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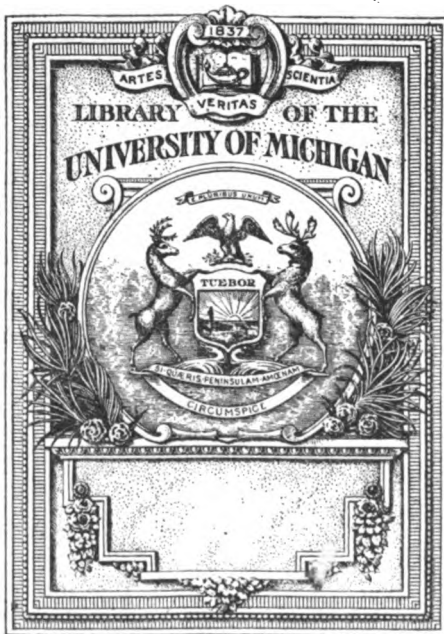
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ANNUAL REPORTS
OF THE
Navy Department

FOR THE FISCAL YEAR

1917



WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

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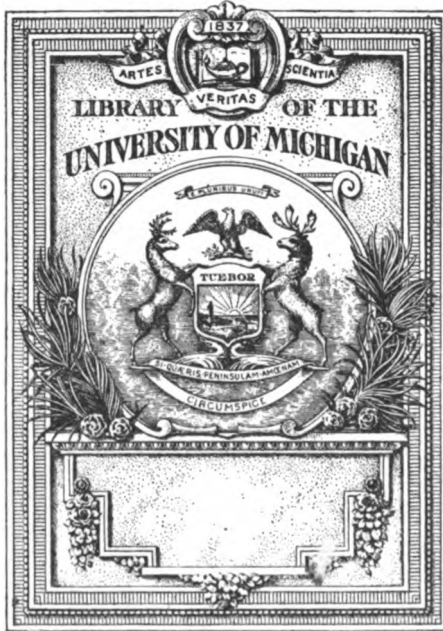
ANNUAL REPORT
OF
THE SECRETARY OF THE NAVY.

SECRETARY'S OFFICE, NAVY DEPARTMENT,
Washington, D. C., December 1, 1917.

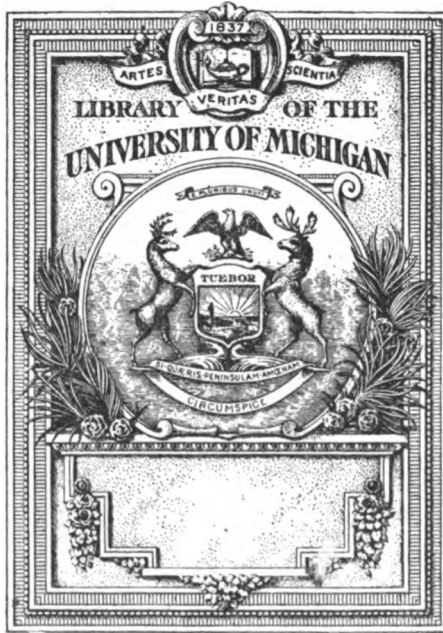
TO THE PRESIDENT:

I have the honor to submit herewith the annual report of this department for the fiscal year ending June 30, 1917, including operations, recommendations, and estimates to date.

Since April 6 the Navy of the United States has been undergoing the test of war. While I may not, therefore, speak in detail of the greater naval operations since that date, it may be stated that the record is one of increasing power, of developing resourcefulness, and of cooperative achievement which the American people may well survey with national pride. The spirit of the Navy of to-day was tersely expressed by a young officer, the senior in command of our first flotilla of destroyers sent abroad to combat the submarine menace. When asked by the English admiral, upon the arrival of the ships in England, when they would be ready, the American officer answered, "We are ready now." This was not the language of boasting. It was the prophecy and pledge of our service with those fighting in a common cause. In the trying months that have followed the readiness and fitness of our men and ships have been tested and established amid perils more insidious and baffling than those that ever before confronted a nation at war. During peaceful years the Navy has been quietly but steadily perfecting itself to meet the time of war. How adequate was its preparation, how efficient its personnel, how competent its machinery to carry on the multitudinous activities of war time could only be surmised and estimated. Now the hour for which it has been preparing has arrived. Our sword is drawn, and no one will dispute that the blade is keen and free from rust and its temper true. Although the naval activities in this war have been largely confined to the extermination of the submarine, our Navy has been called on to do much more than the public realizes, and in no case and in no way has it so far been found wanting either in material or personnel.



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OF
THE SECRETARY OF THE NAVY.

SECRETARY'S OFFICE, NAVY DEPARTMENT,
Washington, D. C., December 1, 1917.

TO THE PRESIDENT:

I have the honor to submit herewith the annual report of this department for the fiscal year ending June 30, 1917, including operations, recommendations, and estimates to date.

Since April 6 the Navy of the United States has been undergoing the test of war. While I may not, therefore, speak in detail of the greater naval operations since that date, it may be stated that the record is one of increasing power, of developing resourcefulness, and of cooperative achievement which the American people may well survey with national pride. The spirit of the Navy of to-day was tersely expressed by a young officer, the senior in command of our first flotilla of destroyers sent abroad to combat the submarine menace. When asked by the English admiral, upon the arrival of the ships in England, when they would be ready, the American officer answered, "We are ready now." This was not the language of boasting. It was the prophecy and pledge of our service with those fighting in a common cause. In the trying months that have followed the readiness and fitness of our men and ships have been tested and established amid perils more insidious and baffling than those that ever before confronted a nation at war. During peaceful years the Navy has been quietly but steadily perfecting itself to meet the time of war. How adequate was its preparation, how efficient its personnel, how competent its machinery to carry on the multitudinous activities of war time could only be surmised and estimated. Now the hour for which it has been preparing has arrived. Our sword is drawn, and no one will dispute that the blade is keen and free from rust and its temper true. Although the naval activities in this war have been largely confined to the extermination of the submarine, our Navy has been called on to do much more than the public realizes, and in no case and in no way has it so far been found wanting either in material or personnel.

The declaration of war found many naval dispositions already made in anticipation of possible developments. No ships had been sent abroad, but when we began to arm merchant ships, a distinguished officer, with a small staff, was on the other side of the Atlantic, available for consultation as to general operations and ready to take charge of any force to be sent.

The United States soon assumed its part in the antisubmarine operations being conducted in European waters. On April 16 six destroyers were directed to be prepared for prolonged distant service, and they sailed for European waters on the 24th. Since that date other vessels of various types have been dispatched from time to time and are rendering constant and useful service. How important and valuable that service is will be the subject of reports when victory is celebrated.

The most difficult problems before the Navy Department since the beginning of the war have grown directly or indirectly out of the great expansion of the Navy found necessary. From a force of 4,500 officers and 68,000 enlisted men in January, 1917, the Navy has expanded to 15,000 officers and 254,000 enlisted men, including regulars, reserves, and national naval volunteers. Further expansions are inevitable. The Navy had 130 stations of all kinds on January 1, 1917. It has now 363. The number of employees at regular navy yards in the United States has increased from about 35,000 to over 60,000. On shore and afloat, including civilians and sailors, the Naval Establishment embraces more than 300,000.

At the beginning of the fiscal year 1917 the monthly expenditures for all naval purposes were about \$8,000,000; they are now about \$60,000,000. On January 1, 1917, there were 300 naval vessels of all kinds in commission; to-day there are many more than a thousand. These typical figures sufficiently indicate the task the Navy has had to accomplish to date in the way of expansion.

There was embarrassment in the early days of the war by reason of the patriotic and eager response of the young men of the country to the Navy's efforts in recruiting. These were so successful that it was difficult with the then facilities to take care of the flood of volunteers. There were also various threats of epidemics of the diseases that appear when unseasoned men are suddenly assembled in large numbers. These, however, were stamped out, and facilities either completed or to be ready before winter are now adequate for the needs of the present Navy personnel. If required, these can be enlarged even more rapidly after the experience now had.

Many of the problems encountered have been due to the novel developments of marine warfare, and particularly the breach by Germany of the accepted principles of international law as regards naval war and the indiscriminate sinking of merchant ships without

warning. As a minor case may be cited the fact that life-saving appliances and methods suited to recognized conditions of naval warfare had to be materially modified in the case of vessels primarily engaged in opposing submarines. To cite a major instance, the Navy had a moderate provision of guns and ammunition for arming naval auxiliaries to be taken into service in time of war. When Germany undertook early this year the indiscriminate sinking of merchant vessels, it soon became evident that all merchant vessels should be armed and ready to fight submarines. This involved not only providing guns but also providing skilled gun-crews. The Navy has taken care of this, the guns being placed first on the most important merchant vessels and on others as fast as available.

The nature of the necessary naval operations to date has emphasized the necessity for vessels of greatest value against the submarine. In view of united naval opinion that, all things considered, the destroyer is the most desirable type for this purpose, particular efforts have been devoted to increasing the number of our destroyers.

In its work since the war began the department has not been hampered by the necessity for any modification of its organization in passing from a peace basis to a war basis. There has been a natural and temporarily unavoidable shortage of personnel. Strong pressure—which was resisted—has also come from many officers who wished to give up important duty ashore for any kind of duty afloat, but every new expansion and activity was placed readily and naturally with an existing bureau or office of the department, and, as far as its organization is concerned, the difficulties that have faced the Navy Department as regards the Navy proper have been those of expansion and not of reorganization.

The ability of the Navy, without friction or hurrying, to bring to bear its force rapidly and to increase it threefold in a short time, is due to the system that had been built up in peace times and to the securing before the war of a larger building program extending over a term of years as well as to the authorization of an increased personnel. Internally the efficient organization, working together for years as a trained team, made the Navy Department's rapid expansion easy, though it taxed the strength and energy of every head of a department and the entire personnel on shore and in the fleets. The spirit among the officers, among the enlisted men, among the skilled mechanics, among the trained civilians, was so united and their service so willing and their capacity so extraordinary that the Navy Department has marched abreast, all seeking to make the Navy's deeds worthy of its traditions. The years of drilling and practice, of close cooperation in planning and thinking, were evidenced in the readiness and quickness with which the Navy moved when the command rang out. Ships were manned without an

hour's delay. Those in reserve were fully commissioned. Expert gunners lost not a moment when ordered as armed guards on merchant ships. Every man was zealous to find his place and prove the stuff he was made of, and most of them asked the place of danger.

Nor is it alone to the purely military side of the Navy that we feel we may point with justifiable pride. This war, more than any other war, has been an affair of business as well as of fighting. Supplies, equipment, transportation, all have called for the highest degree of efficiency and intelligence in order that the fighting arm might be sustained. The Navy is fortunate in having during the past four years so improved its business methods and its purchasing system as to be able to meet the tremendous and sudden demands of war time without having found it necessary to alter its existing machinery in anything save an increase in personnel sufficient to handle the vast volume of business which now constitutes a day's work.

The Navy has fully and gratefully availed itself of the organizations and facilities provided by the War Industries Board, the Council of National Defense, including the National Research Council, the Aircraft Production Board, and the able and helpful Naval Consulting Board, which was originally organized for naval purposes. The committee on noxious gases, for instance, of the National Research Council, composed of officers of the Army and Navy and civilian specialists, has been of much assistance in providing both offensive and defensive material needed in connection with this development of warfare. The department has also utilized freely the service of civilian scientists in assisting its officers in the development of various measures to deal more effectively with submarines.

The Naval Consulting Board has been found very useful, not only in assisting in the solution of military problems but in dealing with the immense flood of inventions and ideas submitted to the department from the country at large. It is true that a majority of these are not found to be of practical value, but it is a fact that practically all of them are submitted with the patriotic motive of helping win the war, and the department has felt that they are all entitled to serious and appreciative consideration.

There has been a particularly frank and free interchange of naval and technical information between the countries with which we are allied and ourselves, which has been of great value in view of actual war experiences abroad. Not only as to broad policies but also with respect to details of construction and tactics we are in close touch. The "partnership of democratic nations," which will yet insure a lasting peace, has thus already proved its efficacy in the conduct of naval war.

While the details of what we have done, and how we have done it, must wait until it is permissible to spread them upon public record, this summary may be given to our people: In the Navy we have prepared for and have met the duties of the present; we are preparing for and are confident we will be able to meet any call for greater duties, for more exacting responsibilities. The best way to secure enduring peace is to prepare unceasingly, night and day, for the winning of the war, whether it be long or short. This we have done; this we are doing; this we will continue to do.

GENEROUS PROVISION BY CONGRESS.

The generous provision by Congress and the hearty cooperation of the legislative branch of the Government made possible all that has been accomplished. Congress not only voted liberal appropriations, but gave such full study to naval problems that its legislation was all that could be desired in the way of immediately strengthening the Navy. It had the vision to see the needs and the wisdom to translate its vision into laws and appropriations. This was done, too, in the broadest spirit of national patriotism by members of all political parties.

OPERATIONS OF THE YEAR:

Problems larger and more difficult than in previous years have confronted the Navy during the present year. They may be thus summed up:

1. Preparation for impending and actual war, calling for the largest program of construction, the best plans to supply the larger fleets, and the study of new agencies to be employed in a war without precedent.
2. The coordinating of our efforts with those of the countries with which we are aligned in the war.
3. The carrying on of offensive operations against the naval force of our opponents.
4. Providing safe passage for ships charged with the duty of transporting a large army across the ocean and conducting military operations 3,000 miles overseas.
5. Maintaining available naval forces in a state of readiness for battle.
6. Providing additional fighting units necessary to bring the war to a successful conclusion.
7. Training personnel to man the new units of the Navy and to assist in manning the merchant marine.

The Atlantic Fleet has been reorganized to meet war conditions so that it has readily assimilated a large number of new units. Experimental tactical groups have been organized to keep pace with material development in antisubmarine warfare.

GUNNERY TRAINING AND TARGET PRACTICE.

The gunnery training in the fleet proceeded along well established lines dictated by the results of previous years' experience and conducted successfully all forms of target practice, in spite of the fact war was declared before it was entirely completed. Since the declaration of war the greatest activity in target practice has been in connection with the training of armed-guard crews for merchant and other vessels, and the personnel to man the large number of ships taken over and operated by the Navy. Advantage has been taken of the experiences of our allies in the war, and this, together with our well-established methods of training, is expected to maintain the improvement made in the last two or three years. It is not considered advisable at this time to publish any facts or figures of greater definiteness than the above general statements in regard to target practice.

THE COAST PATROL.

Among the numerous lines in which the Navy has expanded since the war began, none is more marked than that of the coast patrol and the operation of the naval districts. Starting from a skeleton organization, there is now in operation along our coast a large number of vessels engaged in the upkeep of antisubmarine nets, sweeping for mines off the entrances to our harbors, and in scrutinizing the goings and comings of all vessels which approach our shores. Though generally of small size and fighting power, these vessels are constantly on outpost duty and serve to give notice of the approach of enemy vessels. Ships of the Coast Guard, Coast and Geodetic Survey, Lighthouse Service, and Fish Commission have assisted in this service, and, in addition to the ships purchased and commandeered, a number were loaned to the Navy to be employed during the war.

NAVAL DISTRICTS SERVE AS BASES.

In order to operate and direct the movements of the vessels in this service the coast is divided into a number of naval districts, each under a commandant, and each district further subdivided into sections, which serve as bases for the patrol vessels assigned to that section. The duty performed by these vessels and their personnel is onerous to a degree. In many instances they keep the sea for days at a time in small craft originally designed for short pleasure trips in good weather. It has been an excellent school, however, for training a large class of men upon whom the Navy can draw to meet the ever-increasing demands made upon it.

GERMAN SHIPS EMPLOYED.

Certain interned German ships have been taken over for naval service and German refugee ships, greatly damaged at the outbreak

of war, have been repaired and are in use. It was supposed some of these had been damaged beyond the possibility of repair, but American skill and ingenuity have accomplished what those who sought to destroy them deemed could not be done. These ships add materially to the needed tonnage for the transport service, which is under the operation of the Navy.

VISITS OF COURTESY.

In addition to the patrol maintained in cooperation with the English and the French on this side of the Atlantic, the cruiser squadron, under command of Admiral Caperton, has paid visits of courtesies to neighbor countries in South America and was received with every evidence of the friendship now more strongly cemented than ever.

ARMED GUARDS FURNISHED.

Early in March the first steps were taken to provide a defensive armament for American merchant vessels. Since the beginning of the war several hundred vessels have been or are in process of being furnished with armed guards, including one schooner which successfully repelled a submarine gun attack in the Mediterranean and forced the submarine to submerge. In addition, the Navy Department has furnished armed guards to all transports chartered by the Army. Steps are in progress to supply armed guards to vessels included in the program of the Emergency Fleet Corporation.

FORCES ABROAD.

Warships have been dispatched across the seas, and there has been established in European waters a force suitable for offensive operations against submarines and the convoy of merchant vessels. Forces in other distant waters have been disposed to meet the conditions of war. The history of what has been accomplished by American ships against submarines and other naval achievements must await the close of the war for the full details which will then be made public.

CLOSE COOPERATION WITH THE NAVIES OF OTHER NATIONS.

When it was determined by this Government to place naval armed guards on American merchant ships, the difficulties and possibilities of which policy were foreseen, the necessity of having abroad an American naval officer whose ability is recognized in Europe and America, was met by sending Rear Admiral William S. Sims, president of the Naval War College, to Great Britain. Upon the entrance of the country into war, Admiral Sims came at once into close touch with the British and French Admiralties, and when, later, destroyers

were dispatched to make war upon submarines, Rear Admiral Sims was put in command of the United States naval forces operating in European waters, and was promoted to vice admiral. This gave him high rank, equal to that of most of the leading naval officers of foreign countries with whom he was in intimate conference.

CONFERENCE OF NAVAL EXPERTS IN LONDON.

Later, upon the suggestion of this Government, a conference of naval experts of all the countries engaged in war against Germany was held in London, and Admiral Mayo, commander of the Atlantic Fleet, was delegated to visit England and France, and, with Vice Admiral Sims, to represent the United States at the conference. Admiral Mayo was accompanied by members of his staff. During his stay in England, all the information gathered by the British Admiralty during the war was open to Admiral Mayo and staff. The same is true of the admiralties of the other countries he was able to visit. The conference was a full and frank one, resulting in such interchange of views as has drawn into close cooperation the naval authorities of the nations fighting against Germany. As a result of this conference plans were discussed which it is believed will result in more effective coordination of the naval forces of the countries represented.

ADMIRAL BENSON ON WAR MISSION.

Early in November, as a member of the commission named by the President to attend the important war conference in Paris, Admiral William S. Benson, Chief of Naval Operations and the ranking officer of the Navy, sailed for Europe and, with the other members of that commission, is now abroad. Other naval officers of the line and staff have been sent abroad to make studies of conditions, and their reports have been of interest and value. Experts in ordnance, construction, engineering, medicine and supplies are now in frequent conference with the specialists of other navies, and the spirit of cooperation between our officers and the officers in the admiralties across the seas has been all that could be desired. Our officers have been given every opportunity to know what other nations have done and their plans for future operations, and the interchange of views on strategy and all phases of naval warfare have proved most helpful to all who participated.

ADMIRAL GLEAVES IN PARIS.

The first transports carrying troops to France were under the command of Rear Admiral Gleaves, and, though attacked by submarines, there was no loss of life, and every ship reached its destination without accident. It is a matter for thanksgiving that the

Navy has so far successfully convoyed all the troops in safety. During his stay in Paris Admiral Gleaves was in conference with the naval authorities and arranged for the future cooperation in the arrival and departure of transports.

ADMIRAL GLENNON IN RUSSIA.

Rear Admiral James H. Glennon was a member of the American mission to Russia, which arrived in Petrograd in June, and, as the representative of the United States Navy, he spent several weeks conferring with the Russian authorities. During his stay he was invited to visit the Black Sea Fleet, and arrived at Sebastopol just after the sailors had mutinied and dismissed their officers. At the request of the sailors, Admiral Glennon made an address to them and also spoke at a general meeting of representatives of all the councils of soldiers, sailors, and workmen of Sebastopol. He urged the prosecution of the war with renewed energy and so impressed his auditors that the meeting voted—60 to 3—to restore all the Black Sea Fleet officers except the Russian admiral and his staff and to support the Provisional Government.

DISTINGUISHED VISITORS.

Allied powers have sent to this country special missions composed of distinguished statesmen and military and naval officers, who have conferred with the American authorities on almost every phase of the war. In the British mission, which was headed by the Right Hon. Arthur J. Balfour, who for a time was First Lord of the Admiralty, the British Admiralty was represented by Rear Admiral Sir Dudley R. S. de Chair, K. C. B., M. V. O., and Fleet Paymaster Vincent Lawford, D. S. O. Vice Admiral Chocheprat, senior vice admiral of the French Navy, was a member of the French mission, which was headed by former Premier Rene Viviani, Minister of Justice, and Gen. Joffre, Marshal of France. The Prince of Udine, himself an officer in the Italian Navy, headed the Italian mission, which included Senator Guglielmo Marconi, now a naval officer, and Commander Vannutelli. Some time after the arrival of the Russian mission, headed by Ambassador Boris Bakemetieff, Vice Admiral Koltchak, of the Russian Navy, arrived with a special mission and conferred with the United States naval authorities.

Early in April Vice Admiral Browning, commander of the British West Atlantic Fleet, and Rear Admiral de Grasset, of the French Navy, were in conference with our naval officers.

WORK OF THE GENERAL BOARD:

Formerly the annual reports of the General Board, including their recommendations as to new construction and the personnel needed, were regarded as confidential. They were furnished to the Secretar

of the Navy who, in confidence, upon request, furnished the substance to the members of the Naval Affairs Committee for their information. Four years ago the new policy of printing the report of the General Board as an appendix to the Report of the Secretary of the Navy was adopted. These reports were educational and informing. This year the several reports of this board of naval statesmen have touched upon international, as well as national questions of such confidential character I feel it would not be wise to print the full report. Its work during the year has covered the entire range of naval activity, and a summary of the character of its studies illustrates its usefulness as a body of advisers.

After very careful study and investigation, recommendations have been made by it to the Navy Department upon all subjects submitted to it for consideration. In addition, the General Board has from time to time prepared original papers dealing with subjects which have a direct and vital bearing upon preparations for war and for its successful prosecution.

The work of the General Board also includes the preparation of general plans, keeping them up to date, and outlining the necessary logistic arrangements required for their execution.

IMPORTANT QUESTIONS CONSIDERED.

The subjects considered by the board generally require an investigation of collateral subjects for their full treatment and constant attention to new possibilities of development. This is particularly true in determining the military characteristics of ships of all types to be built, from dreadnaughts to submarine chasers; and now craft used in aerial warfare are included.

The range of subjects considered by the General Board in the past year is indicated in the following partial list:

The naval policy of the United States.

Strategic, logistic, and tactical war plans.

Plans for outlying operating bases for the fleet; the strategic value and protection of outlying possessions; the purchase of naval base sites in foreign territory.

Mobilization plans for the fleet in war; cooperation with the Army; formulation of regulations for Naval Militia and Naval Reserve; definition of defensive sea areas.

Location of armor plate factory; location and purchase of training station and operating base site for the fleet.

Location, character, and defense of naval stations; commercial and Government drydocks; aeronautical, submarine, and oil-fuel stations.

The designs for fuel-oil stations; methods of detecting submarines; types of aircraft to be employed.

The transportation and supply of fuel and munitions of war to the fleet.

Necessary increases and distribution of navy personnel.

Purchase and charter of merchant vessels for war purposes.

Improvements of rivers, harbors, and inland waterways.

All fittings, devices, and equipment of ships.

ORIGINAL RECOMMENDATIONS.

Among the subjects upon which the General Board has submitted original recommendations are these:

Military characteristics of ships—all types and classes.

Measures to be taken in war with Central European powers.

Assistance to be given allies upon declaration of war.

Naval policy, recommending a building program with a view to future contingencies.

Protection of American ships on the high seas.

Bases in Caribbean for use in war.

Sending naval officers abroad to observe methods of warfare and to report upon conditions.

Immediate steps necessary for efficient cooperation against submarines.

Plans for opposing submarine activity in the Atlantic.

Transportation of troops to Europe.

The increase of personnel made necessary by the war.

Quarterly review of bureau preparations for war and operations during war.

MANY SUGGESTIONS STUDIED.

The board has kept constantly in touch with the progress of the war and has taken every opportunity to call before it both our own and foreign officers who have had experience abroad under actual war conditions and are in a position to give valuable technical information at first hand. Also, the board has had hearings whenever possible of naval experts in the various naval specialties, and a great quantity of valuable information has been collected to assist the board in its deliberations. The board has also studied and classified and returned to the Navy Department the numerous plans and suggestions submitted by naval officers toward winning the war in compliance with the request of the Secretary of the Navy, who invited suggestions from all officers from ensign to admiral who had given a study to the part the American Navy should take in this war.

PERSONNEL—INCREASE AND NEEDS:

The Navy and Marine Corps, which a year ago had a total enlisted strength of about 67,000, now constitute a force of more than a quarter of a million men. The act of Congress of August 29, 1916, authorized an increase in the enlisted strength of the Regular Navy to 68,700 and authorized the President, "whenever in his judgment a sufficient national emergency exists," to order an increase to 87,000. Under this authority the President, on March 24, issued an Executive order directing the increase to 87,000 men. With the apprentice seamen and other additional classes the total number that could be enlisted was about 100,000.

INTENSIVE CAMPAIGN FOR RECRUITS.

An intensive campaign for recruits was begun at once, and to arouse the interest of the entire country I sent to 2,600 newspapers

in every city and town, a telegram asking their cooperation. The response was immediate, generous, and patriotic. In many cities and towns local committees voluntarily organized to aid in recruiting. Enlistments, which had in March reached 4,474, a new record for a month, quickly increased until they reached more than a thousand a day. Recruits poured in so rapidly that our training stations were overcrowded and temporary quarters for thousands were provided in tents. By the middle of May the enlisted strength had reached 100,000. On May 22 Congress authorized an increase in the enlisted strength of the Navy to 150,000 and the Marine Corps to 30,000. The enlisted strength of the Regular Navy is now over 150,000. We are entitled to enlist some 10,000 apprentice seamen, and others additional, which makes the total authorized about 165,000, which number will soon be reached.

STILL FURTHER INCREASE NEEDED.

The Bureau of Navigation, after careful study, recommends that the permanent enlisted strength of the Navy be increased to 129,000 men, plus 10,000 apprentice seamen, 7,000 men under training in trade schools, and 4,000 men for aviation; and that for the period of the war the enlisted strength authorized should be 180,000 men, plus 24,000 apprentice seamen, 14,000 men under training in trade schools, and 10,000 men for aviation.

RESERVES NUMBER 49,000.

Meanwhile the Naval Reserve force, which was created by the act of August 29, 1916, has grown from a few hundreds to over 49,000, nearly as large as the Regular Navy was 18 months ago, and most of them are on regular duty. The Hospital Corps has grown from 1,600 to 7,000. There are 16,000 National Naval Volunteers and Naval Militia, and nearly 5,000 men in the Coast Guard, which has been placed under the Navy Department for the period of the war.

GETTING A BODY OF PICKED MEN.

Since the middle of July enlistments in the Navy have been limited to 1,000 a week. This has enabled us to secure a steady flow of men about as rapidly as we could provide for them and to enlist men for particular classes for which their previous training or aptitude fitted them. In this way we are getting a body of picked men. All enlistments in the Regular Navy have been for the full term of four years, and the high standard has been rigidly maintained. Since the beginning of war 745 vessels have been commissioned and manned.

YOUTHS EAGER TO ENLIST.

I am confident that we can easily secure whatever number of men is required to man all our ships and provide for all the steadily increasing needs. The Navy was never so popular with the American people as it is to-day, which is evidenced in the eagerness to enlist and the spirit manifested by the recruits, nearly all of whom are anxious to get into active service as soon as possible. I can not emphasize too strongly the zeal, the intelligent and enthusiastic zeal, displayed by the new recruits. With few exceptions they brought to the service enthusiasm and desire to learn, and willingness to be instructed.

INSTRUCTION FOR RECRUITS.

The best instruction, where possible, for the new men is in training stations, ashore for five months, where they are taught swimming, handling boats, military maneuvers, technical and elementary subjects. These include arithmetic, geography, history, stenography, typewriting, and other high-school subjects, whenever possible, in addition to the purely naval subjects, which are always paramount. In the early days of the war the need for additional men to fully man all the ships which were at once placed in full commission did not permit this five months' instruction in training stations. Many young men were of necessity at once ordered to the ships, where the most thorough intensive training was given. The excellence of this ship-board tutelage has been evidenced in the efficiency early shown by those given this practical instruction. Moreover, the quick rush of recruits overcrowded the training stations, so that it was impossible to carry out the systematic and well-matured plan of instruction in the training stations. With the completion of the shore stations authorized, it is hoped that in the future enlisted men will all be able to receive the benefit which five months at training stations afford. The policy of the department, however, will be to subordinate instruction ashore and everything else to the manning of the ships by the best-trained men who can be assigned to this duty.

ADDITIONAL OFFICERS AND SOURCE OF SUPPLY.

The first and best source of supply of naval officers is the Naval Academy; second, the experienced enlisted men and warrant officers who have served long in the naval service and secured advancement by demonstrated fitness; third, the trained men in the militia; fourth, experienced seafaring men; fifth, young men in the Naval Reserve from civil life who have military, engineering, or scientific education.

From these sources a large number of additional officers have been secured, not a few of whom have proved valued additions in the

time when more ships have been commissioned than the Navy could supply with officers in the regular establishment. The return to the service of retired officers has been helpful and they are now filling many important positions held by active officers in times of peace. Special training has been given to capable men seeking commissions and the department's instructions require demonstrated capacity before enrollment or promotion in the commissioned rank. Every ship has been converted into a training station and the fittest men are being advanced as their qualifications are established. Intensive courses for Naval Reserve officers, selected by competitive examinations, have been provided at the Naval Academy at Annapolis, and instruction to qualify as officers is being provided at other points for men who show they have the talent. It is hoped the opportunity for such instruction can be extended to others in the regular and reserve forces of exceptionally capable young men who have enlisted in the Navy this year.

PROMOTION BY SELECTION.

The day of promotion by seniority in the line of the Navy has forever passed. It was the ideal system for rewarding mediocrity in the same manner as initiative, resource, and great ability were rewarded. It was un-American and was apparently framed with the object of protecting the less efficient from the chagrin of seeing the more efficient advanced over their heads. It denied the stimulus of a reward for professional excellence. Under the new law, whereby line officers above the rank of lieutenant commander are promoted by selection, the question of approved ability rather than length of service determines promotions. It well demonstrates its superiority over the antiquated seniority system, which tended to put a premium upon mediocrity and ultra-prudence. If a man "played for safety" under that system he was far surer of promotion than if he had the sand to do something new that involved some chance of accident. Safety and prudence are requisites, but every naval officer who is remembered had the courage, when it would serve his country, to take a chance by an audacious and daring move.

THE FETISH OF SENIORITY.

As the fetish of seniority fully passes from the service (and it is a reform that takes time to secure full acceptance), the new law will insure that no man will be promoted to high rank unless he has given proof of his ability to command. The law should be extended so that promotions in all grades, from ensign to admiral, shall be by selection. The reason advanced for exempting lieutenants, junior lieutenants, and lieutenant commanders from promotion by selection does not seem to be well founded.

SHOULD BE EXTENDED TO THE STAFF.

The time has now come to extend the modern plan of promotion by merit to all commissioned officers of the staff as it now exists in the line. Promotion by merit has always existed for the enlisted personnel. It was only the commissioned officers who had the soft snap of promotion by length of service. I earnestly recommend that Congress enact legislation providing for promotions in the staff corps by selection in substantially the same manner as promotions are now provided for in the line.

EXTENSION SHOULD NOT BE DELAYED.

I had hoped that this legislation would be enacted during the first session of this Congress. It is readily understood that legislation of such character could only with great difficulty have been considered at the two last sessions of Congress, when the multitude of matters of vital importance in the prosecution of the war absorbed all available time. Though such conditions will, of course, exist to a great extent at the next session, it is nevertheless felt that some extension of the principle should not longer be delayed, and it is therefore earnestly hoped that selection by promotion will be made applicable to the grades and ranks of the staff corps of the Navy and the Marine Corps. The same general principle as is applicable at present to certain grades in the line should apply, but with such modifications as may be necessary in the constitution of the board and in other details, upon which specific recommendations will be submitted. In time of war it is believed that the board should consist of a lesser number of officers than nine, as the assembly of so many high ranking officers and their enforced absence from important duties is a very serious embarrassment and prejudicial to the most successful prosecution of the war.

PERSONNEL LEGISLATION NEEDED.

The act of Congress approved May 22, 1917, to temporarily increase the commissioned, warrant, and enlisted strength of the Navy and Marine Corps for the present emergency grants wide and liberal authority for this essential enlargement. Its provisions in general are operating successfully, although it is hoped that several restrictions embodied therein, which at present are affecting adversely the efficiency of the service, may be removed at the next session of Congress. For example, the provision that no temporary advancement, based on the temporary increase above the permanent authorized strength, may be made above the grade of lieutenant in the Navy prevents a suitable and fair distribution of officers, in accordance with the duties that it has been found necessary for them to perform, and should be modified to permit of temporary advancement to at

least the grade of lieutenant commander. That grade is the very one that is most of all in need of officers, because of the greatly increased number of destroyers and auxiliaries, which vessels are normally commanded by lieutenant commanders. In the Marine Corps temporary promotions may be made as high as the grade of major, which is the rank corresponding to that of lieutenant commander, and it is believed that equally as strong reasons exist for similar authority in the Navy. Also the provision that in making the temporary appointments as ensigns the maximum age limit shall be 50 years for commissioned warrant officers and warrant officers has prevented such appointments in the case of a number of very deserving officers of those classes, and it is hoped that this restriction will be removed.

JUST COMPENSATION TO RETIRED OFFICERS ON ACTIVE DUTY.

A number of other special bills recommended by the department for the greater efficiency of the naval service were enacted during the recent session of Congress. A comparatively few items of desired legislation remain, however, principal among which is a bill to provide for the temporary advancement on the retired list, not above the grades of lieutenant commander and major, of retired officers of the Navy and Marine Corps, effective only while employed on active duty in time of war. At present retired officers of the Navy and Marine Corps are not granted by law the same advantages as retired officers of the Army. It is considered just that some relief in the form of temporary advancement should be granted them, for they are rendering valuable services at this time at a sacrifice, and in some cases at an inadequate rate of pay.

REVIVE THE RANK OF COMMODORE.

It is recommended that the distinctive naval rank of commodore be revived. It is associated with the best traditions of the Navy from Commodore Perry to Commodore Dewey. It would be beneficial to the service if Congress should at least authorize the temporary rank of commodore on the active list to be bestowed, in the discretion of the President, upon officers not of flag rank, commanding squadrons unattached, squadrons widely separated from the fleet organization or naval stations without the continental limits of the United States, when the importance of their commands renders increased rank desirable while performing such duties.

PROMOTION FROM THE RANKS.

The fixed policy of the department is to open new doors of promotion to the enlisted personnel. The best and most far-reaching step for the future, secured before the war, was the authority to

appoint annually 100 enlisted men as midshipmen to the Naval Academy. School advantages had enabled an increasing number to qualify as ensigns. All who passed the examinations for assistant paymasters were appointed. These are some of the steps taken in times of peace.

Since war was declared over 1,000 men have been advanced from warrant officers to commissioned officers, and over 1,300 enlisted men have been promoted to warrant officers. Those promoted had won position by demonstrated fitness. There will be further opportunities for promotion to commission rank. The best material for officers in this period is in the enlisted personnel, and their promotion is the sure guarantee of securing the best qualified men to supply the need for additional officers.

ADDITIONAL MIDSHIPMEN AND MORE TRAINING AT SEA.

With the large increase in the number of ships in commission and the multiplied activities requiring trained men for leadership in the war, there has been demand for an increase in officers—a demand that has sorely taxed the authorities to meet. Four years ago Congress authorized an additional appointment to the Naval Academy for each Member of both Houses of Congress, and the last Congress made a like increase. It also authorized appropriations for greatly enlarging the facilities for the accommodation of midshipmen at the Naval Academy. It gave authority to the Secretary of the Navy to appoint every year 100 midshipmen from the ranks of the enlisted personnel. Inasmuch as a certain proportion of those who enter do not continue to graduation, and there will be room at Annapolis when the additional buildings are completed for still more men under instruction, I recommend that legislation be enacted authorizing each Senator and Representative to appoint an additional midshipman, so that there will be under training sufficient officers for the ships under construction.

NO LOWERING OF STANDARDS.

During the past year, by authority of Congress, two classes were graduated earlier than the termination of the regular four-year course. This reduction of their period of instruction was made necessary by the urgent need of officers, and with the commissioning of new and additional craft, it may be wise again to compress the course into a shorter period, though nothing but the stern necessity of war would warrant a denial of the longer period in which every young man should pursue his studies before entering upon the duties of an officer. The multiplied duties of a naval officer call for training in many subjects. A process of cramming would merely result in commissioning officers partially prepared for the varied duties they are now required to perform. Rather than graduate young men

through a process of such intensive pressure as to deny opportunity for a thorough mastery of the subjects taught at Annapolis, it would be wiser, if the exigencies require the services of these young men before the completion of their course, to assign them to service afloat under temporary commissions, permitting them to return and complete their studies when the pressure of war has ended. The last thing that we must contemplate is the lowering, even temporarily, of the standards, now none too high, required for graduation at Annapolis.

EVERY MIDSHIPMAN SHOULD SERVE AN ENLISTMENT OF ONE YEAR.

It had been my purpose, if war had not intervened and made impractical for the time being an extension of the course, to recommend that no midshipman appointed to the Naval Academy should receive his commission under five years, and that, after passing the entrance examination, every appointee should go to sea as a regularly enlisted man and serve one year in the ranks before entering Annapolis. It has been suggested as a better plan to afford future officers experience as seamen, that the course at Annapolis should be divided, the first two years' instruction being given ashore at the academy, the third being spent at sea, doing the duties and having the same discipline as all other enlisted men, the midshipmen then to return to the Naval Academy for two years prior to graduation. There may be discussion as to which suggestion is best, but I am fully convinced that no man should be commissioned an officer in the American Navy until he has spent at least one year "before the mast," not as an officer, but as an enlisted man. This experience would insure practical knowledge which would be of lasting value, and would give the future officer the viewpoint of the enlisted seaman which he could obtain in no other way.

SHOULD BEGIN AT THE BOTTOM.

The American ideal is that men shall obtain high station by beginning at the lowest rung in the ladder. They should obtain place and position by first mastering the primary duties. Is not this necessary to fit one for higher rank? Four years ago this principle impelled me to recommend to Congress that a certain number of enlisted men be appointed as midshipmen. Congress approved the idea. Though there had been no systematic instruction on the ships to prepare for the entrance examination, a number qualified. Their record at the Naval Academy has demonstrated the wisdom of the departure. So strong was the approval of this American plan of selection for appointment to Annapolis that at the last session of Congress authority was given to appoint a hundred enlisted men annually. With the present educational advantages, which will be enlarged in peace times, this will give to a large num-

ber of midshipmen the experience that every man should have before he undertakes command. The best training for command is to be subjected to the discipline an officer must enforce.

ALL APPOINTMENTS WILL COME BY PROMOTION.

The truth is that the day will come when all appointments to the Naval Academy will come by promotion from the enlisted personnel. Why not now? There are but two arguments against it, and only one of them is tenable. The first is that Congressmen would be slow to surrender their right of appointment. If, however, they are persuaded that the good of the naval service would be promoted by surrendering the right of appointment, it is not to be believed that Congress would hesitate to vote for the change. Indeed, not a few Congressmen have voluntarily surrendered the right to make their nominations by holding competitive examinations and naming the young man who stood the best examination. The only valid objection to naming the midshipmen by competition among the enlisted personnel is the fear that it would do away with the excellent plan by which every State and congressional district is now guaranteed equal representation in the Naval Academy. It would be a mistake if anything should change this system, which has made the Navy truly representative of the whole country in its commissioned personnel. To permit appointments without regard to place of residence might deny to the Navy as many naval officers from Iowa as from Massachusetts, for example, and experience has shown that young men from the interior, who never know what salt water is until they take their first Annapolis cruise, make equally as able officers as those from seacoast States. Is there not some practical way to retain the equal proportion to all the States and at the same time gain the immense advantage of opening a naval career alike to every ambitious young man in America? Of course such a plan can be formulated. The inability of many young men of real stuff, ambitious for a naval career, to secure a congressional appointment first induced me to urge Congress to give the Secretary of the Navy the right to appoint capable enlisted men to the Naval Academy. Now the number has been increased to 100, and, properly safeguarded by giving the appointments in the first instance to the States in proportion to their population, there is every reason why, in democratic America, an equal chance to become an admiral should not be within the reach of every ambitious youth.

WOULD INCREASE ENLISTMENT OF BEST YOUTHS.

If the only open door to instruction at the academy was through regular enlistment and a year's service as a seaman, who doubts that the ranks of the enlisted personnel would be thronged by youths, with

love of the sea, ready and willing to make any sacrifice to earn a commission? The Navy would then truly be the highest example of the American doctrine that opportunity and promotion are reserved only for those who establish fitness for command. Fewer men would then enter the Naval Academy "to secure an education" and fewer still would "bilge." No man would pay the price of an appointment unless he loved the naval service. The naval officer to-day is a select man, trained and ready, but if no man entered the academy who had not been trained in the hard school of seafaring experience and by competition with 200,000 youths, would there not be born that enthusiasm for excellence that would insure a still higher standard of efficiency in the service?

NAVAL ACADEMY.

There are now 1,450 midshipmen at the Naval Academy, and in addition 300 reservists, who, by competitive examination, were assigned to take a special course leading to a commission as ensign in the Naval Reserve. These reservists are accommodated in temporary buildings erected during the summer. There are not now sufficient accommodations in Bancroft Hall for all the midshipmen, and temporary quarters have been provided for quartering and messing 210 of them in the marine barracks. On August 1 work was begun on the new wings of Bancroft Hall. One wing will be completed in the summer of 1918 and will give accommodation for 550 midshipmen, and the other wing will be completed in February, 1919, accommodating 550 additional midshipmen. The extension of the mess hall and its accompanying facilities will be completed at the same time, allowing for the messing of the maximum number of midshipmen for which accommodations are to be provided. The extension of Isherwood Hall is under contract and will be completed early in the summer of 1919. Other important improvements at the Naval Academy are in progress, and when all the work now under contract has been completed there will be accommodations in Bancroft Hall for 2,200 midshipmen.

ADMINISTRATION MOST SUCCESSFUL.

Two classes have been graduated at the Naval Academy during the present calendar year. The zeal of the student body and the wise direction and administration of those in authority have been all that could be desired. Hard study, ambition to master technical subjects, excellent deportment, and the spirit of labor and sacrifice to be ready for high service in war have characterized the increased personnel at the academy during the whole year. These evidences assure the country of future officers of the best mettle.

UNIFORM RESIDENCE FOR APPOINTEES.

I suggest that the law governing the appointment of midshipmen be changed so that a uniform term of residence be required for all appointees. Under the present law (sec. 1517, R. S.) it is provided that candidates named by Congressmen for appointment "must be actual residents of the districts or Territories, respectively, from which they are nominated." The act of June 29, 1906, provides that in case nomination is not made by the Senator or Representative by a certain time "the Secretary of the Navy shall fill the vacancy by the appointment of an actual resident of the State, congressional district, or Territory, who shall have been for at least two years immediately preceding the date of his appointment an actual bona fide resident of the congressional district or Territory in which the vacancy will exist and of the legal qualification under the law as now provided."

There is need that the present law be changed so that in case of nominations by Congressmen the nominee shall have been "an actual bona fide resident of the State, congressional district, or Territory for at least two years immediately preceding the appointment." It has happened that a Congressman has made a nomination of a candidate who was not an actual resident of the district, or who established a short residence in order to secure the nomination. There should be a uniform rule requiring two years' residence. Otherwise the spirit of the law giving appointments to Congressmen, in order that the Navy in its officers may be truly representative of every State and Territory, is defeated. It has, indeed, happened that youths have been advised by officers and others, who in all sincerity thought such advice consistent with the law, to establish a residence in a certain district in which there was a vacancy, and the nomination was made by a Member of Congress upon a purely temporary and nominal residence, which in fact defeats the spirit of the act. But under the present law the Congressman may nominate an applicant who has resided in his district for only a few weeks, having acquired a residence solely for that purpose. Prospective candidates have been told they were eligible for nomination by a short stay in a particular district and some Congressmen have assumed under the law that they have the right to make such appointments. The rule prescribed for designations by the Secretary of the Navy, "actual bona fide residence" of "not less than two years immediately preceding the act of appointment," should be incorporated in the law and made applicable to designations by Congressmen.

BOARD OF VISITORS TO THE NAVAL ACADEMY.

The composition of the Board of Visitors to the United States Naval Academy appointed by the President this year rendered their

report of unusual value as reflecting the views of distinguished educators upon the work and needs of the academy.

The board consisted of Edwin Anderson Alderman, president of the University of Virginia; Charles W. Dabney, president of the University of Cincinnati; Albert Ross Hill, president of the University of Missouri; Alexander C. Humphreys, president of the Stevens Institute of Technology; Richard C. Maclaurin, president of the Massachusetts Institute of Technology; K. C. M. Sills, dean of Bowdoin College; and Benjamin Ide Wheeler, president of the University of California; Dr. Alderman being president of the board.

The board, in its report, paid high tribute to the spirit of the academy and the practical results obtained with its methods. Appreciating the special function of the academy, which is to train all its students so that they may be qualified to take their places as junior officers in the fleet and assist in the development of the various branches of science whose application constitutes the daily work of the fleet, the board emphasized also the need of that broad culture required by men of the naval profession.

The board recommended changes in the entrance requirements whereby the standard of admission would conform more closely to those of the universities of the country.

The recommendations will be given careful consideration. Certain features have already been made effective, but the more pressing needs of the existing war necessarily postpone to a future date a careful study of the board's report.

TRAINING STATION EXPANSION.

No development of the Navy has been more marked than that of training stations. The old-time method of sending a young man to sea as soon as he enlisted has been abandoned, except in cases of emergency. Even in war, when the commissioning of new ships makes a heavy draft upon the enlisted personnel, the Navy has sought, when military necessity made it possible, to carry on its established policy of giving several months of training to the new recruits before sending them to sea. At the opening of the war there were four training stations with approximate capacities as follows: Newport, 2,000; Norfolk, 1,150; Great Lakes, 2,000; Yerba Buena (near San Francisco), 850—in all, capacity for 6,000 enlisted men. The training facilities at these four chief stations since the war began have expanded to the following capacities: Newport, 10,000; Norfolk, 16,000; Great Lakes, 20,000; San Francisco, 2,000—a total of 48,000. Through these four permanent training stations more than 50,000 men have been sent into the service. At Newport alone more than 18,000 have been trained since war began. A visit to that station last month gave me personal opportunity to see

at first-hand the thorough work done there, as previous visits to Great Lakes and Norfolk had enabled me to understand the splendid spirit of officers and men that have produced such fine product. I regret it was impossible to visit Yerba Buena. Its young men have been equally well trained. In addition to these stations, which have been in operation for years, temporary stations or barracks have been provided for 5,000 men at Mare Island, Cal.; 5,000 at Puget Sound, Wash.; 500 at New Orleans; 5,000 at Charleston; 4,400 at Philadelphia; 2,800 at Brooklyn; 3,000 at Boston; and 150 at Portsmouth, N. H.—a total of 25,850 in addition. Training stations have also been provided for 13,000 of the reserve force—1,000 at Boston, Bumkin Island; 2,000 at Newport; 5,000 at Pelham Bay, N. Y.; 2,000 at Cape May; 1,000 at Key West; 1,000 at San Pedro; and 1,000 at the University of Washington. In addition to these training stations provision has also been made for 1,900 at aviation training stations, and 20,500 at the following places: 8,000 at the marine camp at Quantico; 5,000 at the marine camp at Port Royal; 2,500 at Gulfport, Miss.; 1,000 under training at the Naval Militia Armory at New York; 500 at the New London, Conn., submarine base; 3,500 at San Diego, Cal.

Harvard University has a class of nearly 2,000 men in training for radio operators, and 150 for other naval specialties; Columbia University a class of 120 for advanced instruction in engineering, and 400 in hospital nursing; Massachusetts Institute of Technology, 200 men in aviation work; Dunwoody Industrial Institute, Minneapolis, over 700 men in a variety of trades; Cloyne School, Newport, a class in cooking and mending; and Yale University has established a course in naval subjects for the reservists who have returned to finish their collegiate work and for such other undergraduates as may elect to take it.

TRAINING FACILITIES FOR 113,000 MEN.

Provision for radio schools and other special schools in various places has been made, so that the Navy has now training facilities for 113,650, virtually all of which has been created since the war. It will be seen that the growth has been from a possible 6,000 in the four training stations to 113,650. Of course this does not include the increased facilities at Annapolis, where 1,750 young men are now under instruction, nor the schools for paymasters, medical officers, electrical engineers, and civil engineers.

EVERY VESSEL A TRAINING STATION.

Moreover, every naval vessel is a training school, and education is carried on along varied lines to secure the greatest efficiency to officers and men. Particular attention has been paid recently to the

use of suitable ships for the extensive training of Naval Reservists and National Naval Volunteers.

ADDITIONAL FACILITIES.

It is believed that the facilities provided will be adequate, when fully completed, at least for the present year, but to provide well-trained men for the many ships under construction and to train armed guards for merchant ships, and to give full training to the 49,000 reservists, training facilities in camps, stations, and ships must demand consideration and such appropriations as may be needed from time to time to give the necessary education and instruction to all who may enter the naval service to carry on the varied duties which are required of them.

STIMULATED ENLISTMENT IN THE MIDDLE WEST.

Most of the expansion of the training stations will be temporary, and all of them will not be needed at the close of the war. But the enlarged permanent stations have been so constructed as to make it not difficult for the increased facilities of such stations to be made permanent. The expansion and development of the station on the Great Lakes, near Chicago, has been more marked than any other of our training stations. It provided at once for the thousands of young men from the Middle West who came into the Navy immediately after the President issued his call. It was also a great stimulus to enlistment. This station, situated on Lake Michigan midway between the two oceans, must remain as one of the main stations for the instruction of enlisted men. Congress will no doubt make provision for retaining and making permanent much of the expansion that has contributed so largely to the rapid training of the young men in the early months of the war.

NAVAL RESERVE FORCE.

The Naval Reserve force was created by the act of Congress approved August 29, 1916. Under the provisions of the law enrollments in the Naval Reserve force were started early in December, 1916, and approximately 200 seafaring men from the Great Lakes were sent to active duty for training in the fleet and went with the fleet for the winter cruise in southern waters. Aside from these men approximately 300 exservice men had been enrolled in the Fleet Naval Reserve up to the 1st of January. Beginning with January 1, enrollments speeded up appreciably in all classes of the reserve and particularly in the Naval Coast Defense Reserve, and on April 1, 1917, approximately 10,000 persons had been enrolled in all classes. With the declaration of war practically all of these were called to duty

and were distributed to the fleet and to the naval vessels patrolling in the naval districts. Since June 7, 1917, no enrollments have been made except for general service and all persons previously enrolled for district service were requested to volunteer for any duty, to which about 70 per cent of those enrolled responded. Since June large numbers of men have been withdrawn from the districts and placed on vessels fitted out for distant service. Practically all patrol vessels except destroyers on duty in distant waters have a large percentage of Naval Reserve force personnel, averaging approximately 25 per cent. Reservists have also been detailed to ships of the fleet and to the vessels taken over for auxiliary purposes, particularly ex-German liners taken over at New York and Boston. The total enrollment in reserves is 49,246.

NATIONAL NAVAL VOLUNTEERS.

The act of August 29, 1916, created a force to be known as the National Naval Volunteers, composed entirely of Naval Militia, thus placing the Naval Militia, which theretofore had been essentially a State organization, on an efficient basis for immediate use by the Navy in time of war. When the Naval Militia were mobilized on April 6 only those officers and enlisted men who volunteered for enrollment in the National Naval Volunteers were called into the Federal service, but nearly all did so volunteer, and a total strength of 666 officers and 9,500 men were mobilized, including those of the Marine Corps branch. Recruiting was continued, and on September 1, 1917, the strength of the Naval Militia had increased to 852 officers and approximately 16,000 enlisted men, exclusive of those in the Marine Corps branch.

In the months of the fiscal year previous to the outbreak of war the Naval Militia had been under constant instruction and had reached a higher state of efficiency than ever before. Over 90 per cent had participated in the cruises of 15 to 30 days' duration provided for instruction purposes. Since their entrance into the Federal service a large proportion of the officers and enlisted men have been placed upon sea duty and many have proved their worth in service.

WORK OF THE LARGER MARINE CORPS:

The Marine Corps has increased from 344 officers and 9,921 enlisted men to 1,197 officers and 30,000 enlisted men.

SOME OF THE MARKED IMPROVEMENTS.

The need for additional housing for this large increase was met by the creation of cantonments or training stations at Quantico, Va., Paris Island, S. C., and Mare Island, Cal., and temporary additions have been made elsewhere where needed. Land has been

purchased for advanced base, expeditionary and aviation work at San Diego, Cal. That city has donated 500 acres of tideland adjoining, and building operations will be undertaken as soon as possible. The marines stationed at San Diego are now occupying several buildings in the exposition grounds which were loaned for temporary use by the authorities. The Major General Commandant of the Marine Corps urges the establishment of a permanent East Coast post, with ample grounds for the drills and maneuvers and advance base drills which experience has shown should be provided. The expansion of navy yards and stations has made it necessary to utilize lands and buildings formerly used by the Marine Corps, and it will be necessary, and much better for the corps, for an independent post to be established. The demand for supplies for the enlarged personnel made larger facilities of the depot of supplies at Philadelphia imperative, and construction upon additional buildings will soon secure such increase.

ENLISTMENTS AND PROMOTIONS.

When the increase to 30,000 was authorized for the duration of the war, there was no difficulty in securing the additional personnel of the best type of American young men. Most of the new officers had enjoyed military training and all were required to pass examinations to test their fitness, quite a number being promoted from the ranks. It was determined in the summer that in the future commissions in the Marine Corps should be given only to graduates of the Naval Academy and to those who, as enlisted men, had qualified themselves for command.

MANY PRIVATES ADVANCED.

A large number of marines, who came into the Marine Corps as privates, have been steadily promoted on merit, and have recently been given commissions. In the future promotions, which will be numerous owing to the increased demand for trained officers, will reward the fittest in the service, and no commissions will be available to civilians. Those civilians desirous of becoming officers in the Marine Corps will attain their desire only after service in the ranks. This new policy should and will attract more and more ambitious young men to this branch of the military service.

EXPEDITIONS.

During the year the Marine Corps has performed excellent service in Haiti and Santo Domingo, the operations being conducted in an efficient and expeditious manner. This was especially so in the suppression of the bandit leaders in Santo Domingo. During the revolt which took place in Cuba last winter, it became necessary to land

marines and seamen from the vessels of the fleet at various places in Oriente and Camaguey Provinces, to protect American property from depredations. Marine detachments from several ships were landed and served ashore at different times from the 1st day of March to the 24th of May, 1917.

In the business of aiding in the restoration of peaceful conditions and stable administration in Haiti and Santo Domingo, both in administrative and military service, officers and men of the Marine Corps have shown excellent judgment and helped greatly toward the rebuilding and sanitation and wise government of these islands. During these years they have found aid and assistance from America administered through the Navy Department. To this high duty Rear Admiral Knapp has been assigned as military representative of the United States in Haiti and head of the military government in Santo Domingo, and he gives warm praise to the achievements and spirit of the Marine Corps.

Upon the transfer of the Virgin Islands by the Kingdom of Denmark to the United States, a battalion of marines was assigned as the military garrison of those islands.

SERVICE WITH THE ARMY IN FRANCE.

By direction of the President, the Fifth Regiment of Marines, organized and equipped in the same manner as the Infantry regiments of the Army, was detached for service with the Army and formed part of the first American expeditionary forces assigned to duty in France, proceeding overseas with that force. This force will soon be considerably augmented by additions that will be sent to France.

ADVANCED BASE FORCE.

The advanced base training is going on at the marine barracks, navy yard, Philadelphia, where the troops are being exercised in the drills necessary for advanced base work, including infantry drill, heavy and light artillery, mining, signal drills of every variety, and aviation. Two regiments of Infantry for advanced base work are being trained at Quantico, Va., and the Artillery battalion of the advanced base force is also being trained at that place. Other important service of the Marine Corps, of the highest value, can not be given in detail until the close of the war permits such a history as will show that the service of this arm of the Naval Establishment has measured up to the best traditions.

ESTIMATE OF APPROPRIATIONS:

Under existing conditions it seems needless to state that the money requirements for the ensuing fiscal year were most difficult of approximation. New demands for funds arise from new conditions

and new methods of naval warfare; appropriations, seemingly adequate, are quickly fully obligated; and experience justifies the opinion that if peace be not previously restored it will be necessary, from time to time, to ask the approaching Congress for further appropriations to apply on current year requirements and, very probably, as the session advances and unanticipated requirements become manifest, to supplement the regular estimates for 1919.

COMPARISON SHOWING BIG INCREASE.

The estimates I have submitted have been, so far as practicable, confined to requirements actually necessary to maintain and operate the Navy as at present constituted on a war footing. Every effort has been made to exclude appropriations not essential to the rigorous prosecution of the war. The total is \$1,039,660,502.84, a sum, I am happy to say, several hundred millions less than the aggregate of the appropriations for the current fiscal year. The naval act approved March 4, 1917, carried \$516,491,802.08, and the two deficiency bills passed at the recent extra session of Congress added to that sum a total of \$1,076,241,057.37, making a grand total of \$1,592,732,859.45. It is difficult to realize that this sum, taken in connection with the appropriations of \$312,678,071 carried in the naval act of August 29, 1916, making a total of naval appropriations in 13 months of \$1,905,410,930.45, exceeds the sum of all appropriations for the new Navy from 1883 to 1911; that is to say, in the space of 13 months Congress appropriated more money for the Navy than was appropriated during the 28-year period mentioned. The total amount of money expended for the naval service, since the establishment of the Navy in 1794 to June 30, 1916 (this period including four wars), was \$3,867,000,000, only about 75 per cent in excess of the total appropriations made during the past year and three months.

A comparative statement of estimates and appropriations appears as an appendix in this report.

CONSTRUCTION—THREE-YEAR PROGRAM:

The act of August 29, 1916, provided a three-year program of 157 vessels to be begun prior to July 1, 1919, and this act and the act of March 4, 1917, provided for undertaking as soon as practicable 109 vessels. There was also a special provision in the act of March 4, 1917, for 20 additional coast submarines, making a total of 68 such vessels authorized, as against 58 in the three-year program. Under emergency provisions additional destroyers have been undertaken and those now under construction far outnumber those contemplated in the three-year program. Normally it would be expected that to com-

plete the three-year program Congress would direct at its coming session the construction as soon as practicable of the vessels constituting the remainder of that program, as follows:

- 3 battleships.
- 1 battle cruiser.
- 3 scout cruisers.
- 9 fleet submarines.
- 2 fuel ships.
- 1 transport.
- 1 destroyer tender.
- 1 ammunition ship.
- 1 gunboat.

In view of the urgent demand for destroyers and merchant vessels, it has not yet been practicable to begin the construction of some of the larger vessels of the program under the provisions of the last act, but they will be pushed to completion as rapidly as the facilities of the country will permit. Active work is progressing rapidly and the ship-building capacity of the country will be very largely increased. My recommendation is that the authorization to proceed with the remainder of the three-year program should be obtained from the Congress at its next session. The department will be prepared to go into this matter in full detail when taken up in the usual course by Congress and I will then make specific recommendations for all the additional fighting ships that can be constructed.

COMMANDEERING OF SHIPS.

The act of March 4, 1917, which authorized the commandeering of vessels needed by the Government, has been successful in insuring more rapid delivery of vessels to the Government at a reasonable price. This price, called by the act above referred to "the just compensation," is determined by a board of appraisal composed of three naval officers and three civilians enrolled as reserve officers who are experts in the question of the manufacture and operation of ships and the cost thereof. This board has conscientiously labored to prevent the payment of extravagant prices sometimes asked for vessels, while at the same time protecting the interests of the owners, who have been permitted to appear before this board and present all evidence necessary to determine the intrinsic value of the vessel in question, together with the loss or earning power or damage to owner's business resulting in the loss to him of the vessel's services.

FIFTY PER CENT GENEROUSLY LOANED OR GIVEN.

A large number of vessels have been taken over by voluntary agreements with the owners, 50 per cent of which have either been presented to the Government for a nominal sum of \$1 or leased to the

Government for nominal rental of \$1 per month, with provision for reimbursement in case of loss of the vessel. The spirit of patriotism which prompted this generosity can not be too highly commended.

NEEDS OF COMMERCE CONSIDERED.

In the exercise of this power to commandeer, the department has sought always to keep in mind the necessities of commerce and has taken over no ships except when military necessity required. In nearly every instance it was possible to reach an agreement with the owners, most of whom had appreciated the pressing need of ships for the Navy to perform its functions in this war. For obvious reasons the number of ships taken over can not now be made public, but at a suitable time the names of all ships taken and the prices paid will appear in naval reports.

NAVAL CONTRACTS IN WAR TIME:

It has been necessary during the past year for the department to place naval contracts, unprecedented in number and size, under conditions also without precedent. Contracts for new vessels have involved many especially difficult problems. In addition to the statutory requirements applicable to all Government contracts, a special law passed in 1886 governing the method of placing contracts for the naval vessels it authorized, was reenacted in successive naval appropriation bills for many years. Although this law has not been reenacted of late years, the department continued to follow substantially its provisions, among them being the requirements that new vessels should be advertised publicly for 60 days, and that contracts should be placed at stipulated prices with the lowest best responsible bidders.

NO BIDS AT FIXED PRICE.

More than a year ago, however, it became evident that it would be very difficult to place reasonable contracts for the new battle cruisers at stipulated prices, in view of the size of the contracts, the time over which they would extend (three years or more), and the uncertainty of labor and material costs. In the naval appropriation act of August 29, 1916, it was provided, as regards these vessels, that, in his discretion, the Secretary of the Navy might contract for them "on the basis of actual cost plus a reasonable profit to be determined by him." Notwithstanding this authorization the department in asking bids on the battle cruisers included bids at a stipulated price. When these bids were opened on December 6, 1916, it was found that no bidder had tendered on the basis of a stipulated price, but that all the most important shipyards had tendered on a basis of cost plus a percentage of profit.

AUTHORITY OF EXECUTIVE INCREASED.

On account of the rapid rise in prices of labor and material, it was apparent that the vessels could not be built within the limit of cost fixed, and it was necessary to appeal to Congress to raise the limit. In hearings before the House Naval Committee early in 1917 the matter was fully discussed—the shipbuilders, as well as representatives of the department, appearing—and these hearings made clear the existing and prospective difficulties liable to be encountered by the department under the existing conditions in contracting for naval vessels.

The naval appropriation bill approved March 4, 1917, largely increased the authority of the Executive as regards naval contracts, provided for increases in the limits of cost of vessels in order to speed up construction, for placing orders by the President, and for requisitioning plants. The department would have much preferred to make all contracts at stipulated sums, and since the act of March 4, 1917, has been able to make such contracts for a large number of small submarine chasers, distributed widely among small shipyards. Practically all other vessels, however, such as destroyers, submarines, etc., have been necessarily contracted for on the basis of actual cost plus a reasonable percentage of profit. The objections to this form of contract are well recognized, the principal ones being the difficulty of determining "actual cost," and the fact that contractors are tempted to increase their profits by increasing the cost.

TO ASCERTAIN ACTUAL COST.

As regards the determination of the actual cost, hardly any two accountants would agree exactly, this being a highly technical question involving a large number of factors. The department adopted as a basis for the determination of actual cost the definition of cost contained in section 302 of the revenue bill approved September 8, 1916. This it has found satisfactory in general, although detail difficulties have naturally arisen.

COMPENSATION BOARD NAMED.

In order to insure the correct ascertainment of cost and to guard against extravagance, the department organized a Compensation Board, composed of distinguished officers of the Navy, headed by Admiral Capps, whose function it was to pass finally upon all expenditures under these "cost-plus" contracts. Cost inspection officers were ordered to all of the yards concerned, so that the department's own officers are fully informed as regards all the operations of the plants affecting naval work. In general, no large expenditure for material can be made until the price has been ap-

proved by the Compensation Board, and the inspection system of the department is such that no large extravagance or misdirection in labor can escape detection and correction.

ADVANCES TO CONTRACTORS.

The Compensation Board has another very important function. It was necessary, under the conditions, for many contractors to increase their plants in order to undertake the work required, with the expedition necessary. They claimed—and with much justice—that these extensions were not warranted by their business, would cost much more under present conditions than in a normal market, and might be valueless to them when the emergency has passed. It was impossible to make stipulated-sum contracts in connection with these necessary extensions which would be fair to all concerned, in view of the uncertainties existing. The department's policy has been in such matters to provide the necessary facilities, either of a temporary or permanent nature. Special temporary facilities, movable tools, etc., have been usually provided at the cost of the Government, the tools to remain the property of the Government, and the salvage value of the temporary facilities also to belong to the Government. Permanent improvements and extensions of plant have been financed up to various percentages by the Government, but upon termination of the contract, settlement is to be made upon the basis of the then value to the contractor of such improvements in his plant, the result being that in the end the Government would pay the extra cost necessitated by providing these improvements now, and the contractor would pay the actual value to him of the improvements when the contract has been terminated and the work done.

Naturally the question of this value may be expected to be a somewhat controversial one. The department has insisted, in all improvements having to do with building ships—except in a few special cases—that this final value shall be ascertained and determined by the Compensation Board, composed wholly of naval officers. It is believed that all contractors will be treated fairly by the board of distinguished officers who will pass upon such matters, and the department much prefers that its own officers should have this determination, as it will undoubtedly avoid much complication.

TO ACCELERATE CONSTRUCTION.

Under the authority of the act of March 4, 1917, and other subsequent acts a number of contracts previously made at stipulated sums have been modified to the "cost-plus" basis. This for one of two reasons: Either it was necessary to accelerate the progress of

construction or to delay certain vessels to enable other vessels to be speeded up. In either case the action necessary made such a radical change in the conditions under which work was to be carried out that it seemed advisable to change the basis of the contract. Incidentally it may be remarked that there are still suits extant regarding stipulated sum contracts undertaken during the Civil War, more than 50 years ago, the difficulty of settlement being due largely to the impossibility of ascertaining accurately the actual costs. Under the contracts made by the department, the costs will be ascertained, estimated, and determined by its own officers with great accuracy, and it is believed that the "cost-plus" contracts made by the department will be executed under such close control and observation that speed of construction, which is the primary object, will be attained without waste or extravagance.

THE PERCENTAGE OF PROFIT.

As a general rule, the percentage of profit has been fixed at 10 per cent. In some of the latest vessel contracts, however, a somewhat different principle has been adopted, a fixed sum being allowed for profit, which is slightly under 10 per cent on the present estimated cost of the vessels; should the final cost fall below the estimated cost, the contractor and the Government divide the saving. Expenditures under these contracts also are strictly under the control of the Compensation Board.

While the contracts for new vessels have probably involved more difficult problems than any others, there have been more or less difficulties with other contracts, such as for provisions and supplies for the fleet, and material of all kinds for the work carried on in navy yards. In many cases the proposals received for supplies have appeared unreasonable, even considering the conditions of the market. Contracts for such materials and supplies do not usually involve long periods in production between the time of placing the order and the delivery of supplies, so that there is a better opportunity for contractors to ascertain costs and bid at fixed prices. Moreover, conditions at the works producing such materials and supplies were not such that the department could ascertain for itself the exact cost, as it does in shipyards, without prohibitive expense and delay.

NEW POWERS EXERCISED.

The policy of the department has been in all such cases to adhere as far as possible to awards at stipulated prices. When bids appear too high investigations have been carried on to determine reasonable costs to contractors and reasonable prices under the conditions. Prices have been fixed accordingly and orders placed under the

authority vested in the President by the naval appropriation act approved March 4, 1917, and the urgent deficiency act approved June 15, 1917. These orders are placed under one of the alternative conditions (a) and (b) below:

“(a) The price herein stated has been determined as reasonable and just compensation for the material to be delivered; payment will be made accordingly. If the amount is not satisfactory, you will be paid 75 per cent of such amount, and further recourse may be had in the manner prescribed in the above-cited acts. Please indicate conditions under which you will accept this order by filling in and signing certificate below, returning original copy of order. If you state the price fixed as reasonable is not satisfactory, 75 per cent only of the unit price will be paid. If payment in full is accepted, it will be considered as constituting a formal release of all claims arising under this order.

“(b) As it is impracticable to now determine a reasonable and just compensation for the material to be delivered, the fixing of the price will be subject to later determination. You are assured of a reasonable profit under this order; and as an advance payment you will be paid the unit prices stated hereon, with the understanding that such advance payment will not be considered as having any bearing upon the price to be subsequently fixed. Any difference between the amount of such advance payment and the amount finally determined upon as being just and reasonable will be paid to you or refunded by you, as the case may be. The unit price stated herein will not prejudice any future price determination or be considered as a precedent in determining such increases or decreases as may be later decided upon as proper.”

CONTRACTS SAFEGUARDED.

In this way supplies have been secured at prices deemed generally satisfactory under present conditions and it is hoped that the complications and uncertainties involved in cost-plus profit contracts can be avoided. Such contracts are not to be made except in emergencies, and even then only when contracts at a fixed price are impracticable. The department has sought in every possible way to safeguard the contracts on this basis, which necessity impelled.

NAVY AIR SERVICE DEVELOPMENT:

In my report a year ago I was compelled to state that “the development of air craft in the Navy has not progressed as rapidly as its usefulness demands.” During the past year there has been an enormous expansion and development of the naval air service which may be said to date from the passage of the naval act of August 29,

1916. The appropriations for aviation for the Navy since July 1, 1916, have been \$67,633,000. Up to this time naval aviation had been almost entirely in the experimental and development stage, and there were comparatively few officers who were aviators. During the development and experimental work, there had been tried every type of seaplane offered by any builder in the United States. None of these had been found fully satisfactory by the flying school at Pensacola, and a year ago the flying school itself was temporarily crippled by a hurricane of exceptional violence, which did much damage to buildings and equipment.

Although, as stated last year, the matériel situation was not satisfactory, the department had thoroughly overhauled the organization for aeronautics and arranged for the coordination of all activities which would be needed in developing an adequate air service by delegating responsibility for its creation definitely to the Chief of Naval Operations and the material bureaus of the Navy Department. This organization has proven sound during the expansion and development of the past year.

TRAINING ACTIVITIES.

To build up a flying personnel was necessarily a primary requirement and for this purpose the flying school at Pensacola was enlarged and reorganized, and seaplanes constructed in quantity of a type suitable for instruction purposes incorporating all safety features known to the art at that time. The design of this school seaplane was outlined by the department and arrangements made with a contractor for its supply. Other builders were encouraged to develop improvements, and the department now is able to purchase satisfactory school seaplanes from at least four builders.

The supply of school seaplanes is now considered adequate to meet the needs of all of the training stations.

To broaden the training and to bring in new ideas, men have been sent to France, England, and Canada for flying instruction.

SATISFACTORY MOTORS DEVELOPED.

As the training of men progressed, every effort was made to develop seaplanes of greater power and endurance for service use. This development has been badly handicapped by lack of a suitable high powered American engine, but eventually one builder succeeded in developing a 200-horsepower tractor seaplane largely under the encouragement and assistance of the department. Seaplanes of this type were then supplied in quantity to the coastal air stations which were established after the declaration of war and are available for operation from these air stations.

They are also available for use in training a large number of young men who have been taken from civil life into the Naval Reserve Flying Corps.

While high-grade engines of French design were put into production in the United States during the year, they were not of sufficient power for naval work. Only recently has what appears to be the desired engine become available. This is the so-called "Liberty" engine developed by the Aircraft Board which gives every promise of providing an adequate power plant for service type aircraft. The engine has been installed in a seaplane and in a flying boat and the preliminary tests have been quite satisfactory.

FLYING BOAT A SUCCESS.

Development work has been prosecuted assiduously during the year, and with the completion of the "Liberty" engine, the department was in a position to select immediately the aircraft to which it should apply and to frame a definite and large building program.

Eliminating types which had been tried and found unsuitable, the department fixed upon two sizes of flying boats for foreign duty, which had been perfected in the United States in anticipation of a high-powered engine becoming available. For sea work, foreign opinion at the present time, as well as our own, strongly favors the flying boat. This type is an American conception and it is a satisfaction to be able to state that here, at least, American designs have been well to the front and that it is not necessary to copy foreign patterns in order to insure our flyers being supplied with the best. It may be stated with confidence that at the present moment we have an American flying boat actually flying with an American engine which is unexcelled by any foreign craft of the type.

The present task of the department in this connection is twofold: First, to produce at the earliest practicable time the numbers of these boats needed; second, to improve the type still further to meet still better the needs of the service and widen the usefulness of "the Navy that flies." The department is prosecuting the task outlined above with the utmost energy.

There has been quite a development of towing kite balloons during the year. Their operation in fair weather presents no great difficulty, but kites to date have proved unable to withstand storm conditions. Improved types of balloons and means for handling are being developed.

The ship-launching catapult for seaplanes has been successfully demonstrated.

DIRIGIBLES DESIGNED AND IN USE.

Observing the growth of the submarine menace it became clear that every weapon should be developed for and against it. Airships

or dirigibles of modern European type had never been constructed in the United States, but from such information as was available a design of a coast-patrol type was prepared in the department and a number of units have been successfully completed by several companies. A training school for dirigible pilots was established in Ohio, and a number of officers have become skillful operators. Coastal dirigible stations are being established from Massachusetts to Panama.

WAR ACTIVITIES.

Active steps have been taken for cooperation with the countries with which we are associated in the war with Germany. Technical officers have visited England, France, and Italy to study the latest aeronautical developments, and the department has been further advised by experts from these Governments who have visited the United States.

American coast-patrol stations have been authorized abroad and will be in operation during the coming year.

CONSTRUCTION PROGRAM.

With the entry of the United States into the war the demand for aircraft from the War and Navy Departments necessitated an enormous expansion of production facility. As a part of this expansion the department undertook to build and equip a naval aircraft factory at the Philadelphia Navy Yard. Within 90 days from the date that the land was assigned the factory was erected and the first flying boat keel laid.

The Aircraft Production Board, now the Aircraft Board, has assisted the department with its larger contracts and arranged to make available for the Navy industrial resources to meet the next year's program. Five private plants are devoted entirely to Navy work, and a large proportion of two other plants are assigned to the Navy. These are all concerns which have demonstrated their ability to construct successful aeroplanes and selected in accordance with the department's policy to require the greatest skill and integrity of workmanship in all aircraft issued to the service. The requisite skill is only obtained by experience in the art.

COOPERATION IN AIRCRAFT DEVELOPMENT.

In the course of the year the department in its aeronautical work has enjoyed the full benefits of the assistance of other governmental agencies. There has been the closest cooperation with the War Department, with very practical results in elimination of conflict in obtaining material and in standardizing specifications. The Bureau of Standards, Forest Service, the Naval Consulting Board,

and the Advisory Committee for Aeronautics, and various committees of the National Research Council have been called upon in connection with several perplexing problems which presented themselves.

THE AIRCRAFT BOARD.

The Aircraft Board recently legalized and taking its membership, one-third from the Army, one-third from the Navy, and one-third from civil life, is continuing the excellent work done by the Aircraft Production Board which developed the "Liberty" engine. The Army and Navy members consist of the officers who have charge of aeronautical matters in their respective departments, and the board operates under the direction and control of the Secretary of War and of the Secretary of the Navy. Thus in all matters affecting the at present gigantic problem of aircraft production and in dealing with the aircraft industry generally the two services act as a unit. In addition, there is a joint Army and Navy technical board which passes upon all new designs for either service. Thanks to the present organization and to the personality of the carefully chosen members of the boards concerned, there has been absolutely no conflict or difference between the two services during the year as regards aeronautic matters, and no indications of the necessity or desirability for a separate aeronautic department as advocated by some. In time of war aeronautic operations and development must be controlled by those who are handling other Army and Navy activities, and there can be no argument otherwise unless the Army and Navy disagree. This has not happened so far, and there is no reason to anticipate its happening.

EFFECTIVE ADMINISTRATION.

Aside from the progress of the present year, which is tangible and represented by numbers of flyers trained and aircraft in service, the department has created intangibles in the form of an administrative organization, including a staff of designers and engineers in the bureaus, and inspectors of construction in the factories. This organization has been entirely built up during the present year, and besides drawing upon the personnel of the Navy, has obtained the services of experts from civil life who are giving practical proof of their patriotism.

INCREASE IN PERCENTAGES.

During the present calendar year the ratio of increase in material has been approximately 1,400 per cent; the increase in personnel trained and under training has been approximately 3,000 per cent; the increase in stations and training schools has been approximately

3,200 per cent. These figures indicate a rapid development, and a very wide and thorough expansion.

SPLENDID PERSONNEL.

The service has been so popular as to attract to it scores of young men of real stuff, some from factories, who loved engines and machinery, and some with college diplomas, who were eager and quick to learn this new and daring adjunct of war. They have demonstrated the courage and capacity of American youths, and the only complaint heard from any of the young men in the Aviation Corps has been that the factories could not provide air craft rapidly enough to give them as much opportunity to fly as they desired.

FIRST TO REACH FRANCE.

The first forces of the United States to land in France for service against the enemy were the United States naval aeronautic detachments which arrived in that country early in June, having been transported on naval vessels. The bodies of three of the men of this first expedition are buried in France. Two of them were killed in accidents in the air.

THE TOLL OF AIR SERVICE.

The toll in this most hazardous service has not been large, but has demanded some of the choicest and bravest spirits. Four members of the Naval Aeronautic Corps have been killed since the beginning of the war, and one of those serving in France died of disease. These were:

Thomas W. Barrett, landsman quartermaster, killed in France June 28 by a nose dive in a flying machine.

George H. Manley, landsman quartermaster, killed in France in aeroplane accident.

C. Fleischman, electrician, third class, National Naval Volunteers, killed August 2 near Bay Shore, L. I., while making a flight in a private machine.

J. V. M. Reynders, electrician, third class, National Naval Volunteers, killed November 4 in making a flight at Bay Shore, L. I.

Harold N. Halstead, landsman quartermaster, died in France July 31.

INSURANCE FOR MEN AND OFFICERS:

On October 6, 1917, Congress placed upon the statute books an enactment which is epoch-making in its effect. This legislation, known as the soldiers' and sailors' insurance act, comprehends many

progressive features, all of which contribute in greater or less degree to the end which a wise and beneficent Government must seek to give practical evidence of its appreciation of the sacrifices made by men who go into the trenches and stand watch in the perils of the deep. This Government has endeavored, by writing the provisions of this measure into law, to enable its sailors and soldiers to go forward to do battle with the enemy unoppressed with the fear which is greater than any apprehension of physical injury to themselves; that is, the feeling of distress which must make itself felt by every husband, father, or son, at the prospect that those near and dear to him at home are to become objects of charity and suffer privation through his death or disability and consequent inability further to provide for them. Every man of the American forces, on sea or on shore, is enabled to render his full measure of service in the certainty that, whatever the danger to which his duty may expose him, his Government has provided for his family and has removed them from the possibility of becoming mendicants, or dependents upon the charity of their fellow citizens.

COMPULSORY ALLOTMENT.

The law provides that a monthly compulsory allotment of pay shall be made by each enlisted man in the service, for the benefit of his wife or children, to an amount not exceeding one-half the man's pay nor less than \$15; the enlisted man may then allot any proportion of the remaining half of his pay to such other person as he may indicate. Should the man have neither wife nor child, he is not required to make a compulsory allotment, but the Secretary of the Navy may (as to the naval personnel) require by regulations that such a man deposit with the Government any proportion of one-half of his pay that is not allotted, such deposit to draw 4 per cent interest. In consideration of the making of the compulsory allotment above mentioned, the Government on its part undertakes to give to the wife and child, or children, of the soldier or sailor so allotting a gratuity, which it calls a family allowance. This allowance will in no case exceed \$50 a month, including the sums received by all beneficiaries, and amounts to a minimum of \$15 a month in the case of a man having a wife but no child. A family allowance is also granted to dependent parents, grandchild, brother, or sister in case the enlisted man makes a voluntary allotment to one or more of these latter. In other words, and in general terms, in case a man makes an allotment to dependent members of his family, the Government contributes at least as much as, and in many cases more than (based on the number of dependents), is required of the man himself.

COMPENSATION FOR DEATH OR DISABILITY.

Compensation is also provided for death or disability resulting from an incident of the service. In the event of death of the enlisted man, his widow, children, and dependent widowed mother are given monthly compensatory sums, the compensation to the widow or widowed mother continuing until death or remarriage, while that to the child continues until the latter reaches the age of 18 years or marries; or should such child be incapable because of mental weakness, or be permanently helpless, then such compensation continues during such incapacity. In the event of disability resulting from an injury in the line of duty, the compensation to the man himself continues throughout his life. The compensation feature applies to officers and enlisted men alike, whereas the allotment and family allowance feature is applicable to the enlisted personnel only.

REEDUCATION AND TRAINING.

There is also a provision for reeducation and vocational training, at the expense of the Government, for persons suffering dismemberment or injuries to sight or hearing, or other injuries causing permanent disability. This enactment may well be characterized as the outcome of the most modern thought in the direction of wise provision for those whose earning capacity is seriously interfered with in the military service of their country.

INSURANCE AT EXACT COST.

The last article of the law and one of its best features is a provision for insurance by the Government, of all officers and men in its military service, in amounts of not less than \$1,000 and not more than \$10,000, in multiples of \$500. In order that every person in the service may have an opportunity to secure such insurance and at the same time be insured pending his availing himself of such opportunity, it is provided that until the 12th day of February, 1918, any person in the active service on or after the 6th day of April, 1917, who becomes totally disabled or dies without having applied for insurance, shall be regarded as having been granted insurance payable to such person during his life in monthly installments of \$25 each; or if he should have died, then monthly installments of \$25 each shall be paid to his wife during widowhood, or to his child, or to his widowed mother, with the limitation that not more than 240 of such monthly installments shall be paid to beneficiaries other than the man himself; and if made to such other beneficiaries, then any payments made to the man prior to his death shall be in-

cluded in the 240 payments provided for. The insurance is to be term insurance during the war, convertible within five years after the war to one of the forms of policies in use by modern insurance companies, the choice resting with the insured. It is to be borne in mind in connection with the provisions for insurance that the Government of the United States pays all overhead charges and incidental costs of administration in connection with the insurance, giving the man the benefit of net rates. In other words, in securing insurance from outside companies, a constituent element which must enter into the premium charged by such company is the cost of rent, or interest on the money invested in an office building, light, heat, office force, commissions to agents, advertising, which consume a large part of the annual premiums. When figuring the premium charged for Government insurance, the Government excludes these elements from its computation, giving the man the benefit of a rate which represents the peace risk only.

HOW THE LAW WORKS.

To illustrate the foregoing the following, by way of examples, will give the information desired by the naval personnel of how they may avail themselves of this new and beneficent law:

(a) The cost of insurance for \$1,000 is 65 cents per month, or \$7.80 per annum, for a man of 21 years; for a man of 45 years the cost is 92 cents per month, or \$11.04 per annum; the rate increases for older men in accordance with the American Experience Table of Mortality.

(b) Pay of man, \$30 per month; age of man, 25 years; family, wife, one child, dependent mother.

Allotment and family allowance.

Class A:

Compulsory allotment (from man)-----	\$15
Family allowance (from Government)-----	25
	40
	40

Class B:

Allotment (from man)-----	5
Family allowance (from Government)-----	10
	15

Of the above, the enlisted man furnishes \$20, the Government furnishes \$35.

COMPENSATION.

Should the above man be totally disabled, \$55 per month until child is 18 years of age, \$45 per month thereafter, and \$10 a month for the mother.

Should another child be born to him, then during period when both children are under 18 years of age he receives \$65 per month.

Should the man have lost both feet, both hands, or both eyes, or be bedridden, then he secures \$100 per month instead of the above.

If such enlisted man, having a wife, one child, and mother, should die, his widow and child would receive \$35 per month and his widowed mother \$20 per month.

INSURANCE.

Should this man have been provident and secured governmental insurance to the extent of \$10,000, for which he would have paid a premium of \$6.60 per month, he would receive \$57.50 per month during life, and after his death his widow would receive \$57.50 per month until a total (including monthly payments received by the man) of 240 such payments should have been received. It is true that the man would have but \$3.40 remaining of his monthly pay. This would cover ordinary small expenditures, or if he required more he could reduce his insurance.

It is a source of satisfaction to the department that officers of the Navy and Marine Corps were assigned to assist in the preparation of the bill, and have now been detailed to cooperate in the administration of the act with officials of the Treasury, under which latter department the insurance law performs its functions. Most of the sailors who have gone abroad have availed themselves of the provisions of this beneficent measure. I feel sure that all will do so when its provisions are fully understood.

ANTICIPATES ALL NEEDS.

The workings of this modern and wise law, enacted before dependents of soldiers and sailors could need its provisions, is the most constructive piece of legislation for the aid of disabled men and the care of their dependents ever enacted. In the past legislators waited until distress demanded pensions. This legislation anticipates the distressing results which follow war and humanely seeks to mitigate the suffering as far as may be.

MAY POINT WAY FOR CIVILIAN RETIREMENT.

For some time there has been annually presented to Congress and to the executive departments of the Government plans for the retirements with compensation or pensions of civilian employees who have grown old in the public service. The operations of this compensation and insurance of soldiers and sailors will no doubt lead to some just measure by which civilian employees, by paying monthly installments in their years of vigor may make provision, through governmental direction and assistance, for their old age.

NAVAL COMMUNICATION SERVICE:

An Executive order issued by the President on April 6, 1917, directed the department to take over such radio stations within the jurisdiction of the United States as might be required for naval communications. It also directed that all radio stations not necessary to the Government of the United States for naval communications be closed. In the enforcement of this order 53 commercial radio stations were taken into the naval communication service for naval purposes. The larger proportion of the stations taken over were formerly operated by the Marconi Wireless Telegraph Co. of America in connection with their ship-shore service for merchant marine, and also for service between fixed points, such as that between Japan and the Territory of Hawaii, and Hawaii and the United States. It was found that a number of the stations operated by the commercial companies could not be made available for naval uses on account of duplication of work, and accordingly 28 commercial radio stations were closed. In addition to this number, thousands of small amateur radio stations were closed, as well as several stations for service between fixed points, for which land lines were available and suitable. At the present time no radio communication is permitted on United States territory (not including Alaska) except through stations operated by this department or by the War Department.

TO HANDLE STEAMSHIP TRAFFIC.

On the Atlantic and Gulf coasts all ship-shore commercial communication was ordered suspended. In order to interrupt as little as possible the traffic of United States, allied, and neutral vessels, certain radio stations were designated on the Atlantic and Gulf coasts to handle steamship traffic only. This traffic is now being handled in code and under very strict censorship.

UNDER STRICT CENSORSHIP.

On the Pacific, Great Lakes, and Alaskan coasts, as well as in the Hawaiian Islands, American Samoa, and the Philippines, the commercial service has not been suspended, but it has been operated under strict censorship. In order not to interrupt the business of Alaska, where other means of communication are limited, a number of private stations have been allowed to operate under censorship restrictions, by agreement among the three departments concerned, viz, War, Navy, and Commerce.

VOLUME OF BUSINESS AND EARNINGS.

During the fiscal year ended June 30, 1917, there were handled by naval radio stations 814,201 messages, of which 728,041 were official and 86,160 were commercial.

In addition to this traffic, the traffic through the stations formerly operated by the commercial companies for the period from April 6 to June 30, 1917, amounted to 103,737 messages, of which 14,797 were official and 88,940 were commercial, a grand total of 917,938 messages, of which 742,838 were official and 175,100 were commercial.

The earnings for the commercial radio service for the first three months of this year, namely, January, February, and March, amount to \$7,557.25, while for the months of April, May, and June of this year the earnings amount to \$74,852.59. This money has been turned into the Treasury as miscellaneous receipts.

TRANS-PACIFIC STATIONS OPERATED.

In addition to the small shore stations taken over by the department, two high-power stations formerly operated by the Marconi Co. between Honolulu and California and with Funibashi, Japan, are being operated by the Naval Communication Service. With the congestion of traffic on the single Pacific cable the importance of continuing service to commercial companies is apparent. The Federal Telegraph Co.'s circuit between California and Hawaii is also being operated.

SAYVILLE AND TUCKERTON TAKEN OVER.

The stations at Sayville, N. Y., and Tuckerton, N. J., which furnished a commercial service with Germany under the Naval Communication Service prior to the declaration of war, have been taken over by the Navy Department and are now being operated for military purposes.

RADIO SETS ON MERCHANT SHIPS.

The policy of sealing radio sets on all merchant vessels when they enter port was placed in effect when war was declared, in order that such apparatus could not be used while in port.

SHIPS SUPPLIED WITH RADIOMEN.

On account of the necessity for strong control over radio operation on merchant ships crossing the Atlantic, all United States ships crossing the Atlantic will be supplied with naval radiomen. The Bureau of Navigation has the necessary men in training through the addition of facilities at Harvard University.

CENSORSHIP OF TELEGRAMS.

In conformity with the Executive order dated April 28, 1917, a censorship of cablegrams passing out of and into the United States and its insular possessions over the submarine cables was estab-

lished on April 30, in harmony with the countries cooperating with the United States in the conduct of the war and in harmony with the radio censorship previously put in force by this department. The director of naval communications was appointed chief cable censor, and this important work has been under his direction with a staff of carefully selected assistants.

Censorship stations were at once organized and operated at New York, Galveston, Key West, San Francisco, Honolulu, Guam, Panama, Guantanamo, Cape Haitien, Port au Prince, San Domingo, San Juan, Ponce, St. Thomas, and St. Croix. All messages to or from the United States and its possessions were censored except those to or from Europe, which were reviewed by the censorship of the countries working in conjunction with the United States in the war. In addition, censorship of cablegrams passing over the trans-Atlantic cables was instituted by this Government on July 26, 1917. Since that date all messages of every character passing into or out of the United States over the submarine cables have been censored. On the basis of the information thereby gathered and furnished our Government and the Governments with which we are cooperating and the protection furnished American trade, naval cable censorship has demonstrated itself an effective military offensive and defensive weapon in prosecuting the war.

COMPREHENSIVE SYSTEM OF COMMUNICATIONS.

The Naval Communication Service has worked with the Coast Guard service in establishing lines of communication to necessary Coast Guard stations, lighthouses, and lookout points along the Atlantic, Pacific, and Gulf coasts, to insure proper communications between these points, radio stations, district headquarters, and the department.

To insure adequate protection in case war activities were brought to our shores a comprehensive system of communications has been worked out whereby events of importance may be immediately telephoned by patrols and lookout stations to the nearest section headquarters and thence relayed on to the commandants of the various naval districts and to Washington.

As a backbone to this system special telephone and telegraph circuits under lease have been provided. These circuits, for the most part, connect the department with the various navy yards, navy stations, and district headquarters along the Atlantic and Gulf coasts.

COOPERATION WITH COMMERCIAL TELEPHONES.

Arrangements have been made with the commercial telephone company providing that Government business be given special service and its calls and messages receive precedence over all other business,

in addition to the communication facilities under lease and used exclusively by the Navy Department.

Activities brought on by the war have increased telephone and telegraph communications of the Navy Department by approximately 1,000 per cent. In taking care of this growth, also in providing protection circuits to take care of emergencies, every effort has been made to disturb to the least extent the commercial telephone and telegraph business of the country in order that maximum facilities will be available for all activities which directly or indirectly affect the war program of the Government.

HIGH-POWER RADIO STATIONS BUILT.

A noteworthy event in radiotelegraphy is the completion of the high-power station in the Hawaiian Islands, the third in the chain of high-power stations completed and ready for operation, and believed to be the most powerful station in the world.

When these high-power stations were projected, it was thought that it would be necessary to erect one on the island of Tutuila and another on the island of Guam, in order to insure communication between Pearl Harbor and Cavite, a distance of about 4,700 miles. With the development in the art, and from experience obtained with Arlington and Darien, it was decided that direct communication was possible between Pearl Harbor and Cavite, and that stations of moderate power would answer every requirement of Tutuila and Guam. Plans were made accordingly; and the result of the official test of the Pearl Harbor Station was so satisfactory as to leave no doubt that as soon as the Cavite Station is ready, which it will be about January 1, there will be radio communication from Washington, via Sayville or San Diego and Pearl Harbor, to Cavite.

MESSAGE FLASHED FROM SAYVILLE TO PEARL HARBOR.

Upon completion of the test of the Pearl Harbor Station messages were exchanged on the 29th of September between the commandant of the naval station and the Navy Department, the messages from Washington having been transmitted via Sayville, Long Island. At 2.30 a. m. the Pearl Harbor Station called Sayville and transmitted the following from the commandant:

TO SECRETARY OF NAVY, Washington:

I have the honor to send you the first through message to Washington, D. C., from Pearl Harbor, Hawaii, radio station, and report satisfactory progress in test of plant.

GEORGE R. CLARK.

To this the following reply was sent:

Express my gratification to the authorities of Hawaii on this momentous occasion wherein the first exchange of radio messages is made possible between Honolulu and the Atlantic coast of the United States. Also I congratulate you on the successful completion of the most powerful radio station in the world.

JOSEPHUS DANIELS.

This message was acknowledged at 3.03 a. m., just 33 minutes from the time the Pearl Harbor station commenced transmission to Sayville.

CAVITE STATION NEARING COMPLETION.

With the completion of the Cavite station, all high-power radio stations authorized by Congress will have been completed, and I desire to take advantage of this occasion to express my appreciation of the admirable work that has been done by the technical officers and employees of the Navy Department, and of the contractors for the apparatus, in thus putting the Navy Department in such close touch with our distant stations and the peoples of Hawaii and the Philippines.

HIGH-POWER STATION AT SAN DIEGO.

On May 1, 1917, the high-power station at San Diego, Cal., was placed in commission and after a short period of test, was placed in the regular service as one of the chain of naval radio stations. This station is equipped with the latest apparatus, and reliable communication over the ranges for which it was designed is assured.

OPERATING BASE—SHORE STATION ENLARGEMENTS:

For years the need has been felt of an adequate naval base on the Atlantic coast. From time to time Congress has provided navy yards and naval stations, and training stations for enlisted men, but the vision of a magnificent naval base for the fleet as well as for the men being trained ashore remained to be realized. Naturally the proper place for this naval base was the chief rendezvous of the fleet. The last session of Congress undertook to provide this need when it authorized the purchase of the well-adapted site at Hampton Roads, which is being rapidly transformed into what, when completed, is believed will be the most ideal naval operating base in the world.

Work has progressed rapidly in the building of the Hampton Roads training station, which will have capacity for training 16,000 young men. The plans provide for a complete aeronautic and submarine base, with all necessary storage and shop facilities, marine railways, building ways, hydrogen plant, storehouses from which

the fleet will be supplied, and ample drill and recreation grounds for the fleet when it is in Hampton Roads—in fact, every activity and every need of the Navy, except ship construction and repair and manufacturing, will be provided at this chief naval base. The original area which was secured consists of 460 acres. This will have been increased to more than 900 acres upon the completion of the retaining walls and the dredging of the ship channel. Already at this base an auditorium which will serve for church and lectures and amusements, seating 4,000 people, is nearly ready. The magnificent drill hall, which will afford space for 10,000 rifles, will soon be in readiness. A general storehouse of 250,000 square feet area and a cold-storage warehouse to refrigerate over 4,000 tons of provisions at one time will be erected soon. These figures indicate the magnitude of the construction and improvements already authorized. When this great work is completed, in addition to other important activities, there will be accommodations not only for the training of many thousand men, but barracks likewise for the men of the fleet. They will then when on leave have a home on shore, something long desired and needed.

AN EDUCATIONAL CENTER ALSO.

Plans are now making for an electrical school, general school, commissary school, carpenters' school, plumbers' and ship-fitters' school, and in addition there will be special instruction for young men in the ranks who are seeking to qualify for commissions. We are making the Hampton Roads naval operating base not only a great operating base, but an educational naval center embracing every character of instruction and training.

NAVY YARD IMPROVEMENTS.

The last Congress appropriated \$18,000,000 for the equipment of certain navy yards for ship construction. Until recent years it had been the policy of the Government not to equip its navy yards for the building of large ships. In fact, until recently no navy yard, except the one at New York, was equipped to build a dreadnaught, and its shop equipment and facilities were so ill fitted for rapid and economical construction that it sometimes cost more money to build a dreadnaught there than in private yards which had been constructed for shipbuilding. Four years ago work was inaugurated to provide facilities for building ships of 12,000 tons at Boston and Philadelphia, and ships of smaller tonnage at Charleston and Mare Island and Portsmouth, N. H.

FOUR YARDS TO BUILD DREADNAUGHTS.

When the large appropriation for navy yard construction became available, plans were at once made to equip four big navy yards, to wit, New York, Philadelphia, Norfolk, and Mare Island, for the construction of dreadnaughts, and to increase the facilities for the construction of smaller ships at the other navy yards. Progress has been made in the improvement of these yards. The dreadnaught *California* is now under construction at Mare Island, and as rapidly as the work can be completed not only can dreadnaughts but battle cruisers also be constructed at Philadelphia, and dreadnaughts at Norfolk; and at New York, instead of building one dreadnaught at a time, two can be built. The additional facilities for the largest naval vessels will be available also for mammoth merchant ships which this country will need in increasing number to carry its expanding trade.

BUILDING HUGE DRY DOCKS.

Even a mere recital of the important and costly improvements and expansions at navy yards in the year would fill pages. The report of Admiral Harris, Chief of the Bureau of Yards and Docks, tells a story of the magnitude of the improvements which his bureau is carrying out with marked efficiency. In addition to the various other improvements, providing facilities for building the largest types of ships, work is progressing on the huge dry docks at Norfolk and Philadelphia. The reports from Pearl Harbor indicate that the big dry dock there is 80 per cent completed. Considering the unusual difficulties under which this dock is being constructed and the fact that no dry dock has ever been built by any such radical method as is being employed, the reports indicate that the status of the work can be considered as satisfactory. The department has been giving professional aid to the Commonwealth of Massachusetts, which is making progress in the construction of an immense dry dock in Boston, and it is believed it will be completed and available by July, 1919. The work on the dry dock at the Union Iron Works at San Francisco, made possible by the Navy Department's assistance, is progressing satisfactorily and it should be completed and ready for receiving vessels in July, 1918.

MORE DRY DOCKS NEEDED.

Even when these large dry docks are completed, the country will still be short of sufficient docks to meet the requirements of the Navy, in view of the large number of vessels that are shortly to be added. The creation of an American merchant marine and the completion of a large number of merchant vessels by the Government will in-

volve provision for docking vessels greatly in excess of the governmental docking facilities of the country. With the increase in marine railways, which the Navy is constructing in navy yards, the dry docks will all be available whenever possible for the use of the merchant marine, but they are inadequate both as regards number and distribution. The dry docks at Charleston and Puget Sound should be lengthened to receive the largest vessels or new large dry docks constructed at these yards, and consideration should be given to the construction of additional dry docks at other yards.

IMPORTANT NEW CONSTRUCTION.

Work on the enlargement of the torpedo station at Newport and the gun factory at Washington, the powder factory at Indian Head, and the plant for making mines at Norfolk, and the construction of storehouses for ordnance and supplies, the additions to munitions plants, and the hundred other additions to naval plants and stations, including storehouses to care for big increase in munitions and stores, has taxed to the fullest extent the officers of the Navy charged with this work. I am pleased to report that the work of construction is going on, in the main, satisfactorily.

Recommendations of the Helm Board.

In pursuance of an act of Congress, a special board was appointed, with Rear Admiral Helm as chairman, to investigate and report "as to the necessity, desirability, and advisability of establishing an additional navy yard or naval station on the Pacific coast of the United States," and "the necessity, desirability, and advisability of improving existing or establishing an additional navy yard or naval station on the Atlantic coast south of Cape Hatteras, on or near the United States coast of the Gulf of Mexico, or in the Caribbean Sea of a character adequate for the proper naval defense of that portion of the country," and "as to the advisability of establishing submarine and aviation bases on the Atlantic, Gulf of Mexico, and Pacific coasts and other possessions of the United States." In the performance of that duty the commission has made a careful and thorough study of the Pacific coast and a partial study on the Gulf and in the South Atlantic, and made important recommendations which have been already presented to Congress.

NAVY YARD AT ALAMEDA AND OTHER STATIONS.

They recommended that for aviation purposes North Island, near San Diego Bay, Cal., should be purchased and that a submarine base also be established upon the existing naval reservation at San Diego; a submarine base be established in the Los Angeles

Harbor; improvements be made at the navy yard at Mare Island; a new navy yard capable of taking the largest ships afloat be established, and they recommended for this the acquirement and development of the Alameda site, which they think is the best in San Francisco Harbor. They estimate that the cost of this new navy yard at Alameda will be \$36,307,000, not including anything for the purchase of land, and that it will require \$6,000,000 a year to construct it. They recommended Puget Sound Navy Yard as a location for a home base for submarines and an aviation station, and that the navy yard at Puget Sound be improved; that a submarine and aviation operating base be established at Ediz Hook, opposite Port Angeles, Wash., and one on the Columbia River, near the mouth of the river.

TEMPORARY BASES.

As temporary war submarine-operating bases they recommend one each at Port San Luis, Monterey Bay, San Francisco Bay, Humboldt Bay, Willapa Bay, Grays Harbor, Port Townsend, Bellingham Bay; and as aircraft-operating bases Morro Bay, Monterey Bay, San Francisco Bay, Humboldt Bay, Coos Bay, Grays Harbor, Port Townsend, Bellingham Bay, and Lake Ozette.

AVIATION BASES NEARING COMPLETION.

The commission recommended a submarine and aviation base at Coco Solo Point, Colon Harbor, which is well toward completion. The site recommended by the commission for an aviation base on North Island, San Diego Harbor, was secured by the War Department for the joint use of the Army and Navy, and the island has been divided between the two departments and both departments have now undertaken its complete development and are utilizing this site for training purposes. This will undoubtedly be the largest and most important naval aviation station on the west coast.

In carrying out the department's policy and the recommendations of the commission under the heading "Aviation," the following bases have been established and a number of them are now in operation:

Chatham, Mass.

Montauk Point, Long Island.

Rockaway Beach, Long Island.

Cape May, at the entrance to the Delaware.

Hampton Roads, on the aviation site of the Hampton Roads Operating Base.

Miami, Fla.

Pensacola, Fla.

Colon, Panama Canal.

North Island, San Diego, Cal.

STUDY OF SOUTHERN NEEDS.

The commission is now on a trip to the South, making a survey of possible aviation, submarine, and navy-yard sites south of Hatteras and in the Gulf, including Key West, and the final report of the commission on this area will be submitted to Congress as soon as it is received.

The board in its preliminary report expressed the opinion that immediate steps should be taken to improve the Charleston Navy Yard so as to permit full utilization of its docking and repair facilities for work of all kinds within the limits of the capacity of its dry dock and the depth of water which can be maintained, without undue annual expenditure, in the channel approaches from the sea to the navy yard.

Notwithstanding occasional damage from hurricanes, the board's inspection of Pensacola and consideration of all data available indicate the desirability of using that yard as an aeronautical station, for which purpose it is now being used. It is practically closed as an industrial yard for general service of the fleet, but the board recommends its additional limited development as a base for submarines and destroyers.

The board considers the development of the New Orleans station as a first-class naval base as remote, but believes that it has possibilities as a naval station for the repair and maintenance of light-draft vessels operating in the Caribbean, and especially as a base for submarines, destroyers, and auxiliary vessels in time of war.

The preliminary reports of the commission were printed as documents at the last session of Congress, and the final report will be also printed for the information of that body.

PRESENT FACILITIES AND THOSE NEEDED.

In the survey of the naval shore needs, which the commission reported before America entered into this war, they were guided by a desire to utilize all the present facilities and to make provision for such enlargement as the future should require. Most of the plans they have favored must be undertaken, but, in view of the billions required immediately for the prosecution of the war, I have deferred estimates upon the larger projects, which will take a long time to complete, and have deemed it wise only to urge those at this time which may be completed in time to help in the present war.

EVERY YARD SHOULD BUILD SHIPS.

The study of this commission, composed of able officers, is convincing proof of the wisdom of utilizing all the navy yards and stations which have been constructed in former years, and of the

necessity of providing still others if our Navy is to expand. A careful reading of the report will be a complete answer to the propaganda waged for years for abandoning all the navy yards hitherto established except two on the Atlantic, and to establish an entirely new one on the Pacific, abandoning those already in use. Every navy yard that can not be profitably used and is not needed should be abandoned, but this war has taught us that we can not depend, for so wide a coast line as the Atlantic for example, upon two yards. The demand upon the seven yards has been so great as to overtax them and has justified the wisdom of retaining and improving all these yards. When the time comes that the stress of war is passed, there should be a more careful study of the best development of the yards that we have and of those that we need. This policy established of making every yard a place for ship construction and the manufacturing of supplies, such as torpedoes and mines and electrical apparatus and a score of other naval necessities, will be made permanent.

LABOR EFFICIENT AND PATRIOTIC.

During the year the Navy has greatly increased its force of skilled labor, and the men employed have been diligent and efficient. The new work and repairs have surpassed all former records and there has been steady employment for all who could qualify. The Navy congratulates itself upon the character and capacity of its skilled personnel in navy yards and stations. The number of civilian employes under the direct pay of the Government has increased in the various navy yards and stations throughout the country from 35,650 to 60,866. We have had excellent cooperation from the Civil Service Commission and the Department of Labor in the procurement of skilled workmen, and the officials of the American Federation of Labor and of various international unions have also cooperated in adding to the Navy forces.

After extended conferences with representatives of the men employed and with the assistance of organized labor, a new scale of wages was put into effect on November 1, and it has been agreed that this scale shall continue in force for one year. Increased compensation was provided in every navy yard to practically every trade employed.

RATE OF WAGES SHOULD NOT FLUCTUATE.

While the new scale represents what the department believes to be an adequate increase in the rates and an increase commensurate with the increase in the cost of living, it may be that eventually some other method of determining the rates of pay in the navy yards should be adopted. The mere fact that there may be a considerable

shortage in one particular trade at one particular point should not necessarily mean that the rates of pay should be increased. It is recognized, first of all, that the rates should be fair, in other words, that they should be adequate; but if this first point is accomplished it is also absolutely essential, especially in time of war, that the rates should not fluctuate in different localities and because of local conditions. A standard once having been adopted as a fair standard, it should not be the subject of frequent revision. Such changes as are made should depend primarily upon the cost of living.

STEADY EFFORT REQUIRED.

It is essential that not only the men who work directly under the Government in Government plants, but also the men who are working in private plants on Government business should realize that their steady and efficient effort is just as important to the Nation as the work of the officers and men on board the ships of the Navy in the actual war zone.

COOPERATION PLEDGED.

It is gratifying to know that most of the men engaged in navy yards feel the compulsion of patriotic duty and have been animated by the spirit to which expression was adequately given when, on the 22d day of August, a committee from the Philadelphia Navy Yard presented to the Secretary of the Navy a paper signed by practically all the civilian employees. In that document, worthy in sentiment to rank with the famous Declaration penned in Philadelphia in 1776, the navy yard employees brought this assurance:

We, the undersigned mechanics and civilian employees of the Philadelphia Navy Yard, as loyal and patriotic American citizens, desire by this means to express to you our pledge of earnest cooperation with all the plans which you and the Navy Department have made in this great national emergency. We desire by our example to stimulate all others to the fullest performance of their duty to the country at this time. We promise to stand by you shoulder to shoulder in carrying out measures for the development of our Navy, and particularly for the betterment of this navy yard. We promise to notify our superiors of any indication of disloyalty on the part of any employee working for the Government. We promise to maintain the reputation of Philadelphia as the center of the best mechanics in America, so that the work intrusted to us can not be bettered in any part of the world.

With the fullest confidence that our country is in the right in this war, and relying on the wisdom of President Wilson, we earnestly pray for a speedy success for our cause and we pledge you by our work to do our full share toward the victory which will ultimately be ours.

Projectile and Armor-Plate Plant.

On the 30th of August the breaking of ground at Charleston, W. Va., to erect the plant for the making of projectiles and armor plate was a concrete declaration of a new national policy in the

making of weapons of war. Contracts have been made and work is going forward on the projectile factory and the plant for the making of forgings. Soon work will be begun on the plant in which the Government will make armor plate for its own great dreadnaughts. We have at last learned that the Government must be able to make all kinds of weapons it needs for the national defense and maintenance of national rights. This does not necessarily imply that the Government must be the sole manufacturer of munitions and weapons. It does mean that it must have the facility for whatsoever it needs, in whole or in part, as conditions demand.

We have too long depended almost solely upon private manufacturers, and when we entered this great struggle the facilities in the United States were inadequate for our needs. As a result, under pressure, we have been forced hurriedly to provide increased capacity at large expenditure of money and loss of time. Neglect to build Government plants has made us dependent upon private corporations which were already crowded with orders from other nations. Most of them have responded to the call for larger outputs. In cooperation with the Government, they are enlarging their facilities in a manner deserving of the highest commendation.

BREAKING OF GROUND WITH CEREMONIES.

In 1907 Congress appropriated money to build an armor-plate plant, but there was a string to the appropriation and the money so set aside was not utilized. The voting by the last Congress of the millions needed for the armor-plate plant ended a long contest for the erection of this plant. A board composed of Rear Admiral F. F. Fletcher, Capt. Frank Clark, and Civil Engineer R. E. Bakenhus was appointed. After visiting a score or more of the eligible sites, the board recommended that the plant be located at the capital of West Virginia. Their selection was approved by the General Board and adopted by the Secretary of the Navy. The governor of West Virginia, the Secretary of the Navy, members of the board, and members of the Naval Affairs Committee were present when the work was begun upon this new and big naval enterprise. When completed, this plant will provide the Navy with a large part of its armor, many of its projectiles, and much of its forgings. With the 181 acres of land in the site, there will be room for still further additions to its manufacturing facilities.

FEEDING AND CLOTHING THE NAVY:

To supply the needs of the Navy in the early days of the war, when it expanded so rapidly and was charged with new duties, taxed the resources of the department. But the men in the fleet and on the patrol, the men in training and on expeditions, and the whole service

bear testimony to the zeal and efficiency of the Navy's personnel charged with this important and responsible duty. The Navy has been well fed and well clothed, though it has not been easy to secure the manufacture of clothing as rapidly as men have enlisted.

INCREASED COST LOWER THAN IN CIVIL LIFE.

Notwithstanding that the statistics compiled by the Department of Labor show that there was an increase of about 40 per cent in wholesale prices of the principal items of food during the fiscal year 1917 as compared with the fiscal year 1916, the average cost of the ration increased only about 20 per cent over the preceding year, and much of this unusual increase was due to the commissioning of patrol boats and submarine chasers for duty in the naval coast-defense districts, where the allowance for subsistence was necessarily much larger than on the regular vessels where the mess facilities are more adequate and the personnel is better trained to economize in the use of food. At the same time the usual high quality of food has been furnished to the men, while every effort was made to secure what was desired at the lowest possible prices.

HEAVY CLOTHING FOR PROTECTION.

Because of the fact that the fleet usually spent the winters in the West Indies, no provision in previous years had been made for heavy clothing for the deck force, the men seeming to prefer to wear light clothing as much as possible. As soon as it became evident that some of the vessels would be operating in cold latitudes, immediate steps were taken to provide proper protection. The first division of destroyers which was sent to European waters was provided with heavy fleece-lined coats and the regular outfit of rain clothes and rubber boots. A special outfit of heavy clothing for the protection of the men who would be required to be in the open in extreme weather has been provided, first of all for the men on the destroyers and other ships in service across the sea. This outfit consists of extra heavy woolen underwear and socks, a blanket overshirt with hood, a wind-proof suit with hood, a pair of heavy woolen mittens, a pair of heavy leather sea boots for use on destroyers, and a pair of heavy arctics for use on vessels other than destroyers. In addition, special outfits of warm clothing are being furnished the men on the submarines, and aviator's clothing is also being purchased for issue to ships and aviation units as required.

COAL AND FUEL PROVIDED.

Coal and fuel oil for the Navy are being obtained under orders placed with the producers at prices determined by the President, the deliveries required being prorated to the various producers in the

same proportion that their output bears to the total production. Every precaution has been taken to provide against shortage of coal and oil, for these are first essentials for the hundreds of naval ships at home and abroad.

LOOKING AHEAD FOR COAL SUPPLY.

The development of the Matanuska coal fields by private enterprise could not proceed unless there was a reasonably assured market for the coal produced; and, to encourage this development, the Navy Department guaranteed to the Department of the Interior the purchase of about 150,000 tons per annum, contingent upon the coal produced being satisfactory for naval purposes afloat; this quantity to be taken during a period of not less than five years from the date on which the mining of the coal is actually begun and the Navy not to be obligated to take specific quantities after June 30, 1925, or such later date as may then be agreed upon. The cost of this coal delivered at Pacific ports is not to exceed the cost to the Navy of coal transported from Atlantic range ports. The agreement also provides that the coal delivered should be of a certain quality or be subject to a reduction in price.

A MODEL OF EFFICIENCY.

The Navy is now spending millions where a few years ago it spent thousands. Two billion dollars must be spent, and to expend it wisely and secure 100 cents' worth of efficiency for every dollar expended calls for good judgment and industry by trained and honest men. It is not too much to say that in these days when the task is difficult the Navy's supply system has met every demand that has been made upon it, showing throughout a model example of efficiency and dispatch.

COOPERATION SECURED.

The War Industries Board has given invaluable aid in the matter of securing new sources of supply and in helping to arrange reasonable prices for such supplies, and there has likewise been full cooperation with both the Food and Fuel Commissioners. The unprecedented demand for supplies of all kinds has made cooperation with these agencies and with the department most helpful. The day of competition between departments of the National Government has ended, and by cooperative effort national needs must be supplied at cost plus a fair profit, and that is the goal to which the Government must aim.

PROTECTION OF OIL RESERVE:

The present war has demonstrated that our Navy to be of the maximum efficiency must be composed of oil-burning units. The

splendid work which has been accomplished by our destroyers could not have been carried out by coal-burning vessels. Neither could other tactical units of the fleet be constructed with their necessary military characteristics except by the employment of oil-burning boilers or internal-combustion engines. No other power is in sight and we can not assume that other power suitable for ship propulsion will be discovered.

In order that the Navy may be justified in building oil-burning vessels, no matter what may be their military advantages, it must be assured of the future supply of fuel. This supply has been a most serious problem during the present war for the European nations, which are not blessed with the natural supply which this country enjoys. But the supply of oil in the ground is being rapidly depleted and, according to the most reliable estimates, will be exhausted in less than 20 years.

In order that this vital supply of oil might be assured, the President of the United States set aside Naval Petroleum Reserves No. 1 and No. 2 in California and No. 3 in Wyoming. Of these No. 2 only is a proven field. The orders creating these reserves stated that the area "shall be held for the exclusive use or benefit of the United States Navy." The validity of the withdrawals was upheld by the Supreme Court in its decision in the Midwest case in February, 1915. In the belief that the question of future supply was thus settled, the naval program has provided almost exclusively for oil-burning vessels.

Since the withdrawal of September, 1909, scores of bills have been introduced in Congress bearing upon the withdrawal and the administration and disposition of public lands containing oil and gas deposits, but few of them have recognized the Navy's rights and none of them have offered adequate protection to the deposits of oil which have been set aside for the exclusive use and benefit of the Navy. Such a measure is now before the Senate (S. 2812), which, while nominally a leasing bill, provides for the disposition of every acre of unpatented oil land in the only proven area, Naval Reserve No. 2, to various companies, most of whom have no claims in law or equity. The determination of these rights or equities, granted by the Pickett Act of June 25, 1910, should be left to the courts where cases are now pending.

HEALTH AND SANITATION:

Under the careful and wise direction of the Surgeon General, the health of the enlarged personnel has received the first care of the Navy Department. With 200,000 new men, coming from all parts of the country, a heavier responsibility was imposed. The medical officers and hospital assistants and nurses have measured fully up to

the larger duties required of them. The unprecedented cold spring made for increased cases for treatment, and contagious diseases brought in by new recruits, the necessity for new quarters, and the provision of good sanitary conditions called for self-sacrifice and increasing effort by the medical staff. Contagious diseases were stamped out as rapidly as possible and preventive measures adopted. The demand for new doctors and nurses and hospital apprentices was met, and with marked efficiency the health and care of the young men given attention. The first outbreak of measles found the Surgeon General on his way to give aid to the physicians. Whether on ship or in training stations the medical staff gave itself fully to the heavy task. New temporary hospitals were rapidly erected, contagious cases were isolated, and to-day the health conditions in the Navy are better than can be found in any like number of men in any civilian population. A special division of sanitation has been organized and is conducted by officers of the Navy and the Public Health Service, 15 officers of the latter service giving their time to this important work.

TO STAMP OUT VENEREAL DISEASES.

Unusual efforts have been put forth to reduce the ravages of venereal diseases, easily the chief foe of naval efficiency. The number of men afflicted by these immoral diseases in civil and military life weakens national efficiency at home and in the field. Last year the men in the Navy incapacitated by one of these shameful diseases caused the loss of 141,378 days of service. Medical officers warn young men of the evils to which they are exposed by the sins of immorality and seek to influence them to keep their bodies clean as a matter of health as well as of morals. Self-control is inculcated. The best attention is given to those who need medical treatment, and the spirit of the Navy is coming to the place where the advice of medical officers to continence is heard and heeded by an increasing number of young men.

EMERGENCY HOSPITALS.

Emergency hospitals have been erected at a cost of \$4,000,000, and the available beds now number 10,000, as compared with the 1,600 available in 1916. There has been an increase of 1,700 in the Medical Corps, 80 in the Dental Corps, 4,500 in the Hospital Corps, and there are now 550 female nurses. Three hospital training schools are in operation, and a fourth will soon be opened at the naval base at Hampton Roads. New medical supplies have been provided against the day of possible need. Hospital equipments have been increased. Hospital units have been sent abroad and everything

made ready for the treatment of sailors and marines across the sea. Special steps have been taken to provide for the care and treatment of any who may be injured in battle. The prompt measures which have been adopted, the plans perfected for all eventualities, and the preparedness of the Medical Department of the Navy have commanded the praise of all who have informed themselves of the work and the spirit of the surgeons and all on the medical staff.

PRAISE FOR THE MEDICAL CORPS.

During the year there was one public criticism of the care of patients, and that was in the shape of a "round robin" signed by a number of enlisted men on the hospital ship *Solace* and sent to a United States Senator. A distinguished and disinterested committee composed of Dr. William H. Welch, director of the School of Public Health, Johns Hopkins University; Dr. Abraham Flexner, secretary of the General Education Board; and Mr. Nathan Straus, a philanthropist, of New York, was appointed to investigate the charges of ill treatment made. After a thorough investigation they reported that some of the charges made were untrue and others grossly exaggerated; that while the *Solace*, owing to unavoidable conditions, was overcrowded, there was no lack of care or medical attendance; that the patients suffering with different infectious diseases were carefully segregated, and the entire ship sterilized after every trip to the hospital. They concluded that Surgeon General Braisted; Dr. Blackwood, the medical inspector in charge of the *Solace*; Dr. Pickford, medical director in charge of the naval hospital at Portsmouth, Va., were "all entitled to the highest praise for their devoted and untiring efforts and for the success which they achieved under extremely difficult conditions." The Senator who presented the "round robin" to the Senate expressed his satisfaction with the result of the investigation and the manner in which it was conducted, and the care and skillful treatment of naval men who needed medical attention.

HOSPITAL SHIPS.

Work has commenced on the new hospital ship, for which Congress made an appropriation, and two large ships, well suited for the purpose, are being fitted up as hospital ships. A small ship, an ambulance afloat, has rendered good service. On sea and land, at home and in foreign lands, though its facilities were sorely taxed by the sudden coming of many thousand young men before the temporary hospitals could be made ready, the Navy has an enviable record in the good work of its Medical Department.

MAKING A WHOLESOME ATMOSPHERE:

It has often been said that the Navy is a young man's institution. When the fleet went around the world the average age, including that of Admiral "Fighting Bob" Evans, was under 21 years. The fact that most of the ships are manned by boys imposes a peculiar responsibility for the safeguarding of their morals. This duty must be performed by providing healthful amusements and recreation as well as by putting a ban upon hurtful and injurious dissipations. No effort is spared to train the boys to understand that to shoot straight they must think straight and live straight. In the spring, when the enlistments were very large and thousands upon thousands of boys between 18 and 20 rushed to the training stations, the twin evils which beset youth—the saloon and the scarlet woman—were conspicuous. In some places, in open defiance of law, they disgraced the communities which owed proper hospitality to the young men who came into them for training in the hour of the Nation's peril. So flagrant were these agencies of evil that it was necessary to call upon the authorities of the States and cities in which these young men were being trained to take steps to abate the nuisances and give a clean atmosphere to the men in uniform. Congress, for the first time in the history of any legislative body in the world, has made it a crime to sell liquor to men in uniform and has put a ban upon houses of prostitution.

LAW ON DRINKING AND PROSTITUTION.

The following sections, which were included in the selective draft act, approved May 18, 1917, were made also applicable to the Navy by the act of October 6, 1917:

SEC. 12. That the President of the United States, as Commander in Chief of the Army, is authorized to make such regulations governing the prohibition of alcoholic liquors in or near military camps and to the officers and enlisted men of the Army as he may from time to time deem necessary or advisable: *Provided*, That no person, corporation, partnership, or association shall sell, supply, or have in his or its possession any intoxicating or spirituous liquors at any military station, cantonment, camp, fort, post, officers' or enlisted men's club, which is being used at the time for military purposes under this act, but the Secretary of War may make regulations permitting the sale and use of intoxicating liquors for medicinal purposes. It shall be unlawful to sell any intoxicating liquor, including beer, ale, or wine, to any officer or member of the military forces while in uniform, except as herein provided. Any person, corporation, partnership, or association violating the provisions of this section or the regulations made thereunder shall, unless otherwise punishable under the Articles of War, be deemed guilty of a misdemeanor and be punished by a fine of not more than \$1,000 or imprisonment for not more than twelve months, or both.

SEC. 13. That the Secretary of War is hereby authorized, empowered, and directed during the present war to do everything by him deemed necessary

to suppress and prevent the keeping or setting up of houses of ill fame, brothels, or bawdy houses within such distance as he may deem needful of any military camp, station, fort, post, cantonment, training, or mobilization place, and any person, corporation, partnership, or association receiving or permitting to be received for immoral purposes any person into any place, structure, or building used for the purpose of lewdness, assignation, or prostitution within such distance of said places as may be designated, or shall permit any such person to remain for immoral purposes in any such place, structure, or building as aforesaid, or who shall violate any order, rule, or regulation issued to carry out the object and purpose of this section shall, unless otherwise punishable under the Articles of War, be deemed guilty of a misdemeanor and be punished by a fine of not more than \$1,000, or imprisonment for not more than twelve months, or both.

Sec. 14. That all laws and parts of laws in conflict with the provisions of this act are hereby suspended during the period of this emergency.

This legislation gave authority to the naval officers charged with the duty of giving the young men a chance of living clean lives without besetting temptations.

LETTERS TO GOVERNORS.

In too many instances the local authorities permitted the harpies to ply their trade. It became necessary to appeal to these authorities, so in the early summer I wrote a letter to the governor of one of the States where young men were being trained, of which the following is an extract:

Herewith I inclose for your information a list of some of the most notorious and most brazenly conducted houses of prostitution, many now virtually as open as drug stores or groceries in the city of ———; also a list of gambling houses running with little pretense of concealment. I am also informed that investigation would easily secure a directory of the saloons which break the law by sales to soldiers and sailors, and you will have no difficulty whatever in discovering which are resorting to the contemptible subterfuge of sending out runners with bottled liquors to deliver to young lads just around the corner.

If your officers have not secured information showing the existence of the illegal selling of liquor, I shall be pleased to furnish you with further information, secured through the Department of Justice. This ought not to be necessary, for the conditions are a matter of public notoriety and scandal in the city of ———.

At ——— are gathered some thousands of the finest of our youth who have offered their lives for the service of their country at a time when this sacrifice is no figure of speech. Most of them have come from carefully guarded homes. Their parents have given them to the Nation in sacred trust that the Government will protect them from unnecessary peril.

I am charged with the duty of training these young men for service in the Navy. You are charged with the duty of seeing that to the fullest possible degree the laws of your State and of the United States are faithfully executed. There lies upon us jointly the duty of protecting these young men from that contamination of their bodies which will impair their efficiency in service, blast their lives for the future, and return them to their homes a source of danger to their communities. If we fail in this, will not the mothers and fathers of these lads, will not the country, hold us in shameful memory?

You are the governor of a State of glorious traditions, whose brave and strong young men have gone forth at every call of the Nation to fight and if need be to die for great causes. I do not believe that you will fail to perceive the vital importance of this matter, or permit yourself to accept at face value assurances that all is well when conditions are so flagrant as to be a matter of common notoriety and protest.

I am sure that with the information herewith transmitted you will take such action to clean up the city of —— as will make unnecessary any further steps by the Government of the United States.

CONDITIONS HAVE IMPROVED.

Letters were also sent to governors of all States in which young men were in training. Most of them responded with a splendid spirit of cooperation. Some of them took strong measures to make a wholesome environment, but in some communities this duty did not seem to be appreciated by the authorities and the Navy Department has had to call upon the Department of Justice and to invoke its own power to lessen the evils, which ought not to be permitted to exist in any community in America in the twentieth century. Unfortunately at two important stations the authorities in the towns have, so far, flagrantly failed to take the necessary steps to assure wholesome environment and moral safeguards for the youths sent there for training. They thus show lack of the spirit of proper hospitality manifested in nearly all other places. By reason of the acts of Congress and the President's order, and the cooperation of State and city authorities, conditions in most places have been better than ever known before. The Young Men's Christian Association, the Knights of Columbus, the Young Men's Hebrew Association, and like organizations for the uplift of young men have helped to secure to the camps and training stations greater freedom from the evil of drunkenness and immorality than ever before where young men were under training for military service. Much is yet to be done, but with the authority given to the chaplains, the surgeons, and other officers of the Navy, and the cooperation of men and women who see the need of driving out evil by introducing wholesome athletics and diversions, this good work will go on until the day will come when these twin relics of bestiality will be anachronisms.

COMMITTEE ON TRAINING-CAMP WELFARE.

The Navy has always encouraged athletics and provided facilities for games and amusements aboard ship and ashore, but the unprecedented increase in personnel, with large numbers of recruits in training camps, necessitated a much greater provision than ever before.

Men and women of broad sympathies and untiring energies were eager to undertake the task of providing wholesome amusements for the men and to bring about better moral conditions in and around

our camps. To take charge of this work a Commission on Training Camp Activities, acting in cooperation with a similar committee for the Army, was created, with Mr. Raymond B. Fosdick as chairman of both committees, and the following members were appointed on behalf of the Navy: Lieut. Richard E. Byrd, United States Navy, secretary; Clifford W. Barnes, Walter Camp, Selah Chamberlain, John J. Eagan, Joseph Lee, E. T. Meredith, Barton Myers, Charles P. Neill, Mrs. Helen Ring Robinson, Mrs. Finley J. Shepard, Mrs. Daisy McLaurin Stevens, Lee F. Hanmer, and John S. Tichenor.

The commission has three fields of operation, namely, the suppression of vice, the inside camp activities, and the outside camp activities. In carrying out its work in the first field of operation the commission has the assistance of the laws recently passed by Congress, making illegal the sale of liquor to a man in uniform and giving the Secretary of the Navy the right to create zones about military camps, stations, and yards in which the sale of liquor is absolutely prohibited and prostitution is forbidden. This work is handled by direct representatives of the commission, with whom are cooperating such organizations as the Committee of Fourteen of New York, the Committee of Fifteen of Chicago, the Bureau of Social Hygiene of New York, and the American Social Hygiene Association. Local police organizations and sheriffs, as well as the machinery of the Department of Justice and the military provost guards, have been utilized. These activities will be extended to Europe in the near future.

The second field of operation is inside the camps, and the commission looks to the Young Men's Christian Association to supply a large share of the club life and entertainment. Athletic directors and singing coaches have been appointed to assist the commandants, and a circuit of entertainers, composed of the best talent in the country, have been booked from camp to camp. The American Library Association is providing books and reading facilities.

The third field of operation lies outside the camps, in the communities near by, and the commission has been at pains to make these adjacent communities the best possible places for sailors in their free time—to organize the social and recreational facilities of the towns so that they shall meet every need and contribute to the mental, moral, and physical health of the men in the stations and training camps. In every community near naval stations and camps the commission has from one to three recreational directors whose function is to bring into coordination all the various local forces and to harness the lodges, churches, clubs, and other groups and organizations with the men in the camps. In each such city a committee of prominent citizens, generally called the Committee on Training

Camp Activities, has been formed to take charge of this work under the representatives of the commission.

The response on the part of the people of the country to this movement has been so great that the ramifications of the commission's activities, the general outline of which has been given above, have become many and varied.

BETTER SYSTEM FOR PRISONERS:

"The worst possible use of a man is to hang him" is a statement from which few dissent in our day of belief in more moderate and sane punishments. The locking up of a man is a loss to society unless the public good demands it, and then imprisonment to be justified must be accompanied by an opportunity for improvement and restoration. There has been steady improvement in the treatment of men convicted of offenses in the Navy, but much remains before the goal of model conditions is reached. There are fewer men in naval prisons to-day, with an enlistment of more than 200,000, than there was in 1913 with an enlistment of 43,000. Some months ago, in order to secure a practical study and more modern methods of administering naval prisons, Mr. Thomas Mott Osborne, a distinguished expert in penology, who believes in the restoration of men who have made a false step, was appointed commandant of the naval prison at Portsmouth, N. H. He has not been in the position long enough to enable me to do more than report progress—real progress—but important reforms have been inaugurated and are already bearing fruit under his introduction of better systems and his appeal to the prisoners made possible by his faith in them. The sudden big increase in the personnel has made it more difficult to achieve direct results at once, but it is also giving a better opportunity to carry out the plans which it is confidently believed will win the cooperation of the younger offenders and end forever the belief that prisoners should be tagged and denied the rights and privileges essential to a desire to win the confidence their lapses had forfeited.

A visit to the prison (I earnestly recommend that the term "prison" be replaced by a name indicating detention and training) two weeks ago strengthened my feeling that no effort be spared to make effective the policy of holding out opportunity for a useful life to these youths, most of whom have done wrong under impulse rather than from criminal intent. The Navy's business is to teach them while in detention and help them find the way to self-restraint and right action through kindly discipline and training. This business is being done, and I believe will show good results to the service and to the country.

ADMINISTRATION OF JUSTICE.

The effect of the existence of a state of war during the last three months of the fiscal year probably renders somewhat less reliable than usual any comparison of statistics of offenses, courts-martial, and prisoners with those of previous years. Nevertheless an analysis of this nature points to a continued improvement in the discipline of the service as a result of a continuation of the system of administering justice described in my last report and modified subsequently only by continued reforms of the same progressive nature. Although the average strength of entire personnel during the fiscal year 1917 subject to naval authority was approximately 52.8 per cent greater than for 1916, the number of general court-martial trials in 1917 was only about 21.2 per cent greater than in 1916, while the number of trials by summary court-martial and deck court in 1917 was actually less than in 1916, in spite of the greatly increased personnel. The percentage of enlisted personnel committed to prison during the fiscal year 1917, based on the average number of men under naval jurisdiction during the year, was about 25 per cent less than in 1916. The number of premature discharges as a result of offenses or inaptitude was considerably less in 1917 than in 1916, in spite of the greatly increased personnel, and the number of desertions in 1917, although greater than in 1916, was less in proportion to the number of men in these years, respectively.

WAR DEMANDS HIGHER CODE OF CONDUCT.

These statistics are reassuring as to the general improvement in the condition and conduct of the enlisted force. Constant thought is given to the subject, several new means by which offenders may obtain their rehabilitation have been authorized, and further progress is confidently expected. It has not been easy to impress upon the great number of new recruits, that in time of war a still higher code of conduct must be enforced and that all offenses, particularly those of a military character, assume more serious proportions and demand more drastic punishment. A general order devoted exclusively to this subject was published, and it is hoped that shortly the true significance of the situation will be fully realized.

UNIFORM TREATMENT OF PRISONERS.

In order that the treatment accorded naval prisoners may be as uniform as possible, it is important that they be concentrated at a few places as practicable, and for this reason the custom of retaining prisoners at a number of navy yards has been discontinued.

ADDITIONAL ACCOMMODATIONS NEEDED.

The existing prison accommodations are insufficient for the present size of the Naval Establishment, and indeed for the size that it is only reasonable to expect will continue after the conclusion of the war. Therefore, provision for an increased number of prisoners is receiving careful consideration, and it is hoped that the necessary authority and funds may be obtained as soon as possible after Congress reassembles, for I hold it to be a serious duty to provide adequate and reasonable accommodations for those who must suffer confinement as a result of their misconduct.

NO ACCIDENTS OR CASUALTIES CONCEALED.

With the loss of the first man of the armed guard, the policy of making public every casualty, accident, or disaster was adopted by the Navy Department. This policy of absolute openness has been pursued and the people have been promptly informed of every engagement or accident in which naval vessels have been involved. At times, for military reasons, the name of a vessel is withheld or the news is not given out for several hours or perhaps some days after its receipt, as, for instance, in the case of a crippled ship which would be in danger of enemy attack until it reached port. But in every case the facts have been given to the public, and, in cooperation with the Committee on Public Information, the press and the people have been kept advised of every movement of the Navy except such as would impart military information to the enemy.

THE LOSS OF LIFE ON THE "MONGOLIA."

The Navy has been singularly free from accidents which might be caused by deterioration in shells and other ammunition used on fighting ships—a danger which ordnance officers thoroughly realize and to guard against which they exercise constant vigilance. Only one accident from firing on shipboard has been reported. An investigation by the Senate Naval Affairs Committee convinced that body of the care exercised in the manufacture and handling of munitions, for which it commended the department.

On May 20, 1917, when the steamship *Mongolia* was about 200 miles out of New York, the armed guard on board that vessel, in accordance with the usual procedure, commenced firing the 6-inch guns, for the purpose of practicing the crew in their use. Several nurses, belonging to a Red Cross unit en route for war service in Europe, were watching the firing from a seat on the promenade deck, some 175 feet forward and 10 feet above the gun. In order that one may understand the accident, it is necessary to explain that the shell and powder for these 6-inch guns are loaded into the gun

separately; that the powder charge is contained in a brass cartridge case, where it is held in place by a pasteboard wad, distance pieces, and a brass mouth cup that fits so as to make a moisture-proof joint; and that when the gun is discharged, this brass mouth cup always is propelled in front of the gun some distance; sometimes whole, sometimes in pieces. On the third shot in this target practice the mouth cup, after leaving the mouth of the gun, flew forward and to one side and struck a stanchion near the nurses, the pieces of the mouth cup hitting and instantly killing two of the nurses, Miss Helen Burnett Wood and Mrs. Edith Ayres, of Chicago, and wounding slightly Miss Emma Matzen, also of Chicago. These unselfish women were on their way to the noble service of their profession in Europe. Their untimely death was deeply deplored by the whole country and cast a gloom over the Navy.

Immediately following the accident the ship returned to port, and a board of investigation was appointed by the commandant of the third naval district, which board reported that the fatalities evidently resulted from the breakup and deflection of fragments of the brass mouthcup, and that no responsibility for the accident attached to the commander of the armed guard or any member thereof.

EXTENSIVE TESTS UNDERTAKEN.

The Bureau of Ordnance immediately undertook extensive tests to obtain a substitute for this brass mouth cup which would not be dangerous in case it were blown back to the ship, and at the same time would hermetically seal the cartridge case. As a result of these tests of various materials, a cork composition disk was developed and adopted as a substitute for the brass mouth cup. All brass mouth cups formerly used with 6-inch ammunition of this type have been replaced by the new cork disks, and with satisfactory results. Hundreds of rounds have since been fired in actual service without injury of any sort to material or personnel.

INVESTIGATION BY SENATE COMMITTEE VINDICATED NAVY.

Shortly after the accident on the *Mongolia* a resolution was introduced into the United States Senate calling for an investigation of the accident and of other cases of alleged defective munitions on armed liners. The Senate Committee on Naval Affairs conducted a thorough investigation, and reported in full to the Senate on June 27, 1917. This report set forth the facts ascertained, and commended the department for promptly recognizing the source of the trouble and making an efficient and successful effort to remedy it. The committee commended the work of the Navy Department in arming more than 200 merchantmen within a few weeks, stating that "the

most experienced and best trained gunners were put on these ships"; that only good and efficient guns were furnished; that "the powder was of recent manufacture and was thoroughly tested"; that out of more than 200 merchantmen armed there had been trouble on only four, and that the department had "at once begun an investigation to ascertain the cause of the trouble and to remedy the same."

EXPLOSION AT MARE ISLAND NAVY YARD.

In view of the very large increase in explosives and magazines, it is notable that the Navy has had only one case of serious loss of life or munitions by explosion caused either by accident or crime. On July 9, 1917, the black-powder magazine at the Mare Island ammunition depot blew up, and that building and several others in the immediate vicinity were demolished and nearly all the buildings on the depot reservation suffered more or less damage. Six persons were killed and about 40 others injured.

The commandant immediately appointed a board, which made a thorough and searching investigation. In addition to the usual means taken to fix the cause of the explosion and to find the men guilty of the crime, the Secretary of the Navy authorized the commandant to employ private detectives and directed him to leave no stone unturned to apprehend the guilty parties. Capt. Harry George, commandant of the Mare Island Yard, and the board of officers appointed by him have been most diligent and alert. When they became convinced that the explosion was not an accident but a deliberate crime, the attempt to find the criminal was prosecuted with all the vigor possible and with all the aid which the power of the Navy and the Treasury could command. The culprits have not yet been apprehended, but the authorities of Mare Island Navy Yard have zealously continued the investigation, for which they deserve the highest commendation. In their effort to locate the criminals they have been seconded by the entire personnel of the station, military and civilian.

The Naval Consulting Board.

During the year the work of this board, organized and approved by Congress in 1915, has increased very materially in importance and volume, its meetings have been frequent and the work of its individual members has been such in some cases as to occupy almost their entire time in the service of the Government.

Some time before the active entry of this country into war the board called a special meeting to which were invited some 50 of the leading scientists and industrial managers, whose special study fitted them to advise on the methods of meeting the submarine

problem. Plans were immediately made to investigate every field to develop a means of preventing destruction of vessels and of defeating the U-boat. The investigation was divided according to the experience of the different members and associated scientists and with the cooperation and valuable assistance of the various manufacturing companies interested a highly developed system of teamwork has been attained and results accomplished not dreamed of at the beginning of the war.

The services of the board were offered to the Council of National Defense and accepted by that body for the investigation of all inventions submitted. Its services were also accepted by the War Department in an advisory capacity.

Valuable assistance has been rendered merchant shipping by the board's activities. Through its initiative, counsel and work the United States Shipping Board formed its ship-protection committee, taking over the study of the protection of merchant ships, and to this committee was detailed one of the Consulting Board's most experienced members qualified in shipbuilding and with sea experience. In this field the board's work has resulted in materially reducing the shipping risk, with a consequent lowering of marine insurance rates.

Not the least result of its work has been the stimulation of interest, in the problems brought up by the war, throughout the country by the general invitation to submit ideas for investigation. Early in the calendar year 1917 this interest manifested itself in the receipt of thousands of ideas weekly, and to care for this the department's connecting office has been greatly enlarged, the office of the board in New York has been organized on a working basis with a large force, and the whole movement has received the approval and hearty assistance of the great national engineering societies. The president of the board, Mr. Thomas A. Edison, has been giving his entire time to the work of the board in the service of his country, and has called to his assistance a capable staff who are working diligently upon naval problems.

With war conditions increasing the need for labor and building materials, it was believed to be a wise policy to defer for a time the building of the new experimental and research laboratory. Such experiments as have been warranted have been made in private laboratories generously offered and at the Bureau of Standards. The need for this establishment, however, is more clearly shown than ever, and its support is urgently advised.

The valuable results obtained by the work of this board are of too confidential a nature to make them the subject of a public document. The members have given freely of their time and scientific ability to the service of the Nation and have earned the gratitude of

all who know their unselfish and patriotic service. I wish to express my sense of obligation for the cheerful cooperation, wise counsel, loyal devotion, and personal sacrifice which have characterized the membership of the board of distinguished civilians who responded, long before war was declared, to the selective draft with all the enthusiasm and efficiency of youthful volunteers.

Perfect Teamwork in Department.

The compulsion of military necessity denies the full recital of what has been done by the Navy since war was declared. I must, however, bear tribute to the spirit of unwearied diligence and expert efficiency in every bureau and every agency organized under the Navy Department. In this period the Republic has been fortunate in the proven capacity of the naval officers who have filled important stations ashore as well as in the splendid men who have commanded fleets and ships. There has been the heartiest cooperation and the most perfect teamwork. As Chief of Naval Operations, Admiral William S. Benson has shown ability of the highest order, and, with capable associates in that organization responsible to the Secretary for the operation and readiness of the fleet, has given full proof of capacity, resource, and initiative. The chiefs of the bureaus have likewise splendidly demonstrated the effectiveness of naval organization in the wonderful work that has been done. No admirals in a victorious fleet have deserved more the approval of their countrymen than Admirals Robert S. Griffin, Chief of the Bureau of Steam Engineering; William C. Braisted, Chief of the Bureau of Medicine and Surgery; Samuel McGowan, Chief of the Bureau of Supplies and Accounts; David W. Taylor, Chief of the Bureau of Construction and Repair; Frederic R. Harris, Chief of the Bureau of Yards and Docks; Leigh C. Palmer, Chief of the Bureau of Navigation; and Ralph Earle, Chief of the Bureau of Ordnance. These men and their associates and the other officers and civilians, whose rare devotion and ability have been equaled only by their patriotism, have made possible the recognized power of the Navy to-day. In the stress of war work it has been a delight to serve one's country in such comradeship as exists in the Navy Department. To it and to the well-known ability of these experts the chief measure of naval preparedness is due. I regret that it is impossible by name to pay tribute to the many, unknown outside the department, whose devotion and ability make them as deserving as the men in the trenches.

Additional Office Space Needed.

The operations of the Navy Department, with its largely increased personnel, have been hampered since the beginning of the war by the lack of sufficient office space. The business of the department

is now carried on in seven rented buildings, in addition to the main offices in the State, War, and Navy Building and the Navy Annex and the offices loaned in the new Interior Building occupied by the Bureau of Ordnance. It is imperative that additional office space be provided. Last June I asked Congress for authority to rent an 11-story building which the Arlington Corporation agreed to build on the site of the old Arlington Hotel, with the understanding that if funds could be secured from Congress the entire building would be taken over by the Navy Department. This building would have provided 350,000 square feet of area and would have given the necessary office room located only about a square and a half from the Navy Department. Congress did not make the appropriation requested for this building, but the urgent deficiency act of October 6 appropriated \$2,000,000 for temporary buildings for the War and Navy Departments, which are now being erected in Henry Park. I am informed that the entire space in this building will be required by the War Department for its greatly enlarged and enlarging activities. I therefore trust that this session of Congress will make an appropriation whereby the Navy Department may rent the Arlington Building, so that all of its bureaus, except those in the State, War, and Navy Building, may be housed conveniently in a fireproof building which will give adequate quarters for the important work which the Navy is trying to render to the country in this period when it needs every facility for the big work it is undertaking.

The Navy and the Liberty Loan.

It is a cause for gratification that the men who are fighting for the country's cause, afloat and ashore, have shown themselves willing and eager to help the country financially as well.

The Navy's campaign for the first Liberty loan was not begun until within a few days of the closing of subscriptions, so that little time was given to accomplish results in a line of effort which had never before been attempted. Even with this great handicap, subscriptions totaling \$3,110,450 were received from the ships, navy yards, and naval stations.

The campaign for the second loan was entered upon with the advantage gained by the experience in the first, and this, together with the better knowledge among the men in the service of the meaning of the loan, resulted in a total subscription of \$10,202,150. Later reports received from ships and stations increased this total by approximately \$600,000.

Navy Auxiliaries of the American Red Cross.

In order to avoid the duplication and waste of energy caused by a multiplicity of relief agencies which the European war has shown to be destructive of the best help, and to centralize and make more efficient the efforts of thousands of patriotic women throughout the

country engaged in making articles to add to the comfort of the men of the Navy, the American Red Cross, at my request, has undertaken the formation of Navy auxiliaries to carry on this laudable work, and I have designated the Red Cross as the sole official medium through which such gifts are to be sent to the Navy.

To direct this undertaking the Woman's Advisory Committee on Navy Auxiliaries to the Red Cross War Council was formed with the following members:

Mrs. E. T. Stotesbury, Philadelphia, chairman; Mrs. George Dewey, Washington, D. C.; Mrs. George Barnett, Washington, D. C.; Mrs. Walter B. Brooks, jr., Baltimore; Mrs. Frederick D. Countiss, Chicago; Mrs. George J. Denis, Los Angeles, Cal.; Mrs. Charles Dana Gibson, New York; Mrs. Cary T. Grayson, Washington, D. C.; Mrs. J. Ogden Armour, Chicago; Mrs. Bryan Lathrop, Chicago; Mrs. E. T. Meredith, Des Moines, Iowa; Mrs. Henry Morgenthau, New York; Mrs. Henry R. Rea, Pittsburgh, Pa.; Mrs. Matthew T. Scott, Bloomington, Ill.; Mrs. James M. Thomson, New Orleans; Mrs. French Vanderbilt, Newport, R. I.; Mrs. Charles S. Hamlin, Boston; Mrs. Otto Wittpen, Hoboken, N. J.; and Mrs. John Holliday, St. Louis.

I wish by every means in my power to facilitate the work for the Navy so generously performed by the women of the country, and I believe this can best be done by the method adopted. Paymasters have been designated at certain points to take charge of the receipt and distribution of these gifts and the Philadelphia Navy Yard designated as the center to which all gifts are to be sent. Every donor may be assured that the articles will be placed where they are most needed and will be gratefully received by the men of the Navy and Marine Corps, who are cheered by this evidence that the women of America have their welfare at heart.

Legal Sanction of the Term "Navy."

The American people have shown genuine interest in the young men in the Navy, and have manifested every disposition to be generous in ways that would add to their comfort and happiness. In view of the many appeals to the people for money during the war, it becomes necessary that every dollar contributed shall be so expended as to insure the public that none of it is unwisely used. To this end there is need for some method by which the spontaneous desire to give proof of helping men in the Navy shall be directed into the best channels. A duplication of organizations hampers these patriotic efforts. Has not the time come for some authoritative direction so that there shall not be waste and divided energies?

The unauthorized use of the word "Navy" by organizations, many of them with the spirit of unselfish desire to aid the service, confuses the people. They think any organization using the term

"Navy" on its letterhead has at least some official connection with the Navy. I recommend that Congress deny to any organization the right to call itself by the name of "Navy" this or "Navy" that unless authorized, and that the use of the designation "Navy" by any temporary agency or benefit be permitted only with the approval of the Secretary of the Navy. This would insure sanction and protection to those agencies operated by patriotic men and women and deny to the ephemeral or unknown bodies the right to make appeals in behalf of the Navy. It has occasionally happened that money contributed by generous people for men in the service has gone chiefly to "expenses" and "organization" instead of to the purposes which the contributors desired to aid. Publicity of expenditures in the case of every organization or agency is necessary.

The Coast Guard and the Coast and Geodetic Survey.

With the beginning of the war, in accordance with legislation previously enacted, the President was authorized to transfer to the Navy the Coast Guard, which had been under direction of the Treasury Department, and the Coast and Geodetic Survey, which had been under the control of the Department of Commerce. Both these services have continued to be operated under the new conditions with their well-known efficiency. The vessels from the Coast Guard and the Coast Survey have been assigned to patrol duty and to other important duties, and they have added to the strength of the Navy staunch and seaworthy vessels with well-trained officers and crews.

Virgin Islands Acquired by the United States.

The Danish West Indies, comprising the islands of St. Thomas, St. John, and St. Croix, acquired by purchase from Denmark for the sum of \$25,000,000 in accordance with the treaty ratified January 17, 1917, were formally taken over by the United States Government on March 31 and renamed "The Virgin Islands of the United States" and their government committed to the direction of the Navy Department. By presidential appointment, Commander Edwin T. Pollock, United States Navy, represented this Government at the ceremonies at St. Thomas and took possession of the islands in the name of the United States. Guards from the Danish cruiser *Valkyrien* and the U. S. S. *Hancock* were present, as well as the officials of the Danish Government and the consular representatives of other nations.

The Danish acting governor of the islands, Capt. Henri Konow, Royal Danish Navy, commander of the cruiser *Valkyrien*, in the name of His Majesty King Christian the Tenth of Denmark, proclaimed the islands transferred to the United States, upon which the guards of honor presented arms, the Danish national flag was lowered while the band played the Danish national anthem, and a

salute of 21 guns was fired by the *Valkyrien* and the *Hancock*. Commander Pollock, on behalf of the President of the United States, declared the islands to be in the possession of the United States, the American flag was hoisted while the band played the American national anthem, and a salute of 21 guns was fired from the saluting battery and the men-of-war. Commander Pollock then read the proclamation of the President and announced that, by order of the President, the islands were to be known as "The Virgin Islands of the United States of America." The commander stated that he had been directed to assume the position of acting governor, and in a brief address to the people assembled said:

While the old order changeth and His Majesty King Christian the Tenth of Denmark and his advisors have deemed it wise to permit the sovereignty of these islands to pass from the Kingdom of Denmark to the Republic of the United States of America, it is earnestly hoped and prayed that no one, and, above all, the people of these islands, will ever have reason to regret the change.

Formal ceremonies also took place at Fredericksted, where the United States was represented by Commander B. B. Bierer, commanding officer of the *Olympia*, and at Christiansted, where First Lieut. Edward S. Willing, United States Marine Corps, was in command of a detachment of marines.

The President, in accordance with the authority conferred upon him by the act of Congress March 3, 1917, to provide a temporary government for the islands, appointed Rear Admiral James H. Oliver governor, and early in April Admiral Oliver assumed the duties of the office.

Half a century ago negotiations were begun looking to the acquisition of these islands, which were desired by the United States on account of their strategic position. But it was not until August 4, 1916, that the convention arranging for the transfer was signed, this being ratified by the United States Senate on September 7, 1916, and the final ratifications exchanged in Washington on January 17, 1917. Congress, in addition to the \$25,000,000 to be paid for the purchase of the islands, appropriated, in the act of March 3, 1917, \$100,000 for the expenses of government.

As the revenue derived from the islands falls short of the amount required to carry on the government, and as certain improvements are absolutely necessary, I recommend a further appropriation of \$200,000 for the next fiscal year.

Guam and American Samoa.

The creation of the Guam Congress, composed of commissioners, deputy commissioners, and other prominent men of the districts, all appointed by Gov. Roy C. Smith, as well as certain officers of the island government, gives the inhabitants a larger share in the govern-

ment of that Island. The first session was held on February 3, 1917, and this promises to prove a valuable advisory council. Progress has been made in increasing the water supply, promoting agriculture, and improving public works, and in caring for the general welfare of the population.

Gov. Poyer reports that American Samoa has enjoyed increasing prosperity during the fiscal year, that there have been no serious epidemics, and health conditions were excellent. A severe earthquake and tidal wave occurred on June 25, a number of buildings being damaged, but no damage being done to the naval station. A new Government school is being erected, and the hospital training school for native nurses has proved an assured success. During the year there were only three cases of intoxication reported among the 7,500 inhabitants. Trade with Apia has increased 600 per cent over the previous year. The laws and regulations of the island government have been codified by Judge Alexander Stronach, secretary of native affairs.

Admiral Dewey, Naval Hero and Statesman.

On January 16 the Navy lost its ranking and greatest officer, Admiral George Dewey. He died in the eightieth year of his age, having been born at Montpelier, Vt., on the 26th day of December, 1837. America has had only three full admirals (Farragut, Porter, and Dewey) elevated to that high grade for life. Among the number, the late George Dewey, "The Admiral of the Navy," ranked second to none of his predecessors in courage and naval knowledge, and was easily the foremost naval statesman of his generation. Before his victory at Manila he was known as an intrepid and able officer. His fame was not the result of chance, but of a life of preparation for the supreme moment. He bore with dignity and modesty the marked honors conferred upon him in 1898 and after, and was permitted to live 17 years after his return from the Philippines to navigate the naval policy into safe harbors with as much skill as he had navigated his ships into Manila Bay. Students of his career at Manila, after his naval victory, have doubted whether he was most to be honored as the courageous victorious commodore or as the able and far-seeing statesman whose actions showed his belief that the civilian power must be supreme in our form of government. To the end of his life he held to this sound American doctrine that it was the duty of the soldier and the sailor to be ready to fight, but it was not their function ever to seek to usurp the place of the civilian administrator. That conviction was deep rooted, and to it he often gave expression.

Admiral Dewey's active service afloat ended when he was welcomed home with such honors as had never before been given a returning naval hero; but he never retired. Up to a few days before his death

he was the active dynamic force of the General Board of the Navy, of which he was the honored president. He was always early at his desk, diligent, and kept up with naval progress in every country in the world. To devotion to his profession and zeal for its growing efficiency, which he did more than any other man to promote, Admiral Dewey added the vision and the judgment of statesmanship. To his recognized and wise leadership must we attribute much of the expansion of the Navy and the fine esprit de corps of the service he loved and adorned.

Upon the death of Admiral Dewey the President, in a special message to Congress announcing the loss the Republic had sustained, closed with this summing up of the qualities that place him with the immortals:

It is pleasant to recall what qualities gave him his well-deserved fame: His practical directness, his courage without self-consciousness, his efficient capacity in matters of administration, the readiness to fight without asking any questions or hesitating about any detail. It was by such qualities that he continued and added luster to the best traditions of our Navy. He had the stuff in him which all true men admire and upon which all statesmen must depend in hours of peril. The people and the Government of the United States will always rejoice to perpetuate his name in all honor and affection.

The form the memorial to this sailor statesman will take will command the thoughtful consideration of Congress. It should be stately and worthy of the noble officer it will commemorate.

John Ericsson Memorial.

It seems fitting at a time when America is engaged in a great war in which the Navy has already taken active part there should be erected by the direction of Congress a monument to the memory of John Ericsson, whose great invention, successfully applied to the *Monitor*, was completed in the War Between the States just in time to meet the Confederate ram *Virginia (Merrimac)* in Hampton Roads March 9, 1862, in that historic conflict of ironclads that settled forever the question of wooden navies and marked the beginning of ironclad, turreted ships. This was the culmination of a number of inventions after Ericsson gave his attention to navigation, for he invented the screw propeller which revolutionized the propulsion of ships of the world, the caloric engine, meters, barometers, pyrometer, sea lead, etc. After coming to America in 1841 he built the U. S. S. *Princeton*, the first ship with propelling machinery under the water line and out of reach of shot. Marked changes have been made in naval construction during the present war, but, dreadful as the submarine menace has shown itself to be, no genius of our day has produced such a revolution in naval construction as did Ericsson in the construction of the *Monitor*.

Congress at its last session appropriated the sum of \$35,000 for the erection in the city of Washington of a suitable memorial to John Ericsson, and named a commission composed of Hon. John Sharp Williams, chairman of the Committee on Library of the Senate; Hon. James L. Slayden, chairman of the Committee on Library of the House of Representatives; and the Secretary of the Navy, to carry out this deferred recognition of the great inventor and constructor. Of Scandinavian origin, Ericsson was one of the foremost of the patriotic men of that sturdy race who have enriched America. His countrymen in America, desiring to make a direct contribution to the statue to Ericsson through the John Ericsson Memorial Association, have contributed \$28,000, which will be added to the appropriation made by Congress. Already visitors to Washington's squares are inspired by the patriotism of the naval heroes whose statues adorn them, and the statue of Ericsson will be worthy of companionship with the bronze figures of the illustrious fighters of the sea.

Naval Monument at Vicksburg.

In October there was unveiled on the Vicksburg battlefield a naval monument to the memory of the officers and men who hastened the coming of peace by the brilliant achievements on the Mississippi. The services of the Navy on those western waters by Farragut, Porter, Foote, Davis, and other naval officers and men is commemorated in an obelisk of enduring granite. The Navy Department's representative on this occasion was Hon. W. W. Venable, member of the Naval Affairs Committee of the House of Representatives, who, in the enforced absence of the Secretary of the Navy, delivered the dedicatory address.

Roll of Honor in Foreign Service.

Even before war was declared a member of one of our naval guards, Boatswain's Mate John I. Eopolucci, met his death in the sinking of an American merchantman. Shortly afterwards the first United States officer lost in this war, Lieut. C. C. Thomas, and four members of his gun's crew perished after the sinking of the *Vacuum*. As in nearly every war, to the Navy was given the sacred privilege of making the first costly sacrifice.

The following men of the Navy have lost their lives in service against the enemy:

John I. Eopolucci, boatswain's mate, first class, lost in sinking of the steamship *Astec* April 1.

Lieut. Clarence C. Thomas; Alexander Donald, seaman, second class; Charles J. Fischer, coxswain; Charles F. Luckan, seaman;

Frank H. LoRee, seaman, members of armed guard on steamship *Vacuum*, died in open boat after sinking of that steamship April 28.

Sidney Horwig, seaman, second class; Andrew Lawrence, seaman, second class; Don Walton Barmore, seaman; Joseph F. Carlin, coxswain; James A. Sokel, seaman, second class; William Whelan, seaman, second class; Cornelius O. Torjusen, seaman, second class; Albert H. Vogel, seaman, second class, lost in sinking of steamship *Motano* July 31.

Roscoe Earl Wagstaff, seaman, second class, lost in sinking of steamship *Platuria* September 15.

Edward Woodworth, seaman, second class, accidentally drowned from steamship *Cacique* in Russian waters July 25, 1917.

James Lee Squib, seaman, second class, washed from steamship *Chincha* August 14, 1917.

James Henry Bush, fireman, third class, drowned accidentally from United States destroyer in August.

Osmond K. Ingram, gunner's mate, second class, killed in action on United States destroyer October 16.

John W. Hunt, seaman, second class; J. C. McKinley, seaman; H. F. Watson, electrician, third class (radio); C. L. Ausburn, electrician, third class (radio); lost in sinking of U. S. transport *Antilles* October 17.

George Herbert Manley, landsman quartermaster (aviation), killed in France August 21 as result of aeroplane accident.

Louis Reinhardt, seamen, second class, drowned June 12; buried in France.

Harold Norman Halstead, landsman quartermaster (aviation), died in France July 31.

Thomas W. Barrett, landsman quartermaster (aviation), killed in aeroplane accident in France July 28; first aviator of any United States force killed in service in France.

John Edward McNeil, seaman, second class, lost in sinking of steamship *Lewis Luckenbach* October 11.

James W. Henry, seaman, second class; Newton D. Head, seaman; Porter Hilton, seaman, second class, members of the naval armed guard on U. S. transport *Finland*, lost when that vessel was torpedoed.

R. W. Riker, seaman, second class; M. A. Pacciano, boiler maker; Robert McCray, seaman; E. Harrison, mess attendant, first class; V. E. Harrington, seaman, second class; Frank W. Higgins, yeoman; Allen Thomas Edwards, seaman, second class; W. R. Holler, seaman, second class; E. R. Gozzett, seaman, second class; C. F. Gaus, seaman, second class; F. W. Fingerling, fireman, second class; A. T. Edwards, seaman, second class; James J. Cleary, seaman, second class; J. W. Brunkhardt, seaman, second class; W. W. Smock,

seaman, second class; W. U. Surratt, seaman, second class; R. Wesche, seaman, second class; J. R. Daniel, seaman, second class; Luther O. Weaver, seaman; E. J. Towle, seaman, second class; John Winne, jr., seaman, lost in sinking of U. S. S. *Alcedo*, November 5, 1917.

Lieut. Commander Walter E. Reno; Lieut. (Junior Grade) Charles F. Wedderburn; Ensign Harry G. Skinner, jr.; Stanley T. Anthony, electrician, first class, radio; Honore Martin Claggett, jr., electrician first class; Daniel B. Crane, machinist's mate, second class; Joseph Sharp Ewart, machinist's mate, first class; Charles Albert Goodrich, chief machinist's mate; Algen Hysle Guttridge, machinist's mate, second class; Henry George Haman, seaman; Joseph Adolphe Heroux, fireman, third class; William Herman Hampel, oiler; Ira Francisco Kopp, gunner's mate, first class; Charles Albert O'Connor, chief yeoman; Francisco Pagtakhan, mess attendant, third class; John Rhinehart, chief water tender; John A. Smith, gunner's mate, first class; John William Stribling, oiler; Oswald Jager Terkildsen, yeoman, second class; Nicholas H. J. Wagner, ship fitter, first class; George Wornell, boilermaker, lost in sinking of destroyer *Chauncey*.

The Navy in Previous Wars.

In this, as in most other wars in which our country has been engaged, the United States Navy has truly demonstrated that it is "the first line of defense." Up to this time in the present conflict there are something like 250,000 enlisted men in the service of the Navy and Marine Corps. The number of ships of all classes in service exceeds a thousand, with a large number under construction. It is interesting, in this connection, to recall briefly the number of men and ships of the Navy engaged in previous wars.

During the Revolutionary War, for which the statistics are imperfect, it is estimated that about 10,000 men were employed on the 84 vessels that accomplished so much in the cause of freedom for the struggling Colonies which had asserted their independence. In the Tripolitan wars from 1801 to 1807 we employed some 19 vessels, whose total tonnage was about 15,000. At the beginning of the War of 1812 we had 21 vessels, including 5 frigates, 3 sloops, and 7 brigs, ranging from 100 to 1,644 tons, with a total tonnage of about 14,000. In that war for the freedom of the seas 165 small gunboats were also employed and hundreds of privateers inflicted destruction on British commerce. In 1812 there were in the Regular Navy about 500 officers and 4,010 enlisted men. During that struggle there were employed 14,960 officers and men and 2,715 marines. In the Mexican War the Navy comprised 72 vessels ranging from 100 to 3,000 tons, with a total tonnage of 68,000. The authorized enlisted strength was 7,500, which, of course, did not include officers and

marines, which would probably make the total number of men employed about 10,000. When the Civil War began in 1861 there were in commission or available 69 war vessels, of 85,054 tons. Every type of vessel that could be used was pressed into service, new types such as the monitor and the ironclad were developed, and there was great activity in shipbuilding as the war progressed. Eight hundred vessels of all kinds were utilized, probably 600 of them fighting ships. The largest was the *Niagara*, a wooden ship of about 6,000 tons, and the largest of the ironclads was *The New Ironsides*. The largest guns were the 15-inch Dahlgren smooth-bores on the *Monitor*, which had a range of about 4,000 yards. The greatest number of men in service at any one time was about 51,000 in 1863. In the four years the total number of enlistments was 118,044, an average of 29,500 for each year.

At the beginning of the War with Spain there were 13,945 enlisted men in the Navy and during the war this was increased to 26,828, including 4,000 Naval Militia in service. On June 30, 1898, there were 20,802 enlisted men and 2,026 apprentices on the rolls; total, 22,828. There were 1,484 officers in the Regular Navy, 180 retired officers were in active service, and 856 served under temporary appointments, a total of 2,520 officers. The Marine Corps expanded from 3,073 to 5,046, with 140 officers.

There were 111 vessels, with an aggregate of 240,000 tons, on the naval list at the beginning of the war, but many were small and ineffective, the smallest being only 31 tons. The largest was the battleship *Oregon*, of 11,340 tons. Nearly 200 auxiliary vessels were acquired, the total number employed being 312, including a few vessels captured from the enemy.

An International Navy to Keep the Peace of the World.

The immediate hope for a world-wide agreement of the navy-building nations for reduction of armament through joint action, which I have urged in every previous report, can not be cherished now that all the world is at war. But if this condition could not be reached in time of peace, may we not believe that it will be one of the compensations for the terrible tragedy of war? The necessity for naval vessels will continue, but, among the policies that will be approved in the peace conference that will follow war there should be incorporated a provision guaranteeing an international navy to enforce international decrees. To this international navy, composed of separate naval establishments of all nations, each country should contribute in proportion to its wealth and population or upon some plan to insure that no nation can safely challenge the decrees of the high international court. To such a police of the sea this country

will be ready to make full contribution, and to that end the expansion that now crowds all the old and new shipbuilding resources will soon place this country in a position to furnish as many and as powerful ships as will come from any other country. It would be a lasting calamity if, when this war ends, there should linger as a burden upon a people, already heavily taxed by war, a competitive program of costly naval construction. This country will, no doubt, take its proper place in bringing about such provisions in the peace treaties as will never again constrain any nation to adapt its naval program to the program of some other nation from which there is the compelling menace of possible and unprovoked attack. Such compulsion is the very negative of natural and orderly naval development. It means the tyranny of a program dictated by apprehension rather than the free choice of a standard suggested by national needs and supported by national ideals. An international navy, on the contrary, will make possible such naval development as each nation deems fitting for its own people. It will also serve "the parliament of man" by providing a naval force ample enough to give validity to international decrees and strong enough to keep inviolate the peace of the world.

The Future.

The program for naval expansion and new construction for the future, big enough to assure America "incomparably the strongest Navy in the world," will call for liberal appropriations by Congress, and the most earnest efforts of those intrusted with carrying it out. This includes not only the executives, the officers and enlisted men, the civilian force, and the skilled workers, but all the private companies constructing ships or manufacturing anything the Navy needs. It is a pleasure to bear testimony to the spirit of the manufacturers and builders and their employees in this time when demands have compelled such speeding up as they had never anticipated. They have worked enthusiastically and with splendid zeal to supply the munitions and material demanded. In the enlargement and extension of plant and increase of production there is the continued call for unceasing effort. There must be no pause or relaxation on the part of the Government plants or private plants in supplying the means of offensive or defensive power to the fighting Navy. The changes in modern warfare may make the implement of to-day obsolete tomorrow. There must be readiness, therefore, at a moment's notice, to change the character of production as well as to increase the output. To this end inventive genius, manufacturing skill, and national resource must be united.

What we have done in the Navy is but the earnest of the things that will become manifest in the months that are before us. Among

the 300,000 men in the Navy, enlisted and civil personnel, or the thousands working outside, there is no thought of lessening effort until the great victory is won. The Navy realizes as never before that it is not merely a division of the national will. It is the expression of the power of the whole Republic, animated by a common memory, energized by a common zeal, and directed by a common and invincible purpose.

Much remains to be done, but it will be done cheerfully, gladly, efficiently. The plans have been made on a scale commensurate with the task. They will be carried out with speed, with confidence, and with ultimate success.

JOSEPHUS DANIELS,

COMPARATIVE STATEMENT OF ESTIMATES AND APPROPRIATIONS, 1918-19, NAVY DEPARTMENT.

	Appropriated, 1918.	Estimates, 1919.	Increase of esti- mates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of esti- mates for 1919 as compared with amount appro- priated for 1918 for same purpose.	New items, 1919.
Navy Department.					
Office of the Secretary:					
Salaries.....	\$85,020.00	\$82,860.00		\$2,160.00	
Three telephone switchboard operators, at \$720 each, omitted.....					
Total.....	85,020.00	82,860.00		2,160.00	
Office of the Solicitor:					
Salaries.....	20,590.00	20,590.00			
Office of Naval Records and Library:					
Salaries.....	21,000.00	21,000.00			
Necessary traveling expenses..... ♦	100.00	100.00			
Total.....	21,100.00	21,100.00			
Office of the Judge Advocate General:					
Salaries.....	17,010.00	17,010.00			
Office of Chief of Naval Operations:					
Salaries.....	31,350.00	31,350.00			
Bureau of Navigation:					
Salaries.....	100,990.00	100,990.00			
Office of Naval Intelligence:					
Salaries.....	17,100.00	17,100.00			
Hydrographic Office:					
Salaries.....	124,020.00	124,020.00			
Contingent and miscellaneous expenses—					
For purchase of copper plates, etc.....	60,000.00	100,000.00	\$40,000.00		
Contingent expenses of branch offices.....	10,000.00	15,000.00	5,000.00		
For services of necessary employees at branch offices.....	17,960.00	17,960.00			
Total.....	211,980.00	256,980.00	45,000.00		

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

Navy Department.	Appropriated, 1918.	Estimates, 1919.	Increase of esti- mates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of esti- mates for 1919 as compared with amount appro- priated for 1918 for same purpose.	New items, 1919.
Naval Observatory:					
Salaries.....	\$47,040.00	\$47,040.00			
Contingent and miscellaneous expenses—					
Miscellaneous computations.....	5,000.00	5,000.00			
Books, etc.....	750.00	1,000.00	\$250.00		
Apparatus, etc.....	2,000.00	3,000.00	1,000.00		
Repairs, etc.....	3,000.00	4,000.00	1,000.00		
Fuel, etc.....	8,000.00	12,000.00	4,000.00		
Grounds and roads, etc.....	5,000.00	7,500.00	2,500.00		
Observations, eclipse of the sun.....	3,500.00			\$3,500.00	
Nautical instrument repair shop.....	20,000.00			20,000.00	
Total.....	94,290.00	79,540.00	8,750.00	23,500.00	
Nautical Almanac Office:					
Salaries, Nautical Almanac Office.....	19,240.00	19,240.00			
Pay of computers on piecework, etc.....	3,000.00	3,000.00			
Total.....	22,240.00	22,240.00			
Bureau of Steam Engineering:					
Salaries.....	65,210.00	65,210.00			
Bureau of Construction and Repair:					
Salaries.....	73,350.00	73,350.00			
Bureau of Ordnance:					
Salaries.....	34,610.00	34,610.00			
Bureau of Supplies and Accounts:					
Salaries.....	136,270.00	136,270.00			
Bureau of Medicine and Surgery:					
Salaries.....	24,150.00	24,150.00			
Bureau of Yards and Docks:					
Salaries.....	29,170.00	29,170.00			
Additional employees, Navy Department (set June 15, 1917).....	499,033.00	893,260.00	394,227.00		

Contingent expenses, Navy Department.....	350,810.00	332,000.00	71,700.00	85,510.00
Stationery, furniture, &c.....				5,000.00
Rent of buildings.....				
Purchase and installation of blue-printing plant.....				
Total.....	350,810.00	332,000.00	71,700.00	90,510.00

Note.—The Treasury Department has been requested to include an estimate of \$200,000 for printing and binding for the Navy Department for the fiscal year ending June 30, 1919.

RECAPITULATION.

Secretary's Office.....	\$85,020.00	\$52,860.00		\$2,160.00
Office of the Solicitor.....	20,590.00	20,590.00		
Office of Naval Records and Library.....	21,100.00	21,100.00		
Office of Judge Advocate General.....	17,010.00	17,010.00		
Office of Chief of Naval Operations.....	31,350.00	31,350.00		
Bureau of Navigation.....	100,990.00	100,990.00		
Office of Naval Intelligence.....	17,100.00	17,100.00		
Hydrographic Office.....	211,980.00	266,980.00	\$45,000.00	
Naval Observatory.....	94,290.00	79,540.00	8,750.00	23,500.00
Nautical Almanac Office.....	22,240.00	22,240.00		
Bureau of Steam Engineering.....	65,210.00	65,210.00		
Bureau of Construction and Repair.....	73,350.00	73,350.00		
Bureau of Ordnance.....	34,610.00	34,610.00		
Bureau of Supplies and Accounts.....	136,270.00	136,270.00		
Bureau of Medicine and Surgery.....	24,150.00	24,150.00		
Bureau of Yards and Docks.....	29,170.00	29,170.00		
Additional employees, Navy Department.....	499,038.00	863,260.00	394,222.00	
Contingent expenses, Navy Department.....	350,810.00	332,000.00	71,700.00	90,510.00
Total.....	1,834,378.00	2,237,790.00	519,672.00	116,170.00

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

Naval Establishment.	Appropriated, 1918.	Estimates, 1919.	Increase of estimates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Pay, miscellaneous.....	\$2,925,500.00	\$4,350,000.00	\$1,414,500.00		
Contingent, Navy.....	46,000.00	150,000.00	104,000.00		
Temporary government for West Indian Islands 1.....	100,000.00	200,000.00	100,000.00		
Expenses, Civilian Naval Consulting Board.....	100,000.00	100,000.00			
Investigation of fuel oil, etc., Navy.....	60,000.00	60,000.00			
Aviation, Navy.....	61,133,000.00	94,000,000.00	32,867,000.00	\$1,000,000.00	
Basic patents of aircraft.....	1,000,000.00				
National Advisory Committee for Aeronautics 1.....	107,000.00	260,000.00	153,000.00		
State marine schools.....	50,000.00	50,000.00			
Care of lepers, etc., Island of Guam.....	20,000.00	20,000.00			
Bureau of Navigation:		5,100,000.00	5,100,000.00		
Transportation and recruiting.....	3,419,848.00			3,419,848.00	
Transportation.....	1,419,228.84			1,419,228.84	
Recruiting.....	160,000.00	160,000.00			
Recreation for enlisted men.....	20,000.00	20,000.00			
Contingent.....	225,000.00	426,000.00	200,000.00		
Outfits on first enlistment.....	10,163,920.00	9,975,000.00	200,000.00		
Maintenance of naval auxiliaries.....	1,144,800.00			185,920.00	
Instruments and supplies.....	6,193,440.00	3,469,800.00		1,144,800.00	
Ocean and lake surveys.....	155,000.00	155,000.00			
Arming and equipping Naval Militia.....	1,527,617.70	1,527,617.70			
Ships for Naval Militia.....	135,600.00			185,600.00	
Naval training station, California.....	192,000.00	225,000.00	33,000.00		
Naval training station, Rhode Island.....	200,000.00	350,000.00	150,000.00		
Naval training station, Great Lakes.....	146,400.00	725,000.00	578,600.00		
Naval training stations, St. Helena and Hampton Roads.....	80,000.00	310,000.00	230,000.00		

Organizing Naval Reserve Force and administration.....	380,000.00	200,000.00		130,000.00
Schools or camps of instruction for recruits and Naval Reserve Forces.....	2,685,860.00	2,655,860.00		30,000.00
Naval War College, Rhode Island.....	38,850.00	38,850.00		
Total.....	28,276,554.54	25,326,627.70	6,241,600.00	9,191,526.84
Naval Academy:				
Bureau of Ordnance:				
Ordnance and ordnance stores.....	87,840,179.00	24,194,045.00		13,646,134.00
Purchase and manufacture of smokeless powder.....	1,800,000.00	2,400,000.00	600,000.00	
Naval Gun Factory, Washington, D. C.—				
New and improved machinery for existing shops.....	387,092.00	500,000.00	162,964.00	
Repairs and betterments to present facilities.....	385,200.00			
Machinery and equipment for new gun shop.....	1,795,600.00	2,000,000.00	201,600.00	
For tools and machinery plant.....	2,500,000.00			
Naval Proving Ground—				
Extension of facilities, etc.....	1,375,345.00	1,000,000.00	1,000,000.00	\$1,000,000.00
Projectile plant.....	28,000.00			
Fuel lands for armor and projectile plants.....	22,353,000.00			
New batteries for ships of the Navy.....	100,000.00			
Liners for eroded guns.....	40,000.00			
One 12-inch 45-caliber gun.....	1,250,000.00			
Antiaircraft guns and mounts complete.....	1,020,000.00			
Machine guns and equipment.....	50,000,000.00	38,309,522.50		
1-pounder boat guns and mounts complete.....	4,072,174.00			
Batteries and outfits.....	2,572,941.00			
Batteries for merchant auxiliaries.....	10,088,800.00			
Batteries for auxiliaries and merchantmen.....	2,572,941.00			
Ammunition for merchant auxiliaries.....	3,600,000.00			
Ammunition for auxiliaries and merchantmen.....	2,500,000.00			
Antiaircraft guns and ammunition at naval stations.....	108,810,978.00	82,688,120.00		
Ammunition for vessels.....	12,201,280.00			
Torpedo and appliances.....	81,417,460.00	83,000,000.00		
Reserve ordnance supplies.....				
Torpedo Station, Newport, R. I.—				
Maintenance, etc.....	100,000.00	200,000.00	100,000.00	
New and improved machinery and tools for torpedo factory.....	100,000.00	200,000.00	100,000.00	
Experiments, Bureau of Ordnance.....	10,000.00	885,000.00	285,000.00	
Contingent, building fund.....	30,000.00			
Repairs, Bureau of Ordnance.....	9,500.00			
Contingent, Bureau of Ordnance.....	1,250,000.00			
Submarine base, New London, Conn.....				
Total.....	394,337,506.50	135,884,188.50	2,479,464.00	260,932,752.00

1 Omitted from totals.

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

	Appropriated, 1918.	Estimates, 1919.	Increase of esti- mates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of esti- mates for 1919 compared with amount ap- propriated for 1918 for same purpose.	New items, 1919.
Naval Establishment.					
Bureau of Yards and Docks:					
Maintenance, Bureau of Yards and Docks.....	\$6,269,000.00	\$7,000,000.00	\$731,000.00		
Contingent, Bureau of Yards and Docks.....	1,825,000.00	5,000,000.00	3,175,000.00		
Total.....	8,094,000.00	12,000,000.00	3,906,000.00		
Public works, Bureau of Yards and Docks:					
Navy yard, Portsmouth, N. H.—					
Dismantling track extensions.....	11,000.00			\$11,000.00	
Distributing system extensions.....	18,000.00			18,000.00	
Addition to machine shop.....	105,000.00	150,000.00	45,000.00		\$200,000.00
Addition to foundry.....		200,000.00	200,000.00		130,000.00
Washroom and toilet facilities for yard workmen.....		130,000.00	130,000.00		5,000.00
Improvements to naval prison.....		5,000.00	5,000.00		4,000.00
Improvements to naval prison.....		4,000.00	4,000.00		
Total.....	134,000.00	489,000.00	355,000.00	29,000.00	339,000.00
Navy yard, Boston, Mass.—					
Sterilizing and disinfecting plant.....	9,000.00			9,000.00	
Improved drainage and filling arrangements, Dry Dock No. 2.....	17,500.00			17,500.00	
Locomotive and crane shed.....	20,000.00			20,000.00	
For improvement of the central power plant.....	150,000.00	75,000.00	75,000.00		
For extension of chain shop.....	60,000.00			60,000.00	
Total.....	256,500.00	75,000.00	181,500.00	181,500.00	
Navy yard, New York, N. Y.:					
Dredging, to continue.....	125,000.00			125,000.00	
Central power plant improvements.....	160,000.00				
Remodeling building No. 132 for pattern storage.....	34,000.00	200,000.00	166,000.00	40,000.00	
Storage facilities.....	500,000.00				34,000.00
Machine shop extension.....	400,000.00				500,000.00
Fitting out crane.....		750,000.00	750,000.00		400,000.00
Water front improvements.....		650,000.00	650,000.00		750,000.00
Total.....	1,219,000.00	1,000,000.00	1,440,000.00	1,059,000.00	1,400,000.00

Navy yard, Philadelphia, Pa.:								
Dry dock, to complete.....	1,000,000.00	2,000,000.00	1,000,000.00					
Central power plant improvements.....	120,000.00	300,000.00	180,000.00					
50-ton locomotive cranes.....	100,000.00							100,000.00
Purchase of ground, quartermaster's depot, Marine Corps, Philadelphia, Pa.....	200,000.00	100,000.00	100,000.00					200,000.00
Tracks, streets, and sewers.....								100,000.00
Total.....	1,420,000.00	2,400,000.00	1,280,000.00					300,000.00
Navy yard, Washington, D. C.—								
Gun shop, complete.....	900,000.00							900,000.00
Extending existing facilities.....	40,000.00							40,000.00
Improving lighting facilities.....	16,000.00							16,000.00
Improvements to central power plant and distributing systems.....	772,000.00							772,000.00
Yard improvements.....	5,000,000.00							5,000,000.00
Fuse and primer loading house, Bellevue magazine.....	25,000.00	25,000.00	25,000.00					25,000.00
Boundary fence, Bellevue magazine.....	15,000.00	15,000.00	15,000.00					15,000.00
Total.....	6,728,000.00	40,000.00	40,000.00					6,728,000.00
Navy yard, Norfolk, Va.—								
Dry dock, to complete.....	1,000,000.00	2,000,000.00	1,000,000.00					
One structural shop, to complete.....	600,000.00							600,000.00
Water front improvements.....	500,000.00							500,000.00
Improvements to central power plant and distributing systems.....	300,000.00	300,000.00						
Water front improvements, including the acquisition of land.....	500,000.00	500,000.00	500,000.00					500,000.00
Tracks, streets, and sewers.....	150,000.00	150,000.00	150,000.00					150,000.00
Galvanizing shop.....	100,000.00	100,000.00	100,000.00					100,000.00
Steel and lumber storage.....	400,000.00	400,000.00	400,000.00					400,000.00
Total.....	2,400,000.00	3,450,000.00	2,150,000.00					1,100,000.00
Buildings and grounds, Naval Academy—								
Extension of Bancroft Hall.....	1,000,000.00	1,850,000.00	850,000.00					
Improvements, central power plant and distributing systems.....	300,000.00	325,000.00	25,000.00					
2 freight elevators, Bancroft Hall.....	15,000.00							15,000.00
General store building.....		100,000.00	100,000.00					100,000.00
Total.....	1,315,000.00	2,275,000.00	975,000.00					100,000.00
Marine recruiting station, Port Royal, S. C.—								
2 bungalows for officers' quarters.....	6,000.00							6,000.00
Station improvements.....	20,500.00	100,000.00	79,500.00					
Noncommissioned officers' quarters, including purchase of land.....	23,000.00							23,000.00
Total.....	49,500.00	100,000.00	79,500.00					29,000.00
Navy yard, Charleston, S. C.—								
Dredging, to continue.....	15,000.00	25,000.00	10,000.00					50,000.00
New superstructure for Pier No. 314.....	50,000.00							130,000.00
Central power plant improvements and distributing systems.....	130,000.00							12,000.00
Addition to dispensary.....	12,000.00							

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

	Appropriated, 1918.	Estimates, 1919.	Increase of esti- mates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of esti- mates for 1919 as compared with amount ap- propriated for 1918 for same purpose.	New items, 1919.
Naval Establishment.					
Public works, Bureau of Yards and Docks—Continued.					
Navy yard, Charleston, S. C.—Continued.					
Storage facilities.....	\$50,000.00	\$1,150,000.00	\$1,150,000.00	\$50,000.00	\$1,150,000.00
Extending dry dock.....		15,000.00	15,000.00		15,000.00
Railroad system extension.....		200,000.00	200,000.00		200,000.00
Station improvements.....		10,000.00	10,000.00		10,000.00
Boat storage.....					
Total.....	257,000.00	1,400,000.00	1,385,000.00	242,000.00	1,375,000.00
Naval station, Key West, Fla.—					
Station improvements.....		25,000.00	25,000.00		25,000.00
Navy aeronautic station, Pensacola, Fla.—					
Improvements, central power plant.....	50,000.00			50,000.00	
Water system.....	40,000.00			40,000.00	
Repair and resurfacing roads.....	10,000.00			10,000.00	
Quarters for enlisted men.....	20,000.00			20,000.00	
2 magazines and 1 building for storage of torpedoes.....	125,000.00			125,000.00	
Total.....	245,000.00			245,000.00	
Naval station, New Orleans, La.—					
Extension of wharf.....	30,000.00			30,000.00	
Floating crane.....	30,000.00				
Improvements, central power plant and distributing systems.....		30,000.00	30,000.00		
Water front improvements.....		280,000.00	280,000.00		280,000.00
Shell house.....		100,000.00	100,000.00		100,000.00
Total.....	60,000.00	450,000.00	420,000.00	30,000.00	420,000.00
Navy yard, Mare Island, Cal.—					
Floating crane, revolving type.....	450,000.00			450,000.00	
Maintenance of dikes and dredging.....	50,000.00				
Improvements, central power plant and distributing systems.....	105,000.00			5,000.00	
Structural shop and auxiliary improvements.....		1,000,000.00	1,000,000.00		1,000,000.00
Total.....	605,000.00	1,200,000.00	1,050,000.00	455,000.00	1,000,000.00

Navy yard, Puget Sound, Wash.— Purchase of land and fitting up trial course (Vashon Island).....	5,000.00			5,000.00	
Improved drainage in dry docks.....	12,000.00			12,000.00	
Storage facilities.....	500,000.00			500,000.00	
Improvements, central power plant and distributing systems.....	150,000.00	200,000.00		350,000.00	
Purchase of land.....	3,500.00			3,500.00	
Total	670,500.00	200,000.00	50,000.00	620,500.00	
Naval station, Pearl Harbor, Hawaii—					
Dry dock, to complete.....	936,500.00			936,500.00	
Storehouse.....	100,000.00			100,000.00	
Total	1,036,500.00			1,036,500.00	
Naval station, Virgin Islands—					
General improvements, including the purchase of land.....		2,000,000.00	2,000,000.00		2,000,000.00
Naval station, Tutuila, Samoa—					
Additional water supply.....	30,000.00			30,000.00	
Enlisted men's quarters.....	10,000.00			10,000.00	
Improvements to station.....		50,000.00	50,000.00		50,000.00
Total	40,000.00	50,000.00	50,000.00	40,000.00	50,000.00
Naval station, Guam—					
Roads.....	10,000.00			10,000.00	
Storage facilities.....	5,000.00			5,000.00	
Purchase of land.....	15,000.00			15,000.00	
Water supply and power plant improvements.....	30,000.00			30,000.00	
Improvements to station.....		100,000.00	100,000.00		100,000.00
Total	60,000.00	100,000.00	100,000.00	60,000.00	100,000.00
Naval station, Guantanamo, Cuba—					
Dredging and fill.....	9,000.00			9,000.00	
Water supply.....	25,000.00			25,000.00	
Improvements to station.....		200,000.00	200,000.00		200,000.00
Total	34,000.00	200,000.00	200,000.00	34,000.00	200,000.00
Naval magazine, Hingham, Mass.—					
Storehouse.....	35,000.00			35,000.00	
2 magazines.....	70,000.00			70,000.00	
Dredging.....		30,000.00	30,000.00		30,000.00
Total	105,000.00	30,000.00	30,000.00	105,000.00	30,000.00

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

	Appropriated, 1918.	Estimates, 1919.	Increase of estimates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Naval Establishment.					
Public works, Bureau of Yards and Docks—Continued.					
Naval proving ground, Indianhead, Md.—					
Improvements to powder factory.....	\$150,000.00	\$140,000.00	\$20,000.00	\$10,000.00	\$20,000.00
Pyro storage.....		20,000.00			
Total.....	150,000.00	160,000.00	20,000.00	10,000.00	20,000.00
Naval magazine, Fort Mifflin, Pa.—					
1 magazine building.....	35,000.00			35,000.00	
Shell house.....	35,000.00			35,000.00	
Railroad track extension.....	11,400.00			11,400.00	
Concrete fence.....	46,800.00			46,800.00	
1 set of quarters for chief gunner, or gunner.....	7,000.00			7,000.00	
Fire-protection system, extension.....	7,500.00			7,500.00	
Total.....	142,700.00			142,700.00	
Naval magazine, Iona Island, N. Y.—					
1 mine and projectile house.....	38,000.00			38,000.00	
Water front improvements.....	12,000.00			12,000.00	
Quarters for marine officer and medical officer.....		18,000.00	18,000.00		18,000.00
Total.....	50,000.00	18,000.00	18,000.00	50,000.00	18,000.00
Naval magazine, Lake Denmark, N. J.—					
2 shell houses.....	70,000.00			70,000.00	
1 magazine.....	30,000.00			30,000.00	
Total.....	100,000.00			100,000.00	
Naval magazine, Fort Lafayette, N. Y.—					
Dredging channel.....		26,000.00	26,000.00		26,000.00
Total.....		26,000.00	26,000.00		26,000.00
Naval magazine, Mare Island, Cal.—					
1 explosive D loading house and equipment.....	8,000.00			8,000.00	
Building for mine storage.....	8,000.00			8,000.00	
Total.....	16,000.00			16,000.00	

Naval magazine, St. Juliens Creek, Va.—									
Extension of small-arms ammunition building.....	8,000.00								8,000.00
1 mine storage building, including track extension.....	9,000.00								9,000.00
1 magazine.....	30,000.00								30,000.00
2 shell houses.....	70,000.00								70,000.00
Total.....	117,000.00								117,000.00
Naval magazine, Charleston, S. C.—									
2 buildings for ammunition storage.....	70,000.00								70,000.00
1 building, with necessary equipment, for storage of torpedoes.....	50,000.00								50,000.00
Total.....	120,000.00								120,000.00
Naval magazine, Puget Sound, Wash.—									
Shop for loading shells.....	7,000.00								7,000.00
Extension of water system.....	30,000.00								30,000.00
1 fuse and detonator house.....	3,600.00								3,600.00
1 mine storage building.....	9,000.00								9,000.00
Total.....	49,600.00								49,600.00
Naval torpedo station, Newport, R. I.—									
Primer-filling house.....	30,000.00								30,000.00
Extension of fire-protection system.....	8,000.00								8,000.00
Building for mine storage, Rose Island.....	9,000.00								9,000.00
Improvements to station.....	250,000.00								250,000.00
Total.....	47,000.00								47,000.00
Torpedo storage—									
For additional storage for torpedoes at ordnance stations.....	250,000.00								250,000.00
Naval training station, San Francisco—									
Contagious wards.....	25,000.00								25,000.00
Improvements to station.....	75,000.00								75,000.00
Total.....	25,000.00								25,000.00
Naval training station, Newport, R. I.—									
Improvements to power plant.....	33,000.00								33,000.00
Improvements to station.....	110,000.00								110,000.00
Total.....	33,000.00								33,000.00
Depots for coal and other fuel.....	2,500,000.00								1,750,000.00
Naval training station, Great Lakes, Ill.—									
Dredging harbor.....	35,000.00								35,000.00
									85,000.00

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

	Appropriated, 1918.	Estimates, 1919.	Increase of esti- mates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of esti- mates for 1919 as compared with amount ap- propriated for 1918 for same purpose.	New items, 1919.
Naval Establishment.					
Public works, Bureau of Yards and Docks—Continued.					
Marine guard, American legation, Peking, China—					
Barracks building.....	\$50,000.00			\$50,000.00	
Laundry, including machinery.....	12,000.00			12,000.00	
Power plant.....		\$25,000.00	\$25,000.00		\$25,000.00
Total.....	62,000.00	25,000.00	25,000.00	62,000.00	25,000.00
Naval torpedo station, Keyport, Wash.—					
Freight wharf.....	8,000.00			8,000.00	
1 set of quarters for commissioned officers.....	8,000.00			8,000.00	
Total.....	16,000.00			16,000.00	
Marine barracks, Philadelphia, Pa.—					
Advances-base storage.....	80,000.00			80,000.00	
Additional barracks.....	200,000.00			200,000.00	
Total.....	280,000.00			280,000.00	
Marine Corps rifle range, Whithrop, Md.—					
Range improvements.....	10,000.00			10,000.00	
Marine barracks, Norfolk, Va.—					
Station improvements.....	12,700.00			12,700.00	
Housing for artillery.....	4,000.00			4,000.00	
Housing for trucks for artillery.....	2,500.00			2,500.00	
Stables.....	3,000.00			3,000.00	
Shops and storeroom.....	3,500.00			3,500.00	
Total.....	25,700.00			25,700.00	
Marine barracks, Mare Island, Cal.—					
Remodeling old barracks.....	35,000.00			35,000.00	
Extension of roads and walks.....	20,000.00			20,000.00	
Total.....	55,000.00			55,000.00	

Marine barracks, San Diego, Cal.— Toward the establishment of a Marine Corps base.....	600,000.00	1,500,000.00	900,000.00	
Naval hospital, Portsmouth, N. H.— 3 contagious wards.....	20,000.00		20,000.00	
Naval hospital, Great Lakes, Ill.— 3 contagious wards.....	20,000.00		20,000.00	
Experimental and research laboratory.....	500,000.00		500,000.00	
Reimbursement for property damaged, Indianhead, Md.....	755.01		755.01	
Lighting facilities, navy yards and stations— Improvements, lighting facilities, navy yards and stations.....	200,000.00		200,000.00	
Naval operating base, Hampton Roads, Va.— Purchase of land.....	1,200,000.00		1,200,000.00	
Toward equipment.....	1,600,000.00		1,600,000.00	
For cold storage.....	300,000.00		300,000.00	
Water front and permanent improvements to station.....	2,500,000.00		2,500,000.00	2,500,000.00
Total.....	3,100,000.00	2,500,000.00	2,500,000.00	3,100,000.00
Quarters for marine guards— For temporary quarters for marine guards at naval magazines.....	100,000.00			100,000.00
Submarine facilities— For submarine facilities, navy yards and stations.....	1,500,000.00			1,500,000.00
Power plants and distributing systems— For improvements, central power plants and distributing systems, navy yards and stations.....	750,000.00			750,000.00
Ordnance storage— For storage of ammunition, mines, torpedoes, and other ordnance material.....	3,000,000.00			3,000,000.00
Hospital construction— For temporary hospital construction.....	1,000,000.00			1,000,000.00
For the establishment of naval medical supply depots at Brooklyn, N. Y., and Mare Island, Cal.....	350,000.00			350,000.00
For temporary hospital construction and repairs and for buildings for naval medical supplies.....	2,000,000.00			2,000,000.00
Total.....	3,350,000.00			3,350,000.00
New London, Conn., submarine base— Purchase of land.....	90,000.00			90,000.00
Handling appliances— For three 30-ton cranes for use at navy yards.....	450,000.00			450,000.00

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

Naval Establishment.	Appropriated, 1918.	Estimates, 1919.	Increase of estimates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Public works, Bureau of Yards and Docks—Continued.					
Training camps					
For construction and equipment of training camps, including rental of land.....	\$6,000,000.00			\$6,000,000.00	
Marine railways—					
For construction and equipment of training camps.....	375,000.00			375,000.00	
For marine railways at navy yards and stations.....	1,000,000.00			1,000,000.00	
Temporary storage—					
For temporary storage.....		\$500,000.00	\$500,000.00		\$500,000.00
Naval prison.....					
Ordnance stations—					
For improvements at stations under the jurisdiction of the Bureau of Ordnance.....	2,250,000.00			2,250,000.00	
Repairs and preservation.....	2,605,000.00	3,500,000.00	895,000.00		
Recapitulation—					
Navy yard, Portsmouth, N. H.....	134,000.00	489,000.00	354,000.00	29,000.00	339,000.00
Navy yard, Boston, Mass.....	256,500.00	75,000.00	181,500.00	1,059,000.00	1,400,000.00
Navy yard, New York, N. Y.....	1,219,000.00	1,600,000.00	381,000.00	300,000.00	1,100,000.00
Navy yard, Philadelphia, Pa.....	1,420,000.00	2,400,000.00	1,280,000.00	6,728,000.00	40,000.00
Navy yard, Washington, D. C.....	6,728,000.00	40,000.00	40,000.00	1,100,000.00	1,150,000.00
Navy yard, Norfolk, Va.....	2,400,000.00	3,450,000.00	1,050,000.00	15,000.00	1,100,000.00
Buildings and grounds, Naval Academy.....	1,315,000.00	2,275,000.00	975,000.00	28,000.00	1,100,000.00
Marine recruiting station, Port Royal, S. C.....	1,49,500.00	100,000.00	79,500.00	242,000.00	1,375,000.00
Navy yard, Charleston, S. C.....	287,000.00	1,400,000.00	1,113,000.00	26,000.00	26,000.00
Naval station, Key West, Fla.....		26,000.00	26,000.00		
Navy aeronautic station, Pensacola, Fla.....	245,000.00			245,000.00	
Naval station, New Orleans, La.....	60,000.00	450,000.00	390,000.00	30,000.00	420,000.00
Navy yard, Mare Island, Cal.....	605,000.00	1,200,000.00	595,000.00	458,000.00	1,000,000.00
Navy yard, Puget Sound, Wash.....	670,500.00	200,000.00	50,000.00	520,500.00	
Navy yard, Pearl Harbor, Hawaii.....	1,086,500.00			1,086,500.00	
Naval station, Pearl Harbor, Hawaii.....		2,000,000.00	2,000,000.00		2,000,000.00
Naval station, Tutuila, Samoa.....	40,000.00	50,000.00	50,000.00	40,000.00	50,000.00
Naval station, Guam.....	60,000.00	100,000.00	100,000.00	60,000.00	100,000.00
Naval station, Guantanamo, Cuba.....	34,000.00	200,000.00	200,000.00	34,000.00	200,000.00
Naval magazine, Hingham, Mass.....	105,000.00	30,000.00	30,000.00	105,000.00	30,000.00
Naval proving ground, Indianhead, Md.....	180,000.00	100,000.00	100,000.00	10,000.00	20,000.00

Naval magazine, Fort Mifflin, Pa.	142,700.00				142,700.00
Naval magazine, Iona Island, N. Y.	50,000.00	18,000.00			50,000.00
Naval magazine, Lake Denmark, N. J.	100,000.00	26,000.00			100,000.00
Naval magazine, Fort Lafayette, N. Y.	16,000.00				16,000.00
Naval magazine, Mare Island, Cal.	117,000.00				117,000.00
Naval magazine, St. Juliens Creek, Va.	120,000.00				120,000.00
Naval magazine, Charleston, S. C.	49,600.00				49,600.00
Naval magazine, Puget Sound, Wash.	47,000.00				47,000.00
Naval torpedo station, Newport, R. I.		250,000.00			250,000.00
Torpedo storage		250,000.00			250,000.00
Naval training station, San Francisco	25,000.00	75,000.00			25,000.00
Naval training station, Newport, R. I.	33,000.00	110,000.00			33,000.00
Depots for coal and other fuel	2,500,000.00	780,000.00			1,750,000.00
Naval training station, Great Lakes, Ill.		35,000.00			35,000.00
Marine guard, American Legation, Peking, China	62,000.00				62,000.00
Naval torpedo station, Keyport, Wash.	16,000.00				16,000.00
Marine barracks, Philadelphia, Pa.	280,000.00				280,000.00
Marine Corps rifle range, Winthrop, Md.	10,000.00				10,000.00
Marine barracks, Norfolk, Va.	25,700.00				25,700.00
Marine barracks, Mare Island, Cal.	55,000.00				55,000.00
Marine barracks, San Diego, Cal.	600,000.00				600,000.00
Marine barracks, Portsmouth, N. H.	20,000.00				20,000.00
Naval hospital, Great Lakes, Ill.	500,000.00				500,000.00
Naval hospital, Great Lakes, Ill.		900,000.00			900,000.00
Experimental and research laboratory					
Reimbursement for property damaged at Indianhead, Md.	200,000.00				200,000.00
Lighting facilities, navy yards and stations	3,100,000.00				3,100,000.00
Naval operating base, Hampton Roads, Va.	1,500,000.00				1,500,000.00
Quarters for marine guards	1,750,000.00				1,750,000.00
Submarine facilities	3,000,000.00				3,000,000.00
Power plants and distributing systems	3,350,000.00				3,350,000.00
Ordnance storage	90,000.00				90,000.00
Hospital construction	450,000.00				450,000.00
New London, Conn., submarine base	6,000,000.00				6,000,000.00
Handling appliances	3,375,000.00				3,375,000.00
Training camps	1,000,000.00				1,000,000.00
Marine railways		500,000.00			500,000.00
Temporary storage	2,250,000.00				2,250,000.00
Naval prisons	2,605,000.00				2,605,000.00
Oil base stations		3,500,000.00			3,500,000.00
Repairs and preservation, navy yards and stations					
Total	46,344,755.01	25,783,000.00	17,262,500.00		37,824,255.01
Bureau of Medicine and Surgery:					
Medical department	4,121,740.00	5,000,000.00			878,260.00
Contingent, Bureau of Medicine and Surgery	1,291,080.00				208,920.00
Transportation of remains	332,658.00				17,842.00
Care of hospital patients	3,000,000.00	4,000,000.00			1,000,000.00
Total	8,745,478.00	10,850,000.00			2,104,522.00
Pay of the Navy	126,532,448.57	213,229,457.00			86,697,108.43

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

	Appropriated, 1918.	Estimates, 1919.	Increase of estimates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Naval Establishment.					
Bureau of Supplies and Accounts:					
Provisions, Navy.....	\$41,885,935.85	\$64,485,353.00	\$22,599,417.15		
Clothing and small stores fund.....	11,071,000.00	12,000,000.00	1,250,000.00	\$11,071,000.00	
Maintenance, Supplies and Accounts.....	10,750,000.00	4,000,000.00	1,400,000.00		
Freight, Supplies and Accounts.....	2,600,000.00	48,400,000.00	22,587,580.00		
Fuel and transportation.....	25,862,420.00			5,000,000.00	
Reserve material, Navy.....	6,000,000.00	55,000.00	55,000.00		\$55,000.00
Naval Academy dairy (reimbursable).....					
Total.....	97,169,335.85	128,940,353.00	47,841,987.15	16,071,000.00	55,000.00
Bureau of Construction and Repair:					
Construction and repair of vessels.....	70,177,340.00	60,000,000.00		10,177,340.00	
Improvement of construction plants—					
Navy yard, Portsmouth, N. H.....	10,000.00	10,000.00			
Navy yard, Boston, Mass.....	25,000.00	25,000.00			
Navy yard, New York, N. Y.....	35,000.00	35,000.00			
Navy yard, Philadelphia, Pa.....	25,000.00	25,000.00			
Navy yard, Norfolk, Va.....	35,000.00	35,000.00			
Navy yard, Charleston, S. C.....	10,000.00	10,000.00			
Navy yard, Mare Island, Cal.....	35,000.00	35,000.00			
Navy yard, Puget Sound, Wash.....	25,000.00	25,000.00			
Total.....	70,377,340.00	60,200,000.00		10,177,340.00	
Bureau of Steam Engineering:					
Engineering.....	57,230,500.00	50,000,000.00		7,230,500.00	
High-power radio stations.....	600,000.00			600,000.00	
Engineering experiment station, United States Naval Academy, Annapolis, Md.—					
Experimental and research work.....	85,000.00	85,000.00			
Equipment of building.....	20,000.00	20,000.00			
Machinery plants.....	180,000.00			180,000.00	
Total.....	58,125,500.00	50,105,000.00		8,020,500.00	
Naval Academy:					
Civil establishment.....	405,883.20	487,778.00	80,884.80		
Current and miscellaneous expense.....	82,000.00	70,150.00	18,150.00		
Maintenance and repairs.....	549,066.00	485,864.00	63,202.00		
					96,120.00

Addition to Iaherwood Hall.....	300,000.00	1,011,864.00	99,034.80	300,000.00
Total.....	1,307,949.20	1,011,864.00	99,034.80	396,120.00
United States Marine Corps:				
Pay of the Marine Corps—				
Pay, officers, active and reserve list.....	3,462,600.00	3,975,437.00	512,837.00	
Pay, officers, retired list.....	198,307.50	218,307.50	20,600.06	
Pay, noncommissioned officers, musicians, privates, active and reserve list.....	9,260,398.00	17,266,879.00	8,006,481.00	
Pay, enlisted men, retired list.....	175,968.00	168,477.00		7,509.00
Undrawn clothing.....	160,000.00	128,358.80		21,641.20
Mileage.....	100,000.00	150,000.00	50,000.00	
Commutation of quarters.....	160,000.00	200,000.00	50,000.00	
Pay, civil force—				
Office of the Major General Commandant.....	4,771.28	7,771.28	3,000.00	
Paymaster's department.....	4,700.00	3,750.00		960.00
Adjutant and Inspector's department.....	7,900.00	9,750.00	1,850.00	
Quartermaster's department.....	16,940.00	24,040.00	7,100.00	
Total.....	13,631,602.78	22,153,370.64	8,661,868.06	30,100.20
Maintenance, Quartermaster's Department, Marine Corps—				
Provisions.....	5,121,671.00	6,545,000.00	1,423,329.00	
Clothing.....	8,078,450.00	14,117,600.00	6,039,160.00	
Fuel.....	662,400.00	662,400.00		
Military stores.....	8,225,408.00	10,466,700.00	2,243,292.00	
Camps of instruction.....	31,000.00	1,100,851.00		31,000.00
Transportation and recruiting.....	2,231,600.00	981,928.00		1,130,719.00
Repairs of barracks.....	1,624,000.00	126,400.00		842,071.00
Corage.....	128,400.00	128,400.00		
Commutation of quarters.....	364,532.00	364,532.00		
Contingent.....	2,801,068.00	4,669,080.00	1,668,015.00	
Depot of supplies, Philadelphia.....	200,000.00	200,000.00		200,000.00
Total.....	29,758,548.00	38,958,542.00	11,403,786.00	2,203,790.00
Expenses, Marine Corps Reserve.....	25,000.00			25,000.00
Increase of the Navy (on account of vessels heretofore authorized):				
Construction and machinery.....	59,349,000.00	28,091,000.00		
Torpedo boats (submarines).....	16,816,110.00	32,397,000.00	15,580,890.00	
Torpedo-boat destroyers.....		125,000,000.00	125,000,000.00	
Armor and armament.....	20,000,000.00	20,000,000.00		
Ammunition.....	3,491,143.00	7,000,000.00		
Improving and equipping navy yards for the construction of ships.....	12,000,000.00	4,000,000.00		8,000,000.00
Naval emergency fund.....	215,000,000.00			215,000,000.00
Total.....	326,655,253.00	216,488,000.00	144,080,747.00	264,258,000.00

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

Naval Establishment.	Appropriated, 1918.	Estimates, 1919.	Increase of estimates over amount appropriated for 1918 for same purpose.	Decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Increase of the Navy (first year of new building program):					
Construction and machinery.....	\$33,774,000.00			\$33,774,000.00	
Torpedo boats (submarines).....	24,116,170.00			24,116,170.00	
Torpedo-boat destroyers.....	225,000,000.00			225,000,000.00	
Armor and armament.....	24,180,000.00			24,180,000.00	
Ammunition.....	11,087,900.00			11,087,900.00	
Total.....	318,107,070.00			318,107,070.00	

RECAPITULATION.

Pay, miscellaneous: Act Mar. 4, 1917.....	\$1,134,000.00				
Act June 15, 1917.....	1,801,500.00				
Contingent, Navy.....	\$2,985,500.00	\$4,350,000.00	\$1,414,500.00		
Temporary government for West Indian Islands.....	46,000.00	150,000.00	104,000.00		
Expenses, Civilian Naval Consulting Board: Act Mar. 4, 1917.....	100,000.00	200,000.00	100,000.00		
Act Oct. 6, 1917.....	100,000.00	100,000.00			
Investigation of fuel oil, etc., Navy: AVIATION, Navy: Act Mar. 4, 1917.....	60,000.00	60,000.00			
Act June 15, 1917.....	85,133,000.00				
Act Oct. 6, 1917.....	11,000,000.00				
Act June 15, 1917.....	46,000,000.00				
Basic patents of aircraft.....	61,133,000.00	94,000,000.00	32,867,000.00		
National Advisory Committee for Aeronautics.....	1,000,000.00				
State marine schools.....	1,107,000.00	260,000.00	153,000.00	\$1,000,000.00	
Care of lepers, etc., Island of Guam.....	50,000.00	50,000.00			
Bureau of Navigation: Act Mar. 4, 1917.....	20,000.00	20,000.00			
Act June 15, 1917.....	\$7,910,430.00				
Act Oct. 6, 1917.....	19,515,124.00				
Act Oct. 6, 1917.....	880,000.00				
Total.....	28,270,554.54	28,826,677.70	6,241,000.00	9,191,626.94	

Bureau of Ordnance:						
Act Mar. 4, 1917.....	48,894,389.00					
Act June 14, 1917.....	198,096,024.00					
Act Oct. 6, 1917.....	1,027,677,123.50	394,337,508.50	136,894,188.50	2,479,464.00	260,892,782.00	
Bureau of Yards and Docks:						
Act Mar. 4, 1917.....	2,794,000.00					
Act June 14, 1917.....	2,810,000.00					
Act Oct. 6, 1917.....	2,500,000.00	8,094,000.00	12,000,000.00	3,906,000.00		
Public works, Bureau of Yards and Docks:						
Act Mar. 4, 1917.....	16,978,255.01					
Act June 14, 1917.....	11,903,500.00					
Act Oct. 6, 1917.....	17,466,000.00	46,344,755.01	26,783,000.00	17,262,500.00	37,894,255.01	
Bureau of Medicine and Surgery:						
Act Mar. 4, 1917.....	1,445,498.00					
Act June 14, 1917.....	7,360,000.00	8,745,478.00	10,850,000.00	2,104,622.00		
Act Mar. 4, 1917.....	51,023,776.15					
Act June 14, 1917.....	76,565,672.42	126,532,448.57	213,229,537.00	86,967,108.43		
Bureau of Supplies and Accounts:						
Act Mar. 4, 1917.....	25,244,943.00					
Act June 14, 1917.....	67,424,412.45					
Act Oct. 6, 1917.....	4,560,000.00	97,169,355.85	123,940,353.00	47,941,997.15	16,071,000.00	
Bureau of Construction and Repair:						
Act Mar. 4, 1917.....	13,050,000.00					
Act June 14, 1917.....	67,337,340.00	70,377,340.00	60,200,000.00		10,177,340.00	
Bureau of Steam Engineering:						
Act Mar. 4, 1917.....	12,965,000.00					
Act June 14, 1917.....	34,960,500.00					
Act Oct. 6, 1917.....	10,200,000.00	58,123,500.00	50,106,000.00		8,020,500.00	
Naval Academy:						
Act Mar. 4, 1917.....	900,049.20					
Act June 14, 1917.....	280,000.00					
Act Oct. 6, 1917.....	18,900.00	1,307,949.20	1,011,864.00	99,034.80	396,120.00	
Marine Corps—						
Paymaster:						
Act Mar. 4, 1917.....	7,132,802.78					
Act June 14, 1917.....	6,396,800.00	13,531,602.78	23,153,370.64	8,551,868.06	30,100.20	

1 Omitted from total.

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

Naval Establishment.	Appropriated, 1918.	Estimates, 1919.	Increase of estimates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Increase of the Navy (first year of new building program):					
Construction and machinery.....	\$33,774,000.00			\$33,774,000.00	
Torpedo boats (submarines).....	24,115,170.00			24,115,170.00	
Torpedo-boat destroyers.....	225,000,000.00			225,000,000.00	
Armor and armament.....	24,180,000.00			24,180,000.00	
Ammunition.....	11,037,900.00			11,037,900.00	
Total.....	318,107,070.00			318,107,070.00	
RECAPITULATION.					
Pay, miscellaneous:					
Act Mar. 4, 1917.....	\$1,134,000.00				
Act June 15, 1917.....	1,861,500.00				
Contingent, Navy.....	\$2,995,500.00	\$4,350,000.00	\$1,414,500.00		
Temporary government for West Indian Islands.....	46,000.00	150,000.00	104,000.00		
Expenses, Civilian Naval Consulting Board:	100,000.00	200,000.00	100,000.00		
Act Mar. 4, 1917.....					
Act Oct. 6, 1917.....					
Investigation of fuel oil, etc., Navy.....	100,000.00	100,000.00			
AVIATION, Navy.....	60,000.00	60,000.00			
Act Mar. 4, 1917.....	85,133,000.00				
Act June 15, 1917.....	11,000,000.00				
Act Oct. 6, 1917.....	45,000,000.00				
Basic patents of aircraft.....	61,133,000.00	94,000,000.00			
National Advisory Committee for Aeronautics.....	1,000,000.00				
State marine schools.....	107,000.00				
Care of lepers, etc., Island of Guam.....	50,000.00				
Bureau of Navigation:	20,000.00				
Act Mar. 4, 1917.....					
Act June 15, 1917.....	\$7,910,430.00				
Act Oct. 6, 1917.....	19,515,124.00				
Total.....	28,270,554.54	28,328,627.70	6,241,600.00	\$1,000,000.00	9,191,628.94

Bureau of Ordnance:						
Act Mar. 4, 1917.....	48,284,289.00					
Act June 15, 1917.....	198,085,024.00					
Act Oct. 6, 1917.....	152,677,123.50	394,367,506.50	135,884,188.50	2,479,464.00	260,982,782.00	
Bureau of Yards and Docks:						
Act Mar. 4, 1917.....	2,784,000.00					
Act June 15, 1917.....	2,810,000.00					
Act Oct. 6, 1917.....	2,500,000.00	8,094,000.00	12,000,000.00	3,006,000.00		
Public works, Bureau of Yards and Docks:						
Act Mar. 4, 1917.....	16,976,255.01					
Act June 15, 1917.....	17,903,500.00					
Act Oct. 6, 1917.....	17,466,000.00	46,344,755.01	26,783,000.00	17,262,500.00	37,894,255.01	
Bureau of Medicine and Surgery:						
Act Mar. 4, 1917.....	1,445,488.00					
Act June 15, 1917.....	7,300,000.00	8,745,478.00	10,850,000.00	2,104,522.00		
Pay of the Navy:						
Act Mar. 4, 1917.....	51,023,776.15					
Act June 15, 1917.....	75,508,672.42	126,532,448.57	213,229,557.00	86,997,108.43		
Bureau of Supplies and Accounts:						
Act Mar. 4, 1917.....	26,244,943.00					
Act June 15, 1917.....	67,424,412.45					
Act Oct. 6, 1917.....	4,500,000.00	97,169,355.85	128,940,353.00	47,941,997.15	16,071,000.00	
Bureau of Construction and Repair:						
Act Mar. 4, 1917.....	13,050,000.00					
Act June 15, 1917.....	57,327,340.00	70,377,340.00	60,200,000.00		10,177,340.00	
Bureau of Steam Engineering:						
Act Mar. 4, 1917.....	12,965,000.00					
Act June 15, 1917.....	84,960,500.00					
Act Oct. 6, 1917.....	10,200,000.00	68,125,500.00	50,105,000.00		8,020,500.00	
Naval Academy:						
Act Mar. 4, 1917.....	900,049.20					
Act June 15, 1917.....	280,000.00					
Act Oct. 6, 1917.....	15,900.00	1,807,949.20	1,011,894.00	90,084.80	306,120.00	
Marine Corps—						
Paymaster—						
Act Mar. 4, 1917.....	7,132,802.78					
Act June 15, 1917.....	6,388,800.00	13,521,602.78	22,153,370.64	8,651,868.08	30,100.20	

1 Omitted from total.

Comparative statement of estimates and appropriations, 1918-19, Navy Department—Continued.

	Appropriated, 1918.	Estimates, 1919.	Increase of esti- mates for 1919 over amount appropriated for 1918 for same purpose.	Decrease of esti- mates for 1919 as compared with amount ap- propriated for 1918 for same purpose.	New Items, 1919.
Naval Establishment.					
Marine Corps—Continued.					
Quartermaster—					
Act Mar. 4, 1917	\$6,200,285.00				
Act June 15, 1917	20,408,161.00				
Act Oct. 6, 1917	3,150,000.00				
Expenses, Marine Corps Reserve	\$29,758,546.00	\$38,958,542.00	\$11,403,786.00	\$2,203,780.00	
	25,000.00			25,000.00	
Total, exclusive of increase of the Navy	947,970,536.45	823,173,502.84	221,073,380.44	345,871,414.05	
Increase of the Navy (on account of vessels heretofore authorized):					
Construction and machinery	59,349,000.00	28,091,000.00		31,258,000.00	
Torpedo boats (submarines)	16,816,110.00	32,397,000.00	15,580,890.00		
Torpedo-boat destroyers (act Oct. 6, 1917)	20,000,000.00	128,000,000.00	108,000,000.00		
Armor and armament	3,490,143.00	7,000,000.00	3,509,857.00		
Ammunition					
Total	99,655,253.00	212,488,000.00	144,090,747.00	31,258,000.00	
Total, exclusive of new program	1,047,626,789.45	1,035,690,502.84	365,164,127.44	377,129,414.05	
Increase of the Navy (new program):					
Construction and machinery	33,774,000.00			33,774,000.00	
Torpedo boats (submarines)	24,116,170.00			24,116,170.00	
Torpedo-boat destroyers (act Oct. 6, 1917)	226,000,000.00			226,000,000.00	
Armor and armament	24,180,000.00			24,180,000.00	
Ammunition	11,037,900.00			11,037,900.00	
Total	318,107,070.00			318,107,070.00	
Total, old and new program	417,763,323.00	212,488,000.00	144,090,747.00	349,365,070.00	
Naval emergency fund:					
Act Mar. 4, 1917	\$115,000,000.00			215,000,000.00	
Act Oct. 6, 1917	100,000,000.00			8,000,000.00	
Improving and equipping navy yards for construction of ships		4,000,000.00			
Grand total	1,662,782,869.46	1,089,690,502.84	366,164,127.44	919,236,484.06	

Total appropriated: \$516,491,892.08
 Act Mar. 4, 1917..... 514,806,038.87
 Act June 11, 1917..... 561,430,023.00
 Act Oct. 6, 1917.....
 Grand total..... 1,692,732,859.45

SUMMARY.

	Appropriated, 1918.	Estimates, 1919.	Net increase of estimates for 1919 over amount appropriated for 1918 for same purpose.	Net decrease of estimates for 1919 as compared with amount appropriated for 1918 for same purpose.	New items, 1919.
Naval and civil establishments.					
Civil establishment.....	\$1,834,278.00	\$2,227,780.00	\$403,502.00		
Naval Establishment (exclusive of new building program).....	1,274,625,789.45	1,039,660,502.84	3,600,000.00	\$294,965,286.61	
Permanent annual and indefinite appropriations.....	2,215,745.00	5,815,745.00			
Total, exclusive of new building program.....	1,278,675,812.45	1,047,714,027.84	4,003,502.00	284,965,286.61	
New building program (cost of first year's work).....	318,107,070.00	1,047,714,027.84	4,003,502.00	318,107,070.00	
Grand total.....	1,696,782,882.45	1,047,714,027.84	4,003,502.00	563,072,356.61	
Net decrease.....				4,003,502.00	
				549,068,854.61	

Statement of sales of charts and Hydrographic Office publications and condemned property sold by the Navy Department during the fiscal year ended June 30, 1917.

Articles.	Gross amount received.	Expense of sale.	Net proceeds.
Charts and Hydrographic Office publications	\$23,256.10	.....	\$23,256.10
Old furniture, carpets, etc., belonging to bureaus and offices of the Navy Department.....	116.55	\$2.00	114.55
Old mail wagons .....	.....	.....	.....
	23,372.65	2.00	23,370.65

Deposited to credit:

Miscellaneous receipts, proceeds of sales	\$114.55
Contingent and miscellaneous expenses Hydrographic Office, 1917...	23,256.10
Total.....	23,370.65

ANNUAL REPORT OF THE SOLICITOR.

NAVY DEPARTMENT,
OFFICE OF THE SOLICITOR,
October 1, 1917.

TO THE SECRETARY OF THE NAVY:

SIR: Since the declaration of war, April 6, 1917, the volume of business handled in this office, which during the preceding two years had grown greatly, as pointed out in previous reports, has increased many fold, and the work has become more diversified and intricate as a result of the arising of questions of a kind that had not previously come before the department.

With the numerically inadequate normal force of the office, the avalanche of business attendant upon the emergency conditions that have prevailed for several months could not have been handled, but relief from conditions that threatened overwhelming and disastrous results was forthcoming from two sources:

First. The very opportune detail to this office of several competent yeomen and yeowomen of the Naval Reserve force, whose services have proven indispensable.

Second. The employees of the office realized the seriousness of the situation and with neither pressure nor suggestion gave, and are still giving, unstintedly of their time and effort, toiling early and late, with no promise of reward or hope thereof save that which comes from the pleasing consciousness of duty patriotically and well performed.

Notwithstanding this considerable enlargement of the clerical force, the work has fallen behind, and it will not be possible for it to be brought up to date with the present office force until there shall occur a decided diminution of work, if such diminution come, with the return of peace. In addition to the employees now on duty the office is seriously in need of augmentation, as indicated by the recommendations heretofore submitted with estimates for appropriation.

CONTRACTS.

A distinct departure was made from the department's type of shipbuilding contracts when contract was made, under authority of the act of March 4, 1917, for constructing the \$19,000,000 battle cruisers, on the plan of paying the ascertained cost and allowing the contractor 10 per cent of such cost for his profit. This arrangement was necessary because of the novelty of the cruiser design and the great cost of the vessels and the conditions of the labor and material markets, owing to the existence of the war in Europe.

This method of financing the construction of vessels was simultaneously extended to other types of vessels without express authority of Congress, such express authority being unnecessary, and now all the ships under construction, except some of the submarine boats, are building on the cost plus percentage for profit basis. With the difficulties of obtaining skilled labor, the constantly rising wages, and the uncertainties of the immediate future, the application of such plan was indispensable to the procuring of the vessels needed. Whether this method will prove advantageous in normal times, as compared with the "payment of a fixed price" plan, is a matter of importance and interest that will require determination in the near future.

EXTENSION OF NAVY YARD, WASHINGTON, D. C.

The naval appropriation bill approved August 29, 1916, provided the sum of \$331,000, in addition to certain unexpended balances of appropriations under earlier acts of Congress, amounting in the aggregate to approximately \$500,000, for the acquisition of urgently needed lands as additions to the Washington Navy Yard.

The premises desired by the department embraced all of the land lying to the westward of the present navy yard wall on Fourth Street SE., south of the south line of M Street SE., east of the east line of Second Street SE., and extending on the southward to the harbor lines.

City squares 770, 771, 801, and 802, together with water-front property lying to the southward of the south line of Potomac Avenue, are embraced within this area, which, including streets and alleys, has an approximate total area of 810,200 square feet. Of this area about 351,100 square feet was found to be in private ownership in some 142 different parcels and in about 81 separate ownerships.

As is frequently found in such cases of diversified ownership, some of the owners when located were found to be under legal disability, minors, or non compos mentis, while in one instance a party in interest was located in the interior of Porto Rico, some two days' journey by the most approved native facilities for transportation (mule back) from the nearest notary public.

To the eastward of the yard the area desired to be added comprised all of the land lying east of the east wall of the navy yard on Ninth Street SE., south of the south line of O Street SE., west of the west line of Eleventh Street SE., and extending southward to the harbor line. City squares 955 and 979 are included within this area. Including streets, alleys, and water-front property the tract to the east of the yard has a total area of approximately 269,450 square feet. This area embraced 12 separate lots in four different ownerships, and was found to be in litigation, the Government claiming ownership to a portion thereof.

The department on September 27, 1916, appointed a board to consider the question of the price to be paid by the Government for this property and to conduct negotiations for the acquisition of such parcels as could be obtained at a reasonable price. This board is composed of Capt. A. L. Willard, United States Navy, senior member; Civil Engineer Kirby Smith, United States Navy; Harold H. Martin (solicitor's office), recording member. The services per-

formed by the board have been of great value to the Government. The work of its members lay along lines that brought them into daily touch with this office, and I can not miss this opportunity of giving official expression to my grateful appreciation of their earnest effort and hearty cooperation in a work that, I rejoice to say, has rounded to the advantage of the Government.

(NOTE.—As this report goes to the printer, not only have the areas to the east and west of the navy yard, as above described, with the exception of one small parcel, been acquired within the limits of the appropriation, but the department has been able to purchase with the unexpended balance several valuable lots to the north of O Street SE. and west of Eleventh Street SE., which are believed to be necessary units in plans for the future development of the yard.)

The experiences connected with this work emphasize the necessity of legislation that will authorize the Secretary of the Navy, in his discretion, to procure from the owners of lands desirable for naval uses option agreements for the purchase thereof by the Government at a specified maximum figure, to be named in the agreement, a nominal consideration to be paid for such option, and, to safeguard the Government, provide that the Government shall not be obligated by such agreement either to purchase such lands or to pay any other or further money on account thereof, except upon the exercise of its option to purchase, which right shall not be exercised unless the Congress shall have first made adequate appropriation for the purpose.

It is amazing to note the alertness of the broker, and how quickly he "scents his quarry," when an appropriation for the purchase of lands by the Government is in the air. The whole pack are speedily on the ground, securing options and powers of attorney from the owners—buying outright if they sense a big enough profit—and all with "but a single thought": How much will the Government stand for?

Dealing direct with the owner, under such circumstances, is effectually barred.

The price that the owner might have been willing to accept for his property is loaded down with the broker's fee, and the difference will often hardly justify the delays and uncertainties incident to a condemnation proceeding.

The Government, as I view it, ought at least to be permitted to stand on an equal footing with the broker, and have the right to enter into agreements with the owner for the purchase of his property at a fair valuation, in a way that will bind him, instead of having to wait until an adequate appropriation for the purchase has been made and values have been deliberately inflated by the ever-present but not always scrupulous middle man.

ADDITIONAL LAND FOR THE NAVAL AMMUNITION DEPOT, ST. JULIENS CREEK, VA.

The naval appropriation act, approved August 29, 1916, carried an appropriation of \$80,000 for the purchase of 88 acres of additional land at this depot. As this act limited the amount of land to be acquired to 88 acres, and as the department could obtain additional acreage for the sum appropriated, the provision in the naval bill was amended in the urgent deficiency bill approved June 14, 1917,

so as to provide for the acquisition of additional land at this station without limiting the department to any particular number of acres. The department entered into negotiations with the owners of three separate parcels that it considered most desirable for the purpose and, after considerable correspondence and conferences, finally reached a satisfactory understanding with them. Upon the clearing up of some minor defects in title it will have acquired the property desired at a total expenditure of \$59,999.53. The owners, who have complied with all the department's requirements, have been paid the compensation agreed upon and it is expected that the whole matter will be finally closed up within a very short time.

MARINE CORPS BASE, SAN DIEGO, CAL.

The naval appropriation act of August 29, 1916, contained an appropriation authorizing the acquisition of 232 acres on the Bay of San Diego, Cal., on condition that the city of San Diego donate to the Government 500 acres of adjoining tide land known as Dutch Flats. Immediately after the passage of this act the department entered into negotiations with the owners of the 232 acres of land authorized to be purchased and arranged for the furnishing of the necessary title papers, etc. The city authorities of San Diego were also communicated with and the many details concerning its right and authority to dispose of the 500 acres to be donated and of its title thereto consumed a great deal of time and involved a very considerable amount of work. Voluminous title papers were submitted to cover the entire 732 acres and finally, after all disputed matters were satisfactorily adjusted, the purchase price of \$250,000 was paid for the 232 acres in question, and the development of the whole tract of 732 acres as a Marine Corps base is now under way.

NAVAL RADIO STATION, KEY WEST, FLA.

In accordance with the authority contained in the naval appropriation act, approved March 3, 1915, the department has consummated the purchase of approximately 5 acres of land at Key West, Fla., as a naval radio station at a total expenditure of \$5,000.

Negotiations for the acquisition of additional lands at various points are now under way and well in process of adjustment. Among these may be mentioned the following:

Arlington, Va. A 5-acre tract as an addition to the radio station at Arlington has been authorized to be purchased. The details of this transaction have been completed and the department is only awaiting the furnishing of additional title papers before authorizing the expenditure of the purchase price.

(NOTE.—The acquisition of this property was finally consummated prior to the printing of this report.)

MARINE CORPS DEPOT OF SUPPLIES, PHILADELPHIA, PA.

The naval act of August 29, 1916, carried an appropriation of \$175,000 for the purchase of ground and erection of necessary buildings adjoining the Quartermaster's Depot of the Marine Corps. The

owners of the two tracts of land needed for this purpose having quoted excessive prices therefor, condemnation proceedings were instituted under which it is believed the department will effect a very material saving in cost. It is expected that this matter will be closed up very shortly.

(NOTE.—These proceedings were satisfactorily concluded before the printing of this report and resulted in a saving of approximately \$25,000 to the Government.)

ARMOR PLANT, CHARLESTON, W. VA.

In conformity with the authority granted by the naval appropriation act of August 29, 1916, authorizing the establishment of an armor plant the Secretary selected Charleston, W. Va., as a site for said plant and the city agreed to donate a tract containing approximately 205 acres suitable for the purpose. The title papers to the greater portion of this site have been furnished and, with the correction of certain minor defects, appear to be satisfactory. The acquisition of title to the remaining portion of the tract is now in process of adjustment and will, it is believed, be completed within a comparatively short period.

NAVAL COAL DEPOT, MELVILLE, R. I.

Negotiations are in progress for the obtaining of two small tracts of land at this station desired primarily for the purpose of protecting the water supply. To date the owner has not furnished satisfactory evidences of title and it may be necessary to institute condemnation proceedings to acquire the property desired. This matter is under consideration and the requisite action will be taken to meet the Government's needs in this connection.

NAVAL HOSPITAL, LAS ANIMAS, COLO.

The naval act of August 29, 1916, authorized an appropriation of \$25,000 to cover additional land for pasturage and other purposes at this post. Under that authority the department has entered into negotiations for the acquisition of 160 acres, more or less, of land in Bent County, and this matter is in course of settlement.

FREIGHT AND PASSENGER RATES.

The case of the United States *v.* Atlantic Coast Line R. R. Co., I. C. C. Docket No. 4651, decided in favor of the Navy Department on November 24, 1916, awarding reparation in the sum of \$533.90, with interest at the rate of 6 per cent per annum from January 1, 1911, involving excess fares charged for the transportation of naval recruits between Norfolk, Va., and Charleston, S. C., and Savannah, Ga., was settled by the payment of \$619.90, principal and interest, in September, 1916.

The case of the United States *v.* Charleston & Western Carolina Railway, I. C. C. Special Docket No. 52048, also involving passenger fares paid for transportation between Port Royal and other points, was decided by the commission on May 21, 1917, and the defendant

was authorized and directed to pay to the Government the sum of \$52.50. Settlement is expected at an early date.

REDUCTION IN CLASSIFICATION OF ARMOR AND DECK PLATE IN WESTERN CLASSIFICATION TERRITORY.

The building of the battleship *California* at the navy yard, Mare Island, and the contemplated building of other vessels at San Francisco and Puget Sound, has necessitated the transportation of a large quantity of armor and deck plate from the Pittsburgh district to the Pacific coast; the estimated amount being over 20,000 tons. The classification of this material by the Western Classification Committee was regarded as excessive and the matter was taken up by this office with that committee for the purpose of securing a reduction. Oral argument was made at Chicago on January 23, 1917, resulting in the establishment of a lower classification. The former classification was second class less than carload, third class carload, minimum carload weight 30,000 pounds. The department contended that the classification should not be over fourth class less than carload and fifth class carload, no objection being made to an increase in the carload minimum because of the heavy loading. The classification obtained was second class less than carload, fourth class carload, minimum weight 36,000 pounds.

Some of this material had been transported under contract, bids having been submitted by the carriers based on the higher classification. Since obtaining the reduction above stated, bids have been received based on either the reduced classification or that contended for—fifth class—so that a great saving to the Government has been effected, amounting approximately to from \$8 to \$12 per ton, a total of over \$160,000 for transportation of the armor and deck plate for these vessels alone.

FREIGHT AND EXPRESS SHIPMENTS.

Several questions involving transportation by express, demurrage charges, etc., have arisen during the year and have been disposed of or are in course of adjustment.

PATENTS.

The application for letters patent for improvements in sextants, filed by this office on June 20, 1913, and prosecuted in behalf of Lieut. Philip H. Hammond, United States Navy, was finally granted and Letters Patent No. 1,191,073 issued July 11, 1916. This invention was dedicated to the public. The obtaining of this patent was due to the filing of a claim for royalty by a certain instrument manufacturer who made a model of this sextant from sketches and description of Lieut. Hammond furnished by officials of the Naval Observatory. Quite a number of sextants of this type are now used in the Navy.

BONDS.

The duty of approval of all bonds that have heretofore been transmitted to this office for examination and recommendation only, has, by order of the Secretary, devolved upon the Solicitor, who grate-

fully acknowledges the mark of confidence that this added responsibility carries with it.

Fidelity bonds are required of pay officers, officers in command of the vessels of the auxiliary service, and certain disbursing officers of the Navy and Marine Corps, and of enlisted men handling postal and radio funds. The great increase in the personnel of the Navy has quadrupled the number of bonds of this character. The number of bonds required of contractors furnishing munitions and other supplies during the fiscal year has also greatly increased.

INSURANCE.

The new building program for the Navy, involving submarine chasers, mine sweepers, destroyers, and various other ships, and the machinery and materials relating thereto, have brought about a tremendous increase in the number of insurance policies received for examination, in view of the provisions of the contracts requiring the placing of insurance.

COLLISION CLAIMS.

The department during the last year secured reimbursement for the Government in the amount of \$903.07 in five cases where naval property was damaged by private parties.

The bill, S. 4268, mentioned in the last report as having been submitted to Congress covering claims in the aggregate amount of \$3,212.59 for damages caused by naval vessels has not been passed by Congress, so that these claims still remain unadjudicated.

OBSERVATORY CIRCLE LANDS.

The failure of the Congress to include an item in the appropriation bill covering the purchase of the last remaining piece of private land within the Observatory Circle renders it necessary to repeat once more the comment made in the 1914, 1915, and 1916 reports on the subject, viz:

The long-drawn out negotiations for acquiring all private lands within the Naval Observatory Circle are still unconcluded. The plan of sale and exchange indicated in the report for last year has been carried out in part, that is to say, the owners of "Normanstone" executed and delivered to the department two deeds, dated August 4, 1913, for the two parcels into which that tract was divided. For the larger of the two tracts the department has paid in full, the price being \$13,959 in money and a deed to the triangular tract of Government land outside and adjacent to the circle. The smaller part of "Normanstone" is valued in the agreement reached and is stated in the deed at \$4,041. An appropriation for this amount was estimated for, but the House Committee on Appropriations omitted it in drafting the bill, so that there is no immediate prospect of payment for this land. Fair dealing on the part of the Government requires that the appropriation should be passed and payment made without further delay, and it is earnestly recommended that the matter be urged upon the attention of the Congress.

THE EIGHT-HOUR WORKDAY.

In line with the avowed purpose of the department to give the broadest interpretation to the act of June 19, 1912, the application of that law to work under contracts for the Navy Department has been appreciably extended.

It is manifest that whether or not the provisions of this law apply to work under a given contract must in the main depend upon the facts peculiar to each particular contract; accordingly this office, in each case of an alleged violation of this law presented to it, has zealously endeavored to gather, through the cooperation of the bureaus interested, reliable information upon which may be based a conclusion as to whether the articles or materials contracted for and on which the work is performed are subject to or excepted from the operation of the act.

Doubtful cases, involving apparently conflicting facts, have been decided as coming within the purview of the law, and it has been the uniform policy of this office to reconsider its findings upon the request of parties in interest upon the presentation of additional and pertinent facts.

PATROL BOATS.

The handling, in conjunction with the Office of the Chief of Naval Operations, of the purchase, chartering, and leasing of small craft suitable for patrol service has involved an immense amount of paper work, aside from the time devoted to the many and varied legal questions necessarily incident to the administration of this important branch of the Navy's activities.

RELIEF OF RESIDENTS ON PENSACOLA STATION.

As pointed out in my last report, the establishment and extension of the aeronautic station at Pensacola has resulted in apparent hardship to a number of tenants who had been granted permission to reside within the reservation and whose property was removed by order of the department as a necessary incident to the carrying out of the extensive scheme of improvement and enlargement of that station.

It should be remembered that many years ago, due to the trouble in obtaining hands for the operation of the yard, at that time difficult of access, the department adopted the policy of encouraging mechanics and other workmen to remove to the reservation, offering as an inducement free license to occupy and improve sites within the reservation, and numbers were thus encouraged to make their homes there and expend their means in the erection of houses and other improvements.

While it is true that such persons occupied these sites under licenses or permits, revocable at the discretion of the Secretary of the Navy and embodying a provision requiring the licensee in the event of revocation to remove all buildings within a given time, and providing further that in such event no claim should lie against the Government for reimbursement on account of damages sustained by reason thereof, it is nevertheless apparent that a strict and exact requirement of the "letter of the bond" has in some cases fallen harshly upon those who are least able to sustain reverses, and I refer especially to those tenants who by reason of advancing years, declining health, and indigent circumstances are unable to bear the expenses of removal or of reerection of their houses elsewhere, and to whom the effect of the department's action means the loss of homes without any compensating benefit.

A bill for the relief of these people, introduced by Senator Fletcher, of Florida, is now pending in the Congress, and the department will no doubt give the subject matter that due consideration to which it is entitled.

The statement that the business handled by this office during the past year has been so greatly in excess of its normal volume would perhaps provoke the expectation that the annual report dealing with that period should, in corresponding degree, reflect at a glance such unprecedented expansion, but a contrary result has been brought about. As the drafts upon the energies and resources of this office have increased to almost the cracking point, with the concurrent multiplication of its duties and responsibilities, requiring every effort and moment of available time, to the total eclipsing of the creeping hands of the office clock, the opportunities for the preparation of a report commensurate with the magnitude of the work accomplished have dwindled in inverse ratio.

The foregoing is, therefore, submitted with a keen appreciation of its many imperfections and inadequacies.

Respectfully submitted.

GRAHAM EGERTON,
Solicitor.

REPORT OF THE JUDGE ADVOCATE GENERAL.

DEPARTMENT OF THE NAVY,
OFFICE OF THE JUDGE ADVOCATE GENERAL,
Washington, September 1, 1917.

From: The Judge Advocate General.

To: The Secretary of the Navy.

Subject: Annual report of the Judge Advocate General of the Navy.

The following is a report of the operations of this office for the fiscal year 1917.

On December 2, 1916, the resignation of Capt. Ridley McLean, United States Navy, as Judge Advocate General left this office in charge of Lieut. Commander Adolphus Staton, the Assistant to the Judge Advocate General, until January 6, 1917, on which date the undersigned executed the oath of office and assumed charge.

GENERAL.

The activities of this office have widened considerably and increased very largely during the period covered by this report, the most prominent cause being the very large increase in naval personnel since the declaration on April 6, 1917, that a state of war existed between this Nation and the Imperial Government of Germany. On March 1, 1917, there were approximately 4,625 officers and 72,000 enlisted men in the Navy and Marine Corps; on July 1, 1917, there were approximately 12,500 and 203,000, respectively, counting, besides the regular establishments, the personnel of the Naval Reserve Force, Marine Corps Reserve, National Naval Volunteers, Naval Militia in the service of the United States, the Coast Guard, and that portion of the Lighthouse Service transferred to the Navy Department. On the date of this report, these figures have become approximately 13,500 and 237,000, respectively, or an increase of approximately 291 per cent in officers and 329 per cent in enlisted force in six months, the great proportion of which occurred in the first three months of the war.

As the volume of work of this office is very largely dependent on the number of personnel in the service, it will be apparent from the foregoing how the pressure upon this office has increased by this sudden and extraordinary expansion. But in another respect also the change from a state of peace to that of war has placed heavy burdens on this office because of the important war legislation affecting the personnel that suddenly became necessary, and because of the many new and varied questions of law that have been constantly arising out of the new conditions, as affecting both the regular establishment and more particularly the auxiliary arms of the service.

Realizing the importance of prompt action when administrative action meanwhile frequently had to await the opinion of this office as to the precise meaning of language used in the law, every effort has been made to expedite the answers to such questions, and it is felt that a satisfactory measure of success has been achieved. Anticipating the increased work that would devolve upon this office, preliminary steps were taken in advance of legislative action to communicate with attorneys of experience with naval law, and this office was thus able, without delay, to secure the services of lawyers of the greatest ability in this field, available within the limits of funds authorized, as soon as the appropriations for additional civil force were passed by Congress and in some instances in advance of such appropriations, which were afterwards made retroactive. The retired officers mobilized to this office have performed most valuable services, and great credit is due to all officers and members of the civil force for their zealous, industrious, and efficient efforts to meet with credit the existing emergency.

PERSONNEL OF THE OFFICE.

On March 1, 1917, there were attached to this office 9 officers, 3 law clerks, 8 clerks, and 2 messengers. There are now 13 officers, 4 attorneys, 4 law clerks, 12 clerks, 3 yeomen, and 3 messengers, but even this number will soon be insufficient, judging from the detailed statistics given under the several divisions of the office which indicate that the increase in the volume of certain work is far in excess of the increase in office force. A most important duty in several of the divisions of this office consists in briefing and cataloguing the various opinions and decisions that are prepared, so as to be available for promulgation to the service and for future reference in similar cases. Not only is this true of the large volume of new matter, but the older files require much similar attention, and an increase of force will undoubtedly be necessary for this purpose. In connection with this work, it has become evident that a legally trained clerk is most important in charge of the filing of the correspondence of this office, and it is hoped that the Congress will authorize such a position with sufficient remuneration to secure a suitably qualified person.

The present civil force of the office is divided between the statutory and temporary rolls, but it is very evident that when the latter is discontinued the former will have to be increased to about the present combined strength, for the increase of work of this office as a result of the war will continue long after its termination, by reason of the numerous claims against the Government that will surely arise and the many perplexing problems that will undoubtedly accompany the transition to a state of peace.

War conditions have produced numerous changes in the personnel of the office, four officers and four clerks having already left in order to engage in more active service. The influx of new personnel in their places has naturally been a considerable handicap under existing circumstances, but no obstacle has been placed in the way of any member of the civil force desiring to enter the military forces and no exemption has been claimed under the provisions of the selective draft act. Needless to say, all officers on the active list attached to the office are keenly anxious for sea duty or duty in the field.

OFFICE SPACE.

Great difficulty has been experienced in carrying on the work of the office, due to lack of sufficient space. In May two additional rooms in this building were obtained which relieved the situation somewhat, but further space is already needed and still more will be required in the future. It is believed that approximately six additional rooms will ultimately be required for the efficient operation of this office on a war basis. The largest single demand for increased space is found in the division of officers' records where largely increased filing space is necessary for the records of the great number of new officers.

Progress has been made in improving the filing system for important records; additional metallic cases have replaced the former insanitary and dangerous wooden ones, and a contract has been let for a further supply.

DISTRIBUTION OF DUTIES.

As outlined in the last annual report the duties of this office naturally divide themselves under the following headings:

- I. Administration of justice.
- II. Officers' records.
- III. Legislation.
- IV. Legal matters.
- V. International law.
- VI. Miscellaneous.

The organization of the office is based on the existence of six divisions for handling the various lines of work as set forth above, and effort has been made to emphasize the administrative powers and responsibilities of the officers and attorneys in charge of the several divisions.

More detailed information concerning the activities of these several divisions is contained under the following corresponding headings.

I. ADMINISTRATION OF JUSTICE.**GENERAL.**

The importance and volume of the work of this division has naturally increased as a result of the greatly enlarged personnel, although prior to the war the numbers of the various courts and boards has been satisfactorily smaller than in recent years. Although it is exceedingly difficult to draw conclusions from statistics of successive years when conditions have radically changed as a result of the war, yet the various tables under this heading and in the appendix contain valuable data from which certain inferences may be derived.

Upon the outbreak of war it was realized that under normal circumstances the great influx of new personnel into the regular service and the placing under naval discipline of the large numbers in the several auxiliary branches would tend to increase in even greater proportion the numbers of offenses leading to court-martial proceedings. At the same time it was felt that a higher sense of duty and responsibility would grow up in the personnel as soon as the

state of war was fully realized, which would tend to reduce the number of offenses to be expected in time of peace. This counterbalancing tendency, however, would naturally be again offset to a certain extent by the fact that in time of war all offenses take on a more serious aspect, so that many involve court-martial trials which in time of peace would be handled otherwise. The combined effect of these three influences can not be differentiated, so that the importance of each as compared to the others must remain uncertain, although undoubtedly all have had their large effect on the data shown in the tables.

The necessity of shortening very greatly the period spent by recruits at training stations, with the lesser amount of supervision in the early days of their service, has also undoubtedly deprived many recruits of that opportunity enjoyed in the past of a gradual transition to amenability to discipline by which their predecessors were better able to avoid those difficulties that so often lead to serious offenses.

In spite of efforts on the part of commanders in chief and commanding officers to impress their men with the importance of good conduct in time of war and the serious penalties attending the various most frequent offenses, it was noted that the number of courts-martial continued to increase, and that in many cases extenuation was claimed because of a lack of realization of the seriousness of the offense committed. Accordingly General Order No. 312 of July 25, 1917, was issued by the department emphasizing again this same subject, and it is hoped that its effect may soon be noticeable in a reduction of the number of serious offenses.

Having in mind the unusual conditions existing for the last three months of the fiscal year, it is considered that the following tables of total trials show a condition for the year as a whole that is very satisfactory.

Only the summarized tables of data are included in the text of this report, the remainder of the more detailed tables being published in the appendix to this report. In all these tables, the term "Navy" includes the Coast Guard, National Naval Volunteers, and Naval Reserve Force, while the term "Marine" includes the Marine Corps Reserve and the Marine Corps Branch of the National Naval Volunteers. In considering all these tables, it should be borne in mind that the total number of enlisted men subject to naval discipline at any time during the fiscal year 1917 was 186,475 as compared with 86,772 for 1916, 85,464 for 1915, and 80,681 for 1914. Inasmuch, however, as a very considerable portion of this large increase for 1917 was in service for only a few months, the above figures, if used for purposes of comparison, would be misleading, and it has therefore been considered preferable to use as a basis for percentage of trials, prisoners, etc., the average number in service throughout the year, which for 1917 is 95,548. For previous years, equally exact figures of this average are not now available, but from the best obtainable data it appears that they are approximately 62,539 for 1916, 60,198 for 1915, and 57,568 for 1914, and these figures are accordingly used in certain of the tables. The average number for 1917 is 52.8 per cent greater than for 1916, and 59 per cent greater than the average for the three years previous to 1917.

General courts-martial, fiscal year 1917.

	Navy.	Marine.	Total.
Officers:			
By order of the Secretary of the Navy.....	127		27
By order of officers of the Navy.....	30	2	32
Total.....	57	2	59
Enlisted men:			
By order of the Secretary of the Navy.....	1,145	249	1,394
By order of officers of the Navy.....	278	144	422
Total.....	1,423	393	1,816
Grand total.....	1,480	395	1,875
Fiscal year, 1916.....	1,264	282	1,547
Fiscal year, 1915.....	1,420	273	1,693

¹ Includes 2 officers of the Naval Reserve Force.

The total of 1,875 trials for the fiscal year 1917 is 328 in excess of the total for 1916, an increase of 21.2 per cent, as compared to an increase of average personnel of 52.8 per cent.

Summary courts-martial, fiscal year 1917.

	Navy.	Marine.	Total.	Average for 3 previous years.
Records received and revised.....	7,979	1,995	9,974	10,294
Cases disapproved.....	80	26	106	111
Acquitted.....	122	222	144	186
Bad-conduct discharges executed.....	734	170	904	1,953
Average trials per month.....	665	166	831	858

From the above it will be noted that the total trials by summary courts-martial for 1917 number 9,974, as compared with 10,130 for 1916 and the average of 10,294 for the three years prior to 1917, a reduction of, respectively, 1.5 per cent and 3.1 per cent, in spite of the considerably greater number of men in service. Nine hundred and four bad-conduct discharges were executed as compared with 1,137 for the year previous, and an average of 1,953 for the past three years.

Deck courts, fiscal year 1917.

	Navy.	Marine.	Total.	Average for 3 previous years.
Records received and revised.....	4,003	1,975	5,978	7,043
Cases disapproved.....	12	9	21	15
Acquitted.....	60	12	72	85
Average trials per month.....	333	165	498	587

It thus appears that there were 5,978 deck courts as compared with 6,285 for 1916, and the average of 7,043 for the past three years, a still greater reduction of respectively 4.9 per cent and 15.1 per cent.

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Percentages of enlisted personnel in the naval service tried by courts-martial.

	1917		1916		1915		1914	
	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.
Average number of men under naval jurisdiction during fiscal year.....	81,007	14,451	52,614	9,925	50,368	9,830	47,791	9,777
Tried by general courts-martial during year.....	1,423	393	1,290	281	1,384	271	1,343	371
Percentage tried by general courts-martial.....	1.75	2.73	2.35	2.82	2.74	2.76	2.8	3.79
Tried by summary courts-martial during year.....	7,979	1,995	8,274	1,856	9,084	2,048	7,543	2,079
Percentage tried by summary courts-martial.....	9.83	13.8	15.72	18.7	19.82	20.83	15.78	21.26
Tried by deck court during year.....	4,003	1,975	4,570	1,715	5,515	1,584	5,603	2,143
Percentage tried by deck court.....	4.93	13.66	8.68	17.3	10.94	16.11	11.73	21.9

The above table shows the satisfactory reduction for the fiscal year 1917 of the percentages of trials of enlisted men, as compared to similar figures for recent years.

In order to show more clearly the comparison between war and peace, as affecting trials by courts-martial, the following table has been prepared showing the number of cases reviewed for the five months, April to August, 1917, inclusive, as compared to the same period in 1916, it being remembered that during the last five months the number of men under naval jurisdiction was approximately three times as great as for the same period in 1916:

	1917	1916
General courts-martial.....	1,110	582
Summary courts-martial.....	4,305	4,992
Deck courts.....	3,479	2,619
Total.....	8,894	8,193

For further detailed statistics regarding courts-martial, Tables I to VIII of the appendix should be consulted.

OPPORTUNITIES FOR REHABILITATION.

Three distinct opportunities for rehabilitation are now offered to men convicted and sentenced by courts-martial: First. The probationary provisions of General Order 110 and Article I 4893 are still in effect as heretofore. Second. In March, 1917, it was decided to grant restoration to duty, on probation and with the unexecuted portion of their sentence in abeyance, to certain prisoners at naval prisons who, as a result of excellent conduct while in confinement and a personal investigation of their individual cases, including their past records, might lead their commanding officers to recommend that they be given another chance. Following this decision, and particularly on the outbreak of war, a considerable number of men were thus restored to duty. Third. It being believed that in some cases it would be preferable to hold in abeyance for a certain probationary period the entire sentence of a general court-martial, including the period of confinement, instead of applying the provisions of

General Order 110, convening authorities were authorized on July 31, 1917, to take such action as an alternative to that set forth in General Order No. 110:

The detention system on board the U. S. S. *Southery* at Portsmouth, N. H., was continued during the fiscal year until April 25, 1917, when, on account of several serious objections, it was abandoned, except for the few men serving in detention at that time who were transferred to the naval prison at Portsmouth. No sufficient reason was apparent why the class of younger men previously placed in detention should have special opportunities for rehabilitation which were denied to regular naval prisoners. Also, as circumstances prevented the extension of the detention system at other localities, it was evident that certain offenders by reason of conviction comparatively near to Portsmouth were thus gaining the benefit of the detention system there, while others in exactly similar conditions elsewhere would be committed to a naval prison. Therefore, it seemed advisable from every viewpoint to standardize the treatment of all, irrespective of age or locality, as the conditions at naval prisons are by no means too severe for any young man of age and physique enabling him to enlist in the naval service. Although by the resulting abandonment of the detention system, a hitherto available opportunity for rehabilitation was likewise eliminated, the policy of granting restoration to duty on probation to certain naval prisoners, as set forth in the preceding paragraph, takes its place.

PROBATIONARY SYSTEM, GENERAL ORDER 110.

The outbreak of war found this system in operation as previously, and during the first nine months of the fiscal year a large number of men were placed on probation in accordance with its provisions, both as regards discharge and loss of pay. Thereafter, in view of the greater seriousness attaching to all offenses in time of war, comparatively few sentences of general courts-martial have been remitted in accordance with General Order 110. In the case of summary court-martial sentences, the application of the probationary features of this order has continued in a great majority of cases, a result naturally to be expected because of the facts that only comparatively minor offenses are now submitted to such courts, and that the majority of those previously handled by summary courts-martial are now considered to warrant trial by general court-martial.

Certain features of this general order are the subject of consideration in the department at the present time, with a view to probable revision on account of the existing war conditions. Furthermore, the schedule of punishments published therein is obviously inapplicable to war conditions, so that certain changes in the order may be submitted shortly.

GENERAL COURT-MARTIAL PROBATIONERS.

Much effort has been expended in recent years to obtain convincing data as to the practical results being derived from the general court-martial probationary system under General Order 110. These statistics are valuable, but are not conclusive for several reasons, particularly if a measure of the success of the system is considered to depend on the number of men who not only pass through a period of proba-

tion successfully but also eventually gain a discharge in honorable status at the expiration of their enlistment, which undoubtedly it is the aim of the general order to encourage and develop.

However, it is now possible to obtain more instructive data than in the past by ascertaining the number of men sentenced by general courts-martial and placed on probation during the fiscal year 1916—the first full year during which the order was in operation—who passed successfully through their period of one year's probation. In the last annual report it was stated that 65.54 per cent of this number had successfully completed an average probationary period of six months, and that it was expected that about 35 per cent of them would completely rehabilitate themselves and be discharged in honorable status at the expiration of their enlistments. From Table IX of the appendix it will be seen that only 36.69 per cent of these men completed the full year of their probation. It is problematic how many of this number may finally be discharged in an honorable status, but obviously the estimate for this number of 35 per cent of all originally placed on probation is too high, in the light of subsequent developments, and should probably be reduced to about 25 per cent.

Table X of the appendix gives preliminary data concerning general court-martial probationers for the fiscal year 1917, showing that 71.67 per cent have successfully completed an average probationary period of six months, as compared with the figure of 65.54 for the similar percentage in 1916. It would thus appear that the probationary status was held in a slightly higher respect than in the previous year, though probably the outbreak of war is sufficient to account for at least the difference shown by the figures.

SUMMARY COURT-MARTIAL PROBATIONERS.

It is also equally difficult to obtain convincing data as to the summary court-martial probationary system. Table XI of the appendix gives completed data for the fiscal year 1916, supplementary to the partial and preliminary data on the subject given in the last annual report. From it it will be seen that 66.3 per cent of the total number placed on probation during that year succeeded in completing their probationary period of six months, as compared with 62 per cent for the last nine months of the fiscal year 1915, for which data are available. Table XII of the appendix shows preliminary data regarding summary court-martial probationers for the fiscal year 1917, but as explained in previous reports such a table can not give complete data, inasmuch as the probationary periods in many cases were still running at the end of the year, and as full reports of all placed on probation in the last months of the year had not been received by June 30, 1917. A corrected table of this data will be published in the next report, as is done in this report for 1916 (Table XI). Consequently, Table XII is useful only for comparison with the similar preliminary one of the previous year published in the last report. Thus used, it is seen that 79.5 per cent of those recorded on June 30 as having been placed on probation during the fiscal year 1917 had either successfully completed their probationary period or were still on probation on that date, as compared to 69.2 per cent for 1916. The apparently greater success of

the probationary system as applied to summary court-martial cases than with general court-martial cases is probably due largely to the shorter probationary period in the former. Figures are not available without excessive labor to ascertain what percentage of summary court-martial probationers not only complete their six-month probationary period, but also remain in good standing for a subsequent period of six months, so as to be compared with the percentage of 36.69 (general court-martial probationers, 1916, successfully completing one year's probation), but it would probably be a little higher than this figure.

PROBATIONERS RELEASED FROM PRISON.

As the general policy of extending opportunity for rehabilitation to naval prisoners was adopted so recently, no reliable figures are yet available from which fair conclusions might be reached as to its success. It is held to be proper and right that some prisoners should have another chance to gain and maintain an honorable status in the naval service, thus wiping out the effect of early misconduct for which a substantial punishment has been suffered, but great care is necessary on the part of commanding officers of naval prisons lest men be recommended for and receive this unusual clemency who are not of the character to appreciate it and benefit thereby. Since March 20, 1917, to September 1, 1917, about 200 men have thus been restored to duty on probation from naval prisons. Of this number, 26 have already proved unworthy, either by desertion or the commission of such serious offenses as led to their discharge or return to prison. It is too early to predict the ultimate results, but if the percentage of those successful proves to be sufficiently high to justify this humane policy, it should be continued; otherwise, the service at large should not be subjected to the handicap of having this class of men returned to it.

SENTENCES HELD IN ABEYANCE.

This general policy was not adopted until July 31, 1917, subsequent to the period covered by this report, so that no data are available as to its results in the comparatively few cases to which thus far it has been applied. When it is desired to hold the sentence in abeyance for a certain probationary period, the form of action taken results in a full-pay status for the offender while on probation, as otherwise the adjudged confinement, with consequent loss of pay, could not be carried into effect at a later date in case of serious misconduct. Under the probation system of General Order 110, the confinement is totally remitted, the loss of pay reduced to six months' pay, and, as thus reduced, conditionally remitted in accordance with article I. 4893. The question presents itself as to which of these two forms of probation will be the more effective in discouraging future misconduct, that in which confinement is held over the man, even though he enjoys a full-pay status, or that in which only half pay is enjoyed, the ultimate recovery of the total amount deducted depending on his subsequent conduct throughout his enlistment. Although each form of probation will no doubt be considered best suited in certain cases, the fact that the former permits of a man being

sent to prison at once in case of misconduct is believed to be advantageous. It had become apparent that under the latter system it was frequently necessary to bring a man to trial again, when the nature of his second offense obviously required imprisonment or when it was apparent that he was committing himself again for the purpose of obtaining his dishonorable discharge. It is hoped that the new form of action will improve discipline, lessen the number of discharges, and avoid considerable court-martial proceedings. A sentence in abeyance, or a return to duty from prison on probation with the remainder of prison sentence and dishonorable discharge hanging over a man does not, of course, preclude further trial by court-martial for serious offenses if such seems preferable, and a sentence of confinement adjudged by the later trial would usually be added to the former unexecuted sentence.

DETENTION SYSTEM.

Although as previously noted, the detention system was abandoned on April 25, 1917, those then in detention were retained in that status, so that the system was in effect to a certain extent throughout the fiscal year. No additional detentioners were assigned to Mare Island, so that when the few men in detention there on June 30, 1916, were disposed of, the system at that place was abandoned. Practically, therefore, it may be said that detentioners existed only on the U. S. S. *Southery* at Portsmouth, N. H., during the year. Table XIII of the appendix indicates the disposition of those detentioners restored unconditionally to duty during the fiscal year 1917. Of these, the high percentage of 84 successfully completed in good standing an average period of six months' service. As the new policy of restoring to duty on probation deserving cases of naval prisoners is in reality merely an extension of the detention system, there should be no reason why equally good results should not follow from it.

CHARACTERS OF DISCHARGES, 1917.

A table was published in the last annual report showing the number of men receiving the various characters of discharges, as indicative of the existing state of discipline in connection with the effect of General Order No. 110. This table contains interesting data and is accordingly continued for the years 1917 and 1916 as follows:

	Navy.		Marine.	
	1917	1916	1917	1916
Discharged in honorable status at expiration of enlistment.....	10, 101	10, 284	1, 700	1, 860
Discharged as undesirable for inaptitude or with ordinary discharge not recommended for reenlistment.....	886	756	249	161
Discharged with dishonorable discharge.....	795	1, 000	139	187
Discharged with bad-conduct discharge.....	1, 713	2, 296	346	487
Total number prematurely discharged.....	3, 394	4, 052	734	835
Excess of premature discharges occurring in 1916 over 1917.....		655		98
Total deserters for fiscal year.....	1 2, 000	1, 681	701	659
Total number of men handled during fiscal year.....	2 126, 260	72, 885	28, 127	13, 887

1 Approximately.

2 Includes only the regular service, omitting various auxiliary branches.

The authority contained in the naval appropriation act of August 29, 1916, to grant honorable discharges under certain conditions, without cost, to enlisted men who so request during the month of June or December, following the completion of one year's service at sea, was regarded originally as offering promise of results tending to decrease the number of desertions. However, it was found that the administrative disadvantages of this policy were so great that it was necessary to recommend to Congress its abandonment, and accordingly the authority was repealed by the act of March 4, 1917.

TIME ELAPSING BEFORE ACTION ON SENTENCE.

The importance has been constantly in mind of reducing as far as possible the time elapsing between the first report against an accused and final action upon the record of his trial. Both the Bureau of Navigation or Marine Headquarters and this office are involved in the several processes necessary in the department to complete a general court-martial trial, and there has been constant cooperation in the endeavor to accomplish satisfactory results in this respect. Various causes frequently produce regrettable delays in trials that are beyond the power of either the Bureau of Navigation or Marine Headquarters or this office to correct; for example, the lack of necessary papers and documents resulting from the service of an unusual number of vessels outside the waters of the United States frequently necessitates an unavoidable delay. So far as the connection of this office with the situation is concerned, there has been little, if any, greater delay in preparing charges and specifications and in reviewing and preparing final action on records than in the past, in spite of the greatly increased number of trials since the outbreak of war. For other reasons beyond the jurisdiction of this office there occurred at New York in August, 1917, a serious congestion of men in confinement awaiting trial or final action, but it is hoped that such a situation will be prevented in future, as recommendations have been made by this office that general court-martial trials be distributed more evenly among the several permanent courts at navy yards on the east coast.

COURTS OF INQUIRY, BOARDS OF INVESTIGATION, AND BOARDS OF INQUEST.

The task of reviewing courts of inquiry, boards of investigation, and boards of inquest continues to be an important feature of the work of the Division of Administration of Justice. The following table indicates the volume of this work for the fiscal year 1917 and the two previous years:

Data covering courts of inquiry, boards of investigation, and boards of inquest, fiscal year 1917.

	1917	1916	1915
Courts of inquiry:			
Followed by courts-martial.....	17	13	21
Followed by action other than courts-martial.....	13	8	11
No further action deemed necessary.....	49	42	59
Total.....	79	63	91
Boards of investigation:			
Received and revised.....	299	209	162
Boards of inquest:			
Received and revised.....	105	79	79
Grand total.....	483	351	332

For more detailed data on this subject, see Table XIV of the appendix.

Since the outbreak of war, there has been no noticeable change in the number of courts of inquiry and boards of investigation, but for the five months, April to August, inclusive, of 1917, the number of boards of inquest was 92, as compared to 31 for the same period of 1916.

NAVAL PRISONERS.

A careful review of the annual reports of the various naval prisons shows them all to be in a satisfactory and efficient condition. The health condition at all prisons is particularly good, no serious outbreak of disease having occurred at any naval prison during the past year. Several reforms have been instituted at these prisons looking toward the betterment of conditions under which prisoners live and the elimination of certain restrictions no longer considered necessary and which tended to destroy the self-respect of the individual. Prisoners are allowed all recreation consistent with the interests of discipline and in all prisons a graded system of schooling is in operation. On account of the recent advances in food prices, it has been necessary to increase the commuted ration value for naval prisoners about 12 per cent, and at the present time this value is considered to be sufficient. At most prisons truck gardens, operated by the prisoners, supply a certain amount of vegetables, and this practice is encouraged wherever possible. In August, 1917, the Judge Advocate General made a personal inspection of the naval prison at Portsmouth, N. H., and the New Hampshire State prison at Concord, N. H., at which latter place about 20 prisoners of the Navy were then in confinement. Conditions were found very satisfactory at both of these prisons, and it is hoped that other prisons on the east coast may shortly be visited.

On June 16, 1917, following the abandonment of the detention system, certain changes in the Manual for the Government of United States Naval Prisons were promulgated, the principal effect of which is to group all naval prisoners in three classes, each class governed by certain rules and having distinct privileges. Normally, prisoners enter class 2 upon receipt at the prison, although the department reserves the right to direct the assignment of a prisoner to class 3 at that time. Thereafter prisoners of excellent conduct and having a sufficiently good past record, who indicate an evident desire to rehabilitate themselves, may be advanced to class 1, wherein by further good conduct and attention to duty they may demonstrate their fitness for restoration to duty on probation in the general service, and receive this special clemency upon the recommendation of their commanding officer. On the other hand, misconduct or evident unwillingness to take advantage of opportunities offered may result in the reduction of a prisoner in class, so that the principle is constantly effective that a man's success depends upon himself. Men convicted of certain offenses may not expect restoration to the service, but nevertheless may earn recommendation for discharge in advance of the expiration of their sentence. This applies to those convicted of desertion in time of war, who by law can not thereafter hold any office of trust or profit under the United States, as well as those guilty of certain other serious offenses. Pris-

oners in classes 2 and 3 are not in a pay status, but prisoners in class 1 draw half pay of their rating. Class 3 prisoners perform hard labor only, those of class 2 perform hard labor half the time and receive special drills and training for the remainder of the time, while class 1 prisoners devote their entire time to special drills, instruction, and training to better fit them for restoration to duty on probation.

It will thus be seen that the present system of administering naval prisons embodies many of the features of the system of indeterminate sentences that is meeting with such favor in civil communities. The further extension of this principle to the naval service and the proposition of providing for indeterminate sentences by general courts-martial, limited only by a maximum period of confinement, are receiving careful consideration in the department at this time.

CONCENTRATION OF PRISONERS.

It is apparent that the fewer the places where prisoners are confined, the more uniform is the treatment that it is possible to accord them. At the navy yards, where it has been customary in the past to keep a small number of prisoners for particular reasons and purposes, it is not practicable to offer the same opportunities for rehabilitation and for useful drills and instruction as are enjoyed by prisoners at the large institutions. For these reasons it has been decided to discontinue the keeping of prisoners at the navy yards at Philadelphia, Norfolk, and Puget Sound, and the naval station at New Orleans, and to concentrate all prisoners at the naval prisons at Portsmouth (N. H.), Mare Island, Paris Island (S. C.), and Cavite. Such concentration of prisoners will render more practicable the utilization of their labor in industrial occupations, if the report of the special commission to investigate such employment of Federal prisoners, submitted to Congress in December, 1916, should result in the authorization of such employment.

Shortly after the declaration of war it became apparent, with the great increase in the enlisted personnel under the jurisdiction of the Navy Department, that additional prison accommodations would be necessary, and steps were taken to erect at Paris Island a temporary building to accommodate approximately 200 prisoners, and to make certain alterations in the naval prison building at Portsmouth whereby an increased number of men can be confined there. The number of prisoners continues to increase, being 843 on September 1, 1917, as compared to 561 on July 1, 1917. If this rate of increase continues it will be necessary to make further temporary arrangements for their accommodations, and further recommendations will be made at an appropriate time.

In this connection it is believed that the capacity of the prison at Portsmouth will not be sufficient for the accommodation of the number of prisoners that may reasonably be expected from the size of the enlisted force of the Navy that will undoubtedly exist even after the termination of the present war. For this reason it would seem to be the part of wisdom at this time to consider the construction of a permanent prison at some suitable locality that would be in readiness to furnish proper accommodations for prisoners, as the temporary arrangements now being made are far from satisfactory

PERCENTAGE OF ENLISTED PERSONNEL COMMITTED TO PRISON.

Taken in connection with the data previously stated regarding the number of premature discharges, certain further inferences regarding the state of discipline in the naval service can be obtained from the percentages of the enlisted personnel committed to prison during successive years. The following table sets forth this latter information:

Data concerning enlisted general court-martial prisoners and detentioners.

	1917			1916		
	State prisons.	Naval prisons.	Detention.	State prisons.	Naval prisons.	Detention.
Enlisted personnel in confinement June 30.....	146	501	30	102	464	53
Enlisted personnel who underwent confinement during year.....	133	1,418	252	167	1,351	367
Average number of men under naval jurisdiction during year.....	95,548			62,539		
Prisoners received during the year.....	31	954	191	58	804	157
Percentage of enlisted personnel committed to prison during year, based on average number of men under naval jurisdiction during the year.....	0.03	0.99	0.20	0.09	1.28	0.25

	1915			1914		
	State prisons.	Naval prisons.	Detention.	State prisons.	Naval prisons.	Detention.
Enlisted personnel in confinement June 30.....	109	547	210	151	746	390
Enlisted personnel who underwent confinement during year.....	208	1,445	644	251	1,409	1,534
Average number of men under naval jurisdiction during year.....	60,198			57,568		
Prisoners received during the year.....	57	699	254	83	638	953
Percentage of enlisted personnel committed to prison during year, based on average number of men under naval jurisdiction during the year.....	0.09	1.16	0.42	0.14	1.18	1.65

¹ In addition to above 1 former officer is serving sentence in California State prison.

² Includes Navy, Marine Corps, National Naval Volunteers (Navy and Marine Corps), Naval Reserve, Marine Corps Reserve, and Coast Guard.

From the above it will be seen that this percentage for 1917, based on the average number of men under naval jurisdiction during the year, is substantially less than in the past, the total percentage for 1917 being 1.22 per cent, as compared to 1.62 for 1916, 1.67 for 1915, and 2.97 for 1914.

Detailed information concerning prisoners confined in naval prisons and under the detention system is set forth in Tables XV and XVI of the appendix, respectively.

PRISONERS CONFINED AT STATE PRISONS.

The policy has been continued of committing to State prisons those of the personnel of the Navy found guilty of crimes for which they would have been sentenced to imprisonment if in civil life, the most common of these offenses being theft and those of an immoral

nature. At present the State prisons at Concord, N. H., Wethersfield, Conn., and San Quentin, Cal., are used for this purpose by arrangement with the respective State authorities. The Eastern State Penitentiary of Pennsylvania is no longer used for the confinement of naval prisoners. Table XVII of the appendix indicates the number of enlisted men confined in State prisons during the fiscal year 1917. It is noted that only 31 men were committed to such institutions in 1917 as compared with 58 in 1916, 57 in 1915, and 83 in 1914.

CLEMENCY LETTERS

The number of letters imploring clemency in the case of naval prisoners is even greater than ever, due probably to the increase in the cost of living, which makes the confinement of prisoners more than ever a hardship upon their dependents. It is always recognized that this suffering on the part of families is a most distressing feature of the administration of discipline in the Navy and where investigation shows that financial conditions are such as to produce actual destitution, the department authorizes some slight assistance, although the enlisted men are advised by General Order No. 312 that such hardship upon their dependents is a necessary consequence of their own serious misconduct.

ADMINISTRATION OF OATHS.

Upon the recommendation of the department, the act of March 4, 1917, broadened considerably the authority for the administration of oaths in the naval service, and beneficial results are being experienced from this more liberal authority.

GENERAL ORDER NO. 296.

On the outbreak of war considerable confusion was found to exist regarding the eligibility of officers of the various auxiliary branches of the Navy to serve on courts-martial and deck courts. General Order No. 296 of May 18, 1917, was accordingly prepared giving full information on this subject, but conditions are still unsatisfactory inasmuch as certain existing laws restrict to an undesirable extent the manner in which personnel of the auxiliary branches may serve on courts-martial. As a result, the enforcement of discipline is being seriously impeded on some of the smaller vessels and at certain stations, and remedial legislation has been requested of Congress. This has not been enacted as yet, and it is earnestly recommended that special effort be made to obtain its passage as soon as possible, so that the present unsatisfactory condition may be eliminated.

II. OFFICERS' RECORDS.

The title of this division is explanatory of its general duties, which cover all matters pertaining to this office that relate to the examination of all officers of the Naval Establishment for appointment and promotion, as well as the proceedings of retiring boards in their cases, and the custody and filing of all their records prior to that of current grade.

As stated elsewhere in this report, the total number of officers in the regular establishment and in the several auxiliary arms of the

service has increased from approximately 4,625 on March 1, 1917, to approximately 12,500 on June 30, 1917, and still further to approximately 13,500 on the date of this report. Thus the increase in the volume of work handled in the division of officers' records during the past six months will be apparent. As indicated in the following tables the total number of records handled during the fiscal year 1917 was 3,095 as compared to 827 for the fiscal year 1916, an increase of 374 per cent, which was largely produced by the activity of the last three months of the fiscal year, when the volume of work handled was still greater than for any similar period in the past. This situation is continuing and will become more emphasized when the examinations for confirmation in grade and promotion of officers of the Naval Reserve Force are commenced.

Upon the initiation of this office legislation was secured in the act of May 22, 1917, whereby the Secretary of the Navy is empowered to take action on the records of examining boards when authorized by the President. This authority has been obtained, and in consequence the President has been relieved of an onerous duty without in any way adding to those of the Secretary of the Navy, and records are handled more expeditiously and with less labor on the part of this office.

Also upon the initiation of this office, legislation was obtained in the act of March 4, 1917, whereby senior officers present or other commanding officers on foreign stations may be authorized to convene boards of medical examiners and boards of examination for appointment, promotion, or retirement in the Navy and Marine Corps. This greater latitude in the statutory requirements has been of much assistance in expediting the examinations of officers on far distant stations, without in any respect prejudicing any of the Government's interests.

The requirement as contained in the act of March 4, 1917, that staff officers shall be examined on promotion in rank as well as grade necessitated an unnecessary number of examinations for such officers, so that upon the request of the department the provision of the former act was modified by that of May 22, 1917, which stipulates that the examinations of staff officers shall not be required except for advancements in rank.

Owing to certain differences and inconsistencies which exist between the numerous statutes regulating the appointment, promotion, and retirement of commissioned and warrant officers, both line and staff, in the Navy and in the Marine Corps, an exhaustive investigation and study of these various statutes has been made in the belief that it would be highly desirable to obtain legislation that will place all officers of both services, irrespective of corps, on an equal footing in this respect, both as regards the rights to which they are entitled and the penalties to which they are liable, in connection with such examinations. A very complete treatise on the whole subject has been prepared, and work is now in progress on certain constructive suggestions for submission to the bureaus and offices concerned. While engaged on this study, it became increasingly evident that many unsatisfactory and perplexing conditions result from the lack of similarity in the laws governing the pay of various branches of the Navy and Marine Corps. It would be a great simplification if the status of all officers regarding pay,

as well as regarding examinations, appointments, promotions, and retirements, were made similar throughout the naval service, every care being exercised, of course, that no disadvantageous effect should thus result in the case of any person.

The office is endeavoring to find some suitable extension binder, so that the record of each officer, or at least of each officer above the rank of lieutenant, may be kept permanently in a volume by itself instead of having several bound together in one volume, as at present. Such an improvement would greatly facilitate the consideration of officers' records by the board for selection, and it is hoped that a suitable binder may be obtained and the very considerable labor of transferring the records be completed before another meeting of the board.

The following tables show in detail the work performed by this division during the fiscal year:

Examining boards.

PROMOTIONS.

Officers of the Navy:		
Records reviewed.....		977
Failed professionally.....	12	
Failed physically.....	30	
Failed mentally and professionally.....	1	
Failed morally.....	1	
Action on cases suspended.....	19	
Qualified for promotion.....	914	
Officers of the Marine Corps:		
Records reviewed.....		333
Failed professionally.....	3	
Failed physically.....	10	
Action on cases suspended.....	11	
Qualified for promotion.....	229	
Qualified for temporary promotion.....	80	
Officers on the retired list examined for restoration to the active list under the provisions of the act of August 29, 1916:		
Records reviewed.....		3
Qualified for restoration.....	2	
Failed physically.....	1	

FOR ADMISSION OF CANDIDATES TO THE NAVY AND MARINE CORPS AS OFFICERS.

NAVY:		
Line—		
Records reviewed.....		29
Warrant officers.....	21	
Failed professionally.....	5	
Failed physically and professionally.....	1	
Qualified for appointment.....	15	
Civilians for engineering duty only.....		8
Failed professionally.....	2	
Failed physically.....	1	
Qualified for appointment.....	5	
Construction Corps—		
Records reviewed.....		18
Qualified for appointment.....	18	
Civil Engineer Corps—		
Records reviewed.....		53
Failed professionally.....	12	
Failed physically.....	16	
Qualified for appointment.....	25	

NAVY—Continued.

Medical Corps—		
Records reviewed.....		375
Failed professionally.....	83	
Failed physically.....	11	
Withdrew.....	1	
Qualified for appointment.....	280	
Dental Corps—		
Records reviewed.....		59
Failed professionally.....	14	
Failed physically.....	17	
Withdrew.....	10	
Qualified for appointment.....	18	
Chaplains:		
Records reviewed.....		19
Failed physically.....	6	
Qualified for appointment.....	13	
Warrant officers (Navy):		
Records reviewed.....		254
Failed professionally.....	110	
Failed physically.....	8	
Failed morally.....	1	
Failed professionally, mentally, and morally.....	1	
Failed professionally, mentally, and physically.....	8	
Qualified for appointment.....	126	
MARINE CORPS:		
Second lieutenants—		
Records reviewed.....		300
Failed professionally.....	55	
Failed physically.....	139	
Qualified for appointment.....	106	
Declined appointment.....	1	
Marine gunners—		
Records reviewed.....		45
Failed professionally.....	4	
Qualified for appointment.....	41	
Quartermaster's clerks:		
Records reviewed.....		48
Qualified for appointment.....	48	
NAVAL RESERVE FORCE:		
Fleet Naval Reserve—		
Records reviewed.....		134
Failed physically.....	18	
Qualified for appointment.....	118	
Naval Auxiliary Reserve—		
Records reviewed.....		186
Failed professionally.....	2	
Qualified for appointment.....	184	
Naval Coast Defense Reserve—		
Records reviewed.....		13
Failed physically.....	2	
Qualified for appointment.....	11	
Medical Reserve Corps—		
Records reviewed.....		168
Failed professionally.....	27	
Failed physically.....	45	
Withdrew.....	7	
Qualified for appointment.....	89	
Dental Reserve Corps—		
Records reviewed.....		9
Withdrew.....	1	
Qualified for appointment.....	8	
Fleet Marine Corps Reserve—		
Records reviewed.....		6
Qualified for appointment.....	6	
Marine Corps Reserve—		
Records reviewed.....		20
Failed physically.....	16	
Qualified for appointment.....	4	

RETIRING BOARDS.

Officers of the Navy:		
Records reviewed.....		36
Retired.....	26	
Fit for duty.....	2	
Incapacitated, not in line of duty.....	2	
Action on cases suspended.....	6	
Officers of the Marine Corps:		
Records reviewed.....		10
Retired.....	4	
Action on cases suspended.....	6	

RECAPITULATION.

Examinations for promotion, Navy and Marine Corps.....	1,313
Examinations for admission, Navy and Marine Corps.....	1,200
Examinations for admission, Naval Reserve Force, including Marine Corps Reserve Force.....	536
Examinations for retirement, Navy and Marine Corps.....	46
Total.....	3,095

III. LEGISLATION.

The number of bills, joint resolutions, and proposed amendments that have been referred to the department for recommendation and the number of statutes that have been drafted in this office remained about normal. Much attention was given by the Judge Advocate General, both by correspondence and in person, to the features of the numerous very important personnel provisions contained in the acts of March 4 and May 22, 1917, while they were under consideration.

The following tables show the operations of this division since October 1, 1916, the date of the last annual report of this office:

Senate and House bills, joint resolutions, and proposed amendments referred to the department for consideration.

Senate bills, etc.:

Private—

Favorable action recommended.....	4
Favorable action recommended, if amended.....	5
Unfavorable action recommended.....	33
Unanswered, pending in department on date of this report.....	2
Total.....	44

Public—

Favorable action recommended.....	2
Favorable action recommended, if amended.....	2
Unfavorable action recommended.....	5
Answered, no recommendation made.....	1
Unanswered, pending in department on date of this report.....	1
Total.....	11

Total Senate bills, etc., referred..... 55

House bills, etc.:

Private—

Favorable action recommended.....	1
Favorable action recommended, if amended.....	1
Unfavorable action recommended.....	16
Answered, no recommendation.....	1
Unanswered, pending in department when Congress adjourned.....	1
Total.....	20

House bills, etc.—Continued.

Public—	
Favorable action recommended.....	1
Unfavorable action recommended.....	1
Unanswered, pending in department on date of this report.....	1
Total	3
Total House bills, etc., referred	23
Statutes, etc., drafted:	
Public bills or amendments thereto drafted and submitted to Congress.....	51

The following personnel legislation, recommended or approved, wholly or in part, by the department, has been enacted since October, 1, 1916, the date of the last annual report of this office:

H. R. 20632. An act making appropriations for the naval service for the fiscal year ending June 30, 1918, and for other purposes. (Approved March 4, 1917.)

This act contains the following new personnel legislation:

Provision for the discharge of enlisted men of the Navy during the months of June and December following completion of one year's service at sea, as contained in the naval appropriation act of August 29, 1916, repealed.

Oaths, authority for administration of, broadened.

Convening of boards of medical examiners and boards for the examination of persons for appointment, promotion, or retirement in the Navy and Marine Corps, by the senior officer present or other commanding officer on foreign station, authorized.

Secretary of the Navy is authorized to sell at cost lubricating oil and fuel (fuel to be furnished free under certain conditions) to duly enrolled vessels of the volunteer patrol squadrons.

Naval Reserve, former members of (act of March 3, 1915, superseded by act of August 29, 1916) provided for.

Pay, advances of, authorized to officers ordered to or from sea duty, or to or from shore duty beyond the seas.

Midshipmen, appointment of 100 by the Secretary of the Navy from enlisted men of the Navy authorized.

Naval Academy course, reduction of, to three years for a period of two years authorized, in the discretion of the President.

Staff officers to be examined on promotion in rank as well as grade.

Discharge certificates, forging, altering, etc., prohibited.

Civil engineer officers on appointment to take rank and precedence with lieutenants (junior grade).

Hoffman, Leonard G., appointment as an assistant paymaster in the Navy authorized.

Mail clerks, detail of enlisted men of the Navy and Marine Corps as with expeditionary forces on shore authorized.

Marine gunners and quartermaster clerks, increase in compensation for foreign shore service, authorized.

Rations, or commutation therefor, enlisted men of the Marine Corps while on shore duty to be same as for enlisted men of Army, and in certain cases when serving in island possessions or on foreign stations, they may be allowed the Navy ration or commutation therefor.

Advertising agencies, use of, authorized in advertising for recruits.

Pay and allowances, enlisted men detailed as clerks and messengers in office of the Major General Commandant and the several staff offices, not forfeited in certain cases when granted furlough.

Defensive sea areas, establishment of, authorized, and punishment for trespass upon, injury to or destruction of harbor defense systems, etc., provided.

H. R. 1771. An act to amend an act entitled "An act making appropriations for the naval service for the fiscal year ending June 30, 1917, and for other purposes," relative to the Fleet Naval Reserve. (Approved April 25, 1917.)

H. R. 2008. An act to provide for the extension of minority enlistments in the naval service. (Approved April 25, 1917.)

H. R. 2338. An act to authorize the detail of additional officers to the Hydrographic Office. (Approved April 25, 1917.)

H. R. 2339. An act to increase the number of midshipmen at the Naval Academy until September 1, 1918. (Approved April 25, 1917.)

H. R. 2340. An act to increase the age limit for persons appointed as officers in the Naval Reserve. (Approved April 25, 1917.)

Pay of enlisted men of the Marine Corps temporarily increased. (Contained in H. R. 3545, "An act to authorize the President to increase temporarily the Military Establishment of the United States," approved May 18, 1917. Made applicable to the Marine Corps by sec. 1612, R. S.)

H. R. 2337. An act to amend an act entitled "An act making appropriations for the naval service for the fiscal year ending June 30, 1917, and for other purposes," relative to enrollments in the Naval Reserve Force. (Approved May 22, 1917.)

H. R. 3330. An act to temporarily increase the commissioned and warrant and enlisted strength of the Navy and Marine Corps, and for other purposes. (Approved May 22, 1917.)

This act contains the following new personnel legislation:

Authorized enlisted strength of the active list of the Navy temporarily increased to 150,000.

Authorized enlisted strength of the active list of the Marine Corps temporarily increased to 30,000.

Enlistments during the war to be for four years, or for such periods as the President may prescribe.

Temporary appointment of additional commissioned officers in the Navy and Marine Corps authorized.

Computations as to number of officers in the various grades and ranks of the Navy may be made during the war, at such times as the Secretary of the Navy may deem necessary.

Board of Selection for Promotion may be convened at any time during the war.

Retirement of temporarily advanced officers of the permanent Navy and Marine Corps to be in the grade or rank to which their position in the permanent Navy or Marine Corps at date of retirement would entitle them, except for disability in line of duty.

Appointment of additional marine gunners, quartermaster's clerks, and clerks to assistant paymasters, and the temporary appointment of eight clerks to assistant paymasters for the war authorized.

Provisions in act of August 29, 1916, limiting the annual rate of increase in the grade of captain in the Navy to 10 until the total authorized number is reached, and providing for the retirement in the next higher grade of certain colonels in the Marine Corps repealed.

Pay of enlisted men of the Navy temporarily increased.

Coast and Geodetic Survey, transfer to the service and jurisdiction of the War or Navy Department during a national emergency of such portion of the personnel and material as the President may deem for the best interest of the country, authorized.

Relative position with reference to precedence and promotion of certain junior officers in the Medical Corps of the Navy not to be disturbed by the act of August 29, 1916.

Provisions in act of March 3, 1915, re designation of commanders in chief for certain fleets, to have the rank of admiral, and the designation of officers second in command of the fleets to have the rank of vice admiral, repealed; and the designation of six officers of the Navy for the command of fleets or subdivisions thereof, three to have the rank of admiral and three to have the rank of vice admiral, authorized.

Section 44 of the act of March 4, 1909, amending the penal laws of the United States, as amended by the act making appropriations for the naval service, approved March 4, 1917, is amended so as to give the District Court of the Canal Zone, Panama, cognizance of offenses committed under that act within the Canal Zone.

Staff officers to be examined only when promoted in rank.

President is authorized to direct the Secretary of the Navy to take final action on naval examining board records and records of boards of naval surgeons for the promotion of officers of the Navy.

Ration allowance, extra, provided for enlisted men of the deck force standing night watches.

A joint resolution approved July 9, 1917, fixed the status and rights of officers of the Public Health Service when serving in time of war on Coast Guard vessels or with the Army and Navy.

The following bills relating to the personnel, which were referred to the department by Congress for comment, have been recommended

by the department for favorable consideration, but have not as yet become law:

H. R. 20632, proposed amendment to. (Naval appropriation act of March 4, 1917.) To advance in rating enlisted men on the retired list with Civil War service.

S. 179. Konrad, Fred C., to grant an honorable disability discharge.

S. 2018. Bostick, John B., acting assistant surgeon, Medical Corps, United States Navy, to waive age limit for appointment as an assistant surgeon in the Medical Reserve Corps.

S. 7129. Lee, John (alias Riley, James), to consider as having been honorably discharged.

S. 8187. Cobb, Frederick W., chief machinist, United States Navy, to transfer to chief pay clerk.

The following proposed legislation, initiated by the department, has not as yet been enacted:

Admiralty proceedings abroad, institution of, by senior officer present, to authorize.

Pay, percentage of increase in, for men on aviation duty not to be computed on allowances.

Volunteer Naval Reserve (a branch of the Naval Reserve Force), to change designation of to Naval Volunteer Reserve.

Volunteer Naval Reserve, to authorize a shorter term of enrollment in.

Premiums for securing recruits, to authorize payment of.

Waller, Littleton W. T., brigadier general, Marine Corps, to reimburse for money stolen.

Paymasters' clerks, former, relief of certain.

Subsistence expenses, officers salvaging the *H-3* and *Milwaukee*, reimbursement for.

Separation allowance for dependents of enlisted men, to provide.

Discharges by purchase and special order, to continue.

Six months' gratuity for beneficiaries of retired officers on active duty.

Pay, additional, for marines serving in firerooms.

Quarters, to authorize the Secretary of the Navy to say when and where available.

Effects of deceased officers and men, disposition of.

Enlisted men defrauded by former paymaster's clerk, T. N. Carter, relief of.

Pay, additional, for men held after expiration of enlistment.

Officers absent without leave for three months, to authorize dropping them from the rolls.

Ratings, new, to establish in the Navy.

Pay, loss of for absence from duty on account of injury resulting from misconduct.

Ration, Navy, to increase the commutation price from 30 to 40 cents.

Effects lost or destroyed due to war operations, reimbursement for.

Medals of honor and distinguished service medals, to provide for officers and men of the Navy.

Courts-martial, to regulate service on, of officers of auxiliary naval forces.

Pay, additional, to provide for gun captains and gun pointers temporarily absent under orders from their regular duty.

IV. LEGAL MATTERS.

The character of work under this division is closely allied to that of all other divisions, inasmuch as legal questions arise in connection with every branch of the work handled by the office. A large proportion of the legal questions propounded to this office involve directly the interpretation of statute law or the regulations based thereon. The importance of this work has been unusually great during the fiscal year, inasmuch as legislation of far-reaching importance to the personnel of the Navy has been enacted, and as the status of the auxiliary branches of the naval service has been found to be in considerable doubt until the actual emergency arose that placed them in active service with the Navy.

The work of this division depends to a great extent on the facility with which it is practicable to locate references to similar cases in

the past; as stated elsewhere in this report, the importance of compiling such precedents is fully realized and a determined effort is being made to improve the situation in this respect. The knowledge thus gained by those so employed is of the greatest value to them and the office, as has been mentioned in the past with regard to the benefits derived from the work of compiling the "Laws Relating to the Navy, Annotated."

In addition to having increased very considerably in numbers, it has also been found that the legal questions presented to this office incident to the existing state of war have been characterized in general with more difficulty than in the past, for naturally there is a lack of precedent in many cases and a greater percentage have therefore been entirely new questions involving an unusual amount of study and research work.

It has been necessary during the year to submit to the Attorney General for his opinion five cases involving questions of law under the cognizance of this office. In three of these cases the views of this office were fully sustained by the Attorney General, while in the fourth, in which much doubt was expressed, the Attorney General was of an opinion contrary to that to which this office leaned. The fifth question that was submitted by the Secretary of the Navy to the Attorney General concerned the applicability to the Navy of sections 12 and 13 of the selective-draft act approved May 18, 1917, which provided, among other things, for certain prohibition features affecting officers or members of the military force while in uniform. In the memorandum of the Judge Advocate General of the Navy which accompanied this reference, doubt was expressed as to whether the Attorney General would give an opinion on the subject, as no question had yet arisen in an actual case and the matter was not wholly an administrative one in this department. Furthermore, the opinion was expressed in this memorandum that the term "military forces" as used in the act above mentioned should not, in view of the context, be construed as including the naval service. The Attorney General in his reply declined to render an opinion on the question involved, as it did not arise in the administration of the Navy Department, but rather in the administration of his own department. He added, however, that the Department of Justice had "administratively construed" that provision of the act in question relating to the prohibition features as covering the entire Military Establishment of the United States, including the Navy and the Marine Corps, and that he would adhere to this construction until the matter is determined otherwise by the Judicial Department. No official information has yet been received, so far as known, to the effect that the question at issue has been raised in any judicial proceeding.

V. INTERNATIONAL LAW.

The "Regulations Concerning Neutrality Duty in Connection with, and the Internment of, Belligerent Vessels of War" were published and promulgated to the service in October, 1916. This manual was the result of much study on the subject of the internment of belligerent vessels of war, this country being neutral, and apparently satisfactorily met the urgent need for a definite and authoritative

course of procedure in such matters. No changes became necessary therein during the remaining period of our neutrality and no difficulties were experienced so far as known in carrying out its provisions.

During the months immediately preceding the outbreak of war very considerable and important work was done by this division in preparing rules for the administration of naval prisoners of war and for the operation of such war prison camps as might be organized by the Navy.

After conferences between representatives of this office and of the General Staff of the Army, it was agreed that all prisoners of war, military, naval, and civil, would ultimately come under the jurisdiction of the Army, and there were adopted a set of joint regulations for the transfer to the Army of such war prisoners as are captured by the Navy. These joint regulations have been followed in effecting the transfer of the comparatively small number of prisoners of war that have thus far been taken.

Complete plans and specifications for the construction and equipment of standard naval war prisoner camps founded on the "unit-compound" system, and expandible to any necessary extent, were prepared by this division, and all preparations made for the construction and administration of such camps at the sites designated by the department, in so far as relate to the jurisdiction of this office.

Upon the outbreak of war the question of the advisability of the construction of any or all of these camps was submitted to the department and it was decided that the immediate prospect of any considerable number of naval prisoners of war was so slight that the construction of any camps would not be justified until further evidence of their prospective need is apparent, particularly as all available construction facilities were so urgently needed for other military and naval activities.

In the absence of regular war prison camps under the Navy Department wherein would be detained prisoners taken by the Navy until transfer to the Army would be effected, provisional arrangements and instructions have been made and issued covering the temporary care of such prisoners at various naval stations.

The investigations of various important subjects of international law have been continued, and at present the differences between the previous tenets of international law and the present actual practices of the Central Powers and the Allies are the subject of particular study, as of interest and importance in connection with the attitude of this Nation toward similar matters, since its entrance into the war. No attempt has been made to enunciate policy, although, in the discussions leading up to conclusions and recommendations, matters of desirable policy or procedure have received careful consideration.

VI. MISCELLANEOUS.

It can not be said that there is a distinct organization of the office for handling matters of miscellaneous character, but numerous cases arise that do not naturally fall under any other division and which consequently are treated under this heading.

CORRESPONDENCE WITH THE COMPTROLLER.

The correspondence with the Comptroller of the Treasury which this office is charged with conducting is a very important feature of its duties. The following table indicates the statistics of this work:

Comptroller's decisions.

Requests for.....	265
Referred to comptroller.....	204
Answered by department.....	59

As this correspondence involves the pay of both the commissioned and enlisted personnel of the Navy, it deserves and is given the most careful consideration; every effort is made to handle the various requests expeditiously and with a view to the best interests of the personnel concerned, harmonizing with the administrative action which has been taken or which it is desired to take by this department.

The increase in the number of naval questions incidentally involving pay which reach the accounting officers has emphasized a highly unsatisfactory condition from an administrative point of view which has existed for many years, involving the jurisdiction of such accounting officers and other officers of the Government. The Comptroller of the Treasury asserts his right to determine his own jurisdiction in any case in which a conflict occurs, and does not recognize as binding upon him, in so far as concerns questions of payments, the opinions of the Attorney General or even the decisions of the Court of Claims, any more than the decisions of the Secretary of the Navy.

On the other hand, the Attorney General claims that his own opinion, when rendered in any case, is final and authoritative under the law, and should be so treated by accounting officers, even if the question involves a payment. Likewise the Court of Claims has repeatedly held that its decisions are binding upon the accounting officers, not only in the specific cases decided, but in like cases as well. Also the Supreme Court has clearly stated that the Secretary of the Navy must necessarily determine all questions pertaining to matters which are intrusted to his control, and that the approval of any officer of another department is not required to make his actions and decisions within his jurisdiction valid and conclusive, notwithstanding that payments may be involved.

As a result of this unfortunate situation, persons in the Navy are frequently required to bring suit in the Court of Claims for pay and allowances to which they are entitled by law, as had been determined by the Court of Claims in previous decisions from which no appeal had been prosecuted, or, if appealed, in which the decision of the Court of Claims had been sustained. This procedure involves the employment of their time and a considerable personal expense incident to such litigation. This office has consistently done its utmost to protect the interests of the personnel in such cases, but the matter is one receiving further particular attention in its general aspect, and will probably be the subject of special report to the department from this office in the near future.

LEGAL PUBLICATIONS.

Work has been in progress during the year on four important legal publications, as follows:

(a) "Laws Relating to the Navy, Annotated." Owing to the very great volume of other work that has fallen to this office it has been impossible to make much progress on this very important publication, and its completion can not be predicted at any definite time. Its progress will necessarily be interrupted, although its value is thoroughly realized, and every effort is being made to permit of substantial progress toward its completion.

(b) "Naval Digest, 1916." This very valuable compilation of precedents, opinions, and decisions has been completed and is being issued. The reading of the proof was a laborious undertaking, because of the great degree of accuracy that was necessary and the unexpected size which the publication eventually reached, so that its issue to the service was considerably later than anticipated in the last report, although one officer continued to give his undivided attention to the matter until its completion.

(c) "Naval Courts and Boards." Similarly, the remaining work on this publication was found to be considerably greater than indicated in the last report, and continuous attention of another officer has been given to it until very recently. The final corrected proof in page form was returned to the printer about the middle of August, and the publication should be ready for issue to the service in October next. Valuable as the "Naval Digest" is proving to be to convening authorities, courts-martial, judge advocates, and others who are parties to courts and boards, it is believed that "Naval Courts and Boards" will be of still greater value to the service at large.

(d) "Index-Digest, 1917." The Index-Digest for 1916 was completed and published in a manner similar to past years. This Index-Digest is to be regarded as the first supplement to "Naval Digest, 1916," and should be consulted in connection therewith.

It has been noted that the Navy Regulations and Naval Instructions are inaccurate or obsolete in some instances, as regards matters covered by statute law relating to the personnel. An officer has been detailed to make a complete study of the Regulations and Instructions with a view to recommending all necessary corrections relating to this office to be made at the same time that certain considerable portions thereof will be stricken out when "Naval Courts and Boards" is issued, as this publication will include all matter in the Regulations relating to courts and boards.

CIVIL OFFENDERS.

The operation of General Order No. 121 of September 17, 1914, has continued to be satisfactory in regard to the procedure for the delivery of persons in the naval service to the civil authorities, and no changes have been found advisable.

The present war, with its attendant large increase of the personnel of the naval service, has naturally brought about a considerable increase in the number of requests made by civil authorities for the delivery of men alleged to be guilty of civil offenses. From the great number of such requests during the last months of the fiscal year,

the inference is inevitable that a certain class of civil offenders were seeking to evade apprehension and the penalties of their misconduct by joining the naval service at a time when the vast increase in enlistments seemed to offer better chances of avoiding detection.

During the past fiscal year the department authorized the delivery of persons in the naval service to the civil authorities of the various jurisdictions as follows:

Massachusetts.....	11	Colorado, New Hampshire, Tennessee, Delaware, Ohio, Missouri,	
New York.....	10	Washington, Florida, South Carolina, Maryland, and Porto Rico,	
California and Rhode Island, each 8.	16	each 1.....	11
Virginia.....	7	Civil courts of the United States....	4
Pennsylvania.....	6		
Illinois and District of Columbia, each 5.....	10	Total.....	83
Wisconsin and Louisiana, each 3....	6		
Connecticut.....	2		

CIVIL WAR CASES.

The following table indicates the work of the fiscal year on correspondence regarding Civil War cases:

Requests for the removal of the charge of desertion.....	13
Granted.....	5
Not granted.....	8
Requests for information relative to removal of the charge of desertion.....	10
Inquiries as to whether service was honorable.....	2
Requests for certificate of discharge, discharge in true name, etc.....	10

PARDONS.

The following table gives data of correspondence handled during the fiscal year regarding pardons:

Requests for executive pardon.....	10
Granted.....	9
Not granted.....	1
Requests for information concerning executive pardons.....	42

LAW COURSE.

During the winter of 1916-17 all officers under the Judge Advocate General who were not qualified lawyers continued their courses at local law schools. Two obtained their degrees and were admitted to the District bar. This policy is a most desirable one and should be continued under all normal circumstances, for in this manner a limited number of officers obtain a legal training which becomes available throughout the service for special duties, without incurring any of the disadvantages which it is believed would result from the creation of a distinct corps of officers for legal duties only, as has sometimes been suggested in the past.

NAVAL ACADEMY LECTURES.

Officers and law clerks from this office assisted in the course of military law for the graduating class of midshipmen at the Naval Academy by preparing and delivering a series of lectures in February, 1917. For the following class the lectures previously prepared were carefully revised and furnished by this office to be delivered by officers at-

tached to the Naval Academy in case a course in military law was given, but it is understood that this was found impracticable, owing to the early graduation of the class.

In this connection, it is believed that these or similar lectures would form a very appropriate part of the course of instruction given to young officers of certain of the staff corps upon entering the service. A certain familiarity with military law is a necessary and desirable element in the mental equipment of every officer in the Navy for the proper performance of all duties that may devolve upon him, and it is urged that a suitable standard in this respect be maintained by the inclusion of this subject in the examination for promotion of staff officers and by greater emphasis to this subject in the examinations for officers of the line and Marine Corps. With the publications in their possession that have been, or are about to be, issued to the service, every officer will have ample yet simple means of acquiring a more comprehensive knowledge of the subject, which it is felt would result in greater efficiency in the administration of justice and in the conduct of the various investigations and inquiries that are constantly necessary.

W. C. WATTS.

APPENDIX.

Annual Report of Judge Advocate General, Fiscal Year 1917.

TABLE I.—General court-martial cases for which charges and specifications were drawn up in this office during the fiscal year.

	Navy.	Marine.	Total.
Officers.....	1 27		27
Enlisted men.....	1,160	251	1,411
Total trials ordered by the Secretary of the Navy.....	1,187	251	1,438
Charges withdrawn (all enlisted men):			
On account of physical disability.....			3
Prisoners escaped.....			11
By order of department.....			3
Total trials not completed.....			17
Cases tried by order of the Secretary of the Navy.....			1,421
Corresponding trials fiscal year 1916.....			1,248
Corresponding trials fiscal year 1915.....			1,471

¹ Includes 2 officers in the Naval Reserve.

TABLE II.—General court-martial cases for which charges and specifications were drawn up by officers of the Navy authorized to convene such courts.

	Navy.	Marine.	Total.
Officers.....	30	2	32
Enlisted men.....	282	145	427
Total trials ordered by officers of the Navy.....	312	147	459
Charges withdrawn (all enlisted men) by order convening authority.....			5
Total trials not completed.....			5
Cases tried by order of officers of the Navy.....			454
Corresponding trials fiscal year 1916.....	179	120	299
Corresponding trials fiscal year 1915.....	159	63	222

TABLE III.—General court-martial trials of officers.

Convicted.....	1 46
Acquitted.....	1 0
Disapproved.....	4
Total.....	69
Fiscal year 1916.....	27
Fiscal year 1915.....	38

¹ Including 1 Naval Reserve officer.

TABLE IV.—General court-martial trials of enlisted men.

	Navy.	Marine.	Total.
Convicted.....	1,395	381	1,776
Acquitted.....	23	10	33
Disapproved or set aside.....	6	2	8
Total.....	1,423	393	1,816
Fiscal year 1916.....	1,293	281	1,520
Fiscal year 1915.....	1,384	271	1,655

TABLE V.—General court-martial trials held at each naval station.

Portsmouth, N. H.....	12
Boston, Mass.....	175
New York, N. Y.....	445
Philadelphia, Pa.....	280
Norfolk, Va.....	130
Mare Island, Cal.....	152
Puget Sound, Wash.....	79
Charleston, S. C.....	55
Special.....	93
Total.....	1,421

TABLE VI.—Schedule of principal offenses.

	Navy.	Marine.	Total.
OFFICERS.			
Absence over leave.....	4		4
Absence over leave; drunkenness.....	1		1
Conduct to the prejudice of good order and discipline.....	5		5
Conduct to the prejudice of good order and discipline; conduct unbecoming an officer and a gentleman.....	1		1
Conduct to the prejudice of good order and discipline; disobeying lawful order superior officer.....		1	1
Conduct to the prejudice of good order and discipline; when on shore, maltreating an inhabitant.....		1	1
Conduct to the prejudice of good order and discipline; assaulting another person in the Navy.....	1		1
Conduct unbecoming an officer and a gentleman.....	2		2
Conduct unbecoming an officer and a gentleman; disobeying lawful order of Secretary of the Navy.....	1		1
Culpable negligence and inefficiency in the performance of duty.....	6		6
Culpable negligence and inefficiency in the performance of duty; neglect of duty.....	1		1
Culpable negligence and inefficiency in the performance of duty; violation of a lawful regulation issued by the Secretary of the Navy; knowingly delivering to a person having authority to receive same, public property of the United States, furnished and intended for the service, less than that for which he received a receipt; falsehood; scandalous conduct tending to the destruction of good morals; conduct unbecoming an officer and a gentleman.....	1		1
Drunkenness.....	7		7
Drunkenness on duty.....	2		2
Drunkenness; conduct unbecoming an officer and a gentleman.....	1		1
Drunkenness; conduct to the prejudice of good order and discipline.....	3		3
Drunkenness; conduct to the prejudice of good order and discipline; resisting arrest; assaulting and striking a sentinel; using profane and abusive language toward sentinel.....	1		1
Desertion.....	1		1
Embezzlement in violation of article 14 of the Articles for the Government of the United States Navy; culpable negligence and inefficiency in the performance of duty; neglect of duty.....	1		1
Improperly hazarding vessel, etc.; culpable negligence and inefficiency in the performance of duty.....	4		4
Improperly hazarding vessel, etc.; through neglect, suffering vessel to be run upon a shoal.....	2		2
Improperly hazarding vessel, etc.; through neglect, suffering vessel to be stranded.....	1		1
Improperly hazarding vessel, etc.; violation of lawful regulation issued by the Secretary of the Navy.....	1		1
Leaving station before being regularly relieved; neglect of duty; conduct to the prejudice of good order and discipline.....	1		1

1 Including 1 Naval Reserve officer.

TABLE VI.—Schedule of principal offenses—Continued.

	Navy.	Marine.	Total.
OFFICERS—continued.			
Making false and fraudulent official report in violation of article 14 of the Articles for the Government of the United States Navy; embezzlement in violation of article 14 of the Articles for the Government of the Navy; scandalous conduct tending to the destruction of good morals.....	1		1
Neglect of duty.....	1		1
Neglect of duty; knowingly and willfully misappropriating and applying to his own use and benefit money of the United States intended for the naval service thereof; culpable negligence and inefficiency in the performance of duty.....	1		1
Scandalous conduct tending to the destruction of good morals.....	2		2
Scandalous conduct tending to the destruction of good morals; disobeying the lawful order of the Chief of the Bureau of Navigation; absence without leave; neglect of duty.....	1		1
Through inattention suffering a vessel of the Navy to be hazarded; culpable inefficiency in the performance of duty.....	2		2
Wrongfully disposing of property of the United States intended for the naval service thereof in violation of article 14 of the Articles for the Government of the Navy; scandalous conduct tending to the destruction of good morals; drunkenness; conduct to the prejudice of good order and discipline.....	1		1
Total.....	57	2	59
ENLISTED MEN.			
Absence without or over leave.....	356	54	410
Absence without or over leave and breaking arrest.....	11	4	15
Absence without or over leave and fraudulent enlistment.....	2		2
Absence without or over leave; conduct to the prejudice of good order and discipline; scandalous conduct tending to the destruction of good morals.....	16	12	28
Assaulting and striking another person in the Navy.....	4	3	7
Assaulting and striking superior officer or threatening to assault and strike superior officer.....	13	4	17
Assaulting with a deadly weapon another person in the Navy.....	10	3	13
Breaking arrest.....	6	3	9
Conduct to the prejudice of good order and discipline.....	42	29	71
Culpable inefficiency in the performance of duty.....	1		1
Desertion.....	660	122	782
Desertion and breaking arrest.....	20	2	22
Desertion and fraudulent enlistment.....	15	4	19
Desertion and conduct to the prejudice of good order and discipline or scandalous conduct tending to the destruction of good morals.....	2	6	8
Disobeying a lawful order of his superior officer.....	8	10	18
Disrespectful in language and deportment.....	1		1
Drunkenness.....	8	4	12
Drunkenness on duty.....	7	17	24
Embezzlement.....	1		1
Falsehood.....	2	1	3
False swearing or perjury.....	1		1
Fraudulent enlistment.....	72	14	86
Forgery.....	1		1
Leaving station or post before being regularly relieved.....	9	11	20
Manslaughter.....	2	1	3
Neglect of duty.....	1	7	8
Refusing to obey a lawful order of his superior officer.....	9	5	14
Resisting arrest.....	1	1	2
Scandalous conduct tending to the destruction of good morals.....	47	24	71
Sleeping on watch or post.....	18	23	41
Sodomy.....	7	1	8
Theft.....	20	9	29
Theft and scandalous conduct tending to the destruction of good morals or conduct to the prejudice of good order and discipline.....	3	1	4
Using abusive, obscene, or threatening language toward another person in the service.....	7	4	11
Total.....	1,395	381	1,776
Disapproved or set aside.....	6	2	8
Acquitted.....	22	10	32
Total.....	1,423	393	1,816

TABLE VII.—Comparative analysis of more frequent offenses by enlisted men tried by general courts-martial.

	1917	1916	1915
Absence without or over leave.....	406	330	437
Absence without or over leave, joined with other offenses.....	50	58	26
Desertion.....	780	645	756
Desertion, joined with other offenses.....	51	23	48
Drunkenness.....	12	23	22
Drunkenness on duty.....	24	26	19
Fraudulent enlistment.....	84	85	94
Fraudulent enlistment, joined with other offenses.....	18	23	31
Theft.....	29	60	39
Theft, joined with other offenses.....	4	8	12

TABLE VIII.—Monthly record of summary courts-martial.

Month.	Bad-conduct discharge (not placed on probation).		Acquitted.		Disapproved.		Approved (exclusive of bad-conduct discharges, acquittals, and disapprovals).		Total cases reviewed.		Grand total.
	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.	
July.....	60	16	11	.....	4	1	668	141	743	158	901
August.....	78	11	6	1	7	2	795	193	886	207	1,093
September..	81	12	9	.....	3	.....	674	107	767	119	886
October.....	71	17	11	5	11	4	678	150	771	176	947
November..	58	17	3	.....	10	4	613	127	684	148	832
December..	55	11	7	.....	7	2	587	122	666	135	791
January....	56	13	2	1	8	1	518	125	584	140	724
February....	56	23	20	1	7	3	606	157	689	184	873
March.....	61	14	18	5	7	8	507	173	593	200	793
April.....	39	8	9	4	4	.....	466	147	518	159	677
May.....	48	13	12	3	3	.....	457	168	520	184	704
June.....	71	15	14	2	9	1	474	167	568	185	753
Grand total.	734	170	122	22	80	26	7,043	1,777	7,979	1,995	9,974

TABLE IX.—Final data concerning men tried by general courts-martial and placed on probation in the service at large during the fiscal year 1916 under the provisions of General Order No. 110.

	Navy.	Marine.	Total.	Percentage.
Total number placed on probation during fiscal year 1916.....	526	90	616	100.00
Disposition:				
Successfully completed probationary period.....	174	43	217	.....
Medical survey.....	5	.....	5	.....
Died.....	1	.....	1	.....
Loss of pay only and successful.....	2	1	3	.....
Successful, total.....	182	44	226	36.69
Unsuccessful:				
Dishonorably discharged.....	268	26	294	.....
Deserted.....	34	17	51	.....
Bad-conduct discharge.....	16	1	17	.....
Serving sentence.....	23	2	25	.....
Undesirable discharge.....	3	.....	3	.....
Total.....	344	46	390	63.31
Grand total.....	526	90	616	100.00

TABLE X.—Preliminary data concerning men tried by general courts-martial and placed on probation in the service at large during the fiscal year 1917 under the provisions of General Order No. 110.

	Navy.	Marine.	Total.	Percent- age.
Number of men under sentence of general court-martial placed on probation in service at large under provisions of General Order No. 110 during fiscal year 1917.....	557	149	706	.....
Disposition:				
In good standing in service at large June 30, 1917.....	386	114	500	70.82
Honorable discharge (excellent or very good).....	2		2	.28
Ordinary discharge (good or fair).....				
Discharge by purchase.....	1	2	3	.42
Medical discharge.....	1		1	.14
Died.....				
Number successful on June 30, 1917 (not discharged for misconduct).....	390	116	506	71.67
Dishonorably discharged.....	108	16	124	17.56
Bad-conduct discharge.....	2		2	.28
In desertion.....	31	12	43	6.09
Undesirable discharge.....	3		3	.42
Serving sentence.....	23	5	28	3.96
Number unsuccessful on June 30, 1917 (by reason of misconduct).....	167	33	200	28.33

TABLE XI.—Actual number of successful and unsuccessful summary court-martial probationers under General Order No. 110 for fiscal year 1916.

Month.	Successful.		Unsuccessful.		Total.	
	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.
July.....	253	62	172	17	425	79
August.....	230	43	108	26	338	60
September.....	206	44	106	13	312	57
October.....	240	38	116	19	356	57
November.....	281	48	109	24	340	72
December.....	190	45	109	21	299	66
January.....	173	44	96	18	269	62
February.....	149	45	87	12	236	57
March.....	175	39	100	19	275	58
April.....	187	44	115	19	302	63
May.....	314	36	170	28	484	64
June.....	256	66	88	10	344	76
Total.....	2,004	554	1,376	226	3,980	780

TABLE XII.—Preliminary data of summary court-martial probationers under General Order No. 110 for fiscal year 1917.

Placed on probation during month of—	Successful or still on probation.		Unsuccessful.		Total.	
	Navy.	Marine.	Navy.	Marine.	Navy.	Marine.
July.....	307	50	170	11	477	61
August.....	300	46	133	19	436	65
September.....	269	39	121	19	390	58
October.....	245	46	85	15	330	61
November.....	243	41	77	7	320	48
December.....	280	26	59	9	339	35
January.....	280	55	43	10	323	65
February.....	214	53	37	8	241	61
March.....	247	79	16	3	263	82
April.....	169	50	24	3	193	53
May.....	210	46	23	1	233	47
June.....	127	26	2		129	26
Total.....	2,891	557	783	105	3,674	662

TABLE XIII.—Data showing disposition of detentioners who have been restored to duty in the service at large during fiscal year 1917.

	Navy.	Marine.	Total.
Number of detentioners received during fiscal year 1917.....	177	14	191
Detentioners unconditionally restored to duty in service at large during fiscal year 1917.....	62	7	69
Disposition:			
In good standing in service at large June 30, 1917.....	49	6	55
Ordinary discharge.....	3		3
Total number successful for average period of six months.....	52	6	58
Percentage of those restored successful for average period of six months.....			84
Dishonorable discharge.....	2		2
Bad-conduct discharge.....	3		3
Deserted.....	1		1
Serving sentence.....	2	1	3
Undesirable discharge.....	2		2
Total number unsuccessful (misconduct) for average period of six months.....	10	1	11
Percentage of those restored unsuccessful for average period of six months.....			16

TABLE XIV.—Data covering courts of inquiry, boards of investigation, and boards of inquest, fiscal year 1917.

Month.	Courts of inquiry.				Boards of investigation.	Boards of inquest.	Grand total.
	Followed by courts-martial.	Other action.	No other action.	Total.			
July.....	2	1	3	6	22	8	36
August.....	3	2	5	10	29	7	46
September.....	1		3	4	21	5	30
October.....	1		5	6	16	9	31
November.....	2	2	6	10	33	6	49
December.....	1	1	5	6	35	11	52
January.....	1	1	4	6	15	4	25
February.....	4		5	9	30	11	50
March.....		1	5	6	29	6	41
April.....		1	4	5	12	12	29
May.....	1	3	2	6	22	10	38
June.....	2	1	2	5	35	16	56
Grand total.....	17	13	49	79	299	105	483

TABLE XV.—Data concerning general court-martial prisoners confined in naval prisons during fiscal year 1917.

	U. S. S. Southerly.		Ports-mouth.		Norfolk. ¹		Paris Island.		Mare Island.		Puget Sound. ¹		Cavite.		Phila-delphia. ¹		New Orleans. ¹	
	Navy.	Total.	Navy.	Total.	Navy.	Total.	Navy.	Total.	Navy.	Total.	Navy.	Total.	Navy.	Total.	Navy.	Total.	Navy.	Total.
Prisoners in confinement June 30, 1916.....	65	14 79 177	37	214	16	16	35	14 49	63	8 61	14	6 20	11	7 18	6	6	7	7
Prisoners received during fiscal year.....	366	70 436 490	110	900	51	11 62	102	43 145	125	43 168	49	12 61	28	25 53	26	6 26	7	7
Total number prisoners confined during fiscal year..	431	84 515 667	147	314	67	11 78	137	57 194	178	51 229	63	18 81	39	32 71	32	6 32	7	7
DISPOSITION.																		
Transferred to—																		
Other naval prisons.....	317	54 371	37	8 45	28	5 33	23	3 3 26	8	31	8	1 9	13	9 22	3	3	4	4
Disciplinary ship Southerly.....	10	3 13	5	5														
Connecticut State prison.....																		
New Hampshire State prison.....	7	3 10	9	9														
California State prison.....																		
Insane asylum.....			1	1														
Naval Detention.....			31	5 36														
Discharged:																		
Ordinary discharge.....			6	6														
Bad-conduct discharge.....																		
Dishonorably discharged, including prisoners from State prisons.....	89	20 109 277	54	331	20	1 21	63	18 81	79	15 94	34	14 48	4	4	15	15	2	2
Restored to duty.....	3	1 4	20	7 27	1	1 2	7	3 10	2	2	3	1 4	7	1 8				
Unconditionally.....	3	3 8	26	1 27	10	2 12	15	17 32	10	6 16	9	9	8 17	12	12	1	1	1
On probation in service at large.....																		
Miscellaneous:																		
Escaped.....																		
Food unfit for confinement by board of medical survey.....			2	2														
Disposition totals.....	431	84 515 614	75	489	59	9 68	98	41 137	121	32 153	54	16 70	32	19 51	30	6 30	7	7
Prisoners in confinement June 30, 1917.....			253	72 325	8	2 10	41	16 57	67	19 76	9	2 11	7	13 20	2	2		
Miscellaneous:																		
Dishonorably discharged after serving sentence in State prisons.....	431	84 515 667	147	814	67	11 78	137	57 194	178	51 229	63	18 81	39	32 71	32	6 32	7	7
Returned to hard labor after period in detention.....	17	6 23	7	1 8														
	43	1 44																

¹ Not regular naval prison.

NOTE.—Men confined in naval prisons are those convicted of military offenses as distinguished from criminals as commonly understood.

TABLE XVI.—Data concerning general court-martial detentioners on disciplinary ship "Southery" and at naval prison, Portsmouth.

	U. S. S. Southery.			Portsmouth prison.			Grand total.
	Navy.	Marine.	Total.	Navy.	Marine.	Total.	
Number of men in detention June 30, 1916....	51	2	53	.....	.....	.....	53
Detentioners received during year.....	177	14	191	.....	.....	.....	191
Number of detentioners transferred to Portsmouth prison when Southery abandoned, Apr. 25, 1917.....	.....	.....	.....	39	8	47	.....
Detentioners received from Apr. 25, 1917, to June 30, 1917.....	.....	.....	.....	5	3	8	8
Number of detentioners handled during fiscal year.....	228	16	244	44	11	55	252
Disposition:							
Restored to duty unconditionally.....	54	7	61	8	.....	8	69
Restored to duty on probation.....	35	.....	35	7	.....	7	42
Dishonorably discharged.....	43	.....	43	4	1	5	48
Detentioners on probation deserted.....	1	.....	1	.....	.....	.....	1
Returned to class 3 for misconduct.....	26	1	27	3	.....	3	30
Returned to class 3 at own request.....	29	.....	29	2	.....	2	31
Returned to class 3 for inaptitude.....	1	.....	1	.....	.....	.....	1
Total.....	189	8	197	24	1	25	222
Transferred to Portsmouth prison.....	39	8	47	.....	.....	.....	.....
In detention June 30, 1917.....	.....	.....	.....	20	10	30	30
Total.....	228	16	244	44	11	55	252
Miscellaneous:							
Number of detentioners received after having served part of sentence in naval prison.....	29	3	32	.....	.....	.....	32
Received direct.....	132	9	141	.....	.....	.....	141
Received from Southery prison.....	16	2	18	.....	.....	.....	18
Number convicted of desertion or absence without leave.....	149	6	155	.....	.....	.....	155

NOTE.—Date of abandonment U. S. S. Southery as disciplinary ship and transfer of prisoners and detentioners to naval prison, Portsmouth, N. H., Apr. 25, 1917.

TABLE XVII.—Enlisted men confined in State prisons during fiscal year 1917.

	Connecticut.			New Hampshire.			California.			Pennsylvania.			Corresponding totals.					
	Navy.		Total.	Navy.		Total.	Navy.		Total.	Navy.		Total.	Navy.		Total.	1916	1915	1914
	Marines.			Marines.			Marines.			Marines.			Marines.					
Prisoners in confinement June 30, 1916.....	31	0	37	7	33	21	7	28	4	4	102	109	151	.....	109	151	.....
Prisoners received during fiscal year 1917.....	8	.....	8	3	14	6	3	9	.....	.....	31	35	67	.....	35	67	.....
Prisoners confined during fiscal year 1917.....	39	0	45	10	47	27	10	37	4	4	133	167	208	.....	167	208	.....
Prisoners in confinement June 30, 1917.....	18	.....	18	3	15	8	5	13	.....	.....	46	104	109	.....	104	109	.....
Transferred to naval prisons.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Dishonorably discharged.....	.....	.....	.....	7	32	19	5	24	4	4	86	.....	.....	.....	62	94	96
Died.....	20	0	20	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....

In addition to above during fiscal year 1917, 1 former officer was confined in New Hampshire State prison and was discharged from prison Dec. 16, 1916; 1 former officer was confined in Eastern State Penitentiary and was discharged from prison Feb. 10, 1917; and 1 former officer is serving sentence in California State prison.

REPORT OF THE CHIEF OF THE BUREAU OF YARDS AND DOCKS.

NAVY DEPARTMENT,
BUREAU OF YARDS AND DOCKS,
Washington, D. C., October 15, 1917.

From: Bureau of Yards and Docks.

To: Secretary of the Navy.

Subject: Report of operations of the Bureau of Yards and Docks for the fiscal year 1917.

1. Expenditures for work performed under the supervision of this bureau during the fiscal year 1917 totaled \$10,750,000. One hundred and seventy-two public works contracts were executed during the year. Since July 1, 1917, two hundred and eight public works contracts have been executed.

2. For the fiscal year 1917 and the year 1918, to date, there has been appropriated for work over which this bureau has cognizance a total of \$108,809,630. Of this amount \$10,350,000 was for maintenance and contingent expenses of yards and stations, and \$98,459,630 for public works. To this date, out of the total amount appropriated, there is unobligated \$34,575,500.

DRY DOCKS.

3. At the close of the fiscal year three dry docks were in course of construction. Work was prosecuted without interruption on the dry dock at Pearl Harbor throughout the fiscal year and satisfactory progress was made. Contracts were awarded for dry docks at the navy yards at Norfolk and Philadelphia. Contract for the Philadelphia dock was awarded some time later than the contract for the Norfolk dock, so that at the close of the fiscal year the work at site was not very far advanced.

BUILDING SLIPS AND EQUIPMENT.

4. A large part of the bureau's activities during the fiscal year were involved in the preparation of various navy yards for the construction of vessels. Numerous contracts were awarded for the construction of ways, enlargement of existing ways, construction of crane runways, purchase of cranes, for the necessary extension of shop buildings, power plants, etc. A great deal of work on these projects was also performed by yard labor. Favorable progress had been made at the close of the year.

POWER PLANTS.

5. Due to the greatly increased activities of the yards and stations it was found necessary to extend many of the power plants. Many

contracts were awarded for power-plant buildings, equipment, and for extensions and improvements to the distributing systems.

FLOATING CRANES.

6. The 150-ton floating, revolving crane under contract for the navy yard, Norfolk, was nearing completion on June 30. Reference was made to this crane in the bureau's annual report for the fiscal year 1916. In that report it was stated that the progress on this crane had been slow, due to the difficulty of the contractor in securing materials. A contract was awarded for superstructure and machinery for a similar crane for the navy yard, Mare Island. Progress on this crane was limited to fabrication of material in the contractor's shops. The pontoon for this crane is being constructed by the navy yard.

RADIO STATIONS.

7. The high-power radio stations at three stations were completed during the fiscal year, and work was well advanced on a fourth station. A great deal of work was performed at secondary stations. Masts, towers, and buildings were erected, sewer and water systems installed, and many other improvements made to existing plants. The cost of this work was defrayed from appropriations under the cognizance of the Bureau of Steam Engineering.

FUEL-OIL AND GASOLINE STORAGE PLANTS.

8. Work coming under this head was more or less limited during the fiscal year, although plans were being drawn to cover the construction of plants under appropriations available. The most important contract awarded was that for the extension for the fuel-oil plant at one insular naval station. This work will cost in the neighborhood of \$320,000. The construction of underground fuel-oil tanks at a second insular station was authorized, and considerable work was performed prior to the close of the fiscal year.

PUBLIC WORKS, BUREAU OF MEDICINE AND SURGERY.

9. The working coming under this head consisted chiefly in the construction of emergency hospital buildings at various points, from funds provided in the urgent deficiency bill of June 15, 1917. Prior to the passage of this bill plans had been drawn and in some cases contracts had been executed, so that at the close of the fiscal year very satisfactory progress had been made upon the construction of this highly important work. During the year many items of improvements and repairs were undertaken at the regular hospital establishments under the general supervision of the bureau.

PUBLIC WORKS, MARINE CORPS.

10. The marine barracks at Norfolk and Mare Island, construction of which was started in the previous fiscal year, were completed.

Many items of improvements of less importance were effected under funds furnished by the Marine Corps. Plans were drawn and contracts executed for the Marine Corps cantonments at Port Royal, S. C., and Quantico, Va. Work was vigorously prosecuted on these large projects and at the close of the fiscal year the work was well advanced.

PUBLIC WORKS, BUREAU OF ORDNANCE.

11. Unusual activity, due to war conditions, was manifested in the construction of public works for the Bureau of Ordnance. The work consisted in the construction, chiefly by contract, of storage buildings for ammunition, although much work of other nature was undertaken, such as the construction of quarters, fences, fire-protection systems, sea walls, etc.

APPROPRIATIONS " MAINTENANCE " AND " REPAIRS AND PRESERVATION. "

12. Appropriations were made for the fiscal year 1917 as follows:

Maintenance, Bureau of Yards and Docks.

Appropriated by act of Aug. 29, 1916.....	\$1, 774, 000
Appropriated by deficiency act of Apr. 17, 1917.....	432, 000
Total	\$2, 206, 000

Repairs and preservation.

Appropriated by act of Aug. 29, 1916.....	\$1, 100, 000
Appropriated by deficiency act of Apr. 17, 1917.....	314, 000
Total	\$1, 414, 000

The amounts provided under these two appropriations were found to be entirely inadequate to cover requirements for the fiscal year and the allotments for the fourth quarter of the year were made for the greater part from the appropriations for the fiscal year 1918, which, by the terms of the appropriation act for that year, became immediately available upon approval of the bill.

APPROPRIATION " CONTINGENT, BUREAU OF YARDS AND DOCKS. "

13. The appropriation under this head for the fiscal year 1917 was \$50,000. This appropriation was fully obligated before the fiscal year had much more than half elapsed, and no further funds were available until March 4, 1917, when the regular appropriation for the fiscal year 1918 was enacted, and became available for immediate use. Due to extremely heavy demands upon it, this appropriation, also, which was for \$75,000, was soon obligated, and further funds were not supplied until the appropriation of \$750,000 under the urgent deficiency bill of June 15, 1917, was passed. Prior to the passage of this bill recourse was had to the provision in same that the

money appropriated therein would be available to cover deficiencies created prior to the passage of the act. This permitted the bureau to go ahead and provide for many urgently needed improvements.

NAVAL EMERGENCY FUND.

14. Allotments were granted the bureau from this fund to provide for general storage facilities, increase in weight-handling and transportation facilities, and to cover bonuses under public works contracts.

ORDNANCE STORAGE.

15. This appropriation, amounting to \$3,000,000, was provided by the deficiency bill of June 15, 1917. The appropriation will be utilized in providing needed storage facilities at places under the jurisdiction of the Bureau of Ordnance.

INCREASE IN THE CORPS OF CIVIL ENGINEERS.

16. An examination was held in May, 1917, for the purpose of securing 25 additional assistant civil engineers who had been authorized by law. These additional officers have been commissioned and have been assigned to duty at yards and stations where they were most needed.

F. R. HARRIS.

REPORT OF THE CHIEF OF THE BUREAU OF NAVIGATION.

NAVY DEPARTMENT,
BUREAU OF NAVIGATION,
Washington, D. C., October 10, 1917.

To: The Secretary of the Navy.

Subject: Annual report for fiscal year 1917, with additions to October 1, 1917.

The personnel has been provided for every operation of war projected by the department.

The supply, training, and assignment of personnel, and the work done in connection with the supply of navigational instruments and charts is so closely associated with the movements and disposition of vessels of the fleets, that much of the information is of a confidential nature. It can be stated, however, that at the end of the fiscal year 1916, there were about 54,000 enlisted men in the regular service and also a few hundred fleet reserves. This number has been increased to about 150,000 enlisted men, 48,000 reserves of all classes, and 15,000 Naval Militia and National Naval Volunteers.

Recruiting has been remarkably successful. It is interesting to note that all enlistments in the Navy are entirely voluntary, and that all recruits have come in for a full four years' enlistment, rather than for the period of the war.

The training of enlisted men is properly systematized. The regular training stations have done remarkable work, and although they were originally fitted for accommodating only 6,000, they have expanded successfully until there are now assigned to them over 40,000 men. These stations are the only ones that are properly fitted to actually train the men for the duties required of them in the fleet. Other depots have been built at various navy yards, and at a few places outside in order to take care of such surplus as is necessary.

It is proper at this time to acknowledge the splendid work of the officers and instructors at these training stations, and great praise should be given also to the officers and men of the fleets, who have trained thousands of men for deck and engineering duties on the new vessels that have been put in commission. The operations of the fleet would have suffered materially had it not been for this fine spirit of cooperation on the part of the personnel afloat and ashore.

In addition to their many duties in connection with the regular force of midshipmen, the officers of the Naval Academy have established a school for 300 reserve officers and are preparing them for service afloat at the end of a four months' period. Some of the leading universities and schools of the country are now rendering valuable assistance in training reserve officers and enlisted men.

The organization of the training classes of the Naval Reserve force has progressed most satisfactorily and this force, together with the

National Naval Volunteers has been drawn upon to assist in manning the many new vessels necessary to carry out the war plans of the department.

Since the beginning of the war 745 vessels, including battleships, destroyers, submarines, auxiliary cruisers, submarine chasers, transports, converted yachts, supply ships, fuel ships, gunboats, etc., for service in the fleets and abroad have been commissioned with full personnel. Some of these vessels were "in reserve" and "in ordinary," but the greater part of them are newly commissioned.

Many new vessels for the regular Navy have been authorized since the beginning of the war, and it will be necessary to provide the personnel for these and for other naval vessels now under construction. The authorized enlisted strength of the Navy before the war was 87,000, plus 6,000 apprentice seamen, or a total of 93,000 men. In order to handle the great number of new vessels of the Navy that are now under construction, action should be taken at this session of Congress, to make the authorized enlisted strength of the Navy 129,000 men, plus 10,000 apprentice seamen for training, 4,000 aviation, and 7,000 men in trade schools. The emergency strength authorized at the beginning of the war was 150,000 men, but with the knowledge we have of the operations which will be undertaken, the emergency strength should now be increased to 200,000 men of the regular Navy. Should the Navy be required to furnish personnel for the new merchant marine, an additional 80,000 men would be necessary, either regulars or reserves.

It is, of course, easier to get men than it is to train officers, and every effort should be made to speed up the training of officers so that they may be available at the earliest possible date. Last year, on account of the great shortage of officers, Congress authorized the reduction of the course at the Naval Academy to three years, this schedule to hold for a period of two years. That action was in the right direction, but was not sufficient for the known needs at that time and the shortage has now been greatly increased by recent authorization of permanent additions to the Navy. In order to provide for the necessary permanent officer personnel, the bureau renews its urgent recommendation of last year that the present three-year course be extended for five years and that the appointments of each Senator and Representative be fixed at five each. The capacity of the Naval Academy will be about 1,800 in the main buildings by the 1st of next October, and there will be additional room for 200 midshipmen in the Marine Barracks and 400 more in the temporary barracks, should such a number of candidates be available. In the following year, the main building alone will hold 2,200 midshipmen and it is sound policy, for the efficiency of the fleet and for national educational purposes that the Academy be kept filled to the limit of its accommodations.

A proper distribution of the bureau's office force is necessary for efficient work during the war. At present, the offices are located in four different buildings in the City of Washington, and are variously distributed on different floors of those buildings. As a result, the work is not carried on with full efficiency. This item is of such vital importance, that I most urgently impress on the department the necessity for providing proper space to efficiently handle the personnel of the Navy.

I can not too strongly express my deep appreciation of the manner in which the officers and clerks of the bureau have successfully met the new and difficult problems of the past year. I earnestly renew my recommendation that the very moderate increases in the pay of clerks, and for additional clerks be authorized at this session.

The officers and men of the Navy are deserving of the greatest commendation for their excellent work in all branches during the difficult period of the first six months of the war. The great handicap under which they cheerfully labored will not be known until peace is declared. Some have already been killed in engagements with enemy submarines, and on the flying fields in France. The Navy was, of course, first to do actual fighting abroad, and thus far Lieut. Thomas and about 20 men of the regular Navy are the only ones of the national forces who have met their death in action with the armed forces of the enemy.

LEIGH C. PALMER,
Chief of Bureau.

APPENDIXES.

No. 1. Report of Hydrographer. No. 2. Report of Superintendent of Naval Observatory.

TABLES.

Comparison of enlistments, extensions, discharges, deaths, retirements, and desertions for the fiscal years 1916 and 1917.

	1916	1917	Increase.	Decrease.
Total men enlisted	20,324	92,413	72,089	.....
Total extended enlistments	750	844	94	.....
Total discharged	17,278	16,550	.....	728
Died	204	511	307	.....
Retired	65	62	.....	3
Deserted	1,648	1,085	337	.....
Total			72,827	781
Net increase			72,086	.....

Comparative strength of enlisted personnel on June 30 of the fiscal years 1916 and 1917.

Total men in service June 30, 1916	54,234
Total men in service June 30, 1917	128,666
Increase	74,432

Enlistments, fiscal year 1917.

Applicants for enlistment and extension	281,957
Applicants accepted:	
First enlistments	84,229
Reenlistments	8,184
Total enlistments	92,413
Extensions effective fiscal year	680
Total enlistments and extensions	93,093
Applicants accepted who failed to enlist	38,441
Applicants rejected for physical disability	127,512
Applicants rejected for other causes	22,911
	150,423
	281,957

Of the number rejected (150,423) the disqualifications of 4,170 were waived and they were enlisted in the number 92,413.

Summary of enlistments.

Enlistments at recruiting stations in the United States	80,844
Enlistments at naval stations in the United States	1,085
Enlistments in insular	888
Enlistments on board receiving ships	1,384
Enlistments on board cruising vessels	8,212
Total	92,413

Enlistments.

	1915	1916	1917
First enlistments	11,413	13,169	84,229
First reenlistments over 4 months from date of discharge.....	987	640	1,461
First reenlistments within 4 months from date of honorable discharge.....	2,807	2,576	2,776
First reenlistments within 4 months from date of ordinary discharge.....	86	43	46
First reenlistments within 4 months from date of ordinary discharge; no benefits.....	16	15	34
Other reenlistments over 4 months from date of discharge.....	128	130	227
Other reenlistments within 4 months from date of honorable discharge.....	261	259	406
Other reenlistments within 4 months from date of ordinary discharge.....	17	16	13
Other reenlistments within 4 months from date of ordinary discharge; no benefits.....	16	15	12
Reenlistments within 4 months from date of discharge under honorable continuous service certificates.....	1,939	3,413	3,165
Reenlistments within 4 months from date of discharge under ordinary continuous service certificate.....	32	42	34
Total.....	17,704	20,324	92,413

Enlistments by States.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Alabama:						
Birmingham.....	1,428	479	131		237	522
Dothan.....	170	56	34			80
Huntsville.....	210	72	67			71
Mobile.....	714	413	102		3	196
Montgomery.....	778	216	79	2	11	373
Phoenix.....	85	31	16			35
Selma.....	60	35	8			17
Tuscaloosa.....	95	46	18			31
Traveling party.....	127	77	17		2	31
Arizona:						
Bisbee.....	267	137	16			114
Douglas.....	61	37	2		4	18
Globe.....	257	162	11			84
Phoenix.....	524	262	10		48	174
Prescott.....	160	91	6			63
Tucson.....	61	41	1		3	16
Traveling party.....	22	18				4
Arkansas:						
Atkins.....	13	4			3	6
Beebe.....	1	1				
Benton.....	11	3			1	7
Bentonville.....	2	2				
Brinkley.....	6	2				4
Camden.....	4	2				2
Clarksville.....	4	2	1			1
Conway.....	24	4		2	7	13
Corning.....	4	2	1			1
Dardenelle.....	1			1		1
Dermott.....	1					1
Eagle Mills.....	1	1				
El Dorado.....	1					1
Eureka Springs.....	1					1
Fayetteville.....	7				2	5
Fordece.....	6	3			3	
Forest City.....	1		1			
Fort Smith.....	718	259	147	1	98	214
Harrison.....	5	2		1		3
Hope.....	3	3				
Hot Springs.....	112	48	4		16	44
Hoxie.....	3	1			1	1
Jonesboro.....	267	117	10		37	108
Judsonia.....	2	2				
Little Rock.....	1,817	707	93	110	247	770
McGehee.....	5	3	1		1	
Newport.....	11	5			2	4
Paragould.....	5	1	1		1	2
Pine Bluff.....	19	11		1	5	3
Prescott.....	4	3				1
Russellville.....	9	2			3	4
Springdale.....	6	4			2	
Stamps.....	6	1			1	4
Wynne.....	3	1			1	1

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
California:						
Auburn.....	2					2
Bakersfield.....	109	63		2	9	37
Dorris.....	12	4	1			7
Fresno.....	230	44	86		1	99
Long Beach.....	120	62		4	16	42
Los Angeles.....	2,918	1,552	810		77	821
Marysville.....	19	9			2	8
Montague.....	3	1				2
Nevada City.....	1					1
Oakland.....	174	86	20			68
Placerville.....	10	4	2	1		4
Pomona.....	4	3				1
Red Lands.....	2	1		1		1
Riverside.....	17	10			4	3
Sacramento.....	611	183	114	17	28	296
San Bernardo.....	33	13		2	8	12
San Diego.....	639	178	9	11	113	339
San Francisco.....	2,099	558	258	46	19	1,264
San Jose.....	140	36	45	1		59
Santa Anna.....	134	51		5	19	61
Santa Barbara.....	63	25		2	10	28
Stockton.....	291	114	96	3	1	80
Ventura.....	3	2				1
Traveling party.....	335	107		1	31	197
Colorado:						
Colorado Springs.....	268	116	52	13	25	75
Denver.....	2,527	1,090	226	121	362	849
Durango.....	35	21	4	2		10
Grand Junction.....	341	165	33	7	31	112
Gunnison.....	3					3
Lamar.....	1	1				
Leadville.....	6	3	1			1
Pueblo.....	742	299	82	47	108	263
Salida.....	4	2				
Trinidad.....	242	85	42	13	21	94
Traveling party.....	389	196	42	9	45	106
Connecticut:						
Ansonia.....	22	13			5	4
Bridgeport.....	1,653	669	25	4	459	600
Hartford.....	1,457	644	48	25	341	424
Meriden.....	31	20	6		1	4
New Haven.....	2,477	1,237	18	84	510	712
New London.....	478	199	57	2	110	112
Waterbury.....	687	371	88		183	145
Traveling party.....	189	79			42	68
Delaware:						
Wilmington.....	759	203	21		316	219
District of Columbia:						
Washington.....	1,476	708	50		381	236
Florida:						
Jacksonville.....	1,320	714	247			359
Pensacola.....	143	71	26			46
Tampa.....	382	178	101			103
Georgia:						
Albany.....	171	63	63			45
Americus.....	148	45	50			53
Atlanta.....	2,314	939	564	3		811
Augusta.....	348	137	110		1	100
Brunswick.....	13	1	9			3
Columbus.....	93	40	36			17
Elberton.....	11	5	6			
Macon.....	595	246	185			164
Ocala.....	36	20	6			10
Rome.....	123	58	57			18
Savannah.....	488	262	123			108
Valdosta.....	441	168	126			147
Waycross.....	29	20	5			5
Traveling party.....	64	34	20			20
Illinois:						
Bloomington.....	21	4			12	5
Champaign.....	385	115		1	161	109
Chicago.....	10,062	3,962	52	1	2,910	3,138
Decatur.....	94	22			35	37
Havana.....	11	3			1	7

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Illinois—Continued.						
La Salle.....	3	2			1	6
Macomb.....	8	2			17	52
Moline.....	59	32			46	108
Mount Vernon.....	167	54	15		148	590
Peoria.....	995	263	4	14	46	108
Quincy.....	260	108			76	64
Rockford.....	230	90			169	277
Springfield.....	549	103		1	28	16
Traveling party.....	59	13	2		9	15
Training station Great Lakes.....	38	14			159	221
Idaho:	512	121	11	8		
Boise City.....	192	56	18		9	109
Pocatello.....	196	33	21		13	124
Indiana:						
Columbus.....	136	68	25		5	38
Connorsville.....	6	6				
Evansville.....	755	347	110	30	80	218
Fort Wayne.....	421	128	58	13	80	155
Indianapolis.....	3,424	1,638	322	151	310	1,154
Kokomo.....	7	7				
Lafayette.....	30	20	5	1	1	4
Marion.....	1	1				
Muncie.....	21	14	1		4	2
Paoli.....	2	2				
Rensselaer.....	9	7			1	1
South Bend.....	732	352	62	12	135	183
Spencer.....	4	3	1			
Terre Haute.....	712	269	55	28	131	257
Valparaiso.....	3	3				
Washington.....	21	14	3		2	2
Traveling party.....	148	73	20	5	4	51
Iowa:						
Burlington.....	413	173	3	21	110	127
Cedar Rapids.....	452	216	2	18	73	161
Davenport.....	398	151		12	94	153
Des Moines.....	2,199	667	18	140	515	909
Fort Dodge.....	251	68	2	15	62	119
Mason City.....	13	2			8	3
Red Oak.....	8	4			2	2
Sioux City.....	509	149	173			187
Waterloo.....	414	115	2	15	148	149
Traveling party.....	194	31	3	15	57	108
Kansas:						
Atchison.....	2				1	1
Salina.....	495	147	3	6	208	137
Topeka.....	475	149	2	9	160	164
Wichita.....	831	413	15	12	178	226
Kentucky:						
Ashland.....	15	9				6
Bowling Green.....	54	26		2	1	17
Carlisle.....	6	6			3	
Frankfort.....	191	130	14	5	9	38
Greenup.....	8	6				2
Jackson.....	28	21	3			4
Lexington.....	478	216	3	8	70	199
London.....	36	24			4	8
Louisville.....	860	431	11	6	168	250
Maysville.....	16	10			5	1
Morehead.....	3	3				
Mount Sterling.....	11	10				1
Owensboro.....	28	19	1			8
Paducah.....	34	21			6	7
Paintsville.....	9	7				2
Russell.....	2	2				
South Portsmouth.....	8	4				4
Winchester.....	4	4				
Louisiana:						
Alexandria.....	187	121		5	5	61
Lafayette.....	121	69		1	14	38
Lake Charles.....	143	56			21	66
New Orleans.....	3,811	1,771	11	145	769	1,280
Shreveport.....	408	217	20	3	32	139
Traveling party.....	548	252	20	9	84	192

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Maine:						
Augusta.....	211	140	7	1	1	63
Bangor.....	1,092	689	79	24	35	289
Lewiston.....	528	336	38	18	23	131
Portland.....	1,260	605	115	92	12	528
Maryland:						
Baltimore.....	4,710	2,105	68	98	1,198	1,345
Cambridge.....	3				1	2
Cumberland.....	139	68	2	1	34	35
Easton.....	2					
Frederick.....	6	2	1		2	1
Hagerstown.....	138	57		2	41	40
Havre de Grace.....	1	1				
Princess Anne.....	1	1				
Rockville.....	1	1				
Salisbury.....	1					1
Snow Hill.....	1				1	
Traveling party.....	14	7			5	2
Massachusetts:						
Boston.....	6,192	3,403	58	134	1,391	1,340
Fall River.....	825	353	68	10	274	130
Holyoke.....	130	74	3	1	35	18
Lowell.....	1,423	875	2	24	239	307
New Bedford.....	334	187	4	5	92	51
Pittsfield.....	551	194	126	7	103	128
Springfield.....	1,006	523			171	312
Worcester.....	846	551	16	11	148	131
Traveling party.....	160	85	5	5	40	30
Michigan:						
Detroit.....	4,575	2,063	13	269	1,249	1,230
Alpena.....	8	5		1	1	2
Flint.....	49	28				13
Grand Rapids.....	386	117	2	19	95	172
Ishpeming.....	400	114	153	4	15	118
Kalamazoo.....	346	83	8	16	121	134
Port Huron.....	9	3			3	3
Saginaw.....	486	168	11	21	164	143
Traverse.....	41	19			11	11
Traveling party.....	91	29		1	27	35
Minnesota:						
Brainerd.....	122	35	44	2		43
Duluth.....	747	241	211	7	7	288
Minneapolis.....	3,960	893	874	121	13	2,210
St. Cloud.....	137	48	47			42
St. Paul.....	1,089	322	350	41	11	406
Virginia.....	9	3	5			1
Mississippi:						
Gulfport.....	123	83	10		2	28
Hattiesburg.....	388	193	54		70	7
Jackson.....	1,202	541	114	4	185	362
Meridian.....	461	153	57	1	144	107
McComb.....	172	59	8		54	51
Traveling party.....	610	222	159	6	108	121
Missouri:						
Hannibal.....	13	1	10			2
Joplin.....	806	412	162	5	47	185
Kansas City.....	4,056	1,138	24	139	708	2,126
Mexico.....	15	4	8			3
Moberly.....	46	24	9			13
Poplar Bluff.....	170	120	26	1		24
Secalia.....	88	37	14		1	36
Springfield.....	638	280	176	5		182
St. Joseph.....	1,018	336	14	19	358	310
St. Louis.....	7,418	4,684	1,203	79	3	1,626
Traveling party.....	188	55	7		45	81
	95	76	8	1		11
Montana:						
Billings.....	744	249	81	1	57	357
Bosman.....	13	2	2			9
Butte.....	488	155	64		15	252
Great Falls.....	266	102	24		28	112
Miles City.....	294	126	38		14	116
Traveling party.....	76	6	3		7	60
Nebraska:						
Aberdeen.....	6	3	2			1
Hastings.....	6		2			4
Lincoln.....	481	195	144			140
Norfolk.....	15	7	2			6
Omaha.....	3,538	1,220	763	1	12	1,542

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Illinois—Continued.						
La Salle.....	3	2			1	
Macomb.....	8	2				6
Moline.....	59	32			17	10
Mount Vernon.....	167	54	15		46	52
Peoria.....	995	263	4	14	148	590
Quincy.....	260	108			46	106
Rockford.....	230	90			76	64
Springfield.....	549	103		1	169	277
Traveling party.....	59	13	2		28	16
Training station Great Lakes.....	38	14			9	15
	512	121	11	8	159	221
Idaho:						
Boise City.....	192	56	18		9	109
Pocatello.....	196	33	21		18	124
Indiana:						
Columbus.....	136	68	25		5	38
Connorsville.....	6					
Evansville.....	755	347	110	30	80	218
Fort Wayne.....	421	128	58	13	80	155
Indianapolis.....	3,424	1,638	322	151	310	1,154
Kokomo.....	7					
Lafayette.....	30	20	5	1	1	4
Marion.....	1					
Muncie.....	21	14	1		4	2
Paoli.....	2					
Rensselaer.....	9	7			1	1
South Bend.....	732	352	62	12	135	183
Spencer.....	4	3				
Terre Haute.....	712	269	55	28	131	257
Valparaiso.....	3	3				
Washington.....	21	14	3		2	2
Traveling party.....	148	73	20	5	4	51
Iowa:						
Burlington.....	413	173	3	21	110	127
Cedar Rapids.....	452	216	2	18	73	161
Davenport.....	398	151		12	94	153
Des Moines.....	2,199	667	18	140	515	999
Fort Dodge.....	251	68	2	15	62	119
Mason City.....	13	2			8	3
Red Oak.....	8	4			2	3
Sioux City.....	509	149	173			187
Waterloo.....	414	115	2	15	148	149
Traveling party.....	194	31	3	15	57	103
Kansas:						
Atchison.....	2				1	1
Salina.....	495	147	3	6	205	137
Topeka.....	475	149	2	9	160	164
Wichita.....	331	413	15	12	178	226
Kentucky:						
Ashland.....	15	9				6
Bowling Green.....	54	36		2	1	17
Carlisle.....	9	6			3	
Frankfort.....	191	130	14	5	9	38
Greenup.....	8	6				2
Jackson.....	28	21	3			4
Lexington.....	478	216	3	8	70	189
London.....	36	24			4	8
Louisville.....	360	431	11	6	168	250
Maysville.....	16	10			5	1
Morehead.....	3	3				
Mount Sterling.....	11	10				1
Owensboro.....	23	19	1			8
Paducah.....	34	21			6	7
Paintsville.....	9	7				2
Russell.....	2	2				
South Portsmouth.....	8	4				4
Winchester.....	4	4				
Louisiana:						
Alexandria.....	187	121		5	5	61
Lafayette.....	121	69		1	14	38
Lake Charles.....	143	56			21	66
New Orleans.....	3,811	1,771	11	145	769	1,290
Shreveport.....	408	217	20	3	32	139
Traveling party.....	548	252	20	9	84	192

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Maine:						
Augusta.....	211	140	7	1	1	68
Bangor.....	1,092	689	79	24	35	289
Lewiston.....	528	336	38	18	23	131
Portland.....	1,260	605	115	92	12	528
Maryland:						
Baltimore.....	4,716	2,105	68	98	1,198	1,345
Cambridge.....	3				1	2
Cumberland.....	139	68	2	1	24	35
Easton.....	2				2	
Frederick.....	6	2	1		2	1
Hagerstown.....	138	57		2	41	40
Havre de Grace.....	1	1				
Princess Anne.....	1	1				
Rockville.....	1	1				
Salisbury.....	1					1
Snow Hill.....	1				1	
Traveling party.....	14	7			5	2
Massachusetts:						
Boston.....	6,192	3,408	58	134	1,391	1,340
Fall River.....	825	353	68	10	274	130
Holyoke.....	130	74	3	1	35	18
Lowell.....	1,423	875	2	24	239	307
New Bedford.....	334	187	4	5	92	51
Pittsfield.....	551	194	126	7	103	128
Springfield.....	1,006	523			171	312
Worcester.....	846	551	16	11	148	131
Traveling party.....	160	85	5	5	40	30
Michigan:						
Detroit.....	4,575	2,063	13	269	1,249	1,230
Alpena.....	8	5		1	1	2
Flint.....	49	28			8	13
Grand Rapids.....	386	117	2	19	95	172
Ishpeming.....	400	114	153	4	15	118
Kalamazoo.....	346	83	8	16	121	134
Port Huron.....	9	3			3	3
Saginaw.....	486	168	11	21	164	143
Traverse.....	41	19			11	11
Traveling party.....	91	29		1	27	35
Minnesota:						
Brainerd.....	122	35	44	2		43
Duluth.....	747	241	211	7	7	288
Minneapolis.....	3,960	863	874	121	13	2,210
St. Cloud.....	137	48	47			42
St. Paul.....	1,089	322	350	41	11	406
Virginia.....	9	3	5			1
Mississippi:						
Gulfport.....	123	83	10		2	28
Hattiesburg.....	388	193	54		70	7
Jackson.....	1,202	541	114	4	185	362
Meridian.....	461	153	57	1	144	107
McComb.....	172	59	8		54	51
Traveling party.....	610	222	159	6	108	121
Missouri:						
Hannibal.....	13	1	10			2
Joplin.....	806	412	162	5	47	185
Kansas City.....	4,056	1,138	24	139	708	2,126
Mexico.....	15	4	8			3
Moberly.....	46	24	9	1		13
Poplar Bluff.....	170	120	26	1		24
Sedalia.....	88	37	14		1	36
Springfield.....	1,638	280	176	5		182
St. Joseph.....	1,018	336	14	19	358	310
St. Louis.....	7,416	4,584	1,203	79	3	1,626
Traveling party.....	188	55	7		45	81
	95	76	8	1		11
Montana:						
Billings.....	744	249	81	1	57	357
Bozeman.....	13	2	2			9
Butte.....	486	155	64		15	252
Great Falls.....	266	102	24		28	112
Miles City.....	294	126	38		14	116
Traveling party.....	76	6	3		7	60
Nebraska:						
Aberdeen.....	6	3	2			1
Hastings.....	6		2			4
Lincoln.....	481	195	144			140
Norfolk.....	15	7	2			6
Omaha.....	3,538	1,220	768	1	12	1,542

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Nebraska—Continued.						
Watertown.....	3	2				1
Traveling party.....	11	1	5	2		3
Nevada:						
Reno.....	19	3				16
New Hampshire:						
Dover.....	441	304	25	5	40	72
Concord.....	230	64	61		46	59
Manchester.....	701	338	60	6	148	165
New Jersey:						
Bayonne.....	90	64		2	11	15
Elizabeth.....	62	41	1		13	7
Hackensack.....	4	1			3	
Jersey City.....	1,464	933	8	1	42	451
Morristown.....	3	3				
Newark.....	5,405	2,764	422	60	1,038	1,161
New Brunswick.....	97	47	3		39	8
Paterson.....	1,720	1,060	14	7	262	394
Trenton.....	836	437	17		210	172
Traveling party.....	64	39	2		15	8
New Mexico:						
Alamogordo.....	51	22	8		5	16
Albuquerque.....	505	328	20		12	145
Las Vegas.....	71	47	1			23
Roswell.....	67	42	2			23
Traveling party.....	56	38	2			16
New York:						
Albany.....	1,775	917	413	46	87	358
Binghamton.....	654	183	34	11	183	254
Brooklyn.....	7,778	4,905	349		1,141	1,378
Buffalo.....	1,927	1,124	64	5	78	671
Cohoes.....	22	12	9			1
Elmira.....	1,398	634	547	3	7	210
Jamestown.....	1					1
New York.....	19,129	12,171	29	25	3,244	3,085
Niagara Falls.....	1					1
Olean.....	217	48	107		8	54
Plattsburg.....	138	105			4	29
Poughkeepsie.....	403	307	3		14	79
Rochester.....	1,343	532	213	9	13	555
Schenectady.....	793	363	122	23	52	256
Syracuse.....	1,398	629	327		20	512
Troy.....	803	497	231	9	58	107
Utica.....	2,266	1,013	775	42	182	396
Watertown.....	372	234	73		5	60
Yonkers.....	916	644			142	130
North Dakota:						
Fargo.....	532	169	119	5	2	252
Grand Forks.....	378	122	119	9	4	133
Minot.....	202	64	60	4		79
North Carolina:						
Asheville.....	390	161	2		118	109
Charlotte.....	493	221	7	1	127	138
Raleigh.....	709	361	2	2	125	221
Wilmington.....	103	46			35	22
Winston-Salem.....	457	268	2	2	121	66
Traveling party.....	11	9				2
Ohio:						
Akron.....	1,148	487	2	5	329	330
Cincinnati.....	1,967	933	14	25	194	826
Chillicothe.....	180	76	9		15	80
Cleveland.....	2,796	1,388	14	18	640	754
Columbus.....	1,135	326	29	4	374	406
Dayton.....	609	291	61	5	72	185
Lima.....	218	88	9		77	44
Springfield.....	298	94	10	4	97	85
Toledo.....	741	341	30	10	199	171
Youngstown.....	592	260	9	4	167	166
Zanesville.....	60	28	4		13	15
Traveling party.....	30	24			4	2
	180	48	2		42	88
Oklahoma:						
Altus.....	7	5				2
Alva.....	18	11				7
Ardmore.....	68	39	1			26
Chickasha.....	246	131	1		182	114
Duncan.....	15	14				1
Elk City.....	16	14				2
El Reno.....	6	1				6

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Oklahoma—Continued.						
Enid.....	145	86	1		1	57
Frederick.....	4	3				1
Gage.....	14	12				2
Guthrie.....	35	25				10
Lorton.....	15	11				4
Mangum.....	8	7				1
Maurika.....	26	24				2
Muskogee.....	473	264	55	3	3	151
McAlester.....	135	98	1	2		41
Oklahoma City.....	2,040	997	81	10	71	891
Tulsa.....	551	335	16	5	7	198
Woodward.....	53	41				12
Oregon:						
Astoria.....	35	11	3			21
Eugene.....	36	9	10			17
Medford.....	93	23	17			53
Pendleton.....	96	22	10			64
Portland.....	2,859	955	230			1,674
Roseburg.....	16	6	3			7
Salem.....	217	55	37			125
Pennsylvania:						
Allentown.....	812	319	4	10	245	244
Easton.....	32	14			9	9
Erie.....	449	195	164			90
Gettysburg.....	3	1			2	
Harrisburg.....	253	154	15		73	111
Johnstown.....	562	320	16	2	45	181
Lancaster.....	430	169			149	112
Philadelphia.....	7,887	3,860	156	5	1,997	1,874
Pittsburgh.....	2,818	1,410	68	53	423	917
Reading.....	437	221	5		112	99
Scranton.....	1,214	501	2	8	365	346
Sumbury.....	13	6			6	1
Wilkes-Barre.....	548	190	4	6	118	236
Williamsport.....	366	114	15	3	104	133
York.....	199	81	1		64	53
Traveling party.....	248	138	5	1	66	39
	94	50			19	25
	39	8		3	19	12
Rhode Island:						
Newport.....	431	151	3	2	140	137
Providence.....	2,261	1,390	8	433		430
Woonsocket.....	184	166			8	10
South Dakota:						
Lead.....	187	84	40			63
Sioux Falls.....	248	108	73		1	66
South Carolina:						
Charleston.....	410	187	109		12	102
Columbus.....	1,047	476	217		8	346
Florence.....	312	164	68		3	77
Greenville.....	428	160	141		13	114
Spartanburg.....	296	138	105			53
Traveling party.....	165	49	45	1	7	64
Tennessee:						
Chattanooga.....	689	362	16		96	215
Jackson.....	291	151			82	58
Knoxville.....	894	426	19		135	314
Memphis.....	1,003	533	10		167	293
Nashville.....	1,150	377	3		319	451
Traveling party.....	261	107			70	84
Texas:						
Abilene.....	950	390	262	4	17	281
Amarillo.....	340	131	61	2	1	147
Austin.....	626	179	112	12	57	178
Beaumont.....	497	254	44	11	9	190
Bonham.....	11	1				10
Carthage.....	15	7			1	7
Cleburne.....	262	109	73	1	16	64
Commerce.....	29	13	7	1		9
Cooper.....	19	6				13
Corpus Christi.....	248	138	87	1	24	99
Dallas.....	3,786	1,773	446	71	90	1,468
Denison.....	426	184	105		4	133
El Paso.....	1,722	935	84	31	39	664
Fort Worth.....	1,199	512	303	4	24	360
Galveston.....	591	400	61	6	15	115
Gilmer.....	28	19				9

Enlistments by States—Continued.

City or town.	Applicants for enlistment.	Applicants rejected.		Applicants rejected whose disqualifications were waived.	Applicants accepted who failed to enlist.	Applicants enlisted.
		Physical defects.	Other causes.			
Texas—Continued.						
Greenville.....	18	7	5		1	5
Hamstead.....	4	2				2
Honey Grove.....	24	10	6			8
Houston.....	1,707	568	129		103	917
Longview.....	8	4	2			2
Lufkin.....	10	5	2		3	
McKinney.....	9	3	2			4
Marshall.....	12	3	6	1		4
Mineola.....	2					2
Mount Pleasant.....	10	5	3			2
Palestine.....	353	169	75	5	7	102
Paris.....	221	221	147	1	3	111
Port Arthur.....	262	127	79	5	9	67
Rusk.....	23	9	6			8
San Angelo.....	186	73	37	2	5	71
San Antonio.....	1,356	646	250	32	48	412
Sherman.....	339	131	113		11	84
Sulphur Springs.....	10	4	1			5
Terrell.....	6	5				1
Texas.....	618	335	153		7	123
Texas.....	94	52	22		3	17
Tyler.....	1,161	524	307	3	22	308
Waco.....	1,037	422	279	4	8	328
Wichita Falls.....	173	62	30	3	3	78
Yoakum.....	87	29	3			55
Traveling party.....						
Utah:						
Ordan.....	276	106	27		16	125
Salt Lake City.....	1,859	423	229	2	441	706
Traveling party.....	85	17	4		26	38
Vermont:						
Brandon.....	133	82	4	5	20	27
Burlington.....	414	212	12	25	18	172
Montpelier.....	249	156	1	9	38	54
Rutland.....	242	153			30	59
Virginia:						
Danville.....	276	175		3	31	70
Lynchburg.....	180	37		6	16	127
Petersburg.....	145	60			34	51
Richmond.....	1,328	547	4	45	303	474
Roanoke.....	443	153		11	89	201
Staunton.....	81	33		1	27	21
Winchester.....	6	2			2	2
Washington:						
Aberdeen.....	2					2
Bellingham.....	90	28	40		9	13
Everett.....	64	24	17		17	6
North Yakima.....	40	9		1	23	5
Seattle.....	2,770	1,132	98	157	417	1,123
Spokane.....	929	230	108			591
Tacoma.....	621	266	10	30	106	237
Vancouver.....	3	2				1
Walla Walla.....	22	1	3			18
Traveling party.....	457	133	4	36	66	254
West Virginia:						
Charleston.....	354	170	43		30	111
Huntington.....	288	143	2		38	105
Parkersburg.....	353	142		2	64	147
Wheeling.....	282	170	18	2	46	48
Wisconsin:						
Ashland.....	25	1	5	2		19
Eau Claire.....	59	17	23		7	12
La Crosse.....	93	16	38	4	15	24
Madison.....	145	48	32	4	3	62
Marquette.....	35	12	12	4		11
Milwaukee.....	2,305	650	773	92	124	756
Oshkosh.....	322	56	118	8	45	103
Sheboygan.....	1					1
Wausau.....	279	105	79	8	5	90
Traveling party.....	323	116	110	6	11	86
Wyoming:						
Cheyenne.....	461	219	82	21	33	127
Total enlisted at recruiting stations..	261,176	121,009	21,997	3,685	37,326	80,844
Total enlisted on vessels, naval stations, etc.....	20,101	6,503	914	485	1,115	11,569
Grand total.....	281,277	127,512	22,911	4,170	38,441	92,413

Enlistments extended since Aug. 12, 1912.

	1913	1914	1915	1916	1917	Total.
For 1 year.....	304	208	573	387	450	1,922
For 2 years.....	32	11	92	83	128	356
For 3 years.....	11	81	195	145	164	696
For 4 years.....	306	281	289	138	92	1,106
Total.....	653	581	1,149	753	844	3,980

Men serving under extension of enlistment.

Extension for 1 year.....	331
Extension for 2 years.....	101
Extension for 3 years.....	103
Extension for 4 years.....	1,153
Total reported.....	1,888

Discharges.

	1915	1916	1917
With honorable discharge, expiration of enlistment.....	8,254	9,901	10,101
With ordinary discharge, expiration of enlistment.....	460	383	494
With ordinary discharge, expiration of enlistment, not recommended for re-enlistment.....	83	30	49
With dishonorable discharge.....	1,033	1,000	798
With bad conduct discharge.....	2,728	2,296	1,713
For physical disability.....	900	860	1,298
For unfitness.....			6
For inaptitude.....	112	95	99
As undesirable.....	880	631	837
For miscellaneous reasons.....	99	100	227
By purchase.....	2,303	1,967	388
Enlistment canceled.....	15	15	59
Furloughed.....			481
Total.....	16,867	17,278	16,550
Died.....	245	204	511
Applicants for retirement.....	45	65	62

Desertions for fiscal year ending June 30.

	1914	1915	1916	1917
Absentees during year.....	2,728	2,320	2,064	2,826
Absentees voluntarily returning to service.....	488	480	384	692
Absentees apprehended and delivered.....	561	438	296	442
Total surrendered and delivered.....	1,049	918	680	1,134
Absentees at large June 30.....	1,679	1,402	1,384	1,692
Apprehended and surrendered; convicted of desertion.....	286	328	297	426
Total.....	1,965	1,730	1,681	2,018
Number at large June 30, who have subsequently had mark of desertion removed.....			33	33
Total desertions for fiscal year.....	1,965	1,730	1,648	1,985
Total number of enlisted men in service during fiscal year.....	68,041	71,107	73,265	147,240
Percentage of desertion based upon total number in service.....	2.89	2.43	2.24	1.43
Decrease of percentage for 1917.....			.19	.81

Citizenship, year ending June 30, 1917.

	Native born.	Naturalized.	Aliens declared intentions.	Aliens resident in the United States.	Aliens nonresident in the United States.	Guam.	Samoa.	Philippines.	Total.
Petty officers.....	27,683	1,774	11	3	11	14	8	126	29,609
Other rates.....	67,416	1,117	16	75	125	144	79	1,815	70,839
Total.....	95,099	2,891	27	77	136	158	87	2,001	100,539

¹ Not reported, 26,127.

Number and percentage of citizenship.

		1913	1913	1914	1915	1916	1917
Petty officers.....	number.....	15,388	17,384	18,536	19,380	19,822	20,609
Native born.....	per cent.....	82.33	87.04	88.33	90.25	90.14	92.24
Naturalized.....	do.....	12.93	11.70	10.42	9.89	8.87	5.97
Declared intentions.....	do.....	.....	.....	.....	.....	.....	.....
Aliens resident in the United States.....	do.....	.....	.....	.....	.....	.....	.....
Aliens nonresident in the United States.....	do.....	.....	.....	.....	.....	.....	.....
Natives of colonial possessions.....	do.....	.....	.....	.....	.....	.....	.....
Citizens of the United States.....	do.....	.....	.....	.....	.....	.....	.....
Enlisted men other than petty officers.....	number.....	31,874	37,061	34,130	32,971	34,412	70,839
Native born.....	per cent.....	82.33	87.04	88.33	90.25	90.01	95.15
Naturalized.....	do.....	12.93	11.70	10.42	9.87	8.87	1.58
Declared intentions.....	do.....	.....	.....	.....	.....	.....	.....
Aliens resident in the United States.....	do.....	.....	.....	.....	.....	.....	.....
Aliens nonresident in the United States.....	do.....	.....	.....	.....	.....	.....	.....
Natives of colonial possessions.....	do.....	.....	.....	.....	.....	.....	.....
Citizens of the United States.....	do.....	.....	.....	.....	.....	.....	.....
Citizenship of the total enlisted force.....	number.....	47,252	54,445	52,666	52,351	54,234	100,539
Native born.....	per cent.....	82.33	87.04	88.33	90.25	90.14	94.56
Naturalized.....	do.....	12.93	11.70	10.42	9.87	8.87	2.86
Citizens of the United States.....	do.....	.....	.....	.....	.....	.....	97.46

¹ Not reported, 26,127.

Activities and residence of the enlisted force, by States.

State	Per cent	1916	1917	State	Born	Residence
Unknown				Alabama	1,482	1,123
Alabama	5.24	1,482	1,123	Alaska	.....	.....
Alaska	Arizona	2,385	4,383
Arizona	5.24	2,385	4,383	Arkansas	1,123	2,000
Arkansas	1,123	2,000	California	11,822	12,217
California	12.21	11,822	12,217	Colorado	1,123	1,123
Colorado	1,123	1,123	Connecticut	2,385	1,778
Connecticut	2,385	1,778	Delaware	1,123	2,385
Delaware	1,123	2,385	District of Columbia	2,385	1,123
District of Columbia	2,385	1,123	Florida	1,123	1,123
Florida	1,123	1,123	Georgia	2,385	7,000
Georgia	2,385	7,000	Idaho	1,123	1,123
Idaho	1,123	1,123	Illinois	1,123	1,123
Illinois	1,123	1,123	Indiana	1,123	1,123
Indiana	1,123	1,123	Iowa	1,123	1,123
Iowa	1,123	1,123	Kansas	1,123	1,123
Kansas	1,123	1,123	Kentucky	1,123	1,123
Kentucky	1,123	1,123	Louisiana	1,123	1,123
Louisiana	1,123	1,123	Maine	1,123	1,123
Maine	1,123	1,123	Maryland	1,123	1,123
Maryland	1,123	1,123	Massachusetts	1,123	1,123
Massachusetts	1,123	1,123	Michigan	1,123	1,123
Michigan	1,123	1,123	Minnesota	1,123	1,123
Minnesota	1,123	1,123	Mississippi	1,123	1,123
Mississippi	1,123	1,123	Missouri	1,123	1,123
Missouri	1,123	1,123	Montana	1,123	1,123
Montana	1,123	1,123	Nebraska	1,123	1,123
Nebraska	1,123	1,123	Nevada	1,123	1,123
Nevada	1,123	1,123	New Hampshire	1,123	1,123
New Hampshire	1,123	1,123	New Jersey	1,123	1,123
New Jersey	1,123	1,123	New Mexico	1,123	1,123
New Mexico	1,123	1,123	New York	1,123	1,123
New York	1,123	1,123	North Carolina	1,123	1,123
North Carolina	1,123	1,123	North Dakota	1,123	1,123
North Dakota	1,123	1,123	Ohio	1,123	1,123
Ohio	1,123	1,123	Oklahoma	1,123	1,123
Oklahoma	1,123	1,123	Oregon	1,123	1,123
Oregon	1,123	1,123	Pennsylvania	1,123	1,123
Pennsylvania	1,123	1,123	Rhode Island	1,123	1,123
Rhode Island	1,123	1,123	South Carolina	1,123	1,123
South Carolina	1,123	1,123	South Dakota	1,123	1,123
South Dakota	1,123	1,123	Tennessee	1,123	1,123
Tennessee	1,123	1,123	Texas	1,123	1,123
Texas	1,123	1,123	Utah	1,123	1,123
Utah	1,123	1,123	Vermont	1,123	1,123
Vermont	1,123	1,123	Virginia	1,123	1,123
Virginia	1,123	1,123	Washington	1,123	1,123
Washington	1,123	1,123	West Virginia	1,123	1,123
West Virginia	1,123	1,123	Wisconsin	1,123	1,123
Wisconsin	1,123	1,123	Wyoming	1,123	1,123
Wyoming	1,123	1,123	Total	95,099	97,000

Nativity and residence of the enlisted force, by other countries.

Country.	Born.	Residence.	Country.	Born.	Residence.
At sea.....	6		Ireland.....	306	9
Africa.....	3		Japan.....	120	36
Argentina.....	1		Korea.....		2
Armenia.....	4		Malta.....	2	1
Azores.....	2		Mexico.....	20	4
Australia.....	21		Newfoundland.....	20	
Austria.....	150	1	Nova Scotia.....	47	1
British Columbia.....	16	3	New South Wales.....		
British West Indies.....	27	1	New Brunswick.....	12	1
British East Indies.....	3	5	New Zealand.....	3	
Belgium.....	19		Nicaragua.....	2	
Bohemia.....	16		Norway.....	142	2
Bolivia.....			Panama.....	1	3
Brasil.....	4		Paraguay.....		
Bulgaria.....	2		Persia.....	3	
Canada.....	214	43	Peru.....	1	
Cape Verde Islands.....	2		Philippines.....	2,001	1,877
Chile.....	2		Prince Edward Island.....	5	1
China.....	172	166	Poland.....	24	14
Colombia.....	2		Porto Rico.....	56	27
Costa Rica.....	4	2	Portugal.....	8	
Cuba.....	6	2	Queensland.....	1	
Virgin Islands.....	8	1	Roumania.....	14	
Denmark.....	92	2	Russia.....	161	1
Ecuador.....	1		Servia.....	3	
England.....	249	6	Scotland.....	86	2
Egypt.....	4		Siam.....		
Finland.....	55	1	Society Islands.....		
France.....	24		South African Republic.....	5	
French West Indies.....	15		Spain.....	7	1
Germany.....	414	3	Sweden.....	237	7
Greece.....	24	1	Switzerland.....	20	8
Guam.....	158	169	Samoa.....	87	85
Guatemala.....	1		Turkey.....	10	
Hawaii.....	85	103	Syria.....	1	
Holland.....	31		Venezuela.....	2	
Honduras.....		1	Wales.....	9	
Hungary.....	42				
Italy.....	230	1	Total reported.....	5,526	2,593

Summary of native and foreign born.

	1916	1917	Increase.
Native born.....	49,252	95,013	45,761
Foreign born.....	4,982	5,526	544
Total.....	54,234	100,539	46,305

¹ Not reported, 28,127.*States furnishing the greatest number of native born.*

New York.....	11,905	California.....	2,395
Pennsylvania.....	8,071	Iowa.....	2,360
Massachusetts.....	6,885	Maryland.....	2,250
Illinois.....	4,959	Michigan.....	2,136
Texas.....	4,165	Virginia.....	2,093
New Jersey.....	3,750	Georgia.....	2,047
Ohio.....	3,709	Kansas.....	1,972
Missouri.....	2,954		
Indiana.....	2,491	Total.....	64,142

Sixteen States furnished 63.7 per cent of the enlisted force reported.

Citizenship, year ending June 30, 1917.

	Native born.	Naturalized.	Aliens declared intentions	Aliens resident in the United States.	Aliens nonresident in the United States.	Guam.	Samoa.	Philippines.	Total.
Petty officers.....	27,683	1,774	11	2	11	14	8	186	29,689
Other rates.....	67,416	1,117	16	75	188	144	79	1,815	70,859
Total.....	95,099	2,891	27	77	199	158	87	2,001	100,529

¹ Not reported, 28,127.

Number and percentage of citizenship.

	1912	1913	1914	1915	1916	1917
Petty officers.....	number.. 15,596	17,204	18,556	19,590	19,822	20,689
Native born.....	per cent. 85.75	87.04	88.33	89.25	90.14	93.24
Naturalized.....	do. 12.93	11.70	10.42	9.80	8.87	5.97
Declared intentions.....	do. .40	.31	.19	.09	.07	.04
Aliens resident in the United States.....	do. .07	.07	.09	.08	.02	.008
Aliens nonresident in the United States.....	do. .08	.09	.07	.07	.02	.04
Natives of colonial possessions.....	do. .77	.79	.89	.71	.88	.704
Citizens of the United States.....	do. 98.68	98.75	98.78	99.05	99.01	92.21
Enlisted men other than petty officers.....	number.. 31,557	30,864	34,110	32,971	34,412	70,850
Native born.....	per cent. 92.46	92.00	92.49	91.50	91.20	95.15
Naturalized.....	do. 2.57	2.68	1.86	1.87	2.33	1.58
Declared intentions.....	do. .21	.21	.13	.09	.06	.02
Aliens resident in the United States.....	do. .47	.34	.34	.35	.27	.11
Aliens nonresident in the United States.....	do. .48	.85	.70	.70	.64	.26
Natives of colonial possessions.....	do. 3.81	3.92	4.48	5.51	5.50	2.88
Citizens of the United States.....	do. 95.03	94.67	94.34	94.34	93.54	96.73
Citizenship of the total enlisted force.....	number.. 47,515	48,068	52,667	52,561	54,234	100,529
Native born.....	per cent. 90.20	90.22	91.02	90.68	91.81	94.58
Naturalized.....	do. 6.05	5.91	4.88	4.80	4.51	2.88
Citizens of the United States.....	do. 96.25	96.13	95.90	95.48	96.32	97.46

¹ Not reported, 28,127.

Nativity and residence of the enlisted force, by States.

State.	Born.	Residence.	State.	Born.	Residence.
Unknown.....	223	.....	Nebraska.....	1,402	1,183
Alabama.....	1,404	1,843	Nevada.....	52	53
Alaska.....	37	67	New Hampshire.....	685	633
Arizona.....	148	229	New Jersey.....	3,750	4,265
Arkansas.....	1,414	1,167	New Mexico.....	178	299
California.....	2,385	4,469	New York.....	11,905	12,217
Colorado.....	972	1,391	North Carolina.....	1,536	1,362
Connecticut.....	1,834	2,155	North Dakota.....	1,255	178
Delaware.....	289	293	Ohio.....	3,709	3,352
District of Columbia.....	614	851	Oklahoma.....	993	1,265
Florida.....	652	852	Oregon.....	939	1,385
Georgia.....	2,047	1,889	Pennsylvania.....	8,071	7,980
Idaho.....	354	459	Rhode Island.....	967	1,073
Illinois.....	4,959	4,576	South Carolina.....	1,097	1,021
Indiana.....	2,491	2,083	South Dakota.....	343	322
Iowa.....	2,360	1,894	Tennessee.....	1,590	1,814
Kansas.....	1,972	1,518	Texas.....	4,165	4,506
Kentucky.....	1,572	1,146	Utah.....	602	676
Louisiana.....	1,463	1,479	Vermont.....	443	339
Maine.....	1,419	1,345	Virginia.....	2,008	2,151
Maryland.....	2,250	2,326	Washington.....	1,164	2,454
Massachusetts.....	6,885	7,309	West Virginia.....	862	817
Michigan.....	2,163	2,009	Wisconsin.....	1,593	1,615
Minnesota.....	1,569	1,249	Wyoming.....	129	195
Mississippi.....	1,293	1,400	No residence.....	.....	332
Missouri.....	2,954	2,133			
Montana.....	398	607	Total.....	95,013	97,946

¹ Number reported.

Nativity and residence of the enlisted force, by other countries.

Country.	Born.	Residence.	Country.	Born.	Residence.
At sea.....	6		Ireland.....	306	9
Africa.....	3		Japan.....	120	36
Argentina.....	1		Korea.....	2	2
Armenia.....	4		Malta.....	2	1
Azores.....	2		Mexico.....	20	4
Australia.....	21		Newfoundland.....	20	
Austria.....	150	1	Nova Scotia.....	47	1
British Columbia.....	16	3	New South Wales.....	12	1
British West Indies.....	27	1	New Brunswick.....	3	
British East Indies.....	3	5	New Zealand.....	2	
Belgium.....	19		Nicaragua.....	1	
Bohemia.....	16		Norway.....	142	2
Bolivia.....			Panama.....	1	3
Brazil.....	4		Paraguay.....	3	
Bulgaria.....	2		Persia.....	1	
Canada.....	214	43	Peru.....	1	
Cape Verde Islands.....	2		Philippines.....	2,001	1,877
Chile.....	2		Prince Edward Island.....	5	1
China.....	172	166	Poland.....	24	14
Colombia.....	2		Porto Rico.....	56	27
Costa Rica.....	4	2	Portugal.....	8	
Cuba.....	6	2	Queensland.....	1	
Virgin Islands.....	8	1	Roumania.....	14	
Denmark.....	92	2	Russia.....	161	1
Ecuador.....	1		Servia.....	3	
England.....	249	6	Scotland.....	86	2
Egypt.....	4		Siam.....		
Finland.....	55	1	Society Islands.....		
France.....	24		South African Republic.....	5	
French West Indies.....	15		Spain.....	7	1
Germany.....	414	3	Sweden.....	237	7
Greece.....	24	1	Switzerland.....	20	8
Guam.....	158	169	Samoa.....	87	85
Guatemala.....	1		Turkey.....	10	
Hawaii.....	85	103	Syria.....	1	
Holland.....	31		Venezuela.....	2	
Honduras.....		1	Wales.....	9	
Hungary.....	42				
Italy.....	230	1	Total reported.....	5,526	2,593

Summary of native and foreign born.

	1916	1917	Increase.
Native born.....	49,262	95,013	45,751
Foreign born.....	4,982	5,526	544
Total.....	54,244	100,539	46,306

¹ Not reported, 28,127.

States furnishing the greatest number of native born.

New York.....	11,905	California.....	2,395
Pennsylvania.....	8,071	Iowa.....	2,360
Massachusetts.....	6,885	Maryland.....	2,250
Illinois.....	4,959	Michigan.....	2,136
Texas.....	4,165	Virginia.....	2,093
New Jersey.....	3,750	Georgia.....	2,047
Ohio.....	3,709	Kansas.....	1,972
Missouri.....	2,954		
Indiana.....	2,491	Total.....	64,142

Sixteen States furnished 63.7 per cent of the enlisted force reported.

Greatest number of foreign born, by countries.

	1916	1917	Increase.	Decrease.
Philippines.....	1,826	2,001	175	.....
Germany.....	486	414	.....	72
Ireland.....	341	306	.....	35
England.....	175	249	74	.....
Sweden.....	235	237	2	.....
Italy.....	174	230	56	.....
Canada.....	137	214	77	.....
China.....	197	172	.....	25
Russia.....	119	181	62	.....
Guam.....	118	158	40	.....
Austria.....	113	150	37	.....
Norway.....	144	142	.....	2
Total.....	4,065	4,434	503	134
Net increase.....			369	.....

¹ Number reported.

Color.

White.....	96,571	Chamorro.....	158
Negro.....	1,285	Hawaiian.....	47
Chinese.....	195	American Indian.....	36
Japanese.....	120	Porto Rican.....	39
Filipino.....	2,001		
Samoa.....	87	Total.....	¹ 100,539

Good-conduct medals.

	Men.	Medals.		Men.	Medals.
1 medal.....	4,585	4,585	7 medals.....	18	126
2 medals.....	1,556	3,112	8 medals.....	.....	.....
3 medals.....	539	1,779	9 medals.....	.....	.....
4 medals.....	205	820	10 medals.....	1	10
5 medals.....	92	460			
6 medals.....	41	246	Total reported.....	7,091	11,138

Comparative statement of reenlistments, etc.

	1916	1917	Increase.	Decrease.
Men entitled to reenlistment under honorable discharge.....	10,284	10,595	311	.....
Extensions effective, fiscal year, and entitled to honorable discharge.....	896	680	.....	216
Total.....	11,180	11,275	95	.....
Total number reenlisted.....	7,155	8,184	1,029	.....
Extensions effective and considered as reenlistments.....	896	680	.....	216
Total.....	8,051	8,864	813	.....
Percentage of reenlistments and extensions.....	72.01	78.61	6.6	.....
Men enlisted during fiscal year to serve during minority.....	2,909	12,161	9,252	.....
Enlisted men serving during minority.....	6,840	10,361	3,521	.....
Number holding certificates of graduation.....	1,790	1,265	.....	525
Number serving under continuous certificate.....	18,832	17,259	.....	1,573
Total number of men serving under reenlistment.....	21,862	20,681	.....	1,181
Percentage of enlisted men serving under reenlistment.....	40.31	20.56	.....	19.75
Men who have served —				
Less than 4 years.....	32,372	79,858	32,272	.....
4 years and less than 8.....	11,426	10,771	.....	665
8 years and less than 12.....	5,617	5,414	.....	203
12 years and less than 16.....	2,842	2,653	.....	189
16 years and less than 20.....	1,065	1,063	18	.....
20 years and less than 24.....	539	388	.....	151
24 years and less than 28.....	249	197	.....	52
28 years and over.....	124	175	51	.....
Total.....	54,234	100,539	32,441	1,260
Net increase.....			31,191	.....

¹ Not reported.

² Number reported, 28,127.

REPORT OF THE HYDROGRAPHIC OFFICE.

HYDROGRAPHIC OFFICE,
UNITED STATES NAVY,
Washington, D. C., October 11, 1917.

To: Bureau of Navigation.

Subject: Report of the hydrographer for the fiscal year ending June 30, 1917.

1. The following report of the operations of the Hydrographic Office for the past fiscal year is respectfully submitted.

2. The office has consistently pursued its policy of rendering itself and the Navy independent of foreign sources for its charts and sailing directions and has accomplished a great deal toward this end during the past year. Much, however, remains to be done. It is believed that the United States has passed the period when it could afford to be dependent upon foreign sources for its vital information.

3. This institution provides the Navy with charts and nautical books produced by its own officers.

4. The function of the office is purely to obtain the very best of information covering all parts of the world and to embody this in charts and sailing directions and issue it to the Navy and the merchant marine.

5. This is a large order, but the office is well on its way toward providing accurate charts and pilots of the entire foreign waters of the world. Some of this is from our own original surveys, which are published by foreign Governments for their own use, there being no copyright. In return, the office reproduces for its own use the charts and pilots of foreign Governments, a practical reciprocity. The practice of utilizing foreign surveys, which is followed by the hydrographic offices of all the great maritime nations, not only serves as a preparation for possible times of national peril, but is also in the interest of economy. Were this practice not carried on, it would always be necessary to purchase many of our navigational charts from foreign nations—a source of supply which would be closed to us in time of war—and, when purchased, the corrections made necessary by newly discovered dangers and changes in buoyage, lighthouses, ranges, etc., would have to be plotted by hand, a method which is much more expensive than that of making the required changes on the plate from which the chart is produced.

6. The function of the office comprises (1) the collection of the necessary information from all over the world; (2) the compilation, consideration, and publication of this data; and (3) the distribution of the resulting charts, sailing directions, and other navigational publications to the Navy and to all Government services and to the merchant marine. The charts and sailing directions issued by the office are based on original surveys and reports or upon the reproduction of similar publications issued by foreign hydrographic offices.

The Hydrographic Office not only collects information from which to make the original publications of charts and sailing directions, but is constantly collecting the information necessary to keep such charts and sailing directions corrected and accurate to date. In order to carry out this duty it receives, scans, and utilizes charts, sailing directions, notices to mariners, and such other hydrographic reports as may be issued by foreign hydrographic offices, marine reports from thousands of seafaring people the world over, as well as from the Navy, the merchant marine, and the various governmental marine services. To accomplish this gathering of information the 16 branch hydrographic offices located in the principal seaports of the United States furnish to and receive from the maritime world and those interested in nautical matters information which is transmitted to the main office and issued to all shipping affected. The useful and beneficial service rendered to mariners through and by these branch offices more than fully justifies the small annual expense of maintaining them. In addition, through the vessels of the Navy and naval attachés and consular service, the office adds to its stock of information.

7. In order to carry out the function of the office, the work is divided up into the following parts: (a) The construction of navigational charts of waters other than those of the United States; (b) the compilation and publication of navigational sailing directions of the same regions; (c) the compilation and publication of Light Lists of the World, azimuth tables, navigators, and other manuals of instruction, which are actually essential to the mariner for safe navigation at sea; (d) the publication of weekly notices to mariners, giving the latest information upon matters pertaining to safe navigation in all parts of the world, such as the establishment of light-houses and other aids to navigation, the discontinuance or defective working of the same, the discovery or development of rocks, shoals, or other dangers, the issue of new nautical publications, the recommended sailing routes, etc.; (e) the publication of the monthly pilot charts, covering various regions of the ocean and showing meteorological conditions for the month, as also matters pertaining to navigation which are of a transitory nature and therefore not appropriate for the permanent navigational charts, such matters comprising the position of derelicts and other floating dangers, ice movements, etc.; (f) the publication of a weekly supplement to the monthly pilot chart before mentioned, under the title of Hydrographic Bulletin, and the daily memoranda of like subjects; (g) the supply of the completed charts, sailing directions, and other nautical books to the Navy and other Government services and their sale to the merchant service. The supply of these articles to the Navy is essentially a military function equally with that of munitions, food, clothing, etc.

WAR CONDITIONS.

8. Owing to the change of the Government of the United States from a peace basis to a state of war, there resulted an extraordinary demand for the publications of the Hydrographic Office for the use of Government officials, and especially for outfits to be supplied to vessels of the Navy in excess of the normal requirements, caused by the placing in commission of a vast number of vessels in excess of

those kept in commission in time of peace. To meet this demand for charts, books of sailing directions, and other publications required for the purpose of navigation, and for disseminating information, the energies of the office, in anticipation of war and after the outbreak of hostilities, were largely diverted from the production of publications covering the world in general and concentrated upon the vicinity of the seat of war. This has resulted in the ability of the office to meet the demands for fitting out the fleet in this material.

SURVEYS.

9. The U. S. S. *Hannibal* continued the survey of the east coast of Nicaragua until war intervened. The past season's work was a continuation of the survey among the reefs and shoals bordering Morrison and Mosquito Cays. This survey is to be continued down the coast and will consume several years. The results of this survey up to and including the season of 1916-17 have been incorporated in new drawings.

The U. S. S. *Paducah* continued the survey of the south coast of Cuba until withdrawn for war purposes. This vessel has completed the survey along the coast from Casilda to Cienfuegos, and also dragged and directed the establishing of navigation marks for several channels south of Jucaro and Tunas de Zaza previously developed by the Cape Cruz Casilda Survey.

The U. S. S. *Leonidas* continued the survey of the Panama coast until required for patrol service. During the past season the work was extended eastward of the Gulf of San Blas as far as longitude 78° 08' W. Under favorable circumstances one more season of uninterrupted work is required to complete the survey of the north coast of Panama from Colon eastward to the Columbian boundary.

The U. S. S. *Eagle* continued the survey of the coast of Haiti until war needs caused her withdrawal. This vessel continued the work of the previous years on the coast of Haiti, completing the survey from Henne Bay to Cape Faux and the survey of the harbor of Port Paix. A reconnaissance survey of Corozos Cove (Samana Bay) was also completed. The topographic survey of the vicinity of the Guantanamo (Cuba) Naval Station was continued until unsettled conditions in Cuba due to the revolution necessitated its abandonment. The survey has been extended over the Guantanamo River region. Surveys were also made and positions established for the marking of a measured mile course on the south coast of Cuba east of Port Hatibonico.

The survey of the island of Guam is being pursued by the personnel of the U. S. S. *Supply*. This vessel has been engaged on a hydrographic survey of the coast of the island of Guam, and has completed the work of about two-thirds of the coast of the island from Uruno Point southwestward to Ajavan Point. It is intended to continue this survey to cover the entire coast of the island and to extend the survey to the southwestward to include Galvez Bank and Santa Rosa Reef.

The U. S. S. *Denver* was engaged in surveying the Gulf of Fonseca, on the west coast of Nicaragua, until her services were required in the war. The hydrographic survey of the Nicaraguan territorial waters in the Gulf of Fonseca, west coast of Central America, was

abruptly brought to a close owing to war conditions. The survey, however, was sufficiently advanced to furnish data for the construction of a large scale chart of the territory involved, such chart to be subject to amplification when a vessel can be reassigned to complete the survey.

The survey of the harbor of Pago Pago, American Samoa, was completed and the resulting charts are in process of publication.

It is hoped to resume this important service at the end of the war. The necessity for these surveys must not be lost sight of. The Caribbean Sea is both the commercial field and a strategic field to the United States. The commerce of this country is expanding and at the close of the war our country must seize the commercial opportunities opening out to us. The pioneer of commerce is the surveying ship, which lays out the path for the vessels of commerce. The approaches to the Panama Canal, the coasts of Mexico, the north coast of South America, and the islands of the West Indies are a proper sphere for survey by this country, both by reason of our present and future commercial interests there and because the nations possessing them are not possessed of the means for surveying them. These coasts in many cases have not been surveyed for a hundred or more years, and new surveys are most necessary.

The charts of the coasts and harbors of Cuba, Haiti, and the Spanish Main generally, except where already covered by our surveys, are very defective, and it is recommended that the prosecution of the surveys in those waters continue uninterrupted and vigorously until completely covered by trustworthy charts.

The increasing demand for accurate hydrographic information calls for a short reference to the work being done in the interests of the world's commerce by all maritime powers, and it emphasizes the obligations which this Government is under to contribute its quota of work in a field of operations which is as vast as the oceans of the globe, of equal importance to all commercial powers, and in which our contributions to the general end in view do not compare as favorably as they should with those of other nations.

While we are receiving from foreign hydrographic offices a vast amount of information which is distributed by them upon the basis of mutual exchange, the return which we make is far short of what is expected or which fair reciprocity demands.

In becoming a party to the present system of international exchange of hydrographic work, an obligation was incurred which should be fully and fairly recognized, and which can only be discharged by means of more reasonable appropriations.

I can not advocate too emphatically the necessity of this Government taking a share of the general hydrographic work of the world commensurate with its maritime interests and importance. Charts are issued continually which from the nature of their origin are known to be only indifferent approximations to what should be represented. A very good hydrographic reconnaissance can be made in a short time at comparatively slight expense, and, when the danger to life and property is considered, there seems to be no excuse why ports of the earth visited by our merchant marine or in the general track of trading vessels should be left in their present doubtful condition as regards hydrography.

EMPLOYEES.

10. The responsibilities of the office have largely increased by reason of the necessity of providing for the greatly increased number of regular naval vessels, auxiliaries, etc., being added to the fleet, as well as to prepare for the coming ships to be placed in service by the Shipping Board. Merchant vessels both of our own and foreign lines have largely increased their demands upon the office products.

To maintain the output, even for times of peace, the authorized technical force must be considerably increased. Besides the statutory force provided in the legislative, executive, and judicial act, the office has had the assistance of 34 persons enrolled in the Naval Reserve and has taken on 31 new employees under the war emergency fund, making a total of 171 employees, or 65 in excess of its peace organization. Its statutory force will, therefore, have to be largely increased.

The amount of work thrown upon the office by the state of war has caused practically a doubling of its output. This has been met by an increase in working force and by overtime work. Meanwhile, the office has permanently and necessarily increased its product, and to maintain this after the war requires a considerable increase in its statutory personnel in order to provide the several hundred charts heretofore obtained from abroad. Very good progress has been made in this work, but the fact must not be lost sight of that every chart which is added to the catalogue of the Hydrographic Office becomes a charge upon the forces of the office to keep the same corrected up to date and to replenish the supply.

Owing to the largely increased work and personnel of the office due to the war, some reorganization has been found necessary. The large divisions have been divided into sections, with a chief of section in charge of each one, handling a specific portion of the work. The position of chief of section is a responsible one and should carry with it some authority and a moderate increase of salary, as these persons have many employees under their direction and must have the ability, technical education, and force to command results.

Many changes in the personnel of the office have occurred. Retired officers of the Navy have taken the places of officers of the active list. The office has lost the services of some of its most competent employees, who resigned to accept commissions as officers in the Naval Reserve.

Three nautical experts were thus taken from the office, to its embarrassment, since others appointed to take their places were, perforce, at first unfamiliar with the technical character that pertains to the work of the Hydrographic Office, but owing to the zeal of the working force and to the quick perception and acquirements of the newly appointed persons, the work of the office has not been impaired appreciably.

The work that lies before the Hydrographic Office to be done in order to put the Government in possession of charts and sailing directions of its own production, so that there shall be no dependence on foreign publications for the use of the Navy and of our merchant marine, is so great that increased facilities are needed to advance the work in the interests of the Government. To attain

this end appropriations can well be expended in providing an ample number of employees and a more adequate supply of material.

I can not too highly commend the efficient performance of duty by all the employees of the office, who have worked overtime and diligently to fulfill the enormous demands which have been made upon the office.

CHARTS PUBLISHED.

11. The office has completed 13 new charts, 12 from original surveys by our surveying ships and 1 from our own and foreign surveys combined. These charts were all engraved on copper and four of them were photozincographed. There are eight charts under way in various stages of construction, being produced from the results of surveys by our surveying ships. One hundred and twenty-four charts have been produced from foreign surveys and 207 emergency reproductions have been made of British charts for war use. Seventy-one old Hydrographic Office charts have been modernized and reproduced. Of the new productions and reproductions of foreign charts, a total of 402 for the year, 19 are copper plates and 383 are zinc. There are 33 copper plates of new charts in various stages of completion, including drafting, engraving, proofing, etc., and 84 zinc plates.

The office has now 2,507 of its own charts, besides 207 of its emergency reproduction which in time will be merged into its list of office charts.

There have been printed during the year 249,938 charts for issue, besides 139,564 printed by contract for the office.

There have been 217,559 pilot charts printed for issue.

Forty copper chart plates received extensive corrections, and 732 received minor corrections. Seals were changed on 174 plates, and 151 were standardized for chart number, price, and edition note. Six copper plates were wholly or partly reengraved. Fifteen engraved copper plates have been electrotyped in the electrotyping plant of the office, 13 altos and 2 bassos. This particular phase of our engraving industry was seriously handicapped for many months owing to the serious illness and death of the former electrotyper, but another engraver has taken up the work and it is now progressing expeditiously and with increased satisfaction to the office. The zinc plates of 238 charts were corrected and charts printed from them. In addition to navigational and pilot charts printed, the lithographic section printed 10 supplements to pilot charts, 14 index charts for Hydrographic Office publications, and 12 charts of a miscellaneous character, upon special demand from several official sources of the department.

The office has prepared and mounted numerous special charts and combinations of charts for the General Board, Office of Naval Operations, the Bureau of Navigation, and other offices of the department, and has aimed in every way to cooperate with and assist any individual or office in furtherance of the prosecution of the war or of any maritime work.

To emphasize as well as summarize the vastly increased output of the office, the following table is given:

Plate printed charts for the year printed in the Hydrographic Office.....	83,202
Lithographed charts printed (navigational).....	166,736
Lithographic charts printed (pilot and miscellaneous).....	263,941
Plate-printed charts printed by contract.....	62,418
Lithographed charts printed by contract.....	77,146
Total printed for the year.....	653,443

PUBLICATIONS, SAILING DIRECTIONS, ETC.

12. On June 30, 1916, the following were in press and have since been completed and issued:

H. O. No. 105, Africa Pilot, Vol. I, West Coast, Cape Palmas to Cape of Good Hope.

H. O. No. 134, East Atlantic Pilot, West Coast of Spain and Portugal.

H. O. No. 154, Mediterranean Pilot, Vol. IV, from Cape Matapan Eastward, the Archipelago, etc.

H. O. No. 156, Africa Pilot, Vol. II, Cape of Good Hope to Ras Hafun.

H. O. No. 157, Red Sea and Gulf of Aden Pilot.

The following new editions and reprints of publications of this office and revisions, with additions and corrections, have been made:

H. O. No. 73, Newfoundland and Labrador Pilot, new edition of certain chapters considered urgent and important.

H. O. No. 100, St. Lawrence Pilot (new edition).

H. O. No. 128, West Indies Pilot, Vol. I, Bermudas, Bahamas, and the Greater Antilles.

H. O. No. 129, West Indies Pilot, Vol. II, Lesser Antilles and Venezuela.

H. O. No. 142, Baltic Pilot, Vol. I, The Baltic Sea.

H. O. No. 145, British Islands Pilot, Vol. II, West Coast of England.

H. O. No. 146, British Islands Pilot, Vol. III, Coasts of Ireland.

H. O. No. 147, British Islands Pilot, Vol. IV, Coasts of Scotland from the Mull of Galloway to Rud'h Re'.

H. O. No. 148, British Islands Pilot, Vol. V, Coasts of Scotland from Rud'h Re' to Cape Wrath and the Hebrides Islands.

H. O. No. 149, British Islands Pilot, Vol. VI, The Faroes, Shetlands and Orkneys, etc.

H. O. No. 152, Mediterranean Pilot, Vol. II, Coasts of France and Italy, etc.

H. O. No. 160, Bay of Bengal Pilot, including Suez Canal, Sokotra, and Southeastern Coast of Arabia.

H. O. No. 161, South Indian Ocean Pilot.

H. O. No. 162, Asiatic Pilot, Vol. VI, Sumatra, Straits of Malakka, etc.

LIGHT LISTS.

The following new editions, with corrections of publications of this office, have been issued during the fiscal year:

H. O. No. 30, List of Lights, Vol. I, West Indies and Pacific Islands, etc. (New edition.)

H. O. No. 31, List of Lights, Vol. II, South and East Coast of Asia, etc. (New edition.)

H. O. No. 32, List of Lights, Vol. III, West Coast of Africa, etc. (New edition.)

H. O. No. 33, List of Lights, Vol. IV, The British Islands.

H. O. No. 34, List of Lights, Vol. V, North Sea and Arctic Ocean.

H. O. No. 35, List of Lights, Vol. VI, the Baltic Sea.

The following reprints, with corrections and additions, have been made:

H. O. No. 9, Bowditch Navigator. (Three reprints.)

H. O. No. 87, International Code of Signals. (Two reprints.)

H. O. No. 200, Altitude and Azimuths and Geographical Positions.

H. O. No. 171, Line of Position Tables.

H. O. No. 127, Star Identifications.

H. O. No. 71, Azimuth Tables.

H. O. No. 9-11, Useful Tables from the American Practical Navigator.

Thus it will be seen that there have been published 32 books that could not otherwise have been furnished to our Government vessels or the merchant marine. Never during the history of this office has such a great demand been made upon it as at the present and during the last fiscal year, due mainly to the fact that the British Admiralty could not supply the sailing directions and charts to this Government that it supplied prior to the beginning of the present war.

NOTICES TO MARINERS.

13. This important weekly publication requires the services of three nautical experts, who compile, analyze, and prepare the data weekly from world-wide sources for its publication. Its importance is self-evident, as it constitutes the basis for the correction of charts, sailing directions, light lists, and other publications issued by this office.

The information published in the Notices to Mariners is limited entirely to such items for the corrections of charts and sailing directions as are absolutely necessary and essential to safe navigation, such as changes in lights, buoys, beacons, wrecks, and shoals.

The Notices to Mariners, which particularly affect the charts and sailing directions, are of the highest value to shipping. These notices consist of a collection of statements pertaining to safe navigation, made up in pamphlet form. They are issued weekly by the Hydrographic Office and form a continuous series of issues dating back to 1869. The statements are notices themselves pertaining to every matter which is of importance to the seaman and navigator. These notices are issued in a convenient form for cutting out to facilitate the correction of the sailing directions. They are distributed from the Hydrographic Office and from its several branch offices to all vessels of the Navy and to not less than 3,000 merchant vessels, officers of which at the present time are collecting information for the Hydrographic Office.

During the fiscal year ending June 30, 1917, there were published 53 numbers of Notices to Mariners, 305,075 whole notices, and 405,250 extracts. The number of paragraphs published (that is

separate notices, affecting different charts and publications) was 3,570.

In connection with the preparation of Notices to Mariners and the preparation of Sailing Directions it is well to state that about 2,500 technical translations have been made from, and of, books, journals, pamphlets, charts, and letters and documents, from nine foreign languages.

PERIODICAL PUBLICATIONS.

14. Information from the sea having a bearing upon safety of navigation was collected from every available source. Its first publication by radio to vessels at sea (when of a nature requiring it, a floating danger for example) was followed by the—

Daily Memorandum.—Icebergs, derelicts, and other news of immediate value to navigation were noticed herein and mimeographed copies sent to the fleet and to the branch Hydrographic Offices.

An average of 306 copies a day were mailed out. Reports of missing buoys or other accidents to aids to navigation were at once telephoned to the Bureau of Lighthouses.

Hydrographic Bulletin.—All the more important items that appeared in the Daily Memorandum, besides others of general interest to navigation, were incorporated in the Bulletin each week—a broad sheet of three columns, variable length—and circulated throughout the Navy, to other public vessels, and the Merchant Marine; average edition, 5,000 copies.

The cheapness of this Bulletin and its quick preparation make it an excellent medium for the prompt publication of matter possessing an ephemeral, though real, interest for the navigator.

Pilot charts.—These charts are most popular with all seafaring peoples, containing as they do conditions and facts of experience in a graphical form easily understood by navigators, and which tend to safeguard the lives of seamen and facilitate transit from place to place on the oceans. They show the regions of storm, rain, fog, and floating masses of ice, the set and rate of ocean currents, the average direction and force of the winds to be expected, the trade-wind limits, the best passage routes, the normal isobaric and isothermal lines over the ocean, the variation of the compass and its change with time and locality, and the reported positions of derelict vessels and floating obstructions to navigation.

These charts are especially appreciated by the merchant marine, as they embody live information which they themselves have contributed in supplying to this office for the general good.

These appeared monthly for the North Atlantic, North Pacific, Indian Ocean, and Central American waters; quarterly for the South Atlantic and South Pacific. Pressure of extra work in chart printing, due to increased sales and the war's demands, was not allowed to interfere with these well-known and popular aids to the mariner. In addition to the meteorological features, which by law are furnished by the Weather Bureau, these charts continued to carry their usual graphic features devoted to routes, currents, compass variations, and radio information, besides special articles on timely subjects of value to navigators. Among the latter may be named: "Method of Estimating Distances at Sea in Fog or Thick Weather," "Avoiding Collisions at Sea," and "Great Circle Sailing."

The unique character of the pilot charts and the moderate cost of their production makes them the most effective means for securing marine reports of all kinds in exchange. Merchant vessels have continued to cooperate as freely as war conditions would permit by giving the office thousands of reports and observations on all matters affecting the safety of navigation.

DISTRIBUTION OF PERIODICAL PUBLICATIONS.

Besides issuing these publications to the various public services having to do with navigation, they were sent to all vessels of the merchant marine cooperating with the office. The distribution to the last named is largely effected through the branch Hydrographic Offices. The following is a guide to the mailing lists and the size of the editions, having in mind that about 100 copies of each pilot chart, notice, and bulletin are retained to meet subsequent demands:

Name of publication.	Number of addresses.		Number of copies.	
	Each edition.	Annual.	Each edition.	Annual.
Daily Memorandum (daily).....	65	20,280	306	95,472
Notice to Mariners (weekly).....	1,518	78,936	5,367	279,064
Extracts, Notice to Mariners (weekly).....	8	416	4,160	216,320
Hydrographic Bulletin (weekly).....	1,439	74,828	4,728	245,856
Corrections to List of Lights (weekly).....	408	21,216	422	21,944
North Atlantic Pilot Chart (monthly).....	1,840	22,080	6,080	72,960
North Pacific Pilot Chart (monthly).....	1,157	13,884	2,727	32,724
Indian Ocean Pilot Chart (monthly).....	843	10,116	1,494	17,928
Central American Waters Pilot Chart (monthly).....	1,935	23,220	3,287	39,444
South Atlantic Pilot Chart (quarterly).....	977	3,908	2,020	8,080
South Pacific Pilot Chart (quarterly).....	841	3,364	1,740	6,960
Total.....	11,031	272,248	32,331	1,036,772

The most urgent necessity for a near-by branch of the Government Printing Office has been demonstrated daily, weekly, and monthly, ever since the discontinuance of the War and Navy printing branch in March. Every small job is unduly delayed now, while the dated publications, especially the Notice to Mariners and Bulletin, are constantly behind from one to five days. The long distance which now separates the office from the Public Printer and the quite special nature of the work on the Pilot Charts and Notice to Mariners make vain the hope for quick and efficient service under the present conditions.

The establishment of a small job office in any new building to which the office may move is most urgently recommended.

BRANCH HYDROGRAPHIC OFFICES.

15. Disseminating the latest information relating to safe navigation and collecting marine data required for the improvement of our charts and nautical books have been as heretofore the general aim and scope of these branches. They have supplied the main office with useful news and data from the sea and have been bureaus of information in

their districts. These duties, so far as can be judged at long range, there being no established inspection of the offices, have been done thoroughly and promptly.

Special duties were also performed by most of the officers in charge, such as recruiting, instruction of Naval Militia or merchant mariners in navigation, and neutrality work.

The officer must in consequence be absent from his office many days during the month; this renders it necessary that at least one official besides the officer in charge be a man of nautical experience and schooling. Only a few of the offices have such employees, most of whom are at present in the naval service as reserve officers. A branch office should be a good technical school for young men and should afford good material for the Navy in time of national emergency. If they can not be provided through the Civil Service Commission, it is recommended that suitable details be made either from the regular or the enrolled yeomen. In each case the officer in charge would pay special attention to teaching the detailed men those technical matters that fit them for higher duties in the fleet.

Appended is a table showing a numerical count of certain items of work done at the branch offices.

The reader is cautioned against instituting comparisons among the branch offices on the basis of the tabular statement of work done, as the offices not only differ in personnel, location, and duties, but often accomplish important work which does not lend itself to such form of statement.

No ice patrol service was conducted this year, but all incoming information regarding the presence of ice near the trans-Atlantic routes, as well as other forms of dangers to navigation, were made available to the public at the branch offices.

In connection with the summary of receipts and expenditures of charts, attention is invited to the large increase over last year in the demands for charts and the saving effected by the office producing in its own plant the charts necessary for fitting out the fleet. It is well known that at the outbreak of the European war, the British Admiralty shut down on its issue of charts and sailing directions to all nations other than its allies. This condition did not become acute until the United States came into the war and required to fit out a large number of vessels for war purposes. Heretofore the office has bought about 50 per cent of its charts and sailing directions from England, but it was now forced to reproduce all necessary charts in the best way it could. Foreign charts were therefore reproduced as rapidly as possible by the photozinc process and issued to the fleet. Besides the saving in cost the office now possesses the plates which after slight periodical correction, can be used to reproduce the desired charts at very little expense.

A large saving has also been effected in the reproduction of sailing directions previously purchased in great part abroad. The result is a large saving in expense, but the important point is the independence of the office and the service from outside sources.

Charts received in archives.

Foreign, complimentary and request:	
Argentina.....	20
Brazil.....	4
Canada.....	12
Chile.....	12
Denmark.....	3
France.....	29
Great Britain.....	190
Japan.....	26
Spain.....	6
Miscellaneous.....	4
Total.....	306
Domestic, complimentary and request:	
United States Coast Survey.....	732
United States Engineer.....	41
Hydrographic Office charts.....	892
United States Geological.....	73
Mississippi River Commission.....	250
War Department.....	291
Total.....	2,279
Foreign and domestic charts received.....	2,585
Charts condemned and retired.....	1,740
Total increase.....	850

Charts on hand June 30, 1917.

Foreign:	
Argentina.....	32
Austria.....	51
Brazil.....	64
Canada.....	92
Chile.....	86
Denmark.....	88
France.....	3,016
Germany.....	466
Great Britain.....	3,557
Italy.....	228
Japan.....	461
Netherlands.....	337
Norway.....	133
Portugal.....	113
Russia.....	292
Spain.....	726
Sweden.....	51
	9,793
Domestic:	
Coast Survey.....	670
Engineers.....	114
Hydrographic Office charts.....	2,507
Hydrographic Office numericals.....	12,112
Miscellaneous.....	3,000
Total.....	18,403
Foreign, total.....	9,793
Grand total.....	28,196

Incomplete archives.

Brazil.	Italy.	Portugal.
Chile.	Mexico.	Russia.

Receipts and expenditures of Hydrographic Office charts for year ending June 30, 1917.

Received from—

Division of chart construction (engraved).....	147,961
Division of chart construction (lithograph).....	139,951
Division of pilot charts (for sales).....	2,066
Total	289,978

Issued to—

United States vessels.....	114,024
Agents and sales.....	66,939
Archives.....	892
Official use.....	6,859
Branch offices.....	6,515
Foreign hydrographers.....	2,971

Total..... 198,200

Number of charts condemned..... 12,691

Total..... 210,891

Number of charts published..... 79

Number of charts canceled..... 8

Number of Hydrographic Office charts on hand June 30, 1917..... 356,089

There are 2,507 Hydrographic Office charts on issue, of which 1,192 are engraved, and 1,315 are lithographs.

Table showing details of work of hydrographic Office for the fiscal year 1917.

	Appropriated.	Expended.
Main office:		
Salaries.....	\$123,660.00	\$121,033.12
Salaries (deficiency bill 1917-18).....	50,000.00	500.86
Contingent and miscellaneous expenses.....	26,000.00	
Received from sales.....	23,256.10	
	49,256.10	147,403.82
Contingent and miscellaneous expenses, provided in deficiency bill, 1917-18..	30,000.00	29,450.00
Contingent expenses, Navy Department (allotted).....	500.00	843.11
Public printing and binding (allotment).....	25,000.00	25,000.00
Public printing and binding (deficiency bill).....	15,000.00	1,406.85
Branch Hydrographic Offices:		
Contingent expenses.....	10,000.00	19,984.64
Services, necessary employees.....	17,960.00	16,579.83
Total	321,376.10	252,201.33

¹ Estimated.

² Printing press and chart paper contracted for.

Appropriation Ocean and Lake Surveys, 1917, \$105,000, under which authority is granted to purchase and print charts and books, the following expenditures were made by this office to meet emergency demands during the fiscal year 1917:

Printing books at Government Printing Office.....	\$42,370.98
Purchase and printing of charts.....	12,874.32

Vouchers and requisitions handled:

One thousand and sixty-four sets of vouchers (estimated), 323 sets of requisitions.

Correspondence:

Received, 17,388 letters (estimated).

Received, 875 books and pamphlets.

Sent, 5,100 letters (estimated).

THOMAS SNOWDEN.

APPENDIX.

SALES.

Charts and books were sold as follows:

Charts:		
Sold (66,939).....	\$15,239.64	
Returned (3,062).....	356.64	
Net (63,877).....	14,883.00	
Books:		
Sold (17,419).....	16,602.20	
Returned (118).....	63.18	
Net (17,301).....	16,539.02	

In order to show how the sale of charts and books has increased during the past several years, the following table has been compiled:

Sale of charts and books, by years.

Year.	Charts.			Books.		
	Copies sold.	Re-turned by agents.	Total of copies handled.	Copies sold.	Re-turned by agents.	Total of copies handled.
1909.....	15,766	2,350	18,116	2,280	59	2,289
1910.....	18,374	1,331	19,705	3,450	161	3,711
1911.....	21,187	4,901	26,088	3,447	167	3,614
1912.....	26,018	1,682	24,700	3,198	75	3,273
1913.....	27,986	2,411	30,397	3,488	89	3,577
1914.....	22,955	2,338	25,293	3,436	67	3,503
1915.....	39,997	3,183	43,180	5,259	127	5,386
1916.....	62,666	4,071	66,737	7,203	166	7,369
1917.....	66,939	3,062	70,001	17,419	118	17,537

STORAGE (BOOKS).

The stock of books received, sold, expended, and on hand is shown by this table:

Receipt and expenditure of Hydrographic Office books during the fiscal year ending June 30, 1917.

Catalogue No.	On hand June 30, 1916.	Received.	Service expendi- ture.	Sold.	On hand June 30, 1917.
9.....	672	4,700	272	4,164	917
9-II.....	416	3,000	667	1,978	711
30.....	501	1,558	544	608	907
31.....	112	525	206	195	236
32.....	657	45	113	275	314
33.....		500	130	2	368
34.....		500	130	2	368
35.....		200	106		94
71.....	1,302	500	361	1,441	...
73.....	42	369	205	51	155
84.....	962	7	243	291	435
87.....	1,053	1,022	888	1,008	179
99.....	1,203	16	269	197	753
100.....	30	1,000	99	82	849
105.....	332	173	78	89	337
107.....	46	2	5	6	38
114.....	47		3	3	41
117.....	1,233	7	198	611	431
120.....	82	609	289	147	255
122.....	171	4	22	58	95
123.....	193	9	12	67	123
124.....	195	53	11	70	167
125.....	1,444	8	465	67	920
126.....	1,138	19	331	66	760
127.....	152	303	139	146	170
128.....	498	2,005	585	460	1,458
129.....	888	1,014	274	371	1,257
130.....	1,139	12	137	401	613
131.....	458			4	454
132.....	850	7	115	97	645
133.....	1,190	22	372	141	699
134.....		1,256	44	87	1,025
135.....	1,139	8	403	48	696
136.....	874	51	91	65	769
140.....	863	146	126	60	823
141.....	872	11	240	44	599
142.....		823	12	86	726
144.....	1,091	10	142	120	839
145.....		1,004	103	35	866
146.....		1,000	129	53	818
147.....		1,000	91	31	878
148.....		1,000	85	25	890
149.....	1,019	29	91	75	882
150.....	729	26	73	116	566
151.....	1,212	19	144	139	948
152.....		1,262	141	45	1,077
154.....		1,270	143	29	1,068
156.....		614	46	42	526
157.....		908	51	30	817
160.....		900	51	30	819
161.....		900	41	7	852
162.....		912	56	24	832
163.....		842	71	31	740
164.....	836	14	50	43	757
165.....	776	17	26	69	696
166.....	801	106	17	82	806
171.....	668	1,230	333	751	814
172.....	1,138	13	80	316	755
173.....	630	29	62	228	369
174.....	1,406	18	95	311	1,018
175.....	868	15	37	105	741
176.....	848	66	19	78	817
200.....		2,006	560	560	886

HYDROGRAPHIC OFFICE.

Tabular statement of work done by the branch hydrographic offices during the fiscal year ending June 30, 1917.

Character of work.	Atlantic and Gulf coasts.					Pacific coast.					Great Lakes.					Total.	
	Boston.	New York.	Phila. del. pbla.	Balti. more.	Nor. folk.	Savan. nah.	New Orleans.	Gal. veston.	San Fran. cisco.	Port. land.	Seattle.	Du. luth.	Sault Ste. Marie.	Chi. cago.	Cleve. land.		Buf. fac.
PUBLICATIONS DISTRIBUTED.																	
Bulletin, Hydrographic.....	16,656	22,100	12,601	3,701	6,773	14,725	5,248	7,806	3,321	4,536	12,268	2,420	724	2,600	785	666	116,900
Daily Memorandum.....	11,249	22,128	8,678	2,875	4,435	3,377	4,540	4,264	1,170	646	3,397	407	404	286	7	10	66,883
Notice to Mariners (H. O.).....	16,416	37,232	17,602	2,221	6,383	12,126	6,405	5,023	18,240	4,806	12,316	49,026	10,900	48,582	39,413	38,962	325,663
Pilot charts.....	5,932	27,175	4,866	2,361	2,915	3,263	5,402	4,216	9,365	2,065	4,762	962	252	1,499	547	96	75,618
Reprints of hydrographic information.		141	156	134	34	69	1,871	29	131	752	37		13		50	21	3,438
Pamphlets (not Hydrographic Office).....	186	148	189	796	12,590	7,948	139	141	819	152	520	202	34	310	20	67	24,161
REPORTS FORWARDED.																	
Aids to Navigation.....	23	113	32	1	108		3		14		6	50			55	4	409
Chart reports.....		22			7				2						1	1	44
Current reports.....	52	2,320	220	118	724	21	410	81	549	31	266		1		1		4,763
Ice reports.....	6	44	7	3	11	2	1	3	7			2	1		3		91
Intention to observe.....	3	61	14	1	752	40			67	8	109						1,065
Oil, use of, to calm the sea.....	12		5	1	1		96		6		4		1				18
Fort facilities.....	21		1	2	5		3		6			5					230
Reports of soundings.....	11	1	1	1	5		1		3			9					65
Recks or shoals.....	6		2	2	5		3		1			5					24
Route reports.....	4	25	4	1	13		1		3	11	5		1				64
Wrecks, derelicts, etc.....	47	583	74	91	147	22	83	39	83	4	17	7			6		1,265
Unclassified reports.....	1	60						39	39	43				4			152
OTHER WORK.																	
Acknowledgments (Form 24).....	150	916		168	2,698	10	295	114	524	20	193	68					2,460
Circular letters sent out.....		211	1,093		2,698	384	1,472	228	4,314	80	941	20	80	400	695	606	13,826
Letters sent out (not circular).....	118	592	292	55	1,080	198	456	56	230	83	343	692	74	112	277	171	3,921
Time (all grouped).....	292	265	292	366	297	295	301	301	297	142	222	297	174	222	264	264	3,260
Time (all ungrouped).....	3	247	247	7	8		8		483	5	69	74		2			3,277
Visitors received.....	645	1,840	5,860	3,339	5,016	2,882	1,812	394	1,701	545	289	6,290	212	7,031	1,930	969	40,849
Telephone calls received.....	354	3,829	1,900	1,013	1,143	2,705	809	689	1,644		211	3,703	32	8,080	2,471	2,019	29,882
																	719,939

REPORT OF SUPERINTENDENT OF NAVAL OBSERVATORY.

NAVY DEPARTMENT,
UNITED STATES NAVAL OBSERVATORY,
Washington, D. C., July 1, 1917.

From: Superintendent, Naval Observatory.

To: Bureau of Navigation.

Subject: Report of the Superintendent, Naval Observatory, for the fiscal year ending June 30, 1917.

Capt. J. A. Hoogewerff, United States Navy, continued as superintendent to March 31, 1917, when he was relieved by the present superintendent, Rear Admiral T. B. Howard, United States Navy, retired.

The time signals were sent out twice daily during the year, at noon and 10 p. m., seventy-fifth meridian time, both by land lines and by radio, through the operating relay at Radio, Va. The improvements mentioned in the last annual report have been completed and put in operation. The accuracy of the radio time signals, which can be picked up anywhere in the north Atlantic, has made it possible to reduce to one the allowance of chronometers for vessels of the Navy operating along the Atlantic coast. The number of requests for exemption from the order for dismantling privately owned receiving sets, coming from watch manufacturers, jewelers, and scientific laboratories and observatories, proved how popular the custom of receiving time signals by radio has become.

The Naval Observatory has continued the policy of encouraging suggestions and developments of methods and instruments for navigation, particularly for submarines and aircraft.

The nautical instrument repair shop has continued to prove economical in time and expense as compared with the previous system of having this work done by contract. During the year ending June 30, 1917, there were 3,251 instruments repaired, an increase of more than 27 per cent over the number repaired in the preceding year. It has been found by trial that chronometers and torpedo-boat watches repaired in the shop receive trial numbers as low as those repaired by commercial firms. Also, a large number of instruments have been reconstructed from parts of instruments condemned by survey. There is now available an appropriation for increasing the size of the repair shop. This increase, when accomplished, will further improve the quality and diminish the cost of the work done.

Owing to the great increase in ships of the Navy and the lack of receipt of materials and nautical instruments from abroad and the shortage of skilled labor in this country, especially in the manufacture of instruments and chronometers, the question of supply of in-

struments for navigation, especially chronometers, is becoming a matter of very serious proportions. The increased demand for the gyro-compass and the instruments attached to it is taxing the capacity of the only factory in this country which is able to manufacture this instrument.

Congress did not provide any addition to the clerical force, and it is earnestly recommended that the additional clerks which will be requested in the estimates to be submitted by the superintendent for the next fiscal year be approved and Congress urged to allow the same.

The Supplement to the American Ephemeris for 1917, Tables Giving the Times of Rising and Setting of the Sun and Moon for 1917 and 1918, was received from the printer on January 18, 1917, and has been distributed. These tables have received very favorable comment. The Supplement to the American Ephemeris for 1918, Total Eclipse of the Sun, June 8, 1918, was received from the printer May 14, 1917, and is being distributed.

Work on the photographic zenith tube of observations for the determination of variation of latitude has been continued throughout the year.

The fundamental observations begun on May 29, 1916, with the 6-inch transit circle have been continued during the year.

A number of contributions were made by the members of the observatory staff to the *Astronomical Journal*. The asteroid observations made with the photographic equatorial have been forwarded for publication in that journal.

The replacement of old and unsafe wiring and lights in the main building was completed this year.

The routine work has been kept up without intermission during the year.

The distribution of publications has been carried on, issues of the *American Ephemeris* and *Nautical Almanac* made, the regular program of astronomical observations followed, the service supplied with nautical instruments, and a large number of visitors given an opportunity to view the heavenly bodies.

The observatory was closed to visitors for several months during this year owing to war conditions.

The instruments, buildings, and grounds have been kept in order.

The astronomical council, consisting of the superintendent and the heads of departments and divisions, has met each month to discuss the work of the observatory.

The scientific personnel has met twice each month, except during the summer, for the discussion of current astronomical topics and reading of papers by its members and scientists.

The astronomical work of this institution is now even more important than usual, owing to the European observatories losing many skilled observers due to the war.

The 14.449 acres of land owned by the Government to the eastward of the southern junction of Massachusetts Avenue with the Observatory Circle is still entirely unimproved.

The special work accomplished by the different departments and divisions is as follows:

DEPARTMENT OF COMPASSES, CHRONOMETERS, AND OTHER NAUTICAL, AERONAUTIC, AND SURVEYING INSTRUMENTS; THE TIME SERVICE; THE NAUTICAL INSTRUMENT REPAIR SHOP; INSPECTION AND SURVEY.

Commander W. D. MacDougall, United States Navy, continued as head of this department until August 16, 1916, when he was relieved temporarily by Lieut. Commander James P. Murdock, United States Navy. Commander George C. Day, United States Navy, was in charge of this department from January 15, 1917, to June 30, 1917.

Professor of Mathematics, H. E. Smith, United States Navy, continued in charge of the supply department.

Commander H. Kimmell, United States Navy, retired, continued as inspection and survey officer.

Lieut. Commander James P. Murdock, United States Navy, continued in charge of the Compass Office until March 3, 1917, when he was relieved by Lieut. Isaac C. Johnson, United States Navy, who continued in charge of the Compass Office until June 13, 1917, when he was relieved by Commander John S. Doddridge, United States Navy, retired.

Lieut. J. H. S. Dessez, United States Navy, continued as assistant in chronometers and other nautical instruments and time service to March 23, 1917.

Commander Charles T. Jewell, United States Navy, retired, reported at the Naval Observatory on March 2, 1917, and has been assistant in the nautical instruments and time service since March 23, 1917.

Mr. C. B. Watts continued as assistant in chronometers and time service, specially charged with care of timepieces in stock and trial, computations, and time-service apparatus.

TIME SERVICE.

Time signals were sent out from the observatory daily at noon and 10 p. m., seventy-fifth meridian time, over the wires of the Western Union Telegraph Co., and by direct wire to the Bureau of Standards and the wireless operating relay at Radio, Va.

Time signals are also sent out from the time and chronometer station at the Mare Island Navy Yard, Cal., over the Western Union lines to points on the Pacific coast, whence they are repeated by wireless.

The possibility of rating chronometers by accurate wireless time signals anywhere in the north Atlantic Ocean has made it possible to cut down to one the allowance of chronometers for vessels of the Navy operating only along the Atlantic coast.

The outbreak of war caused the dismantling of privately owned receiving sets all over the country. The number of requests for exemption coming in from watch manufacturers, jewelers, and scientific laboratories and observatories proved how popular the custom of receiving time signals by wireless has become.

The mean daily error of signals sent from the observatory for the year was 0.036 second, and the maximum error was 0.21 second.

Error is caused by a change in rate of the standard clock during cloudy periods, when observations of stars for time is impossible.

The error in correcting the transmitting clock to agree with the assumed error of the standard is never more than 0.02 second.

The new switchboard referred to in the last annual report has been installed and was first used on April 15.

CHRONOMETERS AND TORPEDO-BOAT WATCHES.

The following is the summary of the annual trial of chronometers and torpedo-boat watches, which began January 19, 1917, and ended July 2, 1917:

	Number in trial.	Number passing.
Chronometers:		
New American.....	33	15
New foreign.....		
Old.....	26	10
Torpedo-boat watches:		
New American.....	18	4
New foreign.....	33	10
Old.....	2	

The accompanying Tables I, II, III, give the data for those which passed.

During the year the following changes in the stock of navigational timepieces were effected:

	Chronom- eters.	Torpedo- boat watches.	Patrol- boat chronom- eters.
Purchased.....	33	30	20
Transferred from foreign vessels.....	9		
Cleaned or repaired—			
By makers.....	64	22	
By Naval Observatory.....	13	38	
Issued for use.....	136	55	

When circumstances permit, chronometers and torpedo-boat watches are withdrawn from service for cleaning and necessary repairs every four years. There are now only three firms in America who undertake this work. Chronometers are also cleaned and repaired at the Mare Island Yard and at the Naval Observatory. The observatory employs an expert in this line, and is in a position to handle the work expeditiously and cheaply, but in small numbers only. It is the policy of the observatory to give enough repair work to the commercial repairers to keep together their force of workmen and to keep up the standard of their work.

Due to the high cost of material and labor, the Bureau of Navigation has advanced the price to be paid in future for navigational timepieces.

American manufacturers of watches have not yet succeeded in producing in any quantity timepieces that will pass the test for torpedo-boat watches. Improvement is shown, and arrangements are being made to induce other manufacturers to compete.

The observatory has procured 20 watch movements mounted in chronometer bowls for use on board coast-patrol boats, and is negotiating for further purchases. The results have been gratifying.

CLOCKS AND WATCHES

The increase in the Navy during the past three months has necessitated the purchase of large quantities of clocks and watches, all of which are tried at the observatory. To facilitate these trials an electric-driven watch-winding machine has been designed and is being manufactured.

There are now about 500 watches at the observatory under trial and arrangements have been made to test 450 clocks at one time.

Owing to the excessive number of stop watches returned for repairs, the observatory has been obliged to specify a high-grade watch for this purpose. No American watchmaker has undertaken to supply a watch of the necessary quality. The supply from abroad is limited. The Bureau of Navigation is therefore restricting the issue of stop watches to cases where they are absolutely necessary. The comparing watches issued are better timekeepers, more durable, and much cheaper than the stop watches.

An important advance has been made during the year by the purchase and issue of clocks for decks, bridges, officers' quarters, and boats, in which the hands and hour figures are painted with radium luminous material so as to be visible at night.

Aircraft are also being supplied with luminous clocks.

The large number of timepieces under trial makes necessary the use of devices for expediting comparisons. Such devices have been installed so that one employee is able to compare 540 watches or clocks per hour to the nearest second and 6 chronometers per minute to the nearest tenth of a second.

NAUTICAL INSTRUMENTS.

The nautical-instrument repair shop at the Naval Observatory has continued to prove economical in time and expense compared with the previous system of doing this work by contract.

During the fiscal year there were added to the original shop force of 9 men the following: October 16, 1 box maker (packer); April 23, 1 box maker (packer); April 24, 1 general helper, making a total of 12 men employed in the shop at the end of the year.

The quality of the work done compares favorably with that of the best commercial instrument makers, and the saving in time and cost is very great. Navigational instruments can generally be delivered in from 3 to 5 days after receipt, deck and boat clocks in 3 weeks, chronometers and torpedo-boat watches within 30 days.

It has been found by trial that chronometers and torpedo-boat watches repaired in the shop receive trial numbers as low as those repaired by commercial firms. In view of the excellence of his work, it is recommended that the pay of the chronometer maker be increased to about \$5 per diem.

Attention is invited to the large number of instruments that have been reconstructed from junk. Since the custom has prevailed of

sending to the Naval Observatory parts of instruments condemned by survey it has been found possible to combine these parts, sometimes with additional new parts, and to turn out instruments fit for service. Sixty sextants have been manufactured in this way, and numerous binoculars and spyglasses have been repaired by using parts of condemned glasses.

A dividing engine has been ordered. When this is received, additional reconstruction work can be accomplished. It is not possible at this time to regraduate the scales of sextants, stadimeters, mercurial barometers, etc.

Plans and specifications have been made for an enlargement of the shop building. Congress appropriated \$20,000 for this purpose. Upon sending our proposals for the work bids were submitted 50 per cent greater than the appropriation. Efforts are now being made by the Bureau of Yards and Docks to obtain the needed additional money.

During the year repairs have been made to navigational and surveying instruments in numbers and at the cost as given in the following list:

Instruments.	No.	Cost.	
		Total.	Average.
Anemometers.....	1	\$1.56	\$1.56
Alidades.....	27	288.98	10.70
Azimuth circles.....	79	727.76	9.19
Artificial horizon.....	1	3.66	3.66
Barographs.....	1	1.20	1.20
Barometers:			
Aneroid.....	81	345.46	4.26
Mercurial.....	34	437.29	12.81
Binoculars:			
Day.....	90	427.09	4.74
Night.....	148	787.85	5.32
Prismatic.....	132	1,170.61	8.87
Chronometers.....	22	388.76	17.67
Chronometer cases.....	78	18.47	.24
Clinometers.....	31	140.62	4.54
Compasses, pocket (aero).....	7	38.72	5.53
Clocks:			
Deck No. 1.....	118	484.58	4.11
Engine-room.....	70	357.29	5.10
Deck No. 2.....	127	475.81	3.75
Deck No. 3.....	20	99.22	3.31
Boat.....	74	341.68	4.63
Compass readers.....	8	51.22	6.40
Universal drafting machine.....	1	8.72	8.72
Heliograph.....	1	20.77	20.77
Drawing instruments.....	22	57.36	2.61
Levels.....	1	.78	.78
Magnetic sets.....	2	17.56	8.78
Magnetometers.....	1	7.50	7.50
Mirrors resilvered:			
Azimuth circle.....	77	17.79	.23
Sextant.....	723	144.78	.20
Stadimeter.....	148	26.88	.18
Octants.....	74	410.79	5.55
Parallel rulers.....	63	22.70	.36
Pelorus.....	18	54.68	3.04
Plane tables.....	1	2.40	2.40
Protractors, 3-arm.....	28	246.76	8.81
Psychrometers.....	14	29.59	2.11
Reading glasses.....	24	24.49	1.02
Sextants:			
High-grade.....	69	800.33	11.72
Surveying.....	103	1,190.43	11.56
Spines and weights.....	1	1.09	1.09
Spyglasses:			
High power.....	58	345.89	5.96
Medium power.....	53	268.56	5.54
Low power.....	60	314.91	5.25
Officer of the deck.....	167	668.00	4.00

Instruments.	No.	Cost.	
		Total.	Average.
Stadimeters.....	46	\$714.21	\$15.52
Telescopes, ship's.....	11	184.39	16.76
Tide gauges.....	2	8.95	4.45
Theodolites.....	17	367.30	21.61
Thermometers.....	2	2.16	1.08
Watches:			
Comparing.....	104	412.42	3.97
Stop.....	121	705.90	5.83
Torpedo-boat.....	52	185.17	3.56
Miscellaneous.....	28	227.32	
Total.....	3,251	14,112.50	

Charged to appropriations:	
Ocean and lake surveys.....	\$1,018.07
Engineering.....	314.56
Aeronautics.....	66.53
Naval Observatory.....	77.98
United States Geological Survey.....	214.70
	<hr/>
	1,692.44
Instruments and supplies.....	12,420.06
	<hr/>
	14,112.50

Grand total: Instruments, 3,251; labor, \$9,910.70; indirect, \$1,981.28; material, \$2,220.52; total, \$14,112.50.

Approximate total value of the instruments repaired, omitting miscellaneous shop equipment and observatory items, is \$105,791.70.

The corresponding items for the fiscal year 1916 are: Number of instruments, 2,554, and cost of repairs, \$11,324.94. This shows an increase of 37 and 41 per cent, respectively, over last year's work.

COMPASS OFFICE.

Gyro-compasses.—During the year the development of the Sperry gyro-compass has continued, and, in addition to the battleship and submarine installations, a new type of gyro-compass, consisting of two rotors, has been developed for use on destroyers. The installations of this type had not been made at the close of the year. In all the larger type submarines, beginning with the *Schley, 60*, and *61*, and the R and S classes, the duplex system is to be installed.

The school maintained by the Sperry Gyroscope Co. has proved invaluable in supplying the service with trained gyro men, and the results are shown in the increased efficiency of the compass.

Magnetic compasses.—Owing to the outbreak of the war, it has been necessary to largely increase the stock of magnetic compasses and equipment. These increases were covered by requisition as early as possible.

Air compasses.—The Sperry types of air compass with horizontal card and with vertical card have been tried out at the aeronautic station at Pensacola for seaplanes. The vertical type card is recommended.

Azimuth circles, peloruses, etc.—Bearing instruments have been supplied during the year and several types of azimuth circles have been tried.

The following extract from a memorandum submitted by the compass office to the Bureau of Equipment on January 15, 1906, is given:

At the time when the Navy was composed principally of wooden ships and the introduction of steel ships was just beginning, the compass office force consisted of two or more officers with adequate clerical assistance. All reports were carefully considered and filed. Considerable original research was carried out. Compass manuals, up to date, were prepared and issued to the service. With the increased size of the ships, the increased number of compasses installed, and the great increase in compass equipment required, the more complicated the problem of the magnetic compass and the requirements of the battle compass below deck became, the compass office facilities have been decreased in almost direct proportion to the increase in difficulty and importance of this work, until at the present time but one officer is attached to the compass office, who is practically without clerical assistance.

As a necessary result of this condition, the officer in charge of the compass office has been compelled to a greater and greater extent to devote his time to the question of compass material, and the second of his functions, to scrutinize the reports from ships and see that the proper reports were written, has been relegated to second place.

Since the above report was written the gyro-compass and its equipment has been added to the duties of this office, while the magnetic compass work, if properly carried out, has steadily increased. This condition has resulted in the inability of the compass office to scrutinize and read reports of both gyro and magnetic compasses. It is recommended that proper clerical force be allowed this office as soon as practicable.

AVIATION INSTRUMENTS AND EQUIPMENT.

As noted in the last annual report, the year started without any instruments or equipment for aviation, under the cognizance of the Bureau of Navigation, having been standardized.

Sets of clothing as used in the British and French aviation services were inspected at the observatory and at the aeronautic station at Pensacola, as well as sets manufactured by American firms. A board was appointed at Pensacola to specify a standard equipment, and their report has been approved. The Bureau of Supplies and Accounts now has specifications for standard articles of clothing and personal equipment approved by the department, and is engaged in the purchase and issue of this material.

In conjunction with the station at Pensacola and other commands engaged in flying, the observatory has practically accepted as standard an altimeter (altitude aneroid barometer) and a clock. A compass for aircraft has been adopted and issued, but is not proving entirely satisfactory and further experiments are under way.

One form of statoscope for dirigibles has been found satisfactory for certain purposes, and will be issued to each dirigible when delivered. This is the Custer type. This instrument is nonluminous and does not indicate speed or amount of change of height. The observatory is assisting various inventors and makers of instruments to devise a statoscope that will answer all requirements.

The observatory has on hand a small number of aeroplane cameras of acceptable design. These are not fixed in the car, and their value will have to be determined in service. Other forms of camera are under trial.

Several barographs, for trial flights of aircraft, have been purchased which are acceptable in design, but generally unsatisfactory in workmanship.

A clamping device for aviators' binoculars has been designed at the observatory, which meets the approval of the service, but, owing to the congested condition of the optical factories, has not been supplied to the service.

A buzzer type masthead anemometer has been adopted as standard. These are to be issued not only to aviation ships and stations, but also to battleships for assisting in determining the initial sight-bar range and deflection for fire control.

Instruments of the following types have been examined at the observatory or at Pensacola:

Compasses: Creagh-Osborne, English make; Creagh-Osborne type, Sperry Gyroscope Co.; Sperry, horizontal card, aviation compass.

Altimeters: Taylor instrument companies, 10,000, 12,000, 15,000 feet maximum altitude; silver dials, silver dials with luminous figures, black dials, luminous.

Altimeters (aneroid barometers): Pocket size, Covelle, Hunter Hoecker, Hicks, Short & Mason.

Barographs: Richard, Green, Taylor, Schneider.

Barographs, pocket: Richard.

Clocks: Chelsea aeroplane clock.

Cameras: Herbert & Huesgen, Mueller, Eastman, type A; Eastman, type B.

Anemometers, masthead: Green (recording), Kadel (buzzer).

Anemometers, portable: Davis, Keuffel & Esser.

Statoscopes: Custer, Schneider (two types), Sprengnether non-automatic, Sprengnether automatic, Hue, Richard, Rojas.

Blish dip prism.

Sperry drift indicator (two types).

G. E. M. ground speed meter.

In all, 35 different types of aviation instruments.

Arrangements have been made with the War Department for the supply of two Brock aero cameras.

The following aviation instruments have been issued to the service: 52 altimeters, 18 barographs, 8 clocks, 44 compasses, 14 statoscopes, 9 anemometers (masthead), 10 anemometers (portable).

SUPPLY DEPARTMENT.

Prof. H. E. Smith, United States Navy, continued as head of this department during the year, with Mr. H. G. Hodgkins, assistant in the department of nautical instruments, as assistant.

A brief statement of the year's work for this department follows:

Value of stock on hand July 1, 1916.....	\$130, 723. 09
Value of instruments, etc., purchased.....	191, 512. 54
Value of instruments received from yards and ships.....	29, 534. 59
Value of instruments issued and expended.....	235, 559. 58
Value of stock on hand July 1, 1917.....	116, 210. 64
Number of shipments made (an increase of 758 over 1916).....	2. 225
Number of instruments and parts shipped (an increase of 10,057 over 1916).....	16, 274
Number of shipments received (an increase of 615 over 1916).....	1, 640
Number of instruments and parts received (an increase of 24,814).....	37, 968

The instrument was reversed 16 times and the stellar focus adjusted twice during the year.

The magnitude equations of the three observers, corresponding to a diminution of three magnitudes in the brightness of a star, were determined in February, 1917, with the following results:

<i>Observer.</i>	<i>Bright—faint.</i>
Hammond	—0°. 0004
Frederickson.....	— .0004
Wylie.....	— .0010

These results are the means of over 100 stars for each observer, about 35 stars being observed on each of three nights.

In June, 1917, the micrometer and objective were interchanged and the circle rotated on its axis so as to read 330° 54' on the nadir. Previous to this, the objective was removed from its cell and cleaned by Assistant G. H. Peters. Also the errors in the screws of the micrometer were measured by the observers. These errors are small and a periodic error in the zenith distance screw, as shown by measures in 1911, seems to have disappeared.

CLOCK VAULT.

The temperature in the clock vault has been maintained practically constant at 84° F. during the year. Riefler clock No. 60 was used as the standard clock during the year, with the exception of the period from August 5 to November 8, 1916, when it was being cleaned and rated. During this period Riefler No. 70 was the standard clock.

The following table gives the mean daily rate of the standard clock as deduced by the time service, together with the maximum variation in the rate for each month:

Month.	Mean daily rate.	Maximum variation.	Clock No.	Month.	Mean daily rate.	Maximum variation.	Clock No.
1916.				1917.			
July.....	-0s. 06	0s. 12	60	January.....	-0s. 07	0s. 06	60
August.....	+ .19	.09	70	February.....	— .09	.04	60
September.....	+ .26	.13	70	March.....	— .11	.04	60
October.....	+ .31	.08	70	April.....	— .11	.05	60
November.....	— .03	.05	60	May.....	— .14	.04	60
December.....	— .05	.03	60	June.....	— .16	.07	60

Total variation in daily rate during the year: No. 60, 0.19 second; No. 70, 0.20 second.

DIVISION OF 9-INCH TRANSIT CIRCLE.

The personnel of this division consisted of Assistant Astronomer Herbert R. Morgan (in charge), Assistant Jesse Pawling, Assistant Leroy P. Steele to May 31, 1917, and Miscellaneous Computer Paul Sollenberger.

The observations of the intermediary and standard stars, begun August 1, 1913, have been continued, and two observations have now been made of all but about 300 stars of the list.

The number of observations made during the year is as follows:

Intermediary stars.....	2,910
Standard stars.....	1,380
Clock stars.....	1,842
Azimuth stars.....	245
Refraction stars.....	41
Reflection stars.....	192
Moon.....	74
Jupiter.....	15
Saturn.....	15
Uranus.....	16
Neptune.....	15
Total.....	6,745

The total number of observations since the beginning of this work is 30,239.

The measures of the pivots taken in July agree with those previously taken. The instrument was reversed four times during the year, and the number of determinations of the instrumental constants is as follows:

Collimation.....	498
Level:	
Nadir.....	624
Spirit.....	135
Azimuth (marks).....	628
Nadir.....	636
Flexure:	
Horizontal.....	14
Vertical.....	12

On the time not spent in observing the members of this division have made the following reductions: The chronograph records are read and means in observing books taken to date; the azimuth of the marks, all instrumental constants, and the clock star reduction sheets have been computed for the year ending August, 1916; the preliminary clock corrections have been derived for the two years ending August, 1916; the observations have been copied on the sheets, and the declination reductions begun for the year ending August, 1914.

DIVISION OF THE EQUATORIALS.

The personnel of this division consisted of Prof. Asaph Hall, United States Navy (in charge); Assistant George H. Peters; Assistant H. E. Burton; and Assistant E. C. Bower.

Observations were taken as follows:

26-INCH EQUATORIAL.

Comets.....	25
Occultations.....	41
Arcs for micrometer screw.....	119
Asteroids.....	4
Instrumental constants.....	2

Of the comet observations, 17 were of 1916b (Wolf), 2 of 1917a (Mellish), and 6 of 1917b (Schaumasse). The 4 asteroid observations were of (288) Glauke, for the Bilk Observatory.

In September the Repsold micrometer was removed from the instrument and was taken apart and cleaned and oiled. It was in excel-

lent condition. A number of new spider lines were inserted by Mr. Reinbold, of the nautical instrument shop. At the same time the driving clock of the 26-inch equatorial was taken apart and cleaned by Mr. Cleve, the observatory instrument maker.

In May further examination was made of the screw of the Repsold micrometer by means of the eyepiece microscope and the auxiliary threads. The errors appear to be small enough to be neglected.

From the observations of arcs a definitive value was computed of a revolution of the screw of Clark Micrometer II. It is: $R=9''.9329+0''.000052$ ($T=50^{\circ}$ F.). This holds for the period May 20, 1908, to June 14, 1915, and for the focal setting 1.280. The periodic errors of the screw of Clark II are negligible. In the measures of the satellites of Saturn the progressive errors are also negligible when double distances are observed. However, beginning with the opposition of 1909-10, the progressive errors of the screw of Clark II have been applied in the reduction of the satellites of Saturn.

In accordance with the decision of the astronomical council, approved by the superintendent, the observations with the 26-inch and 12-inch equatorials have included only occultations, comets, and asteroids of special interest, and observations for instrumental constants. But as much time as possible has been given to the reduction and preparation for publication of the observations which have accumulated. The observations of the satellites of Saturn for six oppositions are to be turned over to the Nautical Almanac Office. Of the combinations in pairs the Equatorial Division is to discuss four, after the places corresponding to the times of observation have been computed from the tables of Evans and after the differential coefficients have been formed in that office.

The observations of Saturn's satellites for four oppositions have been transmitted to the Almanac Office.

12-INCH EQUATORIAL.

With this instrument 38 occultations were observed; also there was made one observation of Comet 1917 a (Mellish).

One thousand and thirty-six visitors were shown through the 12-inch Equatorial by Mr. Peters and Mr. Burton. After February, 1917, the observatory was closed at night to visitors.

In July low-voltage lamps were placed on the 12-inch, to be used in connection with a small transformer.

Observations have been published in the *Astronomical Journal* as follows:

Satellite VI of Jupiter, 1912-1915, inclusive.

(433) Eros, 1914-15.

(624) Hektor, 1915.

(796) 1914 V H.

Comet 1914 c (Neujmin), through July 28, 1914.

Comet 1914 c (Campbell), through November 19, 1914.

Comet 1915 a (Mellish), through January 18, 1916.

Comet 1915 e (Taylor), through March 31, 1916.

Comet 1916 a (Neujmin), through May 5, 1916.

Comet 1916 b (Wolf), through May 1, 1917.

Comet 1917 a (Mellish), through March 30, 1917.

Comet 1917 b (Schaumasse), through May 18, 1917.

Also there was published in the *Astronomical Journal* a compilation of positions of pairs of stars used for values of equatorial micrometer screws.

PHOTOHELIOGRAPH.

Photographs of the sun have been made on 186 days, and solar spots or groups found on 181 days. The indications are that we have arrived at the sun-spot maximum.

PHOTOGRAPHIC TELESCOPE.

The photographic telescope has been in continuous use by Mr. Peters during the year, and has been employed principally in the observation of asteroids.

Observations are made in the following zones:

+ 4° to + 8°—March, April, September, October.

0° to + 4°—May to August.

+12° to +16°—November to February.

With few exceptions, all asteroids in these zones which are given in the *Berliner Jahrbuch* have been observed or searched for. Those in the following list have been found. The observations through 1916 have been sent to the *Astronomical Journal*.

Two photographs of Prof. Barnard's large proper motion star have been made for measurement, and further observations will be secured.

Asteroid.	Number of observations.	Asteroid.	Number of observations.	Asteroid.	Number of observations.
17 Thetis.....	2	173 Ino.....	2	380 Fiducia.....	2
18 Melpotene.....	2	194 Prokne.....	2	401 Ottilia.....	2
32 Pomona.....	2	201 Penelope.....	2	407 Arachne.....	2
37 Fides.....	2	213 Lilaea.....	2	409 Aspasia.....	2
58 Concordia.....	2	219 Thumelda.....	2	411 Bathilde.....	2
60 Echo.....	2	241 Germania.....	2	442 Fichsfeldia.....	2
78 Diana.....	2	245 Vera.....	10	447 Valentine.....	2
86 Semele.....	2	257 Silesia.....	2	455 Bruchsalia.....	2
92 Undina.....	2	268 Adorea.....	2	489 Comacina.....	2
102 Miriam.....	2	303 Josephina.....	2	532 Herculina.....	3
115 Thyra.....	2	305 Gordonia.....	2	536 Merapi.....	5
119 Althaea.....	2	308 Polyxo.....	2	538 Friederike.....	2
122 Gerda.....	4	334 Chicago.....	5	572 Rebekka.....	2
129 Antigone.....	2	335 Roberta.....	2	584 Semiramis.....	2
130 Elektra.....	2	358 Apollonia.....	2	714 1911 LW.....	1
131 Vala.....	1	371 Bohemia.....	2	723 Hammonia.....	2
133 Cyrene.....	2	374 Burgundia.....	2	742 1913 QU.....	2
146 Adeona.....	2	378 Holmia.....	2	785 1914 UN.....	2

DIVISION OF PHOTOGRAPHIC ZENITH TUBE AND ALT-AZIMUTH.

This division has been in charge of Prof. F. B. Littell, United States Navy, who has been assisted in the observational work by Assistant Astronomer G. A. Hill.

PHOTOGRAPHIC ZENITH TUBE.

Observations for the determination of the variation of latitude have been made throughout the year. The observing list consists of 64 stars divided into 8 groups of 8 stars each, with 7 additional

stars for scale value. These stars culminate within $10\frac{1}{2}$ minutes of the zenith, and the mean zenith distance of each group is made as small as practicable by balancing north and south stars. Usually two groups are observed the same night unless weather conditions prevent. At certain times of the year, however, three groups are on the program.

The number of star observations secured during the year was 1,537. The reduction of these stars is well advanced, using preliminary declinations for the stars. These stars have been observed recently with the 6-inch transit circle, and as soon as the resulting declinations are available the definitive results of the work for the variation of latitude can be obtained.

ALT-AZIMUTH.

The alt-azimuth has been used in connection with the photographic zenith tube, the observer utilizing the intervals between the observations with the latter instrument to secure declination observations with the former. The stars on the observing list are those of the *Liste Générale Provisoire d'Étoiles Fondamentales* contained in the *Supplément à la Connaissance des Temps pour l'An 1914*, culminating within 75° of the zenith. The work of the photographic zenith tube prevents this list from being completely observed.

The instrument is used in the meridian as a quickly reversible meridian circle, each star being observed in both clamps at the same culmination. The telescope micrometer and the microscopes are provided with reversing prisms. The alidade has three levels.

The number of observations secured during the year was 1,294.

Minor changes have been made in each of the instruments during the year, adding to the convenience and accuracy of observing.

DIVISION OF PRIME VERTICAL TRANSIT INSTRUMENT.

This division has been in charge of Assistant Astronomer George A. Hill.

During the past year observing with the instrument has been suspended.

A large number of tables containing data to be published, and which were mentioned in the last annual report, have been examined, checked, and put in form for printing.

They consist of the individual observations copied from the cards, means taken, and arranged in order of right ascension. The individual latitudes of the instrument, resulting from all stars for which a definite declination and proper motion is known, have been put in form for publication after having been examined and checked. This latter table contains about 7,000 separate latitude determinations.

Much study has been given in preparing definitive declinations and obtaining proper motions for 15 of the 16 stars that were used in observing by the polygon method. When the stars were selected in 1904 some of them were lacking in good star catalogues of epoch after 1890, and others were weak in number of known places prior to that. That condition arises by the fact that in selecting the stars their positions in the sky was a prominent factor in the selection, and prevented securing stars whose places had been well determined.

In consequence the proper motions of some of them were not at that time well determined. Careful search has been made in modern catalogues and has resulted in recent material that has been included in a recomputation for better proper motions for each star.

A discussion has been made during the year of the proper motion of α Lyrae, based upon about 1,800 observations of the star made between 1893 and 1912. The result of the same suggests a larger proper motion for that star than was used at the commencement of the series. This larger proper motion brings the places, when reduced to 1900, into better accord.

Progress has been made in the preparation of manuscript explanatory of the reductions and results secured.

Preliminary solutions have been made for the correction to the Constant of Aberration used in the series, from 1904 to 1912, inclusive.

An examination of the material has been made to ascertain if in observing in the prime vertical there is indicated a personal equation depending upon magnitude. The result of that discussion is not yet finished.

While the instrument is out of use it is protected by a covering and inspected each week as to its condition.

DIVISION OF REDUCTION OF OBSERVATIONS.

This division has been in charge of the executive committee. The personnel consisted of Assistant Eleanor A. Lamson; miscellaneous computers William A. Conrad, R. R. Candor, S. Goldstein (until Mar. 1, 1917, resigned), L. P. Steele (from June 1, 1917), William Katz (from June 1, 1917), L. A. J. Rabinowitz (from June 19, 1917), R. D. Gustin (from Mar. 16 to Mar. 31, 1917, temporary), F. E. Swindells (from May 21, 1917, temporary), Elizabeth W. Wilson (from May 26 to June 15, 1917, temporary), D. B. Brooks (from June 12, 1917, temporary), M. R. Malone (from June 14, 1917, temporary).

REDUCTION OF THE 9-INCH TRANSIT CIRCLE WORK, 1903-1911.

The discussions mentioned in the last annual report for the introduction to Part I, Volume IX, second series, Publications of the United States Naval Observatory, have been completed while the introduction itself is almost ready for the printer. The printer's copy of the catalogue has been formed.

Part III, Volume IX, second series, Publications of the United States Naval Observatory, comprising the journal of observations from October 6, 1908, to April 10, 1911, is in plate.

REDUCTION OF THE 9-INCH TRANSIT CIRCLE WORK, 1912-13.

This work, which comprises the reduction of observations extending over the period January 31, 1912, to April 19, 1913, has been completed and the catalogue formed. The major portion is in plate and when printed will be known as Part IV, Volume IX, second series, Publications of the United States Naval Observatory.

WASHINGTON-PARIS LONGITUDE WORK.

The Appendix to Volume IX, Second Series, Publications of the United States Naval Observatory, which contains the details of the Washington-Paris longitude determination 1913-14, has been issued in the form of reprints during the year. It is about ready for binding as appendix in the regular volume of the observatory publications, which will also contain Part III (the journal of observations of the 9-inch transit circle, Oct. 6, 1908, to Apr. 10, 1911), and Part IV (the introduction, journal of observations and catalogue of the 9-inch transit circle, Jan. 31, 1912, to Apr. 19, 1913).

REDUCTION OF THE 6-INCH TRANSIT CIRCLE WORK.

This work, which comprises the right ascension and declination reduction of observations, from May 15, 1911, to August 11, 1913, and the declination reduction of observations from July 23, 1915, to June 1, 1916, is well advanced.

REDUCTION OF PHOTOGRAPHIC ZENITH TUBE WORK.

The latitudes from the individual observations have been deduced from October 27, 1915, to December 31, 1916, using preliminary values of the declinations of the stars. The reductions from January 11, 1917, to March 31, 1917, are well advanced.

LIBRARY.

Mr. W. D. Horigan continued as librarian throughout the year.

	Volumes.	Pam- phlets.	Total.
Contents of library July 1, 1916.....	28,786	5,704	34,490
Accessions:			
By purchase.....	204		204
Through exchange.....	267	60	327
Total.....	29,257	5,764	35,021

The following publications were printed:

	Copies.
Annual Report of Naval Observatory, 1916.....	1,200
Publications, Naval Observatory, Vol. IX, Appendix.....	1,200
Table of Factors for the reduction of Transit Observations.....	100
American Ephemeris, 1919.....	1,300
American Nautical Almanac, 1917.....	1,000
American Nautical Almanac, 1919.....	1,500
Tables giving the times of rising and setting of the sun and moon, 1917 and 1918 (Supp. Amer. Ephem., 1917).....	2,000
Total Eclipse of the Sun, June 8, 1918 (Supp. Amer. Ephem., 1918).....	1,500
Astronomical Papers of the American Ephemeris, Vol. IX, part 2.....	1,000

There were distributed 1,801 publications of the department of astronomical observations and 5,327 publications of the department of the Nautical Almanac, making a total of 7,128 copies.

BUILDINGS, GROUNDS, AND ROADS.

Prof. H. E. Smith, United States Navy, has had charge of buildings, grounds, and roads in addition to his other duties during the year.

The 53 buildings constituting the Naval Observatory plant are in good condition. During the fiscal year repairs as follows have been accomplished:

PAINT (OUTSIDE WORK).

Great equatorial dome and all woodwork.
 Barn and entry way.
 Whitewashed cart house and painted tools.
 Alt-azimuth building.
 Photo-zenith building.
 West transit meridian mark.
 Instrument repair shop roof.
 Photo-equatorial roof.
 Longitude buildings and their meridian marks.
 Porch, superintendent's house.
 Outside woodwork, superintendent's house.
 Outside woodwork, boiler house.
 Lane fences.
 Flagstaff stays.
 Lane entrance gate.
 All lamp posts.
 Gate house.
 New clock vault.
 Transit testing house.

PAINT (INSIDE WORK).

Whitewashed inside of barn.
 Basement, superintendent's house.
 Three rooms in observers' quarters.
 Temperature room.
 Toilet room.
 Superintendent's office.
 Time room.
 Compass room.
 Library.

REPAIRS TO BUILDINGS.

All copper, tin, and slate roofs repaired.
 All down spouts and eave troughs repaired.
 Replaced old electric wiring in basement of main building in metal conduits. Wiring in main building now meets the approval of the National Board of Fire Underwriters.
 Replaced old electric wiring and fixtures under clock house and put in metal conduits.
 Prepared south transit building for temporary shop to be used while addition is made to the permanent shop building.
 Plastered several rooms in superintendent's house.
 Overhauled and repaired all screens.
 Built scaffolds for painter's use.
 Repaired greenhouse benches.
 Relaid floor in basement in superintendent's house.

Made various repairs on observers' quarters.
 Repaired all shingle roofs.
 Repaired elevator and equatorial gear.

GROUNDS.

Fertilized lawns where necessary.
 Sowed grass seed on bare spots.
 Cleared out dead trees and dead wood from trees.
 Kept lawns and shrubbery trimmed.
 Repaired boundary fences and hedges.
 Replaced several dead shade trees.
 Cleared drains, sewers, etc., where necessary.
 Replaced topmast for flagstaff (old one struck by lightning).
 Did necessary digging to place electric cable beneath alt-azimuth and west transit houses.
 Replaced obsolete fire hydrants with modern hydrants, identical with those used in the District.
 Overhauled fire equipment.
 Planted and kept up flowers in the usual beds.
 Removed old wire fence back of garden and used wire to repair pasture fence.
 Built 780 feet of iron tube fence on west side of lane.
 Placed marks at boundary stones east of Massachusetts Avenue.
 Built manure pit at barn.
 Felled and split into cordwood numerous dead trees.
 Cleared away brush in southern part of circle.
 Raked and burned all dead leaves.
 Cleared walks of snow, etc.
 Built iron grape trellis.
 Filled gully east of lane.
 Tore down old watering trough and cleared stream.
 Removed three 2-ton piers from clock house.
 Tamped all surface and drainage gutters.
 Dug up garlic and dandelions from lawns.
 Filled depressions in lawns with soil.

WALKS AND ROADS.

Repaved 2,000 feet of gutter, resetting stone in tarvia.
 Put stone on all roads.
 Resurfaced 2,000 linear feet of roadway with tarvia and stone.
 Rolled all roads.
 Laid 480 feet of concrete walk 4 feet wide from barn to the north gate.
 Built several hundred yards of new roadway.

INSPECTIONS.

Made monthly inspections of all roofs, steam, water, air, and gas lines, conduits, waterways, drains, fire, flushing systems, buildings, and grounds.

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ent repairs were made and routine work carried on. Plans
specifications were gotten out for an addition to the instrument-
shop, in accordance with an appropriation of \$20,000 for this
use made by Congress in the first regular session in 1917.

previously stated, the European observatories being more or
crippled by war conditions, additional responsibility is thrown
on this observatory and the Nautical Almanac Office.

T. B. HOWARD,
Rear Admiral, United States Navy (Retired).

REPORT OF CHIEF OF THE BUREAU OF ORDNANCE.

NAVY DEPARTMENT,
BUREAU OF ORDNANCE,
Washington, D. C., October 15, 1917.

To: The Secretary of the Navy.

Subject: Annual report for the fiscal year 1917.

1. The following report, covering the operations of the bureau for the fiscal year ended June 30, 1917, is submitted. A large amount of information of an interesting nature is necessarily omitted, because it is confidential—the quarterly confidential reports of the bureau contain this information in detail.

2. The activities of the bureau were greatly increased due to the severing of diplomatic relations with Germany on the afternoon of February 3, and the declaration of war with that nation on April 6.

3. It is with satisfaction that the bureau invites attention to the value and adequacy of the ordnance work that had been accomplished during the years preceding the actual declaration of war. Its policies, the patient and painstaking work of its personnel, the accumulation of ordnance material, the integrity of its designs, and the actual readiness of every detail are producing results worthy of the best traditions of the naval service. It is with pleasure that the present incumbents of the bureau accord to their predecessors full measure of praise for the splendid work that they had done.

OFFICES.

4. In the interval immediately preceding the declaration of war the insufficiency of the office space allotted the bureau in the State War and Navy Building became more apparent each day, the officers and clerks showing signs of breaking down under the strain. Efforts were made to secure more space, especially after diplomatic relations with Germany were severed. Finally, the bureau obtained, through the courtesy of the Secretary of the Interior, the loan of office space in the new Interior Department building, and moved to the sixth floor of this building, Nineteenth street, between E and F streets, on May 5 and 6. The activities of the bureau are now coordinated in the best possible way, and conducted in ample, well-lighted and well-ventilated rooms. This separation from the other material bureaus of the Navy Department is a handicap, but to remain in the crowded condition as at the beginning of the year would have been an obstacle to the success of any enterprise of the war that depended upon assistance from this bureau.

PERSONNEL.

5. Even before the declaration of war it was apparent that the personnel of the bureau would have to be increased, in order to expeditiously and efficiently accomplish the work delegated to it. In neither office space nor personnel had it kept pace with a rapidly growing Navy and correspondingly augmented appropriations. On January 1, 1917, the bureau personnel was essentially as follows:

Commissioned officers of the line of the Navy:

Active list.....	12
Retired list.....	1
Clerical force, civil-service employees.....	39

By June 30, 1917, this force had been increased to the following numbers:

Commissioned officers of the line of the Navy:

Active list.....	12
Retired list.....	3
Commissioned officers of the Coast Guard Service.....	1
Commissioned officers of the Reserve of the Navy.....	4
Commissioned officers of the British Navy.....	1
Clerical force, civil-service employees.....	50
Clerical force, Naval Reservists.....	41

6. In a few of the technical branches of the Navy the necessary increases of skilled personnel have been obtained from civil life. In the case of ordnance this procedure can not apply, as experience with its material afloat is the main essential to efficiency in its routine matters, as well as in the initiating of new designs. None but a seaman apparently can appreciate the force and power of wind and sea, as well as general shipboard conditions, a failure to understand which causes much otherwise well-directed endeavor to be a waste and fruitless.

7. *Officers.*—The lack of sufficient trained sea officers to handle the war work of the bureau is the most serious problem at present confronting it. At this time the need is especially felt for a design officer. The line officers given postgraduate courses in ordnance, in order to fit them for ordnance work in emergencies like the present, are required at sea, with the result that the bureau has not been able to secure their services, and is thus without one of its most valuable assets and one that had been provided for in its peace organization and work. Officers of the Reserve, the Naval Militia, and the Naval Volunteer Corps have been secured, but as yet in insufficient number. The shortage is felt at the bureau, the proving ground, the Naval Gun Factory, and the torpedo station, and will, unless corrected, be productive of unsatisfactory service in the fleet.

8. *Inspection.*—On March 31 the position of general inspector of ordnance was reestablished in order to better handle the increased personnel of the inspection force due to war contracts. This force, which has proven itself capable of handling the supervision of manufacture under the present emergency, comprised, on June 30, 41 officers, 27 clerks, and 256 subinspectors, whereas a year prior to that time it was but 25 officers, 10 clerks, and 34 subinspectors. There are 9 main inspection districts, and in addition thereto 17 special points.

9. *Clerical force.*—During the fiscal year, the average number of civilians employed in the bureau was 38, which included clerks, draftsmen, messengers, etc. When hostilities were declared, the bureau had insufficient funds for the employment of additional civilians. It secured funds, however, to employ a few and later took advantage of the law which permitted the employment of enrolled Naval Reservists (yeomen, etc.), and these have been of very great assistance in carrying on the bureau's work. The total appropriations handled by the bureau during the past year have been \$430,342,627, as against \$30,889,918, the greatest up to that time. This unprecedented increase in appropriations under the bureau naturally entailed an enormous amount of detail work, and the new force had to be drilled and coached so as to be able to handle it. The older and more experienced employees rendered valuable aid in the organization of the force to carry on the work in a prompt and businesslike way. Considerable overtime work has been performed by the employees of the bureau since hostilities began, and very little leave has been taken, although some broke down from overwork and were compelled to be absent on sick leave. Considering the enormous amount of work thrown on the bureau since the war began, involving new and difficult problems as well as increased current routine work of an office handling approximately \$400,000,000, the bureau's clerical and drafting force has handled the situation in an entirely satisfactory manner. The bureau hopes that the department may see its way clear to put its clerical force on a better basis as regards pay, as many of them are now receiving salaries incommensurate with the work they are performing. In view of the general increase in wages throughout the country, and the increasing cost of living, it is believed that they should be considered.

10. *Rewards and emoluments.*—The bureau in its report for the fiscal year 1914 recommended that a plan be devised whereby a cash reward may be given to any civil employee who may work out an improvement or economy in any manufacturing process or who may submit a design for some important improvement in ordnance material or plant machinery. The bureau renews this recommendation and believes that the skill and ingenuity of its employees ought to be encouraged to the greatest possible extent. The simplest way in which to do this is to appoint employees who make valuable suggestions, improvements, and inventions, for which they receive no return other than a commendatory remark on their records, to a temporary advanced rate of pay for definite periods dependent upon the merit of the service rendered. This matter has been the subject of two bills introduced in Congress, i. e., H. R. 12662 of January 30, 1914, and H. R. 20193 of August 30, 1912. A draft of a proposed bill will be submitted by separate letter.

11. *Annual leave.*—Congress having formally sanctioned and established the system of "annual leave with pay," the bureau, while in full accord with the idea that this practice is desirable and should be maintained, is embarrassed in its efforts to put forth maximum production through the operation of this system at the present time. The demand for men skilled in the mechanical arts far exceeds the numbers available. A due regard for the health and contentment of

its employees precludes, except in cases of extreme emergency, recourse to protracted periods of overtime work. In urging a suspension of the annual-leave system the bureau is mindful of the years of effort that were necessary in order to accomplish its establishment—it knows the suspicions that must naturally attach to the suggestion—but concomitant with these feelings, it believes that the situation of full and fair understanding is possible and can be met with confidence and assurance. A cash commutation in lieu of leave days and a legal promise of renewal of actual leave upon the termination of the war emergency, if freely and openly considered by all concerned, should be acceptable to the employee and be to the advantage of both parties to the agreement.

GUNS.

12. The manufacture of all 5-inch guns required on the *New Mexico*, *Mississippi*, *Idaho*, *Tennessee*, and *California* has been completed. All 14-inch 50-caliber guns for the *Idaho*, *Mississippi*, and *New Mexico* are completed and those required for the *Tennessee* and *California* will be completed within the next four months.

13. The present year has seen an unprecedented demand for guns of from 3 to 5 inches in caliber, a demand entirely beyond the capacity of existing manufacturing establishments to produce. At the outbreak of the present war, all spare guns from 6-inch 45 caliber to 3-pounder, inclusive, for which mounts were available, were grouped into reserve batteries, and either tentatively or finally assigned to merchant ships. The bureau realized that there was a shortage of these guns, and at the time the war broke out was manufacturing approximately 300 guns to form into additional reserve batteries. However, the peculiar conditions of this war have required approximately 5,000 guns for this purpose. It immediately developed that the forging capacity of the country was entirely inadequate to meet the demands of the Army or the Navy, to say nothing of the requirements of both. It therefore became necessary to initiate new plants into the manufacture of both guns and gun forgings.

14. The bureau succeeded in enlisting the services of several new firms in the Middle West, and has endeavored to give them every assistance in the way of advice from skilled personnel that could be found. That more firms could not be interested was due to the fact that money to permit of plant extension was not obtainable. To relieve this situation the bureau, under date of June 5, 1917, drew up a letter to the Secretary of the Navy, requesting that Congress be asked to authorize the payment of advances to contractors, not to exceed 30 per cent of the total amount of their contract, such advance to be covered by suitable bonds.

15. This bureau is assisting in developing increased capacity and output in the following plants:

The Inland Ordnance Co., at Bedford, Ohio.

Taylor-Wharton Iron & Steel Co., Philadelphia, Pa.

Alloy Steel Forging Co., at Pittsburgh, Pa.

16. In addition the Midvale Steel Co. and the Erie Forge Co. have made large extensions to their plants.

17. The following new concerns have undertaken the manufacture of guns:

Root & Vandervoort Co., East Moline, Ill.
Defiance Machine Works, Defiance, Ohio.
The American Radiator Co., Bayonne, N. J.
Inland Ordnance Co., Bedford, Ohio.
Poole Engine & Machine Co., Baltimore, Md.

18. In addition, the resources of the Bridgeport Projectile Co. have been expanded and contracts placed with the Driggs Ordnance Co., and the General Ordnance Co., the Savage Arms Co., and the American & British Manufacturing Co., to the extent of their capacity. The Bethlehem Steel Co. having been assigned to the Ordnance Department of the Army, this bureau has obtained none of their new forging output. Owing to the length of time that is required for new concerns to prepare for and become accustomed to the processes of gun forging and gun manufacture, the earliest deliveries under these new capacities will not be obtained until January or February, 1918. Until that date there will be a large shortage of guns, but the bureau hopes to be able to meet the large destroyer construction program and to arm all ships being built or taken over by the Shipping Board, with but slight delay.

19. The success of the committee on Army and Navy artillery of the National Council of Defense in bringing in new and additional sources of supply for ordnance materials has proved of very valuable assistance to this bureau.

20. During the past year the bureau has developed a new type of high-powered 6-inch gun, which is to be installed on the scouts.

21. A 16-inch 50-caliber gun is nearly completed at the Washington Navy Yard, and it is anticipated that it will be proved within the next three months. Further, certain designs of new and advanced types of ordnance of a confidential nature have already been carried out.

22. The bureau has ascertained that the life of the large-caliber guns has been underestimated, a 14-inch 45-caliber gun having been fired a number of rounds far in excess of that considered practicable. The same holds true for the 5-inch 51-caliber gun which it was believed had a very short life.

23. Experiments to determine the material or treatment by which erosion could be lessened have been carried out, but due to the stress of routine work and the fact that the production of standard material is urgently required at present, the bureau had to defer the extensive program of experiments that would otherwise have been desirable.

GUN MOUNTS.

24. The 5-inch mounts for the *Idaho*, *Mississippi*, and *New Mexico* have been completed and installed, and those for the *Tennessee* and *California* will be ready before they are required for installation. The 5-inch mounts for later ships are well in hand. This mount is being redesigned to provide lower trunnion pressures so as to permit of its use on smaller ships.

25. The 4-inch mounts for destroyers Nos. 69-74 are nearly completed. The twin mount of 4-inch gun was completed and tested at

the proving ground and installed on the *Benham*. Prior to its service test the withdrawal of the *Benham* for foreign duty entailed the removal of the mount. No more have been manufactured.

26. A considerable number of 3-inch anti-aircraft mounts have been completed and installed on ships in commission.

27. A new design of long-recoil, high-angle, 3-inch and 6-pounder mounts for small craft has been completed, and a contract placed for a number of the mounts, deliveries to commence in September.

28. The heavy demand for guns to arm merchantmen and auxiliaries on the outbreak of war exhausted the stock of reserve mounts and it became difficult to provide the mounts required.

29. Contracts have been placed for a large number of gun mounts for guns of 5-inch caliber and below. This material has hitherto been manufactured almost entirely at the Naval Gun Factory so contracts had to be placed with firms having no previous experience in this line of work. Considerable difficulty was experienced at first in placing these orders, but with very few exceptions the firms that took the orders have made gratifying progress.

SMALL ARMS AND MACHINE GUNS.

30. This bureau was awaiting with interest the results to be obtained by the Army Machine Gun Board that was to meet in May to determine the most suitable type of machine gun, but the approach of war made it imperative to obtain additional machine guns without waiting for the results of the May tests. With the cooperation of the major general commandant United States Marine Corps, tests were held at the marine rifle range, Winthrop, Md., during April and the early part of May, and urgent orders were placed for the three types of machine guns that were readily procurable. Considerable numbers of these guns have already been delivered and larger quantities will be delivered in the near future to provide for the immediate needs of the Navy and Marine Corps.

31. Sufficient rifles have been procured from the Army to provide for the needs of vessels afloat and to partially provide for training camps. The situation regarding pistols is not yet satisfactory.

TURRETS.

32. Turret equipment was completed and installed in the *Arizona* prior to her commissioning in September, 1916. Remodeled elevating screws were provided for the *Pennsylvania*, *Arizona*, *Nevada*, and *Oklahoma*. Alterations in shell stowage were planned for the *Nevada* and *Oklahoma*. New powder conveyors and power rammers were undertaken for the *South Carolina* and *Delaware*. Auxiliary elevating gear for guns of turrets of dreadnaughts was designed and contracted for. Certain faulty action in recoil mechanisms of heavy guns was investigated and, it is believed, corrected. Turret equipment for the *Mississippi*, *Idaho*, and *New Mexico* was completed. Contracts were let for all turret material required for the *Tennessee* (43) and *California* (44), battleships 45 to 48, inclusive, and battle cruisers Nos. 1 to 5, inclusive. The designs for turrets of all these vessels are well under way. The designs for turrets, battleships Nos. 49 and 15, are partially completed and contracts pending.

33. Prior to and since the declaration of war the bureau authorized alterations and repairs required to fit out all of the reserve battle-ships and armored cruisers. Reserve mounts and turret equipment for the fleet to meet emergencies has been contracted for.

34. Special attention has been given to the subject of director firing, the improvements of material for the same investigated, and necessary steps taken for its installation and adoption. The scope of this method of firing is being greatly extended.

35. The three-gun turret has been extensively tested during the past year with much thought devoted to ascertaining the best method of firing the guns.

36. The bureau, through the Commander in Chief, received exhaustive reports on the material and methods used in the supply of ammunition. These reports were carefully considered and modifications made where necessary to doubly safeguard the ammunition supply. Special attention has been given to the detailed information received from abroad on the subject of ammunition supply and design of turrets, and great emphasis has been placed upon the necessity of personnel rigidly adhering to the safety regulations prescribed.

PROJECTILES.

37. Contracts were awarded during the year for all projectiles for which funds were available. The bureau has projectile contracts with 23 manufacturers. Many of these firms have not previously made projectiles for the Navy. The almost unlimited capacity of the country for projectile making was indicated when 69 firms bid on one proposal and at prices lower than any previous ones. Even with the Navy's demand for shells there are many large and well-equipped shell plants not operating, due to lack of orders.

38. The rate of production of armor-piercing projectiles has greatly increased and the quality of these projectiles now being delivered is better than it has been in the past. For some months it was a source of much apprehension to the bureau that no firm could deliver high-quality armor-piercing 14-inch projectiles. Difficulties encountered in their manufacture were surmounted during May; deliveries are now well ahead of contract date, and sufficient projectiles of this type are now in reserve. One English firm, Hadfield's, has a contract for such shell, but has made no deliveries to date.

SMOKELESS POWDER.

39. There was manufactured at the Naval Powder Factory, Indianhead, Md., during the fiscal year 1917, a much larger total of smokeless powder than ever before and at a cost less than in the preceding year despite large increases in the prices of raw materials.

40. Owing to the extraordinary demands imposed by the war and by the new building program, large contracts for smokeless powder have been placed with private firms. Notwithstanding the great increase in the cost of labor, raw materials, etc., entering into the manufacture of explosives, it has been possible to place these contracts at a price within the statutory limit of 53 cents per pound, certain contracts being placed at 50 cents per pound, and others,

more recently, at 52 cents per pound, the advance being due to an increase in the market price of alcohol. The price of 53 cents per pound was fixed by Congress as a reasonable and just price for smokeless powder under normal peace-time conditions and the prices recently obtained are considered as very favorable and as yielding a very small margin of profit under the present conditions.

41. For the small calibers it has been found practicable to use water-dried powders, this type having been developed to a high state of efficiency during the war. These powders can be delivered within a few days after manufacture instead of requiring several weeks in the dry house, and they are somewhat cheaper than the standard air-dried powders. All tests show that for the smaller calibers, water-dried powders possess excellent stability and ballistic regularity.

42. The record of the Navy's stabilized powders continues excellent and all reports received regarding the stability and ballistic performance of these powders confirms the previous opinion of the bureau that our powder is at least the equal of any, if not the best in the world. The unstabilized powders still on hand are very rapidly being used up in target-practice work.

43. The war has required all the resources of powder firms to work at full capacity. The Navy has succeeded—October, 1917—in placing orders for practically all of its needs. One firm submitted a price in excess of the statutory limit. The powder required by the Navy and not contracted for must be furnished by the expansion of the Indianhead plant. The difference in cost between purchase and bureau manufacture will provide more than sufficient funds for such enlargement.

FUSES.

44. The most serious problem in connection with service fuses is their proper testing. The proving ground limitations in this respect are well known, and effort continues to be made to increase facilities. The constant testing of these is an essential step in the obtaining of a uniform material, the quality falling off the instant a test is waived.

WORK AT NAVAL AMMUNITION DEPOTS.

45. The increase in work at the naval ammunition depots has been such as to require increases in equipment, many additional workmen, and frequent overtime work. So far as is known, all demands for ammunition, not only for the fleet, but also for the various auxiliaries and merchantmen which have been armed, have been met fully and promptly. Large increases in the storage facilities at the various ammunition depots are being provided to care for the increased amount of material under manufacture and for the amount of the new war reserve.

46. In order better to coordinate the work and equipment at the depots, the office of general inspector of ammunition depots was established by the bureau on February 7, 1917, and improvement in uniformity of product and a lessening in cost has resulted.

HIGH EXPLOSIVES.

47. The quantities of high explosives required have increased enormously on account of the demands incident to the war. Up to the present time these war requirements have all been met at favorable terms both of price and of delivery. In practically all cases the prices quoted the department for explosives since the entry of the United States into the war, have been less than any previous prices since the beginning of the war.

48. The experimental plant for the manufacture of explosive "D," established during the year at Indianhead, has overcome the various handicaps in the line of unskilled labor and machinery breakdowns and is now producing a product of standard quality.

AMMUNITION DETAILS.

49. Similarly, favorable contracts have been placed for large quantities of other ammunition components, such as cartridge cases, ammunition boxes, powder tanks, fuses, and primers. In practically all cases contracts have been placed as a result of competitive bidding on advertised schedules in the usual manner, and the wisdom of the department's general policy of making its purchases in the regular way through the existing machinery in all cases where sufficient facilities were known to exist has repeatedly been manifested.

NEW DEVELOPMENTS—AMMUNITION.

50. There have been a number of important new developments in ammunition during the year, but these are of a confidential nature and can not be discussed in a public report. The bureau is keeping in close touch with all new developments abroad and at home which may tend to increase the efficiency of our ammunition.

ARMOR.

51. Deliveries of all armor for the *Idaho*, *Mississippi*, and *New Mexico* were completed except for some armor bolts and nuts for the *New Mexico*.

52. Ballistic tests of all armor for the *Tennessee* (43) and *California* (44) were successfully completed, and all armor for these vessels except turret and conning-tower armor has been shipped by the manufacturers.

53. A contract for the armor of the *Colorado* (45) and *Washington* (47) was placed with the Bethlehem Steel Co., and a contract for the armor of the *Maryland* (46) and *West Virginia* (48) was placed with the Carnegie Steel Co. The manufacture of this armor is proceeding in a satisfactory manner.

54. Contracts were awarded for the armor for battle cruisers Nos. 1 to 5, inclusive, as follows:

- Bethlehem Steel Co., battle cruisers 1 and 3.
- Carnegie Steel Co., battle cruisers 2 and 4.
- Midvale Steel Co., battle cruiser 5.

55. As no direct contract for battleship armor was placed with the Midvale Steel Co., the department authorized the subletting of certain armor to that company with the result that the three armor makers are each actually manufacturing equal amounts of armor.

56. *Armor prices:*

Ship.	Class A.1.	Class A.2.	Class B.
38.....	\$454	\$518	\$496
39.....	440	504	471
40, 41, 42.....	425	486	466
43, 44.....	425	486	460
45, 47.....	420	485	466
46, 48.....	425	486	460
B. C. 1 to 5, inclusive.....	425	486	460

TORPEDOES.

57. During the past year 12 new vessels have been issued new outfits. Torpedo outfits on 15 battleships and cruisers, 6 destroyers, and 2 submarines have been replaced with the latest type torpedoes.

58. The torpedo storehouse at Melville, R. I., provided for by the 1917 appropriation bill, is now practically completed, and will shortly be used for the storage of torpedoes. Owing to the large number of torpedoes now being built, additional storage facilities became necessary and funds were requested and allotted for the construction of storehouses at several ports. These buildings will provide for the storage of the reserve torpedoes now contracted for and at the same time obtain a distribution of torpedoes from more than one central point.

59. On account of the war, and the large building program now being undertaken, it has been necessary to expand the torpedo-manufacturing facilities in order to provide the necessary torpedoes, and this has been accomplished.

60. As torpedo manufacture is dependent directly upon the production of air-flask forgings, an agreement has been made with the Bethlehem Steel Co. to produce such forgings at a rate such as to meet our demands, deliveries beginning in January, 1918. The Bethlehem Co.'s present production schedule is about one-half the new number.

61. The employment of civilian subinspectors on torpedo work at the Naval Gun Factory has been started, with very good results. It is proposed to establish the same system of inspection at the torpedo station, Newport, R. I., in order that all torpedo factories will be working under exactly the same conditions and that uniformity of product will be insured.

62. On account of the large number of destroyers now being built it has become necessary that orders for these tubes be expedited by interesting new firms. A contract for about 100 tubes has been placed with the Crucible Steel Co., and a manufacturing order for tubes (triple) has been issued to the navy yard, Puget Sound. After thorough advertising the Crucible Co. was the only outside firm which submitted a bid for the manufacture of these tubes, and the Puget Sound yard is the only Government plant outside the Naval Gun Factory which is now in a position to handle this work.

63. On account of the increased war activities it has been necessary to suspend much of the experimental torpedo work.

64. *Torpedo personnel.*—On the recommendation of this bureau the Bureau of Navigation is now giving special designation of gunners' mates assigned torpedo work and arranging that their assignment to this duty will be continuous. As the instruction class on the *Montana* is to be discontinued on account of that vessel being required for other service, a special class for the instruction of officers will be established on shore, with headquarters at the torpedo station, Newport, R. I. This class will be under charge of a competent officer. Also, the number of men assigned to the seaman gunners class is being increased.

MINES.

65. The manufacture of mines at the Norfolk Navy Yard has been continued. The output has been very largely increased, and the policy instituted of subletting the manufactured parts and assembling the completed mines at the Norfolk Navy Yard. These mines have been loaded at the naval ammunition depots.

66. The mine force of the fleet has carried out mine-laying exercises and experimental trials with different modifications and under different conditions of the standard mines. From these trials and from information received from abroad, several modifications in the design of the mine have been made leading to increased efficiency thereof.

67. An officer of the British Royal Naval Reserve, assigned by the British Admiralty to duty in this bureau, has been of great assistance in adapting the lessons learned by three years of actual sea work with mines to the ones now under construction in this country.

DEPTH CHARGES.

68. The general submarine warfare instituted on February 1 emphasized the necessity of weapons against submarine craft. The most efficient weapon against submerged vessels appears, from all reports, to be the depth charge. A large supply of small depth charges was available immediately after the entrance of the United States into the war. The design and construction of a larger type of depth charge has been undertaken and deliveries are, at this date, being made.

SUBMARINE NETS.

69. Prior to the year 1917, submarine nets had not passed beyond the experimental stage. After the outbreak of submarine warfare in February, the bureau acquired a large amount of net material, and a large number of completed nets from private contractors. The net material then acquired, and a still larger amount subsequently purchased, has been made up by naval forces into nets. These nets have been employed for the defense of the fleet and of the several fleet bases.

70. The War Department has undertaken the protection of fortified harbors by nets. This bureau has therefore confined its activities to the defense of larger bodies of water.

ANTISUBMARINE DEVELOPMENTS.

71. In addition to depth charges, the bureau has developed and procured a supply of a number of weapons specially devised for anti-submarine use, the details of which it is considered should best be kept confidential. There may be mentioned, however, antisubmarine aircraft bombs, nonricocheting shell, a heavy-projectile howitzer, and smoke apparatus.

72. A supply of smoke apparatus sufficient for all vessels operating with armed guards has been procured. A standard design has been approved and has been opened for general purchase from the contractors by merchant vessels, as the bureau holds that its cognizance in this connection extends only to vessels carrying armed guards. This standard type of apparatus has been recommended by the Shipping Board and by the Department of Commerce.

ALLOWANCE LISTS.

73. The work of standardizing the allowance lists is still being carried on, and the original plan of standardizing broadside and turret battery lists is practically completed, together with the miscellaneous equipage lists.

ASSEMBLING OUTFITS FOR NEW VESSELS.

74. The assembling of outfits for newly constructed naval vessels has progressed more satisfactorily than during the previous year. The assembling of outfits for converted vessels and for merchant ships has been difficult.

SHIPS' REQUISITIONS AND SURVEYS.

75. The increase in the number of requisitions from ships has not been any more than might be expected. Every effort is being made to adhere to allowances, as there must be some fixed basis on which to establish a stock of material at supply yards.

SUPPLY OF MATERIAL FOR SHIPS.

76. *Miscellaneous.*—The establishing of a stock of spare parts at the Washington Navy Yard and the Mare Island Navy Yard has progressed satisfactorily, and the policy on which the work is based seems to be satisfactory after a year's trial. A number of accessories that were manufactured at the Washington Navy Yard heretofore are being obtained from private firms or from other navy yards, in order to reduce the demands made on the shops at the Washington Navy Yard.

77. *Ammunition.*—The large increase in this work was to be expected, and considerable tax has been made on the stowage facilities at the various depots because deliveries could not be made to ships as soon as ammunition was ready. The various causes of these delays in delivery are being removed, and no future trouble is expected. Prompt meeting of urgent calls has been interfered with

to a considerable extent by restrictions placed on express shipments of explosives.

NAVAL MILITIA AFFAIRS.

78. Guns in the hands of Naval Militia organizations were mobilized early in February, according to plans prepared a year or so before, and everything worked as planned, barring a few mistakes which were not serious.

79. A great number of vessels of various classes have been armed on account of the war.

80. Material obtained from Naval Militia organizations and all other available material has been distributed to a number of training camps established by the Bureau of Navigation.

FIRE-CONTROL AND OPTICAL INSTRUMENTS.

81. Contracts have been let and work is progressing satisfactorily in the manufacture of long-base range finders for the fleet. The problem of manufacture of optical glass appears to be partially solved. Good optical glass is being manufactured by several firms.

82. The supply of range finders and optical instruments requiring high-grade optical glass, depends entirely upon the quality and rate of manufacture of optical glass. It is possible to obtain very little, if any, from France or England, and the supply on hand from Germany, obtained before the war, has been exhausted.

83. Contracts for the telescope sights required for guns of 3-inch caliber and above, have been awarded to various concerns throughout the country. It is a matter of particular interest that firms can satisfactorily manufacture telescope sights and binoculars without much previous experience; thus it becomes possible for the Navy to obtain the necessary telescope sights and binoculars from three or more different companies.

84. The optical mechanics on the *Vestal* and *Prometheus*, during the past year, have been able to overhaul and care for the optical instruments of the fleet in a very satisfactory manner. With a few exceptions, all optical repair work in the fleet is now being done on the *Vestal* and *Prometheus*.

85. Since the war, the telescope sights of guns on merchant steamers have had cleaning and overhaul at the various navy yards. Assistance has been authorized from commercial optical concerns.

86. Work has been undertaken in the construction of the optical shop at the Naval Gun Factory. It is considered when this is fully equipped, most of the major repair work on long-base range finders and periscopic sights can be done there.

87. The fire-control work and developments have progressed rapidly during the past year along lines shown to be necessary from the experience of our allies in the present war. Advantage has been taken of every opportunity to obtain detailed information of the fire-control work and developments of all navies. Due consideration has been given this and no expense has been spared to obtain the highest type of fire-control instruments for our Navy.

SPECIAL BOARD ON NAVAL ORDNANCE.

88. The greater part of the time of the board has been taken up with the examination of inventions and reports upon the same. While the greater portion of these inventions are of no value, being based upon imperfect knowledge of the conditions to be met, of the means already in existence, and generally of the theoretical mechanics of the inventions, quite a number of them have required extensive investigations and tests. The personal presentation of inventions before the board has involved a great deal of time, as it is difficult to convince the inventors that their invention is not the final answer to the particular problem involved. There seems to be no way of avoiding this without subjecting the bureau to a great deal of criticism should it refuse carefully to consider all inventions presented. The number and classification of inventions examined during the year follows:

Submarine devices.....	16	Fuses and firing devices.....	30
Antisubmarine devices.....	55	Guns.....	56
Torpedoes.....	81	Projectiles.....	141
Torpedo and mine protection.....	135	Miscellaneous.....	27
Mines.....	33	Explosives.....	8
Mine sweepers.....	19		
Aircraft devices.....	35	Total.....	636

89. The board has given extensive consideration to an improved method of gun construction by which the initial tensions, secured in the present system of shrinkage, were to be replaced by initial tensions produced by expansion of tubes by very large interior hydraulic pressures, beyond the elastic limit. After careful investigation of the process, it was deemed inadvisable to attempt the substitution of a novel and untried process at a time when all the energies of the bureau were needed to supply the imperative demands for new guns of standard type. However, experiments on a small scale are under way to test the practicability of the method with guns of minor caliber.

90. Investigations and tests of a new high explosive, tetranitroaniline, have been conducted with a view of supplying it in sufficient quantities to meet a shortage, which may exist in this respect for the coming year. Although the tests on a large scale have shown that the alleged superior destructive qualities of this explosive have not been borne out in practice, yet the board considered its safety, stability, and explosive power to be sufficiently demonstrated to recommend its manufacture on a large scale as the best method of remedying the serious shortage.

91. Investigations, experiments, and tests of firing devices or fuses for depth charges, mines, and bombs, with especial reference to the submarine menace, have been systematically conducted throughout the year with satisfactory results.

92. Investigations of proposed materials and methods for the formation of a smoke screen, as an antisubmarine device, have been given some recent experimental tests. These have been in addition to the work in this direction by the Bureau of Mines and also the Bureau of Ordnance.

93. At times the work of the board has been somewhat in the nature of a demonstration of the impracticability of devices invented by enthusiasts who have had no experience in such matters, either in their manufacture or their tactical use. The results of all the efforts in this direction have demonstrated the practical nature of the materials and devices already in use, and have added several new materials of great value for accomplishing the end in view.

NAVAL PROVING GROUND.

94. Owing to war conditions, the work of the proving ground naturally has increased enormously over that of preceding years, and is steadily growing in amount from day to day, especially in medium and minor caliber work. The only instance of work decreasing is that of the proof of breech mechanisms independent of proof of guns.

95. The following table is a summary of the most important proof work carried on at the proving ground during the fiscal year, and a glance at the percentages of increase will give some idea of how the work has grown:

Material proved.	Amount proved.		Percentage.	
	Number.	Unit.	Increase.	Decrease.
Guns	497	Number ..	34	.....
Breech mechanisms (besides those proved during proof of guns)	14	..do		65
Mounts (besides those proved during proof of guns).....	1	..do		
Powder	212	Lots	41	.....
Projectiles	395	..do	316	.....
Armor, class A	52	Plates	2	.....
Armor, class B	43	..do	115	.....
Cartridge cases	346	Lots	19	.....
Primers	1,500	..do	251	.....

96. Of the armor tests enumerated above, seven class A plates were experimental. In addition, five plates for the Swedish Government were tested; 111 experimental projectiles of various kinds were also tested, as compared with 53 in the previous year.

97. During the year 161 ranging records were made.

98. Much experimental work has been conducted during the year, including a series of tests to ascertain the cause of premature bursts in 6-inch 40-caliber ammunition furnished armed liners. Exclusive of tests and proofs, 79 experiments were comprised in the year's work.

99. In conducting tests with an experimental bomb for use as an offensive weapon by sea planes against submarines, Lieuts. (J. G.) Luther Welsh and C. K. Bronson, United States Navy, were killed on the afternoon of November 8, 1916, by the premature bursting of a bomb of a type which had functioned satisfactorily in two previous flights. The cause of this burst was ascertained, and the exploding mechanism altered so as to preclude the recurrence of such an accident.

100. Work has been constantly in progress in improving and increasing the efficiency of facilities at the proving ground. Perhaps the greatest single improvement at the proving ground proper has

been the redesigning of the butts used for testing 14-inch armor-piercing shell, so as to prolong the life of the butts from one to nine impacts before rebuilding, which has resulted in expediting the test of this type of shell greatly.

101. The need for additional officers for the proving ground is keenly felt. Under war conditions that station is operating with fewer officers than in times of peace. The difficulty of obtaining labor has prevented the completion of the extensions and improvements planned.

102. The bureau succeeded in having the Potomac River closed during certain hours of the day by the issue of an order from the War Department, effective April 9, 1917. Without this provision it would have been impossible to have carried on the proof work necessary to keep pace with the increasing war orders.

103. The project for a new site for an auxiliary proving ground suitable for long-range firing and fuze work has not, as yet, been acceptable to the department, although it is necessary to have some relief in the congestion and in the danger to life now existing at the present proving ground. This recommendation, that an additional site be utilized, has been incorporated in the annual reports of my predecessors for a great many years. Careful thought has been given to the problem and all believe that the best plan is to retain the present ground for the major portion of the work and to secure an additional site for long-range firing. The fuze-testing situation has been aided in a great measure by the hearty cooperation of the Marine Corps, who are now removing from the target range at Stump Neck, in order to permit the establishment of fuze butts there. The urgency of obtaining additional space can not be exaggerated. It is paramount. Each day lost in the acquisition of the necessary land and in the extension of facilities means much more in the efficiency of this bureau's war material. The present handicap is excessive, and the quality of the product can not be reasonably expected to be without many flaws. As one example, all high-angle large-caliber gun mounts are accepted without a test at the required service angle of elevation. Failures of heavy guns to return to battery after firing, as well as other defects, must logically develop with shipboard use. Detailed plans were drawn up for required extensions to the proving ground and submitted with estimates in 1912.

POWDER FACTORY.

104. The factory has been operated continuously at maximum possible output. No serious accident has befallen any of its personnel, minor injuries to the number of 87 being reported. Small fires have resulted in no material damage to machinery and only nominal delay in manufacture. These occurred at the mixing house, press house, and cotton dry house. The fire loss for this year was \$2,852.55.

105. The cost of powder was 1 cent less than during the last fiscal year, due primarily to the increase in the amount produced, and secondly, to the manufacture in the plant of the greater part of the acid used. The increase in the cost of raw materials over the past year amounts to 4 cents per pound of powder.

106. The manufacture of rockets and night signals has materially increased.

107. The chemical laboratory has made 10,127 analyses as compared with 7,840 during the previous year, despite difficulty in maintaining sufficient personnel.

108. The experimental work has comprised a large number and variety of items.

109. There is real necessity of providing for railroad connection to the factory. Despite the very best efforts the station could exert, but one month's supply of sodium nitrate has been accumulated. A wharf up river will relieve this condition in a measure, but the delays, due to barge work and the ice in the river for three months of the year, render the railroad connection imperative should the plant's capacity be increased. The bureau recommends that its output be trebled at once because of the fact that there exists in the country a capacity for the manufacture of powder insufficient to provide for the Navy's requirements.

NAVAL TORPEDO STATION, NEWPORT, R. I.

110. The work performed at this station has enormously increased over that of the previous year. However, owing to its great diversity, it is practically impossible definitely to state the amount of increase in total work performed as compared with prior years. The increase in torpedo repair work has been very marked, while similarly the manufacture of torpedoes, primers and mines show much greater amounts. The force of employees has been increased, but is not yet up to the quota necessary in order to make the best output possible. This lack of the required labor has been the cause of much concern during the entire year.

111. The output of completed torpedoes was greater than in the last fiscal year. On the proving range 1,647 shots were fired. With the arrival of the new testing barge from the Boston yard, expected daily, a much greater volume of testing work will be practicable.

112. Manufacture in other lines has continued to increase in the shape of metals in foundry, accumulators, separators, air plants, mines of several types, both service and experimental, primers, detonators, superheater fuzes and torches, and net-cutter bombs.

113. The conditions under which torpedo repair work has been done at this station have been unsatisfactory due to the congested conditions of the island and the increase in the amount of work. The bureau is taking steps to relieve these conditions, it being proposed to carry forward a definite plan of extensions in all directions. The size of the island puts a definite limit upon the increase in plant possible.

114. The total expenditures for labor and material were \$4,550,-677.40, and the number of men employed on June 30, 1917, was 2,161.

115. The enlisted personnel in the seaman gunners' class has increased from 66 to 209.

PACIFIC COAST TORPEDO STATION.

116. A new war-head magazine has been nearly completed, and the force of the station has been efficiently engaged in developing the

reservation so as to make it habitable and capable of doing an increasing amount of work. The radio station has been materially aided by the force of the station installing water, sanitary and power systems, bridging and grading. Thirty-two torpedoes were proven for submarines. Torpedoes for six vessels were proven by their crews, using the station equipment.

117. On June 19, the *Perry* was detached from duty at the station, and since that time no means of supplying compressed air on the station have been available. An air compressor is being installed. The station is starting a seaman gunners' class in torpedo instruction.

ARMOR AND PROJECTILE PLANTS, CHARLESTON, W. VA.

118. *Projectile plant.*—The site for the plant was selected April 24, 1917. A deed conveying 181.9 acres of land to the United States was received on June 4, 1917. Awards for machine tools, hydraulic piercing presses, pumps, electric furnaces, and ingot manipulator were recommended during June, 1917. Drawings for four buildings (machine shop, foundry, forge shop, and heat treatment shop, with lavatory and locker rooms) have been completed. It is estimated that operations in the projectile plant will start on April 1, 1918.

119. *Armor plant.*—The work on the drawings for the armor plant is underway.

NAVAL GUN FACTORY.

120. The following is a summary of the more important work performed at the Naval Gun Factory and improvements made during the year.

121. A large number of guns were manufactured, many more were relined and rebuilt, including 14-inch, 12-inch, 10-inch, 8-inch, 5-inch, 4-inch, 3-inch, 6-pounders, and 1-pounders.

122. The gun work was badly handicapped during the past year on account of the nondelivery of gun forgings, which made it necessary to use a number of the large lathes in the gun shop on miscellaneous work for other shops.

123. *Miscellaneous work* has consisted of the following items:

Contract guns star-gauged, examined and put in serviceable condition; breech mechanisms completed, overhauled, modified, etc.; drill guns completed; firing locks and firing mechanisms completed; sights completed and partially completed; important detail parts for sights; telescopes and optical instruments repaired; torpedo directors—repairs, etc.; periscope mounts completed, repaired, etc.; plotting boards completed, repaired, etc.; gun mounts and parts completed.

124. Many torpedoes have been completed and more are well along.

125. Many twin torpedo tubes, Mark II and Mark III triple tubes, have been finished, as well as a number of submerged tubes. Many spare parts for tubes have been fabricated.

126. Much special equipment for radio, for fire control, for measuring pressures, for firing circuits, and 54,063 articles in the tool shop, such as jigs, gauges, etc., together with 9,182 metal lockers, funnels, trays, adapters, punches, etc., was manufactured.

127. The boiler shop handled about 909,000 pounds of material, including structural steelwork, welding, forming, and boiler work. This work includes material which actually entered into completed

ordnance units and work for other shops, such as repairs to present plant and new equipment.

128. The forge shop has made very satisfactory progress during the past year in the manufacture of gun forgings and torpedo forgings, the more important of which have been air-flask heads, water-compartment heads, torpedo air flasks for Type A submarines, jackets and tubes for 3-inch submarine guns, 14-inch screw-box liners, 14-inch mushrooms, and other breech mechanism forgings, 3-inch anti-aircraft gun forgings, etc. The output in the forge shop was 3,254,982 pounds, an increase of 30 per cent over that of the previous year. There was a considerable increase in work on high grade alloy steel forgings.

129. On account of the recent heavy demand for forgings of all classes additional shifts have been organized, and at the present time all machines in the forge shop which it is possible to obtain help to operate are being worked on a three-shift basis, and as soon as sufficient help is obtained to run all machines in the shop on a three-shift basis the output will be materially increased.

130. The output of good castings and ingots of the foundry was 7,909,898 pounds, showing an increase of 43 per cent over the output for 1916. The largest increase in output this year has been in manganese bronze, naval brass, and open-hearth and converter steel.

131. The extent of the shipping section of the gun factory is indicated by the following table:

	1916	1917
Individual shipments	5,975	9,400
Number of packages	141,310	168,406
Weight of ordnance materials shipped	17,987,605	17,459,497
Weight of miscellaneous materials shipped	13,617,997	16,792,392
Number of packages shipped by freight	136,595	156,404
Number of packages shipped by express	2,480	9,843
Number of packages shipped by mail	2,235	2,359
Weight of material delivered on board vessels at yard	10,595	15,620
Weight of material shipped by Government conveyance	600,558	273,032
Number of ordnance pamphlets sent out	7,708	11,088
Number of railroad cars used to haul material direct from yard	883	840

132. The drafting room has employed 144 persons and has prepared a large volume of new design work as well as to make detail drawings and correct and renew the additional amount of drawings necessary because of the large amount of gun work private concerns have been called upon to do.

133. The allowance office force has been greatly increased, and during this fiscal year allowance lists were made for practically all merchant auxiliaries according to the original mobilization scheme. This scheme having been changed, new allowance lists have been made covering the new assignments of batteries. The reassignment of old reserve batteries, as well as the formation of new reserve batteries and their assignment to ships, has caused immense volume of work in the allowance office. In order to standardize all batteries, make necessary revisions, and assign reserve batteries to armed guards, armed yachts, section patrol vessels, and naval auxiliaries, it has been necessary to print about 250,000 allowance sheets. In addition to this, about 75,000 forms were printed for different departments, shops, etc.

134. The chemical laboratory has made 4,362 analyses. The physical laboratory has made 78,870 tests. The work in the physical laboratory has increased very materially over that of last year, particularly in the number of tensile tests on steel forgings and castings, tests of steel balls and of springs, amounting to over 100 per cent increase in the number of tensile tests and about 30 per cent increase in the number of spring tests.

135. Further progress has been made in the metallographic inspection of gun forgings received on contract during the course of machining and finishing in the shops, and a great many cases of suspected forgings have been taken up during the past year, resulting in rejections of forgings in several instances where the same could not readily have been found by other less rigid methods of inspection. Additional metallographic apparatus has been added to the equipment of the gun factory, and it is contemplated to extend the scope of this work during the coming year.

136. The question of quality of forgings and castings received on contract since the recent rush in production of gun forgings has presented a serious problem with reference to inspection, and many questions involving the inspection of materials, which in ordinary times could not be accepted, have had to be taken up and given careful study by this division, particularly in the case of major gun forgings, air-flask forgings, etc.

137. In the steel foundry, developing of the manufacture of steel ingots has been perfected to a point well beyond the experimental stage, and during the past year practically all of the nickel steel gun forgings made at the gun factory have been produced from ingot material manufactured in the gun factory open-hearth plant. This procedure has effected an immense saving to the Government, both in time and money, as satisfactory nickel steel forge stock has been practically unobtainable during the past six months on account of the great demand for munitions work.

138. The total expenditures for labor were \$6,097,831.35; and for material were \$5,761,343.18. The increase in the number of employees was 2,047. The average daily pay roll was \$23,209.76.

139. During the year a large quantity of new machinery has been installed in all the various shops with resulting improvement in increased output and economy.

ECONOMIES EFFECTED.

140. The manufacture of open-hearth steel by the use of cheap unsalable scrap has been further developed, effecting considerable saving over the ordinary practice of using practically all the heavy and higher priced melting stock.

141. Notwithstanding the recent increases in the market value of pig iron the cost of liquid steel from the open-hearth furnace has remained practically the same on account of the use of cheap steel scrap, which up until this time had to be sold at prices which amounted to a loss of money to the Government.

142. Metallurgical practices brought into effect in the bronze and brass foundry during the fiscal year 1916 have been continued with steady improvements. The immense accumulation of scrap metals which existed two years ago has been very materially reduced, and in

many instances it is now necessary to resort to the use of new metals on account of the scarcity of scrap metals.

143. On account of the scarcity of red bronze and composition scrap consistent efforts have been made to increase the use of naval brass and manganese bronze by making a study of the various castings and the substitution of these cheaper grades of materials, for which the present supply of scrap is still more than adequate to meet all of the demands of the foundry for metals, and the use of manganese bronze during the past year has increased from approximately 188,000 pounds to 363,000 pounds per annum, and of naval brass from 320,000 pounds to 637,000 pounds per annum, while the use of red bronze and composition has been decreased from 908,000 pounds per annum to 734,000 pounds per annum.

144. In order to utilize the large accumulation of yellow brass scrap resulting from the manufacture of cartridge cases the manufacture of naval brass forging ingots has been further extended, until at the present time practically all the requirements on the forge shop for bronze torpedo forgings are being met by the use of forging ingots manufactured at the gun factory.

145. The recent heavy demand for small-caliber cartridge cases and the existence of a surplus of lower grade cartridge-case scrap has made possible the development of the manufacture of cartridge-case slabs in the crucible furnaces in the new experimental plant established under the metallurgical and testing division, which has resulted in a considerable saving to the Government. In this operation crop ends and dirty scrap resulting from the manufacture of large-caliber cartridge cases, and which were formerly considered unsuitable for further use in cartridge-case manufacture, have been melted in natural-draft crucible furnaces, and after careful treatment to free the material from foreign matter, poured into slabs, which have been used with entire success in the manufacture of 1-pounder and 3-pounder cartridge cases, all of which up to the present time passed proof test satisfactorily.

146. Operations of the smelting plant at the gun factory have continued with the same satisfactory results as reported during the previous year. Immense quantities of lower grade scrap materials have been reclaimed in the form of usable ingot material for the production of casting and forging ingots, which has resulted in holding the cost of the gun-factory output of nonferrous castings below the regular market price for similar castings made by outside manufacturers, notwithstanding the increased market value of all nonferrous metals.

147. During the past year there has been produced in the smelting plant at the gun factory from scrap metals a total of 1,704,405 pounds of casting ingots, consisting of manganese bronze 703,852 pounds, naval brass 468,588 pounds, and phosphor bronze or composition 531,965 pounds.

148. Based on the average market value of ingot material of similar characteristics compared with the cost of production of the above ingot material at the gun factory, the operation of the smelting plant has, during the past year, saved the Government approximately \$308,775, which amount would have been absolutely lost to the Government had this scrap been sold or given to contractors on

reworking contracts. With the installation and equipping of the new smelting plant, and the operation of the electric furnace for scrap recovery, it is believed that it will be possible to make still further progress in the reclaiming of scrap materials such as light yellow brass scrap, manganese bronze turnings, etc., which will effect considerable additional saving to the Government.

149. A large increase in both buildings and machinery to care for the greatly increased output necessary for the war has been recommended, and the plans are underway so that when funds are available the work will proceed rapidly. The great advantage to the Navy of this large plant has been shown in hundreds of ways since the mobilization of the fleet.

NAVAL MAGAZINES.

WEST HINGHAM, MASS.

150. The number of employees at this station is now 70 per cent greater than that of the preceding year, and the volume of work has increased accordingly. A successful device for safely unfuzing shell was developed and operated. The station extended the railroad track greatly, installed flood lights for the protection of grounds and buildings, fitted a steam boiler for washing cartridge cases as a great economy over the gas. Seven new buildings were completed during the year, and 20 more are under construction. The fire protection system was extended.

151. As an example of the work performed by an ammunition depot, the following table is submitted, showing a summary of ammunition work performed during the fiscal year ending June 30, 1917:

Charges assembled, overhauled, and broken down.....	19, 513
Fixed ammunition assembled, overhauled, and disassembled.....	144, 146
Service shell loaded and fused and unloaded.....	141, 646
Target shell prepared for issue.....	16, 797
Cartridge cases prepared for issue.....	89, 204
Powder tanks prepared for issue.....	38, 610
Ignitions manufactured.....	13, 943
Powder bags manufactured.....	16, 050

NEW YORK DISTRICT.

152. The year just completed has been the most active in the history of the ammunition depots of the New York district.

153. Labor conditions have improved during the year at Iona Island, due to the adoption of the policy of filling vacancies in the ordnance division by the promotion of laborers. It has been difficult to obtain labor at Lake Denmark, as it is in a sparsely settled locality, and because the higher prices paid by the Army at Picatinny Arsenal and by private firms in that vicinity attract the workmen.

154. Special attention has been devoted to the protection of the ammunition depots, additional lights have been installed, barbed-wire fences erected, and the marine guards increased at Iona Island and Lake Denmark and a detachment assigned to duty at Fort Lafayette. These detachments have performed their duty in accordance with the high standard of efficiency maintained by the Marine Corps.

155. Additional protection has been furnished Iona Island since the declaration of war by detachments of National Guards stationed at Bear Mountain on the western bank of the Hudson and near Manitou on the eastern bank of the Hudson.

156. The ammunition depot property and appurtenances are in good condition.

157. Shipments by rail and water, not counting ammunition delivered to vessels direct from the depot wharf, aggregated 10,185 tons. Seven hundred and nineteen freight cars were handled in connection with shipments and receipts. This was an increase of 39 per cent over the record of the preceding year.

158. The employment of seamstresses in the cartridge-bag sewing room has released the ordnance men formerly employed there for duty more in accordance with their rating and has effected an economy of about 23 per cent in the cost of cartridge bags, as shown by the following comparison of the costs of manufacture of 5-inch powder bags:

Ship.	Number.	Total cost.	Unit cost.
Arizona.....	5,107	\$265.84	\$0.052
Idaho.....	5,065	204.08	.040

159. In order to meet the additional demands, the civilian force has been increased during the year from 150 to 265.

160. In view of the bureau's policy of using Lake Denmark as a general storage ammunition depot for the east coast, a tremendous expansion has taken place there. This is not so apparent in receipts and expenditures, although these show marked gains, as it is in the extensive building program authorized and now under way.

161. Six magazine buildings at Iona Island are under way, and 41 at Lake Denmark, the space given by these being urgently required.

162. From a ready magazine and repository for small arms, wrecking mines, and torpedo material, and temporary storage for ammunition of ships undergoing repairs, the Fort Lafayette ammunition depot has become an issuing depot of great importance. During the period from April 1 to June 30, 1916, Fort Lafayette issued ammunition to 9 vessels. During the corresponding period in 1917 ammunition was issued to 134 vessels.

FORT MIFFLIN, PA.

163. The volume of work performed at this ammunition depot during the fiscal year 1917, based on the number of projectiles loaded, cartridges and charges assembled, etc., is more than double that of the preceding year.

164. There are 19 storage buildings under erection.

ST. JULIENS CREEK, VA.

165. Considerable work has been done in fitting out merchant ships with service and target ammunition, nearly all of which were rush orders, and so far as is known the depot did not delay a single ship.

166. Numerous target-practice orders for ammunition have been carried out for ships based on this port; also, extra orders for ships mobilized; a large quantity has been delivered to ships for training of armed guard crews.

167. The enlarged fleet has been the cause of increased activity. Many more empty containers have been turned in on this account. Thousands of rounds of 3-inch 50-caliber ammunition were turned in by the fleet. Barge loads would be received with nothing to identify the ammunition or whence it came; indexes would be mixed, all of which caused unnecessary delay and confusion. This ammunition has all been overhauled, gauged, and is ready for issue.

168. Three million one hundred and eighty thousand pounds of smokeless powder passed through the filling houses, which is an enormous increase over that of the previous year.

169. Trinitrotoluol loading equipment was purchased and installed, and much of the necessary equipment was manufactured here at the depot. Much new equipment was ordered, a great part of which has not yet been received.

170. The following will give an idea of the increased activities and the amount of work done, as compared with the preceding year:

	1917	1916
Total pay roll.....	\$149,156.99	\$97,730.44
Productive labor.....	\$78,152.14	\$50,000.00
Number railway cars received.....	352	146
Number railway cars shipped.....	87	27

171. Shipments and receipts by water of ammunition and stores for 1917 was 8,856 tons, involving 783 barges; while that for 1916 was only 4,253 tons, involving 456 barges.

172. The unit cost of work was undoubtedly increased owing to overtime and the number of rush orders. The bureau is firmly convinced, however, that the quality of the work turned out at this depot has been vastly improved.

173. The depot's grounds were more than doubled by the purchase of 143 acres of land. Arrangements were made to increase the capacity of the depot by the following:

- Four emergency buildings, each 50 by 250 feet.
- One temporary storehouse, 50 by 250 feet.
- Six mine stowage buildings, each 50 by 160 feet.
- Four powder magazines, each 50 by 200 feet.
- Five shell houses, each 50 by 200 feet.

MARE ISLAND, CAL.

174. The work for the current year in all departments was materially increased over that of the preceding year. The facilities for the work of unfusing projectiles has been greatly increased, and the cost of this work reduced 50 per cent by the use of compressed air devices designed and invented by the inspector of ordnance in charge, and his assistants. The work of tapping out projectiles has been cheapened and facilities increased by devices using compressed air. New devices for assembling minor caliber charges have been invented

and installed, greatly increasing the facilities of the plant for work of that nature as well as materially reducing cost.

175. The recent explosion of the black-powder magazine at Mare Island, at 7.55 a. m. on July 9, by which 128,000 pounds of black powder were lost, six persons killed, including Chief Gunner A. H. McKenzie and family, and 43 injured, is the greatest disaster in the history of ammunition depots of the Navy. The cause of this is as yet unknown, and it is feared that, judging by the record of previous explosions, it will never be known with any degree of certainty. Ten buildings were badly damaged, and 12 others will require much repair. The magazine, with commendable sailor spirit, resumed work on its preparation of ammunition, with practically no delay. The conduct of the officers and employees at the magazine in quelling the spread of the fire and rescuing injured persons was worthy of, and has received, the utmost commendation.

PUGET SOUND, WASH.

176. Many extensive improvements have been made by the personnel of the station. The volume of work is not as great as of the preceding year.

OLONGAPO AND CAVITE, P. I.

177. During the year the laboratory received 973 samples of smokeless powder, 417 samples of guncotton, and 49 miscellaneous samples; it has kept in as close touch as practical with the ships on the Asiatic Station relative to the stability of their powders, and has at all times encouraged reference to it of all questions concerning powders and other explosives. Whenever the visits of the ships to Philippine waters render it practicable, powder samples are personally selected by the inspector or chemist from every ship at least once semiannually. This is done in addition to the regular routine testing of powders in service on the ships and at the magazines, and serves to keep as complete a watch and control as possible over the powder, in order to be in a position to safeguard against any possible accident or explosion.

ARMED GUARDS.

178. A pamphlet was compiled on the care and use of ordnance for armed liners, transports, and patrol vessels in antisubmarine warfare.

179. Special attention was given to the reports of commanders of armed guards and special recommendations made on matters under this bureau brought to the attention of those concerned in the bureau. By personal conferences held with the commander of each of the armed guards on the subject of their trips and ordnance material furnished, it was practicable to improve many small items relative to the batteries of merchantmen.

STUDENT OFFICERS.

180. At the outbreak of war there were 10 student officers under instruction in ordnance, four of these taking a course in metallurgy

at Harvard and Lehigh Universities. During the month of March, 1917, these officers were all withdrawn and ordered to sea by the Bureau of Navigation.

181. A total of approximately 30 line officers of the Navy, exclusive of the 10 mentioned above as sent to sea, have had this course in ordnance instruction.

182. It is considered highly advisable that 10 officers be assigned to duty under Ordnance for instruction, in order that there may be more officers available who are competent to properly carry out work in the bureau. Should such officers be assigned, they will be used as assistants while undergoing instruction.

RALPH EARLE.

REPORT OF CHIEF OF THE BUREAU OF CONSTRUCTION AND REPAIR.

NAVY DEPARTMENT,
BUREAU OF CONSTRUCTION AND REPAIR,
Washington, D. C., October 15, 1917.

To: The Secretary of the Navy.

Subject: Report of the Bureau of Construction and Repair for the fiscal year ended June 30, 1917.

1. I respectfully submit herewith the report of the Bureau for the fiscal year ended June 30, 1917.

2. Estimates for the salaries of the clerical and technical employees of the bureau and for the construction and repair of vessels at navy yards and on foreign stations; the purchase of stores, material, machinery, articles of equipage, and tools of all kinds; construction and repair of yard craft; and for the pay of clerical, drafting, inspecting, and messenger service for navy yards and naval stations and offices of the superintending naval constructors in the performance of all work of the Navy in the line of construction and repair have been submitted under separate correspondence.

3. During the past fiscal year the resources of the bureau have been severely taxed, due to the unprecedented amount of new construction, repair, and conversion work incident to the war. The department is aware that there was during the whole year a shortage of officers and technical force available for the work of this bureau. This shortage could not be materially remedied by increasing the force from civil life, because, coincident with the demand for increased naval work, there was an equally urgent demand for an increase of merchant-ship construction. Under these circumstances it has been necessary to call upon the naval constructors and civilian employees concerned with construction and repair work, both in the department and throughout the country, for exceptional effort. This has been cheerfully and zealously given, resulting in no small accomplishment.

4. On the outbreak of the war, in addition to utilizing the full facilities of existing navy yards, private plants were called upon in accordance with prearranged plans, and have done a large amount of work, supplementing that of the navy yards.

5. As regards new construction, during the year orders were placed for large numbers of additional vessels, the order of precedence of the various types of vessels under construction was rearranged, and exceptional measures taken to accelerate the completion of certain types. These measures are producing results.

6. The following is a list of vessels dropped from the Navy register between July 1, 1916, and June 30, 1917: *Fox, Severn, Boston, Iris, Princeton, and Rainbow*, the last four vessels being transferred to the Shipping Board.

D. W. TAYLOR.

REPORT OF PAYMASTER GENERAL OF THE NAVY, CHIEF OF BUREAU OF SUPPLIES AND ACCOUNTS.

NAVY DEPARTMENT
(BUREAU OF SUPPLIES AND ACCOUNTS)
Washington, 30 September 1917.

To: The Secretary of the Navy
Subject: Annual Report.

The Navy's supply system is directly affected by every operation in every field of naval activity.

The increase in labor, organization, contract and policy problems under the Secretary and the Assistant Secretary of the Navy; the development of the Naval Coast Defense Districts with their bases, patrols, mine sweepers, mine layers and the like, together with the increases in the units and the movements of the fleet under the Chief of Naval Operations; the increase in the enlisted strength of the Navy to a total of 217,000 men (including regulars, Naval Reserves, Lighthouse and Coast Guard Services and Naval Militia) together with the corresponding increase in the commissioned personnel under the bureau of Navigation; the increased demands for structural steel, tools, lumber, rope, paints, oils etc. under the bureau of Construction and Repair; forgings, boiler and engine materials, electrical supplies, crucibles, tubing and other engineering appliances etc. under the bureau of Steam Engineering; cartridge cases, explosives, chemicals, ammunition details, gun forgings, telescopes, powder tanks, metals etc. under the bureau of Ordnance; the increased activities in public works projects, dry docks, buildings, railroad equipment etc. under the bureau of Yards and Docks; the increased shipments under the bureau of Medicine and Surgery—all these involve a corresponding increase in the work of advertising, purchasing, contracting, receiving, storing, shipping, issuing, paying and accounting under the bureau of Supplies and Accounts, and this in addition to provisioning and clothing the men and fueling the fleet and furnishing it with every kind of needed supplies both at home and abroad.

When the War of 1917 became imminent, the pressure on the supply department at first doubled, then trebled and in some cases increased many times over. Double shifts, treble shifts and additional officers and employees—all working overtime—have, however, kept the work up-to-date.

It was nearly a century ago that the Honorable John C. Calhoun, Secretary of War, said:

. . . To prepare the country to meet a state of war with honor and safety, much must depend on the organization of our military peace establishment. . . . To give such an organization, the leading principles in its formation ought to be that at the commencement of hostilities there should be nothing either to new model or to create. The only difference, consequently, between the peace and war formation . . . ought to be in the increased magnitude of the latter; and the only change in passing from the former to the latter should consist in giving to it the augmentation which will then be necessary. . . .

What was prophecy then is history now.

Keeping always in mind the principle so clearly stated in the foregoing quotation, the Navy's supply system was so planned in

advance and so operated in ordinary peace times that, when put to the test of war, it merely experienced an orderly expansion to handle adequately the increased volume of work without any radical change in method and consequently without confusion or delay.

Upon the outbreak of war, the shortage of storage space was particularly serious. The situation made it imperative that additional facilities be authorized immediately at the principal outfitting yards and stations. The Chief of the Bureau of Yards and Docks promptly and vigorously took in hand the construction of additional storage facilities, and has broken all records in the history of the Navy in speeding to early completion this work upon which the supply of the fleet so much depends.

Conditions at practically all the yards and stations necessitated the erection of temporary frame structures for use until the permanent buildings were ready. The Norfolk Yard has been the most crowded; but considerable relief at that point has been obtained through the lease authorized by the recent Act of Congress of the additional property belonging to the Seaboard Wharf and Warehouse Company. It has been necessary to roof over the street areas between buildings at several of the yards to provide protection for valuable Government property. At Philadelphia and New York, privately owned buildings in the vicinity of the navy yard have been leased and have afforded considerable relief from a situation which was fast becoming acute.

At numerous points along the coast, modern reinforced concrete storehouses are in course of construction.

At Boston, the construction of the new storehouse was somewhat delayed by reason of the necessity for removing a building on the site of the new structure. The concrete work, however, has been rapidly pushed until now the third floor is completed.

At New London, the foundations are being laid; and at the Torpedo Station the work has just been commenced on the extension to the present building.

At New York, a complete Supply Department establishment—with the exception of special storage space for paints, oils, lumber etc.—will be housed under one roof when the new ten story structure is completed on or about 31 October.

At Philadelphia, the second floor has been poured; and, unless unforeseen delays are encountered, this building should be ready for occupancy about 1 January 1918.

At Norfolk, the new Supply Base will be located at the Naval Operating Base, Hampton Roads; and estimates have been approved for a modern cold storage plant at that point of sufficient capacity to load one supply ship. At the Norfolk Yard, stores will be carried for the Industrial Department; and at the Operating Base at Hampton Roads the stock is intended for issue to the Fleet. Work has been commenced on the piling for the new storehouse at this time.

At Charleston, the foundations have been completed and it is expected that the new building will be ready for occupancy early in 1918.

At Mare Island, the work has been finished to the third floor; at Puget Sound to the second floor and at Pearl Harbor work has just been commenced on an extension to the present building.

In the city of Newport proper the question of providing a freight warehouse for handling shipments for the fleet has been taken up

and, through the courtesy of the President of the New York, New Haven and Hartford Railroad Company, arrangements have been completed for the acquisition of a very desirable piece of property on the water-front conveniently located with reference to the freight terminals. Steps are being taken for the erection of a temporary frame structure on this site which will not only serve the purpose of a clearing house for fleet stores but will also be used by the Naval District in connection with the issue of supplies to the Patrol Force.

The necessity for new building ways for the construction of vessels at the Navy Yard, New York, will require the tearing down of the buildings now occupied by the Provisions and Clothing Depot and the removal of the Depot from within the limits of the Navy Yard. Location along the water-front is necessary to load supply ships with cargoes of provisions, clothing and general stores. The demand for pier and warehouse space throughout the entire Harbor of New York has been so great as to tax all available facilities. The military situation necessitated immediate provision being made to accommodate the increased stocks of clothing and provisions for the men. Pier 35 at the Bush Terminal was therefore commandeered and the Somers plant of the American Can Company was likewise requisitioned for the clothing factory and clothing storage.

The pier at the foot of Thirty-fifth Street has been leased at a rental of \$120,000 per annum from the City of New York and the American Can Company will be paid approximately 30 cents per square foot storage space per annum.

Early in May the Purchase Division—whose force had increased from twenty-eight to fifty-three in numbers, with the work constantly increasing—was so hampered (through being crowded into four rooms with an approximate area of sixteen hundred square feet) that immediate steps to secure relief were necessary. No space could be found in nearby buildings which could be rented; and, in order to relieve the situation, authority was obtained from the Secretary of the Navy to erect a building in the North courtyard of the State, War and Navy Building. This authority was obtained late Saturday 12 May 1917, and work was started at 7 a. m. 14 May and was prosecuted with such energy that the Purchase Division started to move in on the afternoon of 26 May and was ready for business at 9 o'clock Monday 28 May.

The erection of this building—which has been named "Sanda Court" and which is a two-story frame structure 62 feet long and 57 feet wide, containing approximately 6600 square feet of available floor space and connected with the main building by a bridge—served a four-fold purpose: It provided ample space for the then existing force in the Purchase Division; it permitted expansion as the work increased, until at the present time the personnel of the Purchase Division numbers 119; it made it possible to keep out of the main building several hundred persons each day who are interested in attending public openings of bids and securing legitimate information as to the result of bids received (thus making it much easier for the watch force to handle the remaining part of the public which has occasion to come into the building) and, most of all, it preserved the "open door" principle and practice to the business public.

The importance of purchasing supplies for the Navy from those only who actually have the goods and who alone are in a position

to sell them cannot be too frequently stated or too strongly emphasized. How to secure the widest competition and at the same time get prompt delivery must always be a question difficult to answer. Before any firm's name is now placed upon the bidding list or before a bid is considered, the status of such firm is carefully inquired into with a view to determining whether or not the concern will become a satisfactory supplier and thus promote the efficiency of the Navy.

There has been constant pressure from the service for the establishment of a list similar to the British Admiralty List of satisfactory contractors; but from actual experience under war conditions it has been found unnecessary to suffer any of the evils resulting from unrestricted bidding by irresponsible contractors or the counter evil of unnecessarily high prices due to restricting competition.

If the conditions of bidding and payment are attractive and approximate the conditions followed commercially, responsible concerns can be kept on the bidding list.

All names on the Navy Mailing List have been retained there, except those which have been defaulters or delinquents under Navy contracts. New firms are not placed on the list unless they can qualify as regular dealers or manufacturers. The weeding out process of firms already on the list may require time; but sooner or later any irresponsible concern will be engulfed in difficulties under its contracts and the remedy is obvious—immediate debarment.

As soon as manufacturers have recognized the fact that they cannot secure business from the Navy if a commission for some intermediary is included in their bids, they have adopted the policy of direct bidding—thus automatically solving the problem which has confronted the Navy purchasing for many years.

The task of making Navy business attractive to original sources of supply has required the elimination of all unnecessary hindrances to bidding, the adoption of specifications in conformity with commercial manufacture, the use by the Navy of conditions of purchase acceptable to the trade and the application of sound business sense to the interpretation of all naval contracts.

Wider publicity than ever before is being given to naval purchases. There are now more than 10,000 firms on the Navy's bidding list from all parts of the country who are kept in constant touch with all important purchases. All of the manufacturers and regular dealers have been so classified that it is possible to determine instantly the names of all important suppliers of the principal items of naval purchases. Bidders were formerly required to examine the alphabetical notices of requirements and to request bidding forms in which each was interested. The bidding forms now are forwarded to all known suppliers; Navy purchases being thus brought to the attention of producers through direct invitation from the Navy.

In order that the purchase of supplies for the Navy might be distributed throughout the United States in a more far-reaching manner than previously, cooperation was requested from the Chamber of Commerce of the United States.

This organization sent out letters to a hundred local chambers of commerce in various cities of the United States and to twenty-five trade organizations. Through these agencies the plan to secure wide competition was spread broadcast in the various states and the needs

of the Navy were brought to the attention of the local manufacturer. In every instance the responses were most gratifying. Since the start of this campaign, numerous other chambers of commerce and trade associations have volunteered to assist in the work, which covers at the present time practically every state in the Union. The Navy's desire for direct dealing was thus stated to the business world:

In view of the complaints received by the Bureau of Supplies and Accounts, Navy Department, that agents after securing bids from the manufacturers and taking advantage of their quotations, were placing the business with other concerns, the Navy is making renewed efforts to secure the cooperation of manufacturers and reliable business firms.

In this connection, all firms regularly manufacturing or marketing products used by the Navy are being invited to bid direct with the Bureau of Supplies and Accounts and not through the medium of so-called manufacturers' agents or representatives. Bidding through a third party, it has been found through experience, inevitably leads to misunderstanding and difficulties, which can only be obviated through direct bidding. Each bidder is assured by officials of the bureau of receiving fair and equitable treatment and the purchasing officers are zealous in looking out for the interests of the absent bidder in this respect.

It has recently come to the attention of the Navy that certain persons representing themselves to be manufacturers' agents or brokers have been writing to manufacturers that they are in position to obtain contracts for them, obtain more expeditious payment, and even have the goods of particular manufacture accepted for Government use. These statements have, in some cases, had direct reference to purchases being made by the Navy under competitive bidding and public competition, and were, therefore, without foundation.

There has been no change in the methods previously pursued by the Navy of purchasing material after public competition except in those industries, which are few in number, in which the demand exceeds production and for this or similar reasons the Navy allots its requirements among the trade, subject to final Government price fixing.

On account of the volume of their business in Washington, some concerns have sent experienced factory representatives to the National Capital, who are of real service to the Government, in view of the fact that they are qualified to act for the contractor and understand every detail of the work which their respective firms are bidding on. A representative who does not know the manufacturers' product is unable to furnish such useful service here.

It has recently been noticed that great numbers of brokerage concerns have come into existence and that many of them are endeavoring to bid upon Government supplies. Responsible manufacturers and dealers are being notified that they may be sure of satisfactory business dealings with the Navy if they eliminate such concerns from any interest in their business with the Navy.

The Navy believes in publicity both before bids are received and after awards are made. The entire record regarding all its contracts is open to inspection at any time by parties interested.

As the result of this, letters of appreciation were received from prominent manufacturers in every section of the country. Every mail brought in letters of this character, the greater portion being from manufacturing concerns that had never had business relations with the Government, although long established. Since this announcement several hundred reliable business concerns, having qualified under the law, have been admitted to the bidding list and are now supplying material to the Navy. One instance, which might be cited, occurred recently when 128 bids were received at a regular opening and in each instance the bidder was a qualified one and bidding direct and not through a broker or agent.

Despite all this effort to get into immediate contact with the producer, there still remain, however, a large number of profiteering agents, professional contractors and naval brokers, who constitute a "short-selling brigade," holding out to responsible but uninformed outsiders all manner of inducements and assurances that they are in a position to furnish advance information and to "land" contracts.

These people are scarcely more troublesome than a number of other speculators who seem to be under the impression that the Navy is seeking the services of outside purchasing agents instead of simply buying the goods direct as required by section 3722 of the Revised Statutes which provides that:

. . . No person shall be received as a contractor who is not a manufacturer of, or regular dealer in, the articles which he offers to supply.

The records show that this restrictive clause (quoted from the "Statute of Frauds") was the outcome of a Civil War situation to which Secretary of the Navy Gideon Welles thus referred in his annual reports for 1864 and 1865:

. . . Under the practice that has prevailed, the whole system has become tainted with demoralization and fraud by which the honest and fair dealer is too often driven from the market.

The most efficient remedy for this state of things within the power of the department has been applied in the transfer of the few remaining agencies to paymasters who . . . perform their duties under the responsibility of their commission. . . .

How effective this remedy proved to be is shown by the following extract from the 1899 annual report of Secretary of the Navy John D. Long with respect to the work of Paymaster General Edwin Stewart during the Spanish War:

It is worthy of note that, notwithstanding the immense amount of supplies purchased immediately preceding and during the war and the necessity of expedition, the contractors were held to specifications, the prices paid were no higher than before the emergency arose and the work of the bureau was performed with the most gratifying efficiency and promptness.

When it is remembered that every doubtful dealer means unsatisfactory deliveries and consequent loss in fleet efficiency, it is obvious why the application of any candidate for admission to the bidding list must be and is being critically scrutinized.

The restrictive measures which have been adopted, by which the most scrupulous care is exercised in placing the names of new firms on the Navy's bidding list, will, it is firmly believed, prevent recurrence of the troubles of the Civil War; and the War of 1917 will be perfectly clear of any taint of suspicion in the purchase of naval supplies.

As a concrete example of how sharply the lines are being drawn between satisfactory and unsatisfactory contractors, it may be stated that 86 firms have been debarred from the bidding list since 1 July 1914 and not one has been restored.

In pursuance of the plan outlined in the last annual report, greatly increased stocks have been accumulated at navy yards and bases within the naval districts, the result being that the number of small local purchases of similar items has been greatly reduced, with a consequent saving in clerical work at the yards, together with the financial saving resulting from large consolidated purchases made at one central point.

The war has shown that, as pointed out last year, the reduction of standard stock in yards to a low limit, for reasons of financial economy, is not in keeping with military necessity. While no estimate of future consumption of even the more commonly used supplies can long remain accurate under war conditions, purchases have been made of those items of common stock not subject to deterioration, sufficient in quantity to meet the probable needs of the fleet and of the yards for considerable time to come. These estimates may in some instances be found inadequate and in others excessive; but it is evident that in all probability there is now actually in the possession of the Navy—on board ship and in its own storehouses—a stock of ordinary supplies ample to meet the requirements for at least one year, thus allowing a most careful survey of probable consumption and purchases based thereon to be effected before any possible demand for the materials can become imperative.

This list includes packings, hardware, bolts, nuts, rivets and washers; metals in bars, plates and shapes; acids, chemicals and soaps; paints and varnishes; pumps and anchors, boat and ship fittings; blocks; cordage; wire and wire rope; bedding; dry goods; textiles; bathroom fixtures; oils, greases and other lubricants; electrical cable and wire; lighting and signalling apparatus; hose and hose fittings; musical instruments; brooms and brushes; hand tools; pipe and tubing; pipe fittings, gauges and valves; foundry supplies, mess gear and galley equipment etc.

As a result of investigations of foreign markets, purchases have been made of many articles produced in foreign countries and shipments arranged to home ports in naval colliers. Stocks of sodium nitrate, tin, shellac, teak, kapok and hemp have been thus accumulated.

The war has not produced conditions making it necessary for the Navy to wish to depart in any way from its previous purchasing procedure. The fact that all purchases of naval supplies, with the exception of three items of ordnance, are centralized in one office has made it possible for the Navy to secure adequate supplies to meet all its needs at the most advantageous prices and all in strict accordance with legal requirements—and this without criticism from within or without the service. It has been found unnecessary to throw any veil of secrecy around the Navy's business, whereas out and out publicity insures in advance a deal square and true to each bidder—present or absent.

If the principle of centralized purchasing for the naval service needed any justification, the developments of the few months since the war began would amply furnish it.

For many years one of the complaints most frequently heard about Navy purchases was with respect to liquidated damages for delayed delivery; these damages being in the form of a comparatively small deduction from payments for materials delivered later than specified in the contract. It was thought that by enforcing such a clause contractors would be impelled to deliver in accordance with their promises. The result, however, was simply annoyance to responsible concerns who had good reason to know that in most instances the Navy suffered no actual loss due to the delay in delivery, whereas they had used their utmost endeavors to deliver on time. The irresponsible contractor of the professional Government type indulged in much cor-

respondence for the remission of damages or merely included the probable amount of damages in his bid.

It was obvious that the liquidated damage clause did not accomplish the purpose intended. It is no longer applied to any purchase of materials for stock; but, when it is known in advance that time will be an essential element in the contract, the right is reserved to insert in the specifications liquidated damage at such impressive rates as actually compel delivery within the time prescribed.

The bonding requirement on contracts previously provided for bonds ranging from 25 to 50 per cent of the amount of the contract. This has been reduced so as not to exceed 25 per cent in any case and varies on a sliding scale down to as low as 10 per cent in certain cases. The large contracts for supplies made necessary by the war soon developed the fact that ordinarily responsible concerns alone would quote thereon, in which case a bond in large amount was not necessary because in the final analysis the basis of every contract is good faith. This change has made Navy business more attractive.

Any idea of the possible relaxation of purchase precautions was (intended to be) dismissed definitely and finally by the issuance 18 April 1917 of the following Intra-Bureau Order:

During the last few days there have come to the Paymaster General's attention, several cases where purchasing officers requested that competition be waived because careful inquiry in the market had developed the fact that articles urgently required to meet emergency needs could not possibly be obtained except from some one particular firm.

It was pointed out in each such instance that nothing could be more inappropriate than approving a "competition waived" requisition under conditions thus described—the reason being that, assuming that the facts were as stated, there was surely the keenest kind of competition imaginable, namely competition among the purchasers anxious to obtain the articles (which is necessarily more keen than any competition possibly could be between different firms seeking to supply the same).

Whenever any such cases arise—and they unquestionably will from time to time—it is to be distinctly borne in mind that the requisition to cover emergency purchase will contain on its face a plain statement of the exact facts—the use of such words as "competition waived" or other more or less meaningless terms to be scrupulously avoided.

When, for good and sufficient reasons established in advance, it does (as it seldom will) become necessary to waive competition, the words "in favor of" will not under any circumstances be employed. When competition needs to be waived, it is not in fact waived "in favor of" any firm or person, but because the exigencies of the service make it necessary—competition being waived, if at all, "in favor of" the United States!

It can not be too clearly borne in mind, therefore, that the statement on any requisition or other paper that competition has been or is to be waived "in favor of" any outside establishment is misleading and highly objectionable.

In this connection, attention is particularly invited to the following extract from the Paymaster General's second endorsement 75-2, 402-21, of 20 March 1917, in regard to the undesirability of waiving competition:

Indeed it is even doubtful whether quicker deliveries are obtained in this way—the reason being that, once it becomes known that competitive bidding is departed from, almost any firm that gets an urgent inquiry is apt to figure less carefully on quoting a low price and at the same time allow itself plenty of latitude in the matter of when the goods shall be delivered.

In very urgent cases, it is customary of course to make purchase by telephone. When the need for such a purchase is known, it takes a very few minutes more to call up two or three or four firms than it takes to call up only one; because nearly

any quotation requires some little consideration before it is made.

The result will in most cases be found to be that, while the first firm queried is working on its quotation and the time of delivery, it is very easy to call up two or three others—setting the time for decision, say, one hour from the time the original telephone call is made and notifying each of the firms queried that competition is being obtained not only as to price but with respect to time of delivery. The result, under such circumstances, is that each of such firms figures as closely as possible and also cuts down the time limit to the lowest minimum—which, as already pointed out, is not very apt to be the case if such firm has reason to think that there is no competition.

In view of all of these facts, the Paymaster General is convinced that nothing much more demoralizing and more completely destructive of the integrity of the NAVY'S entire system could possibly occur than for this Department to once start in conferring on anybody blanket authority to waive competition.

There has been, and will continue to be as long as the war lasts, a large number of well-meaning but uninformed persons who will naturally indulge in much criticism of Government purchasing in general. The Navy knows, however, that its own purchasing system is flexible and business-like and that it has met all demands upon it in supplying the needs of the fleet. No test could have been more severe, and no reason exists for changing the system.

While intelligent and patriotic cooperation from outside sources is much to be desired and cannot fail to be productive of far-reaching good to the Government if properly utilized, it is nevertheless a fact that orderly expansion from within will accomplish infinitely more for the naval service than could be expected from any procedure which might involve the possibility of supervision (and control) from without.

In addition to the manifest disadvantages of having outside control of inside activities and thus separating responsibility and authority, any method which would violently disturb existing conditions would have the added disadvantage of two people or sets of people trying to do the same thing at the same time—the result being that it could not be well done by either or both.

In this connection, attention is particularly invited to paragraphs 49 to 62, inclusive, of S and A logistic report, 31 December 1915, and to paragraph 94 of S and A 30 June 1916 logistic report.

The subject-matter contained in the paragraphs of the two logistic reports above referred to was briefly recapitulated in a memorandum for the Secretary of the Navy 28 March 1916 as follows:

I do not for a moment mean to say that we have reached the point where no improvement is possible; but I do say that we are striving each day to make improvements and that any suggestions which will help to make the supply system of the Navy one hundred per cent perfect will be gladly welcomed from whatever source it may come. . . .

Our present logistic plans . . . provide for the systematic supply not only of those ships now in commission and in reserve but also of all ships which may be obtained from all available sources in a reasonably short time; and, on account of the time it would take to build a ship of war, the existing supply system is capable of expansion to almost unlimited extent before any appreciable increase in tonnage could be expected to materialize. . . .

To delegate to any outsiders any part of the control of the Navy's supply system would—as stated in an analysis I handed Admiral Benson September 25, 1915, on a proposition along the same general lines . . . —mean the “taking out of the hands of the Government practically the entire purchasing system at a time when it would be most needed”.

The only addition to this statement which now appears to be necessary is that, while the war of 1917 will be fought in France and in Belgium and in Italy and in Germany, it must be won in Washington.

The increased volume of business handled by the Purchase Division during the fiscal year is indicated by the fact that the total purchases made here in Washington during the fiscal year 1916 aggregated \$27,702,995.61; whereas during the fiscal year 1917 they aggregated \$66,231,991.82—an increase of 140 per cent—in detail as follows:

	Classes advertised.	Number of schedules prepared.	Number of copies sent out.	Number of bids received.	Number of contracts.	Total value.	Number of bidders.
July.....	330	95	71,500	1,531	192	\$998,037.03	616
August.....	646	116	93,800	3,476	294	1,315,007.59	934
September.....	495	120	92,800	2,187	264	3,073,518.36	838
October.....	589	150	109,400	2,859	346	9,912,931.31	1,009
November.....	292	86	66,700	1,317	193	5,967,732.57	628
December.....	759	133	100,100	2,758	346	6,513,623.43	844
January.....	633	121	88,300	2,962	352	2,968,001.68	974
February.....	490	110	77,800	2,179	276	1,692,042.58	752
March.....	442	109	77,900	2,290	330	3,796,213.29	795
April.....	562	110	91,100	2,455	404	2,108,250.92	772
May.....	670	235	185,350	2,987	615	9,137,515.87	1,125
June.....	491	193	141,550	1,961	378	18,749,116.89	706
Total.....	6,399	1,578	1,196,300	28,912	3,990	66,231,991.82	9,993

The work of revising and keeping up-to-date the specifications for Navy standard materials has progressed throughout the year—the comparison being:

SPECIFICATIONS.

1916	1917			Total number of specifications July 1, 1917.
	Cancelled.	Consolidated.	New.	
Total number of specifications, July 1, 1916.				
1,141	27	49 into 18.	80	1,163

Number of specifications in use at the end of Fiscal Year 1915..... 1,117
 Number of specifications in use at the end of Fiscal Year 1916..... 1,141
 New specifications issued in Fiscal Year 1916-1917..... 487

Under the Acts of 4 March 1917 and 15 June 1917, the President was authorized and empowered:

(a) To place an order with any person for such ship or material as the necessities of the Government, to be determined by the President, may require during the period of the war and which are of the nature, kind and quantity usually produced or capable of being produced by such person.

(b) To modify, suspend, cancel, or requisition any existing or future contract for the building, production, or purchase of ships or material.

(c) To require the owner or occupier of any plant in which ships or materials are built or produced to place at the disposal of the United States the whole or any part of the output of such plant, to deliver such output or part thereof in such quantities and at such times as may be specified in the order.

(d) To requisition and take over for use or operation by the United States any plant, or any part thereof without taking possession of the entire plant, whether the United States has or has not any contract or agreement with the owner or occupier of such plant.

(e) To purchase, requisition, or take over the title to, or the possession of, for use or operation by the United States any ship now constructed or in the process of construction or hereafter constructed, or any part thereof, or charter of such ship.

Compliance with all orders issued thereunder is obligatory and takes precedence over all other orders and contracts placed with such person under penalty of forfeiture of the control of the plant or factory, the person concerned having the right to refuse to accept the compensation offered, in which case 50 per cent or 75 per cent of such compensation was to be paid him and he could sue the United States to recover such further sum demanded.

The foregoing authority was to be exercised through such agency or agencies as he might determine; and, insofar as such matters pertain to the naval service, the Secretary of the Navy was authorized to act.

In proceeding under the above authority of law, it was necessary at once to adopt an authoritative definition of what would constitute a reasonable price—presenting thereby a number of intricate purchasing problems. The determination or the definition of a price policy has proved itself to be a difficult problem because of the innumerable elements which enter into the factor to be determined as cost. For some time, it was the accepted viewpoint that suppliers of the Navy should furnish certain materials at cost of production plus a reasonable profit. It was soon found that, to carry out such a policy, every concern supplying the Government would practically be working upon a cost-plus contract with all the attendant difficulties of determining what constituted the cost and of ascertaining what should be a fair profit in the particular industry concerned. This also did not take into account the fact that there were varying commercial conditions among the various producers which would penalize the efficient and allow equal or larger profits to the inefficient. At the same time, the fixing of a flat price to apply to an industry as a whole would allow inequalities of profit. There was also the situation that in many lines production had to be increased, this being obtainable only by a policy of liberality in price-fixing by the Government.

In order to meet the many developments in the price policy, various methods were employed from time to time; but finally the plan was adopted of placing Navy orders with producers, making it obligatory upon them to deliver certain supplies, assuring them at the same time of a reasonable profit, providing preliminary payments at a sufficient rate to meet at least the cost of production and leaving the final price to be later determined. On certain materials, in order to determine a proper price for the Navy to pay, it was deemed advisable to request the Federal Trade Commission to investigate the cost of production in the industry as a whole. In other cases, Naval Accounting Officers were sent to the plants to investigate and report upon the cost of production. Such extended investigations were feasible only in those cases in which the purchases to be made were large in amount or in which it was known that the price quoted to the Navy was considerably in excess of the

cost of production and a reasonable profit thereon. In a number of other cases, investigations were made when it was obvious that the material was produced by a concern having a practical monopoly of the production. While there are a number of disadvantages in procuring materials in this manner on a preliminary payment basis, it was the only method which could be followed to obtain the materials wanted in the absence of a clearly defined price policy.

The work of inquiry into the cost of the many and varied articles required for the Navy has necessitated the establishment of a chain of cost inspection offices under officers of the Pay Corps, which at the end of the fiscal year extended to seventeen shipyards doing new construction work, about sixty yards doing repair work on vessels and to a number of plants manufacturing ordnance material. The system must, of course, be still further expanded.

Three general forms of contracts have been entered into covering this work, namely, a cost plus 10 per cent contract for new construction; a repair contract providing for reimbursement of labor plus 50 per cent overhead, material plus 10 per cent overhead, tool rates and a profit of 10 per cent on the total; and manufacturing contracts providing for reimbursement of actual cost plus a fixed profit per unit of output.

These three contracts in the order named represent an evolution in the form of cost-plus contracts. It early became evident that a cost-plus-percentage of profit contract is undesirable for several reasons, chief of which is the fact that it offers no incentive to the contractor for economical performance—in fact, since the profit increases with the cost, the incentive is in exactly the opposite direction. The percentage contract is based on the assumption that compensation should increase with increased service and this assumption is a fair one; but under a large contract a most painstaking audit is necessary to ensure that increased cost really represents increased service instead of extravagant expenditure or padding.

The repair contract, while continuing the percentage feature, is simpler from a cost inspection standpoint since the reimbursement for overhead is automatic and that item, otherwise the most troublesome, does not require extensive examination. This fixing of the overhead at a uniform rate for various plants whose actual overhead expenses may be greater or less than the standard rate is, however, advisable only where comparatively small amounts of money are involved, such as in the repair contracts.

Bearing these things in mind, representatives of other Departments of the Government were communicated with so as to investigate all phases of the subject. These representatives had similar ideas as to the value of interchange of views and study of the new conditions surrounding Government contract making; and an Interdepartmental Committee was formed, consisting of delegates appointed by Secretaries of the Navy, War, Commerce and from the Federal Trade Commission and the Council of National Defense. As a result, considerable progress has been made toward arriving at, first, a more satisfactory form of cost-plus contract and, second, a clear definition of what elements should be permitted to be charged to cost of work done for the Government.

The manufacturing contracts entered into about this time, the cost and payment provisions of which were prepared by S and A under the

direction of the Secretary and in conjunction with the bureau of Ordnance and the Solicitor, are a step toward a contract which establishes a community of interest between the Government and the contractor, in that the profit is not a percentage on cost, increasing as the cost increases, but is a fixed sum per unit. Under such conditions it is to the contractor's advantage to prosecute the work expeditiously in order sooner to realize his profits, this being to the advantage of the Government in the matter of deliveries and also in the lower costs that are likely to accompany rapid turnover.

It has been the policy to recommend that, wherever practicable, an estimated cost be agreed upon in order that a complete community of interest may be established by increasing the profit up to a certain maximum or decreasing it down to a certain minimum through the sharing by the contractor and by the Government of gains or losses in actual cost as compared with the estimate. In cases where the manufacturers are undertaking a line of work which is new to them, the fixing of a satisfactory estimated cost is, however, difficult if not impossible.

In entering into a cost-plus-percentage contract or into a cost-plus-fixed-profit contract where the profit is fixed on the basis of a percentage on estimated cost, it is becoming more and more evident that several elements—chief of which is the rapidity of turnover—must be taken into consideration. Otherwise the profits, supposedly fixed on a reasonable basis, may be exorbitant or unreasonably low when measured as a return on investment in plant, inventories and working capital. Ten per cent on cost will result in some cases, due to the rapidity with which the article can be turned out, in 100 per cent per annum return on investment or even more; and conversely, when the turnover is slow, it may be and frequently is much less than 10 per cent per annum return on investment.

In addition to return on investment, it is necessary to give consideration to the element of reward for enterprise. This element of profit is most clearly evident in cases where the Government has furnished the plant and equipment to contractors having the requisite experience and organization, there being in such cases no plant investment on which to measure a return.

Progress has been made in eliminating controversial elements in determining actual cost under cost-plus contracts. One of the most controversial—and one concerning which the ideas of the average manufacturer are somewhat hazy—is depreciation. A provision to the effect that the Government will pay "a reasonable allowance" for depreciation (a phrase borrowed from the munitions tax law) is likely to lead to controversy and litigation. But if a valuation of the plant can be agreed upon in advance, not based on present abnormal reproductive values but representing actual or approximate first cost, and a fair annual percentage can be agreed upon for the two principal classes of property involved, i. e., buildings and machinery and equipment, these difficulties are eliminated. This policy is now being followed in the preparation of manufacturing cost-plus contracts.

In the manufacturing contracts it has been specifically provided that Federal income and excess profits taxes are not to be regarded as a part of the cost. Inasmuch as these taxes are by their nature an assessment on net profits realized after all deductions have been

made for manufacturing expenses and inasmuch as the tax-making power conferred upon the Government by the Constitution presumably can not be nullified by a contract entered into by an executive department, it appears doubtful whether, even were the contract silent on the subject, a manufacturer could recover these items as a part of the cost. In order, however, that the department might be specifically protected against any such claims and also in order that the manufacturer might be under no misapprehensions as to the intent of the contract, it seemed advisable that this point be specifically covered. In cases where it was represented that the scale of profit should be made larger in order to cover these items, it was pointed out that an indirect refund of taxes was deemed to be just as much beyond the power of the department as a direct and specific refund of them and just as much in contravention of public policy.

If a contractor is allowed the scale of profit paid to a manufacturer who not only operates but owns a plant and working assets, interest and rent are not allowed as a part of cost under the manufacturing contracts, the procurement by the contractor of the necessary plant and working capital being a matter antecedent, in essence even if not in point of time, to the awarding of compensation on the dual basis. Engineering concerns in entering into cost-plus commonly accept a smaller scale of profit than concerns which in addition to performing services provide a plant. Where a manufacturer can not provide his own plant and working assets, but is receiving the higher compensation based on furnishing those things, he must hire a plant and working capital out of his profits. That element of profit, in other words, which is return on investment goes to the owner whether he be also the manufacturer or a landlord or a banker; a contractor is not entitled to return on an investment which is not his.

In the development of the manufacturing contracts and the system of cost inspection thereunder, S and A has endeavored to protect the Government in the broadest way, while at the same time facilitating in every way the prompt execution of the work and the prompt payment of the contractors' bills. To accomplish this, much more is being done than merely to establish a sound definition of cost, important though that be, and to verify the contractors' actual expenditures thereunder. An effective oversight of methods of purchase under subcontracts has been established and while there is a limit to the extension of this sort of thing, it being manifestly impossible to follow each transaction back of subcontractors to the mines and the forests, contractors are required to show on every subcontract of their own that they have taken due precautions in the matter of obtaining competition and that, quality and deliveries being taken into account, the lowest bids were accepted. In the matter of labor, wage schedules are compared with prevailing rates and the actual application to the contract of labor claimed as a proper charge against it is verified by Government time checkers. Special care is also devoted to examination of the contractor's overhead charges. Similar methods are being used by the officers of the Pay Corps detailed as cost inspectors on new construction, acting jointly under S and A and the Compensation Board.

As part of the cost under certain manufacturing contracts, new facilities have been provided, the country being confronted in various lines with an absolute shortage of capacity. Agreements have been

made with the contractors whereby the Navy will be in a position to realize on these improvements after the war. In certain cases where fixed price contracts have been entered into, the estimated shrinkage in value of new capacities installed by the contractor to meet the requirements of the Navy has been amortized into the price of the product. In arriving at prices to be paid on numerous large fixed-price contracts, officers of S and A after going over manufacturers' cost records and estimates have been able to obtain voluntary reductions amounting in all to several million dollars. In certain cases provisions have been inserted providing for adjustments up or down to take care of changes in scale of wages and prices of raw material.

On account of indeterminate liability, trouble and expense of cost inspection and the possibility of disputes and litigation, even the best possible form of cost-plus contract is less satisfactory to the Government than a straight purchase and sale contract on reasonable terms. When a manufacturer comes to a realization of the fact that the Government will not pay excessive profits, one of the main obstacles to the free negotiation of a fixed price contract on reasonable terms is removed. The next obstacle exists in the fact that under a fixed price contract with a comparatively narrow margin of profit the contractor may need a larger allowance for protection against increased labor and material costs than the Government feels free to agree to on a fixed basis. Under simple methods of manufacture where such increases can readily be shown by an occasional audit, a fixed price contract may be entered into at a reasonable figure but with a clause providing for price adjustments. Where conditions are more complex, a cost-plus contract with continuous audit for the protection of the Government is practically unavoidable. It is also unavoidable in cases where the contractor is entering upon a new line of work and is unable to make a close estimate of cost.

When the contractor and the Government are unable to agree on the amount or on the percentage of profit, not only is the free negotiation of a fixed price contract impracticable but the cost-plus contract is also debarred and recourse must be had to the authority conferred by recent legislation to place an order at a price deemed fair by the Government. As one party to an arrangement of this sort is presumably acting under compulsion, its disadvantages from the standpoint of community of interest are obvious. This method of placing contracts on a "Navy Order" has other disadvantages due to the fact that it leaves the final price subject to determination by the courts, which will involve not only expense and trouble of litigation but also a series of retroactive adjustments. As an example of the complexity of such adjustments may be cited a case where the Government procures material on a Navy Order, furnishes it to a manufacturer who in turn furnishes a fabricated article to a shipyard building ships on a cost and percentage basis.

Final recommendations have been submitted to the Secretary of the Navy on the navy yard cost accounting system (including proposed shop rates for eight of the industrial yards) whereby the principles approved during the past three years may be placed in full effect. By the adoption of these rates, it is intended that the navy yards will be put on a comparable basis with each other and with private

plants and that the expenditures for overhead, insofar as they represent the capacities of the plant taken up by the work engaged upon, will be reflected in the costs.

An accountability for these expenditures will thus be established and an incentive furnished to the yards for economical prosecution of their work. The end to be served is not simply to find out the cost of work but thereby to get more and better output per dollar, since a proper system of daily and monthly cost reports furnishes the chief and practically the only comprehensive survey of operations whereby a large plant may be effectively administered.

A common conception of accounting is that it is something entirely academic; its importance to efficient administration not being generally understood.

The highest developed phase of accounting is the system covering the manufacturing, shipbuilding and repair operations of the industrial yards. Its greatest importance in war time is essentially the same as in peace time, viz., not as an academic report on cost of a job (for in war time cost in itself is secondary) but as a guide to the distribution of labor in a large plant so that inefficiencies may be corrected, work systematically controlled and more output secured. The Accounting Department is the intelligence branch of the Industrial Department and is essential to efficient shop management.

The old governmental idea of accounting has been that it is routine bookkeeping after the fact, with no vital connection with administration. This runs counter to all civilian experience; and to-day there is being developed a system intended to furnish administrative officers of navy yard plants an efficient instrument of control similar to those at the command of the management of great private plants. The whole object of the present development in industrial accounting is to supply a vital part of management which has been sorely needed. With the new system based on methods of work instead of on bookkeeping theories, accounting officers have to have a special and practical knowledge of shop conditions, utilities and processes. In time of stress the experienced man should therefore be retained. There will be a greatly increased strain on the accounting departments, requiring capable supervision, ingenuity and expert knowledge; and, in order that the cost system may not fail the Industrial Department at the time for which it—in common with all other naval activities—exists, it is the intention that the experienced accounting officers not be replaced unless absolutely unavoidable.

The same thing applies to the improvements in the system which are under way. They are all designed to make the Accounting System a more effective, practical tool of administration and are not merely old style bookkeeping methods to be cast aside in time of stress. Their prompt development is even more essential now than during peace times. For that reason, it is the intention to proceed as before with the orderly development and application of these features. The connection between some of the details and war may seem remote at times; but there is a connection in that their sole object is always to improve and render more efficient.

The unusual, if not indeed unprecedented, rise in the cost of nearly all staple articles of food during the year has of course been directly reflected in the cost of the Navy ration which, for 1917, was \$0.438 as against \$0.37648 for 1916.

An important factor in this unusual increase in the cost of the ration was the commissioning of hundreds of patrol boats and submarine chasers for duty in the Naval Coast Defense Districts; for which vessels—owing to the small number of men living aboard, their unfamiliarity with naval methods and the necessarily inadequate galley and messing facilities—an unusually large allowance for subsistence had to be made.

While, however, the average cost of the ration increased about twenty per cent over the preceding year, statistics compiled by the Department of Labor show that there was an increase of about forty per cent in the wholesale prices of the principal items of food; so that, had the cost of the ration increased proportionately with the rise in the food market, it would have cost approximately a million and a half dollars more to feed the Navy than it actually did—somewhat over four thousand dollars a day.

This was accomplished by the rigid enforcement of the regulations prohibiting the purchase of patent and proprietary foods, by closely scrutinizing all reports of the survey of provisions rendered unfit for use to the end that wherever possible all causes for loss would be eliminated by inquiry into every case where ships operating under the same conditions showed a marked difference in the cost of the ration, by the preparation of such items as cakes, pies, ice cream etc. on board ship rather than the purchase of the higher priced manufactured articles and by the exercise of care in the purchase of provisions generally to the end that all items might be purchased when they are most plentiful and when, therefore, the market is the most advantageous.

In administering the Commissary Department of the Navy, the element of cost is, except in so far as relates to the economical purchase of provisions, merely a by-product—the Revised Statutes governing the quantities of the various items which may be issued to each man in the naval service being taken as the guide rather than the cost. In other words, every effort has been made to the end that, without regard to cost, the men of our Navy might continue to be—as the Surgeon General has stated they are—“The best fed body of men in the world”.

The need for maintaining the standard of food for the enlisted men was covered by Intra-Bureau Order 202 of 31 July 1917:

Particular attention is invited to the following paragraphs quoted from Intra-Bureau Orders 33 and 52 of 25 September 1914 and 10 November 1914, respectively:

Because adequate and satisfactory subsistence is the very foundation not only of real efficiency but of discipline itself, there is no class of purchases for the Naval service that needs to be more constantly watched than provisions—our men being no “poison squad” but human beings and American citizens for whom we stand in the relation of trustee in so far as relates to the question of food. It is therefore directed that every effort to try on the Navy any experiments or tests of any food product whatever shall be promptly suppressed.

* * * * *

No provisions will under any circumstances be accepted if there be the least question as to purity or nutritive value—it being constantly borne in mind that doubtful food is bad food and will be treated as such.

These orders were promulgated in peace-time to keep the men contented and in the best possible physical condition against the time when

the Navy might be put to the test. That time is now at hand; and it becomes imperatively necessary that the greatest care be exercised by all concerned to the end that food procured for the Navy shall comply in every particular with the very letter of the specifications as determined by rigid and inflexible inspection.

The Surgeon General of the Navy has repeatedly stated and the people of the United States confidently believe that the American Navy is the best fed body of men in the world.

The only way to continue to deserve that confidence is to watch every ounce of food that is delivered and to unconditionally reject anything concerning which there could be the least possible question.

This was followed by Intra-Bureau Order 212 of 22 August 1917:

For some time past the number of unsolicited modifications proposed to be made in specifications for provisions for the Navy has progressively increased—a good many people appearing to labor under the impression that the Navy is only just beginning to experiment along commissary lines.

While just the opposite is fairly well known to be the fact, it seems not amiss to state here a few details, to the end that there may be no possibility of misunderstanding of this most important subject.

The present specifications have been adopted after years of experience and after free consultation with the Medical Officers of the Navy from the bureau of Animal Industry of the Department of Agriculture and every other intelligent source of information known to be disinterestedly working solely for the best interests of the United States—every effort from any other source being accorded scant consideration or none at all.

Wherever commercial packages could be adopted, they have been; and, when standard specifications in common use on shore could be used without lowering the quality of the food, such action has usually been taken. But, due to climatic causes and comparatively warm storage spaces and various other circumstances, conditions in the Navy are vastly different from what they are almost anywhere else; and it requires constant and the most critical watchfulness to insure that, whenever any change is made, the same must be in the direction of standardizing up and not unionizing down.

It is accordingly directed that no modification of any specifications having any reference whatever to any article of provisions for the Navy shall hereafter be even considered until (or, rather, unless) the same shall have been submitted to and shall have received the sanction of the Paymaster General of the Navy in person.

The necessity for (what are considered by some) the unusually rigid requirements of the Navy specifications with respect to the type of packages is shown by the following quoted from the weekly bulletin of the Food Administration which bulletin was published after the issuance of the foregoing Intra-Bureau Order:

There is a large waste of food in railroad shipments due to defective packages, which are damaged in transit and spill their contents. The Pennsylvania Railroad issues a loss and damage bulletin regularly, showing how barrels and crates break, causing loss of vegetables, how casks leak and lose their liquid contents, and how small shipments of vegetables in packages are damaged by coming in contact with heavy freight.

As was to have been expected, there have been innumerable importunities for changes in the Navy specifications for provisions; and the usual efforts to force all kinds of experimental near-foods on the Navy have been made.

An effort was also made to have the Navy use more poultry than ordinarily, the reason given being that there is now about five times as much poultry in storage as there was the same time last year. The answer to this was that, if the poultry had not been kept in storage for speculative purposes, there would not be so much there now and that the solution is to release this to the public who are

justly entitled to it at reasonable prices rather than have the Navy take it at somewhere near its present fictitious figure.

In order to provide the proper place for the storage of non-perishable provisions, the pier at the foot of 35th Street, Brooklyn, has been leased and is being used for this purpose. This pier is about one-third of a mile long and is the longest pier in the world. It will berth nine supply ships at one time.

The pier is a model of neatness and orderliness, the provisions thereon being stored in four sections, each section complete with respect to the components of the Navy ration; so that, if four supply ships were loading there at one time, it would only be necessary to berth the ships alongside of the pier opposite the respective sections. Since the outbreak of the war, supply ships have been loaded at this pier at the rate of one every three weeks.

Standard provision lists have been adopted for destroyers and submarines. These lists are authentic guides for Commanding Officers of these vessels in fitting out for sea with provisions so symmetrically assorted as to enable them to remain away from all sources of supply for the maximum time possible.

The sudden increase in the enlisted strength of the Navy from 64,000 prior to the outbreak of the war to its present strength of over 217,000 in all branches presented many problems with respect to the question of clothing.

The war plans called for clothing for a total strength of 90,000 men; and, owing to the limited storage facilities, it was impracticable to keep on hand more than 22,000 outfits. This number, however, would have taken care of the total expected strength and the additional outfits needed could have been procured in a very short time; but the question of clothing over 200,000 men was a totally different matter.

In order to meet the demand, the Clothing Factory at Charleston was put on a two-shift basis of ten hours each and a temporary structure in which to operate more machines was erected. Just when it was thought, however, that the Charleston Factory would be able to take care of the needs for white and dungaree garments—the only garments now being manufactured there—complications arose concerning the employment of operatives; and, whereas there were accommodations for about 1500 operatives at Charleston of which only 800 had already been taken on, no more could be employed even to fill vacancies, so that, with the Factory running at about half its capacity, the expected supply of clothing was cut down 50 per cent. In order to meet this unexpected turn of affairs, large contracts were made with outside firms for the manufacture of white and dungaree clothing.

The use of the immigration building at Charleston has now been obtained from the Department of Labor and this building will be fitted with the necessary machines and operated as an adjunct of the Clothing Factory. In this way it is hoped to keep the Clothing Factory at Charleston in existence. But recent developments make it appear doubtful as to whether even this expedient will settle the question in accordance with Civil Service rules and regulations.

The Factory at New York which, as has been pointed out at various times before, is a factory in name only and is really but a place where clothing is cut and inspected, was totally unable to provide the required quantity of blue clothing. Consequently, it has been

necessary to have the bulk of this clothing manufactured by outside concerns—the material in most cases being furnished by the Government in order to insure the proper standard of quality.

The greatest obstacle in the way of promptly supplying the necessary clothing was the difficulty experienced in obtaining raw materials, the purchase of raw wool for subsequent manufacture into blue clothing having had to be resorted to in order to insure the necessary supply of this material and assist in securing cloth at reasonable prices; and, needless to say, the prices of cloth of all kinds have steadily continued to rise. This did not mean added expense to the Government but to the enlisted personnel because the higher the cost of material, the higher the cost of the finished garments and the higher, therefore, must be the issuing price in order that the Clothing Fund—which by law is self-sustaining—may be reimbursed.

No special winter outfit for use of the deck force had been adopted prior to the outbreak of the war for the reason that in ordinary peace times the Fleet spent most of the cold months in the West Indies and the issues of what is ordinarily known as heavy clothing were very limited, the men seeming to prefer to wear light clothing as much as possible.

When, therefore, the first division of destroyers was sent to European waters, it became necessary to provide them with special clothing and they were furnished with heavy fleece-lined coats in addition to the regular outfit of rain clothes and rubber boots.

The bureau of Navigation has decided upon an outfit to consist of extra heavy woolen underwear and socks, a blanket overshirt with hood, a windproof suit with hood, a pair of heavy woolen mittens, a pair of heavy leather seaboots for destroyers and a pair of heavy arctics for vessels other than destroyers. Contracts have been awarded for these articles and they are now being delivered to vessels as required—Congress having appropriated the necessary money to cover their cost and having also materially increased the Clothing and Small Stores Fund to take care of the increased stocks of clothing which must be provided and habitually carried in store.

In addition to the special heavy clothing just referred to, special outfits consisting of an imitation leather jacket and breeches, wind and water-proof, a helmet cap of the same material, a pair of gauntlet mittens of the same material, an inner suit of oxford gray wool close-fitting jacket and breeches, a pair of six-clasp arctic overshoes, a pair of laced leather boots, two suits of extra heavy wool and cotton underwear and two pairs of extra heavy woolen socks have been authorized for issue to submariners; and the necessary steps taken to procure them. Aviators' clothing of an approved design is also being purchased for issue to ships or aviation units as required.

All of the special type clothing will be issued to the men free of charge for their use as long as they are engaged upon duty exposing them to the elements and where clothing other than the regular uniform type is needed.

The Regulations regarding the ships' stores have been rigidly enforced with the result that losses and the accumulation of dead stock have materially decreased. As all losses are charged against the profits derived from the sales—which would otherwise be available for the entertainment of the enlisted personnel—it will be seen that this results in a direct benefit to the men.

The statute under authority of which ships' stores are operated was always construed to limit the operation of these stores to ships; but, in view of the necessity for the establishment of stores at the various new stations which have been opened up since the beginning of the war, the question was submitted to the Solicitor as to whether or not such ships' stores may legally be operated on shore and the profits derived from sales therein be expended for the entertainment of the enlisted force. The Solicitor expressed an opinion to the effect that such procedure is legal provided the articles sold in these stores are limited to those prescribed by the Regulations for ships' stores. General authority has therefore been granted Commandants and Commanding Officers of Yards, Stations and Districts for the establishment of ships' stores wherever necessary.

Commissary stores are now operated at practically all of the navy yards, from which all officers and enlisted men—including those of the Coast Guard, National Naval Volunteers and Reserve Force—may purchase supplies for their personal and family use—the privilege of these stores having recently been extended also to the families of officers and enlisted men who are away at sea or on foreign duty.

The lack of naval auxiliaries has been seriously felt; but various steps have been taken to remedy this difficulty by commandeering merchant vessels of the tanker type and by fitting up for cargo purposes a number of interned vessels. As the war goes on, it is evident that there must be some centralized agency to control American shipping if we are to obtain the maximum efficiency out of the tonnage afloat and building.

The transportation of supplies to the Allied Governments in the way of ammunition, food, fuel and other munitions is a military proposition. The placing of all vessels of American registry under Government control with naval officers in command and naval crews to operate them would increase at one stroke the military patrol of the sea. The Paymaster General has urgently advocated one Governmental agency under which should be pooled all shipping. It matters not whether this question be handled by a pool committee, a ship-control commission or a board on sea transportation—the principle of a centralized Government control remains the same. Matters of chartering, loading, shipping, allocating tonnage and discharging would be materially simplified and, at the same time, the interests of the Government and the interests of the ship owner better served and protected.

Early in June an advance payment of \$2.33½ per long ton was named as the most reasonable cost to apply to bituminous coal under the conflicting and indefinite information then available—the price to be subject to review by the Federal Trade Commission. The Fuel Committee of the Council of National Defense had named a figure of \$2.95 per ton at the mine. Later, the Federal Trade Commission investigated the cost and, upon approval of the President, determined that the price should be per long ton for Navy standard steaming coal at the mine:

Pennsylvania.....	\$2.24
Maryland.....	2.24
Virginia.....	2.24
West Virginia.....	2.24
West Virginia (New River).....	2.408

In the matter of oil fuel, an advance payment was determined upon at a unit figure of \$1.26 per barrel at Port Arthur and \$1.08 per barrel at San Francisco. The lowest bids submitted were 42 cents and 21 cents per barrel higher, respectively, for each port. In the same way, prices were fixed on gasoline from 1 cent to 2½ cents per gallon less than the lowest bids received from the refiners. These figures were arrived at more or less arbitrarily and were subject to later revision by the Federal Trade Commission; but the fixing of these low rates had the effect in the early stages of the war of determining the administration's policy against excessive profits. In the same way, prices were fixed at \$2.50 and \$2.90, respectively, on steel, subject to later revision by the Federal Trade Commission.

Special arrangements have been completed by which naval supplies for and repairs to naval vessels of the Allied Governments can be paid for on a net cost basis—this policy having been also agreed to for supplies for and repairs to vessels of our own service.

The lack of any commercial stocks of steaming coal at tidewater other than the comparatively small quantities on wheels passing over the piers makes it necessary for the Navy to be independent of strikes, wash-outs, tie-ups at the mines, shortage of coal due to unsettled business conditions or any one of the numerous other causes which might tie up or affect seriously the source of supply. Storage at the piers of suitable stocks of Navy standard steaming coal has been the answer.

Standard charter party forms for the trip basis, the bare ship basis and the time charter basis were adopted, special consideration being given to meeting all conditions of service, vessels lost, marine insurance and the like.

The commercial fuel facilities at home and abroad, with particular reference to gasoline, oil fuel and coal, at 95 ports were catalogued and the data includes storage plants, fuels used, sources of supply, character and capacity of plants, maximum and average quantities kept on hand, facilities for rapid coaling and floating equipment.

Special oil fuel investigations have been for various reasons at a standstill. The war is showing the national necessity for conserving the oil supply. Too much consideration can not be given to increasing the Navy storage, not only tank storage but reserve storage. The fleet a generation hence will be burning nothing but fuel oil; and its source of supply must be protected now. There is a tendency at the present time to disregard the demands of the future; but there will be too much of the nation's capital invested in the floating armed forces to follow any such short-sighted policy as has been advanced by the advocates of tapping the naval fuel reserves.

In order to encourage the development of the Matanuska coal fields by private enterprise—contingent on the coal produced being satisfactory for naval purposes afloat—the Navy Department guaranteed to the Department of the Interior the purchase of about 150,000 tons per annum; this quantity to be guaranteed during a period of not less than five years from the date on which the mining of coal from the Matanuska fields is actually begun, specific quantities not to be obligated after 30 June 1925 or such later date as may then be agreed upon. To enable the coal from this field to compete in the world's market with other coals, the question of cheapness has forced the Alaskan Engineering Commission to locate its main point of delivery from the Matanuska fields near the head of Cook's Inlet

at a port now called Anchorage, 75 miles by rail down grade from the mines. This project is entirely commercial and in no way commits the Navy Department to select the port of Anchorage as a base for coaling, particularly as that port is closed by ice for some months in the year and is not, within the meaning of the law, an "open harbor." The port of Seward would be far preferable from the Navy point of view in that it is open the year around and is advantageously located as regards labor supply.

It was recommended that the Alaskan Engineering Commission proceed with the development of Seward as a terminal for general traffic and for the delivery of coal for naval purposes, unless there be insuperable engineering difficulties in the plan of delivering coal for the Navy at Seward.

The price to be paid for such coal as is delivered, plus expenses incident to delivery into vessels and cost of transportation alongside Pacific Stations, is not to exceed the cost to the Navy of the coal transported from Atlantic range ports to those stations in naval colliers; the price accepted to be determined, if practicable, as a result of competitive bidding.

In the case of the first 25,000 tons delivered under this agreement, the Navy Department will accept the coal at the price agreed upon, provided it is of a quality not inferior to 5 per cent less efficient than the coal tested on the *Maryland* 7 November to 18 November 1914; the remainder of the coal supplied to be of a quality equal to that furnished for the *Maryland's* test or to be subject to a proportionate reduction in price and the results obtained from the first year's supply are to determine whether deliveries of this coal will be accepted.

The Logistics Committee, consisting of representatives of the several individual bureaus, did noteworthy work throughout the year and was one of the primary means of increasing the stocks of much needed military supplies. The Committee inquired into sources of supply of a large number of important items of which great quantities are required by the fleet and yards; the accumulation of reserve stocks and increased storage facilities. From the moment the first meeting was held, it was obvious that a means had been devised of solving a great many vexed questions—particularly along the line of possible overlapping and duplication of effort. Unlimited discussion and unbroken harmony resulted in a spirit of cheerful co-operation invariably exhibited by the representatives of all the bureaus concerned; and the progressively valuable work of the Committee accomplished much toward real preparedness.

As early as March 1917 a special set of instructions was prepared covering the operations of supply in the Naval Coast Defense Districts, these being as flexible as possible. It was found necessary to make the Naval District Supply Departments more or less self-supporting to relieve the congestion in, and the excessive demands on, the navy yards. Stocks were therefore authorized at the district base outside the navy yard, from which point it has spread out to, or accumulated at, the section bases. Contract material has, of course, been secured when possible; but miscellaneous items have been obtained by the local District Supply Officers by purchase in the open market on approved requisitions.

The following Intra-Bureau Order 151, issued 1 March 1917, pointed out the necessity for contractors and others transacting business through correspondence rather than by personal visits:

In these busy days all our time is required to handle necessary public business; and we need every uninterrupted moment we can possibly get.

To be sure, access to the building is to a certain extent restricted by existing rules which require identification and written permit; but, at that, we must carefully conserve our time in order to properly handle the increased and constantly increasing volume of government work.

It therefore becomes necessary to recur to Intra-Bureau Order 54 of 13 November 1914 which reads as follows (the reasons for enforcing which order are now far stronger than ever before):

To read the average official letter, look up the subject matter and prepare a proper answer will occupy less than one-fourth of the time required to talk over the same matter during a personal interview—with, in the latter case, no record thereof except two varying and more or less unreliable *exparte* memories.

A business caller (official, quasi-official or unofficial) usually arrives full of his side of the question and is apt to catch the other person comparatively unprepared, whereas it is the visitor's convenience and not the other's that fixes the time (and, unfortunately, in many cases the duration) of the interview.

Nearly everybody is given to saying things on which considerably more thought would be expended before the same would ordinarily be put down in "black and white"; and yet the record of every transaction in the bureau of Supplies and Accounts is and from the very nature of things ought to be committed to writing before it is through with.

While, therefore, every reasonable consideration will continue to be shown representatives of firms having business with the Navy, it will be courteously pointed out whenever appropriate (and this after politely listening to a brief outline of the matter in question) that authentic official action can almost always be expedited and at the same time be made a matter of permanent record by writing a letter instead of coming in person; but this is not intended to apply to the hour for the opening of bids, at which time the business public is invited and welcome to be present and to personally witness and watch all that goes on.

While tact and discretion will be exercised in each individual case, every person in the bureau of S and A who has occasion to deal with persons from outside the building will hereafter keep on his desk a supply of copies of this order—ready to hand one to any outsider who needs it and to courteously stress the fact that in general communications are far more satisfactory to all concerned when reduced to writing.

The American Railway Association, composed of representatives of the railroads of the country, has established various commissions and committees with headquarters in Washington to cooperate in the expeditious movement of material in which the Government is interested, including shipments for the Government and its contractors and their subcontractors. Due to measures adopted by the American Railway Association, Navy business is being materially facilitated regardless of car shortage and congested traffic conditions.

Prior to the outbreak of hostilities when traffic conditions became congested and Navy consignments were delayed on account of embargoes issued by the various railroads, it was ascertained that the law required roads to give preference to Government consignments in time of war or threatened war only. Steps were then taken for the prompt acceptance of government consignments in time of peace by incorporating a suitable provision in the Naval Appropriation Act for the fiscal year 1917. Under the present law, carriers

are required to accept promptly and move consignments moving to agents of the United States Government. It was subsequently found that consignments were not always quickly accepted and, if accepted, delays sometimes occurred *en route*. The Navy Shipping Envelope was then devised and adopted. This envelope—in which the railroad way bill is placed and which has now been adopted by various other Government Departments—provides for through continuous movement of carload consignments moving to officers or agents of the Government. To provide for expeditious movement of less than carload consignments, the American Railway Association has upon request of S and A instructed the various roads to insert on way bill the words "United States Freight—Expedite".

To admit of the adoption of advance measures for placement of cars in instances where heavy consignments are involved, arrangements have been made with the American Railway Association to furnish that association, as soon as a contract is made, with what is known as a "Contract Certificate" whenever more than ten cars will be required to move a consignment from a given point at a stated time or at very close intervals. In the event of failure on the part of the contractor to secure the required number of cars, he is furnished with a "Car Order" which, under instructions issued by the American Railway Association, results in the prompt supply of suitable equipment from another road, provided equipment is not available on the line of the initial carrier.

The presentation of the Navy shipping envelope to the initial carrier results in prompt acceptance of consignment. The envelope in which the railroad way bill is placed accompanies the consignment from shipping point to destination, being in the hands of railroad operatives continuously—thereby insuring personal attention to each consignment.

Notwithstanding the increase in volume of work from 28 per cent in the Allotment Section to 7900 per cent in the Reserve Section, the Disbursing Division has had no unpaid bills on hand on the last day of any month.

The following comparative statement shows the rapid increase of work in the Disbursing Office, which in turn furnishes a fair index to the increased activities throughout the Navy:

	Total number of vouchers paid.	Total number of allotments paid.	Total number of reservists accounts.	Daily average number of public bills remaining on hand.	Total disbursements.
1916.					
July.....	2,578	17,156	470	33	\$4,726,143.02
August.....	2,796	17,202	510	20	4,307,394.43
September.....	2,870	17,008	510	4	5,223,452.08
October.....	4,036	16,639	510	3	5,631,541.08
November.....	4,353	16,273	560	12	5,856,103.57
December.....	3,884	15,990	600	24	5,633,376.83
1917.					
January.....	4,336	16,498	656	12	7,213,139.49
February.....	3,994	17,106	1,489	7	7,005,635.97
March.....	5,089	18,015	5,498	32	9,427,439.98
April.....	5,179	18,378	16,022	36	11,318,171.88
May.....	5,593	19,932	28,342	11	16,244,007.02
June.....	5,876	21,915	33,994	13	18,820,417.90
Grand total.....	50,634				101,406,873.25

are available for immediate assignment to duty the more will the efficiency of the Navy's supply system be assured.

In view of the wide competition on this examination, it was thought that the successful candidates would be well qualified for appointment to the regular Navy and, accordingly, the following circular letter was issued by the Secretary of the Navy 25 July:

On the thirty-first of October, every officer under whom Assistant Paymasters of the Naval Coast Defense Reserve are serving or have served at any time previous thereto will submit to the Department a report showing in detail the duty upon which such officer has been engaged and the manner in which he has performed this duty, together with a specific statement as to whether it would be for the best interests of the Naval Service to transfer such officer to the regular Pay Corps or to retain him as a Reservist or to disenroll him.

These reports will show the age of the officer reported upon, the period covered by the report and the estimate of the reporting senior of his value to the Navy with special reference to general conduct and bearing, attention to duty, executive ability, initiative, punctuality, neatness and responsiveness.

In order that the merits of the several officers reported upon may be intelligently compared, each reserve officer will be graded by the reporting senior in each of the subjects just enumerated on the basis of 10 as perfect—no fractions being used but great care being exercised to the end that the most useful reservists may be selected from comparison of these several reports.

In the event that any officer reported upon has at any time exhibited a tendency toward intemperance or lack of interest in his work or carelessness in the matter of promptly discharging financial obligations or in any other respect deported himself in a manner which might call into question his acceptability as an officer of the Navy, the reporting senior will specifically mention the same and make his recommendation accordingly.

The reports hereinbefore described will be forwarded promptly at the end of the period reported upon and will be accompanied by a special health report to be furnished by the Medical Officer.

All these papers will be submitted to a Board of three commissioned officers of the Pay Corps of the regular Navy not below the rank of Lieutenant Commander to be convened in Washington December 10, 1917, which Board will carefully compare the records of all officers reported upon and recommend for commissions as Assistant Paymasters in the regular service the 39 (or more) officers reported upon whose records show them to be the best qualified for appointment to the regular service; appointments to be apportioned as near as may be to the States in proportion to population.

A comparison of the reports of the senior officers under whom the several officers of the Naval Coast Defense Reserve have been serving will constitute the mental, moral and professional examination required by section 1379 USRS; the physical test consisting of an examination of the several health records hereinbefore referred to.

Of the officers recommended by the Examining Board in the order of comparative merit, such number will be appointed Assistant Paymasters as are needed to fill all vacancies then existing in the Pay Corps of the regular Navy—such appointments to be made from among the Reservists recommended and who are between the ages of 21 and 26 as required by the Revised Statutes.

The Naval Examining Board, in deciding upon which of these candidates shall be appointed to the regular service, will consider one thing only: Their value to the naval service based on demonstrated worth.

In every case where a Reserve Pay Officer is recommended for disenrollment or reduction in rank, the reasons therefor will be stated in detail and a copy furnished the officer concerned for such statement as he may care to make.

In order that all may have a fair and equal chance and that there may not be any misunderstanding on this subject, a copy of this letter will be furnished at the earliest possible moment to every officer of the Naval Coast Defense Reserve Pay Corps.

The immediate expansion in S and A that was necessary at the outbreak of the war was accomplished by the enrollment of female yeomen who could be taken on at once and without the formalities required by the Civil Service rules. The value of the services rendered by these Reservists cannot be overestimated; and, from the standpoint of the Navy's supply system, the Naval Reserve Force has been an unqualified success.

As was stated by the Paymaster General in his remarks to the graduating class of the Naval Pay Officers' School 29 September 1917:

The bureau of Navigation has rendered such preeminent service to the establishment of which I am the head that I do not exaggerate at all when I assure you that the efficiency of the Navy's entire supply system would have been seriously impaired if it had not been for the support given by Admiral Palmer and his Bureau in providing reservists at the time when the sudden expansion of our work was greatest and when it was utterly impossible to obtain civil service employees to do the added work.

The Naval Pay Officers' School has been in practically continuous session during the year; the largest class, consisting of 125 newly-appointed officers, has just graduated and another session for the instruction of Assistant Paymasters of the Naval Reserve Force started immediately thereafter.

Through the courtesy of the rector, the buildings of the Catholic University of America have been secured for the use of the school; and, as the student officers are quartered and messed within the limits of the school, they are at all times under the supervision of the Officer in Charge and his Assistants.

The strictest military discipline is maintained and the students are allowed to leave the University grounds Saturday night and Sunday morning only.

The instruction comprises all phases of the work which these young men will be called upon to do and the course qualifies them to perform such duties as may be assigned them.

Bearing constantly in mind the fact that the Navy is afloat and that the shore establishment exists only for the fleet, particularly that part of the fleet which is now on the firing line, the following Intra-Bureau Order was issued 26 July 1917:

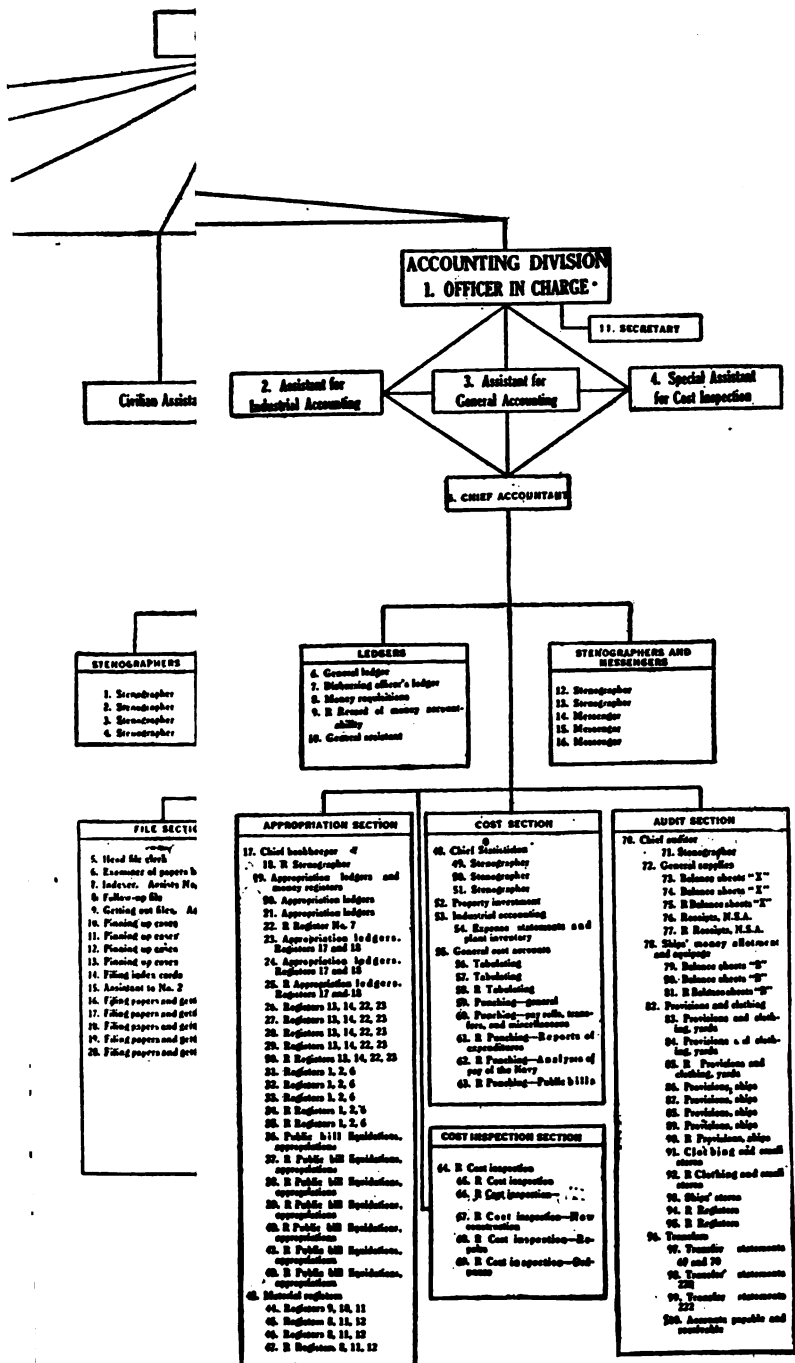
Requisitions, requests and recommendations from Vice Admiral Sims, Senior Naval Officer in Command in Europe, are to be acted upon the same day they are received and, unless there be some insurmountable obstacle, in exact agreement with his wishes; that is to say: when I properly have any discretion in the premises, it is to be understood that that discretion has already been exercised when Admiral Sims' wishes become known.

Advice of action taken will be immediately cabled to Admiral Sims in every case.

I am aware that, almost without exception, the foregoing rule has been in effect ever since Admiral Sims went abroad; but the necessity for instant action and unconditional support of everything that he does or wants to do is so obviously important that this order is issued to the end that immediate and favorable action may hereafter be invariable.

SAMUEL MCGOWAN.

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THE PAYMASTER



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PRINCIPAL ITEMS.

Amount appropriated by Congress for the fiscal year 1917.....	\$1, 356, 119, 436. 35
Total expenditures during 1917.....	<u>261, 403, 176. 52</u>
Fleet maintenance and operating expenses:	
Operation.....	59, 950, 911. 97
Repairs to ships.....	8, 775, 448. 51
Alterations.....	5, 979, 975. 36
Repairs to equipage.....	<u>982, 420. 96</u>
Total.....	<u>75, 688, 756. 80</u>
Expenditures for construction of vessels:	
Battleships.....	20, 531, 621. 94
Gunboats and fuel ships.....	736, 890. 00
Destroyers.....	5, 173, 617. 64
Submarines.....	9, 929, 815. 86
Tenders and tugs.....	<u>8, 486, 835. 70</u>
Total (at navy yards, \$11,256,660.75; under contract, \$33,602,120.39).....	<u>44, 858, 781. 14</u>
Expenditures for pay and allowances of officers and men:	
Navy.....	56, 643, 643. 89
Marine Corps.....	<u>5, 267, 687. 44</u>
Total.....	<u>61, 911, 331. 33</u>
Cost of subsisting the enlisted men of the Navy and marines.....	8, 931, 415. 36
Average cost of subsisting 1 man for 1 day.....	.43+
Cost of maintenance of navy yards.....	<u>32, 095, 682. 50</u>
Cost of output of industrial yards:	
Labor.....	22, 664, 259. 84
Material.....	29, 500, 180. 44
Indirect expense.....	<u>5, 532, 042. 79</u>
Total.....	<u>57, 696, 483. 07</u>
Value of new and reclaimed materials received into store.....	130, 334, 060. 06
Value of materials consumed or otherwise finally expended.....	<u>88, 880, 075. 51</u>
Property investment of Naval Establishment:	
Ships.....	592, 840, 412. 78
Stations.....	221, 252, 598. 68
Stores.....	<u>181, 044, 158. 71</u>
Total.....	<u>995, 137, 170. 17</u>
Expenditures for Naval Militia.....	<u>1, 216, 914. 81</u>
Present value of clothing and small-stores fund:	
Stock.....	4, 844, 133. 64
Money.....	<u>10, 737, 961. 39</u>
Total.....	<u>15, 582, 095. 03</u>
Total expenditures for the Navy, 1794 to 1917, inclusive....	<u>3, 628, 563, 768. 29</u>

Statement 1.—COST OF THE NAVY, 1917.

	Expenditures, July 1, 1916, to Mar. 31, 1917.	Expenditures, Apr. 1 to June 30, 1917.	Total expendi- tures, July 1, 1916, to June 30, 1917.	Additions and betterments.	Maintenance and operation.
Ships.					
Title A. New construction of vessels (see Statement 3).....	\$23,294,411.84	\$21,554,399.30	\$44,858,781.14	\$44,858,781.14	
Title B. Equipment afloat (see Statement 15).....	9,054,517.36	3,297,960.75	12,352,478.11	12,352,478.11	
Title D. Repairs to vessels (see Statement 5).....	5,548,404.60	3,227,043.91	8,775,448.51		
Title K. Alterations to vessels (see Statement 6).....	3,310,500.01	2,669,475.35	5,979,975.36		
Title P. Repairs to ships' equipment (see Statement 7).....	617,636.71	384,784.25	992,420.96		
Total repairs, changes, and additions.....	38,068,043.87	21,882,863.40	59,950,911.97		\$75,688,756.80
Total maintenance and operation of vessels.....					
Shore Stations.					
Title E. Improvements to navy yards (industrial).....	2,119,152.85	2,992,446.95	5,111,599.80		
Title R. Improvements to navy yards and stations (military).....	1,907,205.60	1,590,166.21	3,497,371.81		
Total improvements to yards and stations (see Statement 8).....				8,608,971.61	
Title G. Maintenance of navy yards (industrial).....	13,203,576.16	6,183,948.67	20,137,544.83		
Title S. Maintenance of navy yards (military).....	6,706,888.70	3,472,880.66	10,178,969.36		
Total maintenance charged to titles G and S (see Statement 9).....			30,316,514.19		
Plus amount charged as indirect expense to titles E and Z, Marine Corps, special de- pots, other Government departments, and expenses of auction sales (see Statement 16).....	1,100,013.92	679,154.39	1,779,168.31		
Less total amount applied as indirect expense to cost of output of industrial yards (in- cluding work done for nonindustrial yards) (see Statement 2).....	3,480,739.24	2,054,332.24	5,535,071.48		26,660,611.02
Miscellaneous.					
Title X. Supplies in store—net increase for year ending June 30, 1917.....	17,619,261.27	20,855,433.61	38,474,714.88		
Title Z. Manufacturing work in process—net increase for year ending June 30, 1917.....	5,014,576.69	2,607,769.62	7,622,346.31		
M. C. Marine Corps stores—net increase for year ending June 30, 1917.....	1,007,632.00	1,458,399.02	2,466,031.02	48,563,092.21	
Title V. Net increase in stores June 30, 1917, over July 1, 1916.....	17,159,618.78	14,357,519.69	31,517,138.67		
M. C. General administration expenses (see Statement 16).....	4,918,947.76	9,710,940.10	14,629,787.86		
Pay and maintenance of the Marine Corps.....					
Total miscellaneous.....	683,574.49	692,866.41	1,376,440.90		44,770,485.63
Less checkages pay rolls for ships and stations, including deductions from pay on account naval hospital fund (\$124,674.59) and fines and forfeitures (\$698,733.08).....					147,019,853.45
Net total miscellaneous.....					114,383,323.07
Total expenditures for the NAVY, fiscal year 1917.....	146,485,699.09	114,917,477.43	261,403,176.52		

Statement 2.—TOTAL COST OF THE NEW NAVY.

Fiscal years.	New construc- tion.	Maintenance and operation of the fleet.	Shore-station improvements.	Shore-station maintenance.	Less amount of yard mainte- nance charged to new ships, etc., as indirect ex- pense.	Charges for the Naval Estab- lishment in general, not assignable to specific ships or shore stations.	Marine Corps.	Total expendi- tures.
1884.....	\$2,320,000.00	\$3,813,040.57	\$440,000.00	\$1,743,912.17	.....	\$6,394,344.63	\$581,304.07	\$17,292,601.44
1885.....	1,591,000.00	5,651,431.00	301,000.00	1,685,429.48	.....	6,216,574.70	565,076.67	16,021,076.67
1886.....	2,057,340.80	4,304,618.77	339,000.00	1,381,385.63	.....	5,065,080.65	480,481.89	13,907,867.74
1887.....	2,595,861.00	4,867,868.32	375,595.00	1,490,360.49	.....	5,354,555.15	496,796.84	15,141,126.80
1888.....	3,920,000.00	4,542,026.46	1,401,364.00	1,392,608.63	.....	5,106,232.40	464,202.96	16,926,437.65
1889.....	3,807,291.83	6,558,144.59	1,176,156.00	1,967,443.37	.....	7,213,959.05	655,814.47	21,378,809.31
1890.....	4,842,140.55	6,296,735.20	1,646,106.73	1,808,708.46	.....	6,801,091.58	611,423.77	22,006,206.24
1891.....	8,508,624.65	9,967,700.67	1,612,111.37	2,094,557.08	.....	6,236,384.92	694,517.77	26,113,896.46
1892.....	10,841,890.30	7,117,634.42	2,149,141.21	2,198,977.12	.....	6,017,892.28	29,174,138.98	29,174,138.98
1893.....	11,164,536.34	7,049,792.53	1,411,661.92	3,551,569.74	.....	6,094,001.56	864,532.34	30,136,084.43
1894.....	12,549,924.88	7,255,148.77	1,435,902.72	3,608,681.56	.....	6,104,540.17	31,701,283.79	31,701,283.79
1895.....	10,450,211.55	7,681,676.50	964,706.17	3,316,861.14	.....	5,573,467.18	801,873.19	28,797,796.73
1896.....	7,745,957.56	8,317,891.84	1,396,404.33	3,767,827.42	.....	5,185,284.47	747,098.69	27,147,782.58
1897.....	10,738,549.92	10,012,296.38	1,167,470.66	3,902,306.73	.....	7,908,913.04	832,016.57	34,561,646.29
1898.....	22,182,326.85	14,952,649.03	1,129,008.04	4,979,549.91	.....	14,600,280.33	980,170.64	58,823,984.80
1899.....	9,994,456.61	20,740,784.65	3,132,297.87	7,436,438.36	.....	14,780,040.41	1,589,992.14	63,942,104.26
1900.....	10,659,153.35	15,890,268.91	5,252,054.57	7,841,566.34	.....	13,797,182.55	2,364,903.66	55,933,077.72
1901.....	10,644,217.87	19,387,265.99	7,756,334.80	7,871,771.18	.....	15,532,698.11	61,721,696.05	68,438,301.84
1902.....	14,392,921.77	20,294,704.45	8,221,092.05	7,683,137.29	.....	16,170,897.31	2,869,679.97	104,126,192.84
1903.....	21,907,999.53	24,987,263.38	9,220,294.49	7,683,137.29	.....	24,865,618.46	3,633,697.76	109,726,096.46
1904.....	31,403,948.81	27,870,477.87	11,461,733.43	9,951,044.13	.....	23,965,618.46	4,837,929.96	195,362,144.07
1905.....	36,994,266.87	34,291,860.42	9,599,183.09	11,111,080.81	.....	25,022,660.44	5,974,058.72	210,433,474.71
1906.....	31,764,556.88	29,206,260.42	7,459,310.08	12,801,640.55	.....	23,965,618.46	6,200,227.61	182,427,094.80
1907.....	17,553,017.20	34,291,860.42	8,229,274.03	13,646,511.52	.....	23,965,618.46	6,200,227.61	182,427,094.80
1908.....	20,109,911.45	36,989,852.36	9,741,199.95	15,822,339.81	.....	23,965,618.46	6,200,227.61	182,427,094.80
1909.....	20,109,911.45	45,271,941.71	8,229,274.03	15,822,339.81	.....	23,965,618.46	6,200,227.61	182,427,094.80
1910.....	24,736,569.47	46,460,042.68	8,014,768.44	16,822,339.81	.....	23,965,618.46	6,200,227.61	182,427,094.80
1911.....	19,532,506.20	48,781,622.30	10,534,466.23	17,890,945.94	.....	23,965,618.46	6,200,227.61	182,427,094.80
1912.....	24,680,490.79	49,242,028.07	9,862,719.50	17,890,945.94	.....	23,965,618.46	6,200,227.61	182,427,094.80
1913.....	24,680,490.79	49,154,035.12	7,448,152.29	17,890,945.94	.....	23,965,618.46	6,200,227.61	182,427,094.80
1914.....	24,680,490.79	55,410,710.14	7,916,746.26	17,890,945.94	.....	23,965,618.46	6,200,227.61	182,427,094.80
1915.....	21,860,664.22	65,410,710.14	7,916,746.26	17,890,945.94	.....	23,965,618.46	6,200,227.61	182,427,094.80
1916.....	21,860,664.22	65,410,710.14	7,916,746.26	17,890,945.94	.....	23,965,618.46	6,200,227.61	182,427,094.80
1917.....	41,568,781.14	66,117,532.51	8,117,827.44	23,086,562.50	.....	23,965,618.46	6,200,227.61	182,427,094.80
1918.....	41,568,781.14	66,117,532.51	8,117,827.44	23,086,562.50	.....	23,965,618.46	6,200,227.61	182,427,094.80
1919.....	41,568,781.14	66,117,532.51	8,117,827.44	23,086,562.50	.....	23,965,618.46	6,200,227.61	182,427,094.80
1920.....	41,568,781.14	66,117,532.51	8,117,827.44	23,086,562.50	.....	23,965,618.46	6,200,227.61	182,427,094.80
Total.....	569,172,628.18	847,864,861.10	176,865,020.21	310,996,638.96	30,480,868.13	605,740,108.00	103,016,592.60	2,580,265,476.61

Statement 3.—NEW CONSTRUCTION.

No.	Ship.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.	Total expenditures to June 30, 1917.
	BATTLESHIPS—FIRST LINE.							
	Total.....	\$5,164,121.17	\$1,305,312.85	\$4,710,708.88	\$33,602,120.39	\$16,427.85	\$44,898,781.14	\$171,310,708.84
30	Florida.....	110.28					110.28	8,983,865.74
34	New York.....	1,541.47	310.72	567.64	7,349.35		2,419.83	9,788,174.50
35	Texas.....	2,241.54	487.12	967.10	263,183.41		11,076.43	9,832,142.49
36	Nevada.....	68,157.33	18,039.33	39,183.41	263,183.71		378,513.78	10,051,690.50
38	Oklahoma.....	138,415.11	39,264.83	61,432.02	336,740.84		626,852.80	10,136,210.73
39	Pennsylvania.....	71,968.94	21,408.94	51,694.96	241,073.76		386,146.40	11,996,282.52
38	Arizona.....	628,048.15	145,923.69	939,053.17	60,708.81	13.25	1,364,651.97	11,182,032.66
40	New Mexico.....	1,706,394.65	441,123.38	1,694,166.41	890,913.93		4,662,601.37	8,735,255.63
41	Mississippi.....	260.68	81.33	548.21	2,786,377.36		2,791,521.81	9,611,171.24
42	Iowa.....	194.89	48.31	339.72	1,240,182.56	4,215.23	1,245,062.96	9,136,922.76
43	Tennessee.....	142,682.22	25,166.60	172,762.61	3,117,014.28	4,315.47	3,467,544.62	3,473,837.71
44	California.....	167,156.19	36,491.77	230,652.46	3,158,880.96		3,563,210.38	3,694,470.00
45	Colorado.....				453,212.01		453,212.01	463,212.01
46	Maryland.....				1,000,813.97		1,000,813.97	1,007,813.97
47	Washington.....				85,824.70		85,824.70	85,824.70
48	West Virginia.....	18.14	6.10		472,039.76		472,039.76	472,039.76
75	No. 1.....				15,865.85		15,865.85	15,865.85
76	No. 2.....				7,183.46		7,183.46	7,183.46
77	No. 3.....				7,183.46		7,183.46	7,183.46
78	No. 4.....				7,183.46		7,183.46	7,183.46
135	No. 4.....				199,000.00		199,000.00	199,000.00
	BATTLE CRUISERS							
265	Allen.....	10,285.12	3,206.75	9,904.20	97,333.95		120,700.02	802,781.63
271	Amman.....	26.02					31.20	655,491.76
246	Avwin.....	3,254.22	995.57	1,223.25	5,473.05		5,473.05	800,968.97
248	Barnham.....	2,011.27	543.17	51	2,597.81		2,597.81	783,509.06
269	Caldwell.....	134,219.94	33,640.48	138,684.35	507,000.00		339,236.88	396,889.57
272	Conner.....	67.65	20.33	621.69	32,792.11		61,951.44	507,609.57
253	Corryghan.....	7,977.49	2,662.81	3,488.02	47,923.23		61,951.44	914,313.82
270	Cruvan.....	69,934.25	18,029.70	64,757.69	21,322.11		154,043.80	154,043.80
250	Cushing.....	12,071.08	3,415.68	3,967.73	40,987.20		60,487.20	907,410.34
265	Davis.....	11,330.46	3,334.06	14,317.98	102,062.95		131,065.48	813,065.58
254	Downes.....	7,439.48	2,439.65	2,620.47	4,587.49		12,499.60	748,067.53
242	Duncan.....	6,760.91	2,148.63	2,738.55			16,235.63	822,320.01

Statement 3.—NEW CONSTRUCTION—Continued.

No.	Ship.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.	Total expenditures to June 30, 1917.
DESTROYERS—continued.								
256	Erickson.....	\$2,350.27	\$504.27	\$634.24	\$5,452.00		\$8,940.78	\$882,114.16
255	Fanning.....	1,121.23	203.64	13.14			1,338.01	643,725.77
271	Gwin.....					\$297.63	133,047.63	133,047.63
226	Hanley.....	41.28	10.23	.01			51.52	683,924.75
257	Jacob Jones.....	5,823.63	1,859.90	1,934.69	7,696.00		17,314.21	830,756.85
227	Jarvis.....	13.46	4.61	79.79			97.86	651,528.60
228	Jenkins.....	64.22	16.69	15.66			96.57	665,875.30
274	Manly.....				615,680.00		615,680.00	703,600.00
245	McDougal.....	5,140.25	1,454.95	1,099.93			7,695.13	855,756.30
251	Nicholson.....	1,908.22	471.07	739.54	27,142.40		30,261.23	876,573.67
252	O'Brien.....	10,632.55	3,532.55	4,339.72	26,782.76		44,715.98	881,703.99
249	Parler.....	1,172.67	344.27	117.60			1,634.54	790,552.24
233	Patterson.....	12.51	12.51	63.75			108.35	647,816.01
235	Perkins.....			2.56			2.56	615,134.77
258	Perler.....	5,523.43	1,835.80	2,683.46	12,936.18		22,978.87	870,388.69
264	Rowan.....	5,976.80	1,875.33	7,590.18	59,991.00		76,569.19	792,005.07
243	Sampson.....	9,979.67	2,660.73	8,987.82	59,447.30	132.88	80,527.70	802,427.93
268	Shaw.....	198,176.56	47,562.76	117,110.80	863.86	52.18	363,713.98	678,336.96
273	Stockton.....	51.59	15.51	519.92	597,000.00		597,587.02	549,837.02
249	Tucker.....	7,875.09	2,667.18	3,433.98	37,638.25	120.23	51,734.73	890,327.29
260	Wadsworth.....	2,051.86	543.27	3,804.93			6,923.53	914,608.49
261	Wainwright.....	6,254.29	2,060.47	5,400.05	64,520.45		78,235.26	840,465.57
241	Warrington.....	4.48	1.55				6.03	676,476.31
267	Wilkes.....	10,307.16	2,606.39	7,650.69	179,137.25		199,701.49	809,505.09
253	Winslow.....	4,684.28	1,229.76	1,739.44	25,368.28		33,321.75	875,038.54
276	No. 75.....				115,000.00		115,000.00	115,000.00
278	No. 76.....				115,000.00		115,000.00	115,000.00
277	No. 77.....				115,000.00		115,000.00	115,000.00
278	No. 78.....				115,000.00		115,000.00	115,000.00
279	No. 79.....				97,048.75		97,048.75	97,048.75
280	No. 80.....				97,048.75		97,048.75	97,048.75
281	No. 81.....				97,048.75		97,048.75	97,048.75
282	No. 82.....				97,048.75		97,048.75	97,048.75
283	No. 83.....				97,048.75		97,048.75	97,048.75
284	No. 84.....				97,048.75		97,048.75	97,048.75
285	No. 85.....				97,048.75		97,048.75	97,048.75
286	No. 86.....				97,048.75		97,048.75	97,048.75
287	No. 87.....				97,048.75		97,048.75	97,048.75
288	No. 88.....				97,048.75		97,048.75	97,048.75
289	No. 89.....				97,048.75		97,048.75	97,048.75
290	No. 90.....				97,048.75		97,048.75	97,048.75
291	No. 91.....	3,783.32	1,041.51	5,466.66	13,000.00		23,291.49	24,132.81
292	No. 92.....	3,489.02	965.09	6,661.70	26,987.92		38,103.81	26,987.92
293	No. 93.....				26,987.92		26,987.92	26,987.92
294	No. 94.....				26,987.92		26,987.92	26,987.92
295	No. 95.....				26,987.92		26,987.92	26,987.92
296	No. 96.....				26,987.92		26,987.92	26,987.92
297	No. 97.....				26,987.92		26,987.92	26,987.92

Statement 3.—NEW CONSTRUCTION—Continued.

No.	Ship.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.	Total expenditures to June 30, 1917.
SUBMARINES—continued.								
370	O-11.....			\$432.14	\$218,000.00		\$218,522.14	\$218,522.14
371	O-12.....			432.14	218,000.00	\$90.00	218,486.14	272,986.14
372	O-13.....			272.73	218,000.00	54.00	218,272.73	272,772.73
373	O-14.....			272.73	219,400.00		219,743.11	247,168.11
374	O-15.....			272.73	219,400.00	70.38	219,672.73	247,097.73
375	O-16.....			272.73	219,400.00		219,672.73	247,097.73
378	R-1.....				66,200.00		66,200.00	66,200.00
379	R-2.....				66,200.00		66,200.00	66,200.00
380	R-3.....				66,200.00		66,200.00	66,200.00
381	R-4.....				66,200.00		66,200.00	66,200.00
382	R-5.....				66,200.00		66,200.00	66,200.00
383	R-6.....				66,200.00		66,200.00	66,200.00
384	R-7.....				66,200.00		66,200.00	66,200.00
385	R-8.....				66,200.00		66,200.00	66,200.00
386	R-9.....				66,200.00		66,200.00	66,200.00
387	R-10.....				66,200.00		66,200.00	66,200.00
388	R-11.....				66,700.00		66,700.00	66,700.00
389	R-12.....				66,700.00		66,700.00	66,700.00
390	R-13.....				66,700.00		66,700.00	66,700.00
391	R-14.....				66,700.00		66,700.00	66,700.00
392	R-15.....				66,700.00		66,700.00	66,700.00
393	R-16.....				104,550.00		104,550.00	104,550.00
394	R-17.....				104,550.00		104,550.00	104,550.00
395	R-18.....				104,550.00		104,550.00	104,550.00
396	R-19.....				104,550.00		104,550.00	104,550.00
397	R-20.....				104,550.00		104,550.00	104,550.00
398	R-21.....				66,900.00		66,900.00	66,900.00
399	R-22.....				66,900.00		66,900.00	66,900.00
400	R-23.....				66,900.00		66,900.00	66,900.00
401	R-24.....				66,900.00		66,900.00	66,900.00
402	R-25.....				66,900.00		66,900.00	66,900.00
403	R-26.....				66,900.00		66,900.00	66,900.00
404	R-27.....				66,900.00		66,900.00	66,900.00
405	S-1.....	\$1,657.42	\$185.96	155.30	149,575.00		149,575.00	149,575.00
406	S-2.....	2,173.07	364.18	1,375.97			3,913.22	3,913.22
409	S-4.....	2,172.06	364.18	1,375.97			3,913.22	3,913.22
410	S-5.....	2,172.10	364.18	1,375.97			3,913.22	3,913.22
411	S-6.....	2,172.10	364.18	1,375.97			3,913.22	3,913.22
412	S-7.....	2,172.11	364.18	1,375.96			3,913.22	3,913.22
413	S-8.....	2,172.10	364.18	1,375.96			3,913.22	3,913.22
414	S-9.....	2,172.10	364.18	1,375.96			3,913.22	3,913.22

BUREAU OF SUPPLIES AND ACCOUNTS.

415	S-10.....	2,173.09	364.15	1,375.98	3,913.22	3,913.22	3,913.22
416	S-11.....	2,173.05	364.15	1,375.98	3,913.19	3,913.19	3,913.19
417	S-12.....	2,173.05	364.17	1,376.00	3,913.22	3,913.22	3,913.22
418	S-13.....	2,173.02	364.10	1,376.03	3,913.24	3,913.24	3,913.24
420	S-16.....			26.05	26.05	26.05	26.05
779	BRIDGE.....	254,150.86	83,339.58	152,479.54	86,602.00	576,571.98	1,228,134.58
790	AMMUNITION SHIP No. 1.....	13,190.97	1,140.49	1,435.77		15,767.23	15,767.23
785	BUSHNELL.....	6,292.90	2,146.26	6,111.38	40,964.70	55,506.24	973,926.54
782	FULCON.....	16.50	2.48	121.00	2,322.58	2,462.56	528,004.03
738	MELVILLE.....	9,735.04	3,415.95	7,498.75	61,945.15	82,599.89	1,558,442.85
624	CUYUNA.....	245,058.80	59,572.31	233,394.65	5,271.79	543,299.56	1,041,352.65
616	KANAWHA.....	1,174.48	311.35	342.70		1,828.56	975,460.83
617	MAUIA.....	60,054.82	13,336.89	13,399.77		86,794.09	1,247,423.70
623	NEPTUNE.....	2,808.87	856.15	3,539.88	2.61	7,204.90	914,545.55
625	No. 16.....	18,443.72	6,288.76	16,665.87	500.00	41,968.35	41,898.35
549	Peachontas.....	26,037.41	8,267.40	14,109.35		48,414.16	189,746.12
548	Wando.....	26,400.58	6,971.47	19,071.64		52,443.69	131,158.64
755	HENDERSON.....	371,617.57	113,094.83	278,876.79	866.11	764,445.30	1,523,092.22
676	SACRAMENTO.....				1,697.43	1,697.43	592,394.94
680	No. 21.....	20,746.29	3,708.88	29,713.94		54,167.11	54,167.11
802	HOSPITAL SHIP.....	26,199.09	4,844.17	17,657.10		48,200.36	48,200.36
999	Balloons.....				8,698.85	8,698.85	
997	Dirigibles.....				38,983.76	38,983.76	
997	Aeroplanes.....	14,291.25	7,629.40	52,619.82	665,335.90	739,876.37	
915	Patrol boats, etc.....	336,238.01	101,785.07	306,668.38	5,071,837.62	5,818,557.08	
	Total.....	5,164,121.17	1,366,312.85	4,710,798.88	33,602,120.39	16,427.85	171,310,768.84

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION.

[All expenses of receiving ship organizations, including pay and subsistence of men carried on recruit rolls, are charged to "The Receiving Ship," and not to the individual vessels acting as such.]

RECAPITULATION.

Class.	Num-ber.	Tonnage.	Average months in com-mission.	Total cost.	Average cost per vessel for 12 months.	Class.	Num-ber.	Tonnage.	Average months in com-mission.	Total cost.	Average cost per vessel for 12 months.
Battleships:						Transports	5	23,235	7.4	\$1,007,602.54	\$208,790.00
First line.....	17	435,450	9.18	\$13,244,420.45	\$1,018,409.87	Supply ships.....	9	33,900	9.8	949,535.60	232,939.32
Second line.....	23	298,146	3.7	11,057,913.78	1,559,282.76	Hospital ships.....	1	5,700	12	368,214.99	368,214.99
Armored cruisers.....	10	140,080	6	6,988,236.28	1,191,647.26	Fuel ships.....	23	287,790	10.9	3,509,408.08	167,981.16
Cruisers:						Converted yachts.....	15	6,568	5.33	669,515.96	100,490.16
First class.....	5	46,465	4	2,391,477.32	1,416,886.31	Tugs.....	49	20,591	17.14	1,344,182.17	19,205.81
Second class.....	4	25,065	4.5	1,186,149.67	790,766.71	Special type.....	8	45,904	10.5	1,977,991.38	282,570.19
Third class.....	16	50,820	6.9	3,973,688.23	431,922.60	Unserviceable for war pur-poses.....	21	42,991	3.4	1,048,866.48	176,280.00
Monitors.....	9	32,944	5.9	1,291,989.45	291,975.00	Miscellaneous vessels.....				11,413,204.39	
Destroyers.....	53	47,866	8.5	6,451,685.67	171,853.92						
Submarines.....	56	.....	8.4	2,694,024.51	68,726.11						
Coast torpedo vessels.....	34	9,841	5.1	1,875,277.46	159,776.88						
Tenders to torpedo vessels.....	8	31,827	6.75	1,644,803.73	343,269.72						
Gunboats.....	29	26,173	8.41	3,066,054.01	152,333.59						

No.	Name of vessel.	Title C.			Total operating expenses.	Repairs and alterations to ships, including equipment.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including commuted rations.	Stores issued, including provisions and medical stores.						Full commission.	Commission in reserve.
	Total.....	\$37,781,020.01	\$1,077,317.66	\$21,463,820.08	\$60,922,157.76	\$16,102,084.40	\$77,024,242.15				
BATTLESHIPS—FIRST LINE.											
26	South Carolina.....	446,176.99	7,375.78	208,660.63	662,242.39	162,326.81	824,569.20	16,000	Mar. 1, 1910	12	
28	Michigan.....	446,504.48	10,536.76	220,103.59	677,044.83	158,527.87	835,572.70	16,000	Jan. 4, 1910	12	
28	Delaware.....	508,087.64	8,308.31	228,675.31	784,674.54	228,675.31	1,013,349.85	20,000	Apr. 4, 1910	12	
29	North Dakota.....	324,482.17	2,171.87	146,862.84	486,516.88	112,592.53	599,109.41	20,000	Apr. 11, 1910	3	9
30	Florida.....	524,081.60	9,268.57	358,568.68	891,898.85	129,880.81	1,021,729.66	21,825	Sept. 15, 1911	12	
31	Utah.....	501,781.01	7,716.03	299,910.65	799,407.69	119,507.50	918,915.19	21,825	Aug. 31, 1911	12	
32	Wyoming.....	630,899.17	24,096.14	362,753.66	1,007,748.97	115,550.56	1,117,299.53	28,000	Sept. 25, 1912	12	
32	Kansas.....	565,610.49	10,374.62	269,421.19	835,406.30	210,678.07	1,046,085.37	28,000	Sept. 17, 1912	12	
34	New York.....	690,170.31	10,694.84	284,530.69	885,196.84	64,159.80	949,356.64	27,000	Apr. 16, 1914	12	
37	Texas.....	651,466.37	9,180.41	268,437.10	854,073.88	88,778.40	942,852.28	27,000	Mar. 11, 1914	12	
35	Nevada.....	684,457.68	7,983.83	360,638.40	953,059.91	88,778.40	1,021,838.31	27,500	Mar. 11, 1914	12	
36	Oklahoma.....	686,632.26	86,888.69	373,772.76	979,283.63	51,217.67	1,030,511.30	27,500	May 2, 1916	12	
38	Pennsylvania.....	651,543.11	16,009.48	345,638.64	1,010,191.13	48,286.40	1,058,477.53	31,400	June 12, 1916	12	
39	Arizona.....	442,341.05	6,308.98	307,358.13	756,606.16	29,283.38	785,889.54	31,400	Oct. 17, 1916	9	
40	New Mexico.....	116,109.49	1,090.28	1,090.28	117,267.25	12.61	117,269.86	32,000			
41	Mississippi.....					12.61	12.61				
42	Idaho.....					12.61	12.61				
BATTLESHIPS—SECOND LINE.											
1	Indiana.....	16,085.40	5,632.32	18,104.99	39,822.71	11,715.01	51,537.72	10,288	Nov. 20, 1895		
2	Massachusetts.....	3,592.49	28.78	22,141.68	26,760.95	64,433.98	41,184.93	10,288	June 15, 1896		
3	Oregon.....	143,946.57	5,042.57	123,732.04	272,552.18	68,517.13	341,068.31	10,288	July 16, 1896		9
4	Iowa.....	7,132.36		2,820.69	9,973.05	24,463.10	34,376.15	11,946	June 16, 1897		3
6	Kearney.....	232,412.20	2,553.41	97,860.24	332,335.95	29,181.27	358,513.22	11,920	Feb. 20, 1900		9
6	Kentucky.....	223,064.97	7,894.00	99,062.53	329,536.50	73,221.31	402,777.81	11,920	May 15, 1900		9
6	Illinois.....	253,961.41	9,888.79	119,618.40	379,788.90	66,463.14	478,254.04	11,920	Sept. 16, 1900		9
7	Alabama.....	221,267.47	3,068.56	100,469.63	325,315.66	64,697.59	389,973.25	11,920	Oct. 16, 1900		9
8	Wisconsin.....	236,824.81	3,324.84	115,439.54	355,335.49	64,697.59	420,033.08	11,920	Dec. 29, 1900		9
9	Maine.....	249,004.38	7,793.90	106,249.21	352,307.27	61,538.08	413,845.35	12,500	Dec. 29, 1902		9
10	Missouri.....	249,004.38	140,792.63	90,792.63	329,497.04	37,816.32	367,313.36	12,500	Dec. 1, 1904		7
11	Ohio.....	260,030.29	4,693.82	140,792.63	329,497.04	37,816.32	367,313.36	12,500	Dec. 1, 1904		7
12	Virginia.....	151,461.64	3,313.86	108,992.72	260,388.22	369,932.42	629,320.64	14,948	July 7, 1907		9
16	New York.....	267,634.10	4,511.60	108,992.72	381,138.73	151,323.71	532,462.44	14,948	July 7, 1907		9
18	Georgia.....	127,121.78	1,130.21	118,163.04	246,417.03	498,976.48	745,393.49	14,948	Sept. 24, 1908		9

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Title C.				Total operating expenses.	Repairs and alterations to ships, including equipment.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including committed rations.	Stores issued, including provisions and medical stores.	Full commission.						Commission in reserve.	
BATTLELINE—SECOND LINE—continued.												
17	New Jersey.....	\$242,268.67	\$5,042.67	\$124,720.45	\$872,031.79	\$158,727.18	\$530,758.97	14,948	May 12, 1906	3	9	
18	Rhode Island.....	288,190.97	5,046.39	134,504.59	427,741.95	137,766.15	565,508.10	14,948	Feb. 19, 1906	3	9	
20	Connecticut.....	443,378.49	5,643.17	241,624.58	690,546.24	167,914.32	858,560.56	16,000	Sept. 29, 1906	3	9	
21	Louisiana.....	289,534.30	4,855.51	149,101.97	443,491.87	267,370.30	710,862.17	16,000	June 2, 1906	6	6	
27	Vermont.....	212,626.92	7,000.15	190,846.42	389,473.49	156,473.03	535,946.52	16,000	Mar. 4, 1907	3	9	
21	Kansas.....	297,462.21	6,804.15	183,079.80	427,546.16	274,541.86	701,888.02	16,000	Apr. 18, 1907	3	9	
24	Minnesota.....	373,589.93	5,911.64	174,969.08	554,470.65	298,181.76	840,652.41	16,000	Mar. 9, 1907	3	9	
25	New Hampshire.....	303,183.82	5,997.24	199,614.50	478,706.56	212,486.09	691,280.65	16,000	Mar. 19, 1908	6	6	
ARMORED CRUISERS.												
127	Frederick.....	275,174.83	5,422.44	157,629.45	438,226.70	167,337.18	625,563.88	13,680	Apr. 18, 1905	3	9	
130	Huntington.....	291,067.56	6,283.52	190,069.97	487,411.06	148,351.13	635,762.18	13,680	Feb. 23, 1905	5	7	
131	Memphis.....	369,317.94	82,699.75	60,062.71	142,762.46	36,988.02	179,450.48	14,500	July 17, 1906	12	.....
132	Montana.....	144,704.05	4,876.44	162,563.78	336,753.16	84,753.16	621,511.62	14,500	July 21, 1906	.....	.....
133	North Carolina.....	338,454.07	5,574.91	137,828.46	361,107.43	235,522.46	696,629.89	14,500	May 7, 1905	5	.....
134	Pittsburgh.....	215,546.52	12,929.13	227,049.82	576,073.45	101,793.96	677,872.13	13,680	May 9, 1905	5	7	
135	Pueblo.....	442,007.50	7,867.29	278,077.57	721,942.86	184,966.44	906,494.91	13,680	Jan. 9, 1905	3	9	
136	San Diego.....	190,176.26	4,268.81	186,167.79	360,542.85	147,654.71	508,207.57	13,680	Aug. 1, 1907	10	2	
139	South Dakota.....	367,181.79	6,348.86	190,664.88	564,215.53	138,507.04	702,722.57	14,500	Aug. 27, 1906	3	9	
124	Seattle.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
CRUISERS—FLEET CLASS.												
121	Brooklyn.....	872,016.17	13,995.98	188,770.88	874,782.98	38,691.44	608,474.42	9,215	Dec. 1, 1906	12	.....
122	Charleston.....	135,483.98	7,175.06	178,050.82	299,681.82	51,054.77	420,418.45	9,700	Oct. 17, 1906	3	9	
123	Milwaukee.....	190,181.86	8,413.85	94,116.85	292,712.56	51,694.12	339,276.83	9,700	May 11, 1906	.....	.....
120	Saratoga.....	485,081.42	2,432.72	59,738.92	217,817.05	377,698.15	486,148.31	8,100	Aug. 11, 1893	2	10	
124	St. Louis.....	202,199.64	4,697.75	173,788.12	380,683.51	26,218.08	406,903.59	9,700	Aug. 16, 1906	3	9	
CRUISERS—SECOND CLASS.												
116	Chicago.....	107,242.33	2,142.83	132,848.88	242,294.54	69,199.02	311,433.12	4,500	Aug. 17, 1899	3	0	
118	Columbia.....	237,667.62	5,871.23	96,884.71	339,552.55	99,910.22	439,463.77	7,500	Apr. 23, 1894	12	.....
119	Minnesota.....	.....	.....	1,544.73	143,018.65	.....	144,463.38	7,500	Dec. 18, 1894	.....	.....
117	Olympia.....	106,599.97	4,018.90	70,300.38	180,919.25	119,700.15	300,619.40	6,965	Feb. 6, 1895	3	.....

CRUISERS—THIRD CLASS.		MONITORS.		DESTROYERS.	
111	Albaty.....	168,408.34	5,483.31	60,157.60	11,891.89
112	Birmingham.....	199,499.98	2,084.86	69,547.13	57,205.68
113	Charleston.....	180,874.48	2,884.89	107,878.83	83,971.04
114	Chattanooga.....	116,714.37	1,086.48	107,715.80	63,905.88
115	Chester.....	146,436.34	76,853.78	61,990.31	61,349.88
116	Cincinnati.....	174,172.80	5,571.11	118,956.07	36,435.16
117	Cleveland.....	107,609.21	87,518.82	55,732.11	97,322.32
118	Denver.....	149,183.73	2,191.41	134,816.82	41,500.25
119	Des Moines.....	174,172.80	9,478.12	120,048.68	64,891.31
120	Galveston.....	36,818.74	1,803.85	77,737.93	15,893.00
121	Marblehead.....	14,866.33	1,427.01	74,988.92	86,789.16
122	Montgomery.....	114,031.36	1,732.00	108,544.90	16,006.16
123	New Orleans.....	149,386.82	3,966.48	200,648.09	32,410.47
124	Salem.....	64,247.29	40,472.79	120,048.68	41,235.12
125	Tacoma.....	113,861.86	1,077.71	77,737.93	11,782.80
126	Tacoma.....	113,861.86	1,077.71	77,737.93	4,782.80
127	Tacoma.....	113,861.86	1,077.71	77,737.93	142,128.63
128	Tacoma.....	113,861.86	1,077.71	77,737.93	116,010.10
129	Tacoma.....	113,861.86	1,077.71	77,737.93	267,023.12
130	Tacoma.....	113,861.86	1,077.71	77,737.93	2,990
131	Tacoma.....	113,861.86	1,077.71	77,737.93	3,225
132	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
133	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
134	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
135	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
136	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
137	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
138	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
139	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
140	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
141	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
142	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
143	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
144	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
145	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
146	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
147	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
148	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
149	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
150	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
151	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
152	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
153	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
154	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
155	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
156	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
157	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
158	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
159	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
160	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
161	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
162	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
163	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
164	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
165	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
166	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
167	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
168	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
169	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
170	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
171	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
172	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
173	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
174	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
175	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
176	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
177	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
178	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
179	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
180	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
181	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
182	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
183	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
184	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
185	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
186	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
187	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
188	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
189	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
190	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
191	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
192	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
193	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
194	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
195	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
196	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
197	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
198	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
199	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
200	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
201	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
202	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
203	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
204	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
205	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
206	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
207	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
208	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
209	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
210	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
211	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
212	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
213	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
214	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
215	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
216	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
217	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
218	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
219	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
220	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
221	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
222	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
223	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
224	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
225	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
226	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
227	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
228	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
229	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
230	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
231	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
232	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
233	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
234	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
235	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
236	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
237	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
238	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
239	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
240	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
241	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
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246	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
247	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
248	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
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253	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
254	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
255	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
256	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
257	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
258	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
259	Tacoma.....	113,861.86	1,077.71	77,737.93	3,900
260	Tacoma.....	113,861.86	1,077.71		

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Title C.			Repairs and alterations to ships, including equipment.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including commuted rations.	Stores issued, including provisions and medical stores.					Full commission.	Commission in reserve.
DESTROYERS—continued.										
216	Flusser.....	\$42,203.64	\$6,262.49	\$33,755.10	\$42,491.57	\$126,712.90	700	Oct. 28, 1909	3	9
220	Henley.....	75,993.41	144.27	37,806.56	20,835.64	96,739.05	742	Dec. 6, 1912	12	12
227	Jacob Jones.....	66,463.88	244.52	47,719.39	114,437.79	125,343.89	1,150	Feb. 10, 1916	12	12
227	Jarvis.....	512.20	46,884.33	37,423.50	46,943.40	134,366.90	742	Oct. 22, 1912	12	12
228	Jenkins.....	35,984.73	306.55	31,848.20	68,139.48	119,015.95	742	June 15, 1912	12	12
229	Jouett.....	34,176.89	946.85	19,842.45	54,966.19	97,368.20	742	May 25, 1912	12	12
217	Lamson.....	38,738.35	174.19	37,256.37	79,318.15	155,487.06	700	Feb. 10, 1910	3	9
231	McCall.....	37,373.92	422.02	42,314.17	80,110.11	154,873.42	742	Jan. 28, 1911	12	12
245	McDougal.....	62,963.25	181.77	43,829.86	106,994.88	147,428.50	1,020	Jan. 16, 1914	12	12
230	Mayrant.....		1,195.61	1,195.61	6,953.02	8,148.63	742	Jan. 12, 1911	.....	.....
232	Monaghan.....	31,746.03	208.90	34,640.44	69,995.27	118,249.18	742	Jan. 21, 1911	3	9
231	Nicholson.....	64,054.12	52,787.21	17,237.87	51,653.91	118,249.18	1,060	Apr. 30, 1915	12	12
232	O'Brien.....	66,981.23	298.00	73,663.66	42,695.98	169,933.72	1,060	Apr. 22, 1915	12	12
249	Parter.....	64,860.41	8,583.88	29,314.42	107,758.71	148,896.43	1,036	Dec. 30, 1913	12	12
233	Patterson.....	32,797.35	186.78	25,309.59	58,292.69	70,201.18	742	Oct. 11, 1913	12	12
234	Pauding.....	39,690.73	149.88	33,963.29	73,663.90	117,313.98	742	Sept. 29, 1910	12	12
235	Perkins.....	30,506.23	130.25	11,284.23	41,560.71	93,757.98	742	Nov. 15, 1910	3	9
268	Porter.....	63,203.93	337.90	69,459.87	124,021.30	127,420.10	1,060	Apr. 17, 1916	12	12
218	Roston.....	37,245.14	614.28	37,659.42	34,674.60	110,246.53	700	Dec. 4, 1909	3	9
219	Raid.....	33,247.51	610.96	29,526.55	41,074.57	114,499.98	700	Dec. 3, 1909	3	9
234	Rowan.....	57,979.89	179.20	57,738.94	62,373.47	107,026.65	742	Sept. 17, 1910	12	12
234	Rowan.....	67,203.54	33.45	60,738.09	137,006.03	143,642.48	1,111	June 27, 1916	12	12
234	Rowan.....	7,203.54	23.10	60,738.09	2,924.11	32,442.40	1,110	June 27, 1916	3	9
236	Shannon.....	7,203.54	23.10	60,738.09	2,924.11	32,442.40	1,110	June 27, 1916	3	9
220	Smith.....	41,439.68	227.61	25,198.53	69,848.74	106,452.20	742	Apr. 26, 1909	3	9
227	Street.....	24,347.31	516.16	36,678.41	36,163.76	98,402.78	742	Nov. 13, 1910	3	9
228	Tracy.....	69,480.25	139.10	23,715.21	92,857.18	114,173.27	742	Oct. 13, 1910	12	12
229	Tyler.....	69,480.25	139.10	23,715.21	92,857.18	114,173.27	742	Oct. 13, 1910	12	12
269	Tyler.....	69,480.25	139.10	23,715.21	92,857.18	114,173.27	742	Oct. 13, 1910	12	12
260	Wedgworth.....	68,993.01	612.22	61,249.48	6,488.97	132,718.69	1,060	Apr. 11, 1916	12	12
261	Walker.....	66,245.83	264.70	29,458.70	17,143.84	134,152.94	1,060	July 23, 1916	12	12
240	Walwright.....	35,029.96	30.70	30,700.80	7,049.32	114,024.37	1,150	May 12, 1916	12	12
241	Walker.....	35,029.96	30.70	30,700.80	7,049.32	114,024.37	1,150	May 12, 1916	12	12
241	Warrington.....	40,914.54	116.00	31,896.80	41,231.19	112,281.04	742	Mar. 20, 1911	3	9
237	Wilkes.....	40,914.54	42.85	35,967.82	9,285.84	102,261.05	1,110	Nov. 7, 1915	8	8
233	Winlow.....	68,685.56	413.62	64,928.08	41,947.99	160,968.20	1,060	Aug. 7, 1915	12	12

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Title C.			Total operating expenses.	Repairs and alterations to ships, including equiptage.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including rations.	Stores issued, including provisions and medical stores.						Full commission.	Commission in reserve.
SUBMARINES—continued.											
352	N-2				\$122.89	\$200.39					
353	N-3	\$77.50			87.50	221.39					
354	N-4	98.50			122.89	1,001.56					
355	N-5				1,001.56	6.03					
361	O-2				18.28						
367	O-8										
COAST TORPEDO VESSELS— DESTROYERS.											
204	Bainbridge	\$42,570.63	\$33,022.96	\$53,022.96	75,919.56	56,435.58	132,355.14	420	Nov. 24, 1902	12	
205	Barry	40,496.26	40,834.98	81,219.35	81,219.35	21,583.63	102,802.98	420	Nov. 20, 1902	12	
206	Chauncey	48,869.53	36,344.71	80,790.71	80,790.71	26,373.13	107,153.84	420	Nov. 20, 1902	12	
207	Dale	42,892.80	28,089.21	71,400.22	71,400.22	46,208.93	117,609.15	420	Oct. 24, 1902	12	
208	Decatur	45,059.09	424.74	36,556.28	82,040.11	13,163.80	95,203.91	420	May 19, 1902	12	
202	Hopkins	29,633.38	247.83	29,884.68	59,765.89	34,198.32	93,964.21	408	Sept. 23, 1903	3	9
203	Hull	30,772.90	179.27	34,028.45	64,978.62	53,189.80	118,168.42	408	May 20, 1903	3	9
200	Lawrence	24,521.49	219.08	21,141.26	45,881.95	65,642.62	111,524.47	400	Apr. 14, 1903	3	9
201	Macdonough	26,852.83	265.45	26,852.83	38,094.76	18,675.33	57,370.09	400	Sept. 6, 1903	3	9
209	Paul Jones	33,018.53	342.43	37,263.35	70,646.31	13,727.36	84,376.67	420	July 19, 1902	6	6
210	Ferry	29,896.67	113.20	24,233.96	54,218.73	68,273.11	112,491.84	420	Sept. 4, 1902	3	9
211	Plebe	31,660.59	291.20	29,941.51	61,822.30	18,714.22	80,536.52	420	Jan. 21, 1902	8	4
212	Stewart	35,994.38	240.75	23,109.22	59,370.35	6,679.22	66,049.57	433	Dec. 17, 1902	8	8
213	Truxton	30,477.20	366.76	24,628.49	55,701.45	25,919.04	81,620.49	433	Sept. 21, 1902	4	8
214	Whipple	33,076.53	184.88	33,860.12	66,641.53	13,731.62	80,372.15	433	Oct. 21, 1902	4	4
215	Worden	24,707.29	176.75	15,168.77	40,062.81	20,049.10	60,131.91	433	Dec. 31, 1902	9	3
COAST TORPEDO VESSELS— TORPEDO BOATS.											
719	Begley	3,430.24		3,017.13	6,478.37	21,392.25	27,868.62	175	Oct. 18, 1901	3	9
728	Bailey	6,847.12		7,268.76	16,175.93	21,573.52	37,749.50	250	June 10, 1901	5	6
720	Barney		30.10	2,033.69	2,033.69	12,836.09	14,869.78	175	Oct. 21, 1901	3	8
721	Biddle	1,222.16		1,020.85	2,243.01	10,921.97	13,164.98	175	Oct. 26, 1901	3	9
722	Blaisley	4,263.28		5,460.18	9,768.46	17,498.04	27,266.50	196	Dec. 27, 1904	3	9
714	Dahlgren	1,051.98	144.50	2,081.28	3,267.66	12,551.18	15,798.84	146	June 16, 1900	5	7

788	De Long.....	2,282.14	2,687.91	4,800.05	10,919.41	15,800.46	196	Oct. 27, 1902	7	
717	Du Pont.....	6,110.27	7,400.92	12,370.18	20,305.20	32,584.50	165	Sept. 23, 1897	9	
719	Fargut.....	16,505.69	18,220.62	25,167.89	39,890.36	45,087.26	270	Mar. 22, 1899	0	
720	Fede.....	4,589.71	5,022.92	7,562.66	16,048.70	23,971.26	142	Aug. 7, 1897	3	
726	Goldborough.....		3,98	22,491.18	6,266.98	28,758.16	255	Apr. 9, 1918	9	
713	Morris.....	2,550.53	3,517.96	6,068.91	7,457.44	12,528.35	105	May 11, 1898	0	
711	Rodgers.....	1,123.58	4,843.96	11,702.90	10,476.75	23,170.65	142	Apr. 2, 1898	3	
724	Shubrick.....	10.00	3,065.94	6,255.74	6,370.08	12,635.82	200	Sept. 21, 1905	9	
715	Summers.....	387.98	770.96	1,138.80	2,267.28	3,428.15	150	Mar. 28, 1898	12	
725	Thornston.....		2,682.94	5,516.96	28,805.80	34,322.76	200	June 6, 1902	9	
718	Tiney.....		2,110.81	2,110.81	12,128.15	14,235.96	165	Jan. 7, 1904	3	
TENDERS TO TORPEDO VESSELS.										
780	Alert.....	99,471.04	82,038.84	162,966.81	7,235.72	170,205.53	1,110	Nov. 24, 1915	12	
735	Bushnell.....	112,314.72	96,350.58	202,212.46	13,142.36	215,354.82	3,560	Apr. 19, 1898	12	
737	Dillon.....	94,233.99	79,173.95	173,115.36	24,700.34	197,815.70	6,114	Dec. 7, 1914	3	
732	Furlo.....	266,992.84	66,566.17	331,266.92	16,054.24	346,321.16	1,408	Dec. 7, 1914	12	
736	Irish.....	13.80		9,413.11	9,413.11	9,413.11	6,100	Apr. 1, 1898	12	
738	Belville.....	237,066.02	5,364.94	339,719.94	46,377.65	385,977.59	7,150	Dec. 3, 1915	0	
850	Sautner.....	115,554.96	57,392.35	174,780.20	16,312.90	190,093.10	3,380	Apr. 22, 1898	3	
734	Pompey.....		19,927.36	19,927.36	9,853.36	29,512.72	3,080	May 26, 1898	9	
GUNBOATS.										
662	Annapolis.....	94,841.10	2,175.12	172,478.71	17,512.89	189,991.61	4,013	July 20, 1897	12	
650	Callise.....	83,170.34	1,611.37	138,092.65	26,948.84	163,631.40	1,277	July 31, 1898	12	
677	Cashin.....	102,678.81	3,551.72	182,570.37	29,570.84	212,141.21	1,456	Oct. 23, 1895	12	
667	Don Juan de Austria.....		9,411.97	14,594.05	30,759.13	45,349.31	1,180	Dec. 1, 1895	12	
669	Dubuque.....	97,048.61	1,311.63	140,119.14	10,103.53	157,220.70	1,085	Apr. 3, 1905	12	
678	El Canoe.....	128,438.85	16,883.68	214,894.32	33,189.90	251,084.22	1,620	June 20, 1902	12	
674	Helena.....	6,963.45	8,984.72	186,065.02	33,189.90	231,254.08	1,392	July 8, 1897	12	
676	Isle de Luzon.....	3,235.70	3,370.34	615.04	174.72	231,254.08	1,030	Jan. 31, 1900	12	
661	Macbias.....	74,474.74	2,668.88	116,346.25	33,387.89	149,724.14	1,177	July 20, 1893	12	
670	Marletta.....	36,921.86	2,841.83	60,857.74	77,026.23	127,893.97	900	Sept. 1, 1897	2	
651	Monocery.....	27,589.81	12,339.41	59,700.69	3,850.84	63,551.53	1,010	June 24, 1914	12	
673	Nashville.....	114,104.73	1,920.77	182,264.05	10,263.35	192,517.40	3,711	Oct. 5, 1897	12	
663	Newport.....	145,518.05	12,321.67	224,575.96	18,005.39	252,581.35	1,085	Sept. 2, 1905	12	
698	Pedreah.....	31,573.80	12,206.90	59,800.54	5,894.33	65,784.87	1,180	Sept. 24, 1914	12	
653	Palos.....	16,109.84	8,044.27	33,020.69	7,706.61	33,820.30	243	June 8, 1899	12	
654	Pampanga.....	9,269.56	6,706.86	17,187.32	1,541.45	18,728.77	800	Dec. 10, 1898	7	
659	Petrel.....	47,013.10	29,997.06	77,187.32	2,007.35	2,022.20	1,010	May 17, 1898	12	
664	Princeton.....	14.95		14.95	3,463.41	56,704.49	3,050	Mar. 14, 1900	12	
656	Quintos.....	35,044.68	8,426.70	12,859.70	6,331.08	17,445.20	1,261	Apr. 26, 1914	12	
672	Ranger.....	1,450.00	1,981.23	3,411.23	14,032.06	141,079.64	1,425	May 26, 1899	12	
676	Sacramento.....	69,259.97	52,483.83	124,027.65	3,179.91	29,743.57	100	Sept. 2, 1898	12	
655	Samar.....	13,412.21	5,286.71	26,283.66	8,179.91	34,463.57	243	Oct. 23, 1897	12	
650	Sandoval.....	13,412.21	5,286.71	26,283.66	8,179.91	34,463.57	243	Oct. 23, 1897	12	
665	Vicksburg.....	40,643.96	1,763.31	42,694.06	14,213.28	56,914.61	1,010	Mar. 5, 1900	3	
657	Villalobos.....	30,638.43	6,345.14	90,483.48	8,616.57	99,099.95	1,370	Mar. 5, 1900	12	

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Title C.			Total operating expenses.	Repairs and alterations to ships, including equipage.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including commuted rations.	Stores issued, including provisions and medical stores.						Full commission.	Commission in reserve.
GUNBOATS—continued.											
661	Wheeling.....	\$107,074.43	\$1,253.95	\$49,099.84	\$157,398.22	\$16,744.56	\$174,142.78	690	Aug. 10, 1897	12	
675	Wilmington.....	121,819.43	6,502.52	71,782.03	200,403.98	55,454.19	255,858.17	1,392	May 15, 1897	12	
679	Yorktown.....	112,350.60	1,706.50	80,127.94	194,138.04	51,663.13	225,761.17	1,710	Apr. 25, 1898	12	
TRANSPORTS.											
752	Buffalo.....	132,361.80	4,297.57	122,888.56	259,457.93	30,740.45	290,198.38	6,000	July 18, 1898	12	
750	General Alava.....	164,639.18	357.00	15,373.74	15,426.74	25,631.13	20,051.87	6,115	May 9, 1900	12	
754	Hancock.....	114,569.45	7,308.65	118,749.88	285,028.71	15,490.11	294,498.82	6,500	Nov. 20, 1902	12	
753	Henderson.....	132,357.97	5,367.31	5,668.90	135,728.53	15,205.30	145,054.13	10,000	May 24, 1917	1	
753	Franklin.....	132,357.97	5,367.31	97,702.46	256,507.74	110,361.60	365,869.34	6,680	Apr. 14, 1898	12	
SUPPLY SHIPS.											
779	Bridge.....	8,688.06	2,398.43	5,254.59	16,341.08	101.10	16,442.18	8,600	June 6, 1917	1	
777	Celtic.....	108,108.82	6,631.58	64,878.59	163,615.99	15,633.70	179,249.69	6,780	May 25, 1896	12	
776	Clyde.....	109,883.89	4,297.26	67,748.81	178,838.97	144,218.83	323,055.80	6,000	Dec. 2, 1898	12	
775	Cluskey.....	109,776.78	9,469.55	104,491.01	216,738.24	18,023.66	234,762.00	8,325	July 2, 1898	12	
775	Supply.....	101,947.21	4,808.88	75,989.94	182,684.04	13,511.89	196,195.93	4,325	Aug. 1, 1902	12	
801	Solace.....	251,247.32	9,000.58	67,950.17	328,298.07	39,916.92	368,214.99	5,700	Apr. 14, 1898	12	
HOSPITAL SHIP.											
811	Abercanda.....	35,954.56	7,629.58	40,971.63	84,555.66	3,240.73	87,796.39	6,680	May 20, 1898	12	
612	Ajax.....	32,991.24	7,024.14	38,015.38	92,017.32	19,012.58	111,030.90	9,250	May 21, 1898	12	
698	Arcturion.....	6,942.68	6,942.68	38,353.01	79,160.20	21,032.22	100,192.42	6,160	May 21, 1898	12	
610	Bruna.....	32,098.08	4,021.84	49,898.05	86,018.93	64,826.05	150,845.98	6,550	May 27, 1898	12	
696	Cassat.....	30,563.21	6,758.26	48,060.02	85,078.48	17,945.10	103,023.58	6,940	May 27, 1898	12	
624	Cuyama.....	14,545.92	593.05	31,761.94	46,900.91	1,727.80	48,628.70	19,800	Apr. 2, 1917	3	
677	Cyclone.....	58,703.50	4,023.52	80,252.16	143,000.18	21,933.60	165,023.87	19,800	Nov. 2, 1910	12	
613	Factor.....	4,732.81	98,683.76	104,422.32	107,084.83	1,070.84	108,155.67	11,280	Oct. 29, 1909	12	
623	Jaccon.....	64,451.98	15,968.76	57,243.58	167,263.62	85,133.24	252,446.87	19,280	June 20, 1913	12	
622	Jupiter.....	119,574.42	2,708.54	88,038.45	207,619.41	54,532.65	262,152.06	19,860	Apr. 7, 1913	12	

Item No.	Item Name	Quantity	Unit Price	Total	Account	Date	Quantity	Unit Price	Total	Account	Date
600	Justin.....	5	324.13	1,620.65	19,360	June 5, 1915	371.05	197.404	72	19,360	June 5, 1915
616	Kanawha.....	14	945.39	13,235.46	14,500	Aug. 26, 1909	206,838.63	11,250	11,250	14,500	Aug. 26, 1909
617	Maunsee.....	3	732.87	2,198.61	14,500	Oct. 23, 1916	165,471.64	5	140	14,500	Oct. 23, 1916
618	Neptune.....	4	495.33	1,981.32	19,480	Sept. 20, 1911	84,128.75	19,480	19,480	19,480	Sept. 20, 1911
619	Nereus.....	19	709.87	13,487.53	19,080	June 8, 1898	285,331.96	19,080	19,080	19,080	June 8, 1898
621	Orion.....	3	575.30	1,725.90	19,250	July 29, 1912	103,134.96	19,250	19,250	19,250	July 29, 1912
613	Proetus.....	40	576.70	23,068.00	19,080	July 29, 1912	231,821.98	19,080	19,080	19,080	July 29, 1912
619	Protus.....	6	266.43	1,598.58	19,080	July 9, 1913	201,177.11	19,080	19,080	19,080	July 9, 1913
605	Stirling.....	4	137.39	549.56	5,660	Apr. 16, 1898	85,963.25	5,660	5,660	5,660	Apr. 16, 1898
615	Vulcan.....	5	099.72	499.36	11,250	Oct. 2, 1909	169,208.47	11,250	11,250	11,250	Oct. 2, 1909
CONVERTED YACHTS.											
829	Alleen.....	1	088.61	88.61	192	May 14, 1898	10,509.30	192	192	192	May 14, 1898
834	Dorothea.....	1	190.59	190.59	694	June 1, 1898	12,212.00	694	694	694	June 1, 1898
833	Eagle.....	3	531.36	1,594.08	434	Mar. 26, 1898	87,225.38	434	434	434	Mar. 26, 1898
828	Elfrida.....	2	286.29	572.58	164	June 30, 1898	1,399.13	164	164	164	June 30, 1898
837	Gloucester.....	4	078.09	311.56	764	May 20, 1899	10,802.87	764	764	764	May 20, 1899
832	Hawk.....	4	588.32	2,353.28	375	Apr. 5, 1898	2,980.70	375	375	375	Apr. 5, 1898
825	Huntress.....	7	77.93	545.51	82	July 1, 1898	10,450.76	82	82	82	July 1, 1898
810	Mayflower.....	6	255.86	1,535.16	2,690	Apr. 30, 1898	204,465.29	2,690	2,690	2,690	Apr. 30, 1898
823	Onelda.....	47	815.20	38,319.60	150	Apr. 30, 1898	112.80	150	150	150	Apr. 30, 1898
826	Scorpion.....	7	146.35	1,024.45	775	Apr. 11, 1898	75,397.92	775	775	775	Apr. 11, 1898
827	Sybil.....	59	501.65	29,597.35	152	Aug. 18, 1898	80,857.54	152	152	152	Aug. 18, 1898
830	Syvia.....	1	268.19	268.19	302	June 29, 1898	5,904.17	302	302	302	June 29, 1898
838	Vixen.....	4	752.78	3,011.12	808	Apr. 11, 1898	68,645.26	808	808	808	Apr. 11, 1898
885	Wasp.....	22	649.96	14,300.32	630	.....do.....	5,115.77	630	630	630	.....do.....
859	Yankton.....	47	751.94	35,337.18	975	May 16, 1898	98,437.07	975	975	975	May 16, 1898
TUGS.											
504	Accomac.....	130	00	130.00	187	.....do.....	10,605.04	187	187	187	.....do.....
522	Active.....	7	576.46	4,035.22	286	.....do.....	10,083.64	286	286	286	.....do.....
534	Apache.....	4	649.15	2,596.60	650	.....do.....	5,485.70	650	650	650	.....do.....
545	Arapaho.....	7	069.90	488.93	575	.....do.....	12,700.56	575	575	575	.....do.....
519	Choctaw.....	14	655.23	9,173.22	274	.....do.....	19,593.63	274	274	274	.....do.....
529	Fortune.....	14	170.34	2,384.76	450	.....do.....	49,092.91	450	450	450	.....do.....
507	Hercules.....	2	945.10	1,890.20	188	.....do.....	12,284.92	188	188	188	.....do.....
536	Iroquois.....	16	984.49	15,751.84	702	.....do.....	58,590.46	702	702	702	.....do.....
505	Iwana.....	4	381.20	1,524.80	192	.....do.....	14,413.25	192	192	192	.....do.....
508	Massasoit.....	1	741.26	741.26	202	.....do.....	9,634.00	202	202	202	.....do.....
516	Modoc.....	4	461.70	1,846.80	241	.....do.....	7,376.66	241	241	241	.....do.....
546	Mohave.....	9	799.16	7,192.44	575	.....do.....	26,624.39	575	575	575	.....do.....
526	Mohawk.....	2	151.24	302.48	368	.....do.....	17,142.67	368	368	368	.....do.....
506	Narkeeta.....	2	523.20	1,046.40	192	.....do.....	7,048.63	192	192	192	.....do.....
541	Navajo.....	13	433.45	5,634.85	800	Dec. 20, 1891	70,586.27	800	800	800	Dec. 20, 1891
543	Ontario.....	78	761.98	59,514.44	1,120	Nov. 2, 1907	78,488.50	1,120	1,120	1,120	Nov. 2, 1907
533	Osceola.....	18	789.47	14,210.06	571	Aug. 24, 1912	43,598.93	571	571	571	Aug. 24, 1912
537	Patapeco.....	33	445.21	14,691.93	755	.....do.....	64,645.37	755	755	755	.....do.....
538	Patuxent.....	31	796.48	24,684.96	765	.....do.....	70,404.66	765	765	765	.....do.....

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Title C.			Total operating expenses.	Repairs and alterations to ships, including equipment.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including rations.	Stores issued, including provisions and medical stores.						Full commission.	Commission in reserve.
TUGS—continued.											
520	Pavnee.....			\$2,922.75	\$3,970.28	\$6,893.03	275	1898		12	
513	Pawucket.....	\$5,950.65		15,253.50	3,625.67	20,335.74	225	1898		12	
511	Pennock.....	5,357.41		9,594.41	3,625.67	13,210.08	230	1898		12	
514	Pentucket.....			4,082.60	3,672.90	7,755.50	230	1903		12	
532	Peoria.....	27,245.48		45,230.00	47,154.24	92,384.24	487	1898		12	
542	Piscataquis.....	21,178.73		43,208.63	26,628.80	69,837.43	854	1898		12	
549	Pocahontas.....	4,159.21		9,473.87	5,681.78	15,155.65	575	1898		12	
527	Pontiac.....			428.78	4,734.62	5,163.40	401	1898		12	
539	Potomac.....	25,879.28	3,500.29	19,487.41	48,865.98	56,736.03	785	1898		12	
540	Powhatan.....			4,282.30	4,282.30	8,564.60	194	1898		12	
503	Rapido.....			3,563.13	3,563.13	7,126.26	186	1898		12	
518	Rocket.....			2,121.65	9,181.28	11,302.93	206	1898		12	
512	Samoet.....		8.00	4,072.43	4,072.43	8,144.86	235	Mar. 20, 1897		12	
517	Sebaro.....			1,967.87	4,497.71	6,465.58	243	1898		12	
502	Sioux.....	26,527.66	260.00	3,125.67	7,811.63	11,197.30	235	1898		12	
544	Sonoma.....		219.46	24,222.14	14,667.16	38,889.30	1,220	Aug. 24, 1912		12	
515	Sotomoro.....			5,263.85	60,969.26	66,233.11	155	1898		12	
510	Standish.....	7,870.08		11,303.84	4,971.35	16,275.19	230	1903		12	
530	Tecumseh.....		283.14	1,741.81	4,215.20	5,957.01	450	1898		12	
547	Tillamook.....		983.01	7,237.99	8,271.13	21,322.83	221	1898		12	
521	Traffic.....			3,326.81	6,836.40	10,163.21	575	Dec. 2, 1914		12	
535	Transfer.....			4,053.21	5,819.04	9,872.25	280	1905		12	
509	Triton.....	163,580.54	495.58	5,424.59	169,500.71	175,925.30	684	1905		12	
528	Umedilla.....			4,281.35	4,478.14	8,759.49	355	1895		12	
528	Uneas.....	18,269.11	7.80	14,176.63	32,443.54	46,622.22	441	1898		12	
523	Vigilant.....			9,586.93	1,066.48	10,653.41	300	1898		12	
500	Waban.....	8,062.33		6,206.00	4,570.14	10,776.14	160	1898		12	
501	Wabnetta.....			2,204.82	10,826.22	13,031.04	152	1891		12	
548	Wards.....		40.00	9,297.68	1,124.38	10,422.06	575	1898		12	
531	Wampatuck.....	13,229.90	199.96	18,202.64	18,641.09	40,274.09	462	1898		12	
SPECIAL TYPE.											
376	Baltimore.....	182,026.39	3,691.04	75,324.00	41,094.46	302,134.89	4,413	Jan. 7, 1890		12	
601	Hamble.....	223,922.88	4,894.22	46,116.34	59,963.18	334,896.62	4,000	June 7, 1898		12	
910	Lebanon.....	40,906.62	4,538.59	27,246.83	29,043.99	98,435.78	3,285	Apr. 16, 1898		12	

602	Leonidas.....	102,090.57	7,916.34	50,711.66	160,737.57	22,272.93	183,000.50	4,023	May 21, 1898	12
852	Prometheus.....	152,568.73	2,681.25	73,921.80	229,170.78	39,228.18	268,398.96	12,565	Jan. 15, 1910	12
875	San Francisco.....	181,137.05	4,179.87	74,843.10	260,130.02	70,811.43	330,941.45	4,983	Apr. 21, 1911	9
831	Vestal.....	244,333.74	6,538.84	84,966.67	335,574.25	33,041.59	368,615.84	12,565	Oct. 4, 1909	12
900	Vesuvius.....	63,967.75	.....	23,957.91	87,925.66	3,851.73	91,777.39	930	June 7, 1890	3
UNRECEIVABLE FOR WAR PURPOSES.										
950	Adams.....	56,989.53	300.79	1,311.16	1,611.85	1,203.81	2,815.76	1,400	.....	.....
951	Albatross.....	.....	1,198.73	16,494.78	74,633.04	39,07	74,722.11	346	1905	.....
953	Boxer.....	.....	5,098.50	396.38	263,705.57	619.52	1,018.20	1,970	1797	12
954	Constellation.....	5,043.32	.....	253,581.75	.....	6,532.14	270,225.71	2,200	.....	12
955	Constitution.....	.....	.....	1,656.41	1,656.41	2,367.73	4,024.14	1,800	1904	.....
956	Cumberland.....	.....	481.02	298.00	789.02	.....	789.02	1,375	1876	.....
957	Essex.....	.....	1,475.20	376.17	1,851.37	38.55	1,890.02	840	.....	2
960	Gopher.....	.....	319.60	2,174.44	2,174.44	3,897.45	6,071.89	4,150	.....	12
961	Granite State.....	59,268.46	.....	100,263.68	159,531.74	8,423.76	168,305.50	2,790	.....	12
962	Hartford.....	6,800.47	.....	7,911.81	14,712.28	1,901.56	16,613.84	1,900	.....	12
963	Intrepid.....	59,084.32	6,514.88	24,892.77	90,491.97	8,753.71	99,245.68	1,900	.....	12
733	Mohican.....	12,528.16	.....	45,550.53	59,045.33	1,146.61	60,191.94	4,410	.....	12
967	Philadelphia.....	46,800.30	.....	72,471.34	120,098.89	2,990.23	123,078.12	4,390	.....	12
751	Rainbow.....	.....	1,747.12	3,517.50	5,264.62	2,325.03	7,589.65	2,835	.....	12
969	Reina Mercedes.....	.....	.....	17,778.97	17,778.97	2,629.61	20,408.58	3,900	.....	.....
800	Relief.....	4,915.46	654.93	2,182.74	7,755.13	5,573.52	23,352.49	2,700	.....	12
970	Richmond.....	40,859.39	6,647.84	72,818.88	120,226.11	3,783.65	11,536.79	1,735	.....	.....
731	Savenn.....	.....	.....	5,705.92	5,705.92	9,194.01	129,620.12	3,100	.....	12
971	Southery.....	.....	380.32	753.62	1,133.94	34,117.79	39,822.71	2,265	.....	.....
973	Topeka.....	.....	271.05	265.81	536.86	368.51	1,871.73	685	.....	12
974	Wolverine.....	.....	.....	.....	.....	.....	.....	900	.....	.....
975	Yantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MISCELLANEOUS VESSELS.										
461	Acushnet.....	.....	37.55	37.55	37.55	.....	37.55	.....	.....	.....
89	Agamemnon (K. Wilhelm 2)	.....	.....	.....	.....	30,202.62	30,202.62	.....	.....	.....
463	Alcedo.....	.....	38.20	38.20	38.20	57.04	95.24	.....	.....	.....
106	Algonquin.....	.....	275.78	275.78	275.78	445.12	718.90	.....	.....	.....
103	Androscoggin.....	.....	5,803.00	5,803.00	5,803.00	62,517.90	68,320.90	.....	.....	.....
461	Aphrodite.....	.....	6,603.84	6,603.84	6,603.84	.....	6,603.84	.....	.....	.....
169	Anguine (Necker)	.....	.....	15,891.24	15,891.24	.....	15,891.24	.....	.....	.....
105	Apache.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
46	Armenia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
168	Astoria (Freida Leonhardt)	.....	.....	.....	.....	.....	.....	.....	.....	.....
458	Bath (Andromeda)	.....	.....	.....	.....	.....	.....	.....	.....	.....
170	Biber.....	.....	.....	331.58	331.58	.....	331.58	.....	.....	.....
176	Bismarck.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
169	Bridgeport (Breslau)	.....	.....	.....	.....	.....	.....	.....	.....	.....
167	Bullard.....	.....	1,469.10	1,469.10	1,469.10	.....	1,469.10	.....	.....	.....
100	Carolan (Kala)	.....	.....	.....	.....	.....	.....	.....	.....	.....
74	Carthage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
462	Christobel.....	.....	4,263.35	4,263.35	4,263.35	.....	4,263.35	.....	.....	.....

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Title C.			Total operating expenses.	Repairs and alterations to ships, including equipage.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.	
		Accrued pay.	Miscellaneous expense, including committed rations.	Stores issued, including provisions and medical stores.						Full commission.	Commission in reserve.
MISCELLANEOUS VESSELS—											
continued.											
450	City of Savannah.....				\$2.81	\$2.81					
454	Columbine.....				1,053.95	1,053.95					
460	Corola.....		\$2.20	\$2.20							
463	Corsair.....		6,223.20	6,223.20							
482	Davey.....		60.81	60.81							
456	De Kalb (Prince Eitel Frederick).....	\$31,403.55	\$639.73	2,443.36	34,486.64	146,266.82	180,753.46				
460	Drake.....				230.00	230.00					
475	Dreamland.....				1,163.26	1,163.26					
467	Edithena.....				52.63	52.63					
476	Elsass.....				54.95	54.95					
154	El Mundo.....	22,819.89			22,819.89		22,819.89				
153	El Occidente.....				834.15	834.15					
938	Fish Hawk.....				251.60	251.60	34,990.89				
162	Ferry Boat.....	27,835.78	74.77	6,828.74	34,738.29	1,401.22	1,401.22				
170	Florence Luckenbeck.....				2,047.91	2,047.91					
470	Havard.....				5,046.41	5,046.41					
178	Havana.....				8,967.01	8,967.01					
72	H. P. Mallory.....				368.28	368.28					
474	Helot.....				244.86	244.86					
163	Houston (Leibentels).....				855.71	855.71					
58	Huron (Fred. der Grosse).....				105,320.72	105,320.72	106,176.43				
456	Ivy.....				41,153.49	41,153.49					
464	Kanawha 2.....				4.70	4.70					
67	Kittery (President).....				18,163.98	18,163.98					
185	Lenape.....				26,618.99	26,618.99					
60	Levintham (Vaterland).....				374.26	374.26					
199	Light Vessel 69.....				7,787.01	7,787.01					
177	Light Vessel 70.....				1.00	1.00					
455	Locksrum.....				442.20	442.20					
191	Long Beach (Hohenfeld).....				18,467.28	18,467.28					
61	Mala.....				23,670.48	23,670.48					
487	Malay.....				480.62	480.62					
493	Margaret.....				516.87	516.87					
96	Masovita.....				236.64	236.64					

Statement 4.—TOTAL FLEET MAINTENANCE AND OPERATION—Continued.

No.	Name of vessel.	Accrued pay.	Title C.		Total operating expenses.	Repairs and alterations to ships, including equipage.	Total maintenance and operation.	Tonnage.	Date of first commission.	Months in commission.		
			Miscellaneous expenses, including commuted rations.	Stores issued, including provisions and medical stores.						Full commission.	Commission in reserve.	
MISCELLANEOUS VESSELS— continued.												
979	Submarine base, New London											
980	Receiving ship, Portsmouth.	\$155,662.50	\$11,560.64	\$12,452.48	\$12,452.48		\$12,452.48					
981	Receiving ship, Boston.	431,192.99	84,426.12	81,871.46	167,283.14		167,283.14					
982	Apprentice seaman, Newport				89.25		89.25					
983	Receiving ship, New York	765,416.59	8,416.65	173,611.37	947,444.61		947,444.61					
984	Receiving ship, Philadelphia	615,633.70	38,954.70	183,691.82	838,280.22		842,152.66					
985	Receiving ship, Norfolk	424,611.80	1,460.25	26,738.10	452,810.15	3,872.44	452,810.15					
986	Receiving ship, Charleston	1,150,177.49	29,421.14	347,523.75	1,527,122.38	64.00	1,527,186.38					
987	Apprentice seaman, San Francisco	248,180.61	13,638.40	7,415.73	269,244.74		269,244.74					
988	Receiving ship, San Francisco	110,000.01		10,481.33	120,481.34	514.24	120,995.58					
989	Receiving ship, Puget Sound	571,292.60	6,935.75	223,863.09	802,091.44	1,818.40	803,909.84					
990	Receiving ship, Cavite	338,506.01	14,873.52	72,446.68	445,826.21	1,359.52	447,185.73					
991	Reserve torpedo group, Annapolis	101,291.64	101.61	3,896.25	105,292.50		105,292.50					
992	Reserve torpedo group, Charleston	14,860.29	1,029.30	4,398.38	20,287.97		20,287.97					
993	Receiving ship, Olongapo	2,284.91	33.30	3,005.19	5,323.40		5,323.40					
994	Yard craft, Mare Island	33,661.73		5,737.74	39,399.47		39,399.47					
995	Ships, Naval Academy	219,791.38	6,625.37	77,713.14	304,129.89	702.76	304,832.65					
996	Seaman's quarters, Washington	215,317.07	654.54	54,181.29	270,152.90	159.45	270,312.35					
997	Aeroplanes	118,261.09	1,000.30	13,320.78	132,582.17		132,582.17					
998	Dirigibles	85,080.72	85,080.72	85,080.72	85,080.72	33,918.71	118,999.43					
999	Balloons	38.52	38.52	38.52	38.52	281.76	420.28					
	Total	37,781,020.01	1,677,317.66	21,463,820.08	60,922,157.76	16,102,084.40	77,024,242.15					

Replenishment with Statement 1: 77,024,242.15
 Total maintenance and operating expenses, Statement 4.....
 Less items not chargeable to cost of the Navy—
 Equipage stores (title B), less by survey..... \$971,245.78
 Equipage stores (title B), reclassified under title A..... 864,239.57
 1,335,485.35
 Net cost per Statement 1..... 75,688,756.80

RECAPITULATION.

Class.	Num-ber.	Tonnage.	Average months in com-mission.	Total cost.	Average cost per vessel for 12 months.	Class.	Num-ber.	Tonnage.	Average months in com-mission.	Total cost.	Average cost per vessel for 12 months.
Battleships:						Tenders to torpedo vessels..	8	31,827	6.75	\$1,544,803.73	\$343,289.72
First line.....	17	435,450	9.18	\$13,244,020.45	\$1,018,409.87	Gunboats.....	29	26,173	8.41	3,096,054.01	152,333.59
Second line.....	23	308,146	3.7	11,067,913.78	1,559,282.76	Transports.....	5	23,235	7.4	1,007,602.54	326,790.00
Armored cruisers.....	10	140,080	6	5,955,236.28	1,191,647.26	Supply ships.....	5	33,900	9.8	949,535.60	252,539.32
Cruisers:						Hospital ship.....	1	5,700	12	368,214.99	368,214.99
First class.....	5	46,465	4	2,361,477.32	1,416,896.31	Fuel ships.....	23	287,790	10.9	3,509,408.08	167,981.16
Second class.....	4	25,055	4.5	1,186,149.57	790,766.71	Converted yachts.....	15	6,568	5.33	669,515.96	100,490.16
Third class.....	16	50,820	6.9	3,373,688.23	431,922.60	Tugs.....	49	20,591	17.14	1,344,182.17	19,205.81
Monitors.....	9	32,944	5.9	1,261,689.45	291,975.00	Special type.....	8	45,904	10.5	1,977,991.38	262,570.19
Destroyers.....	53	47,866	8.5	6,451,668.57	171,853.92	Unserviceable for war pur-poses.....	21	42,991	3.4	1,048,866.48	176,280.00
Submarines.....	56	.....	8.4	2,694,024.51	68,725.11	Miscellaneous vessels.....	.....	.....	.....	11,413,204.3	.....
Coast torpedo vessels.....	34	9,841	5.1	1,575,377.46	129,776.98						

Statement 5.—FLEET MAINTENANCE—REPAIRS.
COST OF REPAIRS PER TON BY CLASSES.

Class of vessels.		Title D.	Class of vessels.					Title D.
Battleships:								
	First line.....	40.78	Tenders to torpedo vessels.....				\$2.45	
	Second line.....	3.48	Gunboats.....				14.51	
Armored cruisers.....		4.40	Transports.....				3.77	
Cruisers:			Supply ships.....				4.10	
	First class.....	7.65	Hospital ships.....				4.63	
	Second class.....	8.58	Fuel ships.....				1.73	
	Third class.....	10.55	Converted yachts.....				8.15	
Monitors.....		6.68	Tugs.....				13.08	
Destroyers.....		28.49	Special type.....				3.15	
Coast torpedo vessels:			Unserviceable for war purposes.....				.99	
	Destroyers.....	65.05	Average for all classes.....				3.95	
	Torpedo boats.....	61.95						
No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.	
	Total.....	\$1,638,260.80	\$1,242,428.97	\$1,921,577.84	\$790,832.54	\$182,361.36	\$8,775,448.51	
BATTLESHIPS—FIRST LINE.								
26	South Carolina.....	23,696.56	6,903.67	11,202.50	315.00	3,408.79	45,626.53	
27	Michigan.....	19,707.71	6,013.20	9,567.87	188.35	1,371.70	36,848.83	
28	Delaware.....	20,283.07	8,861.64	17,990.61	92.50	1,793.25	56,980.07	
29	North Dakota.....	8,754.70	1,084.23	3,129.80	17,919.58	91.63	25,981.90	
30	Florida.....	8,754.70	2,745.23	7,775.42	17,919.58	3,432.54	22,982.24	
31	Utah.....	20,102.35	6,990.20	13,604.20	4,960.85	1,068.78	45,644.33	
32	Wyoming.....	14,446.28	3,171.02	16,478.62	1,121.15	303.64	34,620.61	
33	Arkansas.....	33,842.98	8,134.06	16,703.67	1,430.71	7,280.32	67,891.76	
34	New York.....	6,510.39	1,671.13	5,224.80	1,338.88	3,803.89	17,549.09	
35	Texas.....	6,651.83	1,653.12	5,061.94	69.00	8,131.90	16,567.79	
36	Nevada.....	10,285.87	2,899.35	8,651.50	37.50	4,548.35	26,419.07	
37	Oklahoma.....	11,210.15	2,969.24	8,084.48	37.50	5,534.95	25,936.32	
38	Pennsylvania.....	9,546.80	2,690.28	6,318.06	46.50	3,587.96	19,079.49	
39	Arizona.....	6,656.94	1,772.16	2,895.94	12,298.83	1,265.80	24,962.67	

BATTLESHIPS—SECOND LINE.

1	Indiana.....	6,848.70	1,833.77	1,770.78	12.50	1,899.52	10,453.25
2	Massachusetts.....	9,086.46	2,415.10	2,510.92	1.68	905.29	14,015.50
3	Oregon.....	9,256.70	2,260.79	4,744.64			17,197.39
4	Iowa.....	13,243.31	2,694.77	4,370.49			23,151.57
5	Kearsarge.....	8,528.69	2,657.36	4,302.70			17,890.25
6	Kentucky.....	25,127.13	6,751.51	9,531.71	12.50	1,899.52	40,898.85
7	Illinois.....	39,096.71	8,674.21	13,351.42	37.50	1,977.02	69,702.56
8	Alabama.....	13,371.71	3,674.01	5,983.74	37.50	771.67	27,840.53
9	Wisconsin.....	45,117.26	4,763.12	9,918.72			77,374.75
10	Maine.....	15,625.15	10,138.42	13,491.62			79,263.89
11	Missouri.....	6,622.18	2,815.98	3,331.27	42.56		23,678.63
12	Ohio.....	21,617.45	2,835.18	3,302.89	37.50		15,678.63
13	Virginia.....	41,032.50	8,209.55	11,677.11			44,618.90
14	Nebraska.....	33,087.39	12,076.85	21,841.05	1,933.00	1,377.50	85,831.57
15	Georgia.....	34,157.34	12,173.36	19,639.80	2,108.20	4,846.15	63,118.71
16	Florida.....	33,006.16	7,835.31	13,371.05	131.80		69,370.33
17	Rhode Island.....	42,514.39	9,636.48	14,676.66			58,134.81
18	Connecticut.....	80,485.07	24,268.23	17,517.37	96.50	4,215.59	124,717.23
19	Louisiana.....	21,182.02	6,380.61	7,522.17	37.50	2,384.24	71,714.23
20	Vermont.....	69,730.44	20,375.50	27,253.66	545.00	1,361.07	96,159.37
21	Kansas.....	44,211.60	13,113.96	22,226.51	743.38	1,432.57	123,428.05
22	Minnesota.....	46,997.66	14,963.63	15,660.61	40.00	4,245.53	81,447.15
23	New Hampshire.....						81,967.72

ARMORED CRUISERS.

127	Frederick.....	53,615.10	20,177.05	17,979.07		3,185.92	94,957.14
130	Huntington.....	49,896.64	14,216.59	8,793.26	37.50	1,648.56	74,592.55
133	Memphis.....	625.39	215.20	57.65			896.24
131	Montana.....	10,308.54	2,686.18	8,544.16			23,556.28
132	North Carolina.....	50,248.14	12,105.64	33,457.79	167.36	1,870.04	96,390.15
138	Pittsburgh.....	16,917.94	5,874.69	6,925.19	87.90	2,480.63	31,187.94
126	Pueblo.....	14,350.52	5,584.08	6,954.05	32.40		26,121.35
125	San Diego.....	60,268.32	15,416.31	17,162.25			138,518.60
129	South Dakota.....	46,276.39	17,063.67	16,999.96			85,122.74
134	Seattle.....	26,252.11	6,645.07	6,863.20	68.36	535.10	40,363.84

CRUISERS—FIRST CLASS.

121	Brooklyn.....	9,146.11	2,049.20	5,353.49	704.48	699.49	17,952.87
122	Charleston.....	5,596.81	1,231.48	3,677.53	9,366.91	3,815.86	17,578.59
123	Milwaukee.....	8,433.42	2,061.77	12,851.20	1,361.00		24,907.39
120	Saratoga.....	169,815.46	60,016.62	66,185.32			287,216.09
124	St. Louis.....	3,671.49	1,041.56	859.90	454.20	1,645.76	7,851.45

CRUISERS—SECOND CLASS.

116	Chicago.....	11,046.87	3,281.08	4,779.88			19,107.83
118	Columbia.....	27,326.51	7,970.31	20,466.87	37.50	1,691.33	57,497.52
119	Minnesota.....	71,908.79	19,523.83	34,661.94			128,396.56
117	Olympia.....	46,030.19	11,731.44	14,026.71		12.48	73,050.82

Statement 5.—FLEET MAINTENANCE—REPAIRS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on Invoice.	Total.
CRUISERS—THIRD CLASS.							
111	Albany.....	\$9,283.46	\$3,276.90	\$4,043.97	\$571.73	\$2,087.29	\$19,233.35
112	Birmingham.....	28,741.49	6,879.92	8,395.95	53.60	1,996.21	46,040.17
102	Boston.....	839.64	294.93	31.87			1,146.44
106	Chactanooga.....	34,819.27	8,890.50	10,240.76		90.89	54,051.42
114	Chester.....	17,398.05	6,538.43	5,773.18		961.39	29,718.56
103	Cincinnati.....	18,823.31	4,877.53	11,336.03		794.55	36,079.94
106	Cleveland.....	12,537.72	2,916.71	6,687.72		461.60	22,603.75
107	Denver.....	17,434.11	4,370.38	6,791.08	30.00	1,022.56	29,718.33
106	Des Moines.....	25,163.55	3,639.86	6,786.97	649.36	1,771.40	36,011.16
109	Madison.....	26,176.29	6,480.72	10,239.51	148.42	2,063.98	45,110.92
107	Marblehead.....	41,101.24	15,581.65	9,433.32		61,853.21	95,970.42
107	Monterey.....	5,294.30	2,577.62	2,850.40		64.37	11,772.62
112	Monterey.....	14,392.10	8,327.80	6,683.62		23,776.46	42,873.98
104	Raleigh.....	37,303.06	9,327.88	15,638.93		983.98	57,252.85
115	Salem.....	1,350.98	2,104.38	1,439.38			5,294.74
110	Tacomas.....	1,399.08	446.14	1,047.38	46,476.00	1,597.00	47,516.56
MONITORS.							
704	Amphritrite.....	9,453.65	2,102.83	2,426.76			13,983.23
700	Cheyenne.....	16,457.99	6,362.27	7,187.34		1,215.96	31,223.26
705	Manitowish.....	1,792.17	539.64	3,393.90			6,724.71
708	Monadnock.....	6,016.21	1,531.58	5,342.72		1,126.88	14,020.09
708	Monterey.....	18,973.85	4,402.73	7,846.83			31,223.41
701	Osawk.....	8,309.65	2,334.19	11,635.15		1,441.25	23,720.24
702	Tallahassee.....	2,221.96	458.93	1,415.78			4,096.69
707	Terror.....	1,175.79	372.03	2,433.26			3,981.08
703	Tonopah.....	24,228.55	5,157.81	7,361.73	137.25	1,955.73	39,836.07
DESTROYERS.							
266	Allen.....	6,323.08	2,109.43	1,842.60			10,275.11
221	Ammen.....	14,840.73	4,438.70	4,425.67			23,705.09
246	Ayrlwin.....	16,943.20	5,182.19	6,535.07			28,662.96
247	Balch.....	20,648.40	6,959.10	6,913.10	32.50		35,322.60
222	Beale.....	5,973.43	1,966.99	2,098.38	303.00		9,968.80
248	Benham.....	12,260.43	4,004.15	4,852.61			21,117.19
223	Burrows.....	15,084.11	4,700.78	4,460.35			26,095.24
260	Caldwell.....	71.37	18.17				89.54
243	Cassin.....	9,359.42	2,755.18	3,116.85			16,231.45
245	Corryngham.....	3,288.61	1,078.70	7,234.44			11,601.51
244	Cummings.....	10,270.20	2,678.78	5,463.88		5.84	18,418.70
260	Cushing.....	17,265.65	4,246.39	8,098.61			24,610.65

265	Davis.....	588.28	137.04	471.39	16.98	1,213.59
264	Downes.....	252.70	71.09	92.47	.....	410.26
264	Drayton.....	14,569.07	4,569.88	5,316.05	.....	24,722.00
264	Duncan.....	32,519.33	10,501.22	7,940.60	.....	49,961.15
266	Ericsson.....	5,784.91	1,734.04	2,284.05	.....	9,534.06
265	Fanning.....	21,889.11	9,031.02	5,883.06	.....	34,995.19
216	Fisher.....	27,491.13	9,877.74	5,370.29	.....	39,772.99
267	Healey.....	7,434.27	1,151.70	3,604.41	197.60	12,635.39
267	Jacob Jones.....	5,894.49	6,108.68	1,923.89	1,888.57	13,835.02
267	Jarvis.....	10,621.43	6,434.16	7,423.89	1,708.00	23,740.04
268	Jenkins.....	7,731.43	4,885.41	5,074.77	.....	12,806.69
269	Jennett.....	37,134.12	11,610.49	16,358.91	5,925.00	30,605.50
271	McCall.....	32,414.10	8,296.55	11,588.14	.....	43,308.79
261	McDougal.....	5,300.10	1,873.64	2,238.72	.....	8,412.47
260	Maynard.....	1,898.02	5,988.33	2,215.03	.....	13,829.77
269	Mehahan.....	19,316.84	5,105.56	12,281.74	.....	26,674.16
261	Nicholson.....	12,395.42	2,617.09	2,215.54	45.00	17,452.65
262	O'Brien.....	5,150.87	4,445.90	2,215.54	.....	8,813.31
269	Parler.....	12,908.98	4,219.79	5,960.71	.....	23,187.48
263	Patterson.....	3,517.63	1,087.33	1,619.05	.....	6,224.02
234	Paulding.....	17,404.01	5,354.12	5,619.67	.....	28,377.80
215	Pertins.....	19,517.80	5,001.73	14,191.99	.....	38,711.52
258	Porter.....	865.19	277.19	368.17	.....	1,510.55
218	Preston.....	8,486.68	2,658.07	3,134.79	30.00	14,308.54
219	Reid.....	21,210.40	5,524.75	6,451.94	21.00	33,208.09
216	Roe.....	22,896.79	5,904.17	7,835.83	164.97	36,801.86
264	Rowan.....	1,266.22	357.09	7,439.43	.....	2,062.74
263	Sampson.....	3,924.92	923.22	3,457.07	37.50	8,342.71
268	Shaw.....	1,303.18	283.96	276.85	.....	1,863.99
220	Smith.....	17,863.73	4,662.26	5,005.40	.....	27,531.39
237	Sterett.....	15,535.28	4,219.89	4,847.16	.....	24,602.33
238	Terry.....	43,694.75	11,114.11	26,643.78	39,473.93	122,898.57
239	Tripp.....	9,945.04	3,279.72	2,660.00	.....	15,884.76
259	Tucker.....	1,238.33	404.86	865.85	.....	2,506.04
260	Wadsworth.....	3,391.54	919.88	1,530.80	.....	5,842.22
261	Wainwright.....	1,130.49	366.90	1,276.25	.....	2,772.64
240	Walke.....	26,362.44	8,168.91	8,315.22	24.00	42,870.57
241	Warrington.....	18,979.37	6,420.34	4,233.10	.....	26,631.81
267	Wilkes.....	2,731.92	556.64	831.32	.....	4,222.88
263	Winslow.....	13,640.67	2,837.87	3,891.95	.....	20,370.50
204	Bainbridge.....	26,179.65	6,917.59	18,679.68	.....	51,776.92
205	Barr.....	10,468.74	1,907.94	5,248.83	.....	17,625.51
206	Chaunoy.....	12,764.93	3,190.97	5,498.90	.....	21,454.80
207	Dale.....	20,712.64	3,962.89	16,306.54	.....	41,012.27
208	Decatur.....	6,767.58	1,619.42	2,946.78	.....	11,333.77
202	Hopkins.....	11,392.35	2,938.44	16,632.46	.....	31,263.25
203	Hull.....	26,792.39	7,571.14	14,734.53	.....	49,068.06
200	Lawrence.....	33,462.39	9,200.61	18,448.01	.....	61,111.01
201	Macdonough.....	10,666.41	2,608.72	3,102.61	.....	16,377.74

COAST TORPEDO VESSELS—DESTROYERS.

Statement 5.—FLEET MAINTENANCE—REPAIRS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
COAST TORPEDO VESSELS—DESTROYERS—continued.							
209	Paul Jones.....	\$5,549.90	\$1,488.63	\$2,406.11	.....	.....	\$9,444.64
210	Ferry.....	22,826.87	7,948.03	18,909.83	.....	.....	49,584.43
211	Freble.....	6,890.87	1,704.66	8,202.99	.....	.....	16,798.54
212	Stewart.....	3,695.93	931.52	935.09	\$1,667.73	.....	7,230.67
213	Truxton.....	11,980.21	3,149.02	8,373.21	5.54	.....	23,507.98
214	Whipple.....	7,319.31	1,910.03	1,947.68	368.24	.....	11,545.26
215	Warden.....	8,361.14	2,044.28	4,921.53	1,344.14	.....	16,371.09
COAST TORPEDO VESSELS—TORPEDO BOATS.							
719	Bagley.....	12,708.00	3,628.15	3,266.28	.....	.....	19,633.43
728	Bailey.....	9,451.86	2,873.39	7,616.98	.....	.....	19,942.23
720	Barney.....	4,638.75	1,247.26	4,492.83	.....	.....	10,378.84
721	Biddle.....	6,796.06	2,143.43	4,748.16	.....	.....	9,687.65
722	Blakely.....	4,268.61	1,261.83	1,659.90	.....	.....	7,220.34
714	Dahlgren.....	3,876.40	1,022.78	1,008.90	5,143.89	.....	11,051.97
723	De Long.....	5,758.37	1,675.38	1,400.26	.....	.....	8,835.01
717	DuPont.....	11,583.17	3,448.87	3,764.75	49.21	.....	18,846.00
717	Farragut.....	5,267.74	1,330.55	2,249.76	.....	.....	8,936.88
712	Foote.....	10,296.11	2,711.37	2,435.56	.....	.....	15,442.94
716	Fox.....	192.36	75.33	6.62	.....	.....	274.31
726	Goldborough.....	3,443.86	1,279.92	1,120.40	.....	.....	5,844.18
711	Morris.....	4,148.97	947.15	1,540.15	.....	.....	6,636.27
713	Rodgers.....	6,390.94	2,070.14	1,302.59	.....	.....	9,753.67
724	Shubrick.....	3,095.59	746.96	1,764.37	.....	.....	4,606.82
715	Somers.....	1,792.98	.....	234.15	188.20	.....	2,215.33
725	Thornston.....	16,303.37	4,265.46	6,039.95	.....	.....	26,628.78
718	Tingey.....	5,579.24	1,557.54	1,810.32	.....	.....	8,947.10
SUBMARINES.							
300	A-2.....	588.09	108.17	286.30	.....	.....	982.56
301	A-3.....	1,771.42	330.56	778.24	.....	.....	2,880.22
302	A-4.....	1,326.77	237.56	508.58	.....	.....	2,072.89
303	A-5.....	3,357.20	520.56	1,212.85	.....	.....	5,200.61
304	A-6.....	2,563.56	520.56	1,540.32	.....	.....	4,633.46
305	A-7.....	3,407.95	601.05	1,667.44	.....	.....	5,676.44
306	B-1.....	3,856.76	714.34	3,123.01	.....	.....	7,694.11
307	B-2.....	1,268.47	244.00	2,045.01	.....	.....	3,631.48
308	B-3.....	2,041.41	371.70	920.54	56.00	.....	3,333.65
309	C-1.....	478.54	96.14	101.84	.....	.....	676.52
310	C-2.....	.....	.....	.....	55,423.25	22,896.28	78,319.53
311	C-3.....	.....	.....	.....	1,276.41	1,030.72	2,307.13
					16,770.67	1,212.96	14,983.59

Item No.	Description	Quantity	Unit Price	Total	Quantity	Unit Price	Total	Quantity	Unit Price	Total
312	C-4	6	215.00	1,290.00	1	562.10	562.10	12	896.65	10,759.80
313	C-5	12	288.92	3,467.04	3	731.88	2,195.64	37	625.52	23,147.24
314	D-1	2	586.22	1,172.44	1	404.21	404.21	177	70	12,386.10
315	D-2	2	130.72	261.44	4	12.73	50.92	37	50	1,865.00
316	D-3	5	374.72	1,873.60	63	60	3,780.00	163	40	6,520.00
317	E-1	7	317.10	2,219.70	1	571.76	571.76	35	00	3,500.00
318	F-1	7	317.10	2,219.70	1	571.76	571.76	35	00	3,500.00
319	F-2	6	373.34	2,239.04	1	507.22	507.22	81	54.92	4,454.92
320	F-3	6	373.34	2,239.04	1	507.22	507.22	81	54.92	4,454.92
321	G-1	15	24.00	360.00	1	854.18	854.18	71	339.00	24,057.00
322	G-2	15	24.00	360.00	5	212.24	1,061.20	1	333.70	333.70
323	G-3	8	641.81	5,134.48	5	745.66	3,728.30	8	50	400.00
324	H-1	8	101.00	808.00	4	441.78	1,767.12	101	34	3,434.00
325	H-2	10	440.25	4,402.50	4	690.47	2,761.88	38	88	3,362.40
326	H-3	20	271.22	5,424.40	6	251.20	1,507.20	32	00	3,200.00
327	K-1	8	142.74	1,141.92	12	575.72	6,908.64	19	400.00	7,680.00
328	K-2	8	142.74	1,141.92	2	262.40	524.80	35	00	3,500.00
329	K-3	3	222.18	666.54	6	539.01	3,234.06	100	35	3,500.00
330	K-4	4	653.17	2,612.68	4	801.45	3,205.80	504	50	25,200.00
331	K-5	3	758.01	2,274.03	4	569.24	2,276.96	65	50	3,275.00
332	K-6	4	438.42	1,753.68	2	679.33	1,358.66	66	70	4,282.20
333	K-7	2	176.22	352.44	4	273.96	1,095.84	1	116.21	116.21
334	K-8	1	472.80	472.80	4	415.74	1,662.96	58	14	811.72
335	L-1	1	204.80	204.80	87	46	3,972.00	37	50	1,862.50
336	L-2	921	19	17,500.00	73	63	4,599.00	56	50	2,828.00
337	L-3	1,551	83	128,733.00	289	14	4,046.00	77	50	3,862.50
338	L-4	1,800	76	136,800.00	488	28	13,664.00	77	50	3,862.50
339	L-5	7	150.29	1,052.03	430	98	42,146.00	101	45	4,545.00
340	L-6	2	570.55	1,141.10	2	686.01	1,372.02	504	50	25,200.00
341	L-7	1	571.05	571.05	350	15	5,250.00	65	50	3,275.00
342	L-8	2	705.86	1,411.72	921	94	86,604.00	66	70	4,282.20
343	L-9	4	134.80	539.20	2	298.44	596.88	1	148.90	148.90
344	L-10	3	430.63	1,291.89	606	14	8,484.00	421	24	10,104.00
345	L-11	12	979.53	11,754.36	3	618.40	1,855.20	12	741.50	8,900.00
346	L-12	5	348.44	1,742.20	3	293.19	879.57	69	00	6,900.00
347	L-13	4	623.28	2,493.12	2	138.87	277.74	628	88	55,148.00
348	L-14	6	588.78	3,532.68	2	514.68	1,029.36	903	30	27,090.00
349	L-15	42	64	2,688.00	4	659.65	2,638.60	892	71	63,480.00
350	L-16	16	703.95	11,263.20	4	651.22	2,604.88	37	50	1,862.50
351	L-17	12	397.33	4,767.96	1	417.71	417.71	9	033.96	874.56
352	L-18	2	776.29	1,552.58	1	206.08	206.08	19	099.32	1,907.68
353	L-19	2	635.09	1,270.18	11	110.13	1,211.43	1	049.22	1,049.22
354	L-20	299	28	8,372.00						
790	Alert									
791	Bushnell									
792	Ditch									
793	Fulton									
794	Marville									
795	Panther									
796	Pompey									
662	Annapolis									
663	Callao									
664	Castine									
665	Dolphin									
666	Dubuque									
667	Erisano									
668	Helena									

TENDERS TO TORPEDO BOATS.

GUNBOATS.

Statement 5.—FLEET MAINTENANCE—REPAIRS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
GUNBOATS—continued.							
671	Machias.....	\$19,545.82		\$3,220.70		\$363.68	\$22,130.20
680	Marblehead.....	37,944.06	\$11,680.33	10,451.45			59,075.84
681	Merced.....	24.07	10.30	1,451.57	\$3,354.12		5,241.06
673	Nashville.....	5,998.04	3.52	1,437.64	222.70	1,234.88	9,907.14
682	Navy.....	13,478.04	3,122.98	1,424.34			21,725.36
668	Paducah.....	6,746.87	1,668.81	2,425.02		602.03	11,689.73
682	Palos.....	5.58		1.88	220.00		5,963.45
682	Palos.....	922.80	4.51	429.47	734.21		6,792.58
659	Princeton.....	1,092.91	255.79	30.74		142.87	864.64
664	Quincy.....				3,122.81		1,379.44
656	Ranger.....	6,000.54	1,874.46	1,814.21			3,122.81
672	Sacramento.....	8,576.42		2,681.00		174.69	9,689.26
676	Samar.....	5,885.23	2,133.77	983.26			11,015.26
665	Vicksburg.....				2,977.19		2,977.11
657	Villalobos.....	10,373.63		2,960.13	1,108.97		10,121.21
661	Wheeling.....	1,135.70	174.19	1,562.26	8,259.83		8,259.83
675	Wilmington.....	14,462.44	3,724.97	6,422.45	49,963.92		53,424.97
679	Yorktown.....					1,006.17	25,648.03
TRANSPORTS.							
762	Buffalo.....	11,075.06	3,024.32	5,639.88		968.76	21,008.02
750	General A. Lays.....	7,667.90	1,866.29	3,396.51			12,950.70
754	Hancock.....	4,657.58	694.98	1,994.10		110.12	8,096.78
756	Henderson.....				14.70		14.70
753	Franklin.....	45,766.20	12,854.86	15,705.93	764.00	439.74	79,680.73
SUPPLY SHIPS.							
779	Bridge.....	14.64	4.85	4.39			23.88
777	Celtic.....	5,561.43	1,676.04	1,806.30		1,127.37	10,171.04
776	Culgoa.....	64,845.21	16,611.09	18,917.17	613.32	1,142.23	102,029.02
778	Glacier.....	9,741.34	3,242.83	3,377.95	8.10	312.23	15,682.45
775	Supply.....	6,006.14	1,603.09	2,816.66		798.37	11,194.26
HOSPITAL SHIP.							
801	Solace.....	17,492.46	4,016.82	4,870.07	26.00		26,407.35
FUEL SHIPS.							
611	A. Barends.....	1,675.05	406.67	755.24			2,834.96
612	A. Jax.....	10,063.77	2,282.33	4,163.43	9.97		16,519.50

408	Arethusa.....	7,106.30	1,830.12	2,155.53	11,121.95
610	Brutus.....	31,649.97	7,806.76	9,798.70	49,255.43
606	Cassar.....	8,320.14	2,167.47	2,008.97	12,636.58
624	Cuyama.....	1,221.36	313.86	192.99	1,728.11
607	Cyclops.....	6,751.33	2,097.47	3,187.41	12,036.21
613	Hector.....	1,252.02	397.23	532.64	2,686.14
620	Jason.....	22,352.42	6,771.90	7,759.06	36,920.88
622	Jupiter.....	7,720.77	2,082.24	438.88	13,136.82
616	Kanawha.....	7,194.37	2,090.62	3,347.58	12,710.07
614	Mars.....	29,026.94	7,604.24	11,727.80	46,347.35
617	Maumee.....	5,319.59	1,300.84	3,574.11	10,581.34
601	Nanshan.....	4,206.37	1,078.45	1,521.61	6,720.73
623	Nepthune.....	20,880.09	6,382.19	12,623.36	39,923.14
618	Nereus.....	16,134.13	4,897.07	6,004.23	27,037.53
609	Nero.....	8,072.25	1,726.65	3,968.93	13,770.83
621	Orion.....	4,324.26	1,219.62	1,715.57	7,259.45
619	Proteus.....	32,603.33	9,038.42	5,613.03	49,181.46
603	Saturn.....	16,043.28	3,801.14	5,613.03	25,457.45
605	Sterling.....	12,216.30	3,880.37	4,611.69	20,708.36
615	Vulcan.....	26,134.95	6,788.17	7,171.17	40,094.29
CONVERTED YACHTS.					
829	Alleen.....	4,952.08	1,054.50	2,098.54	8,313.12
834	Dorothea.....	29.42	8.47	9.50	8,155.42
833	Eagle.....	4,706.43	918.40	1,846.39	7,471.22
828	Elfrida.....	4,669.12	189.33	62.71	7,957.33
837	Gloucester.....	239.49	53.92	95.65	379.06
832	Hawk.....	3,721.36	1,585.50
825	Huntress.....	6,092.46	3,234.82	370.06	833.50
840	Mayflower.....	1,429.41	105.00
836	Scorpion.....	3,051.34	1,009.19	711.85	2.75
827	Sybil.....	2,174.04	708.10	592.07	800.00
830	Sylvia.....	6,838.67	1,968.06	2,903.28	1,155.00
838	Vixen.....	146.75	45.55	24.07
835	Wasp.....	4,743.07	1,200.09	1,982.44	196.71
839	Yankton.....
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Statement 5.—FLEET MAINTENANCE—REPAIRS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
TUGS—continued.							
506	Narragansett	\$3,058.56	\$719.59	\$707.83			\$4,485.98
541	Navajo	1,038.87	9.12	1,039.88	\$177.00		2,264.87
543	Ontario	4,481.62	1,053.39	1,151.35			6,686.36
553	Oscola	2,634.65		632.41			3,267.06
557	Pataxent	5,222.29	1,650.67	2,264.41			9,137.36
558	Pataxent	5,932.17	1,807.47	4,594.77			12,244.41
590	Pawnee	2,560.40	571.82	723.81			3,856.03
511	Pawtucket	2,633.62	1,040.33	1,110.11			4,784.06
513	Pemosec	2,243.75	551.51	648.89			3,444.15
514	Pentucket	2,327.08	503.91	672.77			3,503.76
532	Peoria	1,361.59		405.93			1,767.52
542	Pescataquis	14,722.75	3,384.10	5,746.60			23,853.45
549	Peechontas	294.31	95.58	89.91			479.80
527	Pontiac	2,626.26	614.96	1,072.19	4,976.16		4,512.40
539	Potomac	691.05		89.91			7,058.57
540	Powhatan	1,047.47	201.89	221.56			1,470.92
503	Rapido	1,967.94	536.60	789.70			3,294.24
518	Rocket	5,693.23	1,753.42	1,107.46			8,559.08
512	Samoset	896.47	266.78	304.65			1,467.90
517	Seaborg	2,537.77	666.87	969.22			4,173.86
502	Stoux	5,786.96	239.78	265.88			1,294.22
544	Sonoma	2,317.81	1,318.63	322.50			4,958.95
515	Sotogomo	2,821.98	936.60	322.50			4,958.95
530	Standish	2,821.98	936.60	322.50			4,958.95
510	Tuamoseh	4,986.95	1,456.67	1,823.65			8,267.27
547	Tuamoseh	2,300.57	378.87	913.64			4,187.01
521	Tradic	3,661.85	510.64	949.80			5,122.19
535	Transfer	2,966.56	622.97	663.57	405.00		4,057.03
509	Triton	2,357.42	723.70	470.13			4,178.76
528	Umsdilla	1,273.14	314.00	1,310.27			2,897.41
525	Vilas	2,526.72	924.91	263.88			5,066.91
505	Wahant	576.74	136.33	557.35			996.45
500	Waban	6,176.29	1,407.70	1,410.84	1,446.00		4,366.54
548	Wanda	6,176.29	36.58	12.94			157.54
531	Wompatuck	8,430.15	2,099.24	3,009.38			13,538.77
SPECIAL TYPE.							
576	Baltimore	17,626.71	4,496.04	4,479.00			27,331.38
601	Hamalud	4,646.04	1,190.78	3,700.33		\$639.13	9,566.23
910	Lochman	17,080.89	4,680.41	5,294.60	16.00		26,952.50

602	Leomides.....	5,987.64	1,505.41	1,881.47	151.83	544.33	10,040.68
852	Prometheus.....	2,767.85	809.83	2,826.28	37.50		6,441.46
875	San Francisco.....	20,323.32	5,381.98	18,957.08		1,108.04	45,750.42
881	Vestal.....	9,307.41	2,598.16	2,087.64	1,360.00	1,713.51	17,096.72
900	Vesuvius.....	37.55		1,283.81			1,321.36
UNSERVICABLE FOR WAR PURPOSES.							
950	Adams.....				180.95		180.95
953	Boxer.....	85.26					85.26
954	Constellation.....	150.94	21.74	14.76			187.44
955	Constitution.....	1,531.07	496.22	514.52			2,451.81
956	Cumberland.....	334.30	116.56	132.20			583.06
960	Gopher.....				4.78		4.78
961	Granite State.....			584.78			1,463.76
962	Harford.....	1,505.25	393.99	883.40	76.20		2,868.87
963	Independence.....	780.57	158.58	430.53			1,369.68
965	Monacan.....	306.23	57.49	1,311.92			1,988.57
967	Palisades.....	229.96	91.44	125.61		312.93	496.01
968	Rainbow.....	1,324.95	310.15	976.52			2,611.62
969	Reina Mercedes.....			20.09			25.95
970	Retief.....	1,931.22	577.65	320.70			2,629.57
971	Seymour.....	788.45	268.31	464.56			1,516.32
972	Southern.....	1,898.35	628.68	1,867.72	180.24		3,574.00
973	W. Pease.....	3,414.43	624.86	1,537.56			5,576.87
974	W. Williams.....	10,911.94	2,556.51	3,470.94			16,938.89
975	Yantic.....				557.84		557.84
					291.01		291.01

MISCELLANEOUS VESSELS.

59	Agamemnon (K. Wilhelm II).....	22,752.20	4,017.73	3,423.46			30,193.39
156	Algonquin.....	8.82	3.01				11.83
168	Androscoggin.....				62,517.90		62,517.90
169	Antigonon (Neckar).....	12,661.91	3,909.83	2,319.50			18,891.24
155	Apoche.....			8.24			8.24
65	Astoria (Frieda Leomhardt).....	744.96	193.35	50.93	144.40		1,133.64
158	Bath (Andromeda).....	21,323.37		1,924.32			23,247.69
159	Bridgeport (Breslau).....	44,347.88		5,417.40			49,765.28
167	Bulgaria.....	29,961.19	9,724.31	7,387.40			47,072.90
190	Camden (Kiel).....	11,086.79	2,767.16	6,516.60	3,900.00		23,970.55
454	Columbine.....	813.28		280.67			1,093.95
156	DeKalb.....	14,916.41	4,525.57	9,062.08			28,504.04
162	Ferr. boat.....	530.62	149.85		251.60		1,401.22
958	Fish Hawk.....						251.60
71	Florence Luckenbach.....	378.81	72.72				451.53
163	Houston (Leibniz).....	52,622.01	12,826.75	20,176.43			85,625.19
58	Huron (Fred. der Grosse).....	29,705.94	5,886.09	5,861.46			41,153.49
456	Ivy.....	4.00		.70			4.70
600	Justin.....	3.80	1.44				5.24
67	Kittery (President).....	10,106.58	2,983.10	1,046.66			15,036.34
60	Leviathan (Waterland).....	4,226.80	1,114.83	2,445.38			7,787.01
455	Locksun.....	14,351.21		3,438.46			17,789.67

Statement 5.—FLEET MAINTENANCE—REPAIRS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
MISCELLANEOUS VESSELS—continued.							
191	Long Beach (Hohenfeld).....	\$14,511.55	\$3,681.05	\$5,258.07	.....	.....	\$23,448.67
66	Newport News (Odenwald).....	8,451.77	2,397.78	458.48	.....	.....	11,308.03
192	Pensacola (Nicarib).....	7,681.37	1,833.80	2,723.84	.....	.....	12,339.01
161	Pocahontas (Princess Irene).....	44,863.57	8,788.64	13,517.63	.....	.....	67,169.83
	Poe.....	13.26	.....	.....	.....	.....	13.26
451	President Lincoln.....	421.16	65.00	.....	.....	.....	486.21
452	Raymond J. Anderton.....	423.06	126.60	8.73	.....	.....	558.39
63	Savannah (Saxonia).....	26,967.65	8,514.11	8,843.84	.....	.....	44,325.60
453	Schurz (Geier).....	30,749.06	.....	14,076.49	.....	.....	44,825.55
457	Solf.....	318.24	.....	.....	.....	.....	318.24
170	Susquehanna (Rhein).....	18,219.57	5,452.08	3,267.46	.....	.....	26,949.11
157	Von Steuben (Kronprinz Wilhelm).....	64,704.14	19,182.84	17,370.24	.....	.....	101,257.22
174	Woodbine.....	64,857.76	25.75	141.17	.....	.....	101,252.68
160	Yamacraw.....	121.85	42.22	.....	.....	.....	164.07
PATROL VESSELS, ETC.							
901	First Naval District.....	2,745.83	945.12	3,047.70	.....	.....	6,738.65
902	Third Naval District.....	187.29	46.32	8.53	.....	.....	242.14
903	Fifth Naval District.....	4,186.20	1,268.77	880.74	.....	.....	6,335.71
904	Sixth Naval District.....	1,486.22	466.10	484.08	.....	.....	2,436.40
905	Eighth Naval District.....	36.44	.....	.....	.....	.....	36.44
906	Tenth Naval District.....	52.16	103.64	80.00	.....	.....	235.80
912	Twelfth Naval District.....	268.28	66.12	210.64	.....	.....	545.04
913	Thirteenth Naval District.....	.....	.....	.....	.....	.....	.....
AIRCRAFT.							
997	Aeroplanes.....	13,525.12	25.36	10,901.74	796.00	\$255.10	25,003.32
998	Dirigibles.....	266.58	.....	167.17	.....	.....	433.75
999	Balloons.....	76.11	.....	106.68	.....	.....	182.79
	Total.....	4,638,250.80	1,242,425.97	1,921,577.84	790,832.64	182,361.36	8,775,448.51

COST OF REPAIRS PER TON BY CLASSES.

Class of vessels.	Title D.	Class of vessels.	Title D.
Battleships:		Tenders to torpedo vessels	\$2.45
First line	\$0.78	Gunboats	14.51
Second line	3.48	Transports	3.77
Armored cruisers	4.40	Supply ships	4.10
Cruisers:		Hospital ship	4.63
First class	7.65	Fuel ships	1.72
Second class	8.58	Converted yachts	8.15
Third class	10.55	Tugs	13.08
Monitors	6.68	Special type	3.15
Destroyers	25.49	Unserviceable for war purposes	.99
Coast torpedo vessels:		Average for all classes	3.95
Destroyers	65.05		
Torpedo boats	61.95		

Statement 5.—FLEET MAINTENANCE—REPAIRS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
MISCELLANEOUS VESSELS—continued.							
191	Long Beach (Hohenfeld).....	\$14,511.55	\$3,681.05	\$5,296.07			\$23,448.67
196	Newport News (Odenwald).....	8,451.77	2,397.78	458.48			11,308.03
192	Pensacola (Nicaria).....	7,681.37	1,653.90	2,723.84			12,339.01
191	Pocahontas (Princess Irene).....	44,893.57	8,788.64	13,517.62			67,199.83
	Poe.....	13.26					13.26
451	President Lincoln.....	421.16	65.00	.....05			486.21
452	Raymond J. Anderson.....	423.06	126.60	8.73			558.39
63	Savannah (Saxonia).....	26,967.65	8,514.11	8,843.84			44,325.60
453	Schurz (Gleier).....	30,749.06	.....	14,076.49			44,825.55
457	Self.....	313.24	.....	.....			313.24
170	Susquehanna (Rhein).....	18,219.57	5,452.08	3,297.46			26,969.11
157	von Stauben (Kronprinz Wilhelm).....	64,704.14	19,182.84	17,370.24			101,257.22
174	Woodbine.....	85.76	25.76	141.17			252.69
190	Yamacraw.....	121.56	42.23	.....			164.07
PATROL VESSELS, ETC.							
901	First Naval District.....	2,745.83	945.12	3,047.70			6,738.65
903	Third Naval District.....	187.29	69.25	19.53	\$164.69		440.76
904	Fourth Naval District.....	4,186.20	1,269.77	880.42			6,336.39
905	Fifth Naval District.....	1,486.22	496.16	484.09	3,338.87		5,805.34
906	Eighth Naval District.....	36.44	.....	.....08			36.52
912	Twelfth Naval District.....	542.16	105.64	80.41			728.21
913	Thirteenth Naval District.....	208.28	65.12	210.64			484.04
AIRCRAFT.							
997	Aeroplanes.....	13,525.12	25.36	10,901.74	796.00	\$255.10	25,903.32
998	Dirigibles.....	266.58	.....	167.17			433.75
999	Balloons.....	79.11	.....	106.58			185.69
	Total.....	4,638,250.80	1,242,425.97	1,921,577.84	790,832.64	182,361.36	8,775,448.51

COST OF REPAIRS PER TON BY CLASSES.

Class of vessels.	Title D.	Class of vessels.	Title D.
Battleships:		Tenders to torpedo vessels	
First line.....	\$0.78	Gunboats.....	\$2.45
Second line.....	3.48	Transports.....	14.51
Armored cruisers.....	4.40	Supply ships.....	3.77
Cruisers:		Hospital ship.....	4.10
First class.....	7.65	Fuel ships.....	4.63
Second class.....	8.58	Converted yachts.....	1.72
Third class.....	10.55	Tugs.....	8.15
Monitors.....	6.68	Special type.....	13.08
Destroyers.....	25.49	Unserviceable for war purposes.....	3.15
Coast torpedo vessels:		Average for all classes.....	3.95
Destroyers.....	65.05		
Torpedo boats.....	61.95		

BATTLESHIPS—SECOND LINE.

1	Indiana.....	395.77	77.53	592.18	995.48
2	Massachusetts.....	127.70	27.50	67.49	222.83
3	Oregon.....	3,556.58	851.53	1,532.76	46,813.82
4	Texas.....	2,948.48	94.33	1,428.59	5,683.35
5	Kentucky.....	2,948.48	985.31	1,658.13	5,801.93
6	Kentucky.....	14,982.10	3,830.90	8,638.17	29,865.78
8	Illinois.....	18,106.70	4,604.06	9,898.18	31,606.98
9	Alabama.....	1,487.10	459.02	1,310.05	3,227.07
9	Wisconsin.....	7,081.91	2,297.88	4,153.55	23,353.34
10	Maine.....	5,420.60	1,397.74	1,892.08	8,719.42
11	Missouri.....	3,363.59	941.27	1,508.61	6,391.82
12	Ohio.....	4,773.18	1,400.21	3,351.62	9,525.01
13	Virginia.....	65,450.82	21,884.72	280,888.07	318,283.97
15	Nebraska.....	30,456.80	10,543.96	17,254.64	59,263.70
16	Georgia.....	139,085.52	40,433.57	246,628.75	426,176.69
17	New Jersey.....	56,519.75	25,143.05	28,855	95,322.80
18	Rhode Island.....	40,623.61	13,896.26	18,483.83	73,032.55
20	Connecticut.....	40,634.18	13,110.28	34,258.64	88,048.71
22	Louisiana.....	61,642.27	19,402.04	40,830.36	121,874.67
23	Montana.....	38,787.12	13,094.59	46,212.17	101,163.39
27	Vermont.....	66,693.07	21,336.72	47,892.03	135,967.60
31	Kansas.....	47,409.75	14,787.41	42,079.62	191,318.61
24	Minnesota.....	68,248.10	22,291.38	29,867.78	87,041.83
25	New Hampshire.....				120,788.14

ARMORED CRUISERS.

127	Frederick.....	17,375.89	7,394.67	22,302.12	81,294.46
130	Huntington.....	33,146.48	1,103.17	19,624.52	64,175.17
133	Memphis.....	5,036.99	2,177.22	10,814.08	19,897.20
131	Montana.....	17,730.80	3,896.30	19,367.00	37,913.04
132	North Carolina.....	27,938.31	8,798.62	28,707.59	126,249.24
136	Pittsburgh.....	6,522.49	3,144.25	7,831.06	15,234.57
138	Pittsburgh.....	18,758.82	4,392.61	8,804.08	18,821.63
139	San Diego.....	16,622.43	5,801.00	20,770.00	33,433.92
140	South Dakota.....	16,622.43	5,801.00	20,770.00	43,244.19
134	Seattle.....	43,873.24	11,365.15	28,786.47	91,408.10

CRUISERS—FIRST CLASS.

121	Brooklyn.....	3,155.15	825.00	4,101.92	9,431.46
122	Charleston.....	8,020.68	1,821.18	4,476.72	2,077.45
123	Milwaukee.....	23,428.81	8,138.34	32,980.65	21,474.91
124	Saratoga.....	3,734.69	1,306.90	9,310.11	67,428.16
120	St. Louis.....				15,875.69

CRUISERS—SECOND CLASS.

116	Chicago.....	22,704.07	7,406.25	16,646.45	47,161.04
118	Columbia.....	13,679.55	4,069.26	11,722.73	31,086.29
119	Minneapolis.....	9,336.77	2,520.92	4,282.32	16,140.01
117	Olympia.....	23,061.11	6,670.06	11,391.62	41,123.79

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material Issued in invoice.	Total.
CRUISERS—THIRD CLASS.							
111	Albaty.....	\$534.61	\$149.69	\$860.06		\$215.66	\$1,760.02
113	Birmingham.....	5,389.76	1,403.40	2,519.36		1,279.71	10,592.23
102	Boston.....	42.66	12.56	208.63			263.85
105	Chattanooga.....	8,485.60	3,448.57	11,932.03		7.50	22,398.54
114	Chester.....	10,133.75	1,134.18	9,130.27		40.00	22,772.59
103	Cincinnati.....	4,454.67	1,163.11	3,374.90			8,993.75
109	Cleveland.....	4,817.48	1,163.11	4,689.66			10,470.25
107	Denver.....	6,697.91	1,643.15	7,142.92			15,483.98
108	Des Moines.....	2,920.42	714.26	1,486.05		2,117.63	7,241.36
109	Galveston.....	891.90	217.38	2,033.37		1,086.90	4,208.45
100	Marblehead.....	3,008.25	1,050.10	2,733.19			6,791.54
101	Montgomery.....	3,635.61	1,023.96	3,158.32			7,817.89
112	New Orleans.....	7,064.91	2,571.71	6,487.27			16,123.89
104	Raleigh.....	4,065.09	737.07	5,189.83		107.30	10,139.29
115	Salem.....	6,277.96	1,928.77	853.85		760.79	9,851.37
110	Thomas.....	386.30	153.76	1,068.12			1,608.18
MONITORS.							
104	Amphitrite.....	385.67	107.45	286.64			789.76
700	Cheyenne.....	19,330.95	7,219.94	20,820.55		2,582.51	49,953.96
705	Minutoman.....	791.71	219.45	1,365.03			1,221.37
708	Monadnock.....	1,352.49	369.03	1,385.08		386.69	3,472.14
707	Monterey.....	20.64	3.00	7.02			32.72
701	Osark.....	5,083.02	1,648.54	8,130.99			14,862.55
702	Palahncsee.....	1,275.00	283.09	5,047.73			6,615.82
707	Terror.....	634.23	151.94	3.86			801.72
703	Tonopah.....	10,336.80	2,625.78	5,549.75			18,532.33
DESTROYERS.							
260	Allen.....	732.61	289.68	441.54			1,413.83
221	Arimon.....	6,177.78	1,894.90	3,040.67			11,113.36
246	Aylinn.....	10,022.15	3,130.40	7,535.31			20,687.86
247	Balch.....	9,843.08	3,186.46	6,371.31			19,399.86
222	Beale.....	23,798.00	7,375.52	19,966.85			51,140.37
248	Benham.....	8,677.41	1,835.33	3,012.80			10,715.63
223	Burrows.....	8,019.77	2,444.08	4,218.30			14,682.15
243	Cassin.....	6,285.15	1,683.12	5,505.29			13,474.56
277	Coyningham.....	2,485.08	1,898.51	1,646.53			5,030.14
244	Cummings.....	7,534.02	1,899.02	5,714.84			15,137.88
250	Cushing.....	9,681.65	2,381.66	5,491.55			17,554.86
265	Davis.....	68.91	21.28	40.11			130.37
254	Dwornn.....	1,048.42	332.07	706.40		75.00	2,161.90

224	Drayton.....	3,712.93	1,196.60	6,073.32	.....	.....	601.87	10,952.85
242	Duncan.....	12,423.95	4,220.79	6,851.52	.....	.....	.....	24,098.13
245	Ericsson.....	11,875.30	3,196.47	5,745.23	.....	.....	.....	20,818.00
226	Fanning.....	5,081.84	1,650.04	3,537.84	.....	.....	.....	10,298.72
216	Fleming.....	5,956.89	1,620.84	3,548.70	.....	.....	.....	11,128.43
227	Henley.....	2,130.12	676.14	1,420.80	.....	.....	.....	4,227.06
237	Jacob Jones.....	538.59	328.67	1,928.55	.....	.....	.....	2,186.81
227	Jarvis.....	6,413.30	2,111.02	3,014.14	.....	.....	.....	11,538.46
226	Jenkins.....	4,515.82	2,007.85	2,698.44	.....	.....	.....	10,322.11
229	Jonest.....	4,593.81	1,482.13	2,489.32	.....	.....	.....	8,565.26
217	Lamson.....	6,586.70	2,136.93	2,675.35	.....	.....	.....	11,558.64
301	McCall.....	8,819.20	2,718.65	4,142.64	.....	256.66	.....	16,680.49
241	McDougal.....	9,079.42	2,244.18	7,758.06	.....	.....	.....	19,081.66
332	Maynart.....	715.63	241.17	1,027.10	.....	.....	.....	1,983.90
332	Monaghan.....	7,653.42	2,101.60	4,328.94	.....	.....	.....	14,083.96
251	Nicholson.....	9,865.94	2,603.42	5,839.02	.....	\$294.00	.....	19,601.96
252	O'Brien.....	3,746.26	1,128.43	3,128.85	.....	600.00	.....	8,904.54
249	Parker.....	9,401.03	3,050.33	8,709.61	.....	.....	.....	21,161.27
233	Patterson.....	2,678.70	950.64	1,660.08	.....	.....	.....	5,189.72
234	Paulking.....	7,366.29	2,331.75	4,021.39	.....	.....	.....	13,719.43
235	Perkins.....	6,485.61	1,770.80	2,946.30	.....	.....	.....	11,102.71
258	Porter.....	873.04	322.85	1,526.56	.....	.....	.....	1,722.45
218	Preslon.....	5,779.52	2,070.08	7,472.90	.....	.....	.....	16,471.93
219	Reid.....	4,047.96	1,167.95	1,606.09	.....	.....	.....	6,822.00
226	Roe.....	10,825.93	2,960.66	5,074.78	.....	.....	.....	18,861.37
264	Rowan.....	374.41	93.32	490.49	.....	.....	.....	958.22
263	Sampson.....	568.19	145.95	360.82	.....	.....	.....	1,004.96
268	Shaw.....	106.57	23.97	161.79	.....	.....	.....	232.83
220	Smith.....	4,078.33	1,139.27	2,616.60	.....	.....	.....	7,834.20
237	Sterett.....	2,704.10	726.70	1,702.95	.....	.....	.....	10,761.51
238	Terry.....	16,620.04	4,603.11	13,736.34	.....	.....	.....	36,728.89
239	Tripp.....	1,998.14	709.58	1,389.34	.....	.....	.....	4,097.06
259	Tucker.....	908.44	323.82	924.08	.....	.....	.....	2,196.94
260	Wadsworth.....	1,511.48	436.11	894.74	.....	.....	.....	2,882.33
261	Wainwright.....	1,616.94	511.21	1,153.44	.....	.....	.....	3,261.69
240	Walke.....	6,214.83	1,845.43	2,768.14	.....	.....	.....	12,412.64
241	Warrington.....	4,486.61	1,577.23	4,303.09	.....	.....	.....	10,366.93
267	Wilkes.....	3,328.06	879.38	1,315.07	.....	.....	.....	6,522.61
253	Winslow.....	9,374.40	2,545.82	4,342.44	.....	.....	.....	16,262.66
SUBMARINES.								
300	A-2.....	100.85	17.33	45.35	.....	.....	.....	3,183.03
301	A-3.....	205.13	34.39	277.12	.....	.....	.....	1,615.65
302	A-4.....	38.34	6.51	21.42	.....	.....	.....	3,066.27
303	A-5.....	455.33	78.19	489.61	.....	.....	.....	2,097.00
304	A-6.....	280.94	48.68	462.06	.....	.....	.....	800.68
305	A-7.....	35.88	6.11	21.38	.....	.....	.....	91.67
306	B-1.....	250.90	45.02	2,359.26	.....	.....	.....	2,655.18
307	B-2.....	85.99	17.55	2,248.60	.....	.....	.....	2,873.96
308	B-3.....	75.78	12.73	2,245.68	.....	.....	.....	2,432.94
309	C-1.....	.....	.....	.....	.....	.....	.....	187.26
310	C-2.....	50.30	13.89	.....	.....	.....	.....	.....

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoice.	Total.
SUMMARIES—Continued.							
311	C-3			\$22.73			\$22.73
312	C-4			19.73			19.73
313	C-5			19.73			19.73
314	D-1			6,785.24			17,863.96
315	D-2	\$8,950.25	\$2,158.46	6,007.37			17,486.19
316	D-3	7,408.46	1,817.86	4,599.47		\$245.00	13,833.58
317	D-4	5,967.33	1,448.49	27,223.53	\$791.00		36,430.35
318	E-1	4,185.53	4,723.18	57,594.90	300.00		63,003.61
319	E-2	19,917.60	4,613.97	11,823.07	174.00		36,748.64
320	E-3	19,134.02	4,579.97	15,910.31	73.50		39,707.80
321	C-1	9,241.08	2,453.57	9,102.38			21,427.03
322	C-2	4,113.95	564.03	1,807.79			6,485.77
323	C-3	3,173.23	794.71	533.39			4,461.33
324	C-4	3,872.73	811.07	533.41			5,187.21
325	C-5	3,512.14	1,400.60	2,408.82	60.40	426.50	7,908.14
326	H-1	3,754.87	1,481.41	2,637.24	61.60	1,277.07	9,192.99
327	H-2	3,644.02	1,867.02	4,040.62	95.40	1,146.82	11,782.86
328	H-3	3,845.25	1,920.31	43,590.56	5,000.00		53,356.14
329	K-1	3,900.42	1,404.01	51,226.04			64,530.47
330	K-2	1,224.49	86.61	1,053.27			2,374.37
331	K-3	1,691.69	95.06	890.95			2,677.70
332	K-4	2,364.12	555.50	1,812.23			4,731.85
333	K-5	2,825.39	694.07	1,995.85	960.00		6,475.31
334	K-6	2,999.93	78.64	1,082.24			4,160.81
335	K-7	1,100.99	74.90	1,108.79			2,284.68
336	K-8	5.44	1.82				7.26
337	L-1			122.89			122.89
338	L-2			122.89			122.89
339	L-3			122.89			122.89
340	L-4			122.89			122.89
341	L-5			15.00			15.00
342	L-6			15.00			15.00
343	L-7			15.00			15.00
344	L-8			15.00			15.00
345	L-9	441.93	190.53	58.85			670.31
346	L-10	2.24	90.90	146.50			149.64
347	L-11			122.89			122.89
348	N-1			122.89			122.89
349	N-2			122.89			122.89
350	N-3			122.89			122.89
351	N-4			122.89			122.89
352	N-5			156.16			156.98
353	N-6	17.78	.50				18.28
354	N-7						
355	N-8						
356	N-9						
357	O-8						

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoice.	Total.
GUNBOATS—continued.							
658	El Cano.....	\$34.42	\$10.88	\$317.49		\$8.80	\$362.79
674	Holena.....						8.80
671	Mechas.....	5,091.19		2,869.46			8,960.65
660	Marietta.....	5,066.26	1,774.34	2,850.47		147.68	9,838.75
651	Monocacy.....			167.00		52.00	219.00
673	Nashville.....	564.34		251.99			816.33
663	Newport.....	6,351.11	1,626.87	2,985.66			10,963.64
668	Paducah.....	1,525.83	384.48	1,037.16			2,947.47
656	Quincy.....				\$163.86		163.86
672	Ranger.....	1,378.02	461.84	1,181.30			3,021.16
676	Sacramento.....	2,900.90		1,556.09			4,456.99
665	Vicksburg.....	1,171.82	460.08	1,505.31			3,137.16
667	Villalobos.....				161.91		161.91
661	Wheeling.....					78.98	1,977.23
675	Wilmington.....					1,640.56	1,640.56
679	Yorktown.....	1,538.23		365.02			1,903.25
		1,422.71	803.76	1,216.73		594.12	3,538.32
TRANSFERTS.							
762	Buffalo.....	4,285.22	685.21	2,962.85			8,133.28
750	General Alava.....	3,934.47	1,027.17	5,490.34			10,451.98
764	Hancock.....	781.25	211.69	2,677.51			3,670.45
756	Henderson.....	1.05					1.35
753	Pratt.....	12,403.28	4,486.31	8,328.17		2,216.93	27,433.69
SUPPLY SHIPS.							
779	Bridge.....	2.48	62				3.10
776	Catic.....	2,717.38	822.67	783.42			4,323.47
777	Catuga.....	15,442.13	3,726.95	15,576.27		458.80	35,496.58
778	Glacier.....	818.10	85.27	584.95		88.21	1,556.53
775	Supply.....	646.45	180.86	738.29			1,485.58
HOSPITAL SHIP.							
801	Solace.....	4,109.00	1,143.63	4,414.15			9,666.78
FUEL SHIPS.							
611	Aberanda.....	209.80	28.14	6.85			239.79
612	Alex.....	1,013.90	297.58	708.17			2,019.65
618	Arcturus.....	4,547.41	1,197.66	3,480.30			9,225.76
610	Britus.....	9,064.24	1,990.01	3,924.70			14,978.95
626	Cassier.....	1,758.94	558.68	1,642.21			3,967.83
624	Cayama.....	Cr. 8.66	Cr. 7.6				1.46
607	Cybele.....	2,714.76	649.24	2,540.28			5,904.28

613	Hector.....	94 87	20 87	Cr. 199 19	876 45
620	Janita.....	24 801 38	7 649 33	12, 150 28	44, 870 90
622	Jessie.....	15 581 84	4 159 71	20 154 39	40, 013 30
616	Kanawha.....	7 283 35	2 083 45	4 484 07	12, 221 52
614	Mary.....	7 952 05	1 910 50	6 689 47	14, 007 52
617	Maumee.....	2 340 71	1 988 45	2 067 60	16, 625 40
604	Nanshan.....	21 196 50	6 539 27	12 017 04	4 947 53
623	Narpane.....	6 324 53	2 009 80	8 491 80	39 813 51
618	Nereus.....	7 076 35	1 828 30	8 163 38	11 826 13
609	Nero.....	7 281 93	1 825 07	6 721 05	17 698 53
621	Orion.....	10 742 37	3 329 60	7 023 58	15 826 55
619	Proteus.....	11 506 57	2 749 30	6 116 66	21 095 55
608	Saturn.....	4 516 06	1 501 17	2 395 73	20 372 53
605	Starling.....	8 462 76	2 371 04	5 088 50	8 413 56
615	Vulcan.....				15, 922 30
CONVERTED YACHTS.					
834	Dorothea.....	468 77	129 40	149 45	32 00
833	Eagle.....	5 50	1 87		747 62
828	Elfrida.....	55 27	18 08	224 19	7 37
837	Gloucester.....			966 70	297 54
832	Hawk.....				966 70
825	Huntress.....	2 00			2 00
840	Mayflower.....	3 860 20	1 742 72	1 253 99	15 425 94
877	Sylph.....	65 52	26 76	58 67	1 191 17
830	Sylvia.....	546 05	193 52	451 60	1 191 17
838	Vixen.....	2 940 81	854 49	2 843 25	6 638 55
835	Wasp.....	82 92	28	10 31	11 51
839	Yankton.....	3 705 32	889 47	2 571 95	7 496 74
TUGS.					
904	Aocomac.....	495 49	163 55	99 79	728 83
822	Active.....	32 23		11 20	43 43
834	Apache.....	12 90		Cr. 3 48	13 46
845	Arsipallo.....	971 07	224 42	1 461 37	2 066 86
819	Chocotaw.....	85 67	47 33	22 08	1 55 08
907	Herules.....	674 00	178 61	529 38	1 332 99
836	Iroquois.....	510 90	478 35	638 54	3 627 39
905	Iwawa.....	467 57	167 23	121 51	746 32
916	Madoc.....	103 00	28 01	94 72	155 73
946	Mohave.....	119 57	738 91	3 004 61	5 863 29
928	Mohawk.....	24 44	8 87	163 96	207 47
906	Narceda.....	354 33	6 69	6 33	63 35
941	Navajo.....	356 57	24 50	542 48	8 986 27
943	Ontario.....	5 130 21	1 423 30	2 465 98	8 986 27
853	Oscoda.....	545 11	146 86	351 08	1 043 08
827	Patapasco.....	1 555 05	513 71	910 22	4 222 93
836	Pattuxent.....	170 04	14	9 98	20 16
870	Pawnee.....	112 90	42 28	3 49	161 70
813	Pawtucket.....	12 78	4 43		19 21
814	Pemadook.....	86 82			161 60
814	Pentucket.....	86 82	24 47	50 40	161 60
832	Peoria.....	86 41		14 81	101 22

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoice.	Total.
TUGS—Continued.							
542	Piscataqua.....	8776.76	\$298.05	\$572.15		\$254.37	\$2,099.33
549	Poonahontas.....	3,264.65	1,022.02	915.31			5,201.98
557	Portac.....	162.49	43.06	1.06			206.61
559	Portnac.....	60.12	18.64	166.59			232.35
546	Portnan.....	13.94	8.07	8.77			30.78
515	Portman.....	329.42	98.26	52.82			530.50
512	Portnet.....	198.31	57.51	123.09			378.91
517	Porto.....	133.84	88.00	84.37			306.21
542	Porto.....	2,063.01	674.37	2,112.88			5,950.26
511	Porto.....	3,083.01	1,134.46	1,134.46			4,997.94
511	Porto.....	298.38	134.15	230.21			4,640.77
530	Porto.....	116.94	43.62	20.58			190.15
510	Porto.....	100.17	55.68	9.88			165.73
547	Porto.....	1,167.73	308.58	1,605.16		5.00	3,086.47
541	Porto.....	1,282.68	55.88	50.61			3,389.17
535	Porto.....	1.51	2.65	2.65			4.71
509	Porto.....	113.14	59.98	28.16			202.28
525	Porto.....	84.82	17.17	81.25			183.24
528	Porto.....	212.45	69.11	82.88			364.44
523	Porto.....	25.20	31.26	43.47			70.03
501	Porto.....	108.21	31.25	1,629.31			1,768.77
548	Porto.....	397.36	108.64	369.31			73.31
531	Porto.....	10.18	4.43	3.55			18.16
SPECIAL TYPE.							
576	Baltimore.....	5,151.89	1,447.76	3,504.72		1,419.69	11,524.06
601	Hannibal.....	21,671.90	5,829.51	15,673.49			43,174.90
910	Lebanon.....	1,549.53	859.52	859.03			2,878.08
602	Lebanon.....	4,559.23	1,213.26	2,634.02		20.54	8,427.05
382	Prometheus.....	13,973.89	4,435.25	11,828.55			31,261.97
575	San Francisco.....	9,049.68	2,693.64	9,580.07		1,027.28	23,875.99
581	Vestal.....	6,239.34	2,206.43	5,711.41		677.00	14,157.18
900	Vesuvius.....					1,544.33	1,544.33
UNSERVICEABLE FOR WAR PURPOSES.							
963	Boxer.....			57.50			57.50
964	Constellation.....	40.00					40.00
955	Constitution.....	105.95	21.87	268.41			423.23
956	Cumberland.....	905.69	267.11	648.84			1,721.64
961	Albatross.....	12.83	4.75	31.49			31.36
961	Granite State.....	340.22	88.91	526.87			956.00
962	Hartford.....	2,663.40	687.28	1,722.07			5,042.75

963	Intrepid.....	98.61	20.92	228.75	348.28
733	Monkton.....	129.50	21.57	2,609.12	2,785.92
967	Philadelphia.....	31.59	13.17	25.92	170.68
751	Rainbow.....	10.20	1.39	163.77	174.36
969	Reina Mercedes.....	3.84	1.58	2,061.13	2,065.55
970	Richmond.....	5.84	2.04	30.00	7.88
731	Severn.....	1,050.07	270.58	621.69	30.00
971	Soathery.....	7,908.75	2,468.58	3,292.59	1,941.34
973	Topeka.....				13,669.92
MISCELLANEOUS VESSELS.					
59	Arsammon (K. Wilhelm II).....	7.38	1.85		9.23
459	Abatross.....	57.04			57.04
166	Algonquin.....	254.96	77.57	97.01	429.54
169	Antigone (Neckar).....	2.60	1.01		3.61
55	Armenia.....	149.65	34.63	15.77	200.05
158	Bath (Andromeda).....	239.76	14.17	11.95	241.71
176	Blar.....	61.63	8.57	5.80	81.60
159	Bridgeport (Breslau).....	14.64	7.30		14.64
167	Bulgaria.....	22.81	219.52	1,753.12	38.68
190	Camden (Kiel).....	844.35	80.84	398.01	2,816.99
74	Carib.....	321.57			790.42
450	City of Savannah.....	2.16	65		2.81
156	De Kalb (Prinz Eitel Frederick).....	56,816.32	16,592.62	43,025.56	115,434.50
460	Drake.....	26.87	7.32	195.81	230.00
153	El Occidente.....	218.51	49.98	535.66	834.15
71	Florence Luckenback.....	1,183.24	342.40	70.74	1,596.38
178	Havana.....	5,187.08	1,435.92	2,334.01	8,957.01
72	H. B. Mallory.....	2.89	87	364.52	368.28
163	Houston (Loebfels).....	10,683.51	2,966.81	5,928.44	19,581.76
67	Klittery (Fraisident).....	7,104.11	2,096.15	2,899.43	12,099.69
185	Lenape.....	8.60	1.72	383.94	374.26
189	Light Vessel No. 69.....		1.00		1.00
177	Light Vessel No. 70.....	213.81	32.30	196.00	442.20
455	Locksunn.....	35.52		210.07	246.59
191	Long Beach.....	130.72	32.28	58.81	221.81
61	Mala.....			87.07	87.07
56	Massovia.....	182.06	41.42	13.16	236.64
182	Monus.....	287.41	53.26	1,153.12	1,498.79
66	Newport News (Odenwald).....	3,908.22	964.48	499.30	5,362.00
186	Pastores.....	11.52	2.28	309.31	323.11
192	Panacolia (Nicaris).....	71.10	15.73	102.55	189.38
57	Pisa.....	218.21	62.55	20.92	291.68
161	Pocahontas (Princess Irene).....	94.70	25.99	42.53	163.22
62	Portonia.....	25.98	5.18	15.68	46.74
73	San Jacinto.....	32.55		483.53	483.53
171	Santa Barbara.....	15.89			32.55
172	Santa Catalina.....	16.39			116.35
173	Santa Cecilia.....	2.49			15.86
175	Santa Clara.....		1.02		3.40
68	Saratoga.....	5,896.08	1,583.40	1,770.91	9,190.46
63	Savannah (Saxonia).....	375.30	104.66	724.14	1,271.09

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoice.	Total.
MISCELLANEOUS VESSELS—continued.							
453	Schurz (Gelder).....	\$345.06					\$368.68
995	Ships, Naval Academy.....						129.45
60	St. Paul.....	35.44	\$10.63	\$23.62		\$129.45	46.07
170	Susquehanna (Rheln).....	235.10	78.42				313.52
458	Veragua.....	85.83	24.08	19.31			129.23
157	Von Stuben (Kronprinz Wilhelm).....	64,305.72	19,051.24	52,317.56			135,674.52
174	Woodsburn.....	104.69	37.56	71.24			207.30
160	Yamacraw.....	154.13	53.11	.06			207.30
905	Fifth District.....				\$3,086.32		3,086.32
907	Seventh District.....	1,866.36	439.66	749.77	88.26		3,058.79
912	Twelfth District.....	109,181.22	29,153.10	62,261.45	1,775.41		202,373.18
915	Chasers, etc.....	114.62			1,453.83		1,635.25
997	Aeroplanes.....						
	Total.....	2,637,766.78	772,025.76	2,518,579.42	45,574.29	370,268.68	6,344,214.93

COST OF ALTERATIONS PER TON, BY CLASSES.

Class of vessels.	Title K.	Class of vessels.	Title K.
Battleships:		Tenders to torpedo vessels.....	
First line.....	\$1.58	Cunboats.....	\$1.27
Second line.....	2.56	Transports.....	2.66
Armored cruisers.....	4.08	Supply ships.....	1.54
Cruisers:		Hospital ship.....	1.26
First class.....	2.50	Fuel ships.....	1.10
Second class.....	4.21	Converted yachts.....	3.48
Third class.....	3.03	Trugs.....	2.92
Monitors.....	3.87	Special types.....	2.66
Destroyers.....	12.70	Unserviceable for war purposes.....	.64
Coast torpedo vessels:		Average for all classes.....	2.96
Destroyers.....	6.45		
Torpedo boats.....	5.44		

Reconciliation with Statement 1:
 Total charged to title K, Statement 6..... \$6,344,214.93
 Less amount of equipment transferred from title B to title K, not chargeable to cost of the Navy..... 364,239.57
 Net cost, per Statement 1..... 6,979,975.36

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
	Total.....	\$549,746.89	\$134,111.64	\$207,668.58	\$50,527.79	\$40,366.06	\$982,420.96
	BATTLESHIPS—FIRST LINE.						
26	South Carolina.....	4,548.21	1,305.65	1,624.97	343.20	392.89	8,214.92
23	Michigan.....	2,136.71	690.11	1,113.93	710.80	1,197.73	5,849.28
28	Delaware.....	6,650.37	2,145.41	2,466.26	586.00	622.28	12,470.32
29	North Dakota.....	1,969.43	651.84	1,176.92	132.29		3,930.48
30	Florida.....	12,093.60	3,423.19	5,193.86	764.22	3,137.18	24,612.05
31	Utah.....	8,314.18	2,573.98	3,310.09	450.25	1,642.26	16,290.76
33	Wyoming.....	10,823.30	3,155.00	9,949.32	1,993.95	3,001.34	28,922.91
32	Arkansas.....	13,562.18	4,466.92	5,720.40	2,138.59	802.49	26,690.58
34	New York.....	3,854.50	515.29	5,003.81	382.63	319.94	10,076.17
37	Texas.....	920.19	341.23	1,437.20	462.02	415.47	2,576.11
35	Nevada.....	1,332.29	431.03	569.47	85.00	2,173.22	4,591.01
36	Oklahoma.....	757.16	235.59	332.81	143.18	958.37	2,427.11
38	Pennsylvania.....	2,459.61	777.95	1,020.91	29.60	1,870.98	6,159.05
39	Arizona.....	1,778.08	565.18	318.60	213.82	310.93	3,186.61
40	New Mexico.....	9.74	2.33	.54			12.61
41	Mississippi.....	9.75	2.34	.52			12.61
42	Idaho.....	9.75	2.34	.52			12.61
	BATTLESHIPS—SECOND LINE.						
1	Indiana.....	186.81	52.99	26.48			266.28
2	Massachusetts.....	151.64	44.16				195.80
3	Oregon.....	2,591.75	726.04	845.87	85.10	257.53	4,506.29
4	Iowa.....	246.58	71.62	2.98			321.18
5	Kearsarge.....	1,249.74	448.91	637.32	153.12		2,489.09
6	Kentucky.....	4,226.12	1,309.89	1,362.06	130.96	377.67	7,406.70
8	Illinois.....	2,350.57	678.92	525.85	301.10	319.76	4,176.20
7	Alabama.....	1,081.81	406.68	437.37	76.30	1,027.83	3,029.99
9	Wisconsin.....	2,973.01	1,070.84	656.93	358.39	151.02	5,210.19
10	Maine.....	4,036.75	1,372.04	2,207.08	2,751.95	187.95	10,555.77
11	Missouri.....	751.59	223.49	257.20	134.67	928.95	2,295.90
12	Ohio.....	8,085.43	2,686.43	1,768.69	110.10		12,650.65
19	Virginia.....	3,961.99	1,197.24	1,102.53	146.73	25.78	6,434.27
16	Nebraska.....	3,519.47	1,107.77	979.84	486.60	132.76	6,226.44
15	Georgia.....	6,424.63	1,904.38	1,187.43	164.58		9,681.02
17	New Jersey.....	3,328.01	841.56	1,177.67	618.30	58.49	6,024.03
18	Rhode Island.....	2,795.12	796.19	1,504.63	955.81	547.04	6,598.79
20	Connecticut.....	4,998.07	1,220.11	1,501.14	173.87	263.19	8,156.38
22	Louisiana.....	9,809.95	2,772.74	6,240.37	90.50	1,864.86	20,778.42
27	Vermont.....	11,411.93	3,618.17	3,010.33	74.50	33.34	18,148.27
21	Kansas.....	9,657.26	2,195.02	3,521.70	72.23		15,446.21
24	Minnesota.....	6,288.27	1,728.63	2,601.60	2,599.60	197.90	13,416.00
25	New Hampshire.....	5,061.48	1,760.84	2,668.34	73.59	174.98	9,739.23
	ARMORED CRUISERS.						
127	Frederick.....	6,660.92	2,741.36	1,572.33	110.97		11,085.58
130	Huntington.....	6,009.01	1,748.25	1,508.61	175.00	138.54	9,579.41
133	Memphis.....	12,596.54	1,238.58	2,739.97	217.40		16,792.49
131	Montana.....	15,617.25	702.83	5,512.02	607.00	845.02	23,284.12
132	North Carolina.....	7,366.19	1,867.77	2,408.08	236.22	14.81	11,893.07
128	Pittsburgh.....	5,866.09	2,293.21	3,345.68	141.10	1,636.39	13,281.47
126	Pueblo.....	3,160.75	1,339.97	678.65	118.40	1,728.69	7,026.46
125	San Diego.....	5,982.36	2,018.77	2,606.88	226.57	241.59	11,076.17
129	New York.....	9,983.65	4,389.28	1,989.12	1,141.52	1,614.21	19,117.78
134	Seattle.....	3,412.14	861.60	1,167.38	1,135.90	157.08	6,735.10
	CRUISERS—FIRST CLASS.						
121	Brooklyn.....	3,522.76	866.66	1,842.86	74.83		6,307.11
122	Charleston.....	726.05	234.90	129.95	74.08	213.70	1,378.68
123	Milwaukee.....	2,979.10	824.52	1,411.75	96.55		5,311.92
120	Saratoga.....	13,136.46	5,554.40	3,845.04	409.00		22,944.90
124	St. Louis.....	947.44	420.45	966.80	2.50	153.75	2,490.94
	CRUISERS—SECOND CLASS.						
116	Chicago.....	1,575.59	583.81	604.63	166.18		2,930.21
118	Columbia.....	403.03	167.09	209.12	166.80	380.37	1,326.41
119	Minneapolis.....	257.44	70.84	153.80			482.08
117	Olympia.....	3,638.57	926.62	932.30	6.00	23.05	5,526.54

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
CRUISERS—THIRD CLASS.							
111	Albany.....	\$555.83	\$233.53	\$144.86	\$87.20	\$410.84	\$1,431.76
113	Birmingham.....	1,645.61	313.87	1,138.84	56.73		3,155.05
102	Boston.....	584.06	204.13	109.96	55		898.70
105	Chatanooga.....	3,074.82	877.37	1,113.75	127.25	70.91	5,264.10
114	Chester.....	1,673.32	529.24	180.12	278.85		2,661.53
113	Cincinnati.....	1,557.80	472.80	496.19	1.92		2,528.71
106	Cleveland.....	555.63	154.39	315.53	108.10	182.67	1,316.32
107	Denver.....	1,299.19	374.85	571.45	54.70	387.27	2,687.46
109	Des Moines.....	438.87	121.91	33.61	2.51		596.90
109	Galveston.....	1,607.68	371.89	1,495.51	224.13	739.02	4,438.23
100	Marblehead.....	1,874.46	907.57	1,598.22			4,380.25
101	Montgomery.....	2,247.57	794.91	1,408.25			4,450.73
112	New Orleans.....	954.68	328.57	197.58	55.00	19.64	1,555.47
104	Raleigh.....	1,288.23	511.41	1,014.29	9.00	59.45	2,882.38
115	Salem.....	2,603.29	529.48	873.52	50.15		3,856.44
110	Tacoma.....	384.34	124.40	168.37	8.00	786.20	1,471.31
MONITORS.							
704	Amphitrite.....	569.62	124.66	30.83	4.90		730.01
700	Cheyenne.....	2,978.85	1,269.90	932.68	45.25	355.28	5,581.96
705	Miantonomoh.....	93.58	44.30	2.60			140.48
706	Monadnock.....	176.80	39.57	59.89	35.25	1,197.67	1,509.19
708	Monterey.....	740.08	194.40	191.61	37.25		1,163.34
701	Ozark.....	1,186.89	369.52	520.14	93.50	572.28	2,742.33
702	Tallahassee.....	365.29	115.81	206.76	184.45		872.31
703	Tonopah.....	3,386.35	1,126.15	2,286.95	23.46		6,822.91
DESTROYERS.							
266	Allen.....	179.38	10.17	13.40			202.95
221	Ammen.....	1,483.16	520.10	243.36	140.92		2,387.54
246	Aylwin.....	2,448.04	355.05	1,787.13			4,590.22
217	Balch.....	6,060.30	950.83	2,190.30			9,201.43
222	Beale.....	129.68	36.51	39.12	35.50		240.81
248	Benham.....	3,155.56	147.00	1,289.33	10.45		4,602.34
223	Burrows.....	1,444.96	198.45	169.45			1,812.86
243	Cassin.....	4,092.66	74.97	988.30	93.68		5,249.61
255	Coyningham.....	1,294.51	369.31	531.72			2,195.54
244	Cummings.....	3,661.65	295.90	889.59	8.40		4,855.54
250	Cushing.....	4,962.74	298.03	1,861.49	100.00		7,222.26
265	Davis.....	184.71	54.00	9.70			248.41
254	Downes.....	151.40	47.23	35.14			233.77
224	Drayton.....	1,203.91	373.90	242.68	59.25		1,879.74
242	Duncan.....	2,671.55	195.84	677.38	424.00		3,968.77
256	Ericsson.....	4,668.49	294.69	977.85	416.96		6,357.99
225	Fanning.....	1,882.79	499.08	235.26	3.50		2,620.63
216	Flusser.....	644.76	101.38	146.04			892.18
226	Henley.....	2,596.18	806.30	1,064.22	8.50		3,975.20
257	Jacob Jones.....	65.00	11.50	13.77			90.27
227	Jarvis.....	1,098.29	369.88	175.05			1,643.22
228	Jenkins.....	4,393.08	1,137.92	541.76	1,741.56		7,814.33
229	Jouett.....	2,156.94	730.14	333.23	10.94		3,231.25
217	Lamson.....	1,798.97	590.67	89.44	28.50		2,507.58
231	McCall.....	4,187.42	545.04	304.57	217.00		5,254.08
245	McDougal.....	5,702.93	496.69	2,733.13	21.44		8,954.19
230	Mayrant.....	102.99	2.90	98.16			204.05
232	Monaghan.....	612.67	130.98	141.64	10.50		895.79
251	Nicholson.....	4,643.44	121.71	1,876.09			6,641.24
252	O'Brien.....	5,761.31	542.98	2,663.87	114.72		9,082.89
249	Parker.....	1,603.99	288.52	792.71	102.75		2,787.97
233	Patterson.....	243.81	34.13	165.81	51.00		494.75
234	Paulding.....	1,029.59	293.82	209.44			1,532.85
235	Perkins.....	1,456.50	318.45	238.09			2,013.04
258	Porter.....	32.65	8.29	138.26	6.60		185.80
218	Preston.....	3,348.70	1,072.86	396.47	75.00		4,893.08
219	Raid.....	679.06	214.33	142.39	8.50		1,044.28
236	Roe.....	1,743.62	412.82	568.70	3,985.03		6,710.17
264	Rowan.....	555.65	7.90	331.96			895.51
263	Sampson.....	969.28	79.88	620.50			1,659.66
268	Shaw.....	114.16	29.92	23.71			167.79
220	Smith.....	913.12	249.34	73.85	1.56		1,237.87
237	Sterett.....	520.16	128.16	84.60	66.00		798.92
238	Terry.....	720.29	175.70	468.33	54.40		1,418.72
239	Trippé.....	978.16	143.25	196.86	16.00		1,334.27

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
DESTROYERS—continued.							
259	Tucker.....	\$910.95	\$55.00	\$357.04	.....	.....	\$1,322.99
260	Wadsworth.....	4,998.58	160.51	3,259.20	.....	.....	8,418.29
261	Wainwright.....	788.11	20.65	176.34	\$10.00	.....	995.10
240	Walke.....	588.97	163.48	518.01	36.50	.....	1,306.96
241	Warrington.....	722.53	228.66	240.00	32.25	.....	1,223.44
267	Wilkes.....	103.28	21.69	115.48	.....	.....	240.45
253	Winslow.....	3,198.54	167.81	1,929.82	18.66	.....	5,314.83
SUBMARINES.							
300	A-2.....	27.75	4.62	43.79	.....	.....	76.16
301	A-3.....	136.32	23.76	47.76	.....	.....	207.84
302	A-4.....	9.91	1.65	.....	.....	.....	11.56
303	A-5.....	83.86	14.57	8.32	.....	.....	106.75
304	A-6.....	291.19	43.46	25.02	9.75	.....	374.42
305	A-7.....	31.81	5.30	7.30	.....	.....	44.41
306	B-1.....	.....	.....	22.76	.....	.....	22.76
307	B-2.....	46.13	7.39	.....	6.00	.....	59.52
308	B-3.....	12.32	2.05	2.59	10.00	.....	26.96
309	C-1.....	34.03	7.25	9.02	686.00	.....	736.30
310	C-2.....	108.99	.....	.02	31.50	.....	140.51
311	C-3.....	114.10	1.51	1.42	12.50	.....	129.53
312	C-4.....	629.47	.....	260.73	8.00	.....	898.20
313	C-5.....	75.98	1.08	11.06	.....	.....	88.12
314	D-1.....	3,848.89	61.36	1,541.26	17.00	.....	5,468.51
315	D-2.....	4,513.50	28.55	1,510.48	19.50	.....	6,072.03
316	D-3.....	3,008.68	4.02	1,206.19	23.00	.....	4,241.89
317	E-1.....	2,083.77	36.32	874.70	.....	.....	2,994.79
318	E-2.....	1,553.79	5.32	614.16	57.00	.....	2,230.27
319	F-1.....	85.76	23.34	10.47	.....	.....	119.57
320	F-2.....	206.26	59.37	17.37	47.50	.....	330.50
321	F-3.....	278.52	76.42	22.43	41.50	.....	418.87
323	G-1.....	728.24	104.55	83.36	.....	.....	914.15
324	G-2.....	316.16	.....	40.34	9.50	.....	366.00
325	G-3.....	53.55	10.25	13.46	847.15	.....	424.71
326	G-4.....	415.72	8.08	96.92	8.50	.....	529.22
327	H-1.....	896.62	324.85	232.16	.....	.....	1,453.63
328	H-2.....	476.96	208.22	305.89	8.00	.....	999.06
329	H-3.....	585.87	256.22	167.20	48.00	.....	1,057.29
330	K-1.....	802.62	38.18	236.27	371.80	.....	1,448.89
331	K-2.....	1,897.19	22.07	853.55	323.50	.....	3,097.31
332	K-3.....	26.99	7.55	91.23	.....	.....	125.77
333	K-4.....	66.82	12.26	5,776.49	.....	.....	5,697.34
334	K-5.....	1,326.53	17.27	555.61	492.25	.....	2,385.66
335	K-6.....	337.16	14.77	996.31	.....	.....	1,948.24
336	K-7.....	1,013.47	6.92	79.76	1.40	.....	1,101.55
337	K-8.....	391.74	17.68	40.43	.....	.....	449.85
338	L-1.....	154.76	1.46	44.03	.....	.....	200.25
339	L-2.....	.....	.....	100.95	.....	.....	100.95
340	L-3.....	25.03	.....	112.67	.....	.....	137.70
341	L-4.....	345.07	71.36	153.94	.....	.....	570.37
342	L-9.....	51.67	5.19	.....	.....	.....	56.86
347	L-10.....	320.33	6.42	3.41	.....	.....	330.16
349	L-11.....	346.98	4.62	7.37	.....	.....	358.97
348	M-1.....	16.38	.....	.....	.....	.....	16.38
351	N-1.....	2.16	.63	.....	.....	.....	2.79
355	N-5.....	169.52	.....	672.06	.....	.....	841.58
361	O-2.....	4.75	1.28	.....	.....	.....	6.03
COAST TORPEDO VESSELS— DESTROYERS.							
204	Bainbridge.....	322.84	100.04	107.12	.....	.....	530.00
205	Barry.....	228.21	45.40	98.75	16.00	.....	388.48
206	Chauncey.....	139.29	30.01	19.44	.....	.....	188.74
207	Dale.....	543.49	100.24	192.26	32.50	.....	868.49
208	Decatur.....	17.77	4.10	16.02	8.00	.....	45.89
202	Hopkins.....	867.74	287.88	111.28	45.25	.....	1,312.15
207	Hull.....	1,077.90	343.05	485.24	.....	.....	1,906.19
200	Lawrence.....	1,414.68	412.39	225.24	35.00	.....	2,087.31
201	Macdonough.....	244.78	28.08	33.76	1.50	.....	306.12
209	Paul Jones.....	941.08	254.10	600.22	16.00	.....	1,811.40
210	Perry.....	1,363.83	482.79	336.40	28.65	.....	2,211.67
211	Preble.....	348.24	68.71	88.03	8.00	.....	512.98
212	Stewart.....	334.93	92.08	45.48	26.50	.....	498.99
213	Truxtun.....	708.74	200.02	267.49	8.00	.....	1,182.25
214	Whipple.....	540.80	134.19	136.50	15.00	.....	826.49
215	Worden.....	749.12	150.22	145.54	288.67	.....	1,333.55

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoice.	Total.
CRUISERS—THIRD CLASS.							
111	Albaty.....	\$534.61	\$148.69	\$860.06		\$215.66	\$1,760.02
113	Birmingham.....	5,389.76	1,403.40	2,519.36		1,279.71	10,592.23
102	Horton.....	42.66	12.56	208.63			263.85
105	Chattanooga.....	8,485.60	3,448.57	11,932.03		7.50	22,398.54
114	Chester.....	10,153.75	1,134.18	9,130.27		40.00	22,772.59
103	Cincinnati.....	4,454.67	1,163.11	3,374.90			8,993.75
109	Cleveland.....	4,817.48	1,643.15	4,489.60			10,470.25
107	Denver.....	6,697.91	1,714.26	7,142.92		2,117.63	15,453.98
108	Des Moines.....	2,920.42	714.26	1,486.06		1,085.90	7,241.36
109	Galveston.....	891.80	217.38	2,033.37			4,206.45
100	Marblehead.....	3,008.25	1,050.10	2,733.19			6,791.54
101	Montgomery.....	3,635.61	1,023.96	3,158.32			7,817.89
112	New Orleans.....	7,064.91	2,571.71	6,487.27			16,123.89
104	Raleigh.....	4,085.09	757.07	5,189.83		107.30	10,139.29
113	Salem.....	6,277.96	1,926.77	858.85		790.79	9,851.37
110	Thomas.....	396.30	1,537.76	1,068.12			1,698.18
MONITORS.							
104	Amphitrite.....	385.67	107.45	266.64			789.76
700	Cheyenne.....	19,330.95	7,219.64	20,820.55		2,582.51	49,953.66
705	Michigan.....	791.71	210.21	219.45			1,221.37
708	Monadnock.....	1,332.49	369.03	1,365.03		386.69	3,472.14
706	Monterey.....	20.64	5.00	7.02			32.72
701	Ozark.....	5,063.02	1,648.54	8,130.99			14,832.55
702	Ozark.....	1,275.00	283.09	5,047.73			6,615.82
707	Terror.....	634.22	161.64	8.86			801.72
703	Tonopah.....	10,566.80	2,625.78	5,546.75			18,739.33
DESTROYERS.							
254	Allen.....	732.61	289.68	441.54			1,413.83
221	Amgen.....	6,177.78	1,894.60	3,040.67			11,113.05
246	Aurora.....	10,072.15	3,130.40	7,535.31			20,737.86
247	Baldwin.....	9,843.08	3,166.46	6,371.31			19,380.85
242	Beale.....	23,798.00	7,375.52	19,966.85			51,140.37
248	Bennett.....	8,617.41	1,835.33	3,012.89			10,715.63
223	Burrows.....	8,019.77	2,444.08	4,218.30			14,682.15
243	Cassin.....	6,285.15	1,683.12	5,506.29			13,474.56
277	Corrywagham.....	2,485.08	1,869.02	1,646.55			5,030.14
244	Cummings.....	7,524.02	1,869.02	5,714.84			15,137.88
250	Cushing.....	9,031.63	2,381.56	5,490.55			17,903.76
265	Davis.....	68.91	21.25	40.11			130.27
264	Dewees.....	1,048.42	332.07	706.46		75.00	2,161.95

224	Drayton.....	3,712.93	1,196.60	6,073.32	601.87	10,962.85
242	Duncan.....	17,422.03	4,220.79	6,363.52	.....	24,008.13
256	Ericson.....	1,872.30	3,196.47	5,741.23	.....	20,818.00
258	Fanning.....	1,081.84	1,620.84	3,337.64	.....	10,298.72
216	Fleming.....	9,954.86	1,620.84	3,548.70	.....	11,126.43
226	Henley.....	2,130.12	676.14	1,420.80	.....	4,227.06
257	Jacob Jones.....	938.50	328.67	928.55	.....	2,195.81
227	Jarvis.....	6,413.30	2,111.02	3,014.14	.....	11,538.46
228	Jenkins.....	5,615.82	2,007.85	2,698.44	.....	10,322.11
229	Jonett.....	4,593.81	1,482.13	2,498.32	.....	8,565.26
210	Lansont.....	6,580.70	2,136.93	2,675.35	.....	11,658.64
261	McCall.....	8,819.20	2,718.65	4,142.64	.....	15,680.64
245	McDougal.....	9,079.42	2,244.18	7,758.06	.....	19,081.66
230	Maynard.....	7,115.63	241.17	1,027.10	.....	14,083.96
232	Monaghan.....	7,653.42	2,101.60	4,328.94	.....	14,083.96
251	Nicholson.....	9,865.94	2,603.00	5,839.02	.....	18,501.96
252	O'Brien.....	8,746.26	1,126.43	3,128.85	.....	8,004.54
249	Parker.....	9,401.03	3,050.63	8,709.61	.....	21,161.27
233	Patterson.....	2,678.70	950.34	1,560.68	.....	5,186.72
234	Pauding.....	7,365.29	2,331.75	4,021.39	.....	13,719.43
235	Perkins.....	6,485.61	1,770.80	2,546.30	.....	11,102.71
253	Porter.....	873.04	322.85	528.56	.....	1,722.45
218	Presson.....	5,779.52	2,070.08	7,472.90	.....	15,471.93
219	Reld.....	4,047.96	1,167.95	1,506.09	.....	6,822.00
226	Roë.....	10,825.93	2,960.66	5,074.78	.....	18,861.37
204	Rowan.....	374.41	93.32	490.49	.....	958.22
263	Sampson.....	568.19	145.95	300.82	.....	1,064.96
268	Shaw.....	106.57	23.97	161.79	.....	292.33
220	Smith.....	4,078.33	1,139.27	2,616.60	.....	7,834.20
237	Sterett.....	2,704.10	726.70	1,702.95	.....	10,761.51
238	Terry.....	16,620.04	4,603.11	13,736.34	.....	36,728.89
229	Trippé.....	1,998.14	709.58	1,389.34	.....	4,097.06
259	Tucker.....	908.44	323.82	924.08	.....	2,156.94
260	Wadsworth.....	1,511.48	436.11	934.74	.....	2,882.33
261	Wainwright.....	1,616.94	511.21	1,153.44	.....	3,261.99
240	Walke.....	6,214.83	1,845.43	2,768.14	.....	12,412.64
241	Warrington.....	4,485.61	1,577.23	4,303.09	.....	10,965.93
267	Wilkes.....	3,328.06	879.38	1,315.07	.....	6,524.51
253	Winslow.....	9,374.40	2,545.82	4,542.44	.....	16,262.66
300	A-2.....	100.85	17.33	45.35	.....	3,183.03
301	A-3.....	205.13	34.39	277.12	.....	1,615.65
302	A-4.....	38.34	6.51	21.42	.....	3,063.27
303	A-5.....	455.33	78.19	480.61	.....	2,097.00
304	A-6.....	280.94	48.68	462.06	.....	800.68
305	A-7.....	35.88	6.11	21.38	.....	91.57
306	B-1.....	250.90	45.02	2,359.26	.....	2,655.18
307	B-2.....	85.99	17.55	2,248.60	.....	2,873.96
308	B-3.....	75.78	12.73	2,245.58	.....	2,525.94
309	C-1.....	50.30	13.89	123.07	.....	187.26
310	C-2.....	.....	.....	22.73	.....	22.73

SUBMARINES.

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoice.	Total.
SUBMARINES—continued.							
311	C-3			\$22.73			\$22.73
312	C-4			19.73			19.73
313	C-6			19.73			19.73
314	D-1		\$2,188.46	6,788.24			17,883.95
315	D-2	\$8,950.26	2,016.13	6,607.37			17,489.19
316	D-3	7,408.46	1,817.85	4,599.27		\$245.00	13,855.58
317	E-1	5,967.33	1,448.49	27,223.53	\$91.00		35,436.35
318	E-2	4,185.53	728.18	57,824.90	300.00		63,035.61
319	F-1	19,517.80	4,618.60	11,828.07	147.00		36,108.17
320	F-2	19,184.62	4,578.37	15,910.51	73.50		39,748.00
321	F-3	9,921.08	2,405.57	9,102.38			21,429.03
322	G-1	2,247.03	551.03	1,117.93			3,915.99
323	G-2	4,113.95	796.31	807.79			5,718.05
324	G-3	3,172.73	741.76	553.39			4,467.88
325	U-1	3,874.76	834.97	533.41			5,243.14
326	U-2	3,512.14	1,400.60	2,494.82	60.40	423.60	7,998.46
327	H-1	3,794.67	1,481.71	2,037.34	61.60	1,221.07	9,176.38
328	H-2	4,844.25	1,857.02	4,580.52	66.40		11,348.26
329	H-3	2,865.45	1,443.01	4,580.58			8,889.04
330	F-2	5,600.42	1,463.61	51,250.04	5,535.00		63,849.07
331	F-3	1,224.46	85.61	1,953.97			3,264.04
332	F-4	1,601.69	95.08	968.65			2,665.42
333	F-5	2,324.12	585.60	1,877.25			4,787.07
334	F-6	2,825.30	694.07	1,995.85			5,515.22
335	F-7	2,990.93	78.64	1,082.24	960.00		5,111.81
336	F-8	1,100.69	71.90	1,108.79			2,380.38
337	F-9	5.44	1.82				7.26
338	I-5			122.80			122.80
339	I-6			122.80			122.80
340	I-7			122.80			122.80
341	I-8			15.00			15.00
342	I-9			146.50			146.50
343	I-10	441.93	186.53				628.46
344	I-11	2.24	.90				3.14
345	N-1			122.80			122.80
346	N-2			122.80			122.80
347	N-3			122.80			122.80
348	N-4			122.80			122.80
349	N-5	63		122.80			185.80
350	O-6	17.78	.60	169.16			187.54

COAST TORPEDO VESSELS—DESTROYERS.

704	Bainbridge.....	2, 121.99	599.43	1, 407.24	.....	4, 128.66
705	Berry.....	193.57	308.43	2, 372.96	.....	3, 560.64
706	Chaunoy.....	1, 075.13	297.38	2, 272.48	.....	4, 739.59
707	Dale.....	1, 399.58	242.60	2, 661.21	1, 073.55	4, 328.17
708	Decatur.....	628.01	141.66	878.68	.....	1, 814.13
709	Hopkins.....	602.58	268.35	673.55	.....	1, 622.92
710	Hull.....	1, 274.07	333.60	487.55	.....	2, 215.55
711	Lawrence.....	1, 623.15	322.99	644.71	.....	2, 444.30
712	Maconochie.....	1, 121.77	266.52	975.94	.....	1, 989.47
713	Macdonough.....	1, 228.56	1, 096.16	2, 021.21	.....	2, 471.32
714	Paul Jones.....	3, 359.62	1, 125.44	553.30	.....	6, 477.01
715	Ferry.....	733.96	59.03	515.94	.....	1, 412.70
716	Preble.....	374.59	108.63	332.26	.....	949.56
717	Stewart.....	787.92	401.05	578.10	.....	1, 228.81
718	Truxtun.....	553.95	.....	.....	.....	1, 359.87
719	Whipple.....	94.25	.....	.....	.....	2, 344.46
720	Wordan.....	1, 365.31	.....	.....	.....	.....

COAST TORPEDO VESSELS—TORPEDO BOATS.

719	Bailey.....	607.14	158.55	181.75	.....	927.44
720	Bailey.....	501.59	131.67	284.14	167.59	1, 085.15
721	Biddle.....	534.04	150.11	300.94	.....	987.02
722	Blakely.....	20.77	6.39	69.39	.....	94.55
723	Dahlgren.....	579.69	160.28	739.78	.....	1, 469.70
724	Delong.....	832.87	231.75	871.98	.....	1, 936.46
725	Drumont.....	681.44	199.92	426.00	.....	1, 307.36
726	Farragut.....	428.98	94.85	163.60	.....	685.41
727	Foote.....	398.68	116.26	362.31	.....	877.26
728	Goldborough.....	27.13	8.85	155.32	.....	191.31
729	Morris.....	342.05	80.04	141.50	.....	563.60
730	Rodgers.....	171.69	58.40	132.04	.....	545.59
731	Shubrick.....	558.15	151.26	644.80	183.46	1, 354.30
732	Shubrick.....	955.05	257.38	882.01	.....	2, 094.44
733	Thornion.....	1, 281.29	320.61	1, 387.43	.....	2, 989.33
734	Tukey.....	.....	.....	.....	.....	.....

TENDERS TO TORPEDO VESSELS.

730	Alert.....	7.11	2.01	1.77	10.89
731	Bushnell.....	3, 227.74	1, 082.13	1, 931.21	351.10	6, 622.13
732	Dixie.....	363.51	292.76	3, 044.36	4, 850.98	8, 846.91
733	Fulton.....	1, 931.49	313.70	946.58	9, 603.04	12, 242.66
734	Irish.....	3, 262.52	1, 191.22	1, 683.10	67, 000.00
735	Magville.....	1, 683.77	281.68	738.15	754.60	7, 267.66
736	Panther.....	368.25	162.68	332.30	2, 257.26	4, 337.96
737	Pompey.....	1, 083.13
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GUNBOATS.

662	Annapolis.....	1, 699.90	330.58	1, 267.07	1, 113.69	4, 411.24
670	Castine.....	1, 935.87	850.40	2, 786.63
677	Dolphin.....	1, 561.74	693.60	1, 141.50	3, 614.42	6, 911.26
667	Dubuque.....	1, 687.37	438.30	1, 832.60	317.32	3, 275.59

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in Invoice.	Total.
GUNBOATS—continued.							
656	El Cano.....	\$34.42	\$10.88	\$317.49		\$8.80	\$392.79
657	Halema.....						8.80
658	Maclias.....	6,091.19		2,869.46			8,960.65
660	Marieta.....	5,086.26	1,774.34	2,850.47		147.68	9,858.75
651	Monocacy.....			187.00		52.00	219.00
673	Nashville.....	564.34		281.99			816.33
668	Newport.....	6,351.11	1,626.87	2,985.66			10,963.64
663	Paducah.....	1,525.53	384.48	1,037.16			2,947.17
656	Quinos.....				\$163.86		163.86
672	Ranger.....	1,378.02	461.84	1,181.30			3,021.16
676	Sacramento.....	2,900.90		1,556.09			4,456.99
665	Vicksburg.....	1,171.82	460.08	1,505.31			3,137.16
667	Villalobos.....				161.91		161.91
661	Wheeling.....					78.86	78.86
675	Wilmington.....	1,533.23		365.02			1,977.23
679	Yorktown.....	1,423.71	303.76	1,216.73		594.12	3,538.32
TRANSFERTS.							
763	Buffalo.....	4,265.22	935.21	2,962.85			8,183.28
750	General Alava.....	3,934.47	1,037.17	5,490.34			10,461.98
754	Hancock.....	781.25	211.69	2,677.51			3,670.45
755	Henderson.....	1.05	30				1.35
753	Pratt.....	12,403.28	4,486.31	8,328.17		2,216.83	27,433.69
SUPPLY SHIPS.							
779	Bridge.....	2.46	62				3.10
777	Catic.....	2,717.38	822.07	783.42			4,322.87
776	Cuipo.....	15,432.13	3,726.88	15,876.27		438.30	35,466.58
778	Glacier.....	819.10	88.27	384.95		86.21	1,358.53
775	Supply.....	549.43	150.86	738.29			1,438.58
801	Salces.....	4,109.00	1,143.63	4,414.15			9,666.78
HOSPITAL SHIP.							
611	Abaranda.....	909.80	23.14	6.85			239.79
612	Ajax.....	1,013.90	297.68	708.17			2,019.52
615	Aretinus.....	4,047.21	1,197.01	3,480.39			8,724.61
610	Brunus.....	9,084.24	1,897.01	5,521.70			16,502.95
623	Cassir.....	1,766.64	558.69	1,642.21			3,967.54
624	Cassir.....	1,766.64	558.69	1,642.21			3,967.54
624	Cyprian.....	1,766.64	558.69	1,642.21			3,967.54
627	Cyrops.....	2,714.70	646.24	2,540.28			5,901.22

613	Hector.....	94.87	20.87	Cr. 109.19	.....	576.45
620	Jason.....	24,821.84	7,159.33	12,493.25	.....	44,870.99
612	Jupiter.....	19,283.84	2,183.77	20,467.61	133.30	40,013.30
614	Madawaska.....	7,983.55	2,083.45	2,584.70	.....	17,231.50
617	Mars.....	7,982.05	1,910.50	2,494.70	.....	14,097.50
618	Mercury.....	7,982.05	1,983.45	2,969.47	.....	16,625.40
604	Minerva.....	7,940.71	539.27	2,067.60	33.60	4,947.53
623	Neptune.....	21,196.53	6,566.37	12,017.04	.....	39,813.51
618	Nepheus.....	5,324.53	2,009.80	3,491.94	.....	11,826.13
609	Nereus.....	7,076.85	1,828.30	3,163.38	.....	17,668.53
621	Orion.....	7,281.93	1,825.07	6,721.05	.....	15,828.05
619	Proteus.....	10,742.37	3,329.60	7,023.58	.....	21,095.55
603	Saturn.....	11,506.57	2,749.30	6,116.66	.....	20,372.53
605	Skarling.....	4,516.66	1,501.17	2,395.73	.....	8,413.56
615	Vulcan.....	8,462.76	2,371.04	5,088.50	.....	15,922.30
CONVERTED YACHTS.						
334	Dorothea.....	468.77	129.40	149.45	32.00	32.00
333	Eagle.....	5.50	1.87	.....	.....	7.37
328	Elfrida.....	55.27	18.08	224.19	.....	297.54
337	Gloucester.....	.....	.....	966.70	.....	966.70
332	Hawk.....	.....	.....	.....	.....	2.00
325	Huntress.....	3,860.20	1,742.72	1,253.99	8,569.03	15,425.94
340	Mayflower.....	65.52	26.76	88.67	.....	150.95
327	Syph.....	546.05	193.52	451.60	.....	1,191.17
330	Sylvia.....	2,940.81	854.49	2,843.25	.....	6,638.55
338	Vixen.....	.....	.....	10.31	.....	11.51
335	Wasp.....	.....	889.47	2,571.95	.....	7,496.74
339	Yankton.....	3,705.32	.....	.....	320.00	.....
TUGS.						
504	Accomac.....	495.49	163.55	69.79	.....	728.83
522	Active.....	32.28	.....	11.20	.....	43.48
534	Apache.....	12.90	4.02	Cr. 3.45	.....	13.46
545	Arapaho.....	971.07	224.42	1,461.37	.....	2,066.86
519	Choctaw.....	85.67	47.33	22.08	.....	155.08
507	Hercules.....	674.00	179.61	539.38	.....	1,332.99
536	Iroquois.....	2,510.90	478.35	638.54	.....	3,627.39
505	Iwawa.....	467.57	157.24	121.51	.....	746.32
516	Modoc.....	103.00	28.01	84.72	.....	185.73
546	Mohave.....	2,119.57	738.91	3,004.51	.....	5,863.29
528	Mohawk.....	34.44	8.87	163.96	.....	207.27
506	Narceeta.....	24.33	6.69	6.33	.....	37.25
541	Navajo.....	359.57	24.20	549.13	.....	933.25
543	Ontario.....	5,130.21	1,423.30	2,455.86	.....	8,989.37
533	Oscola.....	.....	.....	.....	.....	.....
537	Pataasco.....	545.14	146.86	351.08	.....	1,043.08
538	Pattuxent.....	1,597.03	513.71	910.62	.....	4,222.93
520	Pawnee.....	10.04	4.14	3.98	.....	20.76
511	Pawtucket.....	15.28	42.28	3.49	.....	101.76
513	Pemscok.....	14.28	4.43	.....	.....	18.71
514	Pemscuket.....	88.59	24.47	.....	.....	161.69
532	Peoria.....	88.41	24.47	10.40	.....	161.22
.....	.....	.....	.....	14.81	.....	.....
.....	.....	.....	.....	.....	.....	1,241.95

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in Invoices.	Total.
TUGS—Continued.							
542	Piscataqua.....	8976.76	\$298.05	\$572.15		\$254.37	\$2,069.33
543	Pointonast.....	3,264.45	1,022.02	913.31			3,201.88
547	Petisco.....	162.19	15.00	1.04			203.81
549	Pecharas.....	10.12	6.07	168.59			232.55
549	Pecharas.....	10.91	6.07	9.77			33.78
549	Pecharas.....	339.42	98.26	62.59			600.69
549	Pecharas.....	158.57	47.61	123.09			320.11
549	Pecharas.....	213.94	55.10	54.81			323.85
549	Pecharas.....	2,112.58	934.37	2,112.58			5,007.53
549	Pecharas.....	3,053.04	810.34	1,134.46			4,997.84
544	Seneca.....	298.33	124.15	1,230.24			1,640.77
544	Seneca.....	116.94	43.62	29.59			190.15
530	Standish.....	100.17	55.68	9.88			165.73
547	Tellamook.....	1,167.73	398.58	1,605.16		5.00	3,869.47
531	Tellamook.....	282.68	53.88	50.61			389.17
535	Transfer.....	1.51	55	2.65			4.71
509	Triton.....	113.14	59.96	29.16			202.25
525	Unadilla.....	84.82	17.17	81.25			183.24
528	Unness.....	212.45	69.11	82.89			364.44
523	Vigilant.....	25.20	1.36	43.47			70.03
501	Wahpeta.....	108.21	31.25	1,039.31			1,168.77
548	Wando.....	397.36	106.64	369.31			873.31
531	Wompatnek.....	10.18	4.43	3.55			18.16
SPECIAL TYPE.							
576	Baltimore.....	5,151.89	1,447.76	3,504.72		1,419.69	11,524.05
601	Hannibal.....	21,671.90	5,829.51	15,673.49			43,174.90
910	Lebanon.....	1,549.53	369.52	959.03			2,878.08
602	Leonidas.....	4,559.23	1,213.26	2,634.02		20.54	8,427.05
852	Prometheus.....	13,973.89	4,435.25	11,825.55		1,077.28	31,261.97
875	San Francisco.....	9,949.68	2,668.64	9,680.67		677.00	22,875.99
851	Vestal.....	6,239.34	2,206.43	5,711.41			14,157.18
900	Venusius.....					1,544.33	1,544.33
UNSERVICEABLE FOR WAR PURPOSES.							
953	Boxer.....			57.80			57.80
954	Constellation.....	40.00					40.00
955	Constitution.....	105.95	21.87	295.41			423.23
956	Cumberland.....	805.69	267.11	648.84			1,721.64
951	Albatross.....	12.83	4.75	21.49			39.07
961	Granite State.....	340.22	88.91	529.87			959.00
962	Hartford.....	2,663.40	657.26	1,732.07			5,042.73

963	Intrepid.....	98.61	20.92	228.75	348.28	
733	Mohican.....	129.50	21.57	2,609.12	2,785.92	
967	Philadelphia.....	31.59	13.17	25.92	170.68	
751	Rainbow.....	10.20	1.39	162.77	174.36	
969	Reina Mercedes.....	3.84	.....	.....	2,065.55
970	Richmond.....	6.84	2.04	.....	7.88
971	Severn.....	1,050.07	270.58	691.69	30.00	
973	Southery.....	7,908.76	2,468.58	3,292.59	13,669.92	
59	MISCELLANEOUS VESSELS.					
459	Aramannon (K. Wilhelm II).....	7.38	1.85	.....	9.23
166	Albatross.....	57.04	.....	.....	57.04
169	Algonquin.....	254.96	77.57	97.01	429.54	
55	Antigone (Neckar).....	2.60	1.01	.....	3.61
158	Armenia.....	149.65	34.63	15.77	200.05	
176	Bath (Andromeda).....	229.76	.....	11.95	241.71
159	Blar.....	61.63	14.17	5.80	81.60	
167	Bridgeport (Breslau).....	14.64	.....	.....	14.64
190	Bulgaria.....	22.81	8.57	7.30	38.68	
74	Camden (Kiel).....	844.35	219.52	1,753.12	2,816.99	
450	Carib.....	321.57	80.84	398.01	790.42	
156	City of Savannah.....	2.16	65	.....	2.81
460	De Kalb (Prinz Eitel Frederick).....	56,816.32	16,592.62	42,025.56	115,434.50	
153	Drake.....	26.87	7.32	195.81	230.00	
71	El Occidente.....	248.51	49.98	535.66	834.15	
178	Florence Luckenback.....	1,183.24	342.40	70.74	1,596.38	
72	Havana.....	5,187.08	1,435.92	2,334.01	8,957.01	
163	H. B. Mallory.....	2.89	.....	384.52	388.28
67	Houston (Leibnizfels).....	10,683.51	2,969.81	5,928.44	19,581.76	
189	Light Vessel No. 69.....	7,104.11	2,096.15	2,899.43	12,099.69	
177	Light Vessel No. 70.....	8.60	1.72	363.94	374.26	
455	Locksunn.....	213.81	32.39	1.00	1.00	
191	Long Beach.....	35.52	.....	196.00	442.20
61	Mala.....	130.72	32.28	210.07	246.59	
56	Masovia.....	182.06	41.42	58.81	221.81	
182	Morus.....	287.41	58.26	13.16	238.64	
66	Newport News (Odenwald).....	3,908.22	964.48	1,153.12	1,498.79	
186	Pastores.....	11.52	2.28	499.30	5,302.00	
192	Panacoola (Nicasis).....	71.10	15.73	309.31	323.11	
57	Pisa.....	213.21	62.55	102.55	189.38	
161	Pocahontas (Princess Irene).....	94.70	25.99	20.92	281.68	
62	Portonau.....	25.88	6.16	42.53	163.22	
173	San Jacinto.....	32.55	.....	15.66	48.74
171	Santa Barbara.....	15.86	.....	485.53	485.53
172	Santa Catalina.....	16.48	.....	.....	116.56
173	Santa Cecilia.....	15.08	.....	.....	15.08
163	Santa Clara.....	5,826.08	1,583.46	.....	7,409.54
68	Saratoga.....	378.30	109.66	1,770.91	9,190.46	
63	Savannah (Saxonia).....	.....	.....	728.14	1,471.09

Statement 6.—FLEET MAINTENANCE—ALTERATIONS—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued in invoices.	Total.
MISCELLANEOUS VESSELS—continued.							
453	Schurz (Geler).	\$345.06		\$23.62			\$368.68
996	Ships, Naval Academy.					\$126.45	129.45
60	St. Paul.	35.44	\$10.63				46.07
170	Susquehanna (Rhein).	235.10	78.42				313.52
458	Vergana.	85.83	24.08				109.91
157	Von Stubben (Kronprinz Wilhelm).	64,305.72	19,051.24	19.31			83,376.27
174	Woodbine.	104.69	37.56	71.24			136,874.53
180	Yamacraw.	154.13	53.11	.06			207.30
905	Fifth District.				\$3,086.32		3,086.32
907	Seventh District.	1,969.36	439.66	749.77	88.26		3,247.05
912	Twelfth District.	109,181.22	29,153.10	62,261.45	1,775.41		202,371.18
915	Chasers, etc.	114.62		66.80	1,453.83		1,635.25
997	Aeroplanes.						
	Total.	2,637,766.78	772,025.76	2,518,579.42	45,574.29	370,268.68	6,344,214.93

COST OF ALTERATIONS PER TON, BY CLASSES.

Class of vessels.	Title K.	Class of vessels.	Title K.
Battleships:		Tenders to torpedo vessels.	\$1.27
First line.	31.58	Gunboats.	2.68
Second line.	5.56	T-transport.	1.64
Armored cruisers.	4.08	Supply ships.	1.26
Cruisers:		Hospital ship.	1.70
First class.	2.50	Fuel ships.	1.19
Second class.	4.21	Converted yachts.	3.68
Third class.	3.08	Tugs.	2.92
Monitors.	3.87	Special types.	2.96
Destroyers.	12.70	Unserviceable for war purposes.	.64
Coast torpedo vessels:		Average for all classes.	2.96
Destroyers.	6.45		
Torpedo boats.	5.44		

Reconfitment with Statement 1:
 Total charged to title K, Statement 6..... \$6,344,214.93
 Less amount of equipment transferred from title B to title K, not chargeable to cost of the Navy..... 364,239.57
 Net cost, per Statement 1..... 5,979,975.36

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
Total.....		\$549,746.89	\$134,111.64	\$207,668.58	\$50,527.79	\$40,366.06	\$982,420.96
BATTLESHIPS—FIRST LINE.							
26	South Carolina.....	4,548.21	1,305.65	1,624.07	343.20	392.89	8,214.02
23	Michigan.....	2,136.71	690.11	1,113.93	710.80	1,197.73	5,849.28
28	Delaware.....	6,650.37	2,145.41	2,466.26	586.00	622.28	12,470.32
29	North Dakota.....	1,969.43	651.84	1,176.92	132.29	.....	3,930.48
30	Florida.....	12,093.60	3,423.19	5,193.56	764.22	3,137.18	24,612.05
31	Utah.....	8,314.18	2,573.98	3,310.00	450.25	1,642.26	16,290.76
33	Wyoming.....	10,823.30	3,155.00	9,949.32	1,993.95	3,001.34	28,922.91
32	Arkansas.....	13,562.18	4,466.92	5,720.40	2,138.59	802.49	26,690.58
34	New York.....	3,854.50	515.29	5,003.81	382.63	319.94	10,076.17
37	Texas.....	920.19	341.23	437.20	462.02	415.47	2,576.11
35	Nevada.....	1,332.29	431.03	569.47	85.00	2,173.22	4,591.01
36	Oklahoma.....	757.16	235.59	332.81	143.18	958.37	2,427.11
38	Pennsylvania.....	2,459.61	777.95	1,020.91	29.60	1,870.98	6,159.05
39	Arizona.....	1,778.08	565.18	318.60	213.82	310.93	3,186.61
40	New Mexico.....	9.74	2.33	.....	.....	.....	12.61
41	Mississippi.....	9.75	2.34	.....	.....	.....	12.61
42	Idaho.....	9.75	2.34	.....	.....	.....	12.61
BATTLESHIPS—SECOND LINE.							
1	Indiana.....	186.81	52.99	26.48	.....	.....	266.28
2	Massachusetts.....	151.64	44.16	.....	.....	.....	195.80
3	Oregon.....	2,591.75	726.04	845.87	85.10	257.53	4,506.29
4	Iowa.....	246.58	71.62	2.98	.....	.....	321.18
5	Kearsarge.....	1,249.74	448.91	637.32	153.12	.....	2,489.09
6	Kentucky.....	4,226.12	1,309.89	1,362.06	130.96	377.67	7,406.70
8	Illinois.....	2,350.57	678.92	525.85	301.10	319.76	4,176.20
7	Alabama.....	1,081.81	406.68	437.37	76.30	1,027.83	3,029.99
9	Wisconsin.....	2,973.01	1,070.84	656.93	358.39	151.02	5,210.19
10	Maine.....	4,036.75	1,372.04	2,207.08	2,751.95	187.95	10,555.77
11	Missouri.....	751.59	223.49	257.20	134.67	928.95	2,295.90
12	Ohio.....	8,085.43	2,686.43	1,768.69	110.10	.....	12,650.65
19	Virginia.....	3,961.99	1,197.24	1,102.53	146.73	25.78	6,434.27
16	Nebraska.....	3,519.47	1,107.77	979.84	486.60	132.76	6,226.44
15	Georgia.....	6,424.63	1,904.38	1,187.43	164.68	.....	9,681.02
17	New Jersey.....	3,328.01	841.56	1,177.67	618.30	58.49	6,024.03
18	Rhode Island.....	2,795.12	796.19	1,504.63	955.81	547.04	6,598.79
20	Connecticut.....	4,998.07	1,220.11	1,501.14	173.87	263.19	8,156.38
22	Louisiana.....	9,809.95	2,772.74	6,240.37	90.50	1,864.86	20,778.42
27	Vermont.....	11,411.83	3,618.17	3,010.33	74.50	33.34	18,148.27
31	Kansas.....	9,657.26	2,195.02	3,521.70	72.23	.....	15,446.21
24	Minnesota.....	6,288.27	1,728.63	2,601.60	2,569.60	197.90	13,416.00
25	New Hampshire.....	5,061.48	1,760.84	2,668.34	73.59	174.98	9,739.23
ARMORED CRUISERS.							
127	Frederick.....	6,660.92	2,741.36	1,572.33	110.97	.....	11,085.58
130	Huntington.....	6,009.01	1,748.25	1,508.61	175.00	138.54	9,579.41
133	Memphis.....	12,596.54	1,238.58	2,739.97	217.40	.....	16,792.49
131	Montana.....	15,617.25	702.83	5,512.02	607.00	845.02	23,284.12
132	North Carolina.....	7,366.19	1,867.77	2,408.08	236.22	14.81	11,893.07
128	Pittsburgh.....	5,865.09	2,293.21	3,345.68	141.10	1,636.39	13,281.47
126	Pueblo.....	3,160.75	1,339.97	678.65	118.40	1,728.69	7,026.46
125	San Diego.....	5,982.36	2,018.77	2,606.88	226.57	241.50	11,076.17
129	South Dakota.....	9,983.65	4,389.28	1,989.12	1,141.52	1,614.21	19,117.78
134	Seattle.....	3,413.14	861.60	1,167.38	1,135.90	157.08	6,735.10
CRUISERS—FIRST CLASS.							
121	Brooklyn.....	3,522.76	866.66	1,842.86	74.83	.....	6,307.11
122	Charleston.....	726.05	234.90	129.95	74.08	213.70	1,378.68
123	Milwaukee.....	2,979.10	824.52	1,411.75	96.55	.....	5,311.92
120	Saratoga.....	13,136.46	5,554.40	3,845.04	409.00	.....	22,944.90
124	St. Louis.....	947.44	420.45	966.80	2.50	153.75	2,490.94
CRUISERS—SECOND CLASS.							
116	Chicago.....	1,575.59	583.81	604.63	166.18	.....	2,930.21
118	Columbia.....	403.03	167.09	209.12	166.80	380.37	1,326.41
119	Minneapolis.....	257.44	70.84	153.80	.....	.....	482.08
117	Olympia.....	3,638.57	926.62	932.30	6.00	23.05	5,526.54

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
CRUISERS—THIRD CLASS.							
111	Albany.....	\$555.83	\$233.53	\$144.26	\$87.20	\$410.84	\$1,431.76
113	Birmingham.....	1,645.61	313.87	1,138.84	56.73		3,155.05
102	Boston.....	584.06	204.13	109.96	55		898.70
105	Chattanooga.....	3,074.82	877.37	1,113.75	127.25	70.91	5,264.10
114	Chester.....	1,673.32	520.24	180.12	278.45		2,661.53
103	Cincinnati.....	1,557.80	472.80	496.19	1.92		2,528.71
106	Cleveland.....	555.63	154.39	315.53	108.10		1,316.32
107	Denver.....	1,290.19	374.85	571.45	54.70	387.27	2,687.46
108	Des Moines.....	438.87	121.91	33.61	2.51	182.67	596.90
109	Galveston.....	1,607.68	371.89	1,495.51	224.13	739.02	4,438.23
100	Marblehead.....	1,874.46	907.57	1,598.22			4,380.25
101	Montgomery.....	2,247.57	794.91	1,408.25			4,450.73
112	New Orleans.....	954.68	328.57	197.58	55.00	19.64	1,555.47
104	Raleigh.....	1,288.23	511.41	1,014.29	9.00	59.45	2,882.38
115	Salem.....	2,603.29	520.48	673.52	50.15		3,856.44
110	Tacoma.....	384.34	124.40	168.37	8.00	786.20	1,471.31
MONITORS.							
704	Amphitrite.....	560.62	124.66	30.83	4.90		730.01
700	Cheyenne.....	2,978.85	1,269.90	932.68	45.25	355.28	5,581.96
705	Montanomonah.....	93.58	44.30	2.60			140.48
706	Monadnock.....	176.80	39.57	59.89	35.25	1,197.67	1,509.18
708	Montarey.....	740.08	194.40	191.61	37.25		1,163.34
701	Ozark.....	1,186.89	369.52	520.14	93.50	572.28	2,742.33
702	Tallahassee.....	365.29	115.81	206.76	184.45		872.31
703	Tonopah.....	3,386.35	1,126.15	2,286.95	23.46		6,822.91
DESTROYERS.							
266	Allen.....	179.38	10.17	13.40			202.95
221	Ammen.....	1,483.16	520.10	243.36	140.92		2,387.54
246	Aylwin.....	2,448.04	355.05	1,787.13			4,590.22
247	Balch.....	6,060.30	950.83	2,190.30			9,201.43
222	Beale.....	120.68	36.51	39.12	35.50		240.81
248	Benham.....	3,155.56	147.00	1,289.33	10.45		4,602.34
223	Burrows.....	1,444.96	198.45	169.45			1,812.86
243	Cassin.....	4,092.66	74.97	988.30	93.68		5,249.61
255	Coyne/Ingham.....	1,294.51	369.31	531.72			2,195.54
244	Cummings.....	3,661.65	295.90	889.50	8.40		4,855.54
250	Cushing.....	4,962.74	298.03	1,861.49	100.00		7,222.26
265	Davis.....	184.71	54.00	9.70			248.41
254	Downes.....	151.40	47.23	35.14			233.77
224	Drayton.....	1,203.91	373.90	242.68	59.25		1,879.74
242	Duncan.....	2,671.55	195.84	677.38	424.00		3,968.77
256	Ericsson.....	4,668.49	294.69	977.85	416.96		6,357.99
225	Fanning.....	1,882.79	499.08	235.26	3.50		2,620.63
216	Flusser.....	644.76	101.38	146.04			892.18
226	Henley.....	2,596.18	306.30	1,064.22	8.50		3,975.20
257	Jacob Jones.....	65.00	11.50	13.77			90.27
227	Jarvis.....	1,098.29	369.88	175.03			1,643.26
228	Jenkins.....	4,393.08	1,137.92	541.76	1,741.56		7,814.33
229	Jouett.....	2,156.94	730.14	333.23	10.94		3,231.25
217	Lamson.....	1,798.97	690.67	89.44	28.50		2,507.58
231	McCall.....	4,187.42	545.04	304.57	217.00		5,254.08
245	McDougal.....	5,702.93	496.69	2,733.13	21.44		8,954.19
230	Mayrant.....	102.99	2.90	98.16			204.05
232	Monaghan.....	612.67	130.98	141.64	10.50		895.79
251	Nicholson.....	4,643.44	121.71	1,876.09			6,641.24
252	O'Brien.....	5,761.31	542.98	2,663.87	114.72		9,082.88
249	Parker.....	1,603.99	288.52	792.71	102.75		2,787.97
233	Patterson.....	243.81	34.13	165.81	51.00		494.75
234	Paulding.....	1,029.59	293.82	209.44			1,532.85
235	Perkins.....	1,456.50	318.45	238.09			2,013.04
258	Porter.....	32.65	8.29	133.26	6.60		180.80
218	Preston.....	3,348.70	1,072.86	396.47	75.00		4,893.03
219	Reld.....	679.06	214.33	142.39	8.50		1,044.28
236	Roe.....	1,743.62	412.82	568.70	3,983.03		6,710.17
264	Rowan.....	555.65	7.90	331.96			895.51
263	Sampson.....	969.28	79.88	620.50			1,669.66
268	Shaw.....	114.16	29.92	23.71			167.79
230	Smith.....	913.12	249.34	73.85	1.56		1,237.67
237	Sterett.....	520.16	128.16	84.60	68.00		798.92
238	Terry.....	720.29	175.70	468.33	54.40		1,418.72
239	Trippe.....	978.16	143.26	196.96	16.00		1,334.27

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
DESTROYERS—continued.							
259	Tucker.....	\$910.95	\$55.00	\$357.04			\$1,822.99
260	Wadsworth.....	4,998.58	160.51	3,259.20			8,418.29
261	Walwright.....	788.11	20.65	176.34	\$10.00		995.10
240	Walke.....	588.97	163.48	518.01	36.50		1,306.96
241	Warrington.....	722.53	228.66	240.00	32.25		1,223.44
267	Wilkes.....	103.28	21.69	115.48			240.45
253	Winslow.....	3,198.54	167.81	1,929.82	18.66		5,314.83
SUBMARINES.							
300	A-2.....	27.75	4.62	43.79			76.16
301	A-3.....	136.32	23.76	47.76			207.84
302	A-4.....	9.91	1.65				11.56
303	A-5.....	83.86	14.57	8.32			106.75
304	A-6.....	291.19	48.46	25.02	9.75		374.42
305	A-7.....	31.81	5.30	7.30			44.41
306	B-1.....			22.76			22.76
307	B-2.....	46.13	7.39		6.00		59.52
308	B-3.....	12.32	2.05	2.59	10.00		26.96
309	C-1.....	34.03	7.25	9.02	686.00		736.30
310	C-2.....	108.99		.02	31.50		140.51
311	C-3.....	114.10	1.51	1.42	12.50		129.53
312	C-4.....	629.47		260.73	8.00		898.20
313	C-5.....	75.98	1.08	11.06			88.12
314	D-1.....	3,848.89	61.36	1,541.26	17.00		5,468.51
315	D-2.....	4,513.50	28.55	1,510.48	19.50		6,072.03
316	D-3.....	3,008.68	4.02	1,206.19	23.00		4,241.89
317	E-1.....	2,083.77	36.32	874.70			2,994.79
318	E-2.....	1,553.79	5.32	614.16	57.00		2,230.27
319	F-1.....	85.76	23.34	10.47			119.57
320	F-2.....	206.26	59.37	17.37	47.50		330.50
321	F-3.....	278.52	76.42	22.43	41.50		418.87
323	G-1.....	726.24	104.55	83.36			914.15
324	G-2.....	316.16		40.34	9.50		366.00
325	G-3.....	53.85	10.25	13.46	347.15		424.71
326	G-4.....	415.72	8.08	96.92	8.50		529.22
327	H-1.....	896.62	324.85	232.10			1,453.63
328	H-2.....	476.96	208.23	305.89	8.00		999.08
329	H-3.....	585.87	256.22	167.20	48.00		1,057.29
330	K-1.....	802.62	38.18	236.23	371.86		1,448.89
331	K-2.....	1,897.19	23.07	853.55	323.50		3,097.31
332	K-3.....	26.99	7.55	91.23			125.77
333	K-4.....	66.82	12.26	5,776.49			5,897.34
334	K-5.....	1,320.53	17.27	555.61	492.25		2,386.66
335	K-6.....	937.16	14.77	996.31			1,948.24
336	K-7.....	1,013.47	6.92	79.76	1.40		1,101.55
337	K-8.....	391.74	17.68	40.43			449.85
338	L-1.....	154.76	1.46	44.03			200.25
339	L-2.....			100.95			100.95
340	L-3.....	25.03		112.97			138.00
341	L-4.....	345.07	71.36	153.94			570.37
346	L-9.....	51.67	5.19				56.86
347	L-10.....	320.33	6.42	3.41			330.16
349	L-11.....	346.98	4.62	7.37			358.97
348	M-1.....	16.38					16.38
351	N-1.....	2.16	.63				2.79
355	N-5.....	169.52		672.06			841.58
361	O-2.....	4.75	1.28				6.03
COAST TORPEDO VESSELS— DESTROYERS.							
204	Bainbridge.....	322.84	100.04	107.12			530.00
205	Barry.....	228.21	45.49	98.78	16.00		388.48
206	Chauncey.....	139.29	30.01	19.44			188.74
207	Dale.....	543.49	100.24	192.26	32.50		868.49
208	Decatur.....	17.77	4.10	16.02	8.00		45.89
202	Hopkins.....	867.74	287.88	111.28	45.25		1,312.15
203	Hull.....	1,077.90	343.05	495.24			1,906.19
200	Lawrence.....	1,414.68	412.39	225.24	35.00		2,087.31
201	Macdonough.....	244.78	28.08	33.76	1.50		308.12
209	Paul Jones.....	941.08	254.10	600.22	16.00		1,811.40
210	Perry.....	1,363.83	482.79	336.40	28.65		2,211.67
211	Preble.....	348.24	68.71	88.03	8.00		512.98
212	Stewart.....	334.93	92.08	45.48	26.50		498.99
213	Truxtun.....	706.74	200.02	267.49	8.00		1,182.25
214	Whipple.....	540.80	134.19	136.50	15.00		826.49
215	Worden.....	749.12	160.22	145.54	288.67		1,333.55

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
COAST TORPEDO VESSELS— TORPEDO BOATS.							
719	Bagley.....	\$580.09	\$198.24	\$53.05	.....	.....	\$831.38
728	Bailey.....	381.15	116.32	48.94	.....	.....	546.41
720	Barney.....	375.33	12.58	29.96	.....	.....	417.87
721	Biddle.....	94.14	33.74	109.35	\$10.00	.....	247.23
722	Blakely.....	128.18	.40	52.57	.....	.....	181.15
714	Dahlgren.....	17.75	4.61	7.10	.....	.....	28.46
723	De Long.....	100.62	24.22	23.16	.....	.....	148.00
717	Dupont.....	106.46	34.89	3.09	7.49	.....	151.93
727	Farragut.....	200.90	56.93	19.24	.....	.....	277.07
712	Foote.....	62.03	19.66	6.78	.....	.....	88.47
716	Fox.....	25.20	8.49	.....	20.00	.....	53.69
726	Goldsborough.....	114.41	41.72	44.86	30.50	.....	231.49
711	Morris.....	195.71	55.16	6.70	.....	.....	257.57
713	Rodgers.....	103.10	29.49	44.74	16	.....	177.49
724	Shubrick.....	254.74	55.09	99.13	.....	.....	408.96
715	Somers.....	45.12	.....	6.81	.....	.....	51.93
725	Thornton.....	65.46	17.03	.09	.....	.....	82.58
718	Tingey.....	143.69	34.08	10.95	.....	.....	188.72
TENDERS TO TORPEDO VESSELS.							
730	Alert.....	2,994.85	132.02	1,510.26	49.50	\$320.00	5,506.63
735	Bushnell.....	1,107.72	390.79	420.99	2.15	.....	1,921.65
737	Dixie.....	2,257.84	91.39	1,068.54	216.46	.....	3,654.23
732	Fulton.....	72.52	22.12	15.31	132.04	31.81	273.80
736	Iris.....	2,378.37	621.20	1,226.92	177.50	.....	4,303.99
738	Melville.....	3,216.80	329.55	1,319.09	101.73	166.92	5,134.09
850	Panther.....	270.25	59.83	102.07	11.33	131.79	575.27
734	Pompey.....	317.05	74.14	195.67	12.50	.....	599.36
GUNBOATS.							
662	Annapolis.....	776.31	222.76	356.41	12.50	192.33	1,560.31
653	Callao.....	12.25	2.76	.14	.....	.....	15.15
670	Castine.....	779.74	138.41	172.21	297.40	.....	1,387.76
677	Dolphin.....	1,069.06	521.95	291.09	171.23	48.41	2,701.74
667	Dubuque.....	740.66	175.38	257.59	40.26	514.85	1,728.76
658	El Cano.....	181.25	46.24	18.31	.....	.....	245.80
674	Helena.....	739.20	135.96	737.67	10.32	.....	1,623.15
666	Isla de Luzon.....	102.09	34.98	37.65	.....	.....	174.72
671	Machias.....	731.76	158.14	292.88	82.70	31.56	1,297.04
660	Marietta.....	4,395.76	1,450.60	1,211.48	283.10	.....	7,340.94
651	Monocacy.....	97.27	38.40	27.58	85.54	.....	198.79
673	Nashville.....	872.84	35.65	151.54	29.85	.....	1,130.88
663	Newport.....	864.78	203.74	446.93	.....	.....	1,455.45
668	Paducah.....	2,496.49	566.58	519.04	53.45	322.63	3,958.19
652	Palos.....	13.36	4.42	11.46	1.64	.....	30.88
654	Pampanga.....	1.00	.16	.....	5.87	.....	7.03
659	Petrel.....	535.56	4.76	136.49	.....	.....	676.81
664	Princeston.....	391.95	124.02	78.94	33.00	.....	627.91
656	Quinos.....	5.38	.98	10.89	180.17	.....	176.74
672	Ranger.....	794.71	291.27	235.71	.....	.....	1,321.69
676	Sacramento.....	703.89	58	195.13	139.00	41.19	1,079.79
655	Samar.....	130.55	25.07	47.10	.....	.....	202.72
665	Vicksburg.....	640.78	201.04	101.05	12.00	.....	954.87
657	Villalobos.....	92.78	15.45	86.60	.....	.....	194.83
661	Wheeling.....	446.59	37.76	115.06	33.75	86.06	719.21
675	Wilmingon.....	106.42	26.27	22.34	213.63	.....	369.66
679	Yorktown.....	1,164.27	324.55	599.74	66.74	261.45	2,416.76
TRANSPORTS.							
752	Buffalo.....	785.73	261.17	171.28	5.75	325.22	1,549.13
750	General Alava.....	126.04	37.37	55.04	.....	.....	218.45
754	Hancock.....	818.16	297.62	409.01	20.50	127.59	1,672.88
765	Henderson.....	237.24	70.00	2.01	.....	.....	309.25
753	Prairie.....	1,932.02	640.52	477.14	66.40	261.10	3,307.18
SUPPLY SHIPS.							
779	Bridge.....	56.24	12.65	5.23	.....	.....	74.12
777	Celtic.....	668.80	252.42	203.93	4.64	.....	1,130.79
776	Culgoe.....	3,424.65	1,256.78	1,394.67	645.13	.....	6,721.23
778	Glacier.....	529.34	227.91	178.19	10.00	60.24	1,005.68
775	Supply.....	531.39	142.02	261.64	54.00	.....	979.06
HOSPITAL SHIP.							
801	Solace.....	2,080.02	666.42	848.66	216.69	.....	3,812.79

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
FUEL SHIPS.							
611	Abarenda.....	\$106.05	\$19.16	\$8.77	\$32.00		\$165.98
612	Ajax.....	293.20	68.21	79.05	32.00		472.46
608	Arethusa.....	476.35	154.91	73.25			704.51
610	Brutus.....	301.87	87.51	100.52	101.75		591.65
606	Caesar.....	161.13	41.79	29.89	1,110.90		1,343.71
624	Cuyama.....			3.06			3.06
607	Cyclops.....	1,001.45	423.08	2,588.67			4,013.20
613	Hector.....	155.71	41.29	69.82	96.00		352.82
620	Jason.....	1,389.29	456.46	1,494.63	21.00		3,361.38
922	Jupiter.....	700.04	214.70	475.56	.15	\$12.08	1,402.63
600	Justin.....	99.33	27.84	91.64	47.00		265.81
616	Kanawha.....	308.05	83.19	105.78			497.02
614	Mars.....	760.85	263.43	146.58	17.50		1,188.36
617	Maumee.....	138.26	39.44	14.29	315.23		507.22
604	Nanshan.....	369.47	109.93	379.64	17.50		876.54
623	Neptune.....	1,551.19	539.51	3,474.80	90.50		5,656.00
618	Nereus.....	842.92	296.94	819.88	37.50		1,997.24
609	Nero.....	499.24	144.36	205.99	46.00		895.59
621	Orion.....	251.23	88.23	87.79	45.50		472.75
619	Proteus.....	1,382.47	468.86	674.38	17.00		2,542.71
603	Saturn.....	1,304.04	377.05	26.67			1,707.76
605	Sterling.....	286.45	101.19	82.44	50.50		520.58
615	Vulcan.....	1,412.51	442.10	370.86	8.25		2,233.72
CONVERTED YACHTS.							
829	Alleen.....	27.44	8.23		65.00		100.67
834	Dorothea.....	1,018.93	343.52	583.38			1,945.83
833	Eagle.....	901.39	188.38	218.66	53.75		1,362.18
828	Elfrida.....	29.18	7.99	6.84	26.73		73.74
837	Gloucester.....	5.06	1.02	1.10			7.18
825	Huntress.....	133.99		1.92	16.68		152.59
840	Mayflower.....	1,903.27	620.82	860.88	907.47		4,292.44
826	Oneida.....				112.80		112.80
836	Scorpion.....				4.40		4.40
827	Sylph.....	256.50	131.27	41.19	37.50		466.46
838	Vixen.....	123.94	44.86	90.91	10.75		270.45
835	Wasp.....			26.25	18.00		44.25
839	Yankton.....	937.10	311.17	308.03	61.00		1,617.30
TUGS.							
504	Accomac.....	140.96	36.09	197.63			374.68
522	Active.....	.66	.25				.91
545	Arapaho.....	74.46	23.16	11.78			109.40
519	Choctaw.....	11.66	4.90	2.37	4.00		22.93
529	Fortune.....	62.21	18.03	15.75	29.50		125.49
507	Hercules.....	16.67	4.56	1.43			22.66
536	Iroquois.....	107.37	30.96	33.80			172.13
505	Iwana.....	183.11	47.23	423.48			653.82
508	Massasoit.....	72.64	21.64	14.24			108.52
516	Modoc.....	57.61	20.52	5.00			83.13
546	Mohave.....	65.02	24.15	42.01			131.18
526	Mohawk.....	7.74	2.83				10.57
506	Narkeeta.....	2.00	.40				2.40
541	Navajo.....	15.77	.29		16.00		32.06
543	Ontario.....	470.62	146.59	597.74	30.50		55.97
633	Oseola.....	120.12	2.12	48.60	164.00		334.84
637	Patapsco.....	392.85	144.99	126.59			664.43
638	Patuxent.....	336.78	114.99	91.43	68.00		611.20
820	Pawnee.....	39.28	9.58	45.23			94.09
611	Pawtucket.....	80.61	28.31	37.50			146.42
613	Penacook.....	87.09	19.22	56.00			162.31
614	Pentucket.....	5.80	1.15	.50			7.45
832	Peoria.....				46.50		46.50
542	Piscataqua.....	409.87	113.69	152.46			676.02
527	Pontiac.....	3.00	.60	2.01			5.61
539	Potomac.....	374.46	59.06	144.61			578.13
540	Powhatan.....	11.52	2.46	12.15			26.13
503	Rapido.....	76.51	12.75	176.56			265.82
518	Rocket.....	74.26	23.72	23.72			121.70
512	Samoset.....	3.03	.26	.43			3.72
502	Sioux.....	223.33	55.60	330.92			609.85
544	Sonoma.....	420.60	137.73	151.04	74.40		783.77
515	Sotoyomo.....	82.26	26.73	34.58			143.57
580	Standish.....	4.00	1.32	1.49			6.81
510	Tecumseh.....	4.08	2.45	1.67			8.20
847	Tillamook.....	38.90	11.63	6.03			56.56

Statement 7.—FLEET MAINTENANCE—REPAIRS TO EQUIPAGE—Continued.

No.	Name of vessel.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
TUGS—continued.							
521	Traffic.....	\$5.76	\$1.92				\$7.68
535	Transfer.....	4.80	.96				5.76
509	Triton.....	58.48	31.58	\$7.07			97.13
525	Unadilla.....	36.86	8.52	6.47			51.85
526	Unos.....	156.01	49.78	48.54			254.33
500	Waban.....	148.95		74.65			223.60
501	Wahnetta.....	13.78	4.41	8.46			21.65
548	Wando.....	49.25	11.34	2.94			63.53
531	Wompatuck.....	39.20	11.31	34.15			84.66
SPECIAL TYPE.							
876	Baltimore.....	1,520.13	417.73	301.16			2,239.02
801	Hannibal.....	4,388.46	1,016.86	1,327.79	\$99.95		6,833.06
910	Lebanon.....				52.50		52.50
602	Leonidas.....	2,562.92	674.26	463.56	104.46		3,805.20
852	Prometheus.....	930.83	279.67	288.75	25.50		1,524.75
875	San Francisco.....	563.07	133.86	229.20	99.00	\$1,159.89	2,185.02
851	Vestal.....	560.65	209.91	373.06	243.67	400.40	1,787.69
900	Vesuvius.....	734.54	.18	251.32			986.04
UNSERVICEABLE FOR WAR PURPOSES.							
950	Adams.....	701.67	212.83	108.36			1,022.86
953	Boxer.....	477.04					477.04
954	Constellation.....	5,863.78	4.07	397.40	29.45		6,294.70
955	Constitution.....	7.20	1.80				9.00
956	Cumberland.....	44.74	12.70	5.59			63.03
960	Gopher.....	3.80	.76	.31	29.00		33.87
961	Granite State.....	779.83	249.10	445.76			1,474.69
962	Hartford.....	323.75	83.60	75.29	29.50		512.14
963	Intrepid.....	131.70	33.30	18.60			183.60
733	Mohican.....	2,481.47	457.61	972.56	39.62	27.96	3,979.22
967	Philadelphia.....	281.69	107.21	91.02	10.00		489.92
751	Rainbow.....	107.02	31.29	47.69	8.25		194.25
969	Reina Mercedes.....	40.18	11.98	15.84	162.50		230.50
970	Richmond.....	2,103.38	786.44	1,159.72			4,049.54
731	Severn.....	248.25	81.43	88.29	290.78		708.75
971	Southory.....	599.22	141.01	77.52	57.95		875.70
973	Topeka.....	2,042.07	421.53	1,040.40	4.88		3,508.88
975	Yantic.....				67.50		67.50
MISCELLANEOUS VESSELS.							
166	Alonguin.....	1.40	.35				1.75
169	Antigone (Neckar).....	<i>Cr. 2.60</i>	<i>Cr. 1.01</i>				<i>Cr. 3.61</i>
158	Bath (Andromeda).....	105.20		1.13			106.33
159	Bridgeport (Breslau).....	1,121.09		34.55			1,155.64
167	Bulgaria.....	158.27	49.98	41.96			250.21
156	De Kalb (Prinz Eitel Frederick).....	1,166.04	422.30	704.44	35.50		2,328.28
163	Houston (Leibnells).....	76.34	12.15	25.28			113.77
67	Kittery (Präsident).....	637.67	229.29	616.00			1,482.96
455	Locksun.....	344.39		87.63			432.02
66	Newport News (Odenwald).....	213.15	47.21				260.36
70	New York.....	55.68	16.68				72.36
161	Pocahontas (Princess Irene).....	372.86	61.65	533.33			967.84
172	Santa Catalina.....				49.00		49.00
63	Savannah (Saxonia).....	223.64	114.21	29.49			367.34
453	Schurs (Geier).....	112.80	42.89				155.69
157	Von Steuben (Kronprinz Wilhelm).....	1,856.01	622.18	931.27	35.50		3,444.96
174	Woodbine.....	1.78	.50	4.23			6.51
981	Receiving ship, Boston.....				9.25		9.25
987	Receiving ship, Mare Island.....	322.33	107.03	84.88			514.24
983	Receiving ship, New York.....	2,186.38	709.06	954.46	22.55		3,872.44
985	Receiving ship, Norfolk.....				64.00		64.00
988	Receiving ship, San Francisco.....	1,171.06	359.66	237.54	50.15		1,818.40
989	Receiving ship, Puget Sound.....	866.67	346.50	156.35			1,359.52
995	Ships, Naval Academy.....				30.00		30.00
999	Balloons.....	61.39		4.68			66.07
997	Aeroplanes.....	714.56		27.39	6,938.19		6,690.14
901	Patrol boats, First Naval District.....	133.66	44.22	37.39			215.27
910	Patrol boats, Tenth Naval District.....						
		56.83	15.23	8.55			80.61
994	Yard craft, Mare Island.....	331.30	95.90	275.56			702.76
	Total.....	549,746.89	134,111.64	207,668.58	50,527.79	40,366.06	982,420.96

Statement 8.—SHORE STATION IMPROVEMENTS.

Station.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
Total	\$948,538.51	\$117,678.97	1,611,625.78	\$5,929,481.34	\$1,647.01	\$8,608,971.61
Navy yard, Portsmouth, N. H.	44,806.39	4,262.13	68,695.00	68,852.58		186,616.10
Naval hospital, Portsmouth, N. H.				284.65		284.65
Navy yard, Boston, Mass.	41,242.02	10,907.18	32,768.64	113,936.12		198,853.96
Hospital, Boston, Mass.				11,952.22		11,952.22
Ammunition depot, Hingham, Mass.	8,968.28		19,555.78	40,052.56		68,576.62
Training station, Newport, R. I.	6,770.35		31,058.52	5,765.13		43,594.00
Torpedo station, Newport, R. I.	8,439.30		43,621.40	186,866.54		238,927.24
Naval station, Newport, R. I.	10,778.61		5,963.40	26,202.51		42,944.52
War College, Newport.				165.00		165.00
Fuel station, Melville, R. I.			173.92	140.00		313.92
Fuel station, New London, Conn.	2.52		1.57	48.00		52.09
Submarine base, New London, Conn.				2,620.80		2,620.80
Navy yard, New York, N. Y.	31,041.57	6,001.46	111,133.52	185,988.55	.43	334,165.53
Ammunition depot, Fort Lafayette, N. Y.			6,053.38			6,053.38
Ammunition depot, Iona Island, N. Y.	1,797.90		1,815.16			3,613.06
Ammunition depot, Lake Denmark, N. J.	798.90		107.80			906.70
Hospital, New York, N. Y.				3,452.15		3,452.15
Radio station, Fire Island, N. Y.	1,173.65	241.03	2,717.15	3,709.00		7,840.83
Radio station, Colon, Isthmian Canal Zone				32.25		32.25
Radio station, Darien, Isthmian Canal Zone				219.50		219.50
Medical supply depot, New York, N. Y.				374.00		374.00
Navy yard, Philadelphia, Pa.	61,582.41	12,378.32	86,179.24	258,310.63		418,450.60
Ammunition depot, Fort Mifflin, Pa.	450.82		15,842.82	22,934.91		39,228.35
Naval Home, Philadelphia, Pa.				372.66		372.66
Hospital, Philadelphia, Pa.			2,201.50	1,692.50		3,894.00
Radio station, Philadelphia, Pa.				5,984.00		5,984.00
Laboratory, Washington, D. C.			1,369.22			1,369.22
Naval Academy, Annapolis, Md.	8,139.48		9,313.97	80,411.18		97,864.63
Washington D. C.	24,240.33	6,029.00	26,813.45	766,366.94		823,449.72
Proving ground, Indianhead, Md.	55,065.47		121,437.27	169,065.20		345,567.94
Hospital, Washington, D. C.				2,673.48	250.00	2,923.48
Radio station, Arlington, Va.	16.02	4.23	2,952.36	3,567.94		6,540.55
Radio station, Washington, D. C.	229.46	57.02	2,294.33			2,579.81
Navy yard, Norfolk, Va.	132,180.48	28,295.16	179,430.60	1,509,694.85		1,849,601.09
Ammunition depot, St. Juliens Creek, Va.	5,692.11		14,320.68	18,272.62		38,285.41
Hospital, Norfolk, Va.	7,549.14		59,418.73	4,446.90		71,414.77
Radio station, Norfolk, Va.				21.08		21.08
Navy yard, Charleston, S. C.	86,391.33	15,752.97	134,459.42	265,667.10		502,270.82
Radio station, Beaufort, N. C.	15.40	3.50	538.90			557.80
Hospital, Fort Royal, S. C.				11,512.25		11,512.25
Radio station, Charleston, S. C.	4,849.66	739.38	5,037.20	10,044.40		20,670.64
Radio station, St. Augustine, Fla.	13.68	3.19	79.45			96.32
Radio station, Pensacola, Fla.			3,623.01			3,623.01
Naval station, Key West, Fla.	487.10		23,404.75	8,088.99		31,980.84
Radio station, Key West, Fla.	337.32		990.63	24,397.47		25,725.42
Aeronautic station, Pensacola, Fla.	45,372.66		37,078.50	149,405.50		231,856.66
Naval station, New Orleans, La.	15,745.73		8,240.93	217.78	1,277.73	25,482.17
Radio station, New Orleans, La.	193.76		531.92	1,049.35		1,775.03
Radio station, Point Isabel, Brownsville Tex.				32,452.21	12.60	32,464.81
Training station, Great Lakes, Ill.	3,366.60		10,518.77	9,782.37		23,667.74
Hospital, Fort Lyon, Colo.			122.38			122.38
Navy yard, Mare Island, Cal.	137,873.21	21,392.25	162,587.11	207,077.05		528,929.62
Ammunition depot, Mare Island, Cal.	2,647.07		5,626.04			8,273.11
Training station, Cal.	3,448.67		22,067.86	28,482.89		53,999.42
Fuel station, Tiburon, Cal.	753.02		1,933.33	1,666.85		4,353.20
Fuel station, San Diego, Cal.	425.36		10,651.63	10,725.72	106.25	21,908.96
Hospital, Mare Island, Cal.				2,124.00		2,124.00
Radio station, San Diego, Cal.			350.48	64,494.24		64,494.28
Radio station, Yerba Buena, Cal.				10,844.17		11,194.65
Radio station, Eureka.			65.80			65.80
Radio station, Cordova.				50,233.75		50,233.75
Radio station, Marshfield, Oreg.				18,416.75		18,416.75
Marine Corps base, San Diego.				250,000.00		250,000.00
Navy yard, Puget Sound, Wash.	30,192.23	7,812.68	65,085.05	80,025.74		163,115.70
Ammunition depot, Puget Sound, Wash.	10,686.58		11,971.72	28,567.90		51,226.20
Pacific coast torpedo station, Keyport, Wash.	6,378.04		7,036.09	11,411.47		24,825.60
Radio station, North Head, Wash.	967.30	279.03	1,721.14	8,133.63		11,101.10
Radio station, Puget Sound, Wash.	642.70	112.85	1,226.78	94.60		2,076.83
Radio station, Tatoosh, Wash.	368.53	114.52	1,686.92			2,179.87
Radio station, Keyport, Wash.	2,748.26	262.13	2,343.21	38,337.41		43,691.01

Statement 8.—SHORE STATION IMPROVEMENTS—Continued.

Station.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Total.
Naval station, Guantanamo Bay, Cuba	\$14,969.04		\$67,725.50	\$3,717.88		\$86,412.43
Radio station, Guantanamo Bay, Cuba.	141.61		117.52			259.11
Naval station, Pearl Harbor, Hawaii...	83,144.63		78,284.88	869,176.16		1,030,605.67
Radio station, Pearl Harbor, Hawaii...	1,626.68		13,906.49	93,773.95		109,307.12
Naval station, Cavite, P. I.	3,769.95	\$674.82	15,803.28	9,380.00		29,628.03
Naval station, Alongapo, P. I.	3,236.50	963.95	13,965.98	5,760.03		23,926.46
Ammunition depot, Philippine Islands.	324.43		1,593.68			1,918.11
Hospital, Canacao, P. I.				1,391.75		1,391.75
Radio station, Cavite, P. I.	9,122.63	1,392.17	20,040.04	104,005.53		134,560.37
Radio station, Olongapo P. I.				210.60		210.60
Naval station, Tutuila, Samoa.....	1,536.28		2,076.87	23.00		3,636.15
Radio station, Tutuila Samoa.....	1,685.00		5,037.97			6,722.97
Naval station, Guam, M. I.	13,960.31		23,155.09	47,332.22		84,447.62
Radio station, Guam, M. I.	10,152.03		5,690.37	6,980.24		22,822.64
Total	948,538.51	117,678.97	1,611,625.78	5,929,481.34	\$1,647.01	8,608,971.61

Statement 9.—SHOE STATION MAINTENANCE.

Station.	Labor.	Indirect on title S work.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.	Indirect at Industrial yards charged to titles E and Z, Marine Corps, O. D. S. D. and expenses of auction sales.	Total.
Total	\$16,769,887.06	\$116.90	\$5,969,318.08	\$2,310,067.74	\$38,307.27	\$62,021.63	\$5,176,805.51	\$1,779,168.31	\$32,095,682.50
Fuel depot, Frenchmans Bay, Me.....	5,908.64		10,371.62	403.85					16,681.91
Navy yard, Portsmouth, N. H.....	608,515.63		198,275.86	22,870.24					1,047,842.59
Radio station, Portsmouth, Me.....	287.71		1,600.56	1,667.69		\$1,637.47	125,230.49	92,960.37	1,047,842.59
Hospital, Portsmouth, N. H.....	383.43		1,054.25	1,997.60					2,437.28
Navy yard, Boston, Mass.....	5,989.95		12,782.59	22,557.60			21,562.41		62,902.64
Hospital, Boston, Mass.....	1,426,367.75		348,083.75	87,256.00		580.46	168,463.35		2,223,073.11
Ammunition depot, Hingham, Mass.....	19,527.90		53,087.16	54,064.88	\$1,555.12		83,821.69		147,978.38
Radio station, Boston, Mass.....	106,961.76		15,999.11	16,495.82			9,521.69		147,978.38
Radio station, North Truro, Cape Cod, Mass.....	7,983.32		7,915.69	9.28			500.00		16,411.29
Radio station, Chelsea, Mass.....	117.30		127.67	415.23			804.83		1,465.02
Navy purchasing office, Newport, R. I.....				220.77			3,410.79		3,631.56
Training station, Newport, R. I.....	33,491.99		69,626.31	6,425.77	20.76		1,525.25		7,971.78
Torpedo station, Newport, R. I.....	324,309.88		118,733.11	11,867.39	27.02		117,022.82		232,315.53
Naval station, Newport, R. I.....	100,175.56		33,900.15	33,900.15	218.62		35,863.97		513,025.73
War College, Newport, R. I.....	19,451.32		50,453.24	100,065.30			43,166.52		281,278.34
Fuel station, Melville, R. I.....	37,154.12		1,837.90	9,612.18		1.70	173,853.20		204,756.30
Fuel station, New London, Conn.....	1,721.36		9,242.70	1,117.20		305.14	4,904.00		52,723.16
Radio station, Newport, R. I.....	2,426.95		2,320.13	7,459.62			2,372.04		13,873.15
Radio station, Light Vessel No. 85.....			327.86	20.00					3,237.91
Submarine base, New London, Conn.....	3,283,405.77		904,566.02	8,468.77			318,935.94		8,468.77
Navy yard, New York, N. Y.....	8,807.41		2,213.46	221,640.24			3,061.07	183,355.81	4,924,165.30
Ammunition depot, Fort Lafayette, N. Y.....	100,175.56		27,657.87	110.97	15.23	12,246.29	10,504.21		14,192.91
Ammunition depot, Fort Iona Island, N. Y.....	41,992.36		11,791.33	583.14			3,098.84		136,320.78
Naval hospital, New York, N. Y.....	26,226.07		26,878.03	217.75			55,331.23		57,100.28
Radio station, New York, N. Y.....	867.20		1,916.04	875.00					1,080.46
Radio station, Fire Island, N. Y.....	337.84		2,136.20	4,662.46					3,128.88
Radio station, San Juan, P. R.....	106.44		306.89	2,900.76					9,814.75
Radio station, Colon, Isthmian Canal Zone.....	49.67		1,771.63	7,895.40	81.00				13,655.84
Radio station, Darien, Isthmian Canal Zone.....	10.14		1,013.63	3,779.45					38,652.45
Radio station, Balboa, Isthmian Canal Zone.....	12.96		9,244.61	10,485.15					17,301.57
Medical supply depot, New York, N. Y.....	13,008.51		337,622.28	75,963.71	72.75		229,065.06	77,443.47	36,108.27
Navy yard, Philadelphia, Pa.....	1,283,367.98		28,863.55	2,176.95			9,080.41		2,013,918.27
Ammunition depot, Fort Mifflin, Pa.....	64,770.93								99,861.84

Statement 9.—SHORE STATION MAINTENANCE—Continued.

Station	Labor.	Indirect on title B work.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.	Indirect at industrial yards charged to titles E and Z, Marine Corps, O. D. S. D. and expenses of auction sales.	Total.
Naval Home, Philadelphia, Pa.	\$27,890.54		\$6,101.69	\$43,710.53		\$1,028.93	\$25,568.83		\$104,300.52
Naval hospital, Philadelphia, Pa.	15,476.84		15,256.54	56,976.43			36,868.60		124,496.41
Naval purchasing office, Baltimore, Md.	225.55		550.51	650.33					6,660.79
Naval Academy, Annapolis, Md.	584,248.06		44,942.21	2,120.52	\$30.79	1,170.87	1,043,208.60		1,979,155.33
Radio station, Annapolis, Md.			210.69	105,228.67	358.02	112.70			323.39
Radio laboratories, navy yard, Washington, and Bureau of Standards	3.92		246.53	383.15					633.60
Navy yard, Washington, D. C.	1,647,705.95		533,541.24	35,517.82	4.25	208.02	157,138.74	\$814,905.69	3,189,021.71
Naval Observatory, Washington, D. C.				239.70	128.79		37,148.75		37,517.24
Marine Corps, rifle range, Winthrop, Md.				1,716.18		1,432.05			3,148.23
Naval proving ground, Indianhead, Md.	207,812.04		38,436.55	2,577.52		97.66	37,058.55		285,882.62
Naval hospital, Washington, D. C.	42,213.88		8,131.17	79,542.92			45,024.23		174,912.20
Radio station, Arlington, Va.	3,583.61		9,752.35	14,634.75					27,970.71
Radio station, Washington, D. C.	1,614.81		2,765.49	15.70					4,396.00
Radio station, Indianhead, Md.	289.44		.50						289.94
Navy yard, Norfolk, Va.	1,708,447.84		575,531.34	172,921.16	4,503.81		176,762.99	239,861.59	2,873,554.92
Ammunition depot, St. Juliens Creek, Va.	50,894.60		21,889.13	4,021.16			8,662.83		86,255.37
Hospital, Norfolk, Va.	20,224.44		13,429.54	96,896.78			59,439.90		186,990.66
Radio station, Norfolk, Va.				96,403.13					403.13
Radio station, Norfolk, Va.	55.64		1,379.63	1,409.08					2,844.35
Radio station, Beaufort, N. C.						116.92			116.92
Radio station, Diamond Shoals, N. C. (Light Vessel No. 71)	506,136.42		134,222.64	14,462.39	226.56		110,261.75	23,315.67	788,447.26
Navy yard, Charleston, S. C.	2,430.29		10,918.41	5,833.67	1,847.95		6,791.39		32,617.46
Hospital, Port Royal, S. C.	1,135.46		2,364.64	1,936.94					5,437.24
Radio station, Charleston, S. C.									
Radio station, St. Augustine, Fla.	1,142.38		2,864.43	1,612.20					2,619.01
Radio station, Frying Pan Shoals, N. C. (Light Vessel No. 64)				135.80					
Radio station, Pensacola, Fla.	322.08		317.44			4.56			779.88
Radio station, Port Royal, S. C.	1,737.59		1,192.31		21,748.20				24,678.10
Naval station, Key West, Fla.	136.72		222.67						359.39
Radio station, Key West, Fla.	130,896.28		79,219.67	4,985.35	455.26	6.00	51,319.41		266,793.87
Radio station, Jupiter Inlet, Fla.	1,225.87		9,835.07	1,060.50					12,121.44
Aeronautic station, Pensacola, Fla.	66.84			1,886.06					2,618.66
Naval station, New Orleans, La.	217,334.77		138,915.61	63,284.47	55.05		101,263.42		610,883.22
Radio station, New Orleans, La.	209,060.09		81,723.15	20,098.16	423.19	36.49	85,729.01		397,076.09
Radio station, Point Isabel, Brownsville, Tex.	2,512.68		7,039.01	65.00	1,367.65				11,076.47
Radio station, Point Isabel, Brownsville, Tex.			21.60	6,677.12					6,601.72

Statement 9.—SHORE STATION MAINTENANCE—Continued.

Station.	Labor.	Indirect on title 8 work.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.	Indirect at industrial yards charged to titles F and Z, Marine Corps, O. D., S. D., and expenses of auction sales.	Total.
COMMERCIAL RADIO STATIONS.									
Naval station, Guam, M. I.	\$89,991.17		\$38,755.26	\$7,280.35	\$3,254.38	\$2,030.75	\$113,244.29		\$255,156.20
Radio station, Guam, M. I.	758.70		698.55	2,119.79					2,267.94
Fuel station, Pichilingue Bay, Mexico.	172.76	\$54.73	385.25	2,910.97	208.29		1,246.97		3,732.00
Siasconset, Mass.							3,356.90		1,246.97
Sayville, L. I. (high power)			90.72	304.00					3,690.90
New York Herald station.			69.70						90.72
Ensenada.			1,665.51	13,451.30			733.95		14,264.95
Truckerton, N. J. (high power)	10.00		1,665.51	4,500.31	192.27		3,287.74		9,645.83
Cape May, N. J. (high power)			27.54	272.00					272.00
Virginia Beach, Va.			4.03						4.03
Berwood, La.			4.92						35.16
Fort Morgan, Ala.	30.24		5.30						5.30
Mobile, Ala.			7.89						7.89
Fort Arthur, Tex.			3.25						3.25
Galveston, Tex.				8.10					8.10
Duluth, Minn.			148.19						303.54
East San Pedro, Cal.	157.35		253.38						421.23
Los Angeles, Cal. (Federal Co.)	197.04		213.06						410.29
South San Francisco, Cal. (high power)	196.87		568.09						770.26
Reids, Cal. (high power)	378.87		468.64						849.31
Ketchikan, Alaska (high power)	98.57		13.82						104.36
Seattle, Wash. (harbor depot)	6.40		25.15						31.55
Avallon, Cal.	6.01		186.44						192.45
Hillcrest, Cal.	162.50		342.37						504.87
Marshall, Cal.	224.26		95.63						319.89
Grant Hotel, San Diego, Cal.	95.72		216.40						312.12
Juneau, Alaska.	165.00		124.76						289.76
Hobart Building, San Francisco, Cal.	157.35		216.40						373.75
Beach station, San Francisco, Cal.	157.35		173.57						330.92
Belmar-Brunswick, N. J.	157.35		389.77						547.12
Total	16,759,857.06	116.00	5,969,318.08	2,310,067.74	38,307.27	62,021.63	5,176,805.51	\$1,779,168.31	32,095,682.60

Statement 10.—GENERAL ADMINISTRATION.

	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material Invoiced on Invoices.	Auditor's settlements.	Pay rolls.	Total.
Total	\$2,167,136.78	\$200,201.54	\$1,217,363.56	\$5,249,757.88	\$8,531,010.48	\$1,315,628.03	\$14,343,539.33	\$33,024,640.60
Miscellaneous.....	550,100.21	21,035.43	152,344.31	910,200.18	2,583,557.88	675,999.07	1,536,972.68	6,430,208.76
Telegrams, cablegrams, and radiograms.....	750.96		16.76	137,096.14		190.25	138,710.37	1,387,921.37
Telephone rental and tolls.....	8.30	3.73	123.79	16,156.63		8.05	16,300.50	16,300.50
Advertising.....	771.55	254.98	3,012.71	7,564.26			11,683.50	11,683.50
Care, transportation, and burial of the dead.....	35.61	2.15	169.84	39,338.19		3,506.63	43,052.42	43,052.42
Transportation and travel allowance of enlisted men.....			1,024,716.97	1,024,716.97	14.05	229,856.84	302,581.96	1,587,166.82
Mileage for officers.....	21.86	.05	44.27	334,180.30				334,226.48
Transportation and traveling expenses of officers (exclusive of mileage).....	12.13	5.56	39.74	108,907.04		435.49	182.23	109,571.06
Transportation and traveling expenses of civilian employees.....	3,454.76	13.78	37.28	109,532.29		1,394.40		114,432.61
Transportation and traveling expenses of female nurses.....			.90	3,101.46		450.68		3,553.04
Pay of officers traveling.....	50.36	13.18	2.00	2,517.85			82,926.03	85,443.88
Pay and allowance of officers on duty at Navy Department.....				370.10			962,288.24	970,394.83
Pay and allowance of officers on special duty.....				62,463.56		375.02	466,999.76	467,444.88
Models, tests, and experiments.....	310,126.30	55,250.57	492,017.96	291,155.57	16,498.70	46.23	342,177.04	936,452.26
Naval Militia.....	3,227.53	1,061.99	1,415.93	281,651.44	534,372.50	43,494.25	1,107,791.30	1,216,914.81
Naval Reserves.....	22,554.92	4,570.14	38,535.46		2,945.25	21,873.99	2,561,199.10	1,479,942.50
Pay of retired officers.....							417,496.06	2,561,199.10
Pay of enlisted men.....							427,019.39	417,496.06
Pay of personnel unassigned.....							9,102.58	427,019.39
Commissions and interest.....							9,102.58	9,102.58
Exchange.....							9.44	36,402.42
Transportation of funds.....								2,449.00
Courts and boards (building repairs are chargeable to title G or S).....	5,968.54	369.64	1,259.77	19,352.06	8.55	2,925.00	71,843.05	101,326.61
Clothing outfits.....	4.96			1,080.16		81.20	3,464,735.64	3,465,901.96
Care and treatment of sick by civilians.....	4.32	1.17		4,651.36		1,077.00	5,735.86	5,735.86
Special instruction.....	22,724.48	6,636.97	1,267.48	47,981.08			52,645.27	131,156.28
Naval attachés.....				11,423.43				11,423.43
Subsistence and commuted rations of warrant officers and enlisted men not attached to a ship or station.....				99,685.87		18,762.51	198.76	79,263.00
Inspection offices.....	507,557.52	643.34	11,416.55	31,665.55	29,563.59	2,967.63	449,415.64	1,033,530.12
Recruiting offices.....	462.06	43.98	3,321.10	757,241.17	5,756.36	1,121.69	645,102.31	1,413,051.57
Repairs and alterations to ordnance equipage (not attributable to a specific ship) and to ordnance supplies ashore.....				31,849.38	144.32		116,428.79	1,140,844.06
Prisoners (including transportation of prisoner and guards).....				66,740.76				190,056.94
Loss by missing survey or appraisal survey of stores ashore.....					1,764,201.97			1,764,201.94
Loss by missing survey or appraisal survey of stores ashore (other than ordnance).....				.51				
Repairs and alterations to equipage (other than ordnance).....	130.69	62.85		18,168.48			134.08	2,267,685.68
Honorable-discharge gratuities.....	37,977.79	10,458.56	24,570.53				1,263,855.53	1,263,855.53
Small-arms firing-regulation prizes.....				515.44			2,262.50	2,747.94

Statement 9.—SHORE STATION MAINTENANCE—Continued.

Station.	Labor.	Indirect on title 8 work.	Material expended by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.	Indirect at industrial yards charged to titles 8 and 7, Marine Corps, O. D., S. D., and expenses of auction sales.	Total.
COMMERCIAL RADIO STATIONS.									
Naval station, Guam, M. I.	\$89,691.17		\$38,755.26	\$7,280.35	\$3,254.38	\$2,030.75	\$113,244.29		\$255,156.20
Radio station, Guam, M. I.	758.70		608.55	2,119.79					2,287.94
Fuel station, Pichilingue Bay, Mexico.	172.76	\$54.73	385.25	2,910.97	208.29		1,246.97		3,732.00
Siasconett, Mass.									1,246.97
Sayville, L. I. (high power)				304.00			8,356.90		3,660.90
New York Herald station.			90.72						90.72
Ensenada.			69.70	13,451.30			733.95		14,264.95
Truckerton, N. J. (high power)	10.00		1,665.51	4,500.31	192.27		3,287.74		9,645.83
Cape May, N. J.			27.54	272.00					272.00
Virginia Beach, Va.									27.54
Berwood, La.			4.03						4.03
Fort Morgan, Ala.	30.24		4.92						35.16
Mobile, Ala.			8.30						8.30
Fort Arthur, Tex.			7.89						7.89
Galveston, Tex.			3.25						3.25
Duluth, Minn.				8.10					8.10
East San Pedro, Cal.	157.35		146.19						303.54
Los Angeles, Cal. (Federal Co.)	197.64		253.38						451.22
South San Francisco, Cal. (high power)	186.22		215.06						400.28
Bonine, Cal. (high power)	36.57		368.49						405.06
Keokuk, W. Va. (high power)	98.16		13.84						112.00
Seattle, Wash. (harbor depot)	6.81		25.15						31.96
Alton, Ill.	162.50		186.24						348.74
Hillcrest, Cal.	224.26		342.37						566.63
Marshall, Cal.	94.77		95.63						190.40
Grant Hotel, San Diego, Cal.	165.70		124.70						290.40
Juneau, Alaska.	157.00		216.46						373.46
Hobart Building, San Francisco, Cal.	157.35		173.57						330.92
Beach station, San Francisco, Cal.	157.35		389.77						547.12
Belmar-Brunswick, N. J.									899.77
Total	16,759,857.08	116.90	5,969,318.08	2,310,087.74	38,307.27	62,021.63	5,176,805.51	\$1,779,168.31	32,095,682.60

Statement 10.—GENERAL ADMINISTRATION.

	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay rolls.	Total.
Total.....	\$2,167,139.78	\$200,201.54	\$1,217,363.56	\$5,249,757.88	\$8,531,010.48	\$1,315,628.03	\$14,343,539.33	\$53,024,640.60
Miscellaneous.....	550,100.21	21,035.43	152,344.31	910,200.18	2,583,537.88	675,999.07	1,536,972.68	6,430,209.76
Telegrams, cables, and radiograms.....	750.96	.....	137,095.14	137,095.14	.....	190.25	138,710.37	138,710.37
Printing, rental and tolls.....	8.30	3.73	123.79	16,156.63	.....	8.05	.....	16,300.50
Advertising.....	771.55	254.98	3,012.71	7,594.26	.....	.....	.....	11,633.50
Care, transportation, and burial of the dead.....	35.61	2.15	169.84	39,338.19	.....	3,506.63	.....	43,032.42
Transportation and travel allowance of enlisted men.....	.....	.....	.....	1,024,716.97	14.05	229,856.84	302,581.96	1,557,169.82
Mileage for officers.....	21.86	.05	44.27	334,160.30	.....	.....	.....	334,226.48
Transportation and traveling expenses of officers (exclusive of mileage).....	12.13	5.56	39.74	108,907.04	.....	435.49	182.22	109,571.06
Transportation and traveling expenses of civilian employees.....	3,454.76	13.78	37.28	109,532.29	.....	1,394.40	.....	114,432.51
Transportation and traveling expenses of female nurses.....	.....	.....	90	3,101.46	.....	450.68	.....	3,553.04
Pay of officers traveling.....	50.36	13.18	2.00	2,517.85	.....	.....	82,928.03	85,443.88
Pay and allowance of officers on duty at Navy Department.....	.....	.....	.....	8,370.10	.....	375.02	.....	970,384.83
Pay and allowance of officers on special duty.....	310,126.30	55,250.57	492,017.96	62,463.56	16,498.70	48.22	486,699.76	970,384.83
Models, tests, and experiments.....	3,227.53	1,051.99	1,415.93	291,165.57	534,372.50	43,494.25	342,177.04	936,452.25
Naval Militia.....	22,554.92	4,570.14	38,535.46	281,651.44	2,965.25	21,873.99	1,107,791.30	1,216,914.81
Naval Reserves.....	.....	.....	.....	.....	.....	.....	2,561,199.10	2,561,199.10
Pay of retired officers.....	.....	.....	.....	.....	.....	.....	417,496.06	417,496.06
Pay of enlisted men.....	.....	.....	.....	.....	.....	.....	427,019.39	427,019.39
Pay of personnel unassigned.....	.....	.....	.....	.....	.....	.....	9,102.58	9,102.58
Commissions and interest.....	.....	.....	.....	.....	.....	.....	39,402.42	39,402.42
Exchange.....	.....	.....	.....	.....	.....	.....	2,449.00	2,449.00
Transportation of funds.....	.....	.....	.....	.....	.....	.....	71,543.05	101,326.61
Courts and boards (building repairs are chargeable to title G or S).....	5,868.54	369.64	1,259.77	19,352.06	8.55	2,925.00	3,464,735.64	3,465,901.95
Clothing outfits.....	4.96	.....	.....	1,080.15	.....	81.20	.....	5,733.85
Care and treatment of sick by civilians.....	4.32	1.17	.....	4,651.36	.....	1,077.00	52,645.27	131,155.28
Special instruction.....	22,724.48	6,536.97	1,267.48	47,981.08	.....	.....	11,423.43	79,253.00
Naval attaches.....	.....	.....	.....	.....	.....	.....	.....	1,033,430.12
Subsistence and commuted rations of warrant officers and enlisted men not attached to a ship or station.....	507,557.82	643.34	605.87	59,685.87	29,593.59	1,267.03	449,415.64	1,413,051.57
Inspection offices.....	462.06	43.98	3,321.10	757,241.17	5,759.36	1,121.59	645,102.31	1,413,051.57
Recruiting offices.....	.....	.....	.....	.....	.....	.....	.....	1,140,844.05
Repairs and alterations to ordnance equipment (not attributable to a specific ship) and to ordnance supplies ashore.....	635,407.58	83,895.09	389,692.00	31,849.38	144.32	6,722.83	116,428.79	1,903,635.94
Prisoners (including transportation of prisoner and guards).....	.....	.....	.....	66,740.00	1,764,201.97	.....	.....	1,764,221.23
Loss by missing survey or appraisal survey of stores ashore.....	.....	.....	.....	.....	.....	.....	.....	.....
Loss by missing survey or appraisal survey of stores ashore (other than ordnance).....	.....	.....	.....	.....	.....	.....	.....	.....
Repairs and alterations to equipment (other than ordnance).....	130.69	62.55	23	18,198.48	2,267,358.33	.....	134.08	2,267,685.68
Honorable-discharge gratuities.....	37,977.79	10,458.56	24,570.55	.....	.....	.....	1,263,035.53	1,263,035.53
Small-arms firing-regulation prizes.....	.....	.....	.....	.....	.....	.....	2,232.50	2,747.94

Statement 10.—GENERAL ADMINISTRATION—Continued.

Account.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay rolls.	Total.
Gunnersy-exercise prizes other than small arms.								
Freight.....	\$722.82			\$1,228.94		\$45.00	\$38,381.94	\$39,656.98
Target rafts.....	59,738.31	\$15,736.79	\$93,004.21	715,890.33		304,392.33		1,020,965.93
Naval defense districts.....	266.13	49.59	3,817.54	94,061.30	\$140,023.25		738.41	188,600.31
Work on merchant vessels.....	5,139.79	203.62	625.75		1,089,303.75			238,956.22
Funeral flags.....			12.00		6.84			1,046,742.91
Advance base outfits.....								75.84
Allied powers.....			9.05		97,192.64			97,192.64
Total.....	2,167,139.78	200,201.54	1,217,363.56	5,249,757.88	8,531,010.48	1,315,628.03	14,343,539.33	33,024,640.60
Reconciliation with Statement 1:								
Total charged to title V above.....								\$33,024,640.60
Less items not chargeable to cost of the Navy.....								\$76,065.43
Losses of equipment in custody of Naval Militia organizations.....								1,431,436.50
Losses of equipment by wrecks of Memphis, Milwaukee, and Hector.....								1,507,501.93
Net cost, per Statement 1.....								31,517,138.67

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES.

Account and group.	Portsmouth.	Boston.	New York.	Philadel- phia.	Norfolk.	Charles- ton.	Mare Island.	Fuget Sound.	Total.
RECAPITULATION OF EXPENDITURES BY PHYSICAL CLASSES.									
Account 0—Miscellaneous labor and consumable supplies (exclu- sive of direct labor and material Title Z shops).									
1—Losses and gratuities.....	\$330,127	\$1,061,858	\$2,411,777	\$975,609	\$1,260,877	\$988,607	\$1,037,457	\$672,583	\$6,338,905
2—Depreciation.....	192,903	345,603	782,012	285,644	391,163	121,094	328,404	181,900	2,638,723
3—Land and appurtenances.....	124,455	258,205	472,968	262,345	269,282	177,187	343,960	330,017	2,188,329
4—Buildings and structures.....	31,255	76,975	221,687	107,543	77,228	27,983	87,359	39,252	699,292
5—Miscellaneous equipment.....	48,410	126,379	205,105	66,419	118,627	21,458	110,130	119,496	819,023
6—Plant appliances.....	35,873	99,381	183,242	104,883	186,719	37,734	89,237	116,542	753,542
7—Machinery and machine tools.....	51,072	146,789	172,101	64,504	150,302	24,789	88,070	40,350	653,974
8—Loose and hand tools.....	13,143	35,362	108,438	22,767	78,452	1,958	36,636	17,822	317,719
9—Supervision.....	226,650	477,065	751,929	475,451	496,887	194,221	421,554	286,746	616,880
Total yard expense.....	1,312,566	2,763,801	5,638,127	2,494,211	3,287,268	1,005,317	2,680,210	1,902,431	21,068,801
RECAPITULATION OF EXPENDITURES BY PURPOSE GROUPS.									
Group									
00—Grounds and miscellaneous.....	78,099	112,068	333,068	196,789	130,363	69,619	167,319	88,810	1,176,125
01—Supply.....	103,067	296,433	732,584	204,255	550,700	92,990	306,408	196,637	2,483,074
02—Transportation (see A).....	87,530	178,610	460,447	123,386	300,891	58,267	218,966	154,045	1,682,162
03—Power (see B).....	182,096	248,973	378,092	247,709	202,115	87,182	128,817	165,627	1,640,611
04—Administration (see C).....	259,813	577,899	1,017,869	669,344	525,318	270,514	519,666	413,657	4,253,978
05—Building ways.....	4,411	15,549	64,637	26,087	505	1,723	15,620	10,765	138,267
06—Central tool shop.....	6,054	25,730	3,384	.....	13,363	3,902	750	14,692	64,875
07—Military activities.....	65,668	27,028	55,214	40,183	60,494	26,801	306,600	64,318	643,326
Total general departments.....	786,758	1,482,290	3,042,285	1,506,753	1,783,747	608,018	1,664,046	1,108,551	11,982,448
10—Structural department.....	63,858	212,615	724,461	124,058	308,225	55,427	204,921	123,130	1,816,995
20—Smith and special hull.....	32,905	121,862	146,945	26,327	100,167	15,428	68,986	38,463	553,983
30—Machinists.....	95,174	311,182	464,564	240,913	509,156	96,646	247,444	227,106	2,192,185
40—Boiler makers.....	15,549	34,383	54,599	38,009	83,766	26,028	30,171	35,049	317,354
50—Electrical and pipe.....	78,471	88,878	286,246	149,772	83,291	28,744	102,965	110,611	940,998
60—Woodwork.....	78,982	82,358	188,440	77,170	96,496	31,223	81,196	61,142	699,007
70—Laborers and miscellaneous.....	24,670	82,752	185,721	94,161	91,800	26,800	61,534	69,794	628,732
80—Building trades.....	12,278	57,872	47,834	41,130	16,727	52,153	23,629	272,931	772,931
90—Foundries.....	93,418	88,650	104,210	88,289	81,759	21,694	53,761	40,606	571,797
94—Pattern shop.....	12,143	21,198	38,104	15,571	21,659	6,211	16,612	12,790	144,218
95—Dry docks.....	21,550	39,893	206,388	73,260	62,634	28,552	91,552	60,128	582,967
Special shops.....	110	181,517	128,282	9,094	11,438	44,969	4,829	1,567	382,716
Total producing departments.....	525,868	1,281,511	2,595,842	987,468	1,503,521	397,299	1,016,164	793,880	9,101,483
Total general and producing departments.....	1,312,566	2,763,801	5,638,127	2,494,211	3,287,268	1,005,317	2,680,210	1,902,431	21,068,801

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.

Account and group.	Portsmouth.	Boston.	New York.	Philadel- phia.	Norfolk.	Charle- ston.	Mare Island.	Fugot Sound.	Total.
REGULATION OF EXPENDITURES BY PURPOSE GROUPS—contd.									
A. Includes transportation chargeable to titles other than G and invoiced into store.	\$37	\$88,211	13,537	\$80,233	\$30,483	\$13,473	24,438	51,807	331,349
B. Includes power chargeable to titles other than G and invoiced into store.	122,719	215,209	318,200	229,109	175,926	111,170	230,977	135,048	1,538,358
C. Includes the following amounts for pay and allowances of officers and enlisted men.									
<i>Account 0.—Miscellaneous labor and consumable supplies.</i>									
Group									
00—Grounds and miscellaneous.	24,559	24,426	71,815	49,025	35,980	19,129	34,690	18,792	278,408
01—Supply.	75,769	220,202	581,926	180,598	408,050	72,050	195,738	100,224	1,814,555
02—Transportation.	52,122	54,394	277,885	78,848	131,494	26,323	110,641	67,343	799,060
03—Power.	122,371	142,132	229,223	146,880	109,800	49,755	67,400	105,546	973,025
04—Administration.	88,959	254,915	548,332	311,547	244,380	126,348	197,342	220,076	2,011,897
05—Building ways.	167	1,165	23,892	206	142	.....	3,631	3	26,296
06—Central tool shop.	5,462	10,249	.....	.....	7,778	3,418	245,283	5,305	32,315
07—Military activities.	31,940	11,518	25,583	3,575	39,798	13,515	.....	10,684	381,908
Total general expense under this account.	411,349	718,999	1,758,666	750,769	977,423	310,538	851,816	527,891	6,307,450
10—Structural department.	7,851	44,831	185,825	22,090	31,602	3,930	41,108	23,230	390,467
20—Smith and special hull.	12,307	40,353	41,018	9,770	26,051	3,178	14,585	10,863	158,165
30—Machinists.	14,333	73,463	87,435	42,893	110,682	21,428	54,989	45,898	451,121
40—Boiler makers.	2,199	4,975	8,763	4,786	15,257	6,890	14,865	5,541	52,505
50—Electrical and pipe.	15,568	17,598	55,834	24,641	15,241	5,990	14,865	16,757	166,224
60—Woodwork.	12,407	13,651	50,111	22,379	11,639	3,743	10,560	10,916	135,406
70—Laborers and miscellaneous.	4,884	15,080	33,823	22,115	9,502	2,802	6,279	13,723	108,208
80—Building trades.	1,515	451	7,278	20,945	2,888	10,343	4,939	974	41,774
90—Foundries.	43,717	50,755	46,681	34,665	26,773	10,343	23,363	10,109	265,436
94—Pattern shops.	2,528	5,173	4,133	1,865	7,602	2,117	5,201	2,240	30,857
95—Dry docks.	1,408	8,543	21,513	17,148	7,889	1,169	1,919	4,203	63,700
Special shops.	65	68,046	110,568	1,513	8,329	16,025	1,668	4,248	206,492
Total shop expense under this account.	118,778	342,859	653,111	224,840	283,455	78,069	185,641	144,702	2,031,455
Grand total.	530,127	1,061,858	2,411,777	975,609	1,260,877	398,607	1,037,457	672,593	8,338,905
Analysis of above charges:									
Annual productive labor.	\$990,221	\$1,818,000	\$5,473,904	\$2,175,862	\$2,463,409	\$861,021	\$1,722,246	\$954,545	\$10,459,208
Ratio of miscellaneous labor and consumable supplies to productive labor.	63.6	58.0	44.0	44.5	51.0	45.0	60.0	70.0	50.6
Ratio of miscellaneous labor and consumable supplies to total yard expense.	40.0	38.0	43.0	38.0	38.5	38.8	39.0	35.0	39.6

Account 1.—Losses and gratuities.									
Group 00—Grounds and miscellaneous.....	\$6,493	\$21	\$1,751	\$64	\$433	\$520	\$1,356	\$223	\$11,151
01—Supply.....	13,512	13,512	51,757	12,769	15,131	5,556	18,886	9,304	138,759
02—Transportation.....	2,197	10,458	10,458	7,488	7,488	1,912	6,647	6,407	33,607
03—Power.....	4,023	6,898	8,738	5,183	6,510	1,912	3,619	2,662	39,874
04—Administration.....	11,462	27,902	64,719	34,741	30,302	10,144	35,319	24,491	239,300
05—Building ways.....	.....	145	.....	.....	.....	.....	16	.....	410
06—Central tool shop.....	368	4,855	.....	.....	199	.....	249	118	5,789
07—Military activities.....	234	.....	.....	76	391	.....	915	.....	1,621
Total general expense under this account.....	33,279	53,909	137,608	52,986	63,304	20,414	65,316	43,235	470,551
10—Structural department.....	24,226	51,704	160,280	28,005	53,068	16,026	46,408	18,860	398,619
20—Smith and special hull.....	7,283	17,172	4,653	17,172	18,968	2,811	13,000	6,353	86,226
30—Machinist.....	34,805	15,744	133,414	57,821	98,970	24,949	64,734	31,469	621,906
40—Boilermakers.....	4,285	14,108	14,108	14,108	15,433	8,923	8,712	5,445	39,498
50—Electrical and pipe.....	28,295	24,979	19,434	31,433	31,433	6,552	38,168	21,649	207,520
60—Work.....	28,936	23,608	27,648	23,608	23,608	23,608	23,608	21,068	207,483
70—Laborers and miscellaneous.....	15,998	21,182	20,397	21,293	22,534	6,708	21,843	11,560	133,816
80—Building trades.....	5,076	17,345	17,345	17,345	17,345	4,076	2,840	1,640	88,438
90—Foundries.....	12,077	8,150	17,345	3,701	4,794	1,371	5,045	2,136	38,308
94—Furnace shop.....	2,780	4,640	13,841	1,701	4,794	1,371	5,045	2,136	38,308
95—Dry dock shop.....	.....	9	2,413	2,136	8	10,270	5,444	683	6,422
Special shops.....	3	26,390	3,741	2,136	8	10,270	5,444	78	43,170
Total shop expense under this account.....	159,624	291,694	644,404	242,658	337,359	100,860	263,088	138,665	2,168,173
Grand total.....	192,903	345,603	782,012	285,644	391,163	121,094	328,404	181,900	2,638,723
Analysis of above charges:									
Damage and waste.....	\$5,169	\$6,651	\$3,915	\$4,711	\$14,145	\$4,814	\$2,401	\$3,778	\$45,584
Ratio of damage and waste to productive labor.....	0.5	0.36	0.07	0.2	0.5	5.6	0.13	0.4	0.27
Leave pay.....	\$111,084	\$178,086	\$456,662	\$169,067	\$205,210	\$83,789	\$187,457	\$95,827	\$1,467,182
Ratio of leave pay to productive labor.....	11.2	7.4	2.98	7.4	8.1	7.3	9.5	10	8.9
Holiday pay.....	\$69,356	\$131,344	\$298,269	\$110,318	\$162,764	\$52,644	\$137,769	\$78,851	\$1,041,315
Ratio of holiday pay to productive labor.....	7.0	7.0	5.0	5.0	6.6	6.0	7.9	8.0	6.3
Disability pay.....	\$8,662	\$29,522	\$28,397	\$11,887	\$9,044	\$3,070	\$11,863	\$6,876	\$109,821
Ratio of disability pay to productive labor.....	0.87	1.6	0.5	0.5	0.36	0.35	0.68	0.7	0.66
Scrap credits.....	\$1,368	.....	\$5,731	\$339	.....	\$3,223	\$11,086	\$3,432	\$25,179
Ratio of total charges to account 1—Losses and gratuities to total yard expense.....	14.6	12.5	13.8	11.8	15.8	12.0	12.0	9.5	12.5
Account 1.—Depreciation.									
Group 00—Grounds and miscellaneous.....	\$16,248	\$53,548	\$71,964	\$44,465	\$32,076	\$22,486	\$61,087	\$33,440	\$335,314
01—Supply.....	9,516	24,187	25,740	15,429	25,488	8,568	56,944	32,855	198,827
02—Transportation.....	14,835	43,904	49,488	11,963	57,900	9,792	30,602	47,799	266,183
03—Power.....	2,064	28,403	57,060	34,556	27,924	18,172	26,505	32,560	244,380
04—Administration.....	2,848	6,411	6,760	6,947	5,028	5,131	5,029	5,961	43,961
05—Building ways.....	.....	10,172	17,652	24,304	.....	1,260	2,040	1,600	57,366
06—Central tool shop.....	132	1,831	384	384	12	42	42	79	2,268
07—Military activities.....	8,448	1,881	3,360	27,077	14,112	4,354	6,347	26,719	95,248
Total general expense under this account.....	67,385	169,975	231,408	164,741	162,540	69,763	191,896	186,139	1,243,547

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.

Account and group.	Portsmouth.	Boston.	New York.	Philadelphia.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
RECAPITULATION OF EXPENDITURES BY PURPOSE GROUPS—contd.									
<i>Account 1.—Depreciation—Continued.</i>									
10—Structural department.....	\$4,524	\$9,369	\$13,812	\$4,704	\$10,224	\$5,112	\$7,711	\$13,280	\$70,686
20—Smith and special hull.....	2,592	6,021	8,227	3,868	7,332	3,575	13,140	7,474	52,829
30—Machinists.....	8,908	15,369	31,104	28,980	29,304	9,650	23,356	26,388	171,909
40—Boilermakers.....	5,400	2,240	3,144	873	5,928	2,722	3,368	7,215	40,982
50—Electrical and pipe.....	3,492	2,180	7,133	4,343	5,316	2,117	10,176	6,175	30,983
60—Woodwork.....	5,928	6,713	9,912	7,020	5,888	4,463	10,812	10,053	60,319
70—Laborers and miscellaneous.....	1,236	1,570	2,184	1,747	900	375	3,336	3,081	14,399
80—Building trades.....	96	967	372	1,387	744	2,135	553	490	6,744
90—Foundries.....	3,756	3,095	4,164	6,218	3,948	2,402	5,388	14,855	43,626
94—Pattern shop.....	2,676	2,570	2,184	2,782	964	770	1,284	2,446	13,686
95—Dry docks.....	18,562	21,401	155,892	32,345	36,408	20,047	72,432	52,754	409,831
Special shops.....	.....	18,135	3,432	1,357	276	4,036	708	747	28,721
Total shop expense under this account.....	57,060	89,290	241,560	97,604	106,752	57,434	152,264	149,878	944,782
Total general and shop expense under this account.....	124,455	258,205	472,968	292,345	269,292	127,187	343,860	330,017	2,188,329
<i>Account 2.—Land and appurtenances.</i>									
Group 00—Grounds and miscellaneous.....	\$17,842	\$25,111	\$151,569	\$79,120	\$45,124	\$22,367	\$54,472	\$24,705	\$413,300
First cost.....	\$3,082,000	\$7,638,341	\$21,326,098	\$10,173,100	\$2,986,122	\$881,528	\$1,708,626	\$706,782	\$48,401,697
Ratio of annual expenditures to first cost..... per cent.	0.6	0.3	0.7	0.7	1.5	2.5	3.0	3.5	0.85
Group 01—Supply.....	.....	\$186	\$431	\$224	\$4,092	.....	\$217	\$63	\$5,213
First cost.....	.....	.....	\$2,250	.....	\$102,473	.....	\$6,309	\$94,100	\$204,932
Ratio of annual expenditures to first cost..... per cent.	.....	.....	19.0	.....	4.0	.....	3.4	2.6	2.6
Group 02—Transportation.....	\$3,555	\$23,667	\$38,210	\$7,563	\$16,867	\$1,565	\$16,062	\$5,371	\$113,200
First cost.....	\$156,000	\$202,300	\$369,247	\$203,800	\$234,244	\$113,419	\$176,940	\$85,443	\$1,471,393
Ratio of annual expenditures to first cost..... per cent.	2.2	11.0	12.7	3.7	7.0	1.6	9.0	6.4	7.7
Group 03—Power.....	\$9,158	\$25,853	\$39,427	\$27,465	\$11,023	\$3,083	\$12,863	\$8,529	\$127,350
First cost.....	\$131,000	\$242,800	\$386,594	\$459,412	\$286,279	\$91,766	\$79,420	\$164,501	\$1,811,709
Ratio of annual expenditures to first cost..... per cent.	6.9	10.6	10.2	5.9	3.8	3.3	16.0	5.0	7.0
Group 07—Military activities.....	\$700	\$2,478	\$2,060	\$1,843,800	\$817,482	.....	\$3,716	\$24	\$10,510
First cost.....	\$4,500	.....	.....	\$1,843,800	.....	.....	.....	\$775	\$2,666,248
Ratio of annual expenditures to first cost..... per cent.	15.0	.....	.....	0.008	0.017	.....	.....	36.6	0.37
Total expenditures on account of land and appurtenances.....	\$31,255	\$76,975	\$221,687	\$107,543	\$77,228	\$27,993	\$87,349	\$39,262	\$649,292
Total first cost.....	\$3,376,500	\$7,983,491	\$22,015,369	\$12,669,800	\$4,426,111	\$1,086,703	\$1,971,266	\$1,089,600	\$54,536,899
Ratio of total annual expenditures to total first cost..... per cent.	0.9	94.0	1.0	0.8	1.6	2.6	4.4	3.8	1.2

	208	80	122	489	263	411	1,942	225	3,140
	2.5	2.5	3.9	4.0	2.1	2.0	3.2	2.0	3.1
Group 00 —Grounds and miscellaneous.....	\$4,637	\$3,196	\$8,410	\$19,302	\$5,253	\$4,777	\$5,605	\$8,877	\$83,746
Ratio of total charges to account 2—Land and appurtenances to total yard expense..... per cent.	\$257,300	\$166,940	\$204,923	\$46,800	\$39,322	\$4,946	\$211,843	\$68,965	\$685,672
Group 01 —Supply.....	\$4,506	\$23,536	\$26,103	\$4,506	\$4,506	\$2,039	\$16,031	\$43,372	\$184,354
Ratio of annual expenditures to first cost..... per cent.	\$737,800	\$1,352,019	\$1,405,971	\$683,800	\$375,724	\$328,320	\$656,294	\$686,461	\$6,880,239
Group 02 —Transportation.....	\$3.0	\$1,617	\$3,652	\$594	\$394	0.62	\$4,302	\$3.3	\$11,652
Ratio of annual expenditures to first cost..... per cent.	\$40,000	\$39,230	\$65,950	\$14,500	\$14,500	\$14,948	\$70,452	\$8,900	\$271,400
Group 03 —Power.....	\$1,700	\$2,480	\$7,353	\$789	\$1,840	\$1,737	\$773	\$646	\$17,275
Ratio of annual expenditures to first cost..... per cent.	\$77,400	\$142,483	\$154,245	\$135,073	\$103,167	\$145,282	\$149,711	\$121,846	\$1,031,805
Group 04 —Administration.....	\$8,627	\$19,535	\$24,036	\$22,158	\$16,139	\$8,748	\$15,040	\$7,046	\$129,254
Ratio of annual expenditures to first cost..... per cent.	\$178,800	\$266,777	\$600,900	\$378,500	\$236,987	\$143,418	\$338,927	\$190,428	\$2,269,387
Group 05 —Building ways.....	\$3,860	\$504	\$14,180	\$7	\$346	\$16	\$10,057	\$9,153	\$38,088
Ratio of annual expenditures to first cost..... per cent.	\$57,100	\$164,809	\$64,643	\$67,300	\$2,179	\$28,719	\$73,326	\$21,379	\$479,855
Group 06 —Central tool shop.....	\$68,647	\$263	\$1.0	0.01	\$1,230	0.05	\$17	\$451	\$1,963
Ratio of annual expenditures to first cost..... per cent.	\$19,500	\$4,841	\$11,784	\$5,714	\$1,097	\$1,471	\$28,056	\$17,657	\$88,213
Group 07 —Military activities.....	\$463,100	\$149,801	\$168,287	\$890,600	\$571,223	\$121,865	\$201,238	\$404,897	\$3,030,941
Ratio of annual expenditures to first cost..... per cent.	\$41,824	\$56,696	\$105,554	\$52,506	\$91,147	\$12,786	\$77,902	\$85,774	\$394,069
Total general expense under this account.....	\$1,801,000	\$2,246,536	\$2,624,549	\$2,006,500	\$1,834,797	\$700,629	\$2,005,441	\$1,494,019	\$14,992,471
Ratio of total annual expenditures to total first cost..... per cent.	2.3	2.4	4.0	2.5	5.0	1.6	3.8	5.7	3.5
Group 10 —Structural department.....	\$505	\$17,350	\$12,657	\$1,921	\$3,791	\$1,937	\$9,652	\$3,365	\$50,591
Ratio of annual expenditures to first cost..... per cent.	\$154,400	\$262,717	\$345,999	\$130,700	\$47,104	\$124,393	\$152,050	\$228,426	\$1,406,779
Group 20 —Smith and special hull.....	\$295	\$6,964	\$9,132	\$1,321	\$970	\$647	\$1,236	\$365	\$90,930
Ratio of annual expenditures to first cost..... per cent.	\$48,100	\$210,317	\$174,776	\$86,500	\$75,666	\$94,927	\$126,323	\$32,338	\$985,947
Group 30 —Machinists.....	\$448	\$13,653	\$19,725	\$1,900	\$7,266	0.76	\$45,898	\$3,964	\$63,819
Ratio of annual expenditures to first cost..... per cent.	\$127,100	\$414,729	\$439,726	\$335,300	\$246,600	\$62,690	\$616,709	\$206,182	\$2,497,036
Group 40 —Poldermakers.....	\$121	\$389	\$3,389	\$258	\$1,580	\$280	\$78	\$253	\$9,325
Ratio of annual expenditures to first cost..... per cent.	\$154,100	\$66,801	\$86,966	\$46,100	\$100,000	\$69,100	\$92,133	\$114,969	\$730,089
Group 50 —Electrical and pipe.....	\$1,520	\$3,960	\$11,020	\$1,775	\$1,775	\$95	\$24,091	\$24,091	\$44,338
Ratio of annual expenditures to first cost..... per cent.	\$72,600	\$64,967	\$133,315	\$183,400	\$155,267	\$73,988	\$169,490	\$78,327	\$884,384
Ratio of total annual expenditures to total first cost..... per cent.	2.0	2.0	8.3	0.5	0.6	0.12	0.6	30.7	5.0

Account 5.—Buildings and structures.

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.

Account and group.	Portsmouth.	Boston.	New York.	Philadel- phia.	Norfolk.	Charles- ton.	Mare Island.	Puget Sound.	Total.
RECAPITULATION OF EXPENDITURES BY PURPOSE GROUPS—contd.									
<i>Account 5.—Buildings and structures—Continued.</i>									
Group 60—Woodwork.....	\$1,450	\$2,286	\$9,882	\$1,007	\$2,021	\$673	\$2,667	\$673	\$21,229
First cost.....	\$233,600	\$397,774	\$354,493	\$149,300	\$170,000	\$111,800	\$321,500	\$180,700	\$1,919,257
Ratio of annual expenditures to first cost..... per cent.	0.6	0.57	2.8	0.6	1.2	0.6	0.8	0.37	1.1
Group 70—Laborers and miscellaneous.....	\$107,600	\$4,067	\$4,582	\$1,320	\$3,654	\$137	\$3,380	\$219	\$16,896
First cost.....	\$102,600	\$183,123	\$108,747	\$71,100	\$89,891	\$6,766	\$67,384	\$84,288	\$686,066
Ratio of annual expenditures to first cost..... per cent.	\$21.2	2.6	4.5	2.1	2.3	2.0	5.0	0.25	2.4
Group 80—Building trades.....	\$7,600	\$108,860	\$94,007	\$60,200	\$128	\$36	\$1,335	\$10,860	\$4,773
First cost.....	\$7,600	\$108,860	\$94,007	\$60,200	\$128	\$36	\$1,335	\$10,860	\$363,966
Ratio of annual expenditures to first cost..... per cent.	\$1.3	2.2	1.0	0.2	0.1	0.2	0.3	0.21	0.7
Group 90—Fitters.....	\$1,308	\$6,971	\$15,267	\$868	\$1,610	\$145	\$1,771	\$71	\$27,583
First cost.....	\$139,800	\$119,623	\$101,770	\$119,200	\$54,771	\$83,000	\$359,797	\$171,769	\$1,050,851
Ratio of annual expenditures to first cost..... per cent.	0.9	5.8	15.0	0.7	2.9	0.7	0.49	0.12	2.6
Group 94—Pattern shop.....	\$107,600	\$121,845	\$4,834	\$231	\$262	\$5	\$415	\$59	\$8,796
First cost.....	\$107,600	\$121,845	\$4,834	\$231	\$262	\$5	\$415	\$59	\$686,176
Ratio of annual expenditures to first cost..... per cent.	0.07	1.5	0.1	0.1	0.1	0.03	0.16	0.02	0.12
Group 95—Dry docks.....	\$489	\$2,553	\$6,779	\$3,511	\$4,432	\$629	\$5,286	\$146	\$24,529
First cost.....	\$1,200,000	\$2,136,531	\$6,673,558	\$1,767,300	\$2,946,000	\$1,220,000	\$4,467,719	\$2,773,388	\$23,244,636
Ratio of annual expenditures to first cost..... per cent.	0.03	0.12	0.1	0.2	0.4	0.07	0.11	0.05	0.10
Special shops.....	\$1,800	\$10,728	\$1,831	\$433	\$80	\$2,046	\$1,111	0	\$16,241
First cost.....	\$1,800	\$460,098	\$124,713	\$25,500	\$80	\$81,636	\$8,246	\$17,036	\$729,531
Ratio of annual expenditures to first cost..... per cent.	1.7	2.3	1.3	1.7	0.7	3.6	1.9	0.09	2.2
Total shop expense under this account.....									
Total cost of property under this class used by produc- ing departments.....									
Ratio of total annual expenditures to total first cost (producing departments)..... per cent.									
Total first cost of property under this account.....									
Ratio of total annual expenditures to total first cost of buildings and structures..... per cent.									
Ratio of total charges to account 3—buildings and struc- tures—to total yard expense..... per cent.									
<i>Account 4.—Miscellaneous equipment.</i>									
Group 00—Grounds and miscellaneous.....	\$3,859	\$2,475	\$10,159	\$4,881	\$4,123	\$2,034	\$2,713	\$3,911	\$34,155
Group 01—Supply.....	2,700	6,739	32,186	8,300	16,649	663	6,615	6,132	80,975

Group 02—Transportation.....	870	683	244	1,001	2,181	100	1,939	87	7,106
Group 03—Power.....	430	608	608	418	4,698	171	4,856	260	10,903
Group 04—Administration.....	6,287	16,123	26,483	19,208	7,677	10,574	10,054	9,358	105,789
Group 05—Building ways.....	92	2,200	910	464	1,921	483	1,510	3	4,199
Group 06—Central fuel shop.....	8,459	1,503	10,984	2,322	3,240	2,073	17,489	2,704	5,632
Group 07—Military activities.....	17,802	35,413	81,584	83,681	40,806	16,385	39,766	23,579	43,198
Total general expense under this account.....									292,026
Group 10—Structural department.....	2,590	8,323	16,539	10,061	27,151	4,747	14,778	11,178	95,367
Group 20—Smith and special hull.....	2,512	13,448	17,436	1,466	16,694	2,368	15,951	1,387	61,262
Group 30—Machinists.....	835	11,608	4,508	9,780	40,504	4,089	5,882	10,503	87,699
Group 40—Boiler makers.....	56	845	842	3,387	3,887	753	3,189	1,376	7,315
Group 50—Electrical and pipe.....	1,622	1,832	9,287	1,489	3,623	362	7,037	4,855	31,731
Group 60—Woodwork.....	3,126	2,840	4,279	2,097	3,640	253	3,322	2,261	20,261
Group 70—Laborers and miscellaneous.....	103	3,468	7,174	6,835	8,793	879	3,222	2,038	33,055
Group 80—Building trades.....	133	243	410	241	241	341	1,806	718	3,868
Group 90—Foundries.....	19,536	4,148	3,416	5,991	5,991	1,941	1,806	2,465	57,845
Group 94—Pattern shop.....	673	2,271	5,042	12,148	6,999	3,827	5,303	2,452	10,757
Group 95—Dry docks.....	8	10,738	2,235	77	6,999	1,727	2,421	1,181	34,562
Group 96—Special shops.....	31,992	60,968	71,658	68,212	115,913	21,339	49,471	41,963	461,616
Total shop expense under this account.....									753,542
Grand total general and shop expense under this account.....									
Ratio of total charges to account 4—miscellaneous equip- ment to total yard expense..... per cent.	3.0	3.2	2.6	4.1	4.5	3.0	3.3	3.4	3.5
Account 5.—Plant appliances.									
Group 00—Grounds and miscellaneous.....	\$1,827	\$3,124	\$15,013	\$4,380	\$4,137	\$2,301	\$2,003	\$813	\$33,008
First cost.....	\$12,900	\$10,155	\$66,712	\$75,100	\$25,111	\$10,210	\$22,875	\$3,573	\$226,636
Ratio of annual expenditures to first cost..... per cent.	14.1	30.8	22.5	5.8	16.0	22.5	8.7	22.7	14.8
Group 01—Supply.....	\$2,148	\$2,984	\$6,256	\$1,838	\$10,925	\$4,108	\$10,947	\$1,165	\$39,431
First cost.....	\$116,000	\$26,966	\$286,851	\$13,300	\$48,504	\$25,827	\$77,869	\$14,167	\$619,514
Ratio of annual expenditures to first cost..... per cent.	1.8	11.0	1.8	13.8	21.0	16.1	14.0	8.2	6.3
Group 02—Transportation.....	\$12,114	\$43,791	\$73,548	\$22,028	\$70,337	\$17,910	\$46,767	\$22,601	\$309,094
First cost.....	\$28,000	\$286,209	\$1,196,532	\$106,400	\$1,335,938	\$132,779	\$920,731	\$816,674	\$5,422,463
Ratio of annual expenditures to first cost..... per cent.	5.2	6.9	6.1	13.2	5.2	13.4	5.1	2.7	5.7
Group 03—Power.....	\$12,951	\$17,945	\$34,720	\$22,900	\$11,658	\$7,744	\$4,596	\$5,473	\$117,687
First cost.....	\$106,100	\$244,997	\$352,564	\$278,000	\$141,892	\$166,556	\$180,678	\$151,471	\$1,694,927
Ratio of annual expenditures to first cost..... per cent.	11.7	7.3	10.4	8.2	8.2	4.6	2.5	3.1	6.4
Group 04—Administration.....	\$743	\$4,116	\$7,080	\$4,983	\$3,536	\$1,789	\$2,306	\$307	\$25,591
First cost.....	\$11,800	\$24,276	\$37,683	\$27,000	\$17,973	\$12,264	\$17,120	\$17,120	\$170,748
Ratio of annual expenditures to first cost..... per cent.	6.3	16.5	18.5	18.1	21.0	14.5	13.2	1.8	15.0
Group 05—Building ways.....	387	\$654	\$7,669	\$1,616	\$2,718	\$1	\$2,718	\$1	\$11,068
First cost.....			\$179,490	\$65,410		\$24,842			\$263,548
Ratio of annual expenditures to first cost..... per cent.			4.2	0.02		0.04	0.08		3.7
Group 06—Tool shop.....		\$141			\$11	\$1		\$5	\$158
First cost.....		\$377							\$377
Ratio of annual expenditures to first cost..... per cent.		37.4							41.9

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.

Account and group.	Portsmouth.	Boston.	New York.	Philadelphia.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
RECAPITULATION OF EXPENDITURES BY PURPOSE GROUPS—cont'd.									
<i>Account 5.—Plant appliances—Continued.</i>									
Group 07—Military activities	\$1,235	\$4,840	\$461	\$828	\$1,010	\$1,124	\$4,909	\$3,486	\$17,993
First cost	\$1,500	\$39,433	\$36,551	\$9,500	\$1,267	\$4,104	\$6,024	\$46,575	\$150,274
Ratio of annual expenditures to first cost..... per cent.	28.2	12.2	1.1	8.6	78.0	28.3	81.1	7.4	11.9
Total general expense under this account.....									
Total cost of property under this class used by general departments.....									
Ratio of total annual expenditures to first cost (general departments)..... per cent.	6.3	7.9	6.6	9.0	6.4	9.2	5.9	3.3	6.5
Group 10—Structural department.....	\$158	\$1,960	\$3,987	\$1,563	\$1,752	\$99	\$2,062	\$2,459	\$14,040
First cost.....	\$7,100	\$11,457	\$38,808	\$6,700	\$4,198	\$7,141	\$7,487	\$21,550	\$103,971
Ratio of annual expenditures to first cost..... per cent.	2.2	17.0	10.4	23.7	42.0	0.96	27.5	11.3	13.4
Group 20—Smith and special hull.....	\$1,252	\$5,169	\$517	\$190	\$789	\$114	\$720	\$358	\$9,109
First cost.....	\$3,600	\$5,969	\$380	\$4,000	\$2,462	\$3,516	\$6,302	\$5,359	\$32,208
Ratio of annual expenditures to first cost..... per cent.	34.7	86.3	58.7	4.7	30.0	3.2	11.4	6.6	28.2
Group 30—Machinists.....	\$709	\$6,321	\$3,144	\$1,927	\$4,433	\$455	\$1,461	\$676	\$19,126
First cost.....	\$9,600	\$17,351	\$46,965	\$43,200	\$24,400	\$10,366	\$30,766	\$22,380	\$206,028
Ratio of annual expenditures to first cost..... per cent.	7.3	36.4	6.7	4.4	18.0	4.4	4.7	3.0	9.3
Group 40—Boilermakers.....	\$123	\$315	\$580	\$66	\$639	\$98	\$112	\$60	\$2,263
First cost.....	\$19,000	\$8,156	\$17,212	\$4,100	\$4,132	\$2,620	\$17,620	\$39,806	\$111,544
Ratio of annual expenditures to first cost..... per cent.	0.6	3.8	3.3	1.6	28.0	3.8	6.3	0.14	2.0
Group 50—Electrical and pipe.....	\$108	\$1,457	\$1,017	\$2,210	\$875	\$113	\$297	\$317	\$6,394
First cost.....	\$2,700	\$8,057	\$12,856	\$10,300	\$7,984	\$1,260	\$6,970	\$3,117	\$33,244
Ratio of annual expenditures to first cost..... per cent.	4.0	18.0	7.9	21.4	9.4	8.9	4.2	9.9	12.1
Group 60—Woodwork.....	\$1,027	\$1,175	\$881	\$276	\$651	\$2	\$759	\$106	\$4,760
First cost.....	\$15,500	\$2,262	\$46,448	\$19,600	\$62	\$5,480	\$18,478	\$30,326	\$138,156
Ratio of annual expenditures to first cost..... per cent.	6.6	51.9	1.9	1.4	898.0	0.03	4.1	0.34	3.4
Group 70—Laborers and miscellaneous.....	\$395	\$1,582	\$5,942	\$1,252	\$258	\$119	\$6,985	\$947	\$3,840
First cost.....	\$5.4	25.4	7.1	696.0	114.0	7.9	80.7	\$992	\$19,307
Ratio of annual expenditures to first cost..... per cent.	19	348	76	17.9	11.0	1.6	8.6	80.7	19.8
Group 80—Building trades.....	\$300	\$596	\$1,764	\$3,686	\$1,231	\$665	\$1,717	\$3,442	\$8,134
First cost.....	\$1,064	\$1,091	\$3,428	\$19,100	\$11,192	\$2,465	\$60,418	\$3,867	\$126,558
Ratio of annual expenditures to first cost..... per cent.	28.2	54.6	50.9	19.0	9.2	1.6	2.8	18.1	6.4
Group 90—Foundries.....	\$1,064	\$22,086	\$99,428	\$20,100	\$10,063	\$5,000	\$15,446	\$27,269	\$99,869
First cost.....	\$3.0	7.6	4.4	2.7	36.0	0.2	2.6	2.3	\$182,911
Group 94—Pattern shop.....	\$686	\$31	\$31	\$2	\$6	\$6	\$24	\$5	\$994
First cost.....	\$1,228	\$4,963	\$900	\$0.2	\$0.2	\$0.2	\$35	\$2,080	\$9,146
Ratio of annual expenditures to first cost..... per cent.	55.9	76.2	0.42	0.2	0.2	0.2	0.8	0.23	10.8

Group 95—Dry docks.....	\$1,199	\$4,027	\$3,333	\$4,293	\$834	\$6,777	\$19,902
First cost.....	235,300	228,183	224,900	33,862	332,365	31,737	\$155,446
Ratio of annual expenditures to first cost.....	1.6	14.3	13.5	111.0	2.5	332.0	12.8
Special shops.....	9966	134	112	16	21	113	\$1,192
First cost.....	322	6,292	4,600	366	366	.....	\$11,590
Ratio of annual expenditures to first cost.....	309.0	2.1	0.2	.....	5.7	.....	10.2
Total shop expense under this account.....	321,982	116,572	115,107	18,819	22,500	13,823	999,656
Total cost of property under this class used by procuring departments.....	983,600	2,247,405	1,157,700	668,680	1,111,969	1,164,154	\$1,119,999
Ratio of total annual expenditures to first cost (procuring departments).....	5.2	6.7	9.5	27.4	2.2	8.4	3.0
Grand total general and shop expense under this account.....	335,873	1,160,297	771,778	1,200,535	337,504	988,070	\$653,974
Total first cost of plant appliances.....	\$678,100	\$2,394,979	\$752,700	\$1,637,185	\$400,460	\$1,426,882	\$9,367,579
Ratio of total annual expenditures to total first cost of plant appliances.....	6.2	6.7	9.1	7.3	7.6	6.1	3.2
Ratio of total charges to account 5—plant appliances to total yard expense.....	2.3	2.8	2.8	3.6	3.0	3.2	2.1
Account 6.—Machinery and machine tools.							
Group 00—Grounds and miscellaneous.....	\$48	\$59	\$1,398	\$88	.....	\$192	\$1,788
First cost.....	\$2,900	.....	\$200	.....	.....	.....	\$15,561
Ratio of annual expenditures to first cost.....	1.6	.....	699.0	.....	.....	.....	11.4
Group 01—Supply.....	\$5	\$2,333	\$284	\$123	.....	\$538	\$3,387
First cost.....	\$1,500	\$59,081	\$12,200	.....	\$5,388	\$5,833	\$89,690
Ratio of annual expenditures to first cost.....	0.3	3.5	2.3	.....	.....	9.2	3.6
Group 02—Transportation.....	.....	\$14	.....	\$68	.....	\$834	\$652
First cost.....	.....	.....	.....	.....	.....	.....	\$31
Ratio of annual expenditures to first cost.....	.....	.....	.....	.....	.....	.....	.....
Group 03—Power.....	\$11,623	\$6,127	\$3,366	\$15,330	\$1,429	\$5,145	\$63,926
First cost.....	\$149,700	\$281,634	\$199,000	\$207,873	\$56,373	\$197,471	\$1,003,025
Ratio of annual expenditures to first cost.....	7.7	2.1	1.6	7.3	2.5	2.6	3.1
Group 04—Administration.....	.....	\$6	\$231	.....	.....	.....	\$17
First cost.....	.....	.....	.....	.....	.....	.....	\$370
Ratio of annual expenditures to first cost.....	.....	.....	.....	.....	.....	.....	.....
Group 05—Building ways.....	\$2,000	.....	.....	.....	.....	.....	\$4,152
First cost.....	.....	.....	.....	.....	.....	.....	.....
Ratio of annual expenditures to first cost.....	.....	.....	.....	.....	.....	.....	.....
Group 06—Tool shop.....	.....	.....	.....	.....	.....	.....	.....
First cost.....	\$1,300	.....	.....	.....	.....	.....	.....
Ratio of annual expenditures to first cost.....	.....	.....	.....	.....	.....	.....	.....
Group 07—Military activities.....	\$47	.....	.....	.....	.....	.....	.....
First cost.....	.....	.....	.....	.....	.....	.....	.....
Ratio of annual expenditures to first cost.....	.....	.....	.....	.....	.....	.....	.....
Total general expense under this account.....	\$11,723	\$8,558	\$5,279	\$16,045	\$1,843	\$6,841	\$74,868
Total cost of property under this class used by general departments.....	\$157,400	\$387,816	\$211,400	\$211,358	\$129,006	\$212,990	\$1,900,256
Ratio of total annual expenditures to total first cost (general departments).....	7.4	2.2	2.4	7.5	1.4	3.2	3.9

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.

Account and group.	Fortsmouth.	Boston.	New York.	Philadel- phia.	Norfolk.	Charles- ton.	Mare Island.	Puget Sound.	Total.
REGULATION OF EXPENDITURES BY PURPOSE GROUPS—Contd.									
<i>Account 6.—Machinery and machine tools—Continued.</i>									
Group 10—Structural department.....	\$1,914	\$11,861	\$20,498	\$5,483	\$47,202	\$1,508	\$18,857	\$16,335	\$123,638
First cost.....	\$84,100	\$114,148	\$219,123	\$100,500	\$210,870	\$77,070	\$1,011,539	\$140,792	\$1,094,368
Ratio of annual expenditures to first cost..... per cent.	8.4	10.3	9.4	9.4	9.7	7.6	11.0	11.3	11.3
Group 20—Smith and special hull.....	\$2,179	\$19,500	\$28,273	\$3,908	\$19,653	\$533	\$5,792	\$4,131	\$84,487
First cost.....	\$89,600	\$111,600	\$157,597	\$63,000	\$97,712	\$30,000	\$119,868	\$97,083	\$737,459
Ratio of annual expenditures to first cost..... per cent.	3.6	17.4	17.0	6.3	20.0	2.0	4.8	4.2	11.4
Group 30—Machinists.....	\$11,548	\$40,975	\$74,414	\$26,438	\$42,133	\$13,363	\$17,730	\$36,627	\$281,278
First cost.....	\$242,500	\$416,981	\$771,954	\$438,000	\$573,128	\$176,617	\$484,957	\$310,059	\$3,413,898*
Ratio of annual expenditures to first cost..... per cent.	4.7	9.4	9.4	6.0	7.3	3.6	3.6	11.8	7.6
Group 40—Boilermakers.....	\$755	\$1,739	\$2,369	\$974	\$6,015	\$943	\$1,153	\$5,208	\$20,037
First cost.....	\$77,600	\$44,492	\$69,451	\$16,200	\$31,442	\$15,476	\$31,688	\$41,900	\$381,209
Ratio of annual expenditures to first cost..... per cent.	0.9	3.9	3.4	6.0	7.3	5.4	3.3	12.4	5.2
Group 50—Electrical and pipe.....	\$10,517	\$4,203	\$9,314	\$8,933	\$2,839	\$3,638	\$3,602	\$1,763	\$41,602
First cost.....	\$70,900	\$29,774	\$102,735	\$63,900	\$42,271	\$11,061	\$76,274	\$22,400	\$439,324
Ratio of annual expenditures to first cost..... per cent.	14.8	14.1	9.0	14.0	4.5	3.2	4.8	7.8	9.4
Group 60—Woodwork.....	\$7,725	\$4,668	\$11,243	\$4,922	\$6,139	\$1,020	\$5,675	\$4,550	\$46,542
First cost.....	\$82,700	\$77,068	\$102,445	\$64,900	\$83,405	\$42,542	\$80,374	\$64,760	\$617,203
Ratio of annual expenditures to first cost..... per cent.	9.3	6.0	10.9	7.5	6.5	2.8	6.3	7.0	7.5
Group 70—Laborers and miscellaneous.....	\$44	\$484	\$1,299	\$1,299	\$1,461	\$48	\$245	\$816	\$5,373
First cost.....	\$2,400	\$6,012	\$6,037	\$3,400	\$4,523	\$916	\$5,887	\$4,550	\$36,725
Ratio of annual expenditures to first cost..... per cent.	1.8	7.2	11.3	38.2	32.0	5.2	4.1	17.9	14.6
Group 80—Building trades.....	\$101	\$284	\$26	\$64	\$94	\$191	\$148	\$117	\$1,025
First cost.....	\$2,900	\$5,571	\$857	\$4,200	\$3,440	\$1,810	\$525	\$1,422	\$30,655
Ratio of annual expenditures to first cost..... per cent.	3.6	5.0	2.9	1.5	2.7	10.6	28.1	8.2	4.9
Group 90—Foundries.....	\$4,205	\$8,405	\$4,558	\$1,700	\$6,530	\$218	\$1,336	\$1,581	\$28,536
First cost.....	\$38,100	\$39,296	\$54,397	\$24,000	\$50,668	\$6,863	\$45,383	\$43,137	\$281,874
Ratio of annual expenditures to first cost..... per cent.	11.0	28.6	8.3	7.0	13.0	3.1	2.9	3.6	9.7
Group 94—Pattern shop.....	\$319	\$1,441	\$3,216	\$1,301	\$566	\$202	\$508	\$613	\$3,166
First cost.....	\$19,100	\$20,359	\$29,386	\$11,100	\$11,849	\$6,294	\$9,719	\$6,919	\$115,726
Ratio of annual expenditures to first cost..... per cent.	1.6	7.0	10.9	11.7	4.7	3.8	5.2	6.6	6.2
Group 95—Dry docks.....	\$41	\$3,313	\$6,920	\$2,712	\$946	\$1,179	\$248	\$653	\$16,032
First cost.....	\$45,200	\$122,000	\$179,136	\$74,100	\$162	\$49,650	\$107,350	\$637,598	\$1,000,000
Ratio of annual expenditures to first cost..... per cent.	0.09	2.7	3.8	3.6	0.6	2.4	0.30	0.30	2.5
Special shops.....	\$29,846	\$3,668	\$1,353	\$1,353	\$657	\$2,795	\$295	\$102	\$38,662
First cost.....	\$164,380	\$21,214	\$17,300	\$17,300	\$6,131	\$25,502	\$6,102	\$6,246	\$246,961
Ratio of annual expenditures to first cost..... per cent.	18.2	17.3	7.7	7.8	10.7	10.7	4.6	1.6	15.6
Total shop expense under this account.....	\$39,240	\$126,669	\$163,543	\$59,225	\$134,257	\$22,890	\$65,635	\$73,799	\$675,373
Total cost of property under this class used by producing departments.....	\$725,000	\$1,141,739	\$1,717,367	\$880,000	\$1,196,918	\$424,657	\$1,084,434	\$908,681	\$8,027,990

	5.4	11.0	9.5	5.4	11.2	5.3	5.3	8.0	8.4
Ratio of total annual expenditures to total first cost (machinery and machine tools).....per cent.									
Grand total general and shop expense under this account.....	\$51,072	\$145,780	\$172,101	\$64,504	\$150,202	\$24,730	\$62,476	\$70,268	\$750,241
Total first cost of machinery and machine tools.....	\$882,400	\$1,366,038	\$2,105,183	\$1,062,000	\$1,406,970	\$553,063	\$1,247,424	\$1,071,567	\$6,928,251
Ratio of total annual expenditures to total first cost of machinery and machine tools.....per cent.	5.7	9.2	8.1	5.9	10.9	1.4	5.0	7.3	7.5
Ratio of total charges to account 6—machinery and machine tools to total yard expense.....per cent.	8.8	5.1	3.0	2.4	4.5	2.0	2.3	4.1	3.5
Account 7.—Portable power tools.									
Group 00—Grounds and miscellaneous.....		\$109		\$360	\$681		\$60		\$1,210
Group 01—Supply.....		13	\$45	42	8		198	\$265	581
Group 02—Transportation.....		64	4				3		70
Group 03—Power.....		46	5	2,248	3,572	\$17	236	177	6,301
Group 04—Administration.....		15			83		111		211
Group 05—Building ways.....									
Group 06—Tool shop.....		3,555			1,463		39	970	5,988
Group 07—Military activities.....			5			2		7	53
Total general expense under this account.....		3,802	69	2,650	5,809	19	647	1,419	14,415
Group 10—Structural department.....	\$6,695	22,791	75,368	6,041	41,610	5,222	16,498	5,525	179,745
Group 20—Smith and special hull.....	187	8,128	8,258	55	618	2	7,078	684	19,010
Group 30—Machinists.....	239	1,251	4,281	5,782	6,322	444	3,847	3,474	25,640
Group 40—Boilermakers.....	267	863	2,174	2,568	12,206	895	875	1,135	21,013
Group 50—Electrical and pipe.....	43	1,030	9,379	1,283	3,445	25	1,396	1,566	18,187
Group 60—Woodwork.....	261	991	6,196	506	3,779	75	1,319	954	14,101
Group 70—Laborers and miscellaneous.....	158	891	1,545	3,340	3,851	2,025	1,318	2,468	17,966
Group 80—Building trades.....	38	112	1,483	321	249	385	1,223	337	3,148
Group 90—Foundries.....	976	137	665	18	563	33	305	209	2,906
Group 94—Pattern shop.....		4	20	2				21	43
Group 95—Special shops.....		1,332		201			45		205
Total shop expense under this account.....	8,884	31,560	108,369	20,117	72,643	9,339	35,989	16,403	303,304
Grand total general and shop expense under this account.....									
Ratio of total charges to account 7, portable power tools, to total yard expense.....per cent.	8.884	35.362	108.438	22.767	78.452	9.358	36.636	17.822	317.719
	0.67	1.2	1.9	0.92	2.3	1.5	1.3	0.93	1.5
Account 8.—Loose and hand tools.									
Group 00—Grounds and miscellaneous.....	\$520	\$45	\$15		\$285	\$5	\$1,065	\$49	\$1,984
Group 01—Supply.....	10	237	1,139	183	412	21	263	434	2,729
Group 02—Transportation.....		169	18		181	125	614	27	1,124
Group 03—Power.....	463	232	296	170	568	374	130	204	2,437
Group 04—Administration.....		92	56	198	591	578	162	303	1,963
Group 05—Building ways.....	3		82			6			6

Grand total general and shop expense under this account.....

Total first cost of machinery and machine tools.....

Ratio of total annual expenditures to total first cost of machinery and machine tools.....per cent.

Ratio of total charges to account 6—machinery and machine tools to total yard expense.....per cent.

Account 7.—Portable power tools.

Group 00—Grounds and miscellaneous.....

Group 01—Supply.....

Group 02—Transportation.....

Group 03—Power.....

Group 04—Administration.....

Group 05—Building ways.....

Group 06—Tool shop.....

Group 07—Military activities.....

Total general expense under this account.....

Group 10—Structural department.....

Group 20—Smith and special hull.....

Group 30—Machinists.....

Group 40—Boilermakers.....

Group 50—Electrical and pipe.....

Group 60—Woodwork.....

Group 70—Laborers and miscellaneous.....

Group 80—Building trades.....

Group 90—Foundries.....

Group 94—Pattern shop.....

Group 95—Special shops.....

Total shop expense under this account.....

Grand total general and shop expense under this account.....

Ratio of total charges to account 7, portable power tools, to total yard expense.....per cent.

Account 8.—Loose and hand tools.

Group 00—Grounds and miscellaneous.....

Group 01—Supply.....

Group 02—Transportation.....

Group 03—Power.....

Group 04—Administration.....

Group 05—Building ways.....

Statement 11.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.

Account and group.	Portsmouth.	Boston.	New York.	Philadelphia.	Norfolk.	Charleston.	Mare Island.	Fugot Sound.	Total.
REGULATION OF EXPENDITURES BY PURPOSE GROUPS—contd.									
<i>Account 8.—Loose and hand tools—Continued.</i>									
Group 04—Tool shop.....	835	\$668	\$667	\$480	\$118	\$170	\$188	\$605	\$1,471
Group 07—Military activities.....		8			188		664	97	2,589
Total general expense under this account.....	1,031	1,439	2,573	981	2,340	1,283	3,119	1,619	14,385
Group 10—Structural department.....	2,904	11,372	134,890	10,102	48,898	3,466	24,008	10,495	245,098
Group 20—Smith and special hull.....	731	1,066	2,732	1,066	1,066	118	1,277	1,306	9,305
Group 30—Boilermakers.....	2,311	9,636	25,290	10,524	85,303	3,718	25,854	29,740	192,374
Group 40—Rolling mills.....	1,740	3,285	8,147	3,175	7,072	1,640	5,501	24,547	44,237
Group 50—Electrical and pipe.....	1,665	2,293	5,417	7,062	7,062	718	5,887	11,505	44,237
Group 60—Woodwork.....	1,044	1,704	5,416	2,925	4,780	1,333	4,927	3,392	28,585
Group 70—Laborers and miscellaneous.....	1,634	2,004	0,416	1,378	6,800	1,333	1,817	1,983	24,800
Group 80—Boilermakers.....	1,634	2,004	0,416	1,378	6,800	1,333	1,817	1,983	24,800
Group 90—Foundries.....	653	547	1,875	2,738	1,546	1,587	4,781	1,034	14,894
Group 01—Pattern shops.....	887	1,143	82	7,132	1,094	75	4,897	1,273	11,842
Group 02—Dry docks.....	58	143	109	132	914	88	260	292	3,708
Group 03—Special shops.....	2	2,948	274	61	31	72	107	.....	3,668
Total shop expense under this account.....	12,112	36,178	195,998	46,477	164,846	14,160	71,908	60,837	602,525
Total general and shop expense under this account.....	13,143	37,617	198,571	47,458	167,186	15,422	75,027	62,456	616,880
Ratio of total charges to account 8—loose and hand tools—to total yard expense.....per cent.	0.7	1.9	3.3	1.6	4.9	1.5	2.7	3.2	2.9
<i>Account 9.—Superstition.</i>									
Group 00—Grounds and miscellaneous.....	82, 106		\$2,303	\$794	\$2,184		\$4,076		\$11,468
Group 01—Supply.....		\$1,069	5,658		2,446		\$103		13,867
Group 02—Transportation.....	1,627	10,250	6,896	1,802	13,471	11	2,515		40,744
Group 03—Power.....	4,092	5,443	3,747	3,747	9,060	2,808	3,396	4,072	37,888
Group 04—Administration (see A in recapitulation).....	132,246	246,888	331,363	269,603	217,016	109,194	264,144	148,667	1,708,616
Group 05—Building ways.....									784
Group 06—Tool shop.....		1,522			246		34		6,068
Group 07—Military activities.....		4			467		1,160		1,640
Total general expense under this account.....	140,066	268,457	850,893	275,946	244,800	112,026	265,437	159,833	1,817,837
Group 10—Structural department.....	\$13,121	\$33,064	\$100,617	\$32,078	\$43,200	\$13,408	\$24,444	\$18,520	\$278,451
Annual productive labor.....	\$182,076	\$271,790	\$1,452,461	\$247,192	\$464,280	\$119,133	\$412,787	\$136,448	\$3,283,176
Ratio of supervision to productive labor.....per cent.	8.6	12.0	7.0	13.0	10.7	9.1	5.8	13.0	8.9

Group 20—Smith and special hull.....	\$3,457	\$10,242	\$14,174	\$3,040	\$5,379	\$1,932	\$6,197	\$5,119	\$22,580
Annual productive labor.....	\$65,408	\$54,827	\$153,545	\$37,515	\$67,398	\$21,207	\$63,020	\$43,063	\$592,568
Ratio of supervision to productive labor..... per cent.	6.1	12.0	7.5	12.5	11.7	11.1	11.6	11.6	8.8
Group 30—Machinists.....	\$21,078	\$63,283	\$83,279	\$54,280	\$84,289	\$17,605	\$43,653	\$39,278	\$407,318
Annual productive labor.....	\$211,638	\$491,607	\$1,019,153	\$591,500	\$776,994	\$197,646	\$326,867	\$293,063	\$4,066,348
Ratio of supervision to productive labor..... per cent.	1.0	13.0	8.0	9.0	8.7	8.2	10.3	10.0	10.0
Group 40—Boilermakers.....	\$21,541	\$9,201	\$9,697	\$12,894	\$13,949	\$5,586	\$69,871	\$7,295	\$47,498
Annual productive labor.....	\$123,457	\$122,457	\$166,344	\$152,867	\$155,135	\$57,851	\$41,159	\$61,708	\$617,405
Ratio of supervision to productive labor..... per cent.	9.0	7.4	5.4	7.9	7.4	10.4	10.4	10.4	10.4
Group 60—Electrical and pipe.....	\$14,696	\$24,743	\$35,935	\$44,335	\$22,880	\$17,617	\$20,164	\$22,492	\$226,528
Annual productive labor.....	\$166,823	\$169,431	\$413,745	\$339,404	\$224,835	\$184,835	\$143,511	\$2,774,062	\$2,774,062
Ratio of supervision to productive labor..... per cent.	8.5	14.1	8.1	13.1	12.9	15.2	14.9	15.1	15.1
Group 60—Woodwork.....	\$16,077	\$22,951	\$37,073	\$15,072	\$26,919	\$9,570	\$16,751	\$13,079	\$138,703
Ratio of supervision to productive labor..... per cent.	7.9	15.3	9.0	13.6	10.4	12.5	14.9	14.9	14.9
Group 70—Laborers and miscellaneous.....	\$4,429	\$21,323	\$47,590	\$26,176	\$27,882	\$10,179	\$14,287	\$13,421	\$165,389
Annual productive labor.....	\$66,071	\$216,641	\$609,045	\$241,851	\$237,643	\$74,454	\$151,658	\$145,352	\$1,748,695
Ratio of supervision to productive labor..... per cent.	8.3	9.7	7.4	11.4	11.4	13.6	9.3	11.1	10.7
Group 80—Building trades.....	\$30,013	\$34,143	\$67,613	\$63,843	\$123,545	\$47,489	\$123,255	\$19,882	\$519,383
Annual productive labor.....	\$8,057	\$5,231	\$9,765	\$4,124	\$7,880	\$1,841	\$5,336	\$3,908	\$44,163
Ratio of supervision to productive labor..... per cent.	10.0	12.4	6.8	10.2	10.2	4.0	8.2	40.0	10.6
Group 90—Fountain.....	\$20,240	\$41,900	\$31,908	\$60,957	\$76,880	\$12,550	\$34,109	\$37,169	\$465,703
Annual productive labor.....	\$2,291	\$3,526	\$9,283	\$2,591	\$26,741	\$7,261	\$18,564	\$16,207	\$71,082
Ratio of supervision to productive labor..... per cent.	10.7	14.0	7.4	11.4	15.4	22.0	19.0	13.0	10.7
Group 95—Dry docks.....	\$452	\$452	\$2,663	\$1,945	\$3,030	\$1,103	\$2,837	\$606	\$7,520
Annual productive labor.....	.....	.....	40.5	.....	19.0	.....	.....	.....	\$2,256
Ratio of supervision to productive labor..... per cent.	.....	.....	40.5	.....	19.0	.....	.....	.....	62.0
Special shops.....	.....	.....	\$3,364	.....	\$6,631	.....	.....	.....	\$27,796
Annual productive labor.....	.....	.....	\$501,257	\$16,870	\$5,523	\$143,881	\$71,068	.....	\$385,276
Ratio of supervision to productive labor..... per cent.	.....	.....	0.6	12.5	32.0	4.2	10.9	.....	3.0
Total shop expense under this account.....	\$86,555	\$208,608	\$401,076	\$199,305	\$251,997	\$82,195	\$156,117	\$133,913	\$1,519,766
Total annual productive labor.....	\$900,221	\$1,818,000	\$5,473,904	\$2,175,862	\$2,463,409	\$861,021	\$1,722,246	\$664,545	\$16,459,208
Ratio of total supervision under shop expense to total annual productive labor..... per cent.	8.7	11.0	7.3	8.8	10.2	9.5	8.7	14.0	9.1
Grand total general and shop expense under this account (see C in recapitulation).....	\$226,650	\$477,065	\$751,929	\$475,251	\$496,887	\$194,221	\$421,554	\$293,746	\$3,337,303
Ratio of total charges to account 9—supervision to total yard expense..... per cent.	16.8	17.0	13.4	18.9	15.0	19.0	15.7	15.4	16.8

Statement II.—INDUSTRIAL YARD EXPENSE, BY ACCOUNTS AND ACTIVITIES—Continued.
RECAPITULATION.

Account and group.	Portsmouth.	Boston.	New York.	Philadel- phia.	Norfolk.	Charles- ton.	Mare Island.	Puget Sound.	Total.
RECAPITULATION OF EXPENDITURES BY PHYSICAL CLASSES.									
Account 0—Miscellaneous labor and consumable supplies (exclusive of direct labor and material title Z shops).....	\$530,127	\$1,091,858	\$2,411,777	\$975,009	\$1,260,877	\$388,607	\$1,037,457	\$672,563	\$8,338,905
1—Losses and gratuities.....	192,903	345,603	782,012	295,644	391,163	121,094	326,404	181,900	2,638,723
2—Depreciation.....	124,455	268,205	472,968	262,345	269,292	277,187	393,404	330,017	2,186,329
3—Land and appurtenances.....	1,255	76,976	221,987	107,543	77,228	17,983	87,359	36,252	669,292
4—Buildings and structures.....	48,470	120,379	205,105	66,419	118,627	21,458	110,130	119,495	819,023
5—Miscellaneous equipment.....	49,794	96,331	153,242	104,893	166,719	37,784	89,237	65,542	783,542
6—Plant appliances.....	35,073	96,567	160,267	71,778	120,535	34,504	88,070	40,350	653,974
7—Machinery and machine tools.....	8,894	145,789	172,101	64,504	150,302	24,739	62,476	79,258	750,241
8—Portable power tools.....	13,143	35,362	108,438	22,767	78,453	9,358	36,638	17,822	317,719
9—Loose and hand tools.....	226,650	477,068	751,929	476,251	496,887	194,221	421,554	283,746	3,337,303
Total yard expense.....	1,312,566	2,763,801	5,638,127	2,494,211	3,287,268	1,006,317	2,690,210	1,992,431	21,088,931
RECAPITULATION OF EXPENDITURES BY PURPOSE GROUPS.									
Group 00—Miscellaneous.....	78,099	112,068	333,068	196,789	130,363	69,619	167,319	88,810	1,176,126
01—Supply.....	103,087	296,433	732,684	294,255	550,700	92,990	306,408	194,637	2,488,074
02—Transportation (see A).....	87,530	178,610	460,447	122,398	300,861	86,287	218,966	154,046	1,582,163
03—Power (see B).....	182,086	295,978	378,092	247,709	302,116	270,514	126,817	163,927	1,640,611
04—Administration (see C).....	269,813	577,899	1,017,669	669,316	526,316	270,514	519,566	413,657	4,253,978
05—Building ways.....	4,411	15,549	64,637	28,067	80,605	1,723	15,620	10,768	138,287
06—Tool shop.....	6,064	25,730	55,214	40,183	13,363	3,952	750	14,692	64,876
07—Military activities.....	65,688	27,028	55,214	40,183	60,494	23,801	306,600	64,318	643,326
Total general departments.....	786,758	1,482,290	3,042,265	1,506,783	1,783,747	608,018	1,664,046	1,108,851	11,982,448
10—Structural department.....	63,888	212,616	774,461	124,058	308,225	55,427	204,921	123,120	1,816,686
20—Smith and special hull.....	32,856	121,832	146,945	26,377	100,167	55,428	63,966	27,063	633,983
30—Machinists.....	95,174	311,182	464,654	240,913	699,186	95,646	367,444	231,108	2,192,186
40—Roller makers.....	15,349	24,383	64,949	38,076	88,096	26,728	30,511	30,949	317,954
50—Electrical and pipe.....	75,471	83,878	268,246	179,772	385,001	25,744	102,958	110,911	940,998
60—Woodwork.....	76,852	82,660	188,741	77,170	191,890	21,423	81,196	61,142	689,007
70—Labor and miscellaneous.....	14,278	23,312	57,172	64,181	91,890	26,560	61,584	69,734	626,732
80—Building trades.....	12,478	20,312	57,172	47,884	41,130	16,727	23,024	23,024	271,931
90—Foundries.....	95,418	88,660	104,210	88,249	81,769	21,064	83,781	40,608	571,797
94—Pattern shop.....	12,143	21,196	38,104	15,571	21,659	6,211	16,612	12,720	144,218

85—Dry docks.....	21,550	39,803	205,888	73,260	62,634	28,553	91,552	60,128	532,867
Special shops.....	110	131,517	129,292	9,094	11,438	44,869	4,829	1,567	382,716
Total producing departments.....	525,808	1,281,511	2,595,842	987,458	1,503,521	397,299	1,016,164	793,890	9,101,483
Total yard expense.....	1,312,566	2,783,801	5,638,127	2,494,211	3,287,268	1,005,317	2,680,210	1,902,431	21,083,931
A. Includes transportation chargeable to titles other than G and involves into store.....	37	.....	3,803	.....	.....	.....	631	1,287	5,758
B. Includes power chargeable to titles other than G and invoiced into store.....	29,167	88,211	13,537	80,233	30,433	13,473	24,438	51,807	331,349
C. Includes the following amounts for pay and allowances of officers and enlisted men.....	122,719	215,269	318,200	239,109	176,926	111,170	230,977	135,048	1,538,358

Statement 12.—INDUSTRIAL YARD SHOP EXPENSE, BY SHOPS.

No.	Shops.	Direct shop expense.			Total direct shop expense.	Transfers.		Total shop expense.	Produce of labor.	Average rate.	Rate used.	Produce of hours.	Average wage per hour.	
		Depreciation and maintenance.	Operating expenses.	Per cent.		Power.	General expense.							
11	Plate and angle:													
	Portsmouth.....	\$6,482.21	57	84,906.78	43	\$11,368.90	\$941.57	\$15,070.91	\$10,994.83	137	30	31,318	\$0.35	
	Boston.....	47,191.64	34	27,055.16	33	70,246.80	3,724.84	102,724.71	36,263.68	263	40	265,279	.41	
	New York.....	45,049.84	64	87,414.68	66	132,464.42	6,370.87	194,907.18	112,818.69	173	30	765,777	.41	
	Philadelphia.....	23,433.84	30	21,628.39	49	45,062.23	3,488.54	30,471.41	76,020.16	155	34	152,300	.30	
	Norfolk.....	75,828.22	84	13,641.17	16	89,469.39	8,894.64	102,414.64	38,085.19	269	34	118,778	.32	
	Charleston.....	10,392.57	7	0,017.69	40	17,410.16	897.48	7,624.52	23,731.96	217	30	62,073	.22	
	Mare Island.....	36,194.17	72	13,968.33	28	50,162.49	5,940.50	75,482.47	37,727.17	202	28	87,103	.44	
	Puget Sound.....	33,869.34	82	7,628.01	18	41,497.35	1,017.73	7,631.26	49,573.36	11,310.73	438	33	27,321	.41
	Total all yards.....	278,451.83	61	179,267.00	39	457,708.83	23,285.17	163,975.70	644,969.70	317,644.08	203	811,962	.39
	12	Chipping, calking, etc.:												
Portsmouth.....		7,540.63	36	13,440.99	64	20,981.62	9,268.27	46,802.07	61,634.55	91	30	146,106	.35	
Boston.....		25,438.34	35	47,059.04	65	72,477.38	19,502.70	143,898.20	102,921.98	140	40	284,908	.44	
New York.....		209,981.34	58	142,228.86	42	352,210.19	31,312.25	481,712.00	616,026.06	78	30	1,260,771	.48	
Philadelphia.....		6,422.65	30	15,059.88	70	21,482.53	4,707.95	36,748.17	62,638.65	141	35	99,126	.45	
Norfolk.....		89,302.65	62	35,632.21	38	124,934.86	10,261.52	49,768.68	154,905.06	139	34	436,266	.32	
Charleston.....		5,985.04	69	19,193.96	60	25,188.99	4,251.24	33,409.42	56,864.61	119	30	146,163	.33	
Mare Island.....		40,625.63	33	13,208.91	23	53,834.54	6,922.06	41,413.43	127,361.34	106	28	288,598	.44	
Puget Sound.....		14,377.26	46	16,766.45	54	31,143.71	2,677.60	21,663.21	55,434.52	139	33	103,255	.38	
Total all yards.....		399,675.54	54	316,860.72	46	696,536.26	87,863.59	362,608.77	1,137,038.62	1,169,683.29	103	2,745,911	.42
15		Laying out or templating:												
	Portsmouth.....	1,348.97	18	6,235.01	82	7,583.98	354.47	14,649.17	20,165.86	73	30	67,615	.35	
	Boston.....	2,201.47	32	4,636.07	68	6,837.54	1,531.21	8,368.75	4,897.72	162	40	10,163	.48	
	New York.....	4,547.65	14	26,997.41	86	31,545.06	6,581.34	26,023.92	66,149.32	74	30	217,013	.41	
	Philadelphia.....	3,746.78	39	5,528.97	61	9,275.75	1,018.45	17,069.54	3,630.44	466	35	8,036	.45	
	Norfolk.....	540.79	4	14,539.55	96	15,080.34	1,198.96	18,279.30	60,070.64	70	30	167,000	.32	
	Charleston.....	4,364.14	29	10,781.09	71	15,145.23	1,060.77	26,985.11	44,138.38	96	30	151,416	.29	
	Mare Island.....	6,107.05	33	10,238.83	66	16,345.88	1,196.02	27,719.31	39,377.98	71	28	85,122	.47	
	Puget Sound.....	4,518.64	54	3,965.90	46	8,484.54	3,044.43	11,468.78	11,967.76	11,910.13	99	33	26,780	.42
	Total all yards.....	26,375.79	24	88,060.83	76	109,466.62	16,964.64	96,766.20	224,317.46	268,414.26	85	716,226	.37
	16	Fitting and bolting outside:												
Portsmouth.....		977.09	6	14,512.37	94	15,489.46	4,608.44	16,168.86	46,616.96	78	30	184,920	.35	
Boston.....	4,661.66	12	34,962.97	88	40,644.63	1,292.62	34,604.38	79,461.40	76,398.22	100	40	167,696	.46	

New York.....	6,771.34	5	130,195.97	96	136,968.31	84,160.77	228,374.78	386,690.62	58	30	987,936	.42	
Philadelphia.....	3,725.51	16	20,442.95	84	24,166.46	28,431.10	63,191.58	81,047.83	78	35	219,389	.37	
Norfolk.....	2,868.53	99	26,518.53	96	27,361.06	27,360.68	57,132.94	80,942.87	71	34	262,268	.32	
Mare Island.....	6,636.84	15	37,561.62	85	44,198.46	1,395.22	92,296.83	146,260.25	63	28	422,221	.35	
Puget Sound.....	2,202.57	16	11,305.54	84	14,008.11	17,688.16	34,335.59	37,265.55	92	33	97,000	.38	
Total all yards.....	25,251.76	9	278,990.45	91	304,242.41	16,731.42	589,097.88	864,142.25	68	.....	2,231,710	.39
17 Sheet metal, machine (or M. & H.):													
Portsmouth.....	2,373.27	28	6,112.95	72	8,495.22	6,712.72	15,559.79	22,663.33	60	20	68,559	.39	
Boston.....	3,502.78	16	18,906.14	84	22,408.90	1,555.33	15,559.79	51,317.08	345	40	110,119	.47	
New York.....	11,353.26	34	56,328.61	85	67,778.87	8,262.24	132,078.18	200,580.96	66	30	446,384	.45	
Philadelphia.....	3,499.59	34	6,756.97	86	10,266.56	1,717.23	6,743.00	11,522.98	126	46	33,666	.34	
Norfolk.....	29,162.99	76	8,966.19	24	38,118.28	4,054.23	48,197.80	38,428.28	125	34	118,641	.32	
Charleston.....	1,319.57	36	2,353.36	64	3,677.93	3,712.17	7,644.59	16,357.68	50	26	38,666	.40	
Mare Island.....	4,397.79	21	16,707.62	79	21,105.41	1,088.88	19,379.40	62,060.98	69	26	149,710	.41	
Puget Sound.....	7,524.04	27	20,547.35	73	28,071.39	1,899.68	24,007.01	53,973.08	147	52	76,208	.46	
Total all yards.....	63,132.37	32	136,671.19	68	199,803.56	19,212.93	133,822.26	438,108.08	79	.....	1,033,951	.42
18 Sheet metal, hand:													
New York.....	26.91	1	3,800.33	99	3,680.24	.....	3,630.24	18,211.76	20	30	40,540	.45
Philadelphia.....	1,055.94	8	12,465.13	92	13,511.07	477.55	10,608.47	24,692.09	52	35	112,523	.42	
Norfolk.....	15,193.07	36	26,611.67	64	41,804.74	.....	16,559.55	58,364.29	51	34	351,997	.32
Total all yards.....	16,278.92	28	42,667.13	72	65,946.05	477.55	27,163.02	96,686.62	48	.....	506,060	.36
21 Angle smith:													
Portsmouth.....	1,323.58	28	3,445.77	72	4,798.35	.....	1,775.43	10,987.24	89	48	31,068	.35
Boston.....	9,349.90	38	16,363.37	62	24,733.27	4,519.36	6,962.76	36,915.37	353	50	23,060	.44	
New York.....	5,537.78	27	14,730.47	73	20,268.25	14,896.86	14,026.43	54,390.91	90	30	183,179	.30	
Philadelphia.....	2,459.28	51	2,408.60	48	4,867.78	1,833.95	3,664.25	4,257.88	263	35	9,918	.44	
Norfolk.....	428.81	12	3,299.46	88	3,728.27	421.73	6,025.29	10,174.29	146	34	46,539	.32	
Charleston.....	1,303.08	64	723.20	36	2,024.28	2,227.29	5,016.36	3,362.01	148	50	10,780	.31	
Mare Island.....	2,662.73	60	1,788.70	40	4,485.46	963.56	2,931.41	6,202.74	135	41	12,511	.50	
Puget Sound.....	208.42	31	453.14	69	666.56	51.86	468.78	1,187.20	101	80	2,062	.52	
Total all yards.....	23,306.88	35	42,338.66	65	65,545.24	23,369.08	37,831.63	126,735.95	106,180.15	120	318,122	.33
22 Drop forge:													
New York.....	16,135.10	76	4,982.84	24	21,118.04	4,095.73	3,281.43	28,493.20	467	60	10,745	.57	
Philadelphia.....	23,518.73	80	6,778.84	20	20,587.55	19,055.37	6,610.53	54,283.44	428	45	20,460	.46	
Norfolk.....	18,727.02	69	6,216.64	31	27,046.66	1,394.47	2,151.31	36,692.44	467	62	17,914	.38	
Mare Island.....	2,207.99	64	1,253.68	36	3,461.67	951.16	1,480.71	6,803.56	228	41	4,947	.52	
Total all yards.....	60,888.84	75	20,335.10	25	81,263.94	28,498.72	12,853.98	119,254.64	27,994.19	427	53,666	.52
23 Ship smith:													
Portsmouth.....	5,855.21	28	14,883.77	72	20,748.98	5,746.51	6,712.72	33,208.21	26,883.80	48	71,862	.37	
Boston.....	19,450.04	34	37,794.28	66	62,234.32	14,215.13	26,498.62	90,048.07	54,012.33	179	50	121,017	.45
New York.....	24,807.44	38	40,810.29	62	65,617.23	19,759.92	28,952.92	113,450.62	84,150.63	45	183,919	.39	
Philadelphia.....	5,017.89	34	9,652.35	66	14,670.24	6,961.84	7,860.68	28,691.76	22,768.09	126	100	67,913	.46
Norfolk.....	23,368.67	39	35,712.65	61	58,081.22	12,714.33	27,088.95	97,885.50	60,432.24	62	167,102	.36	

Statement 12.—INDUSTRIAL YARD SHOP EXPENSE, BY SHOPS—Continued.

No.	Shops.	Direct shop expense.			Total direct shop expense.	Transfers.		Total shop expense.	Productive labor.	Aver- age rate.	Rate used.	Produc- tive hours.	Aver- age wage per hour.
		Deprecia- tion and main- tenance.	Per cent.	Operating expenses.		Per cent.	Power.							General expense.
23	Shipsmith—Continued.												
	Charleston.	\$4,384.73	41	\$5,367.15	59	\$10,751.88	\$4,298.72	\$11,136.48	\$15,989.79	164	50	43,905	\$0.36
	Mare Island.	12,944.90	39	20,506.19	61	33,451.09	6,436.97	21,614.49	41,708.23	145	41	97,449	.43
	Puget Sound.	12,506.25	43	16,961.84	57	29,371.09	9,951.76	16,506.80	30,569.71	182	80	75,217	.41
	Total all yards.	107,348.13	37	182,578.42	63	289,926.55	78,086.18	144,571.66	336,604.42	152	.....	818,184	.41
26	Gas cutting and welding:												
	Boston.	7,906.73	50	7,704.67	50	15,611.40	.....	1,354.70	8,043.60	210	40	16,897	.48
	New York.	11,583.31	73	4,256.73	27	16,840.04	.....	7,704.50	22,169.84	75	30	46,142	.48
	Philadelphia.	2,577.87	62	1,995.34	38	4,173.21	164.99	2,177.54	2,973.52	219	36	8,566	.35
	Charleston.	101.08	90	10.80	10	111.88	.....	3,371.21	112.04	431	30	501	.22
	Mare Island.	9,567.52	81	2,247.09	19	11,814.61	.....	2,981.45	14,796.06	130	28	26,741	.42
	Puget Sound.	1,425.34	34	2,780.82	66	4,206.16	43.62	2,343.84	4,348.58	151	33	9,900	.44
	Total all yards.	33,091.85	64	18,595.45	36	51,687.30	198.61	9,933.24	48,970.50	126	.....	108,747	.45
28	Electroplating:												
	Portsmouth.	928.90	22	3,315.51	78	4,244.41	1,123.73	4,328.71	9,693.85	64	21	41,220	.37
	Boston.	796.62	45	968.61	55	1,766.13	.....	677.39	2,443.52	152	40	3,491	.46
	New York.	771.13	29	1,863.11	31	2,707.24	3,197.31	1,452.65	7,307.20	208	20	8,377	.42
	Philadelphia.	827.99	58	1,343.99	62	2,172.98	891.91	1,561.93	4,267.52	108	31	10,349	.41
	Norfolk.	349.85	75	119.26	25	469.21	.....	141.11	610.22	91	32	1,900	.36
	Charleston.	254.94	87	23.61	13	288.61	.....	.....	281.55	.....	.....	.....	.....
	Puget Sound.	925.00	49	963.59	51	1,888.59	257.85	1,875.05	4,018.49	111	30	6,379	.56
	Total all yards.	4,855.53	36	8,683.58	64	13,539.11	5,611.91	9,876.73	29,026.75	100	.....	71,716	.40
31	Machine shop:												
	Portsmouth.	28,025.62	37	39,157.53	63	67,183.15	5,562.98	37,452.99	105,199.12	82	25	290,292	.44
	Boston.	68,144.26	38	142,320.09	60	230,464.35	12,004.69	62,699.26	305,138.33	128	33	526,859	.45
	New York.	148,030.62	40	224,698.08	60	372,728.70	47,835.86	238,459.37	605,268.28	95	30	1,390,290	.46
	Philadelphia.	71,758.96	46	85,247.11	54	157,006.07	14,114.11	92,815.87	204,034.05	85	29	604,397	.51
	Norfolk.	131,244.12	44	225,941.25	58	457,305.37	17,077.32	152,138.70	576,521.30	111	41	1,157,743	.45
	Charleston.	30,731.61	44	8,909.38	58	69,640.99	8,531.29	48,258.50	121,430.32	107	28	210,431	.45
	Mare Island.	58,631.06	39	85,890.87	61	152,521.93	8,645.03	111,299.45	272,447.51	127	30	567,897	.44
	Puget Sound.	91,657.87	53	82,668.69	47	174,226.56	10,444.73	67,007.59	241,678.88	137	47	400,686	.44
	Total all yards.	663,331.15	43	932,631.10	67	1,625,962.25	119,217.01	800,071.27	2,545,370.53	105	.....	5,148,568	.47

37	Protective plant: Mare Island Puget Sound	6, 728.78 1, 108.66	44 44	12, 275.62 2, 488.77	1, 126.18 2.36	8, 121.09 1, 178.40	16, 525.99 2, 600.53	99 154	28 47	45, 171 5, 104	30 34	
38	Total all yards	7, 834.44	63	14, 764.39	1, 131.54	9, 296.49	19, 192.43	103	.....	48, 275	38	
	Machinery, hand: Portsmouth Boston New York Philadelphia Norfolk Charleston Mare Island Puget Sound	1, 931.55 10, 567.86 12, 401.04 13, 552.26 33, 921.59 1, 932.89 18, 659.02 17, 965.02	6 13 13 16 34 34 35 35	32, 990.49 80, 718.33 92, 044.77 83, 809.34 101, 851.72 27, 004.07 52, 637.27 32, 389.99	1, 195.56 5, 801.07 7, 472.08 4, 452.13 3, 737.20 1, 192.63 3, 266.48 690.71	24, 848.21 57, 523.78 84, 160.77 96, 968.97 67, 784.57 44, 545.88 68, 573.28 85, 699.28	59, 029.26 144, 043.23 183, 677.62 232, 899.67 282, 197.42 269, 283.24 102, 016.55 154, 877.03 203, 000.49	83, 555.90 252, 994.01 323, 899.67 366 66 66 67 67 61 62 62	25 33 33 22 22 22 24 26 24 47	205, 480 564, 767 820, 803 644, 121 663, 069 2, 691 566, 635 226, 832	46 41 44 44 38 38 46 46	
	Total all yards	110, 961.83	26	440, 786.21	27, 897.81	479, 109.05	1, 058, 424.89	63	.....	3, 696, 398	45	
41	Boilermakers, machine (or M. & H.): Portsmouth Boston New York Philadelphia Norfolk Charleston Mare Island Puget Sound	5, 447.12 7, 131.00 16, 832.61 3, 948.87 16, 466.77 6, 028.83 8, 233.66 15, 346.88	56 37 33 34 43 39 27 65	4, 216.62 12, 074.97 34, 191.28 7, 654.79 22, 872.02 9, 187.09 21, 933.75 8, 148.94	2, 328.44 2, 712.83 14, 124.86 1, 005.60 11, 194.38 734.46 2, 211.53 1, 618.83	2, 760.84 5, 413.66 56, 107.18 6, 196.58 18, 308.68 14, 948.63 27, 578.52 11, 719.12	14, 752.62 27, 338.05 121, 276.93 17, 805.81 68, 808.85 30, 798.61 69, 962.49 36, 832.77	6, 576.81 26, 836.12 163, 922.08 57, 431.87 20, 167.97 25, 605.77 69, 870.90 10, 624.00	224 102 79 87 120 26 33 33	.....	927, 819	39
44	Total all yards Boilermakers, hand: Portsmouth Boston New York Philadelphia Norfolk Charleston Mare Island Puget Sound	79, 458.84 1, 431.94 1, 817.41 1, 634.95 4, 931.81 21, 291.81 1, 202.00 1, 640.89	39 25 11 11 17 14 11 14	120, 281.46 4, 233.88 13, 377.86 27, 043.88 23, 187.37 9, 610.70 9, 913.10	35, 901.43 2, 500.60 1, 762.94 2, 266.90	141, 820.67 6, 712.72 15, 523.58 41, 271.11 34, 842.31 34, 076.49 28, 463.10	377, 570.40 14, 898.84 32, 282.03 69, 320.23 78, 541.08 82, 629.03 62, 245.12 36, 584.53	371, 025.52 14, 984.01 65, 630.07 12, 421.79 132, 541.08 69 60 62 36, 584.53	101	.....	1, 102, 214	44
	Total all yards Boilermakers, hand: Portsmouth Boston New York Philadelphia Norfolk Charleston Mare Island Puget Sound	32, 798.65 16, 823.08 8, 275.91 28, 998.80 12, 201.49 6, 132.62 1, 642.94 16, 122.76 8, 947.80	27 43 30 19 12 31 28 28 41	84, 723.10 22, 222.45 32, 933.63 126, 926.32 16, 940.91 13, 683.11 14, 780.96 41, 271.26 12, 657.59	8, 028.46 2, 198.81 1, 903.51 9, 682.70 1, 603.31 1, 811.23 1, 101.40 2, 197.37 1, 176.54	136, 402.01 16, 938.49 11, 817.32 112, 216.24 276, 233.17 67, 688.40 24, 309.64 31, 343.83 108, 039.99	281, 950.22 68, 290.84 72, 827.27 366, 286.40 67, 582.00 28, 292.00 28, 992.86 94, 327.18 27, 469.29	446, 381.23 79, 473.66 73, 75 366, 286.40 67, 688.40 184 28, 992.86 327, 18 99, 315.44	58	.....	1, 646, 440	44
51	Electrical, machine (or M. & H.): Portsmouth Boston New York Philadelphia Norfolk Charleston Mare Island Puget Sound	16, 823.08 8, 275.91 28, 998.80 12, 201.49 6, 132.62 1, 642.94 16, 122.76 8, 947.80	43 30 19 12 31 28 28 41	84, 723.10 22, 222.45 32, 933.63 126, 926.32 16, 940.91 13, 683.11 14, 780.96 41, 271.26 12, 657.59	8, 028.46 2, 198.81 1, 903.51 9, 682.70 1, 603.31 1, 811.23 1, 101.40 2, 197.37 1, 176.54	136, 402.01 16, 938.49 11, 817.32 112, 216.24 276, 233.17 67, 688.40 24, 309.64 31, 343.83 108, 039.99	281, 950.22 68, 290.84 72, 827.27 366, 286.40 67, 582.00 28, 292.00 28, 992.86 94, 327.18 27, 469.29	446, 381.23 79, 473.66 73, 75 366, 286.40 67, 688.40 184 28, 992.86 327, 18 99, 315.44	58	.....	1, 646, 440	44

Statement 12.—INDUSTRIAL YARD SHOP EXPENSE, BY SHOPS—Continued.

No.	Shops.	Direct shop expenses.			Total direct shop expense.	Transfer.		Total shop expense.	Produce- tive labor.	Aver- age rate.	Rate used.	Produce- tive hours.	Aver- age per hour.	
		Depreci- ation and main- tenance.	Operating expenses.	Per cent.		Power.	General expense.							
52	Electrical, hand:													
	Portsmouth.....	206.04	\$11,933.05	98	\$12,139.99	\$392.65	\$3,281.07	\$20,753.71	\$28,249.35	74	21	76,237	\$0.37	
	Boston.....	692.35	7,922.45	92	8,615.83	468.42	3,171.79	12,256.04	21,022.44	58	53	47,863	.49	
	New York.....	245.07	4,733.85	89	5,029.55	.....	.....	5,029.55	9,977.06	50	20	74,865	.49
	Philadelphia.....	749.22	29,954.74	89	33,733.96	836.20	41,060.70	76,083.80	134,145.50	56	27	312,533	.39	
	Norfolk.....	2,328.89	22,553.55	87	24,882.44	232.77	17,933.19	43,015.63	103,491.01	79	29	269,339	.48	
	Pugot Sound.....	3,323.68	12,522.53	79	15,846.16	.....	.....	33,968.03	43,716.41	79	29	91,981	.48
	Total all yards.....	11,048.73	86,605.61	89	97,654.34	1,923.04	89,998.85	189,576.23	367,551.60	51	.....	894,640	.42
	53	Coppersmith:												
		Portsmouth.....	794.98	5,577.08	87	6,374.04	601.41	3,770.13	10,745.58	11,572.74	98	41	30,033	.39
Boston.....		3,474.73	17,613.08	87	21,087.81	1,801.02	10,373.33	27,664.81	40,900.70	68	35	83,267	.49	
New York.....		7,964.31	17,513.08	89	25,480.77	2,924.03	47,060.35	69,973.65	69,309.69	101	25	157,088	.44	
Philadelphia.....		3,965.53	18,562.60	89	22,488.18	1,744.53	31,733.80	55,943.38	85,262.31	66	22	207,708	.43	
Norfolk.....		5,533.13	10,080.40	63	15,613.57	1,092.53	7,531.61	25,107.75	23,050.75	109	37	60,768	.37	
Charleston.....		2,450.73	2,201.85	83	2,652.58	430.11	712.17	6,794.88	5,491.01	124	28	14,327	.38	
Mare Island.....		2,183.16	7,690.98	73	9,874.14	970.30	14,161.55	24,970.28	29,576.57	84	21	66,024	.38	
Pugot Sound.....		17,140.12	6,415.03	72	23,555.15	1,144.97	6,462.73	31,152.85	12,068.89	245	34	29,989	.42	
Total all yards.....		41,455.69	79,576.00	86	121,031.69	11,106.00	120,425.47	252,564.16	277,863.56	90	.....	644,139	.45
56	Pipe fitters, machine and hand:													
	Portsmouth.....	1,317.13	16,496.24	93	17,813.42	1,202.79	14,993.79	34,010.00	47,532.24	71	20	122,369	.39	
	Boston.....	2,867.65	3,802.72	56	6,670.37	.....	.....	9,148.61	9,408.26	49	15	19,991	.47
	New York.....	942.57	10,408.48	92	11,351.05	4,519.31	7,013.23	22,868.59	46,884.11	69	15	109,826	.43	
	Philadelphia.....	2,491.41	20,315.16	83	22,806.57	4,146.18	33,311.36	60,263.11	117,624.66	51	22	272,723	.39	
	Charleston.....	1,043.51	6,023.53	83	6,067.04	66.17	14,848.63	20,884.84	31,250.47	67	26	78,577	.39	
	Mare Island.....	10,925.30	24,826.57	69	35,751.87	1,623.96	50,994.33	88,060.16	10,931.51	111	20	221,260	.50	
	Pugot Sound.....	20,538.85	26,262.07	65	46,799.52	906.13	80,469.76	78,509.41	70,629.36	111	36	166,646	.42	
	Total all yards.....	40,546.47	107,166.37	73	147,711.84	12,468.54	153,979.37	313,859.75	334,260.51	98	.....	991,392	.38
	56	Plumbers, machine (or M. & H.):												
Boston.....		1,010.39	10,669.39	87	12,179.78	17.12	4,465.70	16,662.60	25,292.79	66	40	47,377	.83	
New York.....		11,533.12	22,372.45	66	33,905.57	8,864.01	42,082.67	84,062.28	51,202.16	160	20	128,068	.89	
Philadelphia.....		4,063.03	10,666.31	73	14,698.34	1,307.48	2,596.28	18,699.10	12,600.16	161	31	24,283	.42	
Norfolk.....		6,112.29	6,114.78	50	12,227.07	2,241.87	3,073.37	17,644.01	12,600.09	140	60	35,396	.35	
Total all yards.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

59	Charleston.....	648.87	17	2,892.38	83	3,631.25	186.20	4,454.59	8,272.04	6,885.14	120	17,097
	Puget Sound.....	50.47	2	2,286.82	96	2,337.29	343.16	2,572.09	5,562.54	4,842.43	115	11,440
	Total all yards.....	24,083.17	30	54,921.13	70	78,974.30	12,969.54	59,548.70	151,462.54	110,989.77	136	269,178
	Plumbers, hand:											
	New York.....	5,791.14	9	59,887.05	81	65,678.19	642.50	28,082.92	94,373.61	247,886.36	38	686,164
	Philadelphia.....	3,135.72	12	25,789.09	88	26,126.81	475.06	19,532.09	61,131.96	124,172.77	49	291,765
	Norfolk.....	2,259.08	10	21,219.11	90	23,478.19	1,252.17	13,529.61	44,229.71	76,227.61	68	216,611
	Puget Sound.....			134.16	100	134.16	25.65	409.27	569.08	338.78	168	677
	Total all yards.....	11,185.94	9	105,029.41	81	116,215.35	2,375.23	81,713.78	200,304.36	449,024.52	44	1,094,207
61	Shipwrights, machine:											
	Portsmouth.....	1,925.90	35	3,541.73	65	5,467.63	1,243.50	1,461.75	8,172.88	3,951.81	207	9,259
	Boston.....	2,391.88	44	12,948.60	55	5,485.38	2,137.42	2,467.40	10,110.20	3,485.48	289	7,680
	New York.....	11,712.67	47	12,948.60	53	24,662.33	14,151.06	16,831.71	65,635.09	10,910.08	510	30,084
	Philadelphia.....	3,263.99	37	2,446.89	33	3,683.58	315.96	7,496.29	7,496.29	4,669.38	359	3,358
	Norfolk.....	2,311.76	37	1,119.03	23	3,430.19	940.50	1,019.54	6,391.23	4,889.21	26	12,116
	Mare Island.....	7,627.05	47	5,811.91	45	15,438.35	2,726.37	5,171.91	21,938.94	8,175.39	237	18,130
	Puget Sound.....	3,984.47	71	1,638.15	29	5,462.62	780.51	1,578.15	3,298.38	4,657.89	204	5,762
	Total all yards.....	33,197.32	52	30,623.97	48	63,821.29	21,986.01	30,379.81	116,187.11	38,210.44	304	86,546
62	Shipwrights, hand:											
	Portsmouth.....	92.93	2	5,450.03	98	5,543.96	499.98	5,520.73	11,534.57	14,329.40	81	24,176
	Boston.....	2,087.38	14	15,998.90	86	15,084.28	93.54	15,768.45	30,944.27	41,338.32	71	25
	New York.....	2,998.63	8	36,684.38	92	39,683.01	769.09	56,107.18	96,559.19	146,721.31	66	90,286
	Philadelphia.....	1,146.64	7	15,292.84	83	16,439.48	1,216.86	31,267.45	48,923.79	59,408.27	82	314,881
	Norfolk.....	4,833.97	16	23,418.38	84	27,532.35	1,053.86	30,128.47	48,923.79	69,739.57	81	132,914
	Charleston.....	7,711.06	9	7,536.97	91	8,308.03	453.22	17,075.92	58,840.17	25,227.73	102	179,572
	Mare Island.....	4,517.06	20	18,427.17	80	22,944.83	745.01	31,305.25	54,965.09	68,801.07	24	57,909
	Puget Sound.....	1,843.07	12	13,870.18	88	15,713.23	537.05	28,594.66	44,844.96	24,782.36	20	164,275
	Total all yards.....	17,790.74	11	133,678.35	89	151,469.09	5,321.52	215,764.11	372,554.72	452,454.03	82	1,026,178
63	Joiners, machine:											
	Portsmouth.....	7,186.22	41	10,221.88	59	17,410.10	6,452.87	6,712.72	30,575.69	22,199.10	138	52,811
	Boston.....	4,397.62	23	20,282.05	77	26,329.72	3,841.14	6,456.29	24,978.70	12,673.78	197	28,749
	New York.....	7,543.09	44	9,420.81	66	11,637.90	12,739.70	11,221.15	50,290.57	33,210.17	156	65,237
	Philadelphia.....	10,118.78	47	11,419.16	63	21,983.94	4,106.07	7,864.50	28,940.16	18,056.10	144	51,211
	Norfolk.....	7,615.76	41	10,673.96	59	18,189.76	2,997.56	4,518.97	30,762.98	19,205.43	160	47,467
	Mare Island.....	7,651.42	50	7,539.83	59	15,190.35	2,019.95	13,812.86	31,023.16	23,808.66	23	86,743
	Puget Sound.....	5,804.61	41	8,226.16	66	14,029.77	1,238.35	7,510.24	22,778.36	7,742.05	294	49,264
	Total all yards.....	56,267.22	38	88,066.55	62	144,332.77	36,117.40	69,223.21	249,673.38	170,667.81	146	399,311
64	Joiners, hand:											
	Portsmouth.....	282.64	8	3,173.79	82	3,456.43		2,621.95	5,978.38	17,311.79	35	40,255
	Boston.....	1,242.83	6	19,660.29	94	20,802.69		11,262.88	82,085.50	59,689.74	54	138,769
	New York.....	1,600.80	6	10,678.10	94	10,738.90	788.84	9,618.49	21,346.23	68,504.18	36	118,517

Statement 12—INDUSTRIAL YARD SHOP EXPENSE, BY SHOPS—Continued.

No.	Shops.	Direct shop expense.				Total direct shop expense.	Transfers.		Total shop expense.	Produce- tive labor.	Aver- age rate.	Rate used.	Produce- tive hours.	Aver- age wage per hour.
		Deprecia- tion and main- tenance.	Operating expenses.	Per cent.	Per cent.		Power.	General expense.						
64	Jobs, hand—Continued. Philadelphia..... Boston..... New York..... Philadelphia..... New York..... Philadelphia..... New York..... Philadelphia..... New York.....	\$1,036.91	\$17,702.02	94	\$18,738.93	\$1,732.27	\$12,886.14	\$33,357.34	\$33,156.82	\$63	41	41	\$117,771	\$0.45
		438.05	16,660.40	3	16,660.40	.....	17,066.34	33,154.89	68,335.34	49	34	34	186,564	.41
		164.73	4,561.00	97	4,725.73	407.43	11,136.48	16,269.64	17,431.62	81	24	24	42,962	.40
		1,000.12	9,108.55	91	11,089.67	67.98	14,907.20	26,064.85	32,840.47	80	23	23	62,474	.41
		765.91	5,369.94	88	6,135.85	282.90	9,376.31	15,793.96	20,350.44	78	35	35	37,478	.54
		5,091.50	86,666.18	95	91,758.68	3,279.32	88,954.79	184,020.79	327,551.40	86	.....	.....	726,910	.45
		4,411.41	10,655.06	71	15,066.47	2,709.61	9,849.44	27,626.82	35,843.08	77	33	33	84,913	.42
		7,311.41	24,726.61	77	32,038.02	4,860.85	25,219.61	62,118.48	108,529.70	57	21	21	261,868	.43
		10,286.21	16,018.69	61	26,304.90	3,396.17	12,838.27	42,838.34	36,444.16	120	45	45	78,339	.46
		29,070.56	57,970.53	33	87,041.09	9,439.62	28,054.92	124,535.63	165,777.67	178	78	78	372,631	.46
5,791.24	13,545.60	70	19,336.84	3,434.90	14,972.78	37,749.49	53,822.13	185	40	40	69,130	.36		
9,008.01	19,770.96	67	29,678.96	2,628.17	22,694.86	54,799.96	103,138.24	92	35	35	208,469	.41		
7,401.05	11,132.01	40	18,533.06	1,929.38	14,161.68	34,234.37	36,986.71	62	35	35	68,489	.44		
11,106.63	8,514.06	43	19,620.69	2,103.17	16,875.96	38,599.41	30,400.23	127	35	35	68,367	.44		
80,876.10	151,678.45	66	232,553.55	27,989.26	134,717.89	394,660.70	506,107.86	77	.....	.....	1,204,632	.42		
71	Painters: Portsmouth..... Boston..... New York..... Philadelphia..... New York..... Philadelphia..... New York..... Philadelphia..... New York.....	749.35	8,254.94	92	9,004.29	294.81	5,620.73	14,819.83	20,182.69	74	18	18	49,974	.40
		2,126.39	16,106.71	12	18,233.10	404.09	9,200.07	27,835.26	36,337.13	77	25	25	88,242	.44
		2,634.77	29,466.43	92	32,101.20	3,010.32	28,088.48	63,170.20	106,562.84	59	20	20	227,854	.47
		5,286.12	34,808.96	75	40,045.08	3,778.00	39,377.76	79,809.34	100,764.37	79	22	22	221,623	.45
		7,223.81	21,614.50	25	28,838.31	436.63	28,401.68	61,869.78	62,585.01	99	23	23	122,634	.42
		2,289.73	4,943.89	95	5,243.62	19.33	7,424.32	12,687.57	19,943.11	64	21	21	57,188	.34
		2,317.25	9,970.88	81	12,288.13	482.51	18,634.07	31,413.51	27,573.46	114	20	20	61,817	.45
		1,453.89	13,160.01	90	14,613.90	654.24	20,166.90	35,434.04	29,077.19	122	30	30	61,978	.47
		22,030.41	128,353.02	87	150,383.43	5,960.12	150,967.18	317,080.73	393,033.77	80	.....	.....	886,980	.44
		297.08	10,180.68	87	10,487.69	180.00	9,473.08	20,110.77	31,105.96	62	16	16	90,960	.34
5,076.46	34,670.29	84	40,246.75	720.99	28,722.02	64,189.47	82,811.48	65	25	25	373,073	.33		
17,946.74	97,872.91	86	115,819.65	1,868.15	70,134.95	187,048.78	260,388.09	48	15	15	1,108,100	.33		
10,688.69	24,904.41	83	35,593.10	1,868.33	34,510.19	86,660.73	77,688.63	76	31	31	267,797	.39		
72	Laborers and riggers: Portsmouth..... Boston..... New York..... Philadelphia.....	297.08	10,180.68	87	10,487.69	180.00	9,473.08	20,110.77	31,105.96	62	16	16	90,960	.34
		5,076.46	34,670.29	84	40,246.75	720.99	28,722.02	64,189.47	82,811.48	65	25	25	373,073	.33
		17,946.74	97,872.91	86	115,819.65	1,868.15	70,134.95	187,048.78	260,388.09	48	15	15	1,108,100	.33
		10,688.69	24,904.41	83	35,593.10	1,868.33	34,510.19	86,660.73	77,688.63	76	31	31	267,797	.39
		297.08	10,180.68	87	10,487.69	180.00	9,473.08	20,110.77	31,105.96	62	16	16	90,960	.34
		5,076.46	34,670.29	84	40,246.75	720.99	28,722.02	64,189.47	82,811.48	65	25	25	373,073	.33
		17,946.74	97,872.91	86	115,819.65	1,868.15	70,134.95	187,048.78	260,388.09	48	15	15	1,108,100	.33
		10,688.69	24,904.41	83	35,593.10	1,868.33	34,510.19	86,660.73	77,688.63	76	31	31	267,797	.39
		297.08	10,180.68	87	10,487.69	180.00	9,473.08	20,110.77	31,105.96	62	16	16	90,960	.34
		5,076.46	34,670.29	84	40,246.75	720.99	28,722.02	64,189.47	82,811.48	65	25	25	373,073	.33

74	Norfolk.....	11,295.19	32,776.36	74	44,071.55	52,731.29	100,057.12	134,037.78	75	68	27	625,731
	Charleston.....	3,656.29	12,734.73	66	16,391.02	18,560.98	37,627.85	42,632.93	68	22	19	196,253
	Mare Island.....	9,006.02	25,680.17	74	84,836.19	1,476.45	1,476.45	101,612.77	86	17	20	307,372
	Puget Sound.....	3,537.57	26,003.24	58	29,241.11	1,897.53	75,166.43	83,060.47	90	19	19	233,731
	Total all yards.....	62,356.43	262,062.74	81	324,409.17	11,175.94	680,634.87	979,838.20	64	.....	.....	3,103,025
	Rigging loft:											
	Portsmouth.....	35.85	1,772.80	98	1,936.65	51.93	3,755.20	5,742.10	65	12	12	12,342
	Boston.....	2,760.43	7,764.89	74	10,526.32	410.50	16,973.93	21,247.93	61	20	20	60,251
	New York.....	2,352.31	13,466.98	65	16,828.29	11,231.18	29,339.23	31,997.94	53	31	31	106,204
	Philadelphia.....	1,861.91	5,307.69	77	6,895.85	2,248.58	13,682.28	18,618.15	63	31	31	38,185
	Norfolk.....	1,823.24	3,307.49	74	5,891.28	.....	5,351.63	14,508.11	83	27	27	43,651
	Charleston.....	4,066.34	12,094.22	82	15,014.22	.....	17,112.30	19,589.67	113	22	22	15,823
	Mare Island.....	4,224.63	7,880.94	54	6,116.57	298.45	26,457.22	31,589.66	219	17	17	32,044
	Puget Sound.....	1,333.41	2,699.13	67	4,004.36	472.51	9,633.51	11,589.80	131	46	46	10,407
	Total all yards.....	12,789.88	42,057.81	77	54,947.69	4,171.87	114,062.95	148,021.36	77	.....	.....	323,895
76	Sail loft:											
	Portsmouth.....	650.19	2,828.20	83	3,403.39	150.26	6,313.99	9,070.07	70	18	18	21,226
	Boston.....	2,375.99	11,372.28	83	13,748.27	471.00	25,463.30	30,594.42	77	30	30	63,806
	New York.....	3,668.94	18,756.43	84	22,428.37	4,516.38	54,997.67	64,096.20	86	20	20	146,675
	Philadelphia.....	1,984.67	6,050.33	76	8,035.00	942.36	9,716.51	18,663.86	129	25	25	32,679
	Norfolk.....	3,063.34	10,241.57	77	13,304.91	904.41	8,416.83	36,101.69	63	27	27	90,256
	Charleston.....	284.35	1,777.31	87	2,061.66	.....	7,494.32	9,486.98	151	24	24	14,778
	Mare Island.....	415.14	4,870.00	93	5,285.14	163.18	5,962.89	6,294.72	105	38	38	22,992
	Puget Sound.....	2,370.63	4,456.71	66	6,827.34	397.89	6,502.74	13,767.97	121	45	45	24,360
	Total all yards.....	14,743.25	60,350.83	80	75,094.08	7,545.47	160,780.22	182,937.66	88	.....	.....	416,762
78	Upholsterers, machine:											
	Philadelphia.....	1,965.10	6,112.72	74	6,977.82	457.78	15,020.07	23,335.87	53	25	25	62,836
79	Sealers:											
	Puget Sound.....	2,694.39	2,343.51	47	5,037.90	932.70	7,376.91	16,504.55	45	19	19	49,601
81	Building trades:											
	Portsmouth.....	2,233.15	10,045.13	82	12,276.28	.....	1,568.35	13,846.63	45	.....	.....	82,194
	Boston.....	4,872.50	16,430.23	78	21,311.82	20,732.32	42,044.14	34,142.58	123	17	17	67,574
	New York.....	2,828.34	6,450,094.47	95	47,852.81	2,800.80	102,091.36	67,612.83	166	15	15	162,230
	Philadelphia.....	7,728.85	40,104.72	84	47,833.67	53,774.01	72,407.70	63,843.16	113	16	16	172,648
	Norfolk.....	4,232.68	36,896.75	90	41,126.33	19,026	69,945.53	123,545.26	56	16	16	427,341
	Charleston.....	5,319.76	11,406.35	69	16,726.11	3,370.33	42,369.38	47,498.53	89	124	124	175,675
	Mare Island.....	12,037.92	20,117.26	77	52,158.18	517.52	69,815.98	123,255.46	57	13	13	291,495
	Puget Sound.....	3,140.11	20,494.41	87	23,624.52	374.05	23,907.02	47,905.59	241	17	17	54,572
	Total all yards.....	42,393.40	220,518.32	84	292,911.72	7,361.74	490,366.34	510,392.44	111	.....	.....	1,453,629
94	Pattern shop:											
	Portsmouth.....	4,545.42	7,597.18	63	12,142.60	793.65	18,456.97	23,631.01	78	36	36	51,234
	Boston.....	7,558.97	13,639.14	65	21,198.11	1,618.11	31,978.96	37,359.84	117	40	40	66,753
	New York.....	10,851.83	22,258.20	72	38,110.22	11,044.60	77,202.38	122,701.85	63	30	30	221,855
	Philadelphia.....	7,424.04	8,147.04	53	15,671.08	1,663.97	25,510.30	28,596.00	69	33	33	55,394
	Norfolk.....	5,162.97	16,506.40	77	21,658.37	1,133.23	30,324.22	26,741.23	113	39	39	57,948

Statement 19.—INDUSTRIAL YARD SHOP EXPENSE, BY SHOPS—Continued.

No.	Shops.	Direct shop expense.			Total direct shop expense.	Transfers.		Total shop expense.	Productive labor.	Average rate.	Rate used.	Productive hours.	Average wage per hour.
		Depreciation and maintenance.	Operating expenses.	Per cent.		Power.	General expense.						
94	Pattern shop—Continued.												
	Charleston	\$1,116.78	17	\$5,094.30	\$6,211.08	\$158.98	\$7,424.32	\$13,792.28	\$7,260.93	\$190	28	14,797	\$0.45
	Mare Island	2,797.08	16	13,865.19	16,662.12	1,173.26	15,682.59	\$3,480.67	16,563.68	180	41	54,309	.34
	Puget Sound	6,216.71	48	6,563.17	12,780.88	830.69	4,687.66	18,340.23	16,206.61	113	51	26,164	.58
	Total all yards.	45,668.75	31	98,610.71	144,277.46	18,516.38	86,302.27	249,096.11	271,081.15	109	.....	640,184	.50
95	Dry docks:												
	Portsmouth.	20,144.06	98	1,406.60	21,549.66	.....	1,226.64	21,549.66	.....	.....	.....	.....	.....
	Boston.	30,798.60	77	9,004.60	39,803.10	.....	9,818.49	41,029.74	.....	.....	.....	.....	.....
	New York.	178,768.96	87	26,620.96	205,389.81	14,796.28	795.98	75,662.71	6,901.91	3,897	30	13,864	.44
	Philadelphia.	64,410.75	74	18,848.98	73,259.73	1,607.00	2,658.57	65,263.61	1,645.37	3,899	38	4,828	.40
	Norfolk.	53,338.90	85	9,298.24	62,635.04	707.88	.....	29,690.87	3,029.74	2,154	24	7,668	.40
	Charleston.	28,787.43	96	1,764.35	26,551.78	.....	745.26	92,297.65	1,102.64	2,687	.....	2,662	.41
	Mare Island.	86,152.09	94	5,400.20	91,652.29	.....	957.55	63,198.46	276.16	.....	19	562	.49
	Puget Sound.	54,735.24	91	5,389.74	60,124.98	.....	.....	.....	.....	.....	.....	.....	.....
	Total all yards.	506,133.72	82	77,732.66	582,866.38	19,242.09	16,583.80	618,662.27	12,255.82	5,047	.....	29,204	.42
25	Gas manufacturing:												
	New York.	6,206.31	95	1,060.81	7,267.12	.....	981.64	13,153.07	3,684.87	.....	.....	10,607	.60
	Norfolk.	2,257.67	92	2,446.43	4,704.10	.....	1,397.14	4,585.26	1,738.26	.....	.....	4,899	.85
	Charleston.	1,162.37	71	483.20	1,645.57	.....	1,113.66	2,759.23	2,002.26	.....	.....	4,181	.34
	Mare Island.	3,941.34	84	718.66	4,660.00	.....	4,367.78	9,773.14	2,402.21	.....	.....	3,294	.61
	Puget Sound.	683.45	77	192.50	875.95	.....	468.78	2,018.61	790.99	.....	.....	2,970	.27
	Total all yards.	14,251.14	85	2,642.93	16,894.07	11,243.11	4,062.60	32,299.78	9,618.59	.....	.....	21,729	.44
27	Galvanizing:												
	Portsmouth.	1,631.08	54	1,411.35	3,042.43	.....	1,819.24	5,102.33	2,288.38	.....	.....	8,943	.28
	Boston.	1,574.76	92	1,122.68	2,697.44	.....	1,670.91	2,387.00	4,890.61	.....	.....	12,674	.38
	New York.	1,882.65	83	2,791.14	4,673.79	.....	1,170.89	7,853.08	4,955.08	.....	.....	12,706	.28
	Philadelphia.	886.87	29	2,481.07	3,411.74	.....	4,493.74	5,609.08	3,233.63	.....	.....	6,872	.47
	Norfolk.	3,011.89	34	6,395.46	9,407.35	.....	4,607.40	13,058.28	13,312.33	.....	.....	37,515	.35
	Charleston.	260.89	42	249.58	510.47	.....	53.57	1,026.03	419.97	.....	.....	1,001	.28
	Mare Island.	3,526.80	30	7,278.83	11,113.03	.....	1,490.71	15,287.88	4,189.67	.....	.....	12,687	.83
	Puget Sound.	348.78	24	1,107.91	1,456.69	.....	81.20	3,382.63	2,576.61	.....	.....	6,163	.60
	Total all yards.	13,217.21	88	21,904.45	35,221.66	2,783.81	13,642.68	51,648.10	36,787.23	.....	.....	99,942	.36

91	Foundry iron:	2,553.91	30	5,887.53	70	8,451.44	1,473.83	2,760.34	12,685.60	8,110.27	21,989	.38
	Portsmouth.....	11,209.83	30	28,159.12	71	89,368.95	6,894.74	6,894.74	6,894.74	18,790.32	41,878	.45
	New York.....	7,028.75	17	36,980.37	83	44,317.07	3,972.19	14,070.05	62,202.91	66,569.61	129,491	.51
	Philadelphia.....	7,068.19	22	24,956.52	78	32,054.62	2,748.02	28,083.27	28,083.27	40,122.50	87,864	.45
	Norfolk.....	13,523.19	33	27,074.88	67	40,598.58	2,541.12	22,594.55	65,734.55	39,074.08	110,463	.35
	Charleston.....	3,146.17	24	9,951.96	76	13,098.13	223.96	7,424.32	20,756.41	8,581.08	19,000	.45
	Mare Island.....	6,758.13	25	19,846.53	75	26,604.66	691.21	5,163.73	26,604.66	16,083.38	59,576	.27
	Puget Sound.....	7,762.18	48	8,880.58	52	16,642.78			22,497.08	15,825.22	29,589	.53
	Total all yards.....	59,988.77	27	161,447.44	73	221,136.21	11,010.32	87,534.83	320,281.46	213,156.91	498,410	.43
92	Foundry brass:	22,186.30	33	45,101.31	67	87,287.61	5,895.25	11,417.78	84,600.64	38,713.63	102,279	.38
	Portsmouth.....	6,632.27	21	24,888.84	79	31,519.11	5,203.81	36,722.92	20,659.89	20,659.89	45,950	.45
	New York.....	21,141.98	36	37,115.78	64	58,257.84	792.66	14,023.65	73,074.07	65,337.70	130,024	.50
	Philadelphia.....	24,442.42	44	31,600.42	56	21,775.41	1,618.82	15,063.25	50,798.64	111,529	111,529	.45
	Norfolk.....	6,432.78	23	20,245.96	77	26,678.74	1,083.03	43,425.02	25,900.16	70,708	70,708	.35
	Charleston.....	1,077.43	21	6,307.83	79	7,865.26	1,998.50	3,712.17	11,866.83	3,968.65	15,989	.25
	Mare Island.....	6,530.70	32	14,228.44	68	20,759.14	796.64	9,844.07	27,156.31	15,043.23	80,988	.19
	Puget Sound.....	7,568.73	46	8,946.87	54	16,515.60			27,156.31	18,987.86	35,637	.53
	Total all yards.....	90,012.61	34	189,433.45	66	285,046.06	10,968.00	81,040.14	377,072.20	1,238,440.70	692,402	.40
93	Smelting plant:	6,783.89	36	10,862.88	62	17,678.77	121.95	4,328.70	22,129.42	13,416.31	41,639	.32
93	Foundry steel:	6,971.11	38	11,089.70	62	17,760.81		127.47	17,888.28	2,439.47	5,369	.45
	Boston.....	1,644.00	100	1,644.00		1,644.00			1,644.00			
	New York.....	178.96	94	10.68	6	198.64			206.98	94.80	211	.45
	Philadelphia.....	3,422.52	24	11,059.38	76	14,481.90	813.53	7,531.83	22,827.06	12,716.80	35,969	.35
	Norfolk.....	1,837.11	28	4,578.32	72	6,415.43			6,415.43	2,981.81	10,922	.27
	Mare Island.....	4,917.52	66	2,529.83	34	7,447.45	655.38	2,347.17	10,450.00	2,456.41	4,724	.52
	Puget Sound.....											
	Total all yards.....	18,071.52	39	29,267.71	61	47,939.23	1,496.13	10,006.27	59,431.63	20,688.29	57,195	.36
93	Paint manufacturing:	1,496.66	21	5,643.11	79	7,139.77	438.42	28,047.36	35,625.55	5,509.06	18,122	.30
	New York.....	1,398.10	44	1,704.04	66	3,072.14	350.02	4,940.87	8,362.83	6,480.90	15,951	.34
	Philadelphia.....	1,345.11	11	10,092.91	86	11,438.02	443.20	6,898.98	18,753.20	5,522.50	12,862	.43
	Norfolk.....	289.09	21	1,083.68	79	1,352.67	330.49	1,406.31	3,173.87	2,265.68	4,720	.44
	Mare Island.....	883.13	57	6,721.15	43	5,865.28	47.71	1,496.31	3,019.30	1,412.18	3,210	.48
	Puget Sound.....											
	Total all yards.....	5,392.09	22	19,175.79	78	24,597.88	1,614.84	42,752.03	68,934.75	21,160.32	57,675	.36
97	Flag manufacturing:	3,943.18	21	14,859.07	79	18,802.25	919.36	12,623.77	32,345.38	24,818.28	93,660	.26
	New York.....	1,106.68	32	2,366.42	68	3,476.10	152.92	2,861.45	6,610.47	8,601.76	28,413	.30
	Mare Island.....											
	Total all yards.....	5,052.86	23	17,225.49	77	22,278.35	1,072.28	15,905.22	38,955.85	33,620.04	123,073	.27
97	Ropewalk:	38,396.06	41	54,060.57	59	92,456.63		30,091.88	122,548.51	789,368.91	272,808	.29
	Boston.....											

Statement 13.—INDUSTRIAL YARD SHOP EXPENSE, BY SHOPS—Continued.

No.	Shops.	Direct shop expense.				Total direct shop expense.	Transfers.		Total shop expense.	Productive labor.	Average rate.	Rate used.	Productive hours.	Average wage per hour.
		Depreciation and maintenance.	Operating expenses.	Per cent.	Per cent.		Power.	General expense.						
98	Washing plant: Portsmouth.....	\$42.08	\$67.02	38	62	\$109.10								
98	Coffee roaster: New York.....	1,466.06	38,719.96	3	97	40,186.02	\$178.46		\$2,766.56			8,266	\$0.33	
98	Tool manufacturing: Philadelphia.....	1,955.33	4,065.39	32	68	6,021.72	2,765.65	\$5,151.06	10,418.48			22,780	.46	
98	Wire mill: Boston.....	1,565.36	5,808.79	21	79	7,374.15	2,037.84	4,516.01	14,470.37			39,116	.37	
99	Clothing factory: New York.....	4,685.59	18,483.44	6	94	23,169.03	542.06		468,171.45			1,109,230	.42	
		11,942.30	32,926.75	26	74	44,869.14	1,933.48		46,802.62	143,881.67			795,454	.18
		16,627.98	91,410.19	15	85	108,038.17	2,475.54		110,513.71	612,053.12			1,904,684	.33
99	Chain: Boston.....	34,761.90	46,923.72	42	58	81,685.62	10,268.91	29,230.27	86,218.12	136	50	192,921	.46	

Statement 13.—INDUSTRIAL YARD GENERAL EXPENSE, BY ACTIVITIES.

Item.	Portsmouth.	Boston.	New York.	Philadel- phia.	Washington.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
Miscellaneous	\$30,439.89	\$59,240.64	\$54,057.43	\$76,558.80	.....	.....	.....	.....	.....	\$309,648.68
Grounds and water front.....	36,277.58	41,480.32	247,191.81	107,414.72	\$60,255.72	89,652.50	\$8,804.87	\$14,609.70	\$47,521.45	\$902,367.80
Communications.....	4,458.33	7,484.94	14,847.36	7,989.04	7,884.16	14,561.19	54,137.42	137,376.44	9,015.24	286,589.29
Fire protection.....	6,923.31	3,882.28	16,942.06	4,316.53	7,714.63	7,733.45	2,447.81	14,142.40	3,705.37	68,108.72
Fleet fuel supply	10,178.35	40,452.50	21,326.99	935.74	442.41	19,605.09	8,390.20	70,505.54	66,111.01	237,948.48
Stores supply.....	77,063.04	207,633.33	434,407.42	169,258.60	264,077.25	465,631.75	77,906.75	190,946.74	90,078.24	1,965,902.12
Laboratory.....	4,890.71	24,708.45	137,055.39	32,752.93	25,938.33	44,989.21	3,135.67	22,830.05	14,286.54	294,589.29
Purchase.....	10,943.83	23,646.85	53,050.92	18,307.68	29,012.57	20,473.92	3,657.28	32,126.27	26,159.48	217,377.71
Provisions and clothing depot.....	.....	86,745.67	.....	.....	.....	.....	.....	.....	.....	86,745.67
Total supply	103,065.93	290,433.13	732,586.26	204,254.95	319,490.56	550,699.97	92,988.91	306,407.60	196,635.88	2,802,563.22
Locomotive	9,122.28	35,378.60	80,157.06	18,255.69	47,690.80	36,487.11	9,396.32	44,841.65	18,269.32	299,578.83
Crane.....	13,514.73	26,906.12	108,477.93	35,904.40	39,038.32	48,910.29	15,513.49	47,372.03	17,764.44	353,269.74
Motor truck.....	2,983.57	6,892.24	29,254.55	8,364.58	36,946.71	12,734.86	5,467.36	8,265.83	13,342.73	124,278.22
Team.....	31,816.45	29,292.11	55,196.68	27,008.52	19,885.25	75,890.67	10,041.46	58,424.97	21,143.11	324,278.22
Hand.....	.....	1,408.84	.....	12,463.26	25,087.95	2,560.33	169.39	598.66	.....	42,296.43
Water.....	30,092.80	78,533.41	187,361.97	20,788.91	30,362.04	124,347.66	17,709.29	64,462.58	83,536.98	637,496.64
Total transportation	87,526.83	178,610.32	460,447.19	123,386.36	198,999.07	300,890.92	58,267.31	218,965.72	184,046.68	1,781,162.30
Heat	19,233.79	47,115.97	73,573.39	543.96	45,635.68	32,622.23	5,773.57	12,150.69	24,460.34	261,109.52
Steam.....	26,779.16	32,678.33	65,120.20	31,586.26	61,685.34	15,940.99	1,376.02	20,199.59	56,641.06	340,778.55
Water.....	.....	4,863.12	23,975.10	47,729.35	.....	8,337.54	5,819.04	2,506.49	.....	86,230.64
Air.....	46,060.51	60,265.54	47,644.28	60,265.90	38,785.79	55,310.11	25,831.68	25,243.33	25,707.05	361,137.19
Electric.....	89,952.68	114,049.35	167,779.82	121,817.30	148,057.66	89,863.57	47,119.81	62,318.54	59,817.33	900,816.06
Salt water.....	.....	.....	.....	.....	.....	.....	1,263.09	.....	.....	1,263.09
Total power	189,066.14	248,972.31	378,092.79	247,708.67	324,164.47	202,074.04	87,183.21	122,418.64	165,625.78	1,988,336.06
Chefical	36,953.14	85,767.06	174,400.82	80,644.31	135,430.13	87,298.65	45,631.37	69,453.88	49,516.70	764,137.16
Drafting.....	42,853.16	69,536.40	240,238.45	124,098.40	235,826.53	94,539.64	24,630.81	69,550.61	83,775.83	964,147.45
Estimating.....	1,804.29	70,100.77	400,739.57	194,148.36	469,277.75	204,371.94	22,639.01	64,505.71	49,003.88	1,450,906.44
Accounting.....	18,606.53	47,447.42	106,647.55	34,010.70	49,247.00	38,261.69	22,000.00	49,559.15	28,040.08	389,739.76
Disbursary.....	9,629.13	43,486.77	86,329.47	38,890.11	27,635.92	32,080.11	20,173.36	35,734.65	13,286.85	306,618.36
Disbursing.....	2,696.50	11,931.13	2,300.60	1,098.67	27,740.50	1,599.28	14,341.82	3,176.85	1,863.82	28,172.60
Officers.....	2,306.64	11,231.33	15,600.67	5,221.71	9,543.13	6,733.41	3,120.04	4,664.18	2,199.10	60,639.76
General supervisors.....	133,614.80	222,875.61	327,845.77	240,537.04	181,149.01	195,631.44	114,027.58	246,791.74	144,959.19	1,807,327.88
Total administration	10,532.84	31,500.68	20,781.69	31,783.41	6,463.60	42,884.43	2,407.08	23,198.78	3,778.32	173,391.26
Total	259,812.23	577,898.63	1,017,883.19	669,343.34	694,347.76	526,332.42	270,518.57	519,586.27	413,373.25	4,948,070.66

Statement 13.—INDUSTRIAL YARD GENERAL EXPENSE, BY ACTIVITIES—Continued.

Item.	Portsmouth.	Boston.	New York.	Philadel- phia.	Washington.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
060 Building ways.....	\$4,411.29	\$15,546.37	\$64,644.20	\$25,087.00	\$1,286.73	\$504.82	\$1,721.30	\$15,620.41	\$10,765.12	\$139,590.23
060 Tool shop.....	6,053.77	25,730.99	384.00	.....	72,702.92	13,388.74	3,902.25	749.26	14,695.40	64,904.41
070 Military activities.....	65,687.77	27,028.97	55,214.43	40,183.93	.....	60,495.72	23,788.16	306,648.34	64,600.45	716,350.69
Grand total.....	786,756.07	1,482,290.90	3,042,290.75	1,506,752.34	1,086,846.01	1,783,749.67	608,003.50	1,664,063.18	1,106,553.81	13,669,327.23
Invoices.....	29,203.06	88,210.96	20,146.52	80,232.50	2,306.98	30,482.61	13,472.61	29,182.76	53,064.38	346,832.40
Military.....	418,422.24	750,662.45	1,317,345.59	554,207.02	223,316.01	906,140.84	191,337.95	827,122.64	584,123.64	5,732,703.36
Industrial.....	339,130.75	643,367.49	1,704,796.64	872,312.92	1,451,223.02	847,126.22	403,192.94	807,778.78	531,353.79	7,590,266.45

Statement 14.—INDUSTRIAL YARDS—RATIO OF EXPENSE LABOR TO PRODUCTIVE LABOR, BY SHOPS.

Shop.	(g) Total labor.	(f) Productive labor.	(e) Per cent $\frac{f}{g}$.	(d) Miscellaneous labor.	(c) Per cent $\frac{d}{g}$.	(b) Super- vision.	(a) Per cent $\frac{b}{g}$.	(h) Leave pay.	(k) Per cent $\frac{h}{g}$.	(m) Holiday pay.	(n) Per cent $\frac{m}{g}$.	(o) Dis- ability pay.	(p) Per cent $\frac{p}{g}$.
11	Plate and angle:												
	Portsmouth.....	\$16,200	\$11,000	\$490	68	\$1,460	13.3	\$890	8.1	\$610	5.6	\$40	0.3
	Boston.....	82,000	38,300	8,540	44	4,860	13.4	3,360	9.3	3,260	9.0	1,120	3.1
	New York.....	215,700	112,800	46,200	52	17,900	15.9	8,630	7.6	5,350	4.7	3,877	3
	Philadelphia.....	88,300	68,600	6,200	45	6,620	14.7	4,160	7.1	2,410	4.1	400	0.7
	Norfolk.....	84,800	38,100	4,240	45	1,610	4.2	2,620	6.9	1,800	4.7	76	0.2
	Charleston.....	19,700	11,800	1,630	60	2,760	23.2	835	7.1	635	5.4	86	1.1
	Mare Island.....	69,700	37,300	5,080	54	2,060	5.4	3,440	10.2	1,970	5.2	317	0.8
	Puget Sound.....	29,000	11,300	1,800	39	2,060	13.2	1,160	10.2	1,480	4.2	20	0.2
	Average.....	75,700	39,700	9,160	52	5,160	13.0	3,120	7.9	2,060	5.2	302	0.8
12	Chipping, etc.:												
	Portsmouth.....	67,200	51,600	1,860	77	2,440	4.7	5,370	10.4	2,760	6.3	560	1.1
	Boston.....	169,000	103,000	14,500	65	10,900	10.6	9,440	9.1	6,860	6.6	4,200	4.1
	New York.....	786,900	616,000	42,900	78	34,900	6.6	32,500	6.8	22,900	3.5	1,760	0.3
	Philadelphia.....	90,000	44,600	2,570	74	3,160	15.1	1,970	7.1	1,970	4.4	70	0.2
	Norfolk.....	187,000	149,000	7,600	78	9,640	6.7	9,680	6.8	6,680	4.9	270	0.2
	Charleston.....	62,800	47,800	76	76	6,440	13.5	3,640	7.1	2,350	4.8	330	0.7
	Mare Island.....	172,400	127,600	12,400	80	3,260	2.6	7,440	6.9	5,780	4.5	1,280	1.0
	Puget Sound.....	61,900	39,800	4,850	63	5,080	12.2	3,350	8.4	2,220	5.6	504	1.3
	Average.....	195,000	146,000	10,900	76	9,900	6.8	9,310	6.4	6,440	4.4	1,120	0.8
15	Laying out and templating:												
	Portsmouth.....	26,400	20,200	800	77	2,780	13.6	1,620	8.0	980	4.6	.....	.....
	Boston.....	10,260	4,900	1,180	48	1,960	40.4	680	13.9	230	4.7	18	0.4
	New York.....	117,000	69,200	11,600	71	4,460	5.0	6,300	7.0	3,860	4.3	18	0.1
	Philadelphia.....	3,320	3,680	39	39	2,860	79.4	420	11.6	350	9.6	2	0.1
	Norfolk.....	64,000	49,000	880	78	6,500	13.6	3,000	7.3	2,360	4.7	100	0.4
	Charleston.....	96,300	44,100	40	78	3,870	6.9	4,100	10.0	2,830	4.5	168	0.4
	Mare Island.....	51,800	39,600	3,680	76	2,460	9.2	2,440	6.2	1,940	3.8	14	0.2
	Puget Sound.....	16,360	11,800	1,310	63	4,480	3.8	615	6.2	485	3.8	23	0.2
	Average.....	43,900	32,900	2,680	76	3,160	9.6	2,460	7.5	1,630	4.6	41	1.1
16	Fitting and bolting:												
	Portsmouth.....	61,200	46,600	1,220	76	4,980	10.6	4,780	10.3	2,660	5.7	490	1.1
	Boston.....	113,000	69,400	6,940	66	10,400	10.8	7,630	7.9	4,960	5.1	1,900	2.0
	New York.....	499,400	395,800	22,400	79	26,200	7.2	28,400	7.4	18,600	4.7	1,700	0.8
	Philadelphia.....	101,000	81,000	4,020	80	6,040	7.4	5,920	7.3	3,110	3.8	.....	.....

Statement 14.—INDUSTRIAL YARDS—RATIO OF EXPENSE LABOR TO PRODUCTIVE LABOR, BY SHOPS—Continued.

Shop.	(a) Total labor.	(b) Pro- ductive labor.	(c) Per cent $\frac{b}{a}$	(d) Miscellaneous labor.	(e) Per cent $\frac{d}{b}$	(f) Super- vision.	(g) Per cent $\frac{g}{f}$	(h) Leave pay.	(i) Per cent $\frac{i}{h}$	(m) Holiday pay.	(n) Per cent $\frac{n}{m}$	(o) Disability pay.	(p) Per cent $\frac{p}{o}$
16 Fitting and bolting—Concluded.													
Norfolk.....	\$108,800	\$80,000	74	\$2,000	2.5	\$15,800	19.5	\$5,500	6.8	\$3,800	4.7	\$145	0.1
Boston.....	184,000	120,000	79	7,800	5.1	12,000	12.5	9,000	5.9	9,500	4.6	316	.2
Marine Island.....	46,300	37,300	79	2,800	7.5	4,550	8.2	1,850	5.2	2,100	5.6	72	.2
Puget Sound.....													
Average.....	159,500	126,500	79	7,120	5.6	11,800	9.3	9,030	7.1	5,980	4.2	670	.5
17 Sheet metal, M. (or M. & H.):													
Portsmouth.....	29,800	22,700	76	740	3.3	1,540	6.8	2,190	9.7	1,240	5.4		
Boston.....	71,200	51,200	72	6,640	12.7	6,940	9.4	3,550	6.9	2,560	4.0	480	.9
New York.....	295,000	200,600	77	18,500	6.7	14,400	7.2	14,900	7.4	9,650	4.8	681	1.3
Philadelphia.....	19,600	11,500	59	2,030	17.4	3,370	20.6	1,120	9.7	810	7.0	210	1.5
Norfolk.....	64,700	33,460	52	2,460	7.4	2,400	7.2	1,440	4.2	1,590	4.7	70	.2
Charleston.....	17,800	15,400	87	2,566	17.4	2,350	2.9	1,680	4.4	1,590	3.8	16	.1
Marine Island.....	78,900	62,100	79	3,620	5.6	4,290	6.9	3,900	6.3	3,100	5.1		
Puget Sound.....	57,800	36,200	63	6,400	17.9	6,370	17.5	3,060	8.5	2,570	7.1	205	.6
Average.....	75,000	54,200	72	4,500	8.3	4,480	8.3	3,860	7.1	2,780	5.1	240	
18 Sheet metal, H:													
New York.....	21,800	18,200	83	550	3.0	533	4.6	36	.2	1,530	8.4	653	3.6
Philadelphia.....	59,700	47,700	80	2,380	5.0	5,430	11.4	2,480	5.2	1,450	3.0	75	.2
Norfolk.....	147,000	114,000	77	7,190	6.2	7,180	6.2	4,380	3.6	4,760	4.2	190	.2
Average.....	76,400	60,000	80	3,370	5.6	4,480	7.5	2,300	3.8	2,580	4.3	306	.5
21 Angle smith:													
Portsmouth.....	12,600	11,000	81	10	.1	794	7.2	772	7.0	405	3.7		
Boston.....	25,500	10,200	40	6,270	61.5	2,700	26.5	860	8.7	640	6.3	280	2.7
New York.....	69,300	54,400	79	3,232	6.0	3,720	6.8	2,580	4.6	1,960	3.1	92	.2
Philadelphia.....	6,520	4,200	65	333	5.4	3,374	8.8	412	9.7	2,072	4.7		
Norfolk.....	17,800	14,700	83	540	3.7	185	1.3	1,010	6.9	690	4.7	28	.2
Charleston.....	3,980	3,380	85	177	5.2	28	.8	185	5.5	150	4.4	28	.2
Marine Island.....	8,000	6,210	78	130	2.1	229	3.7	551	8.9	240	3.9		
Puget Sound.....	1,880	1,060	79	41	3.8	25	2.3				2.0	85	7.8
Average.....	18,100	13,200	73	1,330	10.1	1,010	7.7	794	6.0	505	3.8	64	.6
22 Drop forge:													
Boston.....	19,200	6,100	32	1,360	22.3	220	3.6	306	6.0	518	8.5	138	2.3
New York.....	33,100	12,700	38	1,660	8.1	2,660	20.2	360	3.1	420	3.3		

25	Norfolk.....	26,400	6,960	26	810	12.3	700	10.7	1,020	15.5	373	5.7	13	.2
	Mare Island.....	4,830	2,980	54	333	13.6	280	11.2	1,145	5.6	139	5.4		
	Average.....	20,600	6,980	34	730	10.4	940	13.5	466	6.7	363	5.2	38	.6
26	Ship smith:													
	Perthmouth.....	38,600	28,900	70	2,760	10.3	2,070	7.7	2,590	9.6	1,660	6.2	96	.4
	Boston.....	87,800	64,000	62	7,540	13.9	6,640	10.4	6,800	10.7	4,370	8.1	1,760	3.2
	New York.....	124,300	84,200	67	12,400	13.5	9,420	7.6	3,940	4.7	4,000	4.7	1,130	1.3
	Philadelphia.....	32,300	22,800	71	2,180	10.4	2,180	10.4	1,730	7.5	988	4.3	1,66	.8
	Norfolk.....	98,800	60,400	61	6,470	10.7	6,650	11.2	10,300	17.1	3,770	6.2	170	.3
	Charleston.....	21,900	16,000	73	1,027	6.4	1,950	12.0	1,100	7.5	903	5.6	83	.6
	Mare Island.....	62,200	41,700	67	3,070	7.5	5,080	12.2	4,480	10.7	3,170	7.6		
	Fugot Sound.....	46,500	30,400	66	4,400	14.4	3,270	10.7	2,460	8.0	2,060	6.7	183	.6
	Average.....	64,300	42,100	67	4,980	11.8	4,100	9.9	4,090	9.7	2,620	6.2	435	.1
26	Gas cutting and welding:													
	Boston.....	15,500	8,040	52	2,700	33.6	1,590	19.8	670	7.1	312	3.9	90	1.1
	New York.....	26,100	22,300	85	62	3	319	1.4	816	3.7	840	3.8	124	.6
	Philadelphia.....	4,820	2,970	62	500	16.8	202	6.8	266	8.6	161	5.4	2	.1
	Mare Island.....	14,900	11,800	76	432	3.8	432	3.8	870	7.7	558	4.9		
	Fugot Sound.....	7,300	4,350	60	300	6.9	1,430	32.8	545	12.5	344	7.9	30	.7
	Average.....	13,700	9,780	71	717	7.4	795	8.1	611	6.3	443	4.5	46	.6
28	Electroplating:													
	Perthmouth.....	18,000	15,200	85	126	8	502	3.2	696	4.6	717	4.7		
	Boston.....	3,730	1,400	59	246	15.3	92	6.1	145	10.2	159	8.6	38	2.4
	New York.....	5,020	3,510	70	178	5.1	388	11.1	405	11.5	168	4.8		
	Philadelphia.....	6,360	4,280	80	140	3.3	160	3.7	240	5.6	130	3.0		
	Norfolk.....	920	670	73	3	4.4	53	7.0	37	5.4	26	3.7		
	Fugot Sound.....	4,610	3,680	72	190	5.3	66	1.8	228	6.4	139	3.9		
	Average.....	6,070	4,810	79	144	3.0	210	4.4	285	6.1	220	4.6	8	.2
31	Machine shop:													
	Perthmouth.....	171,900	128,000	74	7,880	6.2	9,800	7.6	10,600	8.3	7,220	5.6	1,970	10.7
	Boston.....	422,000	239,000	67	56,600	23.2	35,500	14.9	21,600	9.0	14,500	6.1	4,400	1.9
	New York.....	966,600	696,000	70	61,800	8.9	53,700	7.7	58,200	8.4	34,700	5.0	4,600	.7
	Philadelphia.....	415,000	300,000	74	28,700	9.3	21,200	6.9	18,500	6.0	12,300	4.0	515	.2
	Norfolk.....	909,500	517,700	64	99,800	17.3	62,900	40.2	46,000	8.7	26,500	5.1	515	9.9
	Charleston.....	146,300	94,600	66	34,000	14.7	8,620	9.1	7,280	7.7	6,370	5.7	508	.3
	Mare Island.....	363,700	231,000	66	31,400	12.2	23,300	9.1	24,300	9.5	15,300	7.1	1,200	.9
	Fugot Sound.....	265,000	176,000	60	31,500	17.9	25,900	14.7	10,500	6.0	11,400	6.5	1,360	.3
	Average.....	463,000	302,000	67	40,100	13.3	28,900	9.8	24,500	8.1	16,300	5.4	1,690	.6
37	Projectile plant:													
	Mare Island.....	28,200	16,800	64	1,300	7.7	1,370	8.1	1,320	7.9	801	4.8		
	Fugot Sound.....	3,720	1,730	47	480	27.8	448	26.8	50	2.9	262	16.9	3	.2
	Average.....	15,000	9,260	62	680	9.6	909	9.8	683	7.4	546	5.9	2	.....

Statement 14.—INDUSTRIAL YARDS—RATIO OF EXPENSE LABOR TO PRODUCTIVE LABOR, BY SHOPS—Continued.

Shop.	(g) Total labor.	(b) Productive labor.	(c) Per cent $\frac{b}{a}$.	(d) Miscellaneous labor.	(e) Per cent $\frac{d}{b}$.	(f) Supervision.	(g) Per cent $\frac{f}{b}$.	(h) Leave pay.	(k) Per cent $\frac{h}{b}$.	(m) Holiday pay.	(n) Per cent $\frac{m}{b}$.	(o) Disability pay.	(p) Per cent $\frac{p}{b}$.
38													
Machinists, band:													
Portsmouth.....	\$114,500	\$83,000	73	\$3,950	4.7	\$11,300	13.5	\$10,300	12.3	\$4,400	5.3	\$370	0.4
Boston.....	324,000	253,000	78	5,350	2.1	27,600	11.0	15,700	6.2	15,500	6.1	2,600	1.0
New York.....	407,600	324,000	79	13,600	4.2	20,600	9.1	21,900	6.8	13,600	4.2	6,600	2.2
Philadelphia.....	355,000	282,000	80	9,300	3.3	33,700	11.9	14,900	5.3	9,500	3.4	380	0.2
Norfolk.....	333,000	269,000	78	10,400	4.0	31,300	12.1	12,200	4.7	12,300	4.7	380	0.2
Charleston.....	127,300	102,000	80	4,610	4.5	8,900	8.8	5,840	5.7	4,510	4.4	1,022	0.8
Mare Island.....	310,800	253,000	81	14,100	5.6	18,000	7.5	15,600	6.2	11,200	4.4	1,200	0.4
Fugate Sound.....	140,200	105,000	75	6,890	6.5	12,900	12.3	5,890	5.6	4,790	4.5	380	0.4
Average.....	284,000	208,000	79	8,530	4.1	21,800	10.5	12,900	6.1	9,500	4.6	700	0.4
41													
Boiler makers, M. (or M. & H.):													
Portsmouth.....	11,200	6,990	59	990	14.7	572	8.4	1,810	27.5	552	8.4	932	3.4
Boston.....	41,800	26,800	64	3,620	13.5	3,290	12.2	1,790	15.0	1,790	15.0	26	0.1
New York.....	192,700	154,000	80	5,600	3.7	9,050	5.9	10,000	6.5	6,640	4.3	26	0.1
Philadelphia.....	26,100	20,400	70	3,200	15.7	2,500	12.2	1,740	3.6	700	3.4	11	0.1
Norfolk.....	83,800	57,200	68	7,050	12.3	6,900	12.1	3,000	6.3	2,570	4.5	50	0.1
Charleston.....	35,300	26,600	73	4,190	16.3	1,380	5.4	1,620	6.3	1,350	5.3	145	0.6
Mare Island.....	96,300	66,900	73	7,590	8.0	7,300	10.5	4,970	7.1	3,960	5.6	119	1.1
Fugate Sound.....	24,600	10,600	43	2,750	25.8	2,710	25.5	1,350	12.7	775	7.3	119	1.1
Average.....	64,300	46,400	72	4,120	8.9	4,210	9.1	3,240	7.0	2,300	5.0	160	0.4
44													
Boiler makers, H.:													
Portsmouth.....	19,000	15,000	79	708	4.7	1,410	9.4	1,010	6.7	899	6.0	58	0.3
Boston.....	109,500	95,000	87	620	1.7	5,940	6.3	4,120	4.3	2,440	2.5	58	0.1
New York.....	15,100	12,400	82	240	1.9	645	5.2	620	6.5	560	4.7	345	2.3
Philadelphia.....	157,000	123,000	86	870	1.7	9,800	7.2	6,210	4.7	4,400	4.6	93	0.1
Norfolk.....	128,000	98,000	86	4,080	4.2	7,050	7.2	5,110	3.7	2,450	4.0	166	0.1
Charleston.....	72,800	54,200	76	70	1.1	4,910	7.4	2,280	3.7	1,450	4.0	68	0.1
Fugate Sound.....	40,600	30,600	76	1,910	6.2	4,800	14.2	1,720	5.6	1,570	4.5	145	0.5
Average.....	77,600	63,800	82	1,210	1.9	4,890	7.6	3,190	5.0	2,390	3.8	100	0.2
61													
Electricians, M. (or M. & H.):													
Portsmouth.....	107,200	79,600	74	7,490	9.5	3,580	4.5	4,730	6.0	3,890	4.9	292	0.4
Boston.....	107,600	72,800	67	5,780	7.9	6,660	13.3	5,090	11.1	6,380	8.8	700	1.1
New York.....	501,000	364,300	73	20,900	7.4	35,300	9.7	23,100	9.7	22,400	6.2	3,140	0.9
Philadelphia.....	88,000	67,800	77	4,620	6.9	4,000	6.9	3,600	5.3	3,400	5.0	96	0.1

82	Norfolk.....	27,500	13,200	48	2,530	19.3	4,180	31.6	3,080	24.3	2,000	19.7	120	.9
	Charleston.....	43,100	29,000	67	2,890	9.9	7,160	24.8	2,010	6.9	1,900	6.7	30	.1
	Mare Island.....	137,800	94,300	68	9,090	9.6	12,100	12.8	11,600	12.3	7,100	7.4	306	.3
	Puget Sound.....	25,400	11,300	44	3,010	26.6	6,230	56.1	1,500	13.3	1,120	9.9	22	.2
	Average.....	129,700	91,800	71	7,780	8.5	10,300	11.2	8,710	9.5	6,110	6.7	592	.6
	Electricians, E.:													
	Portland.....	40,200	28,300	70	860	3.0	5,020	17.7	3,850	13.6	2,150	7.6		
	Boston.....	28,100	21,000	75	1,330	6.3	5,680	27.1	902	2.5	1,730	4.7	74	.2
	New York.....	41,800	37,000	91	1,440	3.9	6,625	1.7	8,440	6.3	4,820	3.6	420	.3
	Philadelphia.....	165,000	134,000	81	3,300	2.5	12,800	9.6	6,080	5.9	4,750	4.6	150	.1
	Norfolk.....	124,300	103,500	83	2,110	2.1	6,370	6.1	3,190	7.4	2,290	6.2	85	.2
	Puget Sound.....	56,400	43,700	78	2,400	5.5	4,090	9.4	3,740	6.1	2,620	4.3	121	.2
	Average.....	76,000	61,800	81	1,910	3.1	5,760	9.4	3,740	6.1	2,620	4.3	121	.2
	Coppersmiths:													
	Portland.....	16,800	11,600	71	780	6.7	1,400	12.1	1,460	12.6	714	6.1	149	1.3
	Boston.....	33,000	40,900	77	2,770	5.3	3,620	8.9	2,620	6.4	1,820	4.5	127	.3
	New York.....	86,700	69,300	80	2,780	4.0	3,980	5.7	4,960	7.2	3,040	4.4	180	.3
	Philadelphia.....	104,000	86,300	82	1,460	1.7	8,250	9.2	3,280	5.3	3,280	3.8	270	.3
	Norfolk.....	34,500	22,000	69	1,910	7.0	3,470	15.1	2,310	10.0	1,850	6.9	500	2.1
	Washington.....	7,600	5,500	74	630	13.4	1,010	11.4	380	6.9	290	3.3	6	.1
	Mare Island.....	37,600	29,000	79	328	.8	2,450	6.2	2,350	5.4	1,550	3.9	972	2.4
	Puget Sound.....	15,600	12,700	68	1,530	12.0	1,850	14.5	1,150	9.1	720	5.7	26	.2
	Average.....	44,800	34,700	77	1,420	4.1	3,210	9.3	2,450	7.1	1,600	4.6	280	.8
	Pipe fitters:													
	Portland.....	63,600	47,500	75	2,470	5.2	4,700	9.9	5,529	11.6	2,940	6.2		
	Boston.....	15,000	9,400	63	57	.7	2,630	28.0	3,360	3.8	2,736	2.5		
	New York.....	57,300	46,900	82	1,460	6.3	5,480	8.6	4,180	8.9	2,150	4.6		
	Philadelphia.....	139,000	113,000	85	1,140	1.0	8,980	7.5	5,460	4.6	4,000	3.9	1,041	2.2
	Charleston.....	38,400	31,300	98	1,770	2.3	1,720	5.6	1,030	3.3	1,300	4.2	132	.2
	Mare Island.....	36,400	10,800	28	3,320	30.4	5,610	51.6	8,680	79.5	5,970	54.5	1,090	10.9
	Puget Sound.....	96,700	70,600	73	4,870	6.9	9,650	13.7	5,810	8.2	4,000	5.7	1,137	.2
	Average.....	63,800	47,800	75	1,800	3.8	5,170	9.2	4,440	9.3	2,940	6.2	353	.7
	Plumbers, M. (or M. & H.):													
	Boston.....	36,500	25,300	70	2,180	8.1	3,160	12.5	1,990	7.9	1,011	4.0	1,900	7.5
	New York.....	75,400	51,200	68	9,040	17.7	2,320	4.5	4,540	8.7	2,900	5.7	1,158	.8
	Philadelphia.....	22,100	10,300	47	6,600	64.0	1,340	13.0	984	9.5	1,140	11.1	5	
	Norfolk.....	19,200	12,500	65	250	2.0	1,960	6.9	745	6.0	1,920	15.4	10	
	Charleston.....	9,910	6,880	69	216	3.1	1,610	23.4	470	6.8	460	6.7	7	.1
	Puget Sound.....	7,100	4,840	63	716	14.8	1,626	12.9	453	9.4	280	5.8	168	3.4
	Average.....	25,400	15,600	65	3,160	17.1	1,650	8.9	1,510	8.1	1,290	7.0	375	.6

Statement 14.—INDUSTRIAL YARDS—RATIO OF EXPENSE LABOR TO PRODUCTIVE LABOR, BY SHOPS—Continued.

Shop.	(a) Total labor.	(b) Pro- ductive labor.	(c) Per cent b a	(d) Miscel- laneous labor.	(e) Per cent d b	(f) Super- vision.	(g) Per cent f b	(h) Leave pay.	(i) Per cent h b	(m) Holiday pay.	(n) Per cent m b	(o) Dis- abil- ity pay.	(p) Per cent o b
60 Plumbers H:													
New York.....	\$308,300	\$248,000	80	\$4,270	1.7	\$20,300	8.2	\$18,300	7.4	\$12,600	5.1	\$2,220	0.8
Philadelphia.....	147,000	124,000	85	2,570	2.3	9,060	7.3	6,320	5.1	4,130	3.3	66	.....
Norfolk.....	98,200	76,600	78	4,110	5.6	8,550	11.3	4,760	6.3	3,330	4.4	56	.....
Puget Sound.....	470	340	72	36	10.6	20	5.9	41	12.0	26	7.6	10	.....
Average.....	138,600	112,200	81	2,820	2.5	9,480	8.4	7,350	6.5	5,000	4.5	588	.5
61 Shipwrights, M:													
Portsmouth.....	8,200	3,950	48	430	10.9	1,800	45.5	660	16.5	235	5.9	330	8.4
Boston.....	7,790	3,500	45	855	24.5	1,633	18.1	367	10.5	1,077	30.8	62	1.8
New York.....	28,900	10,900	38	6,250	57.4	3,160	29.0	1,900	17.4	890	8.1	.....	.....
Philadelphia.....	5,850	2,080	36	1,520	70.0	805	39.6	80	3.9	130	6.4	.....	.....
Norfolk.....	6,440	4,860	76	350	6.7	8	.....	362	7.4	182	3.7	.....	.....
Mare Island.....	18,950	8,860	47	1,300	14.8	2,360	26.8	1,130	12.9	680	7.2	76	9
Puget Sound.....	6,880	4,060	59	850	20.4	50	1.2	317	7.8	262	6.2	8	.....
Average.....	20,800	9,550	46	2,860	30.0	2,200	23.0	1,200	12.6	847	8.9	120	1.3
62 Shipwrights H:													
Portsmouth.....	19,800	14,300	72	360	2.5	1,950	13.6	2,060	14.5	990	6.8	63	4
Boston.....	54,500	41,300	76	80	1.7	7,160	17.3	3,400	8.2	1,800	4.6	286	7
New York.....	184,000	146,000	79	2,840	4.8	14,500	9.9	11,200	7.7	7,300	5.0	1,040	7
Philadelphia.....	74,700	59,400	80	1,410	1.9	5,230	8.8	4,430	7.6	2,520	4.2	.....	.....
Norfolk.....	98,500	72,700	74	1,610	1.6	9,150	12.6	7,260	10.0	4,070	5.6	.....	.....
Charleston.....	32,800	26,200	77	340	1.4	3,810	15.1	1,410	5.6	1,480	5.9	.....	.....
Mare Island.....	88,100	68,600	78	2,460	3.6	6,600	8.2	5,850	8.6	3,780	5.5	628	8
Puget Sound.....	26,200	24,800	63	2,220	9.3	6,100	25.3	2,670	11.2	1,740	7.3	910	3.8
Average.....	74,000	56,600	76	1,530	2.8	6,660	11.9	4,700	8.6	2,970	7.0	560	.9
63 Joiners M:													
Portsmouth.....	35,600	22,208	62	1,770	8.0	2,330	10.5	3,000	13.5	1,300	5.8	780	3.4
Boston.....	26,100	12,700	51	3,140	24.8	1,630	13.4	2,160	17.2	2,440	16.2	275	2.3
New York.....	64,200	31,200	50	6,060	23.0	4,530	14.1	5,400	10.6	2,120	6.6	267	8
Philadelphia.....	34,800	19,200	55	2,970	22.1	1,440	7.7	1,630	3.4	700	4.2	10	.....
Norfolk.....	48,800	32,200	66	1,970	13.4	3,680	19.2	1,450	7.5	2,690	13.4	9	.....
Charleston.....	33,000	22,200	72	1,970	8.9	3,510	10.6	1,800	6.6	1,970	5.9	630	1.9
Mare Island.....	33,000	22,600	72	1,810	8.5	1,480	6.2	2,220	9.3	1,660	7.0	382	1.6
Puget Sound.....	17,600	7,700	43	3,160	41.0	2,300	29.9	1,550	20.1	898	11.0	114	1.5
Average.....	34,700	21,200	61	3,560	16.8	2,660	12.6	3,040	9.6	1,720	8.1	304	1.4

64	Jobbers H:	17,500	84	496	2.9	1,690	10.4	68	4	572	5.0	1,000	1.8
	Fortsmonth.....	70,200	75	96	4.4	4,070	16.3	4,250	7.1	2,470	4.2	2,890	4.4
	Boston.....	66,500	86	96	4.2	5,020	6.9	3,810	6.5	2,510	4.4	2,600	4.6
	New York.....	83,200	75	2,470	10.0	6,220	9.5	4,330	7.5	2,600	3.8	300	.6
	Philadelphia.....	66,300	81	310	3.6	2,190	12.6	2,880	4.4	1,980	6.7	300	1.7
	Norfolk.....	17,400	79	310	1.8	3,580	10.8	2,880	8.8	1,980	6.1	506	1.6
	Charleston.....	43,400	75	1,010	3.8	2,640	13.0	1,050	5.2	1,984	4.8	40	.2
	Mare Island.....	35,800	79	630	3.1	4,310	9.5	2,640	6.4	1,880	4.6	275	.6
	Puget Sound.....	20,300	79	1,620	4.0	2,080	5.7	3,300	9.2	1,980	5.5	57	.2
	Average.....	51,900	79	2,780	7.8	6,300	6.7	7,650	7.1	4,980	4.6	860	.8
	Spar makers:	35,900	75	4,530	4.2	3,640	10.3	2,100	8.7	4,860	4.5	1,750	1.7
	Fortsmonth.....	108,600	80	3,430	16.4	3,300	13.4	2,650	11.1	1,320	5.5	600	2.5
	Boston.....	35,400	64	5,620	23.6	7,560	7.5	2,940	3.8	4,530	4.3	54	.....
	New York.....	106,600	61	3,060	3.2	3,740	10.1	2,190	4.9	1,960	5.2	72	.....
	Philadelphia.....	105,000	82	3,130	10.3	1,990	6.5	1,300	4.3	1,750	5.5	59	.....
	Norfolk.....	37,000	72	3,570	6.4	4,560	8.2	3,540	6.3	2,700	4.8	454	.....
	Mare Island.....	30,400	74	1,280	6.2	1,520	7.5	2,275	11.2	1,330	6.6	1,720	8.5
	Puget Sound.....	55,800	76	2,140	15.7	4,160	16.8	3,170	9.6	2,550	7.0	1,430	3.1
	Average.....	20,200	69	2,040	8.4	13,800	6.8	5,710	4.7	4,120	4.1	290	.3
	Painters:	165,800	72	2,460	4.7	8,600	12.5	5,120	9.2	3,910	7.8	460	.9
	Fortsmonth.....	101,600	69	2,450	4.6	1,780	8.6	5,850	4.2	3,120	5.6	104	.4
	Boston.....	78,800	81	1,880	6.0	3,310	15.0	2,510	9.1	2,000	7.2	104	.4
	New York.....	52,000	72	2,680	9.2	4,360	15.0	2,630	10.4	1,820	6.2	1,510	5.2
	Philadelphia.....	38,200	63	5,660	10.0	6,250	11.0	3,900	6.9	3,010	5.3	720	1.3
	Norfolk.....	27,600	72	2,200	7.0	1,630	5.2	3,730	12.0	2,190	7.0	288	.9
	Mare Island.....	66,800	75	4,830	3.9	9,410	7.6	8,210	6.6	5,170	6.6	2,670	2.2
	Puget Sound.....	123,400	78	10,800	2.8	27,000	7.0	29,800	7.6	20,700	5.3	2,350	4.6
	Average.....	100,800	77	2,620	3.4	8,220	10.6	4,700	6.0	4,630	5.9	1,110	1.4
	Labouers and riggers:	169,700	79	2,960	2.9	13,200	9.9	6,760	5.0	7,300	5.5	2,020	1.6
	Fortsmonth.....	55,700	77	1,220	2.9	6,720	15.8	2,270	5.3	2,170	5.1	95	.2
	Boston.....	42,600	78	1,980	1.9	7,460	7.3	6,860	7.3	6,860	6.7	1,650	1.6
	New York.....	101,600	76	6,580	7.9	6,460	7.3	7,380	7.7	5,070	6.1	1,684	1.8
	Philadelphia.....	122,500	78	4,150	3.4	9,990	8.1	8,660	7.1	7,140	5.8	1,360	1.1
	Norfolk.....	156,300	78	4,150	3.4	9,990	8.1	8,660	7.1	7,140	5.8	1,360	1.1

Statement 14.—INDUSTRIAL YARDS—RATIO OF EXPENSE LABOR TO PRODUCTIVE LABOR, BY SHOPS—Continued.

Shop.	(a) Total labor.	(b) Productive labor.	(c) Per cent $\frac{b}{a}$.	(d) Miscellaneous labor.	(e) Per cent $\frac{d}{b}$.	(f) Supervision.	(g) Per cent $\frac{f}{b}$.	(h) Leave pay.	(k) Per cent $\frac{h}{b}$.	(m) Holiday pay.	(n) Per cent $\frac{n}{b}$.	(o) Disability pay.	(p) Per cent $\frac{p}{b}$.
74													
Rigging loft:													
Portsmouth.....	87,420	85,740	77	8,670	4.7	8514	8.9	8,692	10.3	8,778	4.8		
Boston.....	24,300	24,300	77	1,300	5.3	3,670	11.7	2,010	8.5	2,222	2.1	\$39	0.2
New York.....	64,300	62,000	76	1,840	2.7	5,440	8.8	3,000	3.4	2,380	3.7	27	.1
Philadelphia.....	31,700	26,600	84	810	3.0	1,340	5.1	1,450	5.5	840	2.6		
Norfolk.....	19,800	14,900	75	620	4.2	1,350	9.1	1,740	13.3	510	0.1	6	.1
Charleston.....	7,770	5,570	72	10	0.2	1,700	15.4	1,520	13.1	824	7.1		
Mare Island.....	18,300	11,600	63	763	6.6	1,700	15.4	1,520	13.1	824	7.1		
Puget Sound.....	8,180	5,340	65	659	12.3	1,150	21.4	518	9.7	315	5.9	10	.2
Average.....	24,200	18,500	77	810	4.4	2,130	11.5	1,370	7.4	845	4.6	10	.1
76													
Sail loft:													
Portsmouth.....	11,700	9,070	78	596	6.6	764	8.4	743	8.2	500	5.5		
Boston.....	41,400	30,600	74	3,270	10.7	3,300	10.8	2,010	6.5	1,320	4.3		
New York.....	83,700	64,100	76	7,470	11.7	4,900	7.8	3,060	4.8	2,300	3.6		
Philadelphia.....	52,900	42,900	81	2,260	5.3	2,500	6.0	1,900	4.4	1,340	3.1		
Norfolk.....	47,300	36,100	76	1,490	4.1	4,200	11.6	2,190	6.1	1,780	4.9	22	.1
Charleston.....	8,060	6,300	78	41	0.6	826	13.1	2,428	6.8	1,407	6.5	7	.1
Mare Island.....	15,900	10,900	69	965	8.9	1,730	15.9	1,390	12.7	740	6.8		
Puget Sound.....	16,500	11,400	69	1,500	13.1	1,390	12.2	1,786	6.9	641	5.6	22	.1
Average.....	34,700	26,400	76	2,200	8.3	2,470	9.0	1,660	5.9	1,130	4.3	12	.1
80													
Building trades:													
Portsmouth.....	41,200	30,600	74	1,270	4.1	3,330	10.9	2,720	8.9	2,420	7.9	967	2.8
Boston.....	82,000	67,100	65	254	10.3	1,530	5.4	7,620	24.2	5,580	16.4		
New York.....	123,000	87,000	65	6,960	10.7	17,400	25.8	16,400	14.9	12,500	18.5		
Philadelphia.....	105,000	63,800	61	20,400	32.0	1,950	3.0	9,540	14.9	6,800	10.7		
Norfolk.....	181,600	128,600	76	1,960	1.6	10,200	8.3	11,400	9.2	11,300	9.2		
Charleston.....	69,800	47,600	79	2,310	4.9	1,910	4.0	3,620	7.9	2,920	6.2		
Mare Island.....	167,700	123,000	73	4,130	3.4	10,300	8.4	11,400	9.3	12,200	9.9		
Puget Sound.....	41,300	19,900	48	882	4.4	7,970	40.0	5,590	27.0	5,810	29.2		
Average.....	94,000	69,800	68	4,770	7.5	6,890	10.8	8,540	13.4	7,440	11.6	722	1.1
84													
Pattern shop:													
Portsmouth.....	81,800	23,700	76	2,300	9.7	2,300	9.7	1,410	5.9	1,160	4.9		
Boston.....	46,300	37,000	61	4,310	15.7	3,530	14.0	2,700	9.9	1,980	6.2	120	.4
New York.....	165,100	125,700	79	3,370	2.7	9,280	7.5	5,490	6.9	6,210	4.3	125	.1
Philadelphia.....	66,300	32,600	73	1,510	5.3	2,560	9.0	3,040	7.1	1,480	5.3		

Norfolk.....	44,400	26,700	60	6,840	25.6	4,100	15.3	2,440	9.1	1,720	6.4	63
Charleston.....	12,000	7,260	61	2,000	27.6	1,610	22.2	563	7.8	384	5.3	10
Mare Island.....	32,800	18,600	73	4,410	24.7	3,570	19.2	3,210	16.2	1,850	10.0	1
Puget Sound.....	24,600	16,200	66	1,670	10.3	2,130	13.1	947	5.8	877	5.4	31
Average.....	48,100	32,900	69	3,190	9.3	3,680	11.2	2,730	8.0	1,800	5.5	50
Dry dock:												
Portsmouth.....	2,200			1,370								
Boston.....	12,400			6,660		452						
New York.....	42,100			17,600		2,700		1,670		710		37
Philadelphia.....	25,800			14,100				1,190		510		1
Norfolk.....	21,800			6,580				440		380		
Charleston.....	5,950			810		580		148		97		1
Mare Island.....	10,100			1,630		348		250		192		200
Puget Sound.....	6,470			3,980		2,400		395		187		1
						280						

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Total shop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total.
11 Plate and angle:							
Portsmouth.....	\$15,070.91	\$3,701.92	\$11,368.99	\$1,462.29	\$1,888.57	\$1,555.92	\$4,906.78
Boston.....	102,722.71	32,475.91	70,246.80	4,852.79	9,896.73	8,365.64	23,055.16
New York.....	194,951.47	62,457.05	132,494.42	17,932.10	55,113.93	14,368.55	87,414.58
Philadelphia.....	79,022.19	33,959.95	45,062.23	5,624.04	6,263.32	6,741.03	21,628.39
Norfolk.....	102,414.64	12,945.25	89,469.39	1,613.01	7,015.73	5,014.43	13,641.17
Charleston.....	25,731.96	8,321.80	17,410.16	2,753.44	2,930.34	1,573.82	7,017.59
Mare Island.....	75,482.47	25,319.99	50,162.49	2,050.97	5,184.34	5,733.02	13,946.33
Puget Sound.....	49,573.36	8,049.01	41,524.35	2,063.29	3,961.94	1,600.38	7,625.61
Average.....	80,621.21	23,407.61	57,213.60	5,168.99	11,619.04	5,619.10	22,407.13
12 Chipping, calking, etc.:							
Portsmouth.....	46,802.07	25,820.45	20,981.62	2,439.04	2,298.24	8,703.71	13,440.99
Boston.....	143,898.20	71,420.82	72,477.38	10,856.12	15,565.32	20,617.60	47,039.04
New York.....	481,712.00	129,499.81	352,212.19	34,882.38	49,643.59	57,802.90	142,228.87
Philadelphia.....	62,938.65	41,456.12	21,482.53	6,727.56	3,117.60	5,214.62	15,059.78
Norfolk.....	154,905.06	59,970.20	94,934.86	9,410.77	7,949.06	18,272.38	35,632.21
Charleston.....	56,854.61	37,660.66	19,193.95	6,436.89	415.20	6,356.62	11,208.81
Mare Island.....	134,443.51	60,333.49	74,110.02	3,257.44	15,711.77	14,515.18	33,484.29
Puget Sound.....	55,484.52	24,340.81	31,143.71	5,087.39	5,594.62	6,084.44	16,766.45
Average.....	142,129.85	56,312.80	85,817.05	9,887.19	12,524.41	17,195.99	39,607.59
15 Laying out and templating:							
Portsmouth.....	14,649.17	7,067.19	7,581.98	2,756.96	912.37	2,565.78	6,235.01
Boston.....	8,922.87	2,085.33	6,837.54	1,979.31	1,273.45	1,378.28	4,636.07
New York.....	66,149.32	34,634.26	31,515.06	4,447.85	12,228.58	10,260.96	26,997.41
Philadelphia.....	17,609.54	8,031.49	9,578.05	2,890.97	2,168.22	779.78	5,828.97
Norfolk.....	35,078.39	19,998.05	15,080.34	6,759.38	1,119.99	6,090.18	14,639.58
Charleston.....	47,132.94	27,045.88	15,145.23	3,668.16	110.65	6,802.28	10,781.08
Mare Island.....	27,719.31	12,375.43	15,343.88	2,483.16	3,751.42	4,002.25	10,236.63
Puget Sound.....	11,897.75	3,513.21	8,384.54	450.05	2,320.14	1,085.71	3,865.90
Average.....	28,027.18	14,343.85	13,683.33	3,203.22	2,986.23	4,196.90	10,396.35
16 Fitting and bolting outside:							
Portsmouth.....	36,234.76	20,795.30	15,439.46	4,926.46	1,622.09	7,963.82	14,512.37
Boston.....	76,481.40	35,836.85	40,044.55	10,428.22	10,799.50	14,726.95	35,952.67
New York.....	228,374.78	91,406.47	136,968.31	28,161.03	51,950.02	50,085.92	130,196.97
Philadelphia.....	63,191.58	39,025.12	24,166.46	6,042.83	5,213.38	9,186.74	20,442.96
Norfolk.....	97,197.80	28,315.88	28,817.06	15,842.79	2,179.95	10,496.79	28,518.53
Charleston.....	92,296.83	48,098.37	44,198.46	12,392.81	10,161.76	15,007.65	37,561.62
Mare Island.....	34,385.59	20,377.48	14,008.11	4,546.99	3,109.81	4,088.74	11,806.54
Average.....	84,013.98	40,550.78	43,463.20	11,762.73	12,156.64	15,936.44	39,855.81
17 Sheet-metal machine (or M. & H.):							
Portsmouth.....	15,559.79	7,073.57	8,486.22	1,536.49	1,129.96	3,446.60	6,112.96
Boston.....	35,129.75	12,720.85	22,408.90	4,939.65	7,851.39	6,615.10	18,996.14
New York.....	132,038.29	64,359.42	67,678.87	14,350.60	16,442.46	25,523.55	66,335.61
Philadelphia.....	18,716.79	8,480.23	10,256.56	2,369.18	2,328.96	2,068.83	6,726.97
Norfolk.....	48,197.80	10,079.52	38,118.28	2,400.20	3,399.32	3,156.67	8,966.19
Charleston.....	7,644.59	3,966.66	3,677.93	349.57	713.53	1,296.26	2,338.35
Mare Island.....	41,573.60	20,468.28	21,105.41	4,259.34	5,298.24	7,150.04	16,701.62
Puget Sound.....	53,978.08	25,906.69	28,071.39	6,372.36	8,184.13	5,990.86	20,547.35
Average.....	44,104.85	19,129.40	24,975.45	4,573.30	5,906.00	6,904.80	17,083.89
18 Sheet metal, hand:							
New York.....	3,630.24		3,630.24	833.87	548.82	2,217.64	3,600.33
Philadelphia.....	24,592.06	11,081.02	13,511.07	5,433.26	2,908.44	4,023.43	12,465.13
Norfolk.....	58,374.29	16,569.55	41,804.74	7,183.28	9,309.59	9,488.80	36,611.67
Average.....	28,865.54	9,216.86	19,648.68	4,483.47	4,406.62	5,243.29	14,221.38
21 Anglesmith:							
Portsmouth.....	6,544.78	1,775.43	4,769.35	794.16	1,470.35	1,181.98	3,445.77
Boston.....	35,915.37	11,182.10	24,733.27	2,698.39	10,856.10	1,628.98	16,283.37
New York.....	49,101.53	28,833.28	20,268.25	3,734.96	6,625.39	4,470.12	14,730.47
Philadelphia.....	10,365.98	5,498.20	4,867.78	373.97	1,418.94	617.69	2,908.50
Norfolk.....	10,174.29	6,446.02	3,728.27	185.39	1,189.90	1,924.18	3,299.65
Charleston.....	5,016.35	2,990.07	2,026.28	37.61	333.99	361.70	723.28

EXPENSE, BY ACCOUNTS.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation.	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$2,820.00	\$463.24	\$1,381.41	\$154.00	\$1,417.81	\$115.46	\$110.29	\$6,462.21
4,473.24	12,704.87	5,101.24	971.68	11,187.15	5,387.03	7,366.43	47,191.64
8,448.00	5,481.79	8,745.42	3,245.68	16,538.24	1,193.64	1,397.17	45,049.84
3,402.00	424.02	8,196.02	962.70	3,891.33	3,105.10	3,462.67	23,433.84
3,936.00	2,206.84	14,838.04	967.59	27,339.10	12,695.52	13,845.13	75,828.22
2,798.72	175.97	3,847.73	2.24	1,898.98	461.66	1,707.27	10,392.57
5,280.00	2,825.31	9,872.70	1,428.23	16,173.73	316.77	297.43	36,194.17
8,536.48	797.51	8,934.44	392.06	14,157.85	135.86	945.14	33,899.34
4,961.81	3,134.94	7,614.63	1,015.52	11,511.77	2,926.38	3,641.43	34,806.48
24.00		21.72			6,573.53	921.38	7,540.63
2,528.64	1,424.37	1,129.23	509.59	95.92	16,176.92	3,573.67	25,438.34
448.00	1,186.63	4,321.83	379.77	456.06	73,631.28	129,529.77	209,983.34
183.00	13.90	322.24	135.45	111.20	2,751.62	2,905.24	6,422.65
252.00		147.51	5.84	3.37	28,321.66	30,571.94	59,302.65
40.58		285.22	27.17	9.92	4,310.48	1,301.69	5,985.04
176.00	1,668.73	985.95	73.74	1,696.56	15,646.98	20,378.67	40,625.63
869.48	832.19	226.59	676.52	283.38	5,043.03	6,446.07	14,377.26
567.59	641.98	931.29	226.01	332.05	19,056.98	24,453.54	46,209.44
1,116.00		127.50		12.71		90.76	1,346.97
54.72	1,136.64	796.22	11.78	16.60	77.49	106.02	2,201.47
2,052.00	1,616.78	406.62	131.96	168.99	20.20	151.10	4,547.65
2,123.04	729.67	574.16	27.10	261.44	1.72	31.85	3,749.08
492.00	84	29.05				18.90	540.79
1,282.54	1,744.32	450.43	37.17	66.31	450.19	333.13	4,364.14
550.00	2,481.59	1,180.86	445.99	268.73	89.33	90.55	5,107.05
772.75	1,496.63	1,595.75	19.87	103.28	22.39	507.97	4,518.64
1,056.38	1,150.81	645.07	84.23	112.27	82.66	166.55	3,296.97
		41.21	.59			885.29	927.09
1,778.52	929.65	766.11	296.98	88.77	687.68	144.17	4,691.88
564.00	1,987.41	1,090.79	207.80	572.95	274.07	2,074.32	6,771.34
372.00	7.85	623.12	387.34	76.17	47.12	2,209.91	3,723.61
		232.04	49.78		6.72	9.99	298.53
730.00	1,829.50	2,187.90	92.87	55.63	206.99	1,531.95	6,636.94
785.67	3.61	185.65	466.72	81.69	34.32	643.91	2,201.57
604.31	679.72	732.40	214.58	125.03	179.84	1,071.36	3,607.24
564.00	42.24	1,017.93	3.72	483.21	6.00	256.17	2,373.27
633.88	1,154.39	529.90	169.85	472.30	462.30	180.14	3,602.76
2,280.00	2,358.35	1,972.42	22.64	2,761.16	249.78	1,708.91	11,353.26
492.96	742.10	290.34	59.31	1,126.62	11.42	776.84	3,499.59
5,544.00	413.82	3,014.64	191.14	19,859.68	138.81		29,162.09
990.18	16.95	153.98	2.00	32.75		123.71	1,319.57
976.00	247.18	550.21	21.50	662.34	231.21	1,709.35	4,397.79
2,265.62	237.59	236.04	903.64	1,709.11	289.69	1,882.35	7,524.04
1,705.83	651.58	970.68	171.73	3,388.39	173.65	829.69	7,891.65
	26.32	3.59					29.91
131.04	3.25	54.62	21.02	6.41	124.48	715.12	1,055.94
	1,169.30	8,889.22	537.83		447.17	4,149.55	15,193.07
43.68	399.62	2,962.48	186.28	2.14	190.55	1,621.56	5,426.31
480.00		91.72	457.26			294.60	1,323.58
1,692.60	1,085.03	2,351.08	485.14	3,405.48	81.89	248.70	9,249.90
612.00	724.16	1,509.81	86.98	1,767.33	390.47	457.03	5,537.78
1,060.00	263.53	162.36	129.74	798.83		64.82	2,459.28
240.00		170.57	2.54	8.19		7.51	428.81
1,247.04	5.84			18.98		31.22	1,308.08

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Total shop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total.
21 Anglesmith—Continued.							
Mare Island.....	\$3,430.45	\$3,944.97	\$4,485.48	\$229.09	\$769.83	\$790.78	\$1,789.75
Puget Sound.....	1,187.20	520.64	666.56	25.25	320.90	105.99	458.14
Average.....	15,841.99	7,648.84	8,193.15	1,008.60	2,861.17	1,410.06	5,279.83
22 Drop forge:							
Boston.....	28,495.20	7,377.16	21,118.04	217.89	3,799.87	965.18	4,962.94
New York.....	54,263.44	24,665.87	29,597.57	2,564.59	2,395.43	818.72	5,778.84
Norfolk.....	30,592.44	3,545.78	27,046.66	704.22	6,180.00	1,435.33	8,319.64
Mare Island.....	5,903.56	2,441.89	3,461.67	289.74	677.57	286.37	1,253.68
Average.....	29,813.66	9,507.67	20,305.99	944.11	3,263.27	876.40	5,063.76
23 Shipsmith:							
Portsmouth.....	33,206.21	12,459.23	20,748.98	2,065.44	8,412.85	4,405.48	14,583.77
Boston.....	96,948.07	39,713.75	57,234.32	5,639.21	20,066.40	12,078.67	37,784.28
New York.....	113,430.57	47,812.84	65,617.73	6,417.04	25,306.59	9,086.66	40,810.29
Philadelphia.....	28,591.76	13,921.52	14,670.24	2,181.76	4,499.10	2,971.49	9,652.35
Norfolk.....	97,885.50	39,804.28	58,081.22	6,651.00	14,599.65	14,461.90	35,712.55
Charleston.....	26,187.08	15,435.20	10,751.88	1,954.54	2,222.85	2,189.76	6,367.15
Mare Island.....	60,502.55	27,051.46	33,451.09	5,078.38	7,698.21	7,831.60	20,506.19
Puget Sound.....	55,829.66	26,458.56	29,371.09	3,266.13	8,922.99	4,673.02	16,861.84
Average.....	64,072.93	27,832.11	36,240.82	4,156.44	11,453.54	7,212.32	22,822.20
26 Gas cutting and welding:							
Boston.....	16,866.10	1,354.70	15,511.40	1,594.32	5,128.53	981.82	7,704.67
New York.....	16,544.54	704.50	15,840.04	319.44	2,157.28	1,780.01	4,256.73
Philadelphia.....	6,506.74	2,332.53	4,173.21	202.14	973.06	420.15	1,595.34
Charleston.....	493.09	371.21	111.88	.....	10.68	.....	10.83
Mare Island.....	14,796.06	2,981.45	11,814.61	432.51	387.49	1,427.09	2,247.08
Puget Sound.....	6,593.62	2,387.46	4,206.16	1,433.41	400.29	947.12	2,780.82
Average.....	10,298.19	1,688.64	8,609.55	663.64	1,509.55	926.05	3,099.24
28 Electroplating:							
Portsmouth.....	9,606.85	5,452.44	4,244.41	501.60	1,389.92	1,423.99	3,315.51
Boston.....	2,443.52	677.39	1,766.13	91.76	631.76	342.99	906.51
New York.....	7,307.20	4,599.96	2,707.24	387.64	976.49	571.96	1,936.11
Philadelphia.....	4,667.82	2,483.84	2,178.98	158.24	814.36	373.39	1,345.98
Norfolk.....	610.32	141.11	469.21	53.68	3.08	62.50	119.26
Charleston.....	291.55	.....	291.55	.....	36.61	.....	36.61
Puget Sound.....	4,019.49	2,132.90	1,886.59	66.40	521.13	376.06	963.69
Average.....	4,146.69	2,212.53	1,934.16	179.90	610.48	450.13	1,240.51
31 Machine shop:							
Portsmouth.....	105,199.12	43,015.97	62,183.15	9,802.59	9,687.48	19,667.46	30,157.52
Boston.....	305,138.33	74,673.95	230,464.38	35,437.93	65,055.73	41,826.43	142,320.08
New York.....	658,820.93	286,295.23	372,525.70	53,687.94	72,363.36	96,434.78	224,485.08
Philadelphia.....	264,034.05	106,929.98	157,104.07	21,237.98	31,651.54	32,457.89	65,347.11
Norfolk.....	576,521.39	199,216.02	377,305.37	52,890.88	99,005.94	74,064.43	225,961.25
Charleston.....	121,430.32	51,789.33	69,640.99	8,616.54	16,032.59	14,260.25	38,909.33
Mare Island.....	272,447.51	119,915.48	152,532.03	23,321.35	35,482.37	35,077.35	98,880.97
Puget Sound.....	241,678.88	67,452.32	174,226.56	25,998.43	36,925.31	19,744.95	52,598.69
Average.....	318,158.82	114,911.04	203,247.78	28,961.71	45,776.63	41,941.65	116,578.90
37 Projectile plant:							
Mare Island.....	16,525.89	4,250.27	12,275.62	1,366.51	1,966.52	2,213.81	5,546.84
Puget Sound.....	2,666.53	177.76	2,488.77	448.67	579.85	353.59	1,382.11
Average.....	9,596.21	2,214.02	7,382.19	907.59	1,373.19	1,283.70	3,464.48
38 Machinists, hand:							
Portsmouth.....	59,029.26	26,088.77	32,990.49	11,275.73	4,645.40	15,137.51	31,058.94
Boston.....	144,043.23	63,324.86	80,718.38	27,825.33	8,407.22	33,917.97	70,150.82
New York.....	183,677.62	91,632.85	92,044.77	29,590.78	15,075.61	34,977.34	79,643.78
Philadelphia.....	185,290.44	101,471.10	83,809.34	33,652.18	11,941.57	25,363.24	70,257.69
Norfolk.....	173,373.49	71,521.77	101,851.72	31,348.31	11,676.15	24,905.67	67,930.13
Charleston.....	72,744.53	45,738.46	27,005.07	8,988.33	5,366.07	10,689.18	26,072.18
Mare Island.....	154,577.08	71,989.78	82,637.27	15,995.19	17,640.17	27,442.90	63,973.25
Puget Sound.....	85,699.29	35,309.30	50,389.99	12,931.80	8,362.99	11,370.08	32,694.37
Average.....	132,308.11	63,372.11	69,931.00	21,825.89	10,266.85	22,975.64	54,695.28

EXPENSE, BY ACCOUNTS—Continued.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation.	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$1,512.00	\$21.70	\$10.75	\$14.36	\$445.76	\$82.23	\$806.93	\$2,095.73
61.06	12.01	.....	3.75	71.88	12.24	47.48	208.42
861.84	264.03	535.78	147.47	814.66	69.60	220.04	2,913.32
1,175.64	468.56	4,585.37	2,187.92	7,686.46	2.82	28.33	16,135.10
1,716.00	1,151.13	7,144.90	182.38	12,998.82	20.09	596.41	23,818.73
447.57	5.63	8,994.18	.....	9,266.17	.....	13.47	18,727.02
648.00	34.22	1,203.46	.....	300.44	5.35	16.52	2,207.99
996.80	414.88	5,481.98	592.57	7,562.97	9.31	163.70	15,222.21
1,956.00	190.39	757.41	649.95	1,721.72	176.70	413.04	5,865.21
2,812.80	4,489.11	3,252.26	1,017.08	7,267.67	26.76	584.36	19,450.04
2,268.00	5,870.51	3,478.82	177.69	11,216.37	1,108.61	687.44	24,897.44
1,998.00	587.20	133.20	1.62	1,988.10	.....	311.77	5,017.89
5,888.43	819.37	4,821.08	215.42	9,425.73	165.16	1,033.48	22,368.67
1,656.00	720.99	1,470.72	5.08	544.35	1.76	85.83	4,384.73
6,780.00	339.06	1,157.06	169.89	3,964.60	43.81	470.50	12,944.90
6,348.39	299.63	1,811.85	218.02	3,801.03	27.15	1,205.21	12,609.25
3,713.20	1,652.03	1,960.29	306.84	4,993.45	193.74	598.95	13,418.50
449.52	428.12	2,784.73	1,407.14	651.04	1,920.69	165.49	7,806.73
6.50	98.11	3,737.53	12.48	66.68	6,730.16	931.85	11,583.21
591.00	364.63	903.66	61.53	249.00	54.92	363.13	2,577.87
.....	.....	2.08	99.00	.....	.....	.....	101.08
96.00	465.07	1,800.28	166.92	68.70	6,823.30	147.25	9,567.52
.....	8.79	1,551.92	135.96	15.86	611.23	101.58	1,425.34
190.50	227.47	1,630.03	312.17	175.21	2,690.06	284.86	5,510.31
84.00	65.37	303.19	.....	450.22	10.32	15.80	928.90
221.40	179.36	295.10	20.99	55.05	25.77	1.95	799.62
240.00	14.77	86.35	.16	394.55	4.72	30.58	771.13
150.96	64.96	242.05	3.50	218.07	.....	148.45	827.99
.....	.....	220.73	.....	129.22	.....	.....	349.96
221.04	.....	21.38	.....	12.52	.....	.....	264.94
301.06	28.64	181.39	.....	386.54	3.14	22.23	923.00
174.06	50.44	192.88	3.52	235.17	6.28	31.20	693.64
7,992.00	250.42	781.40	656.71	11,489.94	55.12	1,800.03	23,025.62
12,217.56	11,106.11	10,851.03	4,235.02	40,961.29	990.95	7,062.33	88,144.29
30,336.00	19,028.44	3,834.84	3,141.31	72,311.45	3,448.71	15,938.87	148,039.62
28,325.16	1,813.23	7,698.07	1,796.77	25,825.53	1,822.79	4,475.41	71,756.96
29,172.00	6,238.55	16,452.07	3,573.43	42,068.88	4,037.35	79,801.84	181,344.12
9,645.12	944.27	4,037.05	181.36	13,363.19	222.20	2,338.42	30,731.61
20,173.00	4,651.94	1,191.74	957.34	14,337.18	547.76	16,792.10	58,051.06
24,183.00	1,740.99	6,778.32	639.42	35,848.83	1,252.21	21,215.10	91,657.87
20,255.48	5,720.49	6,465.57	1,897.67	32,025.79	1,547.14	18,756.76	86,068.90
330.00	116.27	310.38	53.88	2,428.44	.27	3,489.54	6,728.98
291.00	10.32	46.23	.....	403.63	.....	355.48	1,106.66
310.50	63.29	178.31	26.94	1,416.04	.13	1,922.51	3,917.73
816.00	197.43	53.51	51.93	57.92	184.20	570.56	1,931.55
3,151.56	2,457.25	756.68	2,086.05	13.23	260.12	1,842.97	10,667.86
768.00	667.71	674.19	2.62	103.18	833.74	9,321.60	12,401.04
605.04	86.54	2,062.02	130.39	660.53	3,850.49	6,048.24	13,652.26
132.00	1,027.88	24,051.75	859.52	64.61	2,285.12	5,500.21	33,921.59
4.80	.90	52.27	273.85	.....	221.82	1,379.25	1,932.80
2,853.00	1,129.56	4,390.26	449.77	964.73	3,298.90	5,572.80	18,550.02
914.00	2,232.84	3,678.16	36.62	374.22	2,221.58	8,238.70	17,965.62
1,155.35	978.70	4,464.85	486.34	279.80	1,658.12	4,809.35	13,832.71

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Total shop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total.
41 Boilermakers, machine (or M. & H.):							
Portsmouth.....	\$14,752.52	\$5,068.78	\$9,663.74	\$572.92	\$1,279.55	\$2,364.15	\$4,216.62
Boston.....	27,323.05	8,126.48	19,206.57	3,256.33	4,206.21	4,612.43	12,074.97
New York.....	121,276.93	70,233.04	51,043.89	9,052.05	8,442.21	16,097.02	24,191.28
Philadelphia.....	17,805.31	6,202.15	11,603.16	2,496.36	3,002.98	1,465.45	7,654.79
Norfolk.....	68,808.85	29,471.06	39,337.79	6,981.21	9,731.68	6,219.13	23,872.02
Charleston.....	30,798.51	15,583.00	15,215.42	1,378.75	4,689.16	3,119.18	9,187.13
Mare Island.....	59,962.46	29,790.05	30,172.41	7,298.48	6,125.35	8,511.92	21,935.75
Puget Sound.....	36,832.77	13,337.45	23,495.32	2,715.07	3,220.91	2,212.96	8,148.94
Average.....	47,196.30	22,229.01	24,967.29	4,211.39	5,173.51	5,650.39	15,035.19
44 Boilermakers, hand:							
Portsmouth.....	14,896.84	9,213.32	5,683.52	1,413.82	919.15	1,920.61	4,253.50
Boston.....	22,262.03	17,096.77	15,175.26	6,944.99	768.45	6,044.41	12,357.86
New York.....	3,460.33	.....	3,460.33	645.75	222.02	1,408.91	2,378.68
Philadelphia.....	69,942.62	43,537.55	26,405.07	9,807.98	1,003.08	11,142.88	22,043.83
Norfolk.....	74,843.81	34,414.63	44,429.18	7,027.85	5,525.50	10,614.02	23,167.37
Charleston.....	24,079.49	23,266.79	10,812.70	4,607.56	170.78	4,832.36	9,630.70
Puget Sound.....	28,463.10	16,909.41	11,653.69	4,360.88	2,320.46	3,231.76	9,912.10
Average.....	37,421.46	20,632.64	16,788.82	4,829.82	1,588.49	5,684.90	12,103.20
51 Electrical, machine (or M. & H.):							
Portsmouth.....	58,260.84	19,127.30	39,142.54	3,584.84	9,573.09	9,064.52	22,222.45
Boston.....	54,332.37	13,122.83	41,209.54	9,645.19	8,616.93	14,071.51	32,933.63
New York.....	276,213.17	121,379.04	154,834.13	35,263.19	29,896.60	60,745.54	125,925.33
Philadelphia.....	54,729.98	25,587.58	29,142.40	4,000.06	5,802.88	7,047.97	16,940.91
Norfolk.....	24,309.64	4,593.91	19,715.73	4,181.14	3,589.02	5,812.05	13,593.11
Charleston.....	31,343.93	14,950.03	16,393.90	7,160.21	3,585.59	4,005.16	14,750.96
Mare Island.....	106,039.99	50,645.97	57,394.02	12,074.45	10,417.87	18,778.94	41,371.26
Puget Sound.....	27,469.29	5,864.20	21,605.09	6,232.91	3,803.81	2,530.87	12,667.59
Average.....	79,338.53	31,906.86	47,429.67	10,271.49	9,432.09	15,332.05	35,035.63
62 Electrical, hand:							
Portsmouth.....	20,783.71	8,643.72	12,139.99	5,011.88	877.26	6,043.87	11,993.01
Boston.....	12,256.04	3,640.21	8,615.83	5,678.04	2,237.09	8,322.07	7,923.45
New York.....	5,029.55	.....	5,029.55	625.62	1,453.43	2,704.83	4,783.88
Philadelphia.....	75,653.86	41,919.90	33,733.96	12,815.59	3,477.93	13,691.19	29,994.74
Norfolk.....	41,868.04	19,582.19	22,285.85	6,370.67	2,132.09	10,954.30	19,466.96
Puget Sound.....	33,985.03	18,135.87	15,849.16	4,088.17	2,818.67	5,616.09	12,532.83
Average.....	31,596.04	15,320.32	16,275.72	5,764.98	2,166.06	6,503.20	14,434.20
63 Coppersmith:							
Portsmouth.....	10,745.58	4,371.54	6,374.04	1,401.13	1,843.73	2,332.20	5,577.06
Boston.....	27,864.81	12,774.05	15,090.76	3,622.91	3,617.79	4,375.25	11,615.96
New York.....	69,973.65	44,504.38	28,469.27	3,979.91	5,526.33	8,006.82	17,513.06
Philadelphia.....	55,946.35	33,478.17	22,468.18	8,253.96	2,139.66	5,108.98	15,622.60
Norfolk.....	28,107.76	9,524.19	15,583.57	3,471.47	2,425.32	4,183.65	10,060.44
Charleston.....	6,794.86	4,142.28	2,652.58	638.22	870.88	683.65	3,201.85
Mare Island.....	24,970.29	15,132.15	9,838.14	2,477.36	890.49	4,203.13	7,699.99
Puget Sound.....	31,162.85	7,607.70	28,555.15	1,846.80	2,661.31	1,906.92	6,415.03
Average.....	31,570.78	16,441.82	15,128.96	3,211.47	2,499.20	4,236.33	9,947.00
66 Pipe fitters (M. & H.):							
Portsmouth.....	34,010.00	16,196.58	17,813.42	4,697.77	3,274.18	8,534.20	16,696.34
Boston.....	9,148.64	2,358.27	6,790.37	2,628.37	558.21	6,164.14	3,922.73
New York.....	22,883.59	11,532.54	11,351.05	2,978.12	56.33	7,374.03	10,498.69
Philadelphia.....	60,263.11	37,456.54	22,806.57	8,859.12	1,896.52	9,589.52	20,315.16
Charleston.....	20,984.84	14,917.80	6,067.04	1,774.54	839.23	2,409.76	4,028.39
Mare Island.....	88,060.16	52,308.29	35,751.87	5,611.85	5,777.28	15,637.44	24,336.57
Puget Sound.....	78,509.41	31,377.89	47,131.52	9,648.16	6,587.98	10,066.53	26,292.67
Average.....	44,837.10	23,735.41	21,101.69	5,171.13	2,394.25	7,743.96	15,309.34
68 Plumbers, machine (or M. & H.):							
Boston.....	16,662.60	4,482.82	12,179.78	3,163.30	2,477.92	4,928.17	10,599.39
New York.....	84,882.25	50,946.68	33,906.57	2,332.78	12,834.54	7,505.12	22,372.45
Philadelphia.....	18,599.10	3,908.76	14,690.34	1,342.77	7,125.14	2,127.40	10,896.31
Norfolk.....	17,544.01	8,316.94	12,227.07	858.42	2,876.06	2,680.31	6,114.78

EXPENSE, BY ACCOUNTS—Continued.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation.	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$4,344.00	\$120.94	\$53.82	\$84.76	\$741.76	\$73.34	\$29.00	\$5,447.12
1,304.04	388.80	254.82	211.35	1,711.37	314.15	2,948.97	7,131.60
3,144.00	3,889.48	842.23	580.57	2,269.40	1,581.12	5,045.81	16,852.61
647.04	257.52	244.93	58.42	949.63	1,258.33	532.50	3,948.37
5,928.00	1,580.16	2,386.13	556.74	6,014.74	.....	.....	16,465.77
2,721.96	241.63	727.59	49.50	537.77	400.79	1,049.09	6,028.33
3,398.00	78.05	149.20	112.15	1,152.50	875.39	2,501.37	8,236.68
6,868.00	213.40	1,212.85	52.98	6,122.18	675.03	201.94	15,346.38
3,540.63	783.75	733.89	213.31	2,474.92	647.27	1,538.33	9,932.10
1,056.00	.....	2.99	38.29	14.16	194.01	126.49	1,431.94
935.88	.....	90.16	103.62	27.68	578.44	81.63	1,817.41
.....	.....	.....	.....	.....	593.25	490.40	1,083.65
225.96	.....	151.57	7.43	23.98	1,399.90	2,642.41	4,361.25
.....	.....	1,001.19	382.04	.....	12,206.14	7,672.44	21,261.81
.....	13.16	35.51	48.57	5.33	494.15	900.28	1,202.00
347.00	39.43	163.62	7.20	85.64	459.94	537.76	1,640.59
366.41	8.23	206.43	83.88	22.39	2,262.26	1,735.92	4,685.52
2,556.00	1,427.02	1,589.64	78.95	10,009.78	42.50	1,216.20	16,920.09
1,025.00	1,529.61	703.12	1,075.64	2,882.26	718.66	841.63	8,275.91
3,900.00	4,632.24	6,037.59	614.06	6,202.46	4,962.79	2,559.66	28,908.80
1,542.00	341.92	1,080.07	1,016.82	5,970.87	332.06	1,917.75	12,201.49
167.04	99.12	612.89	62.56	307.52	1,961.00	2,922.49	6,132.62
988.08	9.91	155.14	40.52	49.29	2.94	397.06	1,642.94
5,503.00	517.27	5,341.43	153.79	2,490.23	63.55	2,046.44	16,122.56
735.00	1,177.56	757.40	270.54	918.84	469.43	4,618.73	8,947.78
2,052.04	1,216.83	2,034.66	414.86	3,641.40	1,069.12	2,064.99	12,394.00
156.00	.....	35.14	.....	.....	.....	15.80	206.94
160.00	.....	70.54	.....	.....	.....	461.84	692.38
.....	1.88	5.12	.....	.....	20.11	219.06	245.67
540.96	.....	980.48	985.60	47.82	151.23	1,043.08	3,749.22
1,808.96	27.49	165.39	39.94	164.22	94.53	1,089.36	2,828.89
105.00	10.69	1,277.73	1.35	54.53	198.77	1,677.56	3,325.68
378.49	6.59	422.40	170.99	44.43	75.77	742.78	1,841.45
432.00	74.33	67.26	3.28	175.18	.....	44.93	796.96
591.24	91.79	671.49	285.89	777.98	182.17	874.25	3,474.78
612.00	4,895.10	1,084.91	77.95	876.02	398.75	511.48	7,966.21
1,359.00	201.03	1,164.45	49.47	589.69	220.92	350.99	3,965.58
2,040.00	963.94	170.53	10.44	1,411.83	286.92	629.57	5,033.13
342.96	.....	15.65	6.72	.....	.....	39.40	450.73
1,200.00	92.30	281.85	26.04	212.03	81.71	274.23	2,168.16
2,347.00	11,275.32	2,230.96	13.40	269.22	188.79	815.43	17,140.12
1,115.53	2,139.21	710.89	59.15	544.74	169.91	442.53	5,181.96
348.00	18.87	129.64	26.00	331.95	.....	462.72	1,317.18
177.24	1,288.46	451.98	91.68	828.19	46.35	103.73	2,967.65
300.00	5.72	17.80	7.04	202.76	215.36	193.89	942.67
387.00	71.41	38.28	65.68	1,067.97	115.02	746.05	2,491.41
543.69	10.65	67.36	61.29	85.76	17.26	267.49	1,043.51
3,468.00	265.12	1,413.94	115.42	956.11	1,240.81	3,265.00	10,925.30
2,988.00	11,615.92	586.48	31.88	514.78	737.85	4,263.94	20,838.85
1,173.12	1,910.88	385.07	57.01	569.65	338.96	1,357.67	5,792.36
226.44	1,048.33	24.83	3.52	214.74	82.83	.....	1,610.39
2,304.00	1,963.14	1,296.43	15.46	1,279.95	2,628.05	2,316.09	11,533.12
544.92	198.92	936.32	24.37	1,276.32	206.28	1,000.92	4,098.08
1,800.00	694.70	484.29	527.81	989.11	661.59	1,004.79	6,112.29

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Total shop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total.
58 Plumbers, machine—							
Continued.							
Charleston.....	\$8,272.04	\$4,640.79	\$3,631.25	\$1,612.53	\$385.05	\$983.90	\$2,982.28
Puget Sound.....	5,552.54	3,215.25	2,837.29	626.10	759.51	901.21	2,396.82
Average.....	25,247.09	12,084.71	13,162.38	1,656.15	4,309.70	3,187.67	9,153.52
59 Plumbers, hand:							
New York.....	94,373.61	28,695.42	65,678.19	20,297.80	6,482.93	33,106.32	59,887.05
Philadelphia.....	61,131.96	34,207.15	26,924.81	9,063.10	4,137.87	10,588.12	23,799.09
Norfolk.....	44,229.71	20,761.52	23,478.19	8,554.20	4,617.40	8,147.51	21,219.11
Puget Sound.....	569.08	434.92	134.16	19.68	86.20	78.28	134.16
Average.....	50,076.09	21,022.25	29,063.84	9,483.69	3,793.60	12,980.06	26,257.35
61 Shipwrights, machine.							
Portsmouth.....	8,172.88	2,705.25	5,467.63	1,800.40	526.14	1,215.19	3,541.73
Boston.....	10,110.20	4,624.82	5,485.38	633.55	952.42	1,507.53	3,093.53
New York.....	55,635.09	30,972.76	24,662.33	3,160.27	7,009.74	2,779.55	12,949.62
Philadelphia.....	7,496.29	1,802.71	5,693.58	805.61	1,432.63	211.75	2,449.99
Norfolk.....	5,391.23	1,960.44	3,430.79	8.00	563.24	547.79	1,119.09
Mare Island.....	21,083.04	7,644.08	13,438.96	2,348.06	1,614.85	1,849.00	5,811.91
Puget Sound.....	8,298.38	2,655.76	5,642.62	49.27	1,026.63	882.25	1,658.18
Average.....	16,598.14	7,480.81	9,117.33	1,257.88	1,875.09	1,241.88	4,374.85
62 Shipwrights, hand:							
Portsmouth.....	11,534.57	5,990.71	5,543.86	1,953.54	367.15	3,130.24	5,450.98
Boston.....	30,944.27	15,859.99	15,084.28	7,160.88	186.67	5,649.35	12,906.93
New York.....	96,559.19	66,876.18	39,683.01	14,521.30	2,574.98	19,588.10	38,684.35
Philadelphia.....	48,929.71	32,484.31	16,439.48	5,231.21	3,025.12	7,036.51	15,292.84
Norfolk.....	58,912.68	31,160.33	27,762.35	9,153.40	1,574.29	13,690.99	23,418.28
Charleston.....	26,840.17	17,532.14	8,308.03	3,810.77	705.34	3,020.86	7,536.97
Mare Island.....	54,995.09	32,050.26	22,944.83	5,599.11	2,767.24	10,061.42	18,427.17
Puget Sound.....	44,844.96	29,131.71	15,713.25	6,102.75	2,427.93	5,339.50	13,870.18
Average.....	46,569.34	27,635.70	18,933.64	6,691.62	1,703.59	8,314.88	16,709.78
63 Joiners, machine:							
Portsmouth.....	30,575.69	13,165.59	17,410.10	2,326.16	2,838.24	5,057.45	10,221.85
Boston.....	24,978.70	10,297.43	14,681.27	1,963.37	3,426.41	4,904.87	10,263.65
New York.....	50,290.57	23,960.85	26,329.72	4,526.35	9,815.06	5,949.59	20,262.08
Philadelphia.....	26,940.18	9,976.26	16,963.90	1,440.87	6,386.40	6,907.31	9,420.81
Norfolk.....	30,762.98	9,226.04	21,537.94	3,688.68	3,682.00	4,048.48	11,419.14
Charleston.....	32,323.76	14,134.04	18,189.72	3,507.09	2,714.86	4,452.01	10,673.96
Mare Island.....	31,023.16	15,832.81	15,190.35	1,477.79	1,581.74	4,179.40	7,538.98
Puget Sound.....	22,778.36	8,748.11	14,029.77	2,299.99	3,448.40	2,476.77	8,225.16
Average.....	31,209.17	12,167.58	18,041.59	2,652.54	4,274.01	4,081.64	11,008.19
64 Joiners, hand:							
Portsmouth.....	5,978.38	2,521.95	3,456.43	1,660.86	554.79	958.14	3,173.79
Boston.....	32,055.50	11,252.88	20,802.62	9,107.98	2,654.31	7,798.00	19,560.29
New York.....	21,346.23	10,607.33	10,738.90	4,070.43	1,022.98	6,404.69	10,578.16
Philadelphia.....	33,357.34	14,618.41	18,738.93	5,023.55	5,771.26	6,907.31	17,702.08
Norfolk.....	33,154.89	17,056.34	16,098.55	6,222.42	2,474.65	6,963.42	15,980.49
Charleston.....	16,269.64	11,543.91	4,725.73	2,189.58	322.53	4,048.89	4,581.08
Mare Island.....	26,064.85	14,975.18	11,069.67	3,581.93	1,135.05	5,372.57	10,089.56
Puget Sound.....	15,793.96	9,658.11	6,135.85	2,640.48	642.87	2,068.59	5,369.54
Average.....	23,002.59	11,529.26	11,473.33	4,312.15	1,707.31	4,817.43	10,896.89
65 Spar makers:							
Portsmouth.....	27,628.52	12,559.05	15,066.47	2,032.88	3,255.88	5,366.30	10,655.08
66 Boat shop:							
Portsmouth.....	62,118.48	20,080.46	22,033.02	6,302.86	4,864.85	13,558.89	24,796.61
Boston.....	42,538.34	16,233.44	26,304.90	3,635.58	6,432.56	5,950.55	16,018.69
New York.....	124,535.63	37,494.54	87,041.09	11,396.17	30,513.20	15,961.16	57,970.58
Philadelphia.....	37,744.49	18,407.65	19,336.84	3,204.82	5,763.24	4,577.54	13,545.60
Norfolk.....	54,799.98	25,121.02	29,678.96	7,846.10	3,544.47	6,580.38	19,770.93
Mare Island.....	34,324.37	15,791.31	18,533.08	3,744.49	3,161.56	4,225.96	11,132.01
Puget Sound.....	38,599.41	18,978.73	19,630.68	1,996.39	3,369.74	3,157.93	8,514.08
Average.....	56,380.10	23,158.17	33,221.93	5,445.20	8,221.38	8,001.77	21,668.35

EXPENSE, BY ACCOUNTS—Continued.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation.	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$242.04	\$74.62	\$134.16	\$4.48	\$174.07	\$5.20	\$14.30	\$648.87
.....	11.56	2.89	.....	5.39	.84	29.79	50.47
837.90	620.21	481.44	95.94	648.26	597.46	727.65	4,008.86
24.00	360.47	846.86	301.74	753.61	1,155.97	2,348.49	5,791.14
59.04	1.58	747.19	67.89	.....	257.27	2,002.75	3,135.72
.....	.....	55.52	234.93	16.46	451.27	1,500.90	2,269.08
20.76	90.51	412.39	151.14	192.51	466.10	1,463.03	2,796.44
576.00	112.88	70.68	1.92	862.80	97.32	204.39	1,925.90
1,134.12	2.02	136.78	112.17	531.20	125.97	349.56	2,391.88
2,340.00	2,888.78	462.06	112.82	4,465.53	37.56	1,405.97	11,712.67
1,131.96	297.18	318.88	13.81	1,241.56	25.73	214.47	3,243.59
624.00	4.52	909.69	56.98	329.38	349.91	37.28	2,311.70
1,008.00	1,187.57	335.12	271.76	2,966.19	64.94	1,193.47	7,627.05
2,171.57	19.10	049.16	.09	729.98	12.57	402.00	3,984.47
1,369.38	644.57	411.77	81.36	1,589.53	102.00	543.86	4,742.47
.....	.....	.....	.....	3.76	.....	89.17	92.93
1,440.96	7.69	175.44	53.99	39.03	18.76	351.51	2,067.38
108.00	90.59	457.00	132.49	87.82	233.59	1,889.14	2,998.63
34.92	.67	183.65	79.72	2.16	79.31	766.21	1,146.04
420.00	305.12	662.96	38.46	214.83	627.39	2,065.21	4,333.97
546.69	8.50	33.21	.....	20.80	74.59	87.27	771.06
2,682.00	186.90	249.58	16.31	33.78	578.73	1,369.96	4,617.06
138.06	12.24	135.89	42.37	19.96	769.31	725.26	1,813.07
596.33	76.46	237.19	45.42	52.77	297.71	917.97	2,223.85
1,488.00	789.67	1,331.96	132.08	3,423.27	.....	73.24	7,188.22
1,312.44	745.35	55.09	101.50	1,531.41	517.01	132.82	4,397.62
1,488.00	1,391.96	442.26	119.57	2,396.42	1.30	205.21	6,047.72
2,836.08	387.96	776.82	130.17	2,586.13	126.83	694.13	7,543.09
3,024.00	332.35	945.76	119.49	4,403.86	96.55	1,196.78	10,118.78
3,879.03	604.52	173.59	2.24	1,597.77	.....	1,198.61	7,511.76
4,653.00	414.85	279.51	7.84	1,514.90	123.30	657.92	7,651.42
1,902.82	142.01	288.00	56.15	2,492.93	17.23	905.47	5,804.61
2,572.92	602.46	536.75	83.63	2,494.09	110.28	633.27	7,033.40
132.00	.....	25.36	.....	39.25	.....	86.03	282.64
1,016.64	1.90	7.00	.....	.....	.....	216.79	1,242.33
.....	8.84	62.24	.....	11.33	.....	78.39	160.80
474.00	.....	19.36	51.18	1.20	126.93	364.24	1,036.91
67.68	57.54	67.40	263.73	1.67	.....	57.72	438.06
.....	.....	45.90	.....	1.56	.....	49.59	164.78
602.99	482.96	228.58	19.12	101.70	16.21	154.55	1,000.12
.....	.21	1.17	3.50	1.34	.....	156.70	765.91
286.66	68.96	56.75	40.94	19.76	17.89	145.50	636.46
1,380.00	13.97	464.11	100.89	2,138.17	.....	314.27	4,411.41
2,352.00	583.59	1,244.10	792.13	1,267.35	183.93	998.31	7,311.41
1,808.88	1,627.08	2,464.25	907.54	2,565.87	329.47	662.52	10,286.21
.....	1,136.92	334.29	9.28	144.36	185.36	825.59	2,634.77
2,543.04	321.28	800.52	4.62	1,090.96	147.02	883.95	5,791.24
1,320.00	1,926.71	1,254.66	81.92	1,189.29	2,704.70	1,431.73	9,908.01
2,469.00	394.24	948.99	443.68	1,058.19	535.59	1,551.46	7,401.06
5,237.56	469.70	2,701.79	3.75	1,306.87	184.99	1,202.96	11,106.62
2,247.21	912.58	1,392.64	320.40	1,230.27	606.87	1,068.07	7,777.04

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Totalshop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total.
71 Painters:							
Portsmouth.....	\$14,819.83	\$5,815.54	\$9,004.29	\$1,522.78	\$1,393.33	\$5,338.83	\$8,254.94
Boston.....	27,835.26	9,604.16	18,231.10	6,164.55	2,672.97	7,268.19	16,105.71
New York.....	63,170.20	31,069.00	32,101.20	9,729.62	5,646.19	14,000.62	29,466.43
Philadelphia.....	79,800.84	39,755.76	40,045.08	12,918.16	11,783.35	10,107.45	34,808.96
Norfolk.....	51,869.78	23,031.47	28,838.31	8,594.22	3,519.09	9,501.19	21,614.50
Charleston.....	12,687.27	7,442.65	5,244.62	1,785.35	1,171.34	1,997.20	4,953.89
Mare Island.....	31,413.51	19,116.58	12,296.93	3,306.37	2,067.24	4,605.97	9,979.58
Puget Sound.....	35,434.04	20,811.14	14,622.90	4,363.36	3,324.83	5,490.82	13,169.01
Average.....	39,628.84	19,580.91	20,047.93	6,048.05	3,947.29	7,298.78	17,294.13
72 Laborers and riggers:							
Portsmouth.....	20,110.77	9,653.08	10,457.69	1,637.09	2,296.18	6,237.36	10,160.69
Boston.....	64,189.66	23,942.91	40,246.75	9,408.40	6,134.82	19,127.07	34,670.29
New York.....	187,045.75	71,673.10	115,372.65	27,005.03	17,528.35	62,839.53	97,372.91
Philadelphia.....	58,696.72	24,903.51	33,793.21	8,220.55	4,022.56	10,661.30	22,904.41
Norfolk.....	100,087.12	56,015.57	44,071.55	13,244.42	3,293.88	16,238.06	32,776.21
Charleston.....	37,627.53	21,236.81	16,391.02	6,716.89	1,468.86	4,548.98	12,734.73
Mare Island.....	87,740.59	52,905.40	34,835.19	7,461.51	2,399.42	15,969.24	25,330.17
Puget Sound.....	75,156.43	45,915.32	29,241.11	6,084.44	7,231.81	12,286.99	25,008.29
Average.....	78,831.96	38,280.71	40,551.15	9,971.04	5,546.98	17,238.57	32,756.96
74 Rigging loft:							
Portsmouth.....	3,755.20	1,946.55	1,808.65	514.54	380.71	877.37	1,772.93
Boston.....	15,795.98	5,450.66	10,345.32	3,056.39	1,533.03	3,175.47	7,764.89
New York.....	29,739.43	13,910.14	15,829.29	5,869.78	2,241.66	5,362.51	13,468.99
Philadelphia.....	8,992.25	3,583.41	5,308.88	2,443.31	902.85	1,661.11	5,007.27
Norfolk.....	13,122.92	7,531.63	5,591.29	1,348.07	672.60	2,267.32	4,307.99
Charleston.....	6,376.40	3,712.17	2,664.23	850.75	69.98	1,257.16	2,177.90
Mare Island.....	26,557.22	17,441.75	9,115.47	1,791.26	816.00	2,283.58	4,960.84
Puget Sound.....	9,633.51	5,628.95	4,004.56	1,148.25	673.95	846.95	2,669.15
Average.....	14,266.61	7,400.63	6,855.98	2,127.79	911.35	2,218.09	5,257.22
76 Sail loft:							
Portsmouth.....	6,313.99	2,910.60	3,403.39	764.72	813.71	1,244.77	2,832.26
Boston.....	23,463.39	9,715.12	13,748.27	3,295.72	4,738.92	3,337.64	11,572.26
New York.....	54,997.67	32,569.30	22,428.37	4,986.36	8,410.46	5,362.61	18,759.43
Philadelphia.....	18,693.96	10,658.86	8,035.00	1,049.48	3,326.31	1,674.54	6,050.29
Norfolk.....	22,626.15	9,321.24	13,304.91	4,196.04	2,016.13	4,030.40	10,241.57
Charleston.....	9,485.98	7,424.32	2,061.66	825.84	91.89	859.58	1,777.31
Mare Island.....	11,411.21	6,126.07	5,285.14	1,727.62	995.85	2,146.53	4,960.03
Puget Sound.....	13,787.97	6,960.63	6,827.34	1,388.08	1,566.08	1,502.55	4,456.71
Average.....	20,097.63	10,710.77	9,386.76	2,279.11	2,744.92	2,519.83	7,543.86
78 Upholsterers, machine:							
Philadelphia.....	15,020.07	8,042.25	6,977.82	1,544.92	2,079.58	1,488.22	5,112.72
79 Scales:							
Puget Sound.....	7,376.91	2,339.01	5,037.90	437.03	925.84	980.64	2,343.51
81 Building trades:							
Portsmouth.....	13,846.63	1,568.35	12,278.28	3,332.14	1,514.57	5,198.42	10,045.13
Boston.....	42,044.14	20,732.32	21,311.82	1,827.12	450.50	14,161.55	16,439.29
New York.....	112,031.39	54,178.58	57,852.81	17,438.02	7,279.23	30,307.22	55,024.47
Philadelphia.....	72,407.70	24,574.03	47,833.67	1,946.58	20,945.16	17,212.98	40,104.73
Norfolk.....	69,945.53	28,816.20	41,129.33	10,165.10	2,887.46	23,844.19	36,896.75
Charleston.....	42,369.38	25,643.27	16,726.11	1,913.56	2,783.67	6,709.12	11,406.35
Mare Island.....	69,815.98	17,080.80	52,735.18	10,334.36	4,939.49	24,843.41	40,117.26
Puget Sound.....	47,905.59	24,281.07	23,624.52	7,970.27	973.83	11,540.31	20,494.41
Average.....	58,795.79	24,681.83	34,113.96	6,865.89	5,221.75	16,727.15	28,814.79
94 Pattern shop:							
Portsmouth.....	18,456.97	6,314.37	12,142.60	2,290.92	2,526.41	2,779.85	7,597.18
Boston.....	31,978.96	10,780.85	21,198.11	3,826.05	5,173.11	4,639.98	13,639.14
New York.....	77,202.18	39,091.96	38,110.22	9,283.02	4,134.44	13,840.83	27,268.29
Philadelphia.....	25,510.30	9,939.22	15,571.08	2,581.45	1,895.01	3,700.58	8,147.04
Norfolk.....	30,334.22	8,664.85	21,669.37	4,109.85	7,602.40	4,794.15	16,806.40
Charleston.....	13,792.28	7,581.20	6,211.08	1,606.57	2,117.09	1,370.64	5,094.30

EXPENSE, BY ACCOUNTS—Continued.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation.	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$528.00	\$26.72	\$14.13		\$23.28	\$158.22		\$749.35
325.92	903.22	279.32	\$51.33	204.72	47.21	\$313.67	2,125.30
	1,135.92	334.26	9.28	144.36	185.36	825.59	2,634.77
79.92	459.19	581.29	155.85	77.93	3,298.46	583.48	5,236.12
216.00	1,918.90	1,168.88	122.54	183.80	50.12	3,563.57	7,223.81
88.44	4.54	150.87	3.68	7.28	15.24	19.68	280.73
514.00	152.25	342.15	270.08	18.58	648.06	372.23	2,317.35
578.39	35.62	221.11	178.01	119.92	219.54	101.30	1,453.89
291.33	579.42	386.50	98.85	97.48	577.78	722.44	2,753.80
180.00	74.42	42.64					297.06
707.76	1,320.75	1,813.49	172.64	6.04	843.47	712.31	5,576.46
1,104.00	549.09	6,297.24	362.62	10.76	1,336.78	8,339.25	17,909.74
465.00	167.82	8,421.41	1,053.05	12.22	40.44	728.86	10,888.80
	220.70	4,732.80	71.45	14.02	3,808.11	2,448.11	11,295.19
37.80	90.65	437.94	115.66	3.16	2,010.22	960.86	3,656.29
1,622.00	301.97	2,795.00	174.90	80.70	2,766.19	1,264.26	9,005.02
629.26	49.34	1,394.22	240.10	2.64	392.27	930.04	3,637.87
593.23	346.84	3,241.84	273.80	16.19	1,399.89	1,922.96	7,794.55
12.00		2.65		21.20			35.85
170.40	408.11	1,136.77	127.57	80.88		836.70	2,760.43
468.00	1,068.81	289.88	11.87	273.23		230.52	2,362.31
129.00	132.31	3.24	7.14	18.04		11.88	301.61
36.00	193.64	418.03	2.16	10.49		622.98	1,283.30
127.80	35.58	200.50				122.46	496.34
1,140.00	2,830.63	150.50	.06	56.86	3.44	43.15	4,224.63
720.08	82.21	5.34		3.55	2.64	521.59	1,335.41
350.41	596.41	275.86	18.59	58.03	.76	298.66	1,596.72
516.00	7.11	45.72				10.36	580.19
366.24	1,454.57	228.37	43.40	142.18		141.23	2,375.99
612.00	2,119.21	254.86	40.71	597.09	22.71	22.36	3,666.94
857.04	586.54	320.86	8.39	361.07	1.08	49.09	1,984.67
648.00	320.71	614.87	62.27	1,252.40		165.09	3,063.34
120.60	6.28	89.92		37.44		80.11	284.35
60.00	95.12	33.95		59.15		136.92	415.14
1,123.14	30.43	414.82	1.20	699.88	22.51	85.65	2,370.68
537.88	552.49	250.55	19.49	396.23	5.79	80.48	1,842.91
216.00	373.88	416.00	27.17	828.89		3.16	1,865.10
.13	21.00	2.88	527.47		1,830.79	311.52	2,694.39
96.00	211.69	133.42	18.60	101.34	37.94	1,634.16	2,233.15
967.12	2,473.99	242.93	347.76	284.38	111.73	444.69	4,872.69
372.00	96.33	384.29	78.96	26.18	462.60	1,390.08	2,828.34
1,387.08		6.07	3,635.83	64.00	321.10	2,314.87	7,728.95
744.00	127.58	241.22	1,231.58	93.81	248.67	1,545.72	4,232.58
2,135.16	36.28	341.17	664.63	190.62	384.74	1,567.16	5,319.76
553.00	1,825.31	1,805.86	1,716.94	148.28	1,223.07	4,785.46	12,037.92
400.00	2.21	718.44	441.88	116.71	337.22	1,033.65	3,140.11
843.05	596.67	484.18	1,016.77	128.16	393.37	1,836.97	5,299.17
2,676.00	78.81	585.14		318.94		896.53	4,545.42
570.00	1,855.01	1,614.28	935.64	1,441.39		1,142.65	7,568.97
2,184.00	4,838.00	490.20	21.49	3,216.67	19.88	81.69	10,861.93
2,781.96	330.67	2,873.87	2.16	1,300.83	2.16	132.39	7,424.04
984.00	292.37	2,394.67		596.05		913.98	5,152.97
769.92	8.38	42.39	6.44	201.90		87.75	1,116.78

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Total shop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total.
94 Pattern shop—Continued.							
Mare Island	\$33,490.97	\$16,827.85	\$16,663.12	\$3,567.96	\$5,201.32	\$5,066.01	\$13,865.19
Puget Sound	18,340.23	5,618.35	12,721.88	2,126.87	2,240.32	2,135.98	6,508.17
Average	31,137.01	13,102.33	18,034.69	3,674.07	3,857.51	4,794.75	12,326.33
95 Dry docks:							
Portsmouth	21,549.65		21,549.65	1,405.60			1,405.60
Boston	41,029.74	1,226.64	39,803.10	452.46	8,542.70	9.44	9,004.90
New York	230,004.58	24,614.77	205,389.81	2,063.49	21,513.84	2,413.62	26,630.95
Philadelphia	75,662.71	2,402.98	73,259.73		17,147.66	1,701.32	18,848.98
Norfolk	65,283.71	2,658.57	62,625.14	583.73	7,869.27	825.24	9,268.24
Charleston	29,630.87	1,079.09	28,551.78	348.49	1,169.23	246.64	1,764.35
Mare Island	92,193.65	745.36	91,448.29	2,837.35	1,919.15	643.70	5,400.20
Puget Sound	63,197.46	3,068.48	60,124.98	606.00	4,200.61	583.13	5,389.74
Average	77,331.55	4,474.49	72,857.06	1,115.99	7,797.81	802.88	9,716.89
25 Gas manufacturing:							
New York	13,153.07	5,885.95	7,267.12	367.37	334.64	358.80	1,060.81
Norfolk	4,595.73	2,150.30	2,445.43	25.36	111.56	50.84	187.76
Charleston	2,759.23	1,113.66	1,645.57		224.46	258.74	483.20
Mare Island	9,773.14	5,113.14	4,660.00	68.01	425.41	225.24	718.66
Puget Sound	2,018.61	1,142.66	875.95	71.90	110.76	9.84	192.50
Average	6,459.96	3,081.14	3,378.82	106.63	241.37	180.60	528.59
27 Galvanizing:							
Portsmouth	5,102.33	2,059.90	3,042.43	95.92	1,033.91	281.82	1,411.35
Boston	2,367.90	870.21	1,497.69			122.93	122.93
New York	7,883.75	2,159.96	5,673.79	383.40	3,322.35	85.39	3,791.14
Philadelphia	5,609.08	2,167.34	3,441.74	124.08	2,066.94	270.05	2,461.07
Norfolk	13,058.22	4,662.76	8,395.46	758.88	3,966.39	658.30	5,383.57
Charleston	1,026.03	425.20	600.83		349.62	.33	349.95
Mare Island	13,257.86	2,144.83	11,113.03	101.44	4,736.61	2,438.48	7,276.53
Puget Sound	3,392.93	1,936.24	1,456.69	266.31	580.79	270.81	1,107.91
Average	6,456.02	2,053.31	4,402.71	215.00	2,007.08	515.98	2,738.06
91 Foundry, iron:							
Portsmouth	12,685.60	4,234.16	8,451.44	865.66	3,935.82	1,096.05	5,897.53
Boston	46,263.73	6,884.78	39,368.95	2,126.16	22,244.55	3,788.41	28,189.12
New York	62,263.01	17,945.84	44,317.17	5,098.52	23,131.88	8,450.92	36,600.32
Philadelphia	33,485.91	31,431.29	32,054.62	1,917.46	14,300.55	8,738.51	24,956.52
Norfolk	65,734.55	25,135.97	40,598.58	3,843.66	16,268.32	6,962.90	27,074.88
Charleston	20,756.41	7,658.28	13,098.13	904.41	6,178.04	2,869.51	9,961.96
Mare Island	26,604.66		26,604.66	2,707.21	10,152.26	6,987.06	19,846.53
Puget Sound	22,497.60	5,854.93	16,642.78	1,798.06	4,349.54	2,732.98	8,880.58
Average	40,035.19	12,393.17	27,642.04	2,407.64	12,570.12	5,203.17	30,180.93
92 Foundry, brass:							
Portsmouth	84,600.64	17,313.03	67,287.61	3,784.63	32,779.14	8,537.54	45,101.31
Boston	36,722.92	5,203.81	31,519.11	2,574.80	19,045.12	3,266.92	24,886.84
New York	73,074.07	14,816.31	58,257.76	4,667.21	23,553.45	8,896.12	37,115.78
Philadelphia	79,437.17	23,394.33	56,042.84	2,208.04	20,398.38	9,006.09	31,600.42
Norfolk	43,425.02	16,746.28	26,678.74	3,638.01	13,481.12	4,126.83	20,245.69
Charleston	11,896.93	3,911.67	7,985.26	936.37	4,164.99	1,206.47	6,307.93
Mare Island	20,759.14		20,759.14	2,254.68	10,221.29	1,762.47	14,286.44
Puget Sound	27,156.31	10,640.71	16,515.60	1,842.55	4,652.57	2,451.78	8,946.87
Average	47,134.03	11,503.27	35,630.76	2,613.29	16,035.51	4,905.88	23,554.18
93 Smelting plant:							
Portsmouth	22,129.42	4,450.65	17,678.77	1,437.04	7,002.42	2,453.42	10,862.88
93 Foundry steel:							
Boston	17,888.28	127.47	17,760.81	529.96	9,466.24	1,004.80	11,069.70
New York	1,644.00		1,644.00				
Philadelphia	206.86	17.22	189.64		8.04	2.64	10.68
Norfolk	22,827.08	8,345.16	14,481.90	1,387.55	7,023.86	2,647.97	11,069.38
Mare Island	6,415.42		6,415.42	374.30	2,989.01	1,315.01	4,578.32
Puget Sound	10,450.00	3,002.55	7,447.45	267.44	1,107.37	1,154.82	2,322.68
Average	7,428.95	1,436.55	5,992.40	319.91	2,574.19	764.26	3,688.46

EXPENSE, BY ACCOUNTS—Continued.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation.	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$1,284.00	\$419.05	\$302.86	\$24.24	\$508.32		\$259.51	\$2,797.93
2,446.00	388.14	2,452.31	5.03	613.33	\$21.50	292.40	6,218.71
1,711.99	1,026.30	1,344.69	124.38	1,020.93	5.44	474.61	5,708.34
18,552.00	488.88	673.37	389.22	40.58			20,144.05
21,401.04	2,556.28	2,270.76	1,195.94	3,313.31	3.52	54.66	30,798.50
155,892.00	6,778.87	5,042.19	4,026.97	6,919.70		109.12	178,768.86
32,345.04	3,510.85	12,147.53	3,383.49	2,711.61	200.80	111.42	54,410.75
36,408.00	4,652.45	6,999.44	4,292.67	966.11		18.13	53,336.80
20,046.96	828.55	3,826.92	833.85	1,178.85		72.29	26,787.43
72,432.00	5,265.87	2,421.15	5,776.85	248.13		8.09	86,152.09
52,754.00	147.64	1,180.58	.32	652.70			54,735.24
51,223.88	3,028.68	4,320.28	2,487.79	2,003.87	25.54	46.71	63,141.75
3,240.00	305.15	1,161.34	44.62	1,443.97	4.76	6.47	6,205.31
342.96	10.32	1,006.44	539.30	255.61	453.00		3,267.67
2,712.00	16.06	788.31	9.50	20.31		1.29	1,162.37
518.00	11.35	531.98	323.13	350.88	6.35	.96	3,941.84
		16.30		137.80			683.45
1,362.59	68.57	701.47	181.31	441.71	92.52	1.74	2,860.21
72.00	39.03	1,360.02	144.61	7.15		8.27	1,631.08
268.92	314.04	179.89	50.64	434.33	70.00	56.94	1,374.76
144.00	999.94	339.74	12.78	393.02		23.19	1,852.65
73.00	40.41	34.31	4.08	745.59		78.28	980.67
755.00	134.69	1,478.36	41.98	599.59		31.27	3,011.89
103.00	20.42	85.86		36.60			250.88
1,392.00	360.25	1,247.48	45.43	642.07	118.75	32.51	3,895.50
247.34	4.13	25.98		18.15	30.32	22.86	348.78
383.28	235.36	593.96	37.44	355.81	27.13	31.66	1,664.64
935.00	888.40	383.81	82.10	220.65	15.09	36.86	2,563.91
2,076.96	3,873.47	2,104.53	1,030.58	1,680.76	131.28	312.25	11,209.53
1,476.00	1,610.62	4,070.61	1,364.23	1,024.16	367.23	386.90	7,628.76
3,109.01	521.94	2,336.50	108.04	724.73		297.88	7,093.10
2,460.99	841.70	2,617.95	2,418.41	4,318.58	354.34	512.03	13,523.70
1,836.00	144.53	1,009.55	5.48	101.75	16.42	32.44	3,146.17
2,676.00	566.57	2,570.40	269.72	426.09	60.53	188.82	6,753.13
5,155.85	98.36	1,155.01	318.96	703.50	146.68	184.82	7,762.18
2,466.81	1,068.19	1,068.17	698.44	1,150.03	136.45	244.00	7,461.09
2,856.00	182.59	13,930.64	990.79	3,687.95	244.50	593.83	22,185.30
945.36	2,437.73	1,560.01	644.33	832.63	5.61	200.60	6,632.37
1,044.00	13,667.17	2,009.17	409.97	3,534.71	293.03	188.93	21,141.96
3,109.01	335.26	12,297.43	448.52	948.74	18.10	7,285.34	24,442.42
944.32	505.12	2,556.47	899.19	1,095.12	136.17	307.39	6,432.78
556.92	.44	931.20	4.48	115.93	16.59	42.88	1,977.43
2,100.00	471.87	2,618.99	147.06	515.97	232.01	444.81	6,530.70
5,696.10	113.93	518.04	226.33	600.73	47.48	67.12	7,568.73
2,120.09	2,213.01	4,590.99	469.96	1,416.47	124.68	1,141.36	12,078.56
264.00	287.22	5,221.47	9.72	296.28	714.93	22.77	6,788.89
72.72	179.63	477.16	16.43	5,891.37		33.80	6,671.11
1,644.00							1,644.00
542.59	3.40	816.16	374.28	26.20		144.36	1,738.96
612.00	324.55	505.00	18.84	1,116.56	73.29	174.68	3,422.63
4,003.06	1.63	512.30	84.94	279.96	15.34	20.60	4,917.82
859.35	93.31	288.82	61.81	963.47	12.63	54.54	2,333.94

Statement 15.—INDUSTRIAL YARD SHOP

Shop.	Total shop expense.	Power and general expense transfer.	Direct shop expense.	Analysis of direct shop expense.			
				Operating expenses.			
				Account 9.	Account 0.	Account 1 (part).	Total
96 Paint manufacturing:							
New York	\$35,625.55	\$28,485.78	\$7,139.77	\$100.36	\$4,518.21	\$1,024.54	\$5,643.11
Philadelphia	8,362.53	5,290.69	3,072.14	624.65	673.54	405.82	1,704.04
Norfolk	18,753.20	7,315.18	11,438.02	1,755.57	8,329.28	8.06	10,082.91
Mare Island	3,173.57	1,521.20	1,652.67	.....	1,343.71	Cr.280.13	1,063.58
Puget Sound	3,019.30	1,454.02	1,565.28	346.98	247.63	77.54	672.15
Average	13,786.95	8,873.37	4,913.53	565.52	3,022.47	247.17	3,835.16
97 Flag manufacturing:							
New York	32,345.38	13,543.13	18,802.25	2,469.60	9,534.47	2,855.00	14,839.67
Mare Island	6,610.47	3,134.37	3,476.10	1,217.56	324.67	824.20	2,366.43
Average	19,477.93	8,338.75	11,139.18	1,843.58	4,929.56	1,839.60	8,612.74
97 Ropewalk:							
Boston	122,548.51	30,091.88	92,456.63	6,330.51	33,704.40	14,025.66	54,080.57
98 Washing plant:							
Portsmouth	109.10	.....	109.10	.....	64.50	2.52	67.02
98 Coffee roaster:							
New York	40,364.48	178.46	40,186.02	.....	38,343.32	376.64	38,719.96
98 Tool manufacturing:							
Philadelphia	13,938.42	7,916.70	6,021.72	1,497.08	839.18	1,730.13	4,068.39
98 Wire mill:							
Boston	13,929.00	6,553.85	7,375.15	1,489.98	2,481.12	1,838.69	5,809.79
99 Clothing factory:							
New York	63,711.09	542.06	63,169.03	793.64	58,205.48	Cr.515.68	58,453.44
Charleston	46,802.62	1,933.48	44,869.14	6,631.10	16,025.35	10,270.30	32,926.78
Average	55,256.86	1,237.78	54,019.08	3,712.37	37,115.41	4,877.31	45,706.09
99 Chain:							
Boston	121,184.80	39,499.18	81,685.62	4,537.77	31,860.05	10,525.90	46,923.72

EXPENSE, BY ACCOUNTS—Continued.

Analysis of direct shop expense.							
Depreciation and maintenance charges.							
Depreciation	Account 3.	Account 4.	Account 5.	Account 6.	Account 7.	Account 8.	Total.
\$300.00	\$279.84	\$261.07	\$29.69	\$461.97		\$164.15	\$1,496.06
552.96	230.90	38.24	7.04	481.04		57.92	1,368.10
278.00	80.36	284.58	15.88	656.86	\$0.04	31.39	1,345.11
180.00	1.95	49.21	11.58	44.79		1.50	1,289.09
747.00	15.60	14.09		101.81		14.63	893.13
411.19	121.73	129.44	12.83	349.29	.01	53.93	1,078.42
288.00	996.69	721.47	1.73	1,893.62		41.67	3,943.18
538.00	158.99	30.64	.96	239.86	45.38	105.82	1,109.68
408.00	577.84	376.05	1.35	1,066.75	22.69	73.75	2,526.43
12,995.16	4,396.99	7,229.33	139.64	12,310.42	988.76	335.76	38,396.06
	31.96	7.79				2.33	42.08
1,116.00	8.36	15.66	48.27	231.36		46.41	1,466.06
834.00	202.56	38.32	5.28	871.80		3.37	1,965.33
894.96	367.86		.45	300.39	1.26	.44	1,565.36
1,728.00	548.16	1,237.70	54.02	1,095.84		21.87	4,685.60
4,036.08	2,959.96	1,726.82	21.24	2,736.26	232.50	229.53	11,942.39
2,882.04	1,754.06	1,482.26	37.63	1,916.06	116.26	125.70	8,313.99
4,244.88	5,963.42	3,509.16	855.72	17,234.78	341.74	2,612.20	34,761.90

Statement 16.—EXPENDITURES BY YARDS AND TITLES.

RECAPITULATION.

[Showing gross expenditures of money and issues of material for Naval Establishment.]

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
A. Construction of new vessels.....	\$44,858,781.14	\$5,164,121.17	\$1,865,312.85	\$4,710,798.88	\$33,692,120.39	\$16,427.85	.....	.....
B. Equiptage of vessels.....	12,824,478.11	.....	.....	.....	186,749.96	12,186,096.49	.....	.....
C. Operating expenses of vessels.....	9,724,137.15	.....	.....	.....	1,860,183.28	21,183,820.98	.....	.....
D. Repairs to vessels.....	8,774,348.51	28,854.55	699.80	62,104.82	860,727.28	152,921.98	.....	.....
E. Repairs to equipment of vessels.....	6,982,430.96	4,639,536.70	1,242,028.97	1,921,577.94	646,927.28	370,288.68	.....	.....
F. Plant additions (official).....	5,111,500.80	2,807,708.78	174,028.76	2,016,778.32	45,974.21	.....	.....	.....
G. Plant additions (military).....	3,497,371.81	619,488.89	117,938.21	297,503.97	3,441,689.59	.....	.....	.....
H. Yard maintenance (industrial).....	20,137,544.81	324,052.40	20.46	673,203.61	2,483,421.75	1,646.43	.....	.....
I. Yard maintenance (military).....	10,178,969.36	13,427,926.50	118.90	4,071,694.83	708,692.15	468.64	.....	.....
J. General administration.....	33,024,640.60	3,328,931.47	.....	1,897,833.26	5,249,757.88	37,840.63	.....	.....
K. Supplies in store.....	96,666,554.92	2,167,136.78	200,201.64	1,217,363.66	96,117,860.50	8,831,010.48	.....	.....
L. Indirect expense deducted.....	5,765,903.17	.....	5,765,903.17	.....	.....	478,280.17	.....	.....
M. Manufacturing.....	37,094,300.66	9,100,157.61	1,894,310.81	26,409,832.74	.....	.....	.....	.....
N. Marine Corps.....	14,629,787.86	28,455.79	8,785.25	25,350.28	9,152,660.88	689,866.76	.....	.....
O. Other Government departments.....	1,409,697.76	414,701.64	95,055.89	208,588.28	.....	680,292.47	.....	.....
P. Special deposits.....	7,840,729.53	89,249.32	17,213.80	128,254.88	.....	.....	.....	.....
Q. Cash sales.....	46,844.83	.....	.....	.....	.....	.....	.....	.....
R. Proceeds of sales.....	67,921.99	.....	.....	6,740.71	.....	.....	.....	.....
S. Allied powers.....	.....	.....	.....	.....	.....	.....	.....	.....
Indirect divided.....	.....	1,357,608.06	1,779,168.31	421,653.25	.....	.....	.....	.....
Total.....	360,419,574.69	43,920,246.93	45,419,367.06	154,830,794.14	52,586,603.62	1,741,282.49	.....	61,911,331.33

RECONCILEMENT WITH STATEMENT 1 (COST OF THE NAVY).

[For reconciliation with statement 42, see Statement 42.]

APPROPRIATION ACCOUNTS, BY TITLES.

Total expenditures for NAVY, per Statement 16.....		\$380,419,574.50
Deductions not chargeable to annual cost:		
Title X—		
Charges to (Statement 16).....	\$96,686,554.92	
Increase for fiscal year (Statements 27 to 35, inclusive).....	38,474,714.88	
Net deduction on account of stores purchased but not issued.....		\$38,191,840.04
Title Z—		
Charges to (Statement 16).....	37,094,300.66	
Increase for fiscal year (Statement 26).....	7,622,346.31	
Net deduction on account of material manufactured but not issued.....		20,471,954.35
Deduct for expenditures on account of other Government departments, special deposits, allied powers, cash sales, and proceeds of sales (Statement 16).....		9,599,206.52
Deduct for checkages against pay accounts (Statement 1).....		1,376,440.90
Deduct for expenditures of title B (equipment) stores (Statement 26).....		2,842,987.28
Deduct for net increase in Marine Corps stores (Statement 37).....		101,482,420.09
Net total deductions.....		2,466,081.02
Expenditures chargeable to annual cost as per Statement 1.....		99,016,398.07
		<u>281,408,176.53</u>

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

191. Frenchman Bay, Me.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
S.....	\$16,681.91	\$5,906.64	.....	\$10,371.62	\$403.65	.....	.....	.....

102. Navy yard, Portsmouth, N. H.

A.....	\$380,893.91	\$127,890.65	\$33,531.95	\$219,492.31	.....	.....	.....	.....
B.....	14.37	11.76	2.35	.....	.....	.....	.....	.....
C.....	322,521.78	185,725.33	46,221.51	90,574.94	.....	.....	.....	.....
D.....	263,085.83	180,456.70	48,245.15	134,383.98	.....	.....	.....	.....
E.....	40,905.13	26,643.28	6,368.60	7,893.26	.....	.....	.....	.....
F.....	186,616.10	44,809.30	4,262.13	65,693.00	\$68,832.56	.....	.....	.....
G.....	954,892.22	608,515.03	.....	186,235.86	22,870.24	.....	.....	\$125,280.49
H.....	32,724.55	25,000.08	1,765.01	5,973.46	.....	.....	.....	.....
I.....	1,766,747.29	510,548.73	86,477.09	1,169,721.48	.....	.....	.....	.....
J.....	136,485.78	.....	136,485.78	.....	.....	.....	.....	.....
K.....	575.65	333.10	4.67	237.88	.....	.....	.....	.....
L.....	15,397.11	9,371.04	2,479.17	3,446.00	.....	.....	.....	.....
M.....	264.84	.....	12.78	115.98	.....	.....	.....	.....
N.....	236.53	322.84	3.68	.....	.....	.....	.....	.....
O.....	.....	.....	92,990.37	.....	.....	.....	.....	.....
P.....	.....	74,392.26	.....	18,898.11	.....	.....	.....	.....
Q.....	3,925,414.56	1,794,130.86	.....	1,917,321.43	91,722.82	.....	.....	125,280.49
R.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	.....	.....	.....	.....

192. Radio station, Portland, Me.

G.....	\$2,158.37	\$257.71	.....	\$1,900.56	.....	.....	\$1,037.47	.....
H.....	3,125.16	.....	.....	.....	\$1,487.69	.....	.....	.....
Total.....	5,283.53	257.71	.....	1,900.56	1,487.69	.....	1,037.47	.....

104. Radio station, Portsmouth, N. H.

G.....	\$1,487.68	\$383.43		\$1,054.25				
S.....	969.60				969.60			
Total.....	2,407.28	383.43		1,054.25	969.60			

105. Naval hospital, Portsmouth, N. H.

R.....	\$284.65	\$5,996.95		\$12,782.69	\$284.65			
S.....	62,902.64				22,807.69			\$71,662.41
Total.....	63,187.29	5,996.95		12,782.69	22,842.94			21,662.41

111. Navy yard, Boston, Mass.

A.....	\$206,737.15	\$121,413.53	\$230,696.29					
D.....	416,499.41	131,641.97	149,575.97					
K.....	381,369.49	123,142.28	588,058.60					
P.....	47,114.48	16,603.04	14,198.78					
E.....	41,242.02	10,807.18	32,768.64		\$113,686.13			
G.....	1,426,867.72		345,063.75		87,259.00			\$198,463.35
V.....	141,368.57	10,446.63	22,814.73					
Z.....	2,788,943.76	146,400.78	1,981,885.81					
Indirect expense deducted.....	408,386.60							
Marine Corps.....	431.00		96.55					
Other Government departments.....	51,392.60	111.21	12,069.34					
Special deposits.....	4,031.86	9,540.97	2,622.47					
Proceeds of sales.....	3,685.44	78.38	187.34					
Indirect divided.....		152,3218.2	82,142.85					
Total.....	7,427,913.69	3,612,546.65	3,416,129.11		201,196.12		580.46	198,463.35

112. Naval hospital, Boston, Mass.

R.....	\$11,982.22	\$19,527.80		\$63,067.16	\$11,982.22			
S.....	162,062.58				54,004.88			\$63,827.62
Total.....	174,014.80	19,527.80		63,067.16	66,017.10		1,555.12	38,827.62

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued

113. Naval ammunition depot, Hingham, Mass.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
R.....	\$69,576.62	\$8,968.28	.....	\$19,555.78	\$40,632.56	.....	.....	.....
S.....	147,978.38	106,961.76	.....	15,999.11	16,486.53	.....	.....	\$9,521.69
7.....	124,602.82	71,346.06	.....	87,256.76	.....	.....	.....	.....
.....	8,016.66	1,645.74	.....	6,370.92	.....	.....	.....	.....
Other Government departments.....	310.61	4.43	.....	305.13	.....	.....	.....	.....
Special deposits.....	83.90	29.94	.....	53.96	.....	.....	.....	.....
Total.....	349,568.99	189,966.26	.....	95,542.66	55,548.38	.....	.....	9,521.69

114. Radio station, Boston, Mass.

G.....	\$15,902.01	\$7,983.32	.....	\$7,918.69	\$9.28	.....	.....	\$500.00
S.....	509.28	.....	.....	.....	.....	.....	.....	.....
Total.....	16,411.29	7,983.32	.....	7,918.69	9.28	.....	.....	500.00

115. Radio station, North Truro, Cape Cod.

G.....	\$244.97	\$117.30	.....	\$127.67	\$415.22	.....	.....	\$804.83
S.....	1,220.05	.....	.....	.....	.....	.....	.....	.....
Total.....	1,465.02	117.30	127.67	415.22	804.83

116. Radio station, Chelsea, Mass.

S.....	\$3,631.96	\$220.77	\$3,410.79
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120. Navy purchasing office, Newport, R. I.

.....	\$7,971.76	\$6,425.77	\$20.76	\$1,626.26
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121. Naval training station, Newport, R. I.

D.....	\$172.96	\$172.96
K.....	40.00	40.00
F.....	6,325.52	6,325.52
R.....	45,594.00	87,470.35	.....	.....	.....	.....
S.....	237,315.53	33,491.99	\$31,058.52	\$5,765.13	.....	\$117,002.82
			69,526.51	11,867.36	- \$27.02	
Total.....	282,448.01	46,800.82	100,954.83	17,632.82	27.02	117,002.82

Statement 16. — EXPENDITURES BY YARDS AND TITLES.—Continued.

122. Naval torpedo station, Newport, R. I.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
D.....	\$3,117.73	\$68.45		\$3,049.28				
P.....	\$181,517.29	\$129,821.70		54,695.59				
R.....	238,927.24	8,439.30		43,691.40	\$186,866.54			
S.....	513,025.73	324,309.88		118,733.11	33,900.15	\$218.62		\$35,863.97
V.....	217,096.28	102,770.85		114,298.43				
Z.....	3,739,556.83	1,016,764.38		2,722,792.30				
Special deposits.....	1,184.54	971.05		213.49				
Total.....	4,894,398.39	1,880,148.61		3,067,403.90	220,766.69	218.62		35,863.97

123. Naval station, Narragansett Bay.

R.....	\$42,944.52	\$10,773.61		\$5,963.40	\$26,202.51			
S.....	281,278.34	87,493.28		50,553.24	100,065.30			\$43,166.52
V.....	36.80			36.80				
Special deposits.....	29.85	29.85						
Total.....	324,289.51	98,301.74		56,553.44	126,267.81			43,166.52

124. Naval War College, Newport, R. I.

R.....	\$165.00			\$1,837.90	\$165.00			
S.....	204,736.30	\$19,451.32			9,612.18		\$1.70	\$173,883.20
Total.....	204,921.30	19,451.32		1,837.90	9,777.18		1.70	173,883.20

125. Fuel station, Melville, R. I.

R.....	\$313.92			\$178.92	\$140.00			
S.....	62,728.16	\$67,154.12		9,242.70	1,117.20		\$506.14	\$4,904.00
Total.....	63,042.08	67,154.12		9,421.62	1,257.20		506.14	4,904.00

124. Fuel station, New London, Conn.

R.....	\$2.09	\$2.52	\$1.57	\$48.00	.....	.....
S.....	13,573.15	1,721.36	2,320.13	7,459.62	.....	.....
Total.....	13,925.24	1,723.88	2,321.70	7,507.62	\$2,372.04

127. Radio station, Newport, R. I.

S.....	\$3,287.91	\$2,428.95	\$772.96	\$36.00
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128. Radio station, Wantuck Light Ship (Light Vessel No. 85).

S.....	\$345.06	\$27.88	\$20.20
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129. Submarine base, New London, Conn.

R.....	\$2,020.80	\$2,020.80
S.....	8,468.77	8,468.77
Total.....	11,089.57	11,089.57

131. Navy yard, New York, N. Y.

A.....	\$6,400,383.43	\$2,948,025.35	\$746,959.06	\$2,705,408.02	.....	.....
D.....	1,171,901.25	742,176.67	165,331.76	284,342.52	.....	.....
K.....	1,133,780.54	496,268.91	123,561.02	518,932.61	.....	.....
P.....	133,937.94	76,439.70	28,453.59	35,044.65	.....	.....
E.....	334,165.53	31,041.57	6,001.46	111,133.52	\$0.43	.....
G.....	4,740,809.49	3,283,405.77	34,542.35	904,566.02	221,640.24	\$12,246.29
V.....	394,498.99	225,564.52	155,970.90	134,892.03	.....	.....
Z.....	6,206,829.68	1,296,837.41	1,096,683.75	4,751,321.37	.....	.....
Indirect deducted.....	1,096,683.75	.....	.....	.....	.....	.....
Marine Corps.....	3,586.00	1,783.42	330.77	1,491.51	.....	.....
Other Government departments.....	189,081.34	86,891.79	19,740.72	35,363.83	.....	.....
Special deposits.....	29,524.20	12,291.51	2,866.45	14,246.24	.....	.....
Proceeds of sales.....	14,708.88	11,251.26	15.45	3,442.67	.....	.....
Indirect expense divided.....	.....	137,317.88	189,114.78	45,797.40	.....	.....
Total.....	19,612,688.93	9,350,294.26	.....	9,622,517.99	407,628.79	15.66
.....	.....	.....	.....	.....	.....	12,246.29
.....	.....	.....	.....	.....	.....	318,885.94

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

134. Naval magazine, Fort Lafayette, N. Y.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
R.....	\$6,053.38			\$6,053.38				
S.....	14,122.91	\$3,807.41		2,213.46	\$110.97			\$3,061.07
V.....	3,460.52							
Total.....	23,726.81	12,267.93		8,266.84	110.97			3,061.07

135. Naval ammunition depot Iona Island, N. Y.

R.....	\$3,613.06	\$1,797.90		\$1,815.16				
S.....	138,320.78	100,175.56		27,057.87	\$583.14			\$10,504.21
V.....	136,102.40	75,284.86		59,817.54				
Z.....	1,202,253.52	26,430.51		1,181,828.41				
Other Government departments	398.79	11.04		386.76				
Special deposits.....	27.55			27.55				
Total.....	1,479,719.80	197,699.57		1,270,932.26	583.14			10,504.21

136. Naval ammunition depot Lake Denmark, N. J.

R.....	\$906.70	\$788.80		\$107.80				
S.....	57,100.28	41,992.36		11,791.33	\$217.75			\$3,068.84
Total.....	58,006.98	42,781.16		11,899.13	217.75			3,068.84

137. Naval hospital, New York, N. Y.

R.....	\$3,452.15			\$26,878.03	\$3,452.15			\$45,331.23
S.....	199,375.74	\$26,226.07			90,940.41			
Total.....	202,827.89	26,226.07		26,878.03	94,332.56			55,331.23

138. Radio station, navy yard, New York, N. Y.

G.....	\$1,050.46	\$367.20		\$683.26			
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139. Radio station, Fire Island.

F.....	\$4,131.85	\$1,173.65	\$241.03	\$2,717.15			
R.....	3,708.88	337.84		1,916.04	\$5,708.00		
G.....	2,483.88				875.00		
S.....	875.00						
Indirect divided.....		200.00	241.03	41.03			
Total.....	10,989.71	1,711.49		4,674.23	4,584.00		

140. Radio station, San Juan, P. R.

G.....	\$2,244.64	\$106.44		\$2,138.20			
S.....	7,570.11				\$4,662.46		\$2,907.05
Total.....	9,814.75	106.44		2,138.20	4,662.46		2,907.05

141. Radio station, Colon, Isthmian Canal Zone.

R.....	\$32.25				\$32.25		
G.....	355.50	\$49.67		\$306.89			
S.....	13,209.28				2,900.76	\$4,893.83	\$5,504.69
Total.....	13,688.09	49.67		306.89	2,933.01	4,893.83	5,504.69

142. Radio station, Darien, Isthmian Canal Zone.

R.....	\$219.50				\$219.50		
G.....	1,781.77	\$10.14		\$1,771.63			
S.....	31,870.68				7,865.40	\$81.00	\$16,170.93
Total.....	33,871.95	10.14		1,771.63	8,114.90	81.00	16,170.93
							7,723.35
							7,723.35

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

143. Radio station, Balboa, Isthmian Canal Zone.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on Invoices.	Auditor's settlements.	Pay and allowances.
G.....	\$1,024.59	\$12.96	.....	\$1,013.63	\$3,778.45	.....	\$9,279.45	\$3,216.08
S.....	16,274.98	.....	.....	.....	.....	.....	.....	.....
Total.....	17,301.57	12.96	.....	1,013.63	3,778.45	.....	9,279.45	3,216.08

144. Medical supply depot, New York.

R.....	\$374.00	.....	.....	.....	\$374.00	.....	.....	.....
S.....	26,100.57	\$13,006.51	.....	\$9,244.61	10,466.15	.....	\$3,362.30	.....
Total.....	26,474.57	13,006.51	.....	9,244.61	10,860.15	.....	3,362.30	.....

151. Navy yard, Philadelphia, Pa.

A.....	\$868,439.37	\$417,126.77	\$123,612.56	\$327,700.04	.....	.....	.....	.....
C.....	982.21	428.48	.....	435.10	.....	.....	.....	.....
D.....	1,319,263.51	772,846.75	228,247.21	318,169.15	.....	.....	.....	.....
E.....	1,231,777.57	576,748.14	186,760.74	474,268.69	.....	.....	.....	.....
F.....	110,563.42	66,419.29	22,240.55	21,833.58	.....	.....	.....	.....
G.....	418,450.60	61,892.41	12,378.32	86,179.24	\$258,310.63	.....	.....	.....
H.....	1,935,504.80	1,283,367.98	.....	337,632.26	75,963.71	.....	\$353.04	\$229,065.08
I.....	239,624.44	202,353.67	.....	29,854.31	.....	.....	.....	.....
J.....	1,551,596.23	418,941.53	7,416.46	56,228.64	.....	.....	.....	.....
K.....	687,616.09	.....	663,616.09	1,076,718.06	.....	.....	.....	.....
L.....	.....	.....	.....	.....	.....	.....	.....	.....
M.....	431.34	188.20	44.46	193.68	.....	.....	.....	.....
N.....	33,370.68	20,219.41	6,203.01	6,948.26	.....	.....	.....	.....
O.....	12,865.44	6,713.93	2,247.89	3,793.62	.....	.....	.....	.....
P.....	9,596.73	8,868.69	2,632.08	70.96	.....	.....	.....	.....
Q.....	.....	.....	.....	.....	.....	.....	.....	.....
R.....	.....	.....	77,413.47	.....	.....	.....	.....	.....
S.....	.....	61,680.81	.....	15,452.96	.....	.....	.....	.....
Total.....	7,299,954.26	4,007,751.06	.....	2,066,378.01	334,304.34	72.75	363.04	229,065.08

152. Naval ammunition depot, Fort Mifflin, Pa.

P.....	\$5.52	\$5.52							
R.....	39,228.34	460.82		\$15,642.60		\$22,684.91			
S.....	99,881.84	64,770.93		29,893.35		2,176.95			\$9,030.41
V.....	71,316.19	\$3,035.66		19,310.93					
Z.....	9,244.62	1,839.41		7,405.21					
Special deposits.....	.32	.32							
Total.....	219,656.84	119,072.66		66,441.91		25,111.86			9,030.41

153. Naval Home, Philadelphia, Pa.

R.....	\$372.66					\$372.66			
S.....	104,300.52	\$27,890.54		\$6,101.69		45,710.53		\$1,028.93	\$25,568.83
Total.....	104,673.18	27,890.54		6,101.69		44,083.19		1,028.93	25,568.83

154. Naval hospital, Philadelphia, Pa.

R.....	\$3,894.00			\$2,201.50		\$1,692.50			
S.....	124,096.41	\$15,476.84		15,256.54		56,976.43			\$36,386.00
Total.....	127,990.41	15,476.84		17,458.04		58,668.93			36,386.00

155. Radio station, Philadelphia, Pa.

R.....	\$5,984.00					\$5,984.00			
G.....	776.06	\$225.55		\$550.51		450.23			
S.....	650.33								
Total.....	7,410.39	225.55		550.51		6,034.33			

156. Navy purchasing office, Baltimore, Md.

S.....	\$6,660.79					\$2,120.62		\$30.79	\$4,519.46
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Statement 16. — EXPENDITURES BY YARDS AND TITLES—Continued.

161. Naval Academy, Annapolis, Md.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
R.....	\$97,162.45	\$8,139.48		\$8,611.70	\$80,411.18			
S.....	1,970,155.33	594,248.06		244,942.21	105,228.67	\$358.02	\$1,170.87	\$1,043,209.50
V.....	40,714.42	40,015.72		701.70				
Special deposits.....	6,224.87	6,822.19		602.68				
Total.....	2,123,260.07	638,025.45		254,885.38	185,637.85	358.02	1,170.87	1,043,209.50

162. Radio station, Naval Academy, Annapolis, Md.

S.....	\$323.39			\$310.60			\$112.70	
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170. Radio laboratories, navy yard, Washington, D. C., and Bureau of Standards.

E.....	\$1,369.23			\$1,369.23				
G.....	250.45			246.53				
S.....	383.15	\$3.92			\$383.15			
Total.....	2,002.83			1,615.75	383.15			

171. Navy yard, Washington, D. C.

A.....	\$39,700.16	\$15,120.31	\$7,985.93	\$16,713.92				
D.....	50,770.65	29,380.23	10,783.83	10,606.60				
K.....	47,672.17	4,950.64	2,109.87	40,611.66				
P.....	7,447.53		1,638.33					
E.....	825,448.73	4,822.80	6,029.00	26,813.45	\$766,366.94			
G.....	2,874,116.02	24,240.33		533,641.24	35,517.82	\$4.25	\$208.02	\$157,138.74
V.....	967,831.74	1,647,705.95	83,716.28	213,243.95				
Z.....	8,386,908.94	2,905,334.28	799,659.83	4,680,974.83				
Indirect deducted.....	117,659.67		117,659.67					
Marine Corps.....	1,144.35	668.69		454.99				
Other Government departments.....	20,755.56	8,056.21	2,906.78	9,792.57				
Special deposits.....	27,043.85	16,073.24	7,694.33	3,375.29				
Proceeds of sales.....	3,297.69	2,350.95		946.74				
Indirect divided.....		610,974.42	\$14,965.17					
Total.....	12,681,687.70	5,990,449.55		203,890.75	901,884.70	4.25	208.02	167,138.74

172. Naval Observatory, Washington, D. C.

S.....	\$37,517.24				\$239.70	\$128.79		\$37,148.75
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173. Marine Corps rifle range, Winthrop, Md.

S.....	\$3,148.23				\$1,716.18			\$1,432.05
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174. Naval proving grounds, Indianhead, Md.

R.....	\$345,567.94	\$55,048.47	\$121,437.27	\$169,085.20				
S.....	265,982.62	207,612.04	38,436.85	2,577.82				\$37,058.55
.....	345,282.42	645,352.02	296,020.40					\$87.66
.....	4,303,414.21	538,929.25	3,764,694.96					
Special deposits.....	68,900.13	4,187.23	64,702.90					
Proceeds of sales.....	120.98	120.98						
Total.....	5,339,268.30	851,476.99	4,278,992.38	171,642.72				97.66

175. Naval hospital, Washington, D. C.

R.....	\$2,928.48	\$42,213.88		\$3,131.17	\$2,673.48	\$250.00		
S.....	174,912.20				79,542.92			\$45,024.28
Total.....	177,840.68	42,213.88		3,131.17	82,216.40	250.00		45,024.28

176. Radio station, Arlington, Va.

R.....	\$2,972.61	\$16.02	\$4.23	\$2,952.36				
S.....	3,507.94				\$3,507.94			
.....	13,335.96	3,583.61		9,752.35				
S.....	14,694.75			14,634.75				
Indirect expense deducted.....	5.68	5.68						
Indirect divided.....		.40	.57	.17				
Total.....	34,507.60	3,600.03		12,704.88	18,202.69			

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

177. Radio station, Washington, D. C.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
E.....	\$2,579.81	\$229.46	\$57.02	\$2,294.33				
G.....	4,380.30	1,614.81		2,765.49				
B.....	15.70				\$15.70			
Indirect expense deducted.....	17.07		17.07					
Indirect divided.....		29.60	39.95	10.35				
Total.....	6,958.74	1,872.87		5,070.17	15.70			

178. Radio station, Indianhead, Md.

S.....	\$289.94	\$289.44		\$0.50				
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181. Navy yard, Norfolk, Va.

A.....	\$668,303.86	\$351,743.53	\$107,703.63	\$196,856.45				
C.....	60.29	32.89	12.84	14.56				
D.....	1,032,889.80	626,819.04	193,979.09	242,101.77				
B.....	177,043.69	47,254.19	134,238.44	326,568.06				
E.....	128,033.72	66,661.67	23,413.95	54,480.09				
F.....	1,249,631.52	102,140.84	26,286.16	174,480.00	\$1,509,694.85			
G.....	2,305,663.10	1,101,673.74	41,522.16	157,770.20	172,921.16			\$176,792.99
Z.....	3,337,361.53	772,831.81	212,493.61	157,770.20				
V.....	434,631.89		637,637.39	2,546,366.11				
Indirect deducted.....			2,625.07					
Marine Corps.....	5,714.07	2,647.25	543.75	2,625.07				
Other Government departments.....	48,738.17	2,263.08	7,941.17	16,544.93				
Special deposits.....	16,004.23	9,057.81	1,815.01	5,131.41				
Proceeds of sales.....	9,328.51	7,216.80	1,621.40	1,680.61				
Indirect divided.....		191,857.75	239,800.68	47,972.93				
Total.....	10,781,683.60	4,689,057.78		4,336,368.73	1,683,616.01			176,792.99

182. Naval ammunition depot, St. Julians Creek, Va.

R.....	\$38,285.41	\$5,692.11	\$14,320.08	\$12,272.83		
S.....	59,250.37	57,844.60	21,899.13	4,803.81		\$8,662.88
V.....	152,241.45	57,844.14	44,819.71			
Z.....	26,961.83	5,069.57	21,911.79			
Other Government departments.....	4.77	4.77				
Special deposits.....	24.83	24.83				
Total.....	283,887.26	149,156.99	102,991.01	23,076.43		8,662.88

183. Naval hospital, Norfolk, Va.

R.....	\$71,414.77	\$7,549.14	\$59,418.73	\$4,446.90		
S.....	189,980.66	20,224.44	13,429.64	96,866.78		\$59,439.90
Total.....	261,405.43	27,773.58	72,848.37	101,343.68		59,439.90

184. Radio station, Norfolk, Va.

R.....	\$21.08			\$21.08		
S.....	403.13			403.13		
Total.....	424.21			424.21		

185. Radio station, Beaufort, N. C.

R.....	\$457.80	\$15.40	\$3.50	\$438.90		
G.....	1,435.37	55.04		1,579.63		
S.....	1,409.08			\$1,409.08		
Indirect expense deducted.....	2.60		5.60			
Total.....	3,308.65	71.04		1,918.63	1,409.08	

186. Radio station, Diamond Shoals, N. C. (Light Vessel No. 71).

S.....	\$116.92					\$116.92
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Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

191. Navy yard, Charleston, S. C.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
A.....	\$113,589.56	\$51,919.51	\$11,900.15	\$49,769.90				
D.....	693,301.91	399,283.13	103,215.45	160,822.33				
K.....	205,497.90	109,013.00	30,300.96	66,177.44				
L.....	13,089.44	8,911.51	2,224.64	1,853.29				
E.....	502,270.83	86,391.33	16,762.97	134,459.43	\$365,667.10		\$1.73	\$110,281.75
V.....	765,331.69	595,136.43		134,222.84	14,462.39	\$236.56		
Y.....	20,283.41	13,068.93	2,501.60	4,713.88				
Z.....	867,163.91	269,430.32	10,394.89	667,338.50				
Indirect deducted.....	169,869.41		169,869.41					
Marine Corps.....	1,479.54	1,517.51		1,500.45				
Ordnance.....	1,479.54	6,265.81	2,831.72	6,356.29				
Special departments.....	1,479.54	1,267.74	270.73	1,497.68				
Special deposits.....	4,911.85	1,530.98	14.00	17.95				
Proceeds of sales.....	1,571.88							
Indirect divided.....		16,997.81	22,638.92	5,639.11				
Total.....	3,020,398.11	1,475,266.57		1,154,500.01	280,129.49	236.56	1.73	110,281.75

192. Naval hospital, Paris Island, S. C.

B.....	\$11,512.25			\$10,918.41	\$11,512.25			
S.....	32,617.46	\$2,430.29			5,583.67	\$1,847.95	\$4,775.75	\$6,791.39
Total.....	44,129.71	2,430.29		10,918.41	17,366.92	1,847.95	4,775.75	6,791.39

193. Radio station, Charleston, S. C.

E.....	\$10,626.24	\$4,849.66	\$739.38	\$6,037.20				
R.....	10,044.40				\$10,044.40			
G.....	3,500.30	1,135.46		2,364.84				
S.....	1,988.94				1,936.94			
Indirect deducted.....	60.73		60.73					
Indirect divided.....		400.00	675.65	275.65				
Total.....	26,047.16	6,385.12		7,690.69	11,981.34			

194. Radio station, St. Augustine, Fla.

E.....	804.23	\$13.08	\$9.19	\$79.45		
G.....	1,006.81	142.38		864.43		
S.....	1,612.20		3.19		\$1,612.20	
Indirect deducted.....						
Total.....	2,712.14	166.06		943.88	1,612.20	

195. Radio station, Flying Pan Shoals, N. C. (Light Vessel No. 94).

G.....	\$639.52	\$322.08		\$317.44		
S.....	140.36				\$135.80	\$4.56
Total.....	779.88	322.08		317.44	135.80	4.56

196. Radio station, Pensacola, Fla.

R.....	\$3,623.01			\$3,623.01		
S.....	24,678.10	\$1,737.59		1,192.31		\$21,748.20
Total.....	28,301.11	1,737.59		4,815.32		21,748.20

197. Radio station, Port Royal, S. C.

G.....	\$359.39	\$136.72		\$222.67		
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201. Naval Station, Key West, Fla.

D.....	\$4,089.99	\$3,190.18		\$899.81		
K.....	101.22	86.41		14.81		
P.....	244.17	123.62		120.55		
R.....	31,980.84	487.10		28,404.75	\$3,088.09	
S.....	266,793.87	190,806.28		79,219.87	4,985.35	\$6.00
Z.....	37,487.70	6,496.66		31,092.04		\$51,319.41
Marine Corps.....	487.14	211.60		285.54		
Other Government departments.....	7,342.17	4,064.61		2,677.66		
Special deposits.....	67.34	38.40		28.94		
Total.....	348,604.44	145,105.86		138,643.57	13,074.34	6.00
					455.20	\$1,319.41

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

302. Radio Station, Key West, Fla.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
B.....	\$25,725.42	\$337.32		\$690.63	\$24,397.47			
S.....	12,121.44	1,225.87		9,835.07	1,060.50			
Total.....	37,846.86	1,563.19		10,525.70	25,457.97			

303. Radio station, Jupiter Inlet, Fla.

S.....	\$2,618.66	\$56.84		\$675.76	\$1,886.06			
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304. Aeronautic station, Pensacola, Fla.

A.....	\$45,318.96			\$45,318.96				
C.....	85,333.14	\$24,192.65		61,130.49				
D.....	26,086.98	13,906.90		11,178.08				
E.....	9,960.21	9,960.21		9,938.69				
K.....	948.57	114.62		83.53				
P.....	231,856.66	45,372.66		37,078.60	\$149,406.50			
R.....	510,883.22	217,834.77		138,915.51	53,284.47	\$65.06		\$101,263.43
S.....	21,401.06	9,867.22		11,533.84				
V.....	31,577.15	18,476.28		15,400.92				
Z.....	288.04			268.04				
Special deposits.....	1,919.95	1,137.02		782.93				
Total.....	967,833.96	331,334.11		332,461.41	202,689.97	65.06		101,263.43

305. Naval station, New Orleans, La.

A.....	\$60,167.45	\$47,711.94		\$12,665.51				
D.....	169,268.56	145,192.09		26,076.47				
K.....	23,646.41	18,774.19		6,872.23				
P.....	4,942.47	4,281.12		661.35				
R.....	25,482.17	15,745.73		8,540.63	\$217.78	\$1,377.78		
S.....	367,076.09	209,000.09		81,729.15	20,068.16	428.19	\$36.49	\$56,729.01
V.....	4.00	4.00						
Z.....	6,671.02	3,808.41		2,862.61				

Marine Corps.....	265.00	220.00	45.00	
Other Government departments.....	50,062.10	34,870.18	15,091.92	
Special deposits.....	15,428.88	9,911.45	5,516.93	
Total.....	753,613.74	486,674.40	20,315.94	36.40
			1,700.92	85,726.01

204. Radio station, New Orleans, La.

R.....	\$1,775.03	\$193.76	\$331.92	\$1,049.35	
S.....	11,076.47	2,592.68	7,080.94	65.00	\$1,387.85
Total.....	12,851.50	2,786.44	7,562.86	1,114.35	1,387.85

207. Radio station, Point Isabel, Brownsville, Tex.

R.....	\$32,464.81			\$32,452.21	\$12.00
S.....	5,001.72		\$24.60	5,577.12	
Total.....	38,066.53		24.60	38,029.33	12.00

208. Radio station, Heald Bank Lightship (Light Vessel No. 81).

S.....	\$106.92			\$88.20	\$18.72
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210. Naval training station, Great Lakes, Ill.

R.....	\$23,667.74	\$3,366.60	\$10,518.77	\$9,782.87	
S.....	606,433.62	64,733.47	208,950.45	64,064.77	\$82.55
V.....	2,779.80	2,580.49	199.11		
Total.....	631,880.96	70,680.56	219,668.33	73,837.14	82.55
					167,612.38

211. Radio station, Great Lakes, Ill.

S.....	\$3,760.49	\$8.32		\$3,772.67	\$0.50
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Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

312. Naval hospital, Fort Lyon, Colo.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
R.....	\$122.38			\$122.38				
S.....	274,409.80	833,345.15		10,049.17	\$138,901.66	\$383.65		\$91,720.27
V.....	9,566.58	9,543.92		12.66				
Total.....	284,088.76	42,889.07		10,184.21	138,901.66	383.65		91,720.27

229. Navy purchasing office, San Francisco, Cal.

S.....	\$1,736.80				\$1,107.63			\$629.17
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231. Navy yard, Mare Island, Cal.

A.....	\$1,743,184.58	\$769,873.79	\$188,844.65	\$795,268.14				
B.....	223,031.01	112.43	25.31	84.28				
C.....	920,523.65	617,648.77	129,705.32	278,251.68				
D.....	384,769.27	183,168.54	41,691.60	160,592.13				
E.....	62,739.28	42,387.20	11,841.99	8,410.14				
F.....	528,029.63	137,873.31	21,392.26	162,687.11	\$337,077.05			
G.....	2,076,023.38	1,398,504.18		397,615.83	28,945.99			\$282,984.46
H.....	44,101.84	23,621.85	3,515.74	6,783.26				
I.....	1,352,677.61	268,518.92	53,655.80	1,015,502.89				
J.....	397,047.79		324,095.79					
K.....	21,803.85	10,453.50	1,753.38	9,596.97				
L.....	109,843.05	59,879.32	14,322.32	35,641.41				
M.....	7,626.48	3,525.04	3,950.57	2,940.57				
N.....	1,776.47	1,270.03	86.26	2,428.18				
O.....			83,479.00	21,882.49				
Indirect divided.....		61,597.11						
Total.....	6,870,180.25	3,492,652.88		2,860,569.96	284,022.97			262,984.46

222. Naval ammunition depot, Mare Island, Cal.

R.....	88,273.11	\$2,647.07		\$5,688.04			
S.....	100,646.88	35,020.08		41,577.27	\$140.00		\$3,911.33
V.....	45,833.55	85,466.05		7,309.53			
Z.....	1,094.77	268.60		706.17			
Total.....	165,823.64	98,462.40		55,309.31	140.00		3,911.33

223. Naval training station, San Francisco, Cal.

R.....	68,909.42	\$3,448.67		\$22,067.86	\$28,492.89		
S.....	566,706.28	41,855.32		144,706.40	39,215.37	\$289.22	\$13.37
Z.....	620,705.70	45,333.99		106,864.26	67,688.26	289.22	13.37
Total.....							\$340,536.00

224. Fuel station, Tiburon, Cal.

R.....	84,333.20	\$733.02		\$1,033.33	\$1,066.85		
S.....	80,046.75	46,853.77		9,291.87	20,901.41		
Z.....	94.06	94.06					
Total.....	84,494.03	50,700.87		11,224.90	22,568.26		

225. Fuel station, San Diego, Cal.

R.....	\$21,908.96	\$425.36		\$10,651.63	\$10,725.72	\$106.25	
S.....	35,214.45	17,264.94		5,303.46	12,233.44	356.60	\$56.01
Total.....	57,123.41	17,690.30		15,955.09	22,959.16	462.85	56.01

226. Naval hospital, Mare Island, Cal.

R.....	\$2,124.00	\$22,867.17		\$64,354.80	\$2,124.00		\$51,400.61
S.....	191,314.77				82,670.99		31.20
Total.....	193,438.77	22,867.17		84,354.80	84,794.99		51,400.61

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

227. Radio station, San Diego, Cal. (Point Loma).

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
G.....	\$4,876.01	\$3,550.96		\$5,316.05				
S.....	11,537.85				\$11,537.85			
Total.....	20,413.86	3,550.96		5,316.05	11,537.85			

228. Radio station, San Diego, Cal. (high power).

R.....	\$64,494.28				\$64,494.28			
G.....	18,960.03	\$6,729.57		\$13,230.46				
S.....	65,784.94				65,784.94			
Total.....	149,239.25	5,729.57		13,230.46	130,279.22			

229. Radio station, Fort Arguello.

G.....	\$1,288.26	\$295.32		\$989.94				
S.....	1,580.00				\$1,580.00			
Total.....	2,868.26	295.32		989.94	1,580.00			

230. Radio station, Farallones.

G.....	\$3,612.79	\$278.74		\$3,894.06				
S.....	1,876.00				\$1,876.00			
Total.....	5,488.79	278.74		3,894.06	1,876.00			

231. Radio station, San Francisco, Yerba Buena.

R.....	\$11,194.65			\$350.48	\$10,844.17			
S.....	10,161.26	\$268.47		2,116.79	7,762.00			
Total.....	21,355.91	268.47		2,467.27	18,606.17			

222. Radio station, Mare Island.

G.....	\$16,701.47	\$4,329.47		\$12,372.00		\$4,283.33	
S.....	4,283.33						
Total.....	20,984.80	4,329.47		12,372.00		4,283.33	

223. Radio station, Eureka.

R.....	\$65.80			\$65.80			
G.....	4,615.80	\$918.55		3,696.96			
S.....	3,529.92	44.80		3,574.67		\$3,188.45	
Total.....	8,511.52	963.55		4,369.42		3,188.45	

224. Radio station, Cape Blanco.

G.....	\$1,809.43	\$176.26		\$1,633.17		\$1,961.25	
S.....	1,961.25						
Total.....	3,770.68	176.26		1,633.17		1,961.25	

225. Radio station, Sitka, Alaska.

G.....	\$9,749.76	\$965.51		\$2,784.25		\$5,117.52	\$512.16
S.....	5,629.68						
Total.....	9,379.44	965.51		2,784.25		5,117.52	512.16

226. Radio station, Cordova.

R.....	\$50,293.75					\$50,293.75	
G.....	9,491.76	\$1,613.13		\$7,878.63		6,568.70	
S.....	6,568.70						
Total.....	66,294.21	1,613.13		7,878.63		56,802.45	

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

287. Radio station, Kodiak.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
G.....	\$11,823.44	\$3,709.93		\$8,113.51				
S.....	3,862.50				\$3,862.50			
Total.....	15,685.94	3,709.93		8,113.51	3,862.50			

288. Radio station, Pribilof.

G.....	\$6,332.68	\$648.09		\$5,784.59				
S.....	4,728.00				\$4,728.00			
Total.....	11,100.68	648.09		5,784.59	4,728.00			

289. Radio station, Dutch Harbor.

G.....	\$3,731.34	\$351.28		\$3,380.06				
S.....	4,131.06				\$4,131.06			
Total.....	7,862.40	351.28		3,380.06	4,131.06			

291. Radio station, Marshfield, Oreg.

R.....	\$18,416.75				\$18,416.75			
G.....	2,198.23	\$296.85		\$1,901.45				
S.....	277.00				277.00			
Total.....	20,891.98	296.85		1,901.45	18,733.75			

292. Radio stations, St. Paul and St. George, Alaska.

G.....	\$24.78	\$24.78						
S.....	372.00				\$372.00			
Total.....	396.78	24.78			372.00			

282. Marine Corps base, San Diego, Cal.

R.....	\$250,000.00	\$163.63			\$250,000.00	
G.....	260.33					
B.....	412.63			\$105.60		412.63
Total.....	250,631.96	163.63		105.60	250,412.63	

280. Navy purchasing office, Seattle, Wash.

B.....	\$674.68				\$674.68	
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281. Navy yard, Puget Sound, Wash.

A.....	\$208,422.63	\$78,792.17	\$23,931.14	\$105,719.32		
C.....	1,724.09	1,076.35	178,260.20			
B.....	850,233.15	491,508.20	61,112.55	100,730.74		
D.....	376,235.46	152,626.22	27,844.19	15,290.38		
E.....	64,842.69	32,549.21		65,826.29		
F.....	183,112.70	32,192.23	7,812.68	65,083.03	\$50,025.74	
G.....	1,408,674.20	957,143.24	2,000.80	293,710.03	29,143.49	\$128,977.44
Z.....	26,633.45	20,153.01	46,512.72	3,831.64		
V.....	75,497.81	196,266.56	46,512.72	508,682.52		
Indirect deducted.....	289,977.36		289,977.36			
Marine Corps.....	206.73	133.58	55.40	17.77		
Other Government departments.....	44,455.31	24,222.73	8,192.58	12,040.00		
Special deposits.....	557.40	24,207.31	117.81	142.28		
Proceeds of sales.....	937.92	928.55	4.13	35.24		
Indirect divided.....		44,151.23	61,392.67	17,241.44		
Total.....	3,629,045.53	2,049,277.68		1,371,671.22	79,166.23	128,977.44

283. Naval ammunition depot, Puget Sound, Wash.

P.....	\$268.15	\$268.15				
R.....	51,226.20	10,686.58		\$11,971.72	\$28,567.90	
S.....	59,232.00	39,626.46		14,827.53	86.00	\$4,690.01
V.....	21,042.51	19,030.48		2,012.03		
Z.....	1,371.00	1,327.26		1,043.74		
Total.....	133,139.86	69,688.83		29,855.02	28,655.90	4,690.01

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

212. Naval hospital, Fort Lyon, Colo.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
R.....	\$122.38			\$122.38				
S.....	274,409.80	833,345.15		10,049.17	\$138,901.56	\$393.65		\$91,730.37
V.....	9,556.58	9,543.92		12.66				
Total.....	284,088.76	42,889.07		10,184.21	138,901.56	393.65		91,730.37

220. Navy purchasing office, San Francisco, Cal.

S.....	\$1,786.80				\$1,107.63			\$639.17
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231. Navy yard, Mare Island, Cal.

A.....	\$1,743,186.86	\$769,372.79	\$188,344.65	\$795,268.14				
C.....	223.01	112.42	25.31	84.28				
D.....	920,523.65	517,966.77	120,706.23	273,261.95				
E.....	364,750.27	182,106.64	41,941.60	160,862.13				
F.....	52,736.23	12,257.20	1,941.26	8,410.14				
G.....	524,628.23	137,857.11	21,262.26	162,857.11	\$237,077.05			
H.....	2,074,100.28	1,288,556.35	3,511.74	397,743.28	26,946.92			\$262,934.45
I.....	1,359,071.64	268,518.92	83,632.40	1,016,562.89				
J.....	327,024.79	84,403.79	9,583.97	9,583.97				
K.....	21,453.50	10,153.10	35,641.41	35,641.41				
L.....	169,843.05	69,876.20	14,322.32	2,950.57				
M.....	7,628.48	3,623.04	860.87	2,438.18				
N.....	1,770.47	1,370.03	86.26					
Indirect deducted.....			83,479.00	21,832.49				
Total.....	6,870,180.25	3,492,432.83		2,800,599.95	294,022.97			282,934.45

222. Naval ammunition depot, Mare Island, Cal.

R.....	86,978.11	82,647.07	85,628.04	.....	.....	.....	.....
S.....	107,646.88	85,020.88	41,877.37	.....	.....	.....	.....
V.....	45,804.88	86,084.08	7,309.83	.....	.....	.....	.....
Z.....	1,094.77	288.60	786.17	.....	.....	.....	.....
Total.....	165,523.64	96,462.40	55,809.31	140.60	.....	.....	3,911.33

222. Naval training station, San Francisco, Cal.

R.....	838,999.42	83,448.67	222,067.86	.....	.....	.....	.....
S.....	566,706.28	41,855.32	144,796.40	.....	.....	.....	.....
Total.....	620,705.70	45,303.99	166,864.26	.....	.....	.....	.....

224. Fuel station, Tiburon, Cal.

R.....	84,333.20	8703.02	81,933.33	.....	.....	.....	.....
S.....	80,046.75	49,853.77	9,291.57	.....	.....	.....	.....
Z.....	94.08	94.08	20,901.41	.....	.....	.....	.....
Total.....	84,494.03	50,700.87	11,224.90	.....	.....	.....	.....

225. Fuel station, San Diego, Cal.

R.....	271,908.96	8428.36	810,651.63	.....	.....	.....	.....
S.....	35,214.45	17,264.94	5,293.46	.....	.....	.....	.....
Total.....	87,123.41	17,690.30	15,955.09	.....	.....	.....	.....

226. Naval hospital, Mare Island, Cal.

R.....	82,124.00	.....	.....	.....	.....	.....	.....
S.....	191,314.77	22,867.17	84,854.80	.....	.....	.....	.....
Total.....	193,438.77	22,867.17	84,854.80	.....	.....	.....	.....

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

227. Radio station, San Diego, Cal. (Point Loma).

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
G.....	\$8,876.01	\$3,559.96	.....	\$5,316.05	.....	.....	.....	.....
S.....	11,537.85	.....	.....	.....	\$11,537.85	.....	.....	.....
Total.....	20,413.86	3,559.96	.....	5,316.05	11,537.85	.....	.....	.....

228. Radio station, San Diego, Cal. (high power).

R.....	\$64,494.28	.....	.....	.....	\$64,494.28	.....	.....	.....
G.....	18,980.03	\$5,720.57	.....	\$13,230.46	.....	.....	.....	.....
S.....	65,784.94	.....	.....	.....	65,784.94	.....	.....	.....
Total.....	149,239.25	5,720.57	.....	13,230.46	130,279.22	.....	.....	.....

229. Radio station, Port Arguello.

G.....	\$1,288.26	\$296.32	.....	\$99.94	.....	.....	.....	.....
S.....	1,580.00	.....	.....	.....	\$1,580.00	.....	.....	.....
Total.....	2,868.26	296.32	.....	99.94	1,580.00	.....	.....	.....

230. Radio station, Farallones.

G.....	\$3,612.79	\$278.74	.....	\$3,334.05	.....	.....	.....	.....
S.....	1,876.00	.....	.....	.....	\$1,876.00	.....	.....	.....
Total.....	5,488.79	278.74	.....	3,334.05	1,876.00	.....	.....	.....

231. Radio station, San Francisco, Yerba Buena.

R.....	\$11,194.65	.....	.....	\$300.48	\$10,844.17	.....	.....	.....
S.....	10,161.26	\$282.47	.....	2,115.79	7,762.00	.....	.....	.....
Total.....	21,355.91	282.47	.....	2,467.27	18,636.17	.....	.....	.....

222. Radio station, Mare Island.

G.....	\$10,701.47	\$4,329.47	\$12,372.00	\$4,283.33
B.....	4,283.33	4,329.47	12,372.00	4,283.33
Total.....	20,984.80	4,329.47	12,372.00	4,283.33

223. Radio station, Eureka.

R.....	\$45.80		\$45.80	
G.....	4,615.80	\$918.55	3,698.06	
B.....	3,229.92	44.80	598.67	\$3,188.45
Total.....	8,611.52	963.65	4,369.42	3,188.45

224. Radio station, Cape Blanco.

G.....	\$1,609.43	\$176.26	\$1,683.17	\$1,961.25
B.....	1,961.25	176.26	1,683.17	1,961.25
Total.....	3,770.68	176.26	1,683.17	1,961.25

225. Radio station, Sitka, Alaska.

G.....	\$3,749.76	\$965.61	\$2,784.26	\$612.16
B.....	5,029.68	965.61	2,784.26	6,117.62
Total.....	9,379.44	965.61	2,784.26	6,117.62

226. Radio station, Cordova.

R.....	\$50,233.75		\$50,233.75	
G.....	9,401.76	\$1,613.13	7,878.63	6,568.70
B.....	6,568.70	1,613.13	7,878.63	6,568.70
Total.....	66,204.21	1,613.13	7,878.63	66,802.45

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

287. Radio station, Kodiak.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
G.....	\$11,882.44	\$3,709.93		\$8,113.51				
B.....	2,882.50				\$3,882.50			
Total.....	15,865.94	3,709.93		8,113.51	3,882.50			

288. Radio station, Pribilof.

G.....	\$6,882.68	\$648.09		\$5,736.59				
B.....	4,728.00				\$4,728.00			
Total.....	11,108.68	648.09		5,736.59	4,728.00			

289. Radio station, Dutch Harbor.

G.....	\$2,731.34	\$851.28		\$2,880.06				
B.....	4,131.06				\$4,131.06			
Total.....	7,862.40	851.28		2,880.06	4,131.06			

291. Radio station, Marshfield, Oreg.

R.....	\$19,416.75				\$19,416.75			
G.....	2,286.88	\$286.88		\$1,983.45				
B.....	277.00				\$277.00			
Total.....	20,980.63	286.88		1,983.45	19,726.75			

292. Radio stations, St. Paul and St. George, Alaska.

G.....	\$24.78	\$24.78						
B.....	\$72.00				\$72.00			
Total.....	\$96.78	24.78			72.00			

243. Marine Corps base, San Diego, Cal.

R.....	\$250,000.00	\$163.63			\$250,000.00	
G.....	269.33					
B.....	412.63				412.63	
Total.....	250,681.96	163.63		105.69	250,412.63	

250. Navy purchasing office, Seattle, Wash.

S.....	\$674.68				\$674.68	
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251. Navy yard, Puget Sound, Wash.

A.....	\$208,492.63	\$78,792.17	\$23,981.14	\$105,719.32		
C.....	1,754.69	1,075.35	178,340.82	338.52		
D.....	850,333.16	481,308.22	178,283.20	190,741.74		
K.....	378,345.25	162,028.32	61,112.55	155,209.38		
P.....	94,342.69	52,560.21	22,956.19	18,826.29		
R.....	158,115.70	30,192.23	7,812.68	65,085.05	\$50,025.74	
G.....	1,408,974.20	957,143.24		283,710.03	29,143.49	\$128,977.44
V.....	26,035.45	20,153.01	2,000.80	3,881.64		
Z.....	751,481.81	196,286.56	46,512.73	508,682.52		
Z.....	229,977.36		229,977.36			
Indirect deducted.....						
Marine Corps.....	206.73	133.56		17.77		
Other Government departments.....	44,455.31	24,222.73	8,192.58	12,040.00		
Special deposits.....	567.40	307.31		142.28		
Proceeds of sales.....	967.92	928.55	4.13	35.24		
Indirect divided.....		44,151.23	61,392.67	17,241.44		
Total.....	3,629,065.58	2,049,277.96		1,371,671.22	79,166.23	128,977.44

252. Naval ammunition depot, Puget Sound, Wash.

P.....	\$268.15	\$268.15				
R.....	51,226.20	10,686.58		\$11,971.72	\$28,567.90	
S.....	56,232.00	39,626.48		14,827.53	86.00	\$4,690.01
V.....	21,042.61	19,030.48		2,012.03		
Z.....	1,371.00	327.26		1,043.74		
Total.....	133,139.96	69,988.96		29,856.02	28,655.90	4,690.01

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.
 283. Pacific Coast Torpedo Station.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
R.....	\$24,825.60	\$6,378.04		\$7,036.09	\$11,411.47			
S.....	77,460.06	29,913.00		26,394.49	1,156.76			\$20,006.81
Z.....	1,434.25	1,219.24		216.01				
Total.....	103,719.90	37,510.28		33,636.59	12,568.22			20,006.81
284. Naval hospital, Puget Sound, Wash.								
S.....	\$74,408.91	\$10,368.93		\$9,908.63	\$18,768.50	\$550.25		\$34,822.41
V.....	36.81			36.81				
Total.....	74,445.72	10,368.93		9,945.63	18,768.50	550.25		34,822.41

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
E.....	\$3,967.47	\$967.30	\$279.03	\$1,721.14				
R.....	8,133.63				\$8,133.63			
S.....	8,378.32	1,200.48		2,177.84				
Z.....	7,444.41				7,444.41			
Indirect deducted.....	78.48		78.48					
Indirect divided.....		150.00	200.55	50.55				
Total.....	21,845.35	2,317.78		3,949.53	15,578.04			

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
E.....	\$1,082.33	\$642.70	\$112.85	\$1,296.76				
R.....	91.50				\$91.50			
S.....	1,831.40	242.49		1,589.41				
Z.....	2,152.46	8.12			2,140.36			
Indirect deducted.....	7.80		7.80					
Indirect divided.....		70.00	110.95	40.95				
Total.....	6,089.31	963.31		2,857.14	2,243.96			

297. Radio station, Tatoonh.

E.....	\$2,179.87	\$368.53	\$114.52	\$1,696.82			
G.....	2,678.41	676.76		2,002.65			
S.....	1,782.00				\$1,782.00		
Indirect deducted.....	87.91		87.91				
Indirect divided.....		20.00	20.61				
Total.....	6,552.37	1,064.29		3,708.08	1,782.00		

298. Radio station, Keypport, Wash.

E.....	\$2,980.49	\$652.28	\$262.13	\$2,076.08			
R.....	40,701.52	2,065.86		2,267.13			
G.....	2,302.37	76.12		2,232.25			
S.....	228.75				228.75		
Indirect deducted.....	186.59		185.39				
Indirect divided.....		60.00	76.74	16.74			
Total.....	46,038.74	2,878.38		4,692.20	38,566.16		

291. Naval station, Guantanamo, Cuba.

D.....	\$9,079.20	\$5,901.08		\$3,179.12			
P.....	1,727.84	1,371.37		336.47			
R.....	98,412.42	14,869.04		67,725.50			
S.....	397,679.73	181,970.16		97,175.56			
V.....	7,871.23	6,498.73		1,372.50			
Z.....	29,745.34	15,698.68		14,146.66			
Marine Corps.....	11,148.92	6,242.09		4,806.83			
Other Government departments.....	3,082.42	2,147.12		885.30			
Special deposits.....	1,590.51	334.13		1,256.38			
Proceeds of sales.....	28.52	26.52					
Total.....	548,314.13	235,157.92		190,904.32	5,440.95		88.02
							116,722.92

292. Radio station, Guantanamo, Cuba.

R.....	\$259.13	\$141.61		\$117.52			
S.....	3,869.28	827.79		3,031.49			
Total.....	4,118.41	969.40		3,149.01			

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

311. Naval station, Pearl Harbor, Hawaii.

Title.	Total.	Labor.	Indirect.	Material supplied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
D.....	\$109,019.88	983,295.71		\$37,794.17				
E.....	4,531.94	3,331.24		1,235.79				
F.....	1,091,643.67	87,124.63		78,284.98	\$699,173.16			
G.....	347,431.28	199,108.43		49,100.77	30,823.60	\$41.00	\$274.61	\$63,062.85
H.....	41,512.62	17,031.90		24,333.72				
I.....	2,762.47	647.72		2,114.75				
J.....	5,982.80	3,205.92		2,746.94				
K.....	17,233.39	3,453.63		13,799.76				
Total.....	1,554,246.76	375,351.97		210,328.57	899,999.76	41.00	274.61	63,062.85

312. Radio station, Pearl Harbor, Hawaii.

R.....	\$109,367.12	\$1,623.68		\$13,006.46	\$93,773.95			
S.....	46,546.39	5,564.10		7,353.35	33,623.94			
Total.....	155,913.51	7,187.78		21,364.84	127,397.89			

322. Navy purchasing office, Manila, P. I.

S.....	\$7,003.96				\$4,366.31			\$2,642.55
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331. Naval station, Cavite, P. I.

C.....	\$101.61	\$74,547.35	\$10,019.03	\$101.61				
D.....	164,792.64	5,044.30	1,584.94	40,233.76				
E.....	23,151.20	7,753.04	666.03	16,654.89				
F.....	12,679.33	2,713.75	8.74	3,594.13	\$9,350.00			
G.....	26,323.70	31.77		19,543.74				
H.....	504,532.08	260,311.43		135,573.46	11,634.94	\$147.85	\$44.20	\$106,050.31
I.....	2,473.77	9,449.80	63.17	3,702.80				
J.....	17,437.10	9,449.80	1,034.77	7,123.79				
K.....	247,233.70	56,511.48	7,841.13	192,651.04				
L.....	19,466.44		19,466.44					
Total.....	1,034,533.53	814,111.93	12,525.24	397,487.27	120,975.94	147.85	44.20	106,050.31

Marine Corps.....	3,135.44	1,554.70	303.11	1,277.63			
Other Government departments.....	39,028.06	21,951.27	8,928.17	13,068.01			
Special deposits.....	3,938.01	1,773.43	252.19	1,927.91			
Proceeds of sales.....	1,134.86	1,106.10	7.23	23.26			
Indirect divided.....		6,602.73	11,084.60	4,481.77			
Total.....	983,713.01	421,451.69		434,318.12	21,214.84	147.85	44.20
							106,536.31

332. Naval station, Olongapo, P. I.

D.....	\$328,066.97	\$182,140.53	\$44,947.60	\$98,978.44			
K.....	47,410.39	19,621.90	5,247.71	22,440.78			
L.....	12,667.73	6,945.39	1,665.13	3,327.23			
E.....	23,026.46	2,233.60	1,983.95	13,965.98			
G.....	617,232.14	308,390.80		93,092.64	55,760.03		
V.....	17,288.81	7,140.74	1,449.14	8,038.93	5,406.34		\$2.42
Z.....	167,210.55	62,548.14		96,876.55			\$110,349.94
Indirect deducted.....	64,467.40		146.05				
Marine Corps.....		478.28		370.27			
Other Government departments.....	129,536.23	75,078.51	18,306.75	36,153.07			
Special deposits.....	5,319.26	2,822.77	693.59	1,802.90			
Proceeds of sales.....	4.53	3.84	.53	.46			
Indirect divided.....			27,279.90	7,535.31			
Total.....	1,192,003.26	689,141.69		382,942.84	11,166.37		2.42
							110,349.94

333. Naval ammunition depot, Olongapo, P. I.

R.....	\$1,918.11	\$324.43		\$1,593.68			
S.....	31,198.05	19,628.99		9,488.70	\$9.30		\$2,071.06
V.....	9,017.64	5,805.43		4,012.21			
Z.....	1,167.30	225.09		942.21			
Total.....	43,901.10	26,783.94		16,036.80	9.30		2,071.06

334. Naval hospital, Canacao, P. I.

R.....	\$1,391.75			\$1,391.75			
S.....	115,665.25	\$17,644.69		\$27,067.04	\$700.74		\$44,554.12
Total.....	117,056.00	17,644.69		27,067.04	700.74		44,554.12

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

326. Naval hospital, Olongapo, P. I.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
S.....	\$33,631.63	\$4,499.34	.....	\$3,151.42	\$9,821.78	\$1,581.96	.....	\$14,577.43

328. Radio station, Cavite, P. I.

E.....	\$30,439.01	\$9,052.27	\$1,390.45	\$20,007.19	.....	.....	.....	.....
R.....	104,120.46	70.36	11.72	32.85	\$104,008.33	.....	.....	.....
S.....	38,446.43	49.61	.....	46.69	36,913.98	.....	.....	\$2,686.15
Indirect deducted.....	158.79	.....	186.79	.....	.....	.....	.....	.....
Indirect divided.....	.....	800.00	1,263.38	453.38	.....	.....	.....	.....
Total.....	172,868.01	9,972.24	.....	20,540.11	139,919.51	.....	.....	2,686.15

327. Radio station, Olongapo, P. I.

R.....	\$210.00	.....	.....	.....	\$210.00	.....	.....	.....
S.....	139.50	139.50
Total.....	350.10	350.10

329. Radio station, Peking, China.

S.....	\$144.32	\$135.02	\$9.30
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331. Naval hospital, Yokohama, Japan.

S.....	\$12,871.90	\$6,776.95	\$1,915.76	\$4,180.19
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341. Naval station, Tutuila, Samoa.

D.....	\$318.24	\$318.24
R.....	3,636.11	1,536.23
S.....	130,461.11	26,870.85	\$2,076.97
V.....	1,008.36	1,008.36	.....	25,169.68	3,206.81	\$78,215.77
Z.....	1,919.73	822.24	.....	97.49	.....	.....
Other Government departments.....	.....	.....	.....	.....	.....	.....
Total.....	136,445.59	30,564.97	.....	24,944.04	3,313.81	78,215.77

342. Radio station, Tutuila, Samoa.

R.....	\$6,722.97	\$1,685.00	.....	\$5,037.97	.....	.....
S.....	3,409.84	320.08	.....	1,556.13	\$901.63	\$603.00
Total.....	10,132.81	2,005.08	.....	6,594.10	901.63	603.00

351. Naval station, Guam, Marianas Islands.

D.....	\$19.30	\$11.27	.....	\$8.03	.....	.....
R.....	84,447.62	13,960.31	.....	22,155.09	.....	.....
S.....	265,156.20	80,691.17	.....	38,755.26	.....	.....
V.....	3,306.74	604.03	.....	2,701.71	7,280.36	\$113,244.20
Z.....	22,574.68	16,163.47	.....	6,211.21	.....	.....
Marine Corps.....	676.31	676.31	.....	.....	.....	.....
Other Government departments.....	55.86	55.86	.....	.....	.....	.....
Special deposits.....	21,866.43	8,076.47	.....	13,789.96	.....	.....
Total.....	387,901.14	120,287.89	.....	84,621.26	54,612.57	2,930.76

352. Radio station, Guam, Marianas Islands.

R.....	\$22,822.64	\$10,152.03	.....	\$5,690.37	.....	.....
S.....	2,267.84	756.70	.....	668.66	\$8,080.24	.....
Total.....	25,090.58	10,908.73	.....	5,061.62	9,100.03	.....

361. Fuel station, Pichilique Bay, Mexico.

S.....	\$3,732.00	\$172.76	\$54.73	\$385.26	\$2,910.97	\$208.29
Indirect expense deducted.....	54.73	.....	.....	.....	.....	.....
Total.....	3,677.27	172.76	.....	385.26	2,910.97	208.29

Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

373. Midshipman's store, Naval Academy.

Title.	Total.	Labor.	Indirect.	Material supplied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
B.....	\$702.18			\$702.18				

403. Radio station, Siasconnet, Mass.

B.....	\$1,246.97							\$1,246.97
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404. Sayville, Long Island (high power).

B.....	\$3,660.90				\$304.00			\$3,356.90
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405. Radio station, New York Herald station.

G.....	\$90.72			\$90.72				
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408. Radio station, Endenada.

G.....	\$79.70	\$10.00		\$69.70				
B.....	14,165.25				\$13,451.30			733.95
Total.....	14,244.95	10.00		69.70	13,451.30			733.95

467. Radio station, Tuckerton, N. J.

G.....	\$1,045.51			\$1,045.51				
B.....	7,980.23				\$4,500.31	\$192.27		\$3,287.74
Total.....	9,045.63			1,045.51	4,500.31	192.27		3,287.74

402. Radio station, Cape May, N. J.

\$27.54	\$27.54				
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409. Radio station, Virginia Beach, Va.

\$372.00	\$372.00				
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413. Radio station, Berwood, La.

\$4.08	\$4.08				
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414. Radio station, Fort Morgan, Ala.

\$30.16	\$30.24	\$4.02			
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415. Radio station, Mobile, Ala.

\$8.30	\$8.30				
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416. Radio station, Fort Arthur, Tex.

\$7.89	\$7.89				
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417. Radio station, Galveston, Tex.

\$3.25	\$3.25				
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422. Radio station, Duluth, Minn.

\$8.10	\$8.10				
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Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
434. Radio station, East San Pedro, Cal.								
G.	\$306.54	\$157.35		\$148.19				
435. Radio station, Los Angeles, Cal. (Federal Co.).								
G.	\$421.23	\$167.64		\$253.59				
436. Radio station, South San Francisco, Cal. (high power).								
G.	\$400.29	\$185.23		\$215.06				
437. Radio station, Bolinas, Cal. (high power).								
G.	\$970.96	\$376.57		\$594.09				
438. Radio station, Ketchikan, Alaska (high power).								
G.	\$194.36	\$65.72		\$283.64				
440. Radio station, Seattle, Wash. (harbor depot).								
G.	\$20.23	\$6.40		\$13.83				
443. Radio station, Avalon, Cal.								
G.	\$992.00	\$60.91		\$281.18				

444. Radio station, Hillcrest, Cal.

G.....	\$348.68	\$102.39	\$186.44			
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445. Radio Station, Marshall, Cal.

G.....	\$556.63	\$224.26	\$342.37			
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446. Radio Station, Grant Hotel, San Diego, Cal.

G.....	\$121.35	\$65.72	\$25.03			
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447. Radio Station, Juneau, Alaska.

G.....	\$289.76	\$165.00	\$124.76			
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448. Radio Station, Hobart Building, San Francisco, Cal.

G.....	\$373.75	\$157.35	\$216.40			
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449. Radio Station, Beach Station, San Francisco, Cal.

G.....	\$330.92	\$157.35	\$173.57			
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451. Radio station, Belmar-Brunswick, N. J.

G.....	\$389.77		\$389.77			
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Statement 16.—EXPENDITURES BY YARDS AND TITLES—Continued.

Ships and Naval Establishment in general.

Title.	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
A.....	\$33,018,548.24				\$33,002,120.39	\$16,437.85		
B.....	12,329,478.11				165,749.96	12,186,009.49	\$718.66	
C.....	60,833,698.42				1,560,183.23	21,463,820.06	28,675.10	\$37,781,020.01
D.....	973,138.90				646,927.23	182,361.36	143,908.32	
E.....	415,842.97				45,574.29	370,268.68		
F.....	30,833.85				50,431.21	40,368.06	66.58	
G.....	28,439,935.72				5,249,757.88	8,531,010.48	1,315,028.03	14,343,539.33
H.....	96,666,564.92				96,117,800.50	478,280.17	70,384.25	
I.....	14,573,226.54				9,152,550.38	689,866.76	119,832.92	4,609,966.48
J.....	690,292.47					690,292.47		
K.....	11.52					11.52		
L.....	7,840,012.43					7,840,012.43		
M.....	67,921.99					67,921.99		
Total.....	237,631,611.06				146,661,226.06	53,556,649.34	1,679,210.80	56,784,626.83

RECAPITULATION.

[Showing gross expenditures of money and issues of material for Naval Establishment.]

A.....	\$44,858,781.14	\$6,164,121.17	\$1,306,312.85	\$4,710,798.68	\$33,002,120.39	\$16,437.85		
B.....	12,329,478.11	26,854.50	490.96	62,104.83	165,749.96	12,186,009.49	\$718.66	
C.....	60,922,187.75	4,038,260.80	1,242,425.97	1,921,577.84	1,560,183.23	21,463,820.06	28,675.10	\$37,781,020.01
D.....	8,775,448.51	2,037,765.78	772,025.76	2,207,698.58	646,927.23	182,361.36	143,908.32	
E.....	6,344,214.93	546,745.89	134,111.64	207,698.58	45,574.29	370,268.68		
F.....	983,420.96	614,464.10	117,668.61	938,365.17	50,461.21	40,368.06	66.58	
G.....	5,111,995.80	324,632.41	20.46	673,230.61	3,441,036.59	1,646.58		
H.....	3,497,871.81	19,324,628.99	116.90	4,071,964.83	703,966.15	1,466.64	13,466.16	1,914,708.48
I.....	20,137,544.83	3,225,811.47	116.90	1,897,833.26	1,606,092.69	37,840.63	48,566.47	3,262,099.08
J.....	10,176,969.36	2,167,136.78	200,201.64	1,217,368.56	3,249,757.88	8,531,010.48	1,315,028.03	14,945,539.33
K.....	23,094,640.60				96,117,800.50	478,280.17	70,384.25	
L.....	96,666,564.92							
M.....	3,746,263.17							
N.....	9,100,157.61							
O.....	27,094,202.66							
P.....	14,628,787.86							
Q.....	1,466,697.76							
R.....	1,466,697.76							
S.....	284,738.83							
Total.....	444,858,781.14	86,164,121.17	1,306,312.85	44,710,798.68	333,002,120.39	12,186,009.49	119,532.92	4,609,966.48

Cash sales.....	7,840,012.43				7,840,012.43
Proceeds of sales.....	45,844.83				45,844.83
Allied Powers.....	67,821.99				67,821.99
Indirect divided.....					
Total.....	38,740.97	1,863.14	6,740.71		47,344.81
	1,357,605.06	1,779,168.31	421,563.25		3,558,336.62
	43,920,245.93		45,419,367.08	154,880,794.14	244,220,407.15
					1,741,232.49
					61,911,331.33

RECONCILEMENT WITH STATEMENT 1 (COST OF THE NAVY).

[For reconciliation with Statement 42, see Statement 42.]

APPROPRIATION ACCOUNTS, BY TITLES.

Total expenditures for NAVY, per Statement 16.....					\$380,419,574.59
Deductions not chargeable to annual cost:					
Title X—					
Charges to (Statement 16).....				895,665,554.92	
Increase for fiscal year (Statements 27 to 35, inclusive).....				38,474,714.85	
Net deduction on account of stores purchased but not issued.....				858,191,840.04	
Title Z—					
Charges to (Statement 16).....				37,094,300.66	
Increase for fiscal year (Statement 26).....				7,622,346.31	
Net deduction on account of material manufactured but not issued				26,471,954.35	
Deduct for expenditures on account of other Government departments, special deposits, allied powers, cash sales, and proceeds of sales (Statement 16).....				9,599,204.52	
Deduct for checkages against pay accounts (Statement 1).....				1,376,440.90	
Deduct for expenditures of title B (equipment) stores (Statement 26).....				2,842,987.25	
Deduct for net increase in Marine Corps stores (Statement 37).....				101,482,428.09	
Net total deductions.....				2,460,031.02	
Expenditures chargeable to annual cost as per Statement 1.....					99,016,398.07
					261,403,176.33

Statement 17.—TOTAL PROPERTY INVESTMENT OF THE NAVY.

Ships:		
Hull and machinery.....	\$402,233,761.74	
Armor and permanent ordnance fittings.....	114,206,644.62	
Batteries.....	57,108,601.24	
Equipment and outfit.....	19,291,606.28	\$592,840,412.78
Stations:		
Cost of original site.....	689,356.26	
Cost of additional land.....	3,712,511.85	
Cost of improvements.....	216,850,730.57	221,252,698.68
Stores:		
Supplies ashore.....	133,161,615.40	
Supplies afloat.....	30,458,712.92	
Material in process.....	17,423,880.39	181,044,188.71
Total.....		906,137,170.17

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipage).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
Total	\$402,233,761.74	\$114,206,044.52	\$57,108,501.24	\$19,201,505.28	\$592,840,412.78	\$126,259,018.26
BATTLESHIPS—FIRST LINE.						
Delaware.....	4,397,026.67	2,433,770.21	1,127,061.47	286,986.98	8,194,865.28	902,450.34
North Dakota.....	4,746,313.18	2,498,373.98	1,116,706.90	245,467.79	8,607,860.73	815,441.40
Florida.....	6,344,626.66	2,639,240.08	1,080,664.05	260,946.31	10,336,506.10	449,900.66
Utah.....	4,730,022.52	2,792,371.60	1,244,253.94	251,566.26	8,468,546.26	426,254.49
Wyoming.....	4,739,116.01	3,503,081.77	1,451,672.19	312,663.59	10,006,533.56	415,851.69
Arkansas.....	6,071,660.43	3,305,161.27	1,422,833.49	288,930.72	10,112,605.21	280,379.29
New York.....	6,326,843.54	3,456,630.96	1,260,972.20	268,444.24	11,072,919.94	671,643.74
Nevada.....	6,102,942.08	3,429,230.41	1,261,921.28	270,557.06	11,065,651.03	671,643.74
Ohio.....	6,200,322.47	3,603,846.98	1,170,035.18	317,213.02	11,111,437.63	671,643.74
Oklahoma.....	6,627,273.92	4,264,560.08	1,486,621.20	360,142.59	12,724,557.79	43,683.15
Pennsylvania.....	5,637,708.12	4,264,560.08	1,486,621.20	211,382.27	8,723,235.63	26,363.27
New Mexico.....	5,841,093.92	3,695,527.51	.....	.....	9,611,171.24	.....
Idaho.....	5,370,814.97	3,770,077.32	.....	.....	9,138,923.76	.....
Tennessee.....	5,387,765.68	3,768,107.78	.....	.....	9,138,923.76	.....
California.....	5,800,692.78	3,086,072.13	.....	.....	3,473,837.71	.....
Colorado.....	230,000.00	8,013,877.22	.....	.....	3,594,470.00	.....
Maryland.....	674,100.00	224,212.01	.....	.....	453,212.01	.....
Washington.....	24,24	85,800.46	.....	.....	1,000,813.97	.....
West Virginia.....	224,700.00	248,339.76	.....	.....	86,824.70	.....
Total	87,227,037.07	58,539,765.82	16,235,874.09	3,226,405.83	164,289,103.80	4,206,133.13
BATTLESHIPS—SECOND LINE.						
Indiana.....	3,379,936.44	1,933,711.61	.....	2,383.49	5,326,031.54	2,136,756.43
Massachusetts.....	3,435,940.03	1,933,154.94	.....	5.70	4,409,085.23	1,201,546.78
Oregon.....	3,213,570.04	1,909,481.83	438,577.15	112,174.87	5,164,723.83	1,622,316.68
Iowa.....	3,445,526.26	1,870,092.04	.....	.....	5,026,144.57	1,486,271.09
Kentucky.....	2,459,611.45	1,568,483.01	471,646.77	153,607.15	4,553,208.39	1,384,634.76
Illinois.....	2,989,611.45	1,204,317.81	594,222.02	116,903.16	4,804,154.44	1,384,634.76
Alabama.....	2,857,103.44	1,219,930.63	432,263.21	127,488.37	4,537,785.65	1,371,791.54
Wisconsin.....	2,905,601.61	1,253,015.92	607,674.46	147,634.80	4,773,926.85	1,371,791.54
Maine.....	3,269,530.53	1,267,833.99	545,034.66	145,594.30	4,794,130.41	1,371,791.54
Total	3,379,936.44	1,267,833.99	545,034.66	128,823.94	5,241,623.12	1,423,860.17

Government built.

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE SHIPS—Continued.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipment).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
BATTLESHIPS—SECOND LINE—continued.						
Missouri.....	\$3,150,003.72	\$1,288,921.36	\$721,417.93	\$152,738.85	\$5,313,081.86	\$1,326,180.63
Ohio.....	3,096,040.66	1,379,235.89	690,080.86	142,948.81	5,307,665.12	1,204,198.99
Virginia.....	3,695,332.47	1,794,703.65	792,262.29	200,981.89	6,494,280.37	1,460,116.78
Nebraska.....	3,949,703.05	1,729,752.91	876,725.23	192,948.13	6,749,187.37	1,219,940.40
Georgia.....	3,762,708.96	1,778,570.62	932,581.93	252,948.34	6,726,799.86	1,566,135.06
New Jersey.....	3,620,376.70	1,765,436.71	991,998.60	190,752.29	6,568,557.30	1,500,314.24
Rhode Island.....	1,743,192.80	1,483,192.80	924,126.73	208,577.50	6,470,077.83	1,398,666.47
Connecticut.....	4,066,336.78	1,828,397.99	1,112,343.00	189,446.24	7,406,466.24	1,398,073.77
Delaware.....	4,186,351.94	1,896,179.25	1,146,243.00	194,781.71	7,423,555.90	1,419,501.52
Vermont.....	4,321,319.29	1,944,737.29	1,167,271.99	169,328.93	7,502,658.50	1,369,459.20
Wisconsin.....	4,239,216.09	1,890,132.75	1,212,622.83	274,145.00	7,316,116.70	1,307,450.40
Minnesota.....	4,182,172.57	1,841,081.42	1,059,272.83	200,983.06	7,293,510.68	1,040,265.06
New Hampshire.....	3,182,172.57	1,797,235.56	779,735.99	200,130.56	6,079,192.15	969,820.66
South Carolina.....	3,601,681.07	1,841,081.42	1,059,272.83	200,130.56	6,752,166.88	1,040,265.06
Michigan.....	3,848,615.13	1,846,004.74	806,810.87	204,781.15	6,706,191.89	760,228.76
Total.....	89,597,319.90	42,639,428.33	17,988,598.54	3,893,792.11	154,088,138.88	34,731,834.12
BATTLE CRUISERS.						
No. 1.....	8,712.39	7,153.46	.....	.....	15,865.85	.....
No. 2.....	.....	7,153.46	.....	.....	7,153.46	.....
No. 3.....	.....	7,153.46	.....	.....	7,153.46	.....
No. 4.....	.....	7,153.46	.....	.....	7,153.46	.....
Total.....	8,712.39	28,613.84	.....	.....	37,326.23	.....
SCOUT CRUISERS.						
Scout cruiser No. 4.....	199,000.00	.....	.....	.....	199,000.00	.....
ARMORED CRUISERS.						
Pittsburgh.....	3,651,409.22	905,677.02	652,262.88	216,119.71	5,725,468.83	1,384,180.27
Kingston.....	3,960,710.24	994,596.17	528,021.09	169,239.04	5,679,176.54	1,326,573.94
San Diego.....	3,685,187.50	871,279.61	645,338.76	231,536.11	5,433,342.08	1,283,543.46
Pueblo (Old Colorado).....	3,685,187.50	871,279.61	645,338.76	231,536.11	5,433,342.08	1,283,543.46
French....	3,685,187.50	871,279.61	645,338.76	231,536.11	5,433,342.08	1,283,543.46
South Dakota.....	3,685,187.50	871,279.61	645,338.76	231,536.11	5,433,342.08	1,283,543.46
Seattle.....	4,000,470.32	994,470.32	694,470.32	201,820.32	6,090,231.30	1,461,077.35
North Carolina.....	3,277,484.12	1,005,862.38	833,933.58	181,820.32	5,298,100.40	974,017.40
Montana.....	3,679,463.54	1,101,623.64	879,592.48	167,514.53	5,668,194.19	679,417.40
Total.....	35,228,267.15	8,431,680.91	6,017,675.56	1,800,795.70	51,478,400.34	8,603,966.90

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS.—Continued.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipment).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
DESTROYERS.						
Allen.....	\$601,934.00	\$947.63	\$223,351.68	\$23,279.68	\$1,049,423.99	\$11,688.94
Ammen.....	655,075.03	416.73	62,131.09	25,406.20	743,032.06	128,578.95
Aylwin.....	800,340.13	628.84	6,334.40	25,836.72	833,343.09	96,711.60
Bach.....	790,096.73	614.65	101,211.23	25,079.53	907,022.12	175,463.40
Beale.....	696,166.12	238.30	67,546.47	24,251.64	811,194.53	116,810.08
Bennah.....	783,062.73	446.33	137,454.87	27,067.93	948,011.86	99,739.98
Burrows.....	679,302.37	439.51	70,518.06	24,608.26	774,868.43	46,638.43
Chadwell.....	306,954.17	4.92	75,186.78	30,353.36	398,589.09	89,391.34
Cassin.....	790,151.25	1,216.99	146,788.35	30,353.37	1,001,944.54	62,662.53
Conner.....	649,159.57	2,000.00	146,788.35	30,353.37	1,001,944.54	16,649.34
Gearyham.....	182,283.78					
Graven.....	706,014.06	1,176.05	69,259.42	18,045.31	919,301.26	73,493.52
Cummings.....	505,408.85	730.30	270,551.07	27,548.25	1,130,839.49	47,225.54
Daunt.....	615,538.85	620.73	139,644.33	20,998.61	1,022,609.42	1,248.96
Davis.....	747,184.15	923.38	71,243.76	20,088.10	939,419.32	1,024.07
Dryden.....	643,694.54	1,663.20	74,698.34	20,811.64	789,374.42	117,590.73
Duncan.....	831,417.72	966.43	72,701.38	23,248.01	918,339.41	67,483.73
Efessou.....	643,553.44	172.13	140,791.73	26,323.51	811,461.61	32,872.58
Fanning.....	639,305.08	657.50	65,731.40	26,625.45	732,322.62	105,021.38
Flusser.....	133,047.63		65,385.50	15,880.03	214,313.16	157,002.45
Grvin.....	662,511.82	1,412.93	61,975.73	27,214.26	753,114.87	79,954.62
Hamley.....	530,073.37	885.48	150,243.51	24,430.57	715,432.93	11,482.46
Jacob Jones.....	651,277.47	261.13	65,607.59	40,545.87	768,693.93	93,905.98
Jervis.....	664,914.06	961.24	57,738.14	27,107.97	750,731.41	106,854.01
Jenkins.....	665,513.06	897.67	62,584.55	22,351.21	751,447.09	106,117.23
Jonest.....	604,488.58	312.53	76,682.07	23,722.75	705,203.81	216,230.64
Lamson.....	703,000.00				703,000.00	
Manley.....	663,944.76	842.06	70,618.40	25,367.62	760,322.83	156,813.56
McCall.....	855,871.49	157.81	145,877.82	31,996.42	1,033,623.54	55,930.69
McDougal.....	673,547.02	366.51			673,913.53	84,246.67
Mayrant.....	644,102.64	341.65	58,463.84	22,652.39	725,560.32	135,049.08
Monaghan.....	876,200.93	190.23	134,841.44	45,655.42	1,057,778.03	44,437.51
Nicholson.....	881,513.76	190.23	106,406.90	33,333.52	1,021,453.81	19,083.35
O'Brien.....	790,092.77	459.47	96,904.06	32,604.27	919,060.57	77,903.08
Parver.....	647,360.02	434.99	70,868.37	20,337.53	749,000.91	86,579.43
Peterson.....	652,928.16		72,969.73	31,942.71	757,840.64	136,561.69
Predding.....	614,353.23	782.58	76,400.92	30,447.48	721,584.19	149,828.34

Porter.....	890,301.09	997.00	187,410.49	36,457.77	1,067,266.95	3,235.09
Preston.....	632,864.46		78,687.81	16,815.95	783,338.22	184,705.99
Reed.....	637,600.90		92,200.82	19,124.84	748,028.65	207,087.52
Rosen.....	642,781.30	331.44	71,708.38	15,791.65	730,284.65	187,604.71
Sampson.....	791,288.23	748.84	208,148.70	26,698.27	1,046,645.04	3,020.98
Shaw.....	873,335.98	114,421.66	131,421.66	28,977.28	1,019,277.28	1,843.18
Smith.....	608,437.33	78,927.74	68,645.09	14,518.16	697,271.54	2,158.32
Street.....	617,474.90	850.81		23,141.48	706,488.54	174,300.72
Stockton.....	549,837.02			24,283.79	706,208.59	141,683.76
Terry.....	639,289.34	216.21	70,158.17	31,107.99	740,769.71	288,205.86
Tripp.....	664,810.32	1,033.40	64,700.11	20,476.99	751,020.40	109,078.58
Tucker.....	889,271.83	1,085.41	133,685.36	24,870.66	1,048,833.31	4,735.83
Wedsworth.....	913,854.06	764.41	135,858.27	31,502.04	1,071,966.80	10,354.03
Wainwright.....	649,564.96	900.61	143,835.41	24,673.45	1,006,874.43	18,308.87
Walke.....	649,307.18	1,089.61	49,182.32	20,734.35	720,283.46	148,803.06
Warrington.....	675,060.75	49,451.10	70,451.10	23,520.74	769,447.15	166,250.70
Wilkes.....	898,667.70	837.30	187,128.38	42,889.36	1,029,694.56	9,745.39
Wishlow.....	874,848.16	180.38	123,431.98	26,524.04	1,025,884.56	39,773.14
No. 75.....	115,000.00				115,000.00	
No. 76.....	115,000.00				115,000.00	
No. 77.....	115,000.00				115,000.00	
No. 78.....	115,000.00				115,000.00	
No. 79.....	97,048.75				97,048.75	
No. 80.....	97,048.75				97,048.75	
No. 81.....	97,048.75				97,048.75	
No. 82.....	97,048.75				97,048.75	
No. 83.....	97,048.75				97,048.75	
No. 84.....	97,048.75				97,048.75	
No. 85.....	97,048.75				97,048.75	
No. 86.....	97,048.75				97,048.75	
No. 87.....	97,048.75				97,048.75	
No. 88.....	97,048.75				97,048.75	
No. 89.....	23,291.49				23,291.49	
No. 90.....	24,126.81				24,126.81	
No. 91.....	26,987.92				26,987.92	
No. 92.....	26,987.92				26,987.92	
No. 93.....	26,987.92				26,987.92	
No. 94.....	26,987.92				26,987.92	
No. 95.....	26,987.92				26,987.92	
No. 96.....	26,987.92				26,987.92	
No. 97.....	26,987.92				26,987.92	
No. 98.....	26,987.92				26,987.92	
No. 99.....	26,987.92				26,987.92	
No. 100.....	26,987.92				26,987.92	
No. 101.....	26,987.92				26,987.92	
No. 102.....	26,987.92				26,987.92	
Total.....	42,370,459.30	31,951.29	6,294,713.08	1,344,444.42	48,981,568.09	4,442,964.83

COAST TORPEDO VESSELS—DESTROYERS

Bainbridge.....	303,715.70	184.93	49,034.97	12,722.33	365,257.93	299,433.49
Barry.....	303,306.87	82.26	52,224.15	12,776.80	388,390.10	281,089.23
Chaunoy.....	302,978.61	308.87	51,958.95	11,709.90	386,956.33	292,310.90
Dale.....	277,069.92	1,920.43	55,901.06	11,362.57	346,254.00	281,176.53

¹ Government built.

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS—Continued.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipment).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
COAST TORPEDO VESSELS—DESTROYERS—continued.						
Deebur.....	\$274,016.93	\$2,021.06	\$41,577.12	\$11,440.24	\$329,055.47	\$890,400.02
Hopkins.....	310,737.76	2,613.09	56,220.88	16,648.43	385,219.60	294,979.41
Hull.....	315,740.24	2,575.81	64,578.69	13,418.90	396,314.64	279,326.97
Lawrence.....	296,639.56	20.31	47,126.83	9,762.98	353,559.53	371,016.99
MacDonough.....	397,023.98	.....	50,873.79	11,262.94	399,160.78	198,908.70
Paul Jones.....	301,279.01	.....	58,811.10	12,408.77	372,498.88	263,264.83
Perry.....	303,300.47	.....	59,693.88	12,538.52	375,532.87	246,035.45
Preble.....	302,952.71	.....	59,317.51	11,661.42	373,951.64	238,254.79
Stewart.....	297,247.68	2,629.62	60,339.45	11,696.16	371,912.90	292,747.46
Thurston.....	302,029.08	2,538.04	63,101.70	19,617.20	387,286.00	252,543.45
Whipple.....	301,194.98	2,596.41	62,746.77	12,849.95	377,387.11	266,637.02
Warden.....	300,755.52	2,545.33	52,773.30	11,860.58	377,934.73	252,971.47
Total.....	4,789,909.10	19,979.09	886,890.67	202,284.73	5,890,158.59	4,351,911.41
COAST TORPEDO VESSELS—TORPEDO BOATS.						
Beley.....	166,065.40	3,880.40	39,066.68	.....	8,406.39	101,967.83
Bailey.....	230,418.99	.....	14,151.05	4,689.28	281,772.16	198,186.41
Barnes.....	165,752.26	.....	19,675.26	5,628.89	165,752.26	101,837.91
Biddle.....	165,796.01	8.00	7,373.20	6,211.12	184,644.34	91,873.91
Bialaly.....	180,305.02	1,800.00	1,055.18	3,355.39	206,496.17	76,547.83
Dahlgren.....	196,561.07	.....	4,932.65	180,818.71	382,312.43	96,446.08
De Long.....	172,010.88	1,800.00	330.61	3,443.09	187,590.58	97,204.42
DuPont.....	164,008.09	1,492.97	12,978.53	11,020.72	189,500.31	141,570.21
Farragut.....	245,414.46	5,487.77	2,099.21	3,197.23	276,199.47	160,414.63
Foots.....	117,656.22	1,660.42	1,981.39	10,966.68	134,513.18	96,608.03
Gatesborough.....	263,948.82	2,298.87	6,735.47	2,845.49	289,849.23	71,394.25
Morris.....	87,478.68	7,445.19	1,922.89	6,941.23	116,489.51	79,491.45
Rodgers.....	106,153.21	1,567.42	7,012.88	3,101.20	127,244.79	122,899.92
Sunbreak.....	145,209.20	.....	3,086.98	4,132.74	152,439.92	40,564.95
Sumers.....	140,797.50	3,628.98	1,029.30	3,745.27	149,181.05	107,267.04
Thornston.....	140,797.50	.....	1,238.77	3,745.27	145,781.54	106,976.79
Thayer.....	194,130.53	2,577.12	129,727.40	79,864.97	207,089.89	71,737.75
Total.....	2,815,808.65	36,707.92	129,727.40	79,864.97	3,062,108.54	1,744,659.00

SUBMARINES.

A-3	178,657.80	7,822.25	2,064.26	183,554.29	80,572.05
A-4	178,384.25	9,484.72	2,085.15	194,916.27	82,967.83
A-5	179,071.04	11,097.17	2,301.18	197,069.90	84,354.97
A-6	179,288.41	9,723.62	2,870.83	194,991.98	84,308.16
A-7	171,843.44	7,188.02	1,635.26	181,066.55	92,540.01
B-1	200,857.48	8,750.76	2,823.04	185,069.55	82,830.80
B-2	187,982.32	13,803.60	2,530.00	204,774.54	83,575.10
B-3	182,077.84	14,243.11	2,654.12	197,887.07	44,748.70
C-1	253,119.81	10,147.38	4,480.27	268,906.46	123,392.60
C-2	266,832.16	31,295.11	2,502.68	298,906.46	161,680.87
C-3	300,331.08	25,874.35	3,602.68	336,904.51	60,158.64
C-4	266,078.37	31,636.40	3,666.04	307,914.81	60,158.64
D-1	344,142.36	35,544.48	6,391.05	340,013.90	67,137.04
D-2	377,234.25	26,897.28	3,722.31	374,201.98	74,832.46
D-3	376,100.98	26,519.04	6,854.48	408,608.67	114,914.74
E-1	380,318.81	25,929.62	3,140.06	407,862.90	125,749.61
E-2	387,788.57	26,071.85	2,472.14	417,342.56	94,148.81
F-1	390,930.12	24,787.70	9,337.04	421,913.31	186,362.79
F-2	468,770.48	25,890.93	2,418.00	390,960.12	134,706.55
F-3	470,519.44	25,584.17	2,242.00	497,066.41	178,868.05
G-1	469,568.17	25,616.06	3,534.33	498,346.60	174,332.59
G-2	470,904.20	12,519.36	10,353.37	486,738.58	125,900.63
G-3	479,349.86	1,754.59	9,616.68	490,721.13	119,239.90
G-4	529,832.47	2,992.34	9,852.78	564,647.59	34,029.77
H-1	439,432.85	723.85	11,026.23	448,162.93	81,544.74
H-2	519,464.25	16,496.11	11,766.15	547,746.51	22,198.74
H-3	518,008.98	20,682.73	9,817.14	549,108.75	50,870.89
K-1	493,769.79	20,920.62	6,604.69	547,238.39	94,194.83
K-2	494,522.82	49,943.60	3,097.90	547,564.22	87,775.89
K-3	529,447.91	25,478.22	7,942.84	562,868.97	104,407.63
K-4	529,832.51	24,234.78	6,762.95	560,821.24	24,070.96
K-5	504,515.83	49,519.76	12,570.40	566,906.98	33,572.44
K-6	500,006.72	49,470.86	6,066.82	556,043.41	33,757.53
K-7	541,271.76	24,502.74	3,833.92	569,598.41	46,527.03
K-8	541,024.26	25,650.60	3,016.18	569,691.04	25,868.97
L-1	532,022.09	40,130.14	8,479.93	587,676.28	21,836.37
L-2	539,491.80	44,81	5,888.72	587,676.28	2,058.89
L-3	539,491.74	71.37	5,888.72	587,676.28	1,621.04
L-4	501,248.67	55,694.32	6,451.40	567,181.40	2,709.94
L-5	517,069.99	30,024.33	5,507.58	500,450.46	137,689
L-6	517,069.91	108.02	5,507.58	517,069.02	137,689
L-7	459,539.83	41.37	15,195.62	459,539.83	137,689
L-8	528,900.81	54,022.42	14,381.69	608,200.10	2,908.06
L-9	540,300.00	54,208.62	609,500.10	609,500.10	11,008.14
L-10	532,000.40	59,913.15	14,850.12	606,785.54	4,200.15
M-1	555,142.21	565,142.21		555,142.21	

Government built.

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS—Continued.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipage).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
SUBMARINES—Continued.						
Schley	\$844,222.94				\$844,222.94	
N-1	415,063.00				415,063.00	\$137.89
N-2	405,304.44				405,304.44	137.89
N-3	365,397.70				365,397.70	137.89
N-4	362,345.67				362,345.67	132.89
N-5	363,004.61				363,004.61	
N-6	363,901.61				363,901.61	
No. 60	522,900.00				522,900.00	
No. 61	189,350.84				189,350.84	
O-1	133,905.05				133,905.05	
O-2	301,832.14				301,832.14	
O-3	274,432.14				274,432.14	
O-4	274,432.14				274,432.14	
O-5	274,432.14				274,432.14	
O-6	274,432.14				274,432.14	
O-7	274,432.14				274,432.14	
O-8	274,432.14				274,432.14	
O-9	274,432.14				274,432.14	
O-10	274,282.14				274,282.14	
O-11	273,022.14				273,022.14	
O-12	272,986.14				272,986.14	
O-13	272,772.73				272,772.73	
O-14	247,168.11				247,168.11	
O-15	247,097.73				247,097.73	
O-16	247,097.73				247,097.73	
R-1	66,200.00				66,200.00	
R-2	66,200.00				66,200.00	
R-3	66,200.00				66,200.00	
R-4	66,200.00				66,200.00	
R-5	66,200.00				66,200.00	
R-6	66,200.00				66,200.00	
R-7	66,200.00				66,200.00	
R-8	66,200.00				66,200.00	
R-9	66,200.00				66,200.00	
R-10	66,200.00				66,200.00	
R-11	66,700.00				66,700.00	
R-12	66,700.00				66,700.00	
R-13	66,700.00				66,700.00	
						1,000.00

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS—Continued.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipage).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
OUTBOATS—continued.						
Habana	\$417,796.91	\$12,872.14	\$85,442.21	\$50,283.61	\$654,394.57	\$366,327.66
Isis G. Lunon	219,700.00		40,163.83	20,868.71	280,732.54	370,852.92
Madras	480,862.84	1,908.48	46,694.83	26,374.83	685,535.97	549,893.09
Maratta	269,974.35	892.67	1,953.98	24,800.82	296,952.82	449,948.04
Manchuria	145,261.74		16,138.98	12,802.87	176,231.99	11,848.87
Newport	564,546.82	12,872.14	77,948.28	46,857.61	699,177.94	529,818.89
Paducah	371,716.45	914.82	46,262.07	95,484.81	474,381.15	278,599.87
Panama	148,163.99		16,897.15	12,264.40	177,325.54	19,487.83
Panama	18,080.00		12,445.31	15,033.48	35,558.79	98,676.28
Panama	309,981.68		63,148.39	46,894.68	414,108.75	418,380.22
Quincy	17,868.21		17,868.21	12,898.83	39,732.74	109,281.73
Rango	127,962.00				127,962.00	504,328.61
Sacramento	502,364.94		48,682.12	68,411.23	619,458.29	46,453.84
Samoa	18,000.00		17,878.98	7,072.74	42,951.72	91,734.84
Sandoval	17,000.00		13,226.73	5,085.87	34,312.60	43,861.32
Vladimir	268,627.46	423.46	62,852.00	44,371.80	383,274.81	345,071.77
Villalobos			12,287.19	24,382.53	36,669.72	57,086.26
Wheeling	255,423.83	645.66	66,277.19	44,853.81	367,199.49	344,928.83
Washington	414,866.04		76,058.75	52,618.49	543,543.28	433,501.72
Yorktown	549,906.61	10,022.61	86,298.68	48,783.99	694,811.89	539,092.55
No. 21	54,167.11				54,167.11	
Total	7,073,460.91	43,559.33	1,046,767.12	876,416.28	9,040,203.64	8,333,458.76
TRANSFERS.						
Buhalo	560,000.00		88,648.05	78,464.21	682,112.26	938,109.41
General Alava	99,760.00				99,760.00	
Quincy and Villalobos						
General Alava	600,000.00		7,182.97	8,708.97	15,991.94	189,236.09
Hancock	1,822,168.74		46,837.47	100,928.98	1,970,035.19	652,889.29
Henderson	878,000.00	926.48	68,076.83	78,667.38	1,025,670.69	18,181.04
Prabro						
Total	3,446,926.74	926.48	178,658.42	261,164.65	3,787,676.19	2,809,721.66

SUPPLY SHIPS.		2,759.65	84,866.66	244,501.80	2,808,377.89	2,922,083.45
Bridge ¹	1,222,374.93				1,225,134.58	24,966
Caulk.....	340,900.00			56,333.99	419,328.14	616,974.36
Canvas.....	247,704.85			28,553.31	322,954.54	890,761.24
Catlines.....	340,550.00			26,408.04	430,327.66	729,443.64
Glacier.....	325,000.00			71,100.81	409,827.07	699,448.84
Supply.....						
Total	2,476,029.78	2,759.65	84,866.66	244,501.80	2,808,377.89	2,922,083.45
HOSPITAL SHIPS.		600,000.00	403.02	81,689.35	682,092.37	1,056,936.36
Solace, No. 1 ¹	600,000.00		403.02	81,689.35	682,092.37	1,056,936.36
	48,200.36				48,200.36	
Total	648,200.36		403.02	81,689.35	730,292.73	1,056,936.36
FUEL SHIPS.		175,000.00	555.55	22,441.23	197,996.78	411,260.20
Aberdeen.....	267,075.50		9,283.02	34,431.35	311,389.87	672,710.32
Arctura.....	215,800.00		11,476.05	31,948.90	261,524.95	446,438.10
Bruno.....	175,000.00		12,077.19	35,494.35	220,471.54	385,629.10
Cesar.....	175,000.00		12,077.19	35,494.35	220,471.54	385,629.10
Cayana ¹	1,041,359.53		12,702.08	31,868.43	1,044,329.45	1,044,329.45
Cyclops.....	971,518.35		443.18	76,608.79	948,570.32	102,048.84
Imbler.....	971,969.80		30,129.89	76,092.41	1,038,192.10	149,323.56
Kanawha ¹	1,328,111.26		50,622.06	102,891.05	1,431,624.37	132,813.84
Maumee ¹	974,460.83		47,152.15	58,118.87	1,032,731.85	47,638.72
Mars.....	514,824.05		47,301.02	48,873.20	563,714.27	245,783.22
Manzanita.....	1,247,133.68	269.72	49,837.63	68,888.20	1,316,289.63	28,139.02
Neah.....	154,728.00		49,454.40	24,064.01	180,686.41	261,453.84
Neptune.....	914,545.55		49,454.40	38,855.77	1,002,855.71	227,872.60
Nero.....	1,022,854.15		49,454.40	79,019.15	1,101,327.64	66,716.35
Orion.....	215,000.00		499.70	27,240.16	242,739.86	548,807.81
Proteus.....	974,828.72		230.52	78,669.05	1,053,628.29	112,453.04
Saturn.....	998,652.53		268.74	62,328.06	1,061,249.33	161,268.77
Sterling.....	200,000.00		258.16	35,231.68	235,489.84	524,112.62
Udall.....	100,000.00		213.52	13,192.86	103,406.38	309,312.69
Vulcan.....	515,136.49			46,405.23	561,541.72	212,875.25
No. 16 ¹	41,866.35				41,866.35	
Total	13,319,582.00	269.72	277,504.15	968,670.74	14,586,046.61	5,547,938.02
CONVERTED YACHTS.		55,000.00	8,731.77	4,456.38	68,188.15	38,447.78
Abeon.....	167,000.00		9,156.72	4,584.42	176,741.14	102,178.77
Edwin.....	100,000.00		4,684.04	26,101.78	130,785.82	263,267.54
Elfrida.....	50,000.00		12,116.51	13,091.95	75,198.46	36,589.70
Gloucester.....	225,000.00		12,116.51	13,091.95	250,208.46	194,158.21

¹ General Alava, Quirós, and Villalobos purchased from Army at a total cost of \$69,760.

² Appraised value 1899. No record of original cost.

¹ Captured.
² Government built.
³ Transferred by War Department without reimbursement.

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS—Continued.

Vessels.	Cost of construction, purchase price, and value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipment).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
CONVERTED YACHTS—continued.						
Hawk.....	\$50,000.00	.....	\$1,613.96	86,960.51	\$85,294.47	\$98,070.10
Humbress.....	27,500.00	.....	1,780.45	6,828.97	32,307.97	32,307.97
Mayflower.....	430,000.00	.....	31,189.79	68,399.46	529,589.25	696,841.26
Scorpion.....	300,000.00	.....	17,847.53	53,896.40	371,683.93	334,170.05
Sybb.....	60,000.00	.....	1,444.31	11,333.85	62,778.16	116,924.70
Sybil's.....	25,000.00	.....	2,258.73	4,042.90	31,301.63	62,899.43
Vixen.....	150,000.00	.....	11,556.99	27,010.58	188,567.57	262,968.43
Wasp.....	96,000.00	.....	10,145.28	11,190.20	116,335.48	168,207.99
Yankton.....	125,000.00	.....	17,545.29	29,839.99	172,385.28	309,937.43
Total.....	1,880,000.00	.....	129,046.53	274,368.27	2,284,044.80	2,626,439.72
TUGS.						
Accomac.....	40,000.00	.....	.....	.....	40,000.00	79,686.02
Active.....	75,000.00	.....	.....	.....	77,154.03	90,122.73
Apache.....	54,510.00	.....	.....	.....	54,510.00	120,971.35
Arapaho.....	125,656.67	.....	.....	.....	129,377.88	10,360.59
Choctaw.....	82,800.00	.....	.....	.....	82,800.00	106,306.23
Fortune.....	146,600.00	.....	5,073.34	.....	151,673.34	212,834.22
Hercules.....	150,000.00	.....	.....	.....	150,000.00	212,834.22
Jacqués.....	33,283.57	.....	5,184.61	.....	38,468.18	114,689.51
Merrimack.....	30,000.00	.....	.....	.....	30,000.00	62,016.67
Medoc.....	30,000.00	.....	.....	.....	30,000.00	62,016.67
Mohawk.....	125,694.67	.....	.....	.....	129,382.16	45,177.99
Mohave.....	4,000.00	.....	.....	.....	4,000.00	29,351.63
Natchez.....	33,648.91	.....	.....	.....	44,000.00	124,872.33
Navy.....	115,000.00	.....	.....	.....	35,092.33	138,316.59
Ontario.....	210,137.97	.....	.....	.....	128,787.90	59,377.61
Oswego.....	100,000.00	.....	.....	.....	288,037.16	47,044.61
Palmetto.....	219,492.33	.....	.....	.....	111,094.13	122,259.85
Patuxent.....	212,167.02	.....	.....	.....	284,735.78	68,861.20
Pearse.....	75,366.46	.....	.....	.....	284,735.93	73,733.64
Payback.....	84,465.68	.....	.....	.....	20,133.31	57,267.28
Pennacook.....	95,151.86	.....	.....	.....	78,387.81	59,053.70
Pemunclet.....	100,000.00	.....	.....	.....	87,674.66	59,604.36
Perris.....	130,000.00	.....	.....	.....	97,613.61	44,104.43
Piscataqua.....	182,746.12	.....	.....	.....	117,869.98	125,244.14
Pocahontas.....	.....	.....	.....	.....	12,484.60	187,437.66
.....	.....	.....	.....	.....	14,161.16	186,180.17
.....	.....	.....	.....	.....	.....	6,700.86

Pontiac	30,000.00	.....	.....	2,132.21	32,132.21
Potomac	125,800.00	.....	62.95	10,271.92	135,654.87
Powhatan	42,500.00	.....	.....	1,539.35	44,039.35
Prichard	5,000.00	.....	.....	.....	5,000.00
Rehoboth	29,000.00	.....	802.05	.....	29,802.05
Rose	73,505.23	.....	.....	1,772.74	75,277.97
Sacoast	23,000.00	.....	.....	1,707.15	24,707.15
Sabago	25,553.51	.....	.....	1,052.92	26,606.43
Sonoma	198,778.55	.....	5,651.53	22,791.59	227,221.66
Sotoyomo ¹	71,143.05	.....	13.92	3,045.43	74,188.48
Standish	48,300.00	.....	.....	6,519.61	54,819.61
Tecumseh	45,000.00	.....	.....	2,474.35	47,474.35
Tillamook	125,666.66	.....	.....	4,021.25	129,687.91
Trafic	26,400.00	.....	.....	1,370.95	27,770.95
Transfer ¹	153,053.00	.....	.....	2,576.77	155,629.77
Triton	101,145.08	.....	.....	3,305.60	104,450.68
Unadilla ¹	76,000.00	.....	.....	3,576.67	79,576.67
Unas	60,000.00	.....	4,103.38	9,372.99	69,372.99
Vigilant	20,000.00	.....	.....	1,844.93	21,844.93
Waban	33,176.52	.....	.....	1,144.45	34,320.97
Wabnetta	131,153.64	.....	.....	.....	131,153.64
Wando ¹	65,000.00	.....	110.57	.....	65,110.57
Wompatuck	.....	.....	.....	8,902.11	8,902.11
Total	4,068,068.76	.....	58,808.31	233,541.75	4,360,418.85
SPECIAL TYPE.					
Baltimore	1,546,172.13	.....	89,311.81	.....	1,635,483.94
Hamibel	147,941.60	.....	.....	86,136.77	234,078.37
Lebanon	225,000.00	.....	11,992.29	60,998.09	306,990.38
Leonidas	147,941.60	.....	13,355.44	74,266.70	235,543.74
Prometheus ¹	1,605,622.20	.....	66,259.78	78,518.08	1,750,400.06
San Francisco	1,738,267.82	.....	123,568.99	108,500.56	1,970,337.37
Vestal ¹	1,625,176.36	.....	72,990.12	115,242.94	1,813,409.42
Vesuvius	360,007.94	.....	.....	.....	360,007.94
Amunition ship No. 1 ¹	15,767.23	.....	49,167.38	5,958.45	70,692.86
Total	7,411,886.83	.....	581,836.56	591,186.83	8,543,434.98
UNSERVICABLE FOR WAR PURPOSES.					
Adams ¹	55,185.00	.....	705.01	15,591.97	71,481.98
Bose	94,703.14	.....	.....	16,023.66	110,726.80
Constitution ¹	15,735.00	.....	87,774.86	186,076.18	289,586.04
Constitution ²	15,820.00	.....	.....	.....	15,820.00
Cummander	427,906.35	.....	387.99	17,103.02	445,397.36
Geopha ¹	117,900.00	.....	14,122.88	17,683.22	149,706.10
Geopha ²	41,000.00	.....	.....	.....	41,000.00
Griffith State ¹	61,800.00	.....	31,025.57	41,367.19	134,192.76
Harford	284,994.05	.....	.....	49,543.82	334,537.87
Hatfield ¹	403,113.10	.....	630.00	7,023.98	410,777.17
Hatfield ²	70,500.00	.....	.....	62,763.58	133,263.58
Mohican ¹	.....	.....	9,552.49	.....	9,552.49
Total	.....	.....	.....	.....	.....
* Appraised value 1899. No record of original cost.					
† Government built.					

Statement 18.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHIPS—Continued.

Vessels.	Cost of construction, purchase price, or appraised value of hull and machinery.	Armor and permanent ordnance fittings.	Battery (ordnance equipment).	Outfit (except ordnance).	Total.	Repairs and alterations to June 30, 1917.
UNRECOVERABLE FOR WAR PURPOSES—continued.						
Philadelphia.....	\$1,561,392.47		\$7,155.87		\$1,561,392.47	\$815,011.70
Reina Mercedes ¹	450,000.00			\$22,498.02	29,633.89	899,416.56
Relle ¹	43,380.00				450,000.00	194,318.90
Richmond ¹	190,000.00		3,868.76		43,380.00	93,856.48
Scoutery.....	170,327.50			22,024.73	136,823.48	285,978.41
Topsails.....	47,796.00		17,023.46		170,327.50	638,917.60
Toliverine ¹	62,080.00		11,646.70	34,314.06	89,132.54	28,737.86
Yantic ¹		\$1,228.08		15,732.41	82,406.11	83,271.84
Total.....	4,001,325.64		183,205.88	481,295.78	4,667,065.08	4,816,165.86
MISCELLANEOUS.						
Miscellaneous.....	5,816,457.08				9,652,592.33	481,850.08
Aircraft.....	1,084,488.43		2,291,904.89	1,614,130.36	1,084,488.43	174,263.68
Grand total.....	402,233,751.74	114,206,644.62	57,108,501.24	19,291,505.28	582,840,412.78	126,289,018.26

¹ Captured.

² Transferred by War Department without reimbursement.

³ Appraised value 1899. No record of original cost.

Statement 19.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE—SHORE STATIONS.

Yards and stations.	Date of establishment.	Cost of original site.	Land acquired in addition to original site.	Total expenditures for buildings, improvements, and machinery.	Total maintenance since establishment, including repairs.
INDUSTRIAL YARDS.					
Fortsmouth, N. H. (including naval hospital and naval prison).....	1800	\$5,500.00	\$105,000.00	\$11,524,288.87	\$13,722,044.04
Boston, Mass. (including naval hospital, Chelsea, ammunition depot, Hingham, and niter depot, Malden).....	1800	60,746.92	367,753.83	16,890,077.07	25,388,685.41
New York, N. Y. (including naval ammunition depots at Dover, Iona Island, and Fort Lafayette and naval hospital).....	1800	40,006.00	662,002.28	31,186,471.79	50,786,839.80
Philadelphia, Pa. (including naval ammunition depot, Fort Mifflin).....	1868	1.00	14,197,891.39	19,121,831.24	19,121,831.24
Washington, D. C. (including naval hospital, dispensary, and magazine, Bellevue).....	1800	4,000.00	555,246.91	15,184,032.18	24,782,867.82
Norfolk, Va. (including naval hospital, naval ammunition depot, St. Juliens Creek, Craney Island, and Fort Norfolk).....	1800	12,000.00	625,018.40	21,890,867.68	27,297,421.14
Mare Island, Cal. (including naval hospital and naval ammunition depot).....	1833	84,207.00	28,300.00	5,613,605.81	3,616,938.25
Puget Sound, Wash. (including naval hospital and naval ammunition depot).....	1891	9,587.25	19,812.00	21,647,481.94	26,396,738.91
Cavite, P. I. (including Sangley Point, naval hospital, Canacao, and Manila).....	1895	( )	.....	10,860,273.07	9,538,497.92
Olongapo, P. I. (including naval ammunition depot, Philippine Islands).....	1902	( )	.....	2,680,298.02	13,893,000.87
Total.		299,467.17	2,261,133.37	154,990,976.70	221,307,914.65
NONINDUSTRIAL YARDS AND STATIONS.					
Frenchman Bay, Me.....	1900	24,650.00	.....	582,678.26	96,705.19
Naval torpedo station, Newport, R. I.....	1869	()	76,850.00	2,191,055.36	7,688,815.54
Naval station, Newport, R. I. (including naval training station and war college).....	1861	36,709.00	78,566.08	2,310,391.92	5,748,412.20
Melville, R. I.....	1901	( )	.....	1,218,697.21	4,462,815.00
New London, Conn.....	1868	( )	.....	445,594.90	479,617.06
Naval Academy, Philadelphia (including naval hospital).....	1826	16,352.91	12,883.25	108,713.26	2,092,925.74
Naval Academy, Annapolis, Md.....	1845	1,801.00	832,773.54	12,048,754.38	24,754,791.98
Naval Observatory, Washington, D. C.....	1860	75,000.00	.....	910,847.30	458,428.12
Naval proving ground, Indianhead, Md.....	1890	12,220.00	25,000.00	2,446,055.04	3,065,479.28
Port Royal, S. C.....	1868	5,000.00	9,687.50	1,299,713.19	2,024,264.68
Key West, Fla. (including Dry Tortugas, Womens Key and FLEMING KEY).....	1833	4,000.00	196,111.51	2,688,307.41	3,449,880.64
Pensacola, Fla.....	1828	15,000.00	133,002.04	2,652,414.07	1,829,035.91
New Orleans, La.....	1840	( )	.....	3,720,041.91	2,448,599.58
Training station, Great Lakes, Ill.....	1904	( )	.....	483,428.31	2,048,599.58
Naval hospital, Fort Lyon, Colo.....	1905	( )	.....	483,428.31	2,048,599.58
Training station, San Francisco, Cal.....	1894	( )	.....	2,886,570.15	3,183,092.37
Thibour, Cal.....	1904	( )	.....	2,652,414.07	1,829,035.91
San Diego, Cal. (including Marine Corps base).....	1901	80,000.00	.....	1,099,506.18	3,124,417.04
Torpedo station, Keyport, Wash.....	1914	60,801.39	250,000.00	182,913.94	115,209.20

¹ No cost for original site.

Statement 19.—PROPERTY INVESTMENT AND TOTAL MAINTENANCE OF SHORE STATIONS—Continued.

Yards and stations.	Date of establishment.	Cost of original site.	Land acquired in addition to original site.	Total expenditures for buildings, improvements, and machinery.	Total maintenance since establishment, including repairs.
NONINDUSTRIAL YARDS AND STATIONS—continued.					
Providence Bay, Mexico.....	1900	( )	.....	\$57,063.59	\$39,027.61
Guantanamo, Cuba.....	1903	( )	.....	2,212,412.95	2,705,250.29
Atuvalu, Samoa.....	1881	\$214.29	.....	533,546.56	1,265,175.93
Panama, P. I.....	1886	()	\$85,665.11	608,724.70	2,924,517.93
Pearl Harbor, Hawaii.....	1900	\$9,140.80	183,196.50	11,749,361.41	2,125,515.63
Sitka, Alaska.....	1900	( )	.....	184,361.49	57,513.43
Naval hospital, Yokohama, Japan.....	1900	()	4,980.00	85,708.07	511,581.71
Radio stations.....	1872	( )	.....	3,669,685.06	1,689,326.44
Total.....		\$89,889.09	1,451,378.48	61,859,733.87	80,182,234.93
Grand total.....		\$89,358.26	3,712,511.85	216,850,730.57	\$31,490,149.56

1 Leased.

1 No cost for original site.

Statement 20.—APPRAISED VALUE AND REPRODUCTION COST OF INDUSTRIAL PLANTS.

APPRAISED VALUE, 1917.

Depreciation is computed by the "fixed percentage on reducing balance" method on all items in classes 2, 3, 5, and 6 except dry land, water rights, typewriters, computing machines and motor-propelled vehicles, the last three items being exempted from the operation of the depreciation reserve owing to the provisions of the naval acts approved Aug. 22, 1912, and Aug. 29, 1916, permitting worn-out typewriters, computing machines, and motor-propelled vehicles to be exchanged as a part of the purchase price of new ones. All additions and replacements under classes 4, 7, and 8 being charged directly to expense, no depreciation is computed on plant values under those classes, which remain at first cost figures. Adjustment between the plant ledgers and cost records in the case of items in classes 4, 7, and 8 are periodically made by physical inventories.

Class.	Classification.	Portsmouth.	Boston.	New York.	Philadel- phia.	Washing- ton.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
2	Land and appurtenances.....	\$2,834,704	\$6,789,146	\$20,470,888	\$11,001,070	\$2,050,783	\$3,978,640	\$809,763	\$1,147,966	\$676,030	\$60,655,960
2	Buildings and structures.....	2,881,076	3,180,546	5,339,902	3,486,943	2,016,410	4,104,080	2,211,440	5,269,171	3,839,032	33,233,080
5	Plant appliances.....	291,042	433,013	927,089	371,426	471,518	1,071,682	277,923	678,623	633,532	5,155,851
6	Machinery and machine tools.....	275,210	378,873	610,017	446,319	1,366,094	534,022	275,563	426,216	531,106	4,831,869

REPRODUCTION COST.

This statement shows original or reproduction cost of present property of the yards named by physical classes. It includes industrial, mixed industrial-military and purely military property. The distribution of property by physical classes and purpose groups is shown in Statement 11. Statement 19 shows total expenditures for original site, irrespective of appreciation, and for all improvements and acquisitions to date, irrespective of disposition.

Class.	Classification.	Portsmouth.	Boston.	New York.	Philadel- phia.	Washing- ton.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
2	Land and appurtenances.....	\$3,376,500	\$7,983,491	\$22,013,369	\$12,659,800	\$2,636,379	\$4,426,111	\$1,086,703	\$1,971,266	\$1,039,600	\$37,192,278
2	Buildings and structures.....	4,180,400	6,884,040	11,354,322	6,121,600	3,969,676	5,747,572	2,785,372	8,584,202	5,450,896	54,068,170
4	Miscellaneous equipment.....	478,585	1,031,981	3,387,810	258,928	258,386	386,163	820,138	291,138	310,016	5,837,807
5	Plant appliances.....	578,100	1,051,718	2,394,979	762,700	1,186,914	1,637,188	490,460	1,426,562	1,226,565	10,794,463
6	Machinery and machine tools.....	882,400	1,569,068	2,105,183	1,092,000	3,899,830	1,406,976	563,663	1,247,424	1,071,897	13,828,081
7	Portable power tools.....	26,556	75,740	141,388	78,913	4,039	62,706	21,166	110,621	29,013	583,738
8	Loose and hand tools.....	24,388	96,376	242,553	66,944	1,146,187	161,000	15,528	186,270	83,946	2,010,142
	Total.....	9,546,879	18,063,284	41,640,642	20,063,883	13,088,001	13,817,712	5,066,191	13,817,532	9,220,863	144,294,790

Statement 21.—PROPERTY INVESTMENT—STORES.

Classification.	Balances in store.	Balances in transit.	Work in progress.	Total balances June 30, 1917.
Naval supply account.....	\$41,629,267.73	\$3,968,422.46	\$3,032,808.72	\$48,630,528.91
Ordnance account.....	94,286,347.41	4,406,165.74	13,896,851.06	112,489,364.20
Survey account.....	857,637.37	25,913.97	.....	883,551.34
Used-material account.....	224,318.53	15,027.15	.....	239,345.68
Reserve material, Navy account.....	13,796.30	.....	.....	13,796.30
Equipage afloat.....	74,871,602.30	1,828,404.22	.....	76,400,006.52
Provisions.....	4,680,208.98	1,765,019.95	.....	6,445,228.93
Provisions, naval auxiliaries.....	60,372.95	.....	.....	60,496.43
Ships' store supplies.....	262,835.54	54,865.48	.....	317,701.02
Clothing and small stores.....	3,327,875.76	968,797.91	534,170.63	4,850,844.29
Medical stores.....	327,094.35	.....	.....	327,094.35
Marine Corps stores.....	6,126,521.45	.....	.....	6,126,521.45
Total.....	152,446,268.33	11,174,061.94	17,423,830.39	181,044,159.71

Statement 23.—TOTAL STORES OPERATIONS AND BALANCES.

Classification.	Receipts.		Expenditures.		Balances June 30, 1917, including stores in transit and work in process.
	New and re-claimed material.	Transfers.	Final and to manufacture.	Transfers.	
Naval supply account.....	\$87,166,622.56	\$2,265,120.43	\$45,233,715.16	\$4,612,186.83	\$46,980,525.91
Ordnance account.....	26,418,610.94	7,777,097.87	13,913,332.23	8,523,994.84	112,496,364.20
Survey account.....	268,761.98	2,103,032.59	1,143,861.47	909,168.28	883,561.24
Used-material account.....	246,264.43	284,832.74	141,411.65	308,378.84	289,542.68
Reserve material, Navy account.....	1,347,274.01	.....	684.60	.....	13,766.80
Quilts adroit.....	1,347,274.01	13,424,917.72	2,888,938.91	10,996,074.89	76,400,066.32
Provisions, naval auxiliaries.....	16,124,136.48	119,671.63	11,688,285.41	290,913.74	6,646,428.34
Ships' stores, supplies.....	1,267,831.88	109,531.73	1,269,173.43	2,221.08	67,437.03
Clothing and small stores.....	8,732,764.87	349,566.07	7,833,459.01	17,237.72	4,817,844.29
Medical stores.....	705,655.77	.....	637,376.89	.....	527,094.85
Marine Corps stores.....	5,971,950.66	.....	3,568,919.64	.....	6,126,581.46
Total.....	130,334,060.06	26,543,881.23	88,880,075.51	25,966,928.79	267,444,165.23

Statement 23.—TOTAL STORES (BALANCES BY CLASSES, JUNE 30, 1917).

Classification.	Naval supply account ashore.	Naval supply account afloat.	Total naval supply account.	Ordnance account ashore.	Ordnance account supply officers.	Ordnance account gunnery officers.	Total ordnance account.
1 Guns, range finders, etc.	\$7,536.02	\$2,382.76	\$9,918.78	\$19,516,830.72	\$24,908.65		\$19,541,739.37
2 Arms, accoutrements, etc.	2,410.25	522.43	7,387.89	4,895,166.31	84,234.51		4,979,400.82
3 Mines, torpedoes, etc.	79,037.63	65.72	79,103.35	4,841,467.10	783,264.91		5,624,732.01
4 Ammunition and ammunition details	16,334.42	41.20	16,375.62	30,694,963.62	28,692.21	\$21,525,121.52	52,193,949.55
5 Flags and bonding	69,493.99	7,382.15	76,876.14	13,141.36			13,141.36
6 Anchors, anchor chain, etc.	1,157,041.22	3,353.63	1,160,394.85	6,279.71			6,279.71
7 Fuel, galley and steaming (coal and oil)	1,297,844.25	283,741.49	1,581,585.74				
8 Fuel astore	447,086.39	3,176.81	450,263.20				
9 Barrack, boats	447,086.39	3,176.81	450,263.20				
10 Boilers and engines (boat, aircraft)	737,738.15	39,179.10	776,917.25	298.49			298.49
11 Pumps and other parts	117,367.73	40,630.84	158,000.57	1,618.91			1,618.91
12 Engines and fire engine fittings	525,910.73	125,036.84	650,947.57	8,103.14	2.43		8,105.57
13 Oils, greases, and all lubricants	254,530.88	133,922.26	388,453.14	5,698.14	1.51		5,700.65
14 Oils, greases, and all lubricants	176,465.85	78,243.31	254,709.16	1,027.78	1.21		1,029.99
15 Electric cable, insulated wire, etc.	789,740.87	45,320.81	835,061.68	5,771.84	48.40		5,820.24
16 Radio apparatus and outfits, etc.	415,080.82	32,850.40	447,940.22				
17 Electric apparatus, outfits, etc.	837,333.54	573,139.31	2,480,472.85	92,518.29	85.55		92,603.84
18 Instruments of precision	1,334,938.94	31,784.31	1,366,723.25	24,807.66	150.18		24,957.84
19 Blocks, rigging, and accessories	190,929.65	11,776.87	202,706.52	749.66			749.66
20 Cordage, hemp, twine, etc.	2,480,424.70	151,320.36	2,631,745.06	13.90			13.90
21 Rope, wire, bare, and manufactured	468,944.79	59,879.81	528,824.60	123,586.24			123,586.24
22 Boat and ship utensils	301,520.53	16,833.32	318,353.85	719.89			719.89
23 Canvas, including manufactured articles	1,164,715.45	92,090.27	1,256,805.72	4,147.84			4,147.84
24 Furniture	193,874.92	1,725.34	195,600.26	497.73			497.73
25 Dry goods, bedding, textiles, etc.	639,929.36	59,470.84	699,400.20	52,562.87			52,562.87
26 Bathrooms and toilet fixtures	144,521.91	72,988.87	217,510.78	88.97			88.97
27 Lighting apparatus (nonelectric)	143,157.14	11,619.57	154,776.71	317.13			317.13
28 Gaskets, packing, rubber, etc.	350,218.08	231,691.24	581,909.32	1,144.57	96.36		1,240.93
29 Hose, leather, belting, etc.	357,487.82	24,738.78	382,226.60	1,283.91			1,283.91
30 Hooks, periodicals, etc.	62,867.50	1,583.22	64,450.72	818.33			818.33
31 Musical instruments	16,337.43	1,563.72	17,901.15				
32 Athletic apparatus	20,998.54	1,045.96	22,044.50	1,123.61			1,123.61
33 Brooms and brushes	82,029.37	46,604.25	128,633.62	1.50			1.50
34 Lumber and timber	1,326,098.10	23,253.70	1,349,351.80	3,539.33	32.06		3,571.39
35 Tools, machine, outfits and parts	445,479.62	21,984.37	467,463.99	64,635.60	463.05		65,098.65
36 Tools, hand	648,586.36	85,297.62	733,883.98	9,367.50	28.70		9,396.20
37 Hardware	871,581.06	152,659.09	1,024,240.15	7,265.57	4.51		7,270.08
38 Bolts, nuts, rivets, and washers	781,174.84	117,183.32	898,358.16	1,094.30			1,094.30
39 Pipes, tubes, and tubing	2,993,723.33	308,903.48	3,302,626.81	2,914.08	5.26		2,919.34
40 Pipe fittings	925,138.03	328,013.16	1,253,151.19	1,132.46			1,133.46
41 Metals in bars	3,837,527.33	220,148.09	4,057,675.42	14,880.37			14,880.37
42 Metal in plates and sheets	1,790,246.72	109,912.92	1,900,159.64	1,561.53			1,561.53

42	Shapes, metal, angles, channels, etc.	588,557.43	8,780.94	547,588.99	117,401.65	117,401.65
43	Aeromatic apparatus	126,772.01	9,476.50	151,248.51	10,158.86	10,158.86
44	Foundry apparatus, etc.	350,815.72	10,747.95	161,963.57	586.42	586.42
45	Acids, chemicals, soaps, etc.	291,857.08	77,852.74	589,230.53	3.50	3.50
46	Fatins and paint ingredients	1,605,543.45	199,178.32	1,701,721.80	117.42	117.42
47	Stationery and drafting supplies	597,899.40	97,922.79	968,222.18	388.57	388.57
48	Office equipment	26,644.92	2,310.74	28,955.66	1,060.90	1,060.90
49	Clothing and small stores	24,011.84	4,374.57	28,386.41	70.20	70.20
50	Provisions, groceries, etc.	7,826.50	272.01	8,098.51	617.25	617.25
51	Medicines and surgical apparatus	126,448.00	56.82	126,504.82	617.71	17.71
52	Navy-yard appliances, live stock, etc.	76,294.14	6,985.97	83,280.11	184.78	184.78
53	Building material	865,647.19	368,609.53	1,234,256.72	1,638.56	1,638.56
54	Boilers and engines, ships'	148,477.13	1,220.49	1,251,450.73	5,430.99	5,430.99
55	Power-driven appliances, ships'	107,730.95	1,043.59	108,774.54	1,589.98	1,589.98
56	Crane's gear	194,179.50	24,130.44	130,309.94	2.48	2.48
57	Galleys and laundry apparatus	194,608.83	43,625.83	238,232.66	175.61	175.61
58	Miscellaneous articles	392,758.03	46,352.88	439,110.61	1,330.94	1,330.94
59	Shore store supplies	304,615.65	.....	204,615.65	777,636.97	777,636.97
60	Special construction stores	3,312,662.38	.....	3,312,662.38	.....	5,273.70
61	Total in store	37,539,380.97	4,385,859.23	41,929,287.73	71,788,619.19	21,525,121.52
62	Stores in transit	.....	3,965,439.46	3,965,439.46	.....	4,406,165.74
63	Manufacturing (work in process)	.....	.....	3,062,808.72	.....	13,826,851.05
64	Grand total	37,539,380.97	4,389,901.26	48,960,525.91	71,788,619.19	112,469,364.20

Statement 23.—TOTAL STORES (BALANCES BY CLASSES, JUNE 30, 1917)—Continued.

Classification.	Survey account.	Used material account.	Reserve material, Navy account.	Equipment and supplies afloat.	Provisions, clothing, and ship's stores accounts.	Medical stores.	Marine Corps stores.	Total.
1 Guns, range finders, etc.	\$538.86	80.70						\$10,561,668.16
2 Arms, accoutrements, etc.	38.26							4,978,052.66
3 Mines, torpedoes, etc.								5,708,874.63
4 Ammunition and ammunition details	7,199.81	55.79						82,176,194.97
5 Flags and bunting.	57,511.24	17,996.96						97,123.30
6 Anchors, anchor chain, etc.	80.00							1,274,694.99
7 Fuel, galley and steaming (coal and oil)	76.92	1,458.00						1,816,235.74
8 Aircraft, boats.	187,433.49	20,049.65						294,429.82
9 Boilers and engines (boat, aircraft)	210,266.28	15,452.78						649,558.80
10 Pumps and their parts	2,151.73	3,705.35						946,972.03
11 Boat and ship fittings	40,928.85	4,647.93						106,512.58
12 Engine and fireroom fittings.	1,860.05	381.20						704,522.42
13 Oils, greases, and all lubricants	64.03	384.10						391,265.04
14 Electric cable, insulated wire, etc.	661.74	9,391.51						346,872.88
15 Radio apparatus and outfits.	5,770.75	35,831.32	\$11,018.30					661,575.50
16 Electric apparatus, outfits, etc.	46,776.57	261.31						2,815,228.40
17 Instruments of precision.	27,150.45	940.35						2,842,827.97
18 Blocks, rigging, and accessories	2,749.55	940.51						272,627.01
19 Cordage, hemp, twine, etc.	4,437.00	31.21						2,632,484.02
20 Rope, twine, and manufactured	5,734.96	268.18						2,652,879.09
21 Canvas, sail, and awnings	25,129.13	948.89						329,038.88
22 Canvas, including manufactured articles.	27,680.01	1,959.89						1,297,041.83
23 Furniture	6,203.51	437.25						1,225,747.68
24 Dry goods, bedding, textiles, etc.	6,301.44	98.21						758,603.83
25 Bathrooms and toilet fixtures	4,109.36	43.20						183,334.95
26 Lighting apparatus (nonspecial)	140.11	14.29						87,329.90
27 Fire-surfacing and heat-insulating material	6.53	2.65						154,808.57
28 Gaskets, packing, rubber, etc.	4,367.95	135.20						653,293.59
29 Hoses, leather, belting, etc.	3,807.21	2.65						388,033.66
30 Books, periodicals, etc.	5,842.60							69,275.89
31 Musical instruments.	3,374.48	151.00						23,763.84
32 Athletic apparatus	24.66	5.10						23,644.59
33 Brooms and brushes	12.33	2.48						128,654.88
34 Lumber and timber	15,039.76	4,000.59						1,352,938.00
35 Tools, machine, outfit and parts.	3,761.16	39.54						541,962.99
36 Tools, hand	8.68	39.54						747,144.47
37 Bolts, nuts, rivets, and washers	3,767.09	5,816.14						1,032,731.43
38 Pipes, tubes, and tubing	6,774.96	1,281.93						900,100.03
39 Pipe fittings								1,262,940.54

46	Metals in bars.....	6,899.54	28,890.61						4,106,385.94
47	Metal in plates and sheets.....	1,447.14	21,735.29						1,974,906.60
48	Shapes, metal, angles, channels, etc.....	2.67	319.91						666,310.01
49	Aeronautic apparatus.....	419.86	144.00						43,419.35
50	Foundry apparatus, etc.....	31.36	88.36						152,895.55
51	Acids, chemicals, soaps, etc.....	21.53	31.55						934,954.69
52	Paints and paint ingredients.....	37.48							1,701,892.80
53	Stationery and drafting supplies.....	10,717.13	548.80						3,865,718.23
54	Office equipment.....	94.28							50,405.49
55	Clothing and small stores.....	345.52							3,356,996.53
56	Provisions, groceries, etc.....	6,072.13	1,252.94						4,949,289.90
57	Medicines and surgical apparatus.....	4.70	50.00						134,029.69
58	Navy-yard appliances, live stock, etc.....	47,822.95	2,467.18						84,906.27
59	Building material.....	1,729.51	6,053.79	\$2,148.00					1,312,309.82
60	Boilers and engines, ships'.....	5,653.39	4,171.83						1,166,694.61
61	Power-driven appliances, ships'.....	421.67	517.00						116,612.24
62	Officers' mess gear.....	2,414.47	517.00						130,906.22
63	Crew's mess gear.....	24,027.69	31,689.23						242,666.09
64	Galley and laundry apparatus.....								1,272,254.50
65	Miscellaneous articles.....								206,015.05
66	Shop store supplies.....								3,317,958.17
67	Special construction stores.....								74,311,572.90
	Equipment aircraft (title B).....								6,126,521.45
	Marine Corps stores.....								262,835.44
	Provisions, ship's stores account.....								86,126,521.45
	Total in store.....	857,637.27	224,318.53	13,766.30	74,871,692.30	8,531,292.84	537,094.85	227,317,988.68	
	Stores in transit.....	25,913.97	16,027.15		1,528,404.22	2,719,435.63		12,702,486.16	
	Manufacturing (work in process).....					534,170.62		17,426,830.39	
	Grand total.....	883,551.24	239,345.68	13,766.30	76,400,096.52	11,828,969.09	537,094.85	6,126,521.45	287,444,165.23

Statement 24.—SUPPLY DEPARTMENT OPERATIONS, 1917.

[For complete stores statistics, see Statements 22, 23, and 25 to 27, inclusive. This statement does not include stores in transit, afloat, at foreign stations, at ammunition depots outside of navy yards, or coal at depots outside of navy yards.]

	Portsmouth.	Boston.	New York.	Philadelphia.	Washington.	Norfolk.	Charleston.	Mare Island.	Puget Sound.
1. Number of shipments made:									
Freight.....	855	2,074	4,702	1,388	2,733	3,326	770	2,576	270
Express.....	691	1,200	3,876	1,045	3,116	3,022	283	856	162
Mail.....	382	609	6,742	1,078	6,528	2,305	215	973	225
Government conveyance.....	17	104	1,961	89	32	278	15	543	98
Number of public bills.....	5,874	11,048	26,454	9,908	6,757	13,208	3,735	11,509	6,796
2. Average number of days between dates of delivery and dates of acceptance.....	7	6	10	10	11	14	8	8	4
3. Average number of days between dates of acceptance and dates of preparation of public bill.....	1	3	12	6	5	7	11	4	4
4. Average number of days required to make payments.....	1	1	4	1	1	21	14	1	1
5. Number of naval supply account requisitions submitted.....	173	581	967	669	145	656	269	1,286	639
Bocal.....	483	1,377	1,492	1,500	1,323	1,724	204	559	1,057
Number of ship's requisitions filled.....	489	7,016	2,524	1,433	1,418	2,861	1,033	1,832	2,443
Number of issues in excess prepared.....	2,485	10,349	34,423	14,134	14,289	12,639	2,770	7,360	2,436
Number of manufacturers' requisitions prepared.....	3,304	20,918	64,402	33,200	24,281	30,450	6,167	3,263	7,694
Number of stub requisitions filled.....	1,411	5,683	6,126	1,899	24,764	30,450	7,024	2,641	1,176
Total value of naval supply account stores on hand July 1, 1916.....	26,000	17,338	188,429	92,070	204,000	51,901	42,126	90,008	29,211
Total value of receipts in naval supply account.....	\$1,456,422.87	\$2,227,000.54	\$3,898,134.79	\$3,092,778.48	\$1,198,648.01	\$2,068,797.17	\$700,682.38	\$2,287,122.40	\$1,306,883.87
Total issues of naval supply account stores on hand June 30, 1917.....	\$4,329,160.19	\$8,093,763.16	\$15,098,408.79	\$8,028,154.53	\$4,710,370.21	\$13,957,418.07	\$1,909,498.41	\$8,375,785.92	\$2,737,957.15
Total value of clothing and small stores on hand June 30, 1917.....	\$3,773,627.48	\$6,915,030.89	\$13,163,911.16	\$6,264,229.89	\$4,539,908.07	\$10,616,331.16	\$1,634,337.76	\$7,044,070.48	\$2,190,110.12
Total value of manufactured stores under title Z, naval supply account.....	\$2,012,955.58	\$4,216,332.81	\$7,433,630.42	\$3,864,708.11	\$1,669,115.15	\$6,089,884.05	\$975,813.03	\$3,468,787.84	\$1,944,780.90
Total issues of nonperishable provisions.....	\$121,421.96	\$274,961.37	\$7,037,448.41	\$704,108.80	.....	\$499,824.23	\$86,919.74	\$67,988.39	\$201,373.11
Total value of clothing and small stores on hand June 30, 1917.....	\$41,851.05	\$92,831.50	\$644,904.86	\$65,340.23	\$3,407.80	\$37,198.33	\$39,549.97	\$112,060.40	\$63,152.67
Total receipts of manufactured stores under title Z, naval supply account.....	\$1,633,460.38	\$2,375,236.46	\$3,967,332.01	\$1,194,000.05	\$1,696,690.69	\$2,242,736.71	\$143,077.71	\$700,340.55	\$572,211.61
Total value of ordinance stores on hand July 1, 1916.....	\$288,456.01	\$606,106.79	\$3,443,066.01	\$2,426,294.05	\$12,977,994.74	\$1,032,028.76	\$678,571.56	\$628,094.34	\$2,191,961.95
Total receipts of ordinance stores.....	\$274,152.31	\$1,073,917.34	\$2,260,052.75	\$2,456,656.93	\$8,372,973.26	\$4,111,135.02	\$394,370.91	\$1,083,412.71	\$1,336,871.10
Total issues of ordinance stores.....	\$492,308.97	\$1,154,984.24	\$8,068,933.88	\$1,890,265.80	\$8,702,960.78	\$1,889,669.71	\$642,786.26	\$640,400.45	\$1,274,872.13
Total value of ordinance stores on hand June 30, 1917.....	\$70,207.25	\$694,102.89	\$2,869,156.51	\$3,018,687.19	\$12,647,696.29	\$3,308,864.67	\$400,147.23	\$706,105.69	\$2,242,680.92
Total value of scrap on hand July 1, 1916.....	\$73,432.89	\$2,668.23	\$34,744.06	\$64,407.51	\$99,356.88	\$6,632.45	\$3,267.01	\$57,411.24	\$4,407.30

25. Total value of receipts of scrap.....	\$206,051.29	\$71,190.36	\$118,594.11	\$124,897.97	\$2,302.45	\$44,675.19	\$17,951.97
26. Total issues of scrap.....	\$206,170.80	\$94,955.19	\$129,097.53	\$90,533.42	\$3,308.72	\$49,243.77	\$16,262.51
27. Total value of scrap on hand June 30, 1917.....	\$71,313.38	\$10,970.17	\$23,863.79	\$63,017.00	\$2,860.74	\$62,874.66	\$6,096.76
28. Total cost of maintenance of storehouses charged to "Maintenance supplies and accounts": Labor.....	\$72,447.75	\$447,276.05	\$182,122.07	\$17,802.26	\$68,647.83	\$178,520.95	\$89,013.95
Material.....	\$5,962.71	\$43,647.10	\$17,250.10	\$33,381.73	\$4,700.99	\$10,700.79	\$5,139.23
29. Estimated value of inactive stock on hand July 1, 1916.....	\$65,642.61	\$56,919.70	\$74,900.00	\$945,000.00	\$14,000.00	\$73,290.59	\$198,000.00
30. Estimated value of inactive stock on hand June 30, 1917.....	\$65,642.61	.....	\$64,400.00	\$257,000.00	\$10,000.00	\$63,290.59	\$74,416.34
31. Number of employees on the rolls Apr. 1, 1917: Permanent.....	97	187	292	297	81	187	92
Temporary.....	4	4	4	12	10	5	5
Reservists.....	.....	.....	.....	.....	.....	.....	.....
32. Total paid for salaries to classified employees June 30, 1917.....	\$33,021.57	\$70,166.74	\$66,686.17	\$111,534.58	\$27,579.11	\$141,997.10	\$56,261.70
33. Number of classified employees on the rolls June 30, 1917: Permanent.....	97	229	210	587	104	220	187
Temporary.....	37	68	19	20	21	7	5
Reservists.....	10	20	55	.....	10	.....	7
34. Total labor charges for unclassified employees.....	\$35,415.12	\$217,461.51	\$79,993.05	\$157,698.18	\$41,068.77	\$50,687.88	\$49,514.28
35. Total number of chemical employees made permanent.....	.....	11,909	3,673	3,369	.....	1,230	1,100
36. Number of laboratory employees.....	.....	19	4	4	.....	3	4
37. Annual cost of such services.....	\$7,353.12	\$26,122.09	\$7,534.03	\$5,615.47	.....	\$4,233.32	\$5,447.04
38. Total value of fuel on hand July 1, 1916.....	\$10,903.66	\$70,371.21	\$25,321.19	\$33,236.77	\$52,265.05	\$56,610.86	\$210,534.46
39. Total value receipts of fuel.....	\$225,443.05	\$692,576.43	\$351,878.93	\$3,222,399.45	\$110,681.17	\$193,258.33	\$30,233.22
40. Total issues of fuel.....	\$170,765.51	\$728,643.23	\$369,014.03	\$3,221,341.89	\$89,387.76	\$323,697.98	\$260,245.73
41. Total value of fuel on hand June 30, 1917.....	\$65,481.23	\$34,304.41	\$8,188.09	\$34,384.33	\$74,578.46	\$29,169.21	\$30,323.95
42. Value of military reserve stock ordered during the year.....	\$500,000.00	\$530,697.32	\$907,778.96	\$6,905,708.68	.....	\$17,281.84	\$698,546.00
43. Square feet of floor space occupied by stores under cover.....	215,000	562,430	411,498	395,100	154,900	428,894	262,544
44. Additional floor space necessary to properly store all active and reserve stock.....	100,000	.....	415,000	458,000	95,400	.....	290,800

Statement 24.—SUPPLY DEPARTMENT OPERATIONS, 1917—Continued.

	Naval station, Newport.	Torpedo station, Newport.	Naval proving ground.	Key West.	Pensacola.	New Orleans.	Great Lakes.	Las Animas, Colo.	Training station, California.
1. Number of shipments made:									
Freight.....	21	545	220	52	42	155	244	1	32
Express.....	64	569	164	46	113	84	413	23	15
Mail.....		1,589	50	52	5	17			
Government conveyance.....		7	38	6	1				
Number of public bills.....	2,214	3,839	1,427	806	2,068	1,833	2,128	871	655
2. Number of bills.....	3	6	4	2	4	10	8	1	3
3. Average number of days between dates of delivery and dates of acceptance.....	1	25	4	2	7	14	12	4	5
4. Average number of days between dates of acceptance and dates of preparation of public bill.....	4			1	9	6	8	2	8
5. Average number of days required to make payments.....				263		7	170	15	177
6. Number of naval supply account requisitions submitted.....		635	179						
7. Number of requisitions prepared:									
Local.....	117		298						
Parent.....	731	1,846	183	340	1,154	366	151	231	1
8. Number of ships' requisitions filled.....		1,379	35	559	53	539	173		321
9. Number of manufacturing requisits prepared.....		1,379	4,713	974	160	699	119		108
10. Number of stub requisitions filled.....		2,860	16,782	4,880	7,400	145			
11. Total value of naval supply account stores on hand July 1, 1916.....	\$173,061.28	\$223,382.39	\$382,806.41	\$115,390.81	\$103,332.51	\$63,115.09	\$38,910.51	\$5,289.55	\$4,794.14
12. Total value of receipts in naval supply account.....	\$1,040,119.08	\$1,669,873.17	\$1,420,739.27	\$360,793.44	\$443,936.55	\$320,440.95	\$376,824.74	\$17,309.45	\$216,214.28
13. Total value of naval supply account stores on hand June 30, 1917.....	\$785,837.22	\$1,385,951.83	\$1,462,633.15	\$324,707.92	\$404,579.61	\$231,110.36	\$258,863.56	\$10,194.21	\$201,528.95
14. Total issues of naval supply account stores on hand June 30, 1917.....	\$27,643.14	\$507,302.73	\$340,982.53	\$132,476.33	\$142,709.46	\$182,446.28	\$156,271.09	\$12,414.80	\$19,479.47
15. Total issues of nonperishable provisions.....	\$132,674.02	\$13,021.70		\$17,021.26		\$49,436.26	\$115,751.30		\$105,351.55
16. Total issues of clothing and small stores.....	\$36,542.30	\$19,746.11		\$20,581.00		\$27,875.62	\$1,046,315.52	\$2,141.66	\$447,374.58
17. Total value of clothing and small stores on hand June 30, 1917.....				\$23,833.79		\$9,049.65	\$276,591.63	\$2,656.10	\$66,931.86
18. Total receipts of manufactured stores under title Z, naval supply account.....		\$76,379.26		\$19,975.28		\$5,182.50			
19. Total value of ordinance stores on hand July 1, 1916.....	\$86.25	\$3,940,900.61	\$2,918,657.09	\$7,254.05	\$2,397.88	\$16,816.49	\$75.00		
20. Total receipts of ordinance stores.....	\$0,302.18	\$5,481,063.60	\$5,144,248.60	\$27,063.49	\$38,611.09	\$6,282.59	\$63,812.42		\$192.80
21. Total issues of ordinance stores.....	\$0,302.18	\$6,543,455.43	\$5,474,991.94	\$5,421.79	\$35,750.80	\$1,266.39	\$63,507.76		\$192.80
22. Total value of ordinance stores on hand June 30, 1917.....	\$86.25	\$2,850,538.24	\$2,587,913.75	\$29,806.75	\$5,272.17	\$21,832.09	\$379.66		
23. Total value of scrap on hand July 1, 1916.....	\$78.00	\$718.66	\$1,108.50	\$534.17					

26. Total value of receipt of scrap.....	\$377.30	\$9,110.00	\$45.45	\$1,217.65				
27. Total issues of scrap on hand June 30, 1917.....	\$462.30	\$4,444.77	\$31.05	\$724.55				
28. Total cost of maintenance of storerooms charged to "Maintenance supplies and accounts":		\$4,638.50	\$338.54	\$468.30				
Labor.....	\$2,709.33							
Material.....	\$478.83							
29. Estimated value of inactive stock on hand July 1, 1916.....			\$5,508.93	\$5,498.05	\$16,584.55		\$827.38	
30. Estimated value of inactive stock on hand June 30, 1917.....			\$113.32	\$193.17	\$1,246.81		\$5.21	
31. Number of employees on the rolls Apr. 1, 1917:								
Permanent.....	2	23	19	9	15	7	78	4
Temporary.....		1	14	7		1		
Reservists.....								
32. Total paid for salaries to classified employees June 30, 1917.....	\$2,689.26	\$30,531.12	\$4,782.03	\$12,380.96	\$9,389.61	\$7,288.05		\$2,143.74
33. Number of classified employees on the rolls June 30, 1917:								
Permanent.....	5	26	24	10	18	7	89	6
Temporary.....		1	52	7	1	1		
Reservists.....		1	19		29			
34. Total labor charges for unclassified employees.....	\$2,709.33	\$2,057.11	\$23,914.77	\$3,288.63	\$7,214.95	\$1,685.98	\$42,989.57	\$1,938.14
35. Total number of chemical analyses made.....								
36. Number of laboratory employees.....								
37. Annual cost of such services.....								
38. Total value of fuel on hand July 1, 1916.....	\$163,654.07	\$15,835.91	\$57,592.75	\$1,717.59	\$3,038.69			\$206.17
39. Total value receipts of fuel.....	\$899,672.59	\$35,413.85	\$185,236.65	\$21,204.52	\$32,012.79		\$3,195.00	\$28,380.43
40. Total issues of fuel.....	\$600,590.10	\$23,477.14	\$158,087.63	\$20,768.06	\$30,728.53		\$3,195.00	\$27,239.10
41. Total value of fuel on hand June 30, 1917.....	\$372,726.56	\$12,983.29	\$57,754.77	\$2,154.55	\$4,322.96			\$1,347.50
42. Value of military reserve stock ordered during the year.....								
43. Square feet of floor space occupied by stores under cover.....	4,371	52,734	75,025	23,077	27,001	27,000	4,500	6,600
44. Additional floor space necessary to properly store all active and reserve stock.....	8,000	20,000	6,000	11,838	66,000	42,464	2,700	1,000

Statement 25.—ANNUAL TURNOVER OF PRINCIPAL CLASSES OF NAVAL SUPPLY ACCOUNT STORES.

[To find average number of months' supply carried, divide 12 by the annual turnover.]

	Portsmouth.	Boston.	New York.	Philadelphia.	Washington.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
Class 5.—Flags and bunting:										
Annual issues.....	\$1,687	\$9,065	\$184,000	\$14,075	\$654	\$14,529	\$2,973	\$24,717	\$2,800	\$255,560
Average stock carried.....	\$2,383	\$3,264	\$33,662	\$8,800	\$764	\$8,348	\$1,353	\$11,873	\$5,188	\$77,644
Annual turnover.....	0.7	2.7	5.1	1.6	1.6	1.5	2.1	2.0	0.5	3.2
On hand June 30, 1917.....	\$2,585	\$4,103	\$19,049	\$6,201	\$970	\$7,507	\$1,481	\$7,494	\$3,960	\$65,270
Number of months' supply on hand June 30, 1917.....	18.3	5.4	1.2	5.0	17.9	6.2	5.9	3.6	24.0	2.6
Class 7.—Fuel, galley and steaming (coal and oil):										
Annual issues.....	\$165,938	\$545,430	\$729,930	\$227,349	.....	\$2,066,166	\$65,163	\$1,299,623	\$200,241	\$6,293,868
Average stock carried.....	\$20,085	\$33,742	\$11,033	\$8,565	.....	\$15,053	\$32,590	\$102,533	\$101,635	\$394,860
Annual turnover.....	8.2	6.6	66.0	20.5	197.3	1.2	1.2	12.6	2.5	15.7
On hand June 30, 1917.....	\$40,017	\$157,124	\$4,864	.....	.....	\$89,917	\$191,379	\$191,379	\$80,328	\$462,624
Number of months' supply on hand June 30, 1917.....	3.5	3.4	0.1	.....	.....	11.6	1.7	1.4	1.4	0.9
Class 8.—Fuel ashore:										
Annual issues.....	\$21,904	\$17,492	\$46,843	\$141,064	\$269,418	\$222,276	\$61,936	\$110,460	\$13,480	\$900,538
Average stock carried.....	\$1,926	\$2,880	\$4,968	\$11,355	\$1,826	\$14,301	\$3,777	\$1,174	\$6,831	\$46,557
Annual turnover.....	11.4	6.0	9.3	1.2	165.2	15.6	18.8	94.0	1.9	19.9
On hand June 30, 1917.....	\$3,306	\$3,921	\$10,296	\$12,960	\$7,761	\$21,716	\$7,280	\$14,589	\$7,381	\$74,260
Number of months' supply on hand June 30, 1917.....	1.8	3.7	2.6	1.0	0.3	1.1	1.2	6.8	6.8	0.9
Class 12.—Boat and ship fixtures:										
Annual issues.....	\$122,197	\$123,038	\$291,064	\$96,396	\$15,005	\$80,914	\$19,257	\$78,090	\$30,331	\$626,307
Average stock carried.....	\$49,022	\$39,910	\$89,069	\$76,022	\$4,331	\$86,126	\$10,524	\$33,114	\$43,027	\$444,168
Annual turnover.....	2.6	3.2	3.3	1.1	1.7	1.7	3.8	0.7	0.7	1.8
On hand June 30, 1917.....	\$67,378	\$69,591	\$100,492	\$66,723	\$41	\$116,615	\$7,921	\$14,589	\$49,065	\$467,018
Number of months' supply on hand June 30, 1917.....	5.0	5.8	4.1	9.2	27.4	2.2	2.2	1.9	1.9	7.0
Class 13.—Engine and fire room fittings:										
Annual issues.....	\$28,487	\$49,728	\$69,582	\$73,076	\$12,028	\$32,040	\$12,380	\$48,578	\$17,371	\$376,178
Average stock carried.....	\$19,077	\$22,562	\$37,552	\$23,338	\$11,915	\$27,778	\$7,489	\$15,292	\$10,009	\$177,422
Annual turnover.....	15.5	2.2	2.3	2.1	1.0	1.0	3.0	3.1	2.1	2.1
On hand June 30, 1917.....	\$17,460	\$30,353	\$66,638	\$27,052	\$13,009	\$40,720	\$12,526	\$17,086	\$6,318	\$281,594
Number of months' supply on hand June 30, 1917.....	8.9	7.4	9.2	4.3	12.9	3.4	12.1	4.3	2.6	7.3
Class 14.—Oils, greases, etc.:										
Annual issues.....	\$10,775	\$75,929	\$54,962	\$19,799	\$39,161	\$89,028	\$9,992	\$70,945	\$13,327	\$243,948
Average stock carried.....	\$6,777	\$4,417	\$8,418	\$7,047	\$4,489	\$26,112	\$6,411	\$4,839	\$9,224	\$112,607
Annual turnover.....	1.7	17.1	6.4	2.8	8.7	3.4	11.5	14.7	2.1	2.1
On hand June 30, 1917.....	\$7,708	\$6,044	\$33,268	\$10,110	\$7,533	\$44,350	\$11,189	\$4,869	\$6,243	\$154,481
Number of months' supply on hand June 30, 1917.....	8.5	1.2	11.4	6.1	3.1	8.1	13.4	7.5	7.5	6.3
Class 15.—Electric cable and insulated wire:										
Annual issues.....	\$17,129	\$34,823	\$420,508	\$62,857	\$15,099	\$62,498	\$17,491	\$54,079	\$33,314	\$720,388
Average stock carried.....	\$20,544	\$16,677	\$247,663	\$43,026	\$14,308	\$47,267	\$9,351	\$33,530	\$30,540	\$446,748
Annual turnover.....	0.3	2.2	1.3	1.4	1.3	1.3	1.3	1.6	1.1	1.6
On hand June 30, 1917.....	\$89,694	\$27,961	\$404,848	\$62,633	\$34,943	\$61,312	\$14,123	\$41,580	\$38,978	\$706,334
Number of months' supply on hand June 30, 1917.....	28.8	6.1	11.5	11.9	28.7	11.7	6.7	6.3	10.4	11.7

Statement 25.—ANNUAL TURNOVER OF PRINCIPAL CLASSES OF NAVAL SUPPLY ACCOUNT STORES—Continued.

	Portsmouth.	Boston.	New York.	Philadel- phia.	Washing- ton.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
Class 20.—Bathroom and toilet fixtures:										
Annual issues.....	\$5,629	\$10,010	\$52,853	\$17,886	\$3,407	\$20,244	\$7,704	\$14,480	\$10,246	\$142,459
Average stock carried.....	\$4,294	\$9,161	\$14,320	\$6,203	\$939	\$15,309	\$5,033	\$6,029	\$5,580	\$45,069
Annual turnover.....	1.3	1.1	3.0	2.8	3.6	1.3	2.5	2.4	1.8	2.2
On hand June 30, 1917.....	\$6,912	\$14,261	\$32,173	\$19,005	\$1,917	\$29,168	\$4,830	\$3,545	\$12,118	\$123,931
Number of months' supply on hand June 30, 1917.....	14.7	15.5	12.7	12.7	6.7	17.3	7.5	3.0	14.1	10.4
Class 22.—Fire surfacing and heat insulating materials:										
Annual issues.....	\$3,452	\$13,455	\$29,315	\$17,755	\$1,306	\$22,454	\$12,444	\$19,275	\$7,557	\$126,940
Average stock carried.....	\$4,867	\$15,276	\$15,555	\$7,215	\$1,294	\$25,618	\$7,027	\$13,522	\$14,065	\$104,070
Annual turnover.....	0.7	0.8	1.0	2.4	1.1	0.9	1.4	0.5	0.5	1.2
On hand June 30, 1917.....	\$5,856	\$21,388	\$22,103	\$9,271	\$1,305	\$36,094	\$7,968	\$10,956	\$13,848	\$126,787
Number of months' supply on hand June 30, 1917.....	20.4	19.0	8.1	6.2	12.0	19.2	7.7	6.8	21.9	12.1
Class 33.—Gaskets, packing, rubber, etc.:										
Annual issues.....	\$17,282	\$39,360	\$98,879	\$61,004	\$4,780	\$90,060	\$15,569	\$54,646	\$18,556	\$400,127
Average stock carried.....	\$15,429	\$20,435	\$39,443	\$17,481	\$9,073	\$55,056	\$10,416	\$8,643	\$17,097	\$193,073
Annual turnover.....	1.1	1.9	2.5	3.4	3.4	1.6	1.4	6.3	1.8	2.0
On hand June 30, 1917.....	\$23,410	\$34,382	\$62,342	\$14,179	\$9,975	\$108,912	\$14,743	\$16,986	\$25,296	\$316,275
Number of months' supply on hand June 30, 1917.....	16.2	10.4	7.5	2.8	24.9	14.5	11.3	3.7	16.3	9.0
Class 34.—Hose, leather belting, etc.:										
Annual issues.....	\$18,553	\$101,584	\$125,411	\$120,670	\$21,191	\$57,665	\$14,453	\$42,451	\$19,550	\$521,562
Average stock carried.....	\$18,268	\$45,109	\$63,544	\$54,853	\$16,320	\$40,050	\$12,353	\$27,137	\$17,258	\$294,922
Annual turnover.....	1.0	2.2	1.9	2.2	1.3	1.4	1.1	1.5	1.1	1.7
On hand June 30, 1917.....	\$18,791	\$68,696	\$78,034	\$87,678	\$22,767	\$54,192	\$19,143	\$31,762	\$20,068	\$326,101
Number of months' supply on hand June 30, 1917.....	12.1	6.9	7.0	8.7	12.8	11.4	15.9	6.1	12.3	7.4
Class 35.—Brooms and brushes:										
Annual issues.....	\$13,897	\$13,751	\$42,772	\$18,991	\$6,062	\$25,585	\$3,341	\$14,543	\$5,432	\$142,914
Average stock carried.....	\$6,269	\$11,050	\$15,487	\$6,271	\$5,960	\$13,760	\$3,567	\$4,486	\$6,646	\$72,476
Annual turnover.....	2.4	1.1	2.6	3.0	1.1	1.8	0.9	3.2	0.8	1.9
On hand June 30, 1917.....	\$4,441	\$13,451	\$15,775	\$4,283	\$7,648	\$16,344	\$3,896	\$3,163	\$7,004	\$74,073
Number of months' supply on hand June 30, 1917.....	4.1	11.7	4.4	2.7	13.7	7.6	12.0	1.7	15.4	6.2
Class 39.—Lumber and timber:										
Annual issues.....	\$107,849	\$130,168	\$256,804	\$154,307	\$104,904	\$315,367	\$46,117	\$281,676	\$98,390	\$1,496,348
Average stock carried.....	\$117,742	\$116,940	\$171,555	\$96,189	\$65,702	\$357,722	\$46,316	\$81,890	\$36,702	\$1,090,058
Annual turnover.....	0.9	1.4	1.5	1.6	1.6	0.8	1.0	3.0	2.4	1.3
On hand June 30, 1917.....	\$126,247	\$110,680	\$307,696	\$62,385	\$67,866	\$99,023	\$49,641	\$66,647	\$32,041	\$1,199,744
Number of months' supply on hand June 30, 1917.....	15.3	10.3	9.7	6.4	10.0	15.2	12.0	4.5	4.1	9.8
Class 41.—Tools, hand:										
Annual issues.....	\$19,087	\$60,770	\$244,325	\$120,046	\$45,117	\$80,913	\$20,787	\$68,469	\$37,891	\$726,875
Average stock carried.....	\$13,269	\$44,955	\$66,194	\$94,563	\$46,094	\$74,067	\$24,562	\$33,744	\$26,112	\$469,321
Annual turnover.....	1.9	1.3	3.6	1.3	1.0	1.1	0.8	2.0	1.5	1.8
On hand June 30, 1917.....	\$34,024	\$49,799	\$119,635	\$114,513	\$78,633	\$102,894	\$28,265	\$34,466	\$40,067	\$662,704
Number of months' supply on hand June 30, 1917.....	14.1	8.3	8.3	10.6	20.9	12.3	16.3	6.0	13.0	9.3

Statement 25.—ANNUAL TURNOVER OF PRINCIPAL CLASSES OF NAVAL SUPPLY ACCOUNT STORES—Continued.

	Portsmouth.	Boston.	New York.	Phila- del- phia.	Washing- ton.	Norfolk.	Charleston.	Mare Island.	Puget Sound.	Total.
Class 62.—Paints and paint ingredients:										
Annual issues.....	\$40,067	\$106,369	\$1,186,729	\$345,722	\$28,488	\$771,031	\$28,478	\$321,351	\$51,753	\$2,816,018
Average stock carried.....	\$33,792	\$36,656	\$119,240	\$114,184	\$19,001	\$333,667	\$27,640	\$67,012	\$64,535	\$656,747
Annual turnover.....	1.2	2.8	10.0	3.0	1.2	2.3	1.0	3.6	0.8	3.2
On hand June 30, 1917.....	\$36,350	\$41,435	\$446,745	\$132,183	\$22,328	\$448,639	\$35,046	\$63,663	\$74,043	\$1,330,901
Number of months' supply on hand June 30, 1917.....	10.8	4.7	4.5	4.5	11.5	14.7	14.7	3.5	17.1	7.1
Class 53.—Stationery and drafting materials:										
Annual issues.....	\$11,563	\$28,430	\$279,538	\$38,185	\$112,955	\$43,844	\$13,247	\$34,904	\$21,699	\$584,357
Average stock carried.....	\$5,960	\$9,999	\$103,985	\$6,913	\$46,309	\$13,045	\$4,643	\$6,174	\$5,423	\$206,356
Annual turnover.....	2.0	2.8	2.7	3.8	2.4	3.3	2.8	5.6	2.5	2.8
On hand June 30, 1917.....	\$7,600	\$15,673	\$106,920	\$13,792	\$46,594	\$18,468	\$5,470	\$3,945	\$9,580	\$238,043
Number of months' supply on hand June 30, 1917.....	7.8	6.6	4.5	4.3	4.9	5.0	5.0	1.3	5.3	4.6
Class 59.—Building material ashore:										
Annual issues.....	\$9,240	\$17,811	\$48,142	\$20,543	\$20,689	\$34,337	\$32,085	\$55,074	\$26,585	\$288,005
Average stock carried.....	\$3,819	\$2,632	\$7,251	\$7,229	\$2,588	\$9,322	.....	\$9,936	\$5,126	\$46,398
Annual turnover.....	2.5	6.8	6.0	2.8	8.4	3.5	.....	5.6	5.0	5.3
On hand June 30, 1917.....	\$6,781	\$1,194	\$4,500	\$6,302	\$2,711	\$11,912	.....	\$9,464	\$4,214	\$80,723
Number of months' supply on hand June 30, 1917.....	7.9	0.8	1.2	4.0	1.5	4.2	.....	1.5	1.9	2.3

RECAPITULATION.

Total annual issues under the above classes at the yards named.....	\$3,666,137,810
Average stock carried.....	\$1,672,103,223
Annual turnover.....	2.2
On hand June 30, 1917.....	\$2,267,539,400
Number of months' supply on hand June 30, 1917.....	7.3
Average number of months' stock carried.....	5.5

Statement 26.—EQUIPAGE ACCOUNT, AFLOAT.

[Title B, excepting medical and Marine Corps stores.]

Bureau.	Balance July 1, 1916.	Receipts.					Total on hand and received.
		Purchases.	Gain by inventory.	Transfers.	Other Government departments.	Total.	
Navigation.....	\$625,876.59	\$6,462.29	\$100,002.32	\$253,739.70	\$54.68	\$360,288.99	\$1,286,165.68
Ordnance.....	56,430,942.18	3,250.40	3,462,348.92	8,772,689.83	5,579.34	9,243,768.49	65,674,710.87
Construction and Repair.....	10,705,636.55	17,725.63	107,742.62	2,270,440.23	5,735.36	2,401,643.84	13,107,680.39
Steam Engineering.....	5,211,715.89	11,112.69	3,800,510.38	1,418,975.44	575.27	1,723,173.78	6,942,889.87
Supplies and Accounts.....	580,785.21	12,262.91	161,257.99	156,732.11	.86	329,273.87	910,059.08
Yards and Docks.....	.....	.....	.....	8,391.86	.....	8,391.86	8,391.86
Naval Militia.....	390,146.37	.....	.....	25,096.48	110,644.35	135,640.83	525,790.20
Total on balance sheets.....	74,245,405.79	50,833.92	1,131,862.23	12,904,965.65	122,519.86	\$ 14,210,181.66	88,465,887.45
In transit.....	1,008,452.15	.....	.....	.....	.....	.....	.....
Grand total.....	75,253,857.94	.....	.....	.....	.....	.....	.....

¹ Gyro-compass parts, etc.
² Gun mounts on Minnesota, gun equipment on Tonopah, and other miscellaneous items.
³ Miscellaneous equipment.

⁴ Spare propellers, etc., carried at navy yards now on charge on ship's books.
⁵ Silver service articles now on charge on ship's books.

⁶ To reconcile the total receipts as shown by statement 21, deduct stores in transit on July 1, 1916, from the total receipts shown above and add stores in transit on June 30, 1917, to the remainder.

Statement 26.—EQUIPAGE ACCOUNT, AFLOAT—Continued.

Bureau.	Expenditures.						Balance June 30, 1917.
	Loss by survey, title C.	Alterations to ships, title K.	Naval Militia, etc., title V.	Transfers.	Other Government departments.	Loss by wreck. ¹		Total.
Navigation.....	\$13,418.49	\$1,168.00	\$1,856.72	\$124,091.43	\$57.49	\$10,239.41	\$152,831.63
Ordnance.....	483,536.02	245,787.92	26,540.87	8,263,574.71	37,394.21	1,037,789.92	10,064,613.65
Construction and Repair.....	302,117.27	32,377.32	28,876.95	1,365,752.44	6,113.09	249,772.10	1,985,009.17
Steam Engineering.....	144,342.06	84,806.24	12,444.72	849,138.32	2,305.98	126,237.40	1,219,364.74
Supplies and Accounts.....	27,831.92	100.00	2,905.06	86,187.33	.86	7,397.67	118,323.64
Yards and Docks.....	.....	.....	.....	18.00	.....	.....	18.00
Naval Militia.....	.....	.....	3,440.11	10,284.01	.....	.....	13,724.12
Total on balance sheets.....	971,245.78	364,236.57	76,065.43	10,995,046.24	45,951.63	1,431,436.50	13,683,965.15
In transit.....	.....	.....	.....	.....	.....	.....	74,871,602.30
Grand total.....	.....	.....	.....	.....	.....	.....	1,928,504.22
Increase.....	.....	.....	.....	.....	.....	.....	76,400,006.82
.....	.....	.....	.....	.....	.....	.....	1,146,148.58
.....	.....	.....	.....	.....	.....	.....	76,283,867.94

¹ Memphis, Milwaukee, and Hector.

Statement 27.—NAVAL SUPPLY ACCOUNT, AFLOAT AND ASHORE.

On hand July 1, 1916.....		\$26,315,870.1
Received:		
From open purchase.....	36,165,920.12	
From contracts.....	45,363,049.05	
Equipage and supplies included in cost of new ships.....	645,917.87	
From other Government departments.....	286,801.19	
From manufacture.....	14,515,987.22	
From gain by appraisal.....	34,906.35	
From gain by inventory.....	152,857.68	
From condemned stores account.....	6,914.68	
Miscellaneous material returned to store.....	44,464.40	
		<hr/>
New and reclaimed material.....		67,166,628.56
From equipage account and miscellaneous and title C stores.....	214,635.55	
From ordnance account.....	791,550.23	
From survey account.....	634,833.07	
From used-material account.....	306,816.20	
From provisions and clothing accounts.....	268,285.39	
		<hr/>
Transfers between accounts.....		2,266,120.43
		<hr/>
		95,748,619.18
Expended:		
For use and to manufacturing account on reports of expenditures.....	34,316,316.77	
To ships, title C, and on miscellaneous invoices.....	10,463,702.06	
To loss by appraisal.....	197,911.27	
Fuel for officers.....	22,474.83	
To condemned stores account.....	153,453.09	
To loss by inventory.....	84,857.14	
		<hr/>
Final expenditures and to manufacturing account.....		45,238,715.16
To equipage account.....	4,133,906.66	
To ordnance account.....	46,420.85	
To survey account.....	214.72	
To used-material account.....	19,202.08	
To provisions and clothing accounts.....	412,442.52	
		<hr/>
Transfers between accounts.....		4,612,186.83
On hand June 30, 1917.....		45,897,717.19
		<hr/>
		95,748,619.18

Statement 27.—NAVAL SUPPLY ACCOUNT, AFLOAT AND ASHORE—Contd.

ANALYSIS OF BALANCES.

	July 1, 1916.	June 30, 1917.
Navy yard, Portsmouth.....	\$1,456,422.87	\$2,012,965.58
Navy yard, Boston.....	2,227,900.54	4,216,222.81
Naval ammunition depot, Hingham.....	533.16	1,324.20
Naval torpedo station, Newport.....	223,512.99	507,992.73
Naval training station, Newport.....	9,377.21	53,989.78
Navy yard, New York.....	3,898,570.12	7,433,980.42
Naval ammunition depot, Iona Island.....	16,985.28	25,980.71
Naval ammunition depot, Dover.....	5,842.23	9,782.01
Navy yard, Philadelphia.....	1,848,208.54	3,630,065.79
Naval ammunition depot, Fort Mifflin.....	590.37	282.42
Naval Academy, Annapolis.....	52,964.39	82,322.75
Navy yard, Washington.....	1,198,648.01	1,569,682.17
Naval Observatory, Washington.....	128,168.09	116,210.64
Naval Proving Ground, Indianhead.....	382,901.92	340,952.53
Navy yard, Norfolk.....	2,698,803.27	6,039,284.06
Naval ammunition depot, St. Juliens Creek.....	1,088.63	1,556.80
Navy yard, Charleston.....	700,682.28	975,811.08
Naval station, Key West.....	115,390.81	129,449.55
Naval aeronautic station, Pensacola.....	103,482.50	142,709.46
Naval station, New Orleans.....	98,169.58	182,448.26
Naval training station, Great Lakes.....	38,610.51	156,271.69
Naval hospital, Fort Lyon.....	5,289.55	12,414.80
Naval training station, San Francisco.....	4,794.14	19,479.47
Navy yard, Mare Island.....	2,237,122.40	3,480,268.83
Naval ammunition depot, Mare Island.....	2,562.00	571.20
Navy yard, Puget Sound.....	1,396,883.87	1,944,730.90
Naval station, Guantanamo.....	265,459.87	298,573.69
Naval station, Cavite.....	1,314,834.05	2,613,879.00
Naval station, Olongapo.....	387,090.25	295,924.55
Naval station, Guam.....	74,036.07	49,493.40
Naval station, Pearl Harbor.....	721,937.11	612,186.53
Naval station, Tutuila.....	52,933.24	45,731.32
Naval coal depot, Melville.....	154,244.16	368,624.62
Naval coaling station, New London.....	9,409.91	4,111.94
Naval coaling station, San Diego.....	71,850.38	111,773.80
Naval coaling station, Pichilínque.....	10,278.76	7,965.62
Naval coaling station, Sitka.....	18,536.24	12,187.59
Naval coaling station, Yokohama.....	52,286.41	29,881.69
Fifth naval district.....		128.06
Sixth naval district.....		6,952.08
Ninth naval district.....		246.51
Twelfth naval district.....		34.26
General supply system vessels.....	3,011,453.63	4,143,187.72
Naval fuel ships.....	298,329.92	246,719.04
Shipments between stations in transit.....	1,024,291.68	3,968,429.46
Total.....	26,315,870.19	45,897,717.19
Increase in balances.....	19,581,847.00	

Statement 23.—ORDNANCE ACCOUNT, AFLOAT AND ASHORE.

	Supply officers afloat.	Gunnery officers afloat.	Supply officers ashore.	
On hand July 1, 1916.....				\$85, 189, 151. 51
Received:				
From open purchase.....	\$191. 28		\$735, 426. 16	
From contracts.....			14, 264, 367. 96	
From other Government departments.....		\$392. 35	321, 869. 53	
From manufacture.....			11, 945, 022. 10	
From gain by appraisal.....			578, 128. 20	
From gain by inventory.....	566. 77	84, 691. 75	220, 336. 03	
From condemned stores account.....			83. 85	
Miscellaneous material returned to store.....			164, 534. 87	
New and reclaimed material.....				28, 418, 610. 94
From naval supply account.....	26, 821. 94	31. 05	19, 567. 86	
From survey account.....			905. 47	
From used-material account.....			2. 55	
From equipage account and miscella- neous and title C stores.....	328, 907. 64	1, 192, 109. 62	6, 208, 751. 74	
Transfers between accounts.....				7, 777, 097. 87
				<u>121, 384, 860. 32</u>
Expended:				
For use and to manufacturing account on reports of expenditures.....			8, 358, 212. 70	
To ships, title C, and on miscellaneous invoices.....	63, 175. 66	1, 068, 130. 88	2, 644, 631. 02	
To loss by appraisal.....			1, 577, 192. 13	
To condemned stores account.....			68, 607. 98	
To loss by inventory.....	1, 204. 74	39, 779. 78	77, 417. 34	
Final expenditures and to manu- facturing account.....				13, 918, 352. 23
To equipage account.....	307, 401. 06	8, 020. 67	7, 668, 196. 83	
To naval supply account.....	919. 33	12. 95	790, 617. 94	
To survey account.....			7, 590. 85	
To used-material account.....			41, 239. 31	
Transfers between accounts.....				8, 823, 994. 94
On hand June 30, 1917.....				<u>98, 642, 518. 15</u>
				121, 384, 860. 32

Statement 28.—ORDNANCE ACCOUNT, AFLOAT AND ASHORE—Continued.

ANALYSIS OF BALANCES.

	July 1, 1916.	June 30, 1917.
Navy yard, Portsmouth.....	\$288,458.01	\$76,307.25
Navy yard, Boston.....	606,169.79	534,102.80
Naval ammunition depot, Kingsham.....	3,961,739.56	4,127,806.88
Naval torpedo station, Newport.....	3,940,900.61	2,850,538.34
Naval training station, Newport.....	86.25	86.25
Navy yard, New York.....	3,443,086.61	2,599,185.51
Naval ammunition depot, Iona Island.....	7,248,336.00	8,939,265.48
Naval ammunition depot, Dover.....	4,063,575.60	4,790,303.61
Navy yard, Philadelphia.....	2,426,294.06	3,003,687.19
Naval ammunition depot, Fort Mifflin.....	5,079,790.80	6,908,105.00
Naval Academy, Annapolis.....	10,101.86	6,553.00
Navy yard, Washington.....	12,977,984.74	12,547,990.36
Naval proving ground, Indianhead.....	2,918,657.09	2,587,913.75
Navy yard, Norfolk.....	1,032,028.76	3,308,504.67
Naval ammunition depot, St. Juliens Creek.....	8,547,130.74	10,163,672.88
Navy yard, Charleston.....	678,571.56	400,147.22
Naval station, Key West.....	7,254.05	28,895.75
Naval aeronautic station, Pensacola.....	2,397.88	5,272.17
Naval station, New Orleans.....	16,816.49	20,128.21
Naval training station, Great Lakes.....	75.00	379.66
Navy yard, Mare Island.....	636,066.34	769,106.00
Naval ammunition depot, Mare Island.....	4,200,860.13	4,255,686.36
Navy yard, Puget Sound.....	2,191,981.95	2,242,680.92
Naval station, Guantanamo.....	404.38	1,387.76
Naval station, Cavite.....	133,367.72	83,500.34
Naval station, Olongapo.....	1,480,720.97	1,534,905.71
Naval station, Guam.....	.....	153.69
Naval station, Pearl Harbor.....	24,084.31	22,507.44
Naval station, Tutuila.....	16.54	1,530.53
Naval vessels (supply officers).....	672,355.18	922,006.70
Naval vessels (gunnery officers).....	16,998,656.57	21,525,121.32
Naval Observatory, Washington.....	.....	144.57
Sixth naval district.....	.....	7,550.67
Twelfth naval district.....	.....	2,119.64
Shipments between stations in transit.....	1,506,231.92	4,406,165.74
Naval stores in custody of others than naval officers.....	76,960.74	.....
Total on hand.....	85,169,151.51	96,642,513.15
Increase in balances.....	13,483,361.64	.....

Statement 29.—SURVEY ACCOUNT, ASHORE.

On hand July 1, 1916.....		\$624,826.42
Received:		
From open purchase.....	\$37.95	
Material invoiced to supply officers included in cost of new ships.....	10,218.42	
From gain by appraisal.....	134,338.66	
From gain by inventory.....	16,346.12	
From condemned stores account.....	10,361.00	
Material returned to store.....	37,459.53	
		206,761.68
New and reclaimed material.....		
From naval supply account.....	214.72	
From ordnance account.....	7,590.85	
From used-material account.....	1,559.59	
From equipage account and miscellaneous, title C stores.....	2,093,717.73	
		2,103,082.89
Transfers between accounts.....		2,936,670.99
		<u>2,936,670.99</u>
Expended:		
Loss by appraisal.....	761,140.32	
Loss by inventory.....	4,940.65	
To condemned stores account.....	376,599.50	
To ships, title C, and on miscellaneous invoices.....	1,271.00	
		1,143,951.47
Final expenditures.....		
To naval supply account.....	684,833.07	
To ordnance account.....	905.47	
To used-material account.....	153,316.16	
To equipage account.....	68,113.53	
		909,168.23
Transfers between accounts.....		883,551.24
On hand June 30, 1917.....		2,936,670.99

ANALYSIS OF BALANCES.

	July 1, 1916.	June 30, 1917.
Navy yard, Portsmouth.....	\$45,611.22	\$54,106.53
Navy yard, Boston.....	26,614.70	56,478.60
Naval torpedo station, Newport.....		1,153.57
Navy yard, New York.....	97,781.96	194,974.40
Naval ammunition depot, Iona Island.....		106.15
Navy yard, Philadelphia.....	195,868.03	212,011.03
Navy yard, Washington.....		8,855.37
Naval Observatory, Washington.....	1,102.68	26,250.61
Navy yard, Norfolk.....	52,953.69	124,137.86
Navy yard, Charleston.....	71,032.54	10,930.94
Naval station, Key West.....	816.90	1,336.30
Naval aeronautic station, Pensacola.....	600.00	843.68
Naval station, New Orleans.....	357.40	34.10
Naval training station, Great Lakes.....	180.31	151.08
Naval training station, San Francisco.....		9.23
Navy yard, Mare Island.....	83,124.22	119,149.74
Navy yard, Puget Sound.....	21,763.31	20,806.91
Naval station, Guantanamo.....	15,568.92	14,159.53
Naval station, Cavite.....	4,344.99	13,018.91
Naval station, Olongapo.....	6,616.21	1,226.83
Naval station, Pearl Harbor.....	650.25	412.00
Naval station, Tuitula.....	150.00	
Shipments between stations in transit.....	310.91	25,913.97
Total on hand.....	624,826.42	883,551.24
Increase in balances.....	258,724.82	

Statement 30.—USED-MATERIAL ACCOUNT.

On hand July 1, 1916.....		\$197,676.30
Received:		
Gain by appraisal.....	\$112,481.42	
Gain by inventory.....	92,519.51	
From condemned stores account.....	3,425.80	
		<u>208,426.73</u>
New and reclaimed material.....		208,426.73
From naval supply account.....	19,202.06	
From ordnance account.....	41,239.31	
From survey account.....	155,816.16	
Miscellaneous invoices.....	67,075.19	
		<u>282,832.74</u>
Transfers between accounts.....		688,935.77
		<u>688,935.77</u>
Expended:		
For use on reports of expenditures.....	117,559.35	
To ships, title C, and on miscellaneous invoices.....	3,880.98	
Loss by appraisal.....	16,643.19	
Loss by inventory.....	2,635.87	
To condemned stores account.....	492.36	
		<u>141,211.75</u>
Final expenditures.....		141,211.75
To naval supply account.....	306,816.20	
To ordnance account.....	2.55	
To survey account.....	1,559.59	
		<u>308,378.34</u>
Transfer between accounts.....		239,345.68
On hand June 30, 1917.....		<u>688,935.77</u>

ANALYSIS OF BALANCES.

	July 1, 1916.	June 30, 1917.
Navy yard, Portsmouth.....	\$10,991.07	\$36,926.88
Navy yard, Boston.....	12,202.74	12,027.58
Naval torpedo station, Newport.....	2.56	2,476.22
Navy yard, New York.....	24,191.12	26,083.72
Navy yard, Philadelphia.....	33,405.67	23,302.99
Naval Academy, Annapolis.....		219.08
Navy yard, Washington.....		20,255.21
Naval Observatory, Washington.....	2,555.00	124.05
Navy yard, Norfolk.....	17,357.16	44,768.88
Navy yard, Charleston.....	1,341.47	2,861.64
Naval station, Key West.....	7.84	896.93
Naval aeronautic station, Pensacola.....	794.54	2,061.30
Naval station, New Orleans.....		306.99
Navy yard, Mare Island.....	4,578.24	22,249.44
Navy yard, Puget Sound.....	7,027.07	21,699.11
Naval station, Guantanamo.....	700.00	940.50
Naval station, Cavite.....	18,236.84	2,380.32
Naval station, Olongapo.....	1,124.50	2,982.88
Naval station, Tutuila.....	70.26	
Naval station, Pearl Harbor.....		994.91
Shipments between stations in transit.....	747.61	15,027.15
Naval stores in custody of others than naval officers.....	52,354.61	
		<u>239,345.68</u>
Total on hand.....	197,676.30	239,345.68
Increase in balances.....	41,669.28	

Statement 31.—RESERVE MATERIAL, NAVY, ACCOUNT.

On hand July 1, 1916.....		
Received:		
From open purchase.....	\$2,603.75	
From contracts.....	11,600.84	
New material.....		\$14,204.59
		<u>14,204.59</u>
Expended:		
For use on reports of expenditures.....	63.60	
Final expenditure.....		63.60
To equipage account.....	374.60	
Transfer between accounts.....		374.60
On hand June 30, 1917.....		<u>13,766.30</u>
		14,204.59

ANALYSIS OF BALANCES.

	July 1, 1916.	June 30, 1917.
Navy yard, Portsmouth.....		\$455.75
Navy yard, Boston.....		2,337.09
Navy yard, New York.....		7,862.87
Navy yard, Philadelphia.....		1,194.94
Navy yard, Mare Island.....		1,915.65
Total.....		13,766.30
Increase in balances.....	\$13,766.30	

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Statement 32.—PROVISIONS ACCOUNT, AFLOAT AND ASHORE.

PROVISIONS, NAVY

Balances July 1, 1916:			
At navy yards and stations	.....	\$976, 586.22	
On board ships	.....	1, 085, 901.95	
In transit	.....	459, 650.40	
			<u>32, 582, 118.57</u>
Received:			
From purchase	.....	15, 642, 423.05	
From Marine Corps	.....	1, 457.38	
From naval hospitals	.....	4, 253.93	
From Naval Militia	.....	14.40	
From manufacture	.....	382, 022.52	
From other Government departments	.....	19, 458.80	
From miscellaneous receipts	.....	4, 919.94	
From ex-German vessel	.....	16, 715.41	
From gain by inventory	.....	9, 134.83	
From advanced prices	.....	53, 512.46	
			<u>16, 133, 902.73</u>
New material	.....	63, 950.92	
From naval supply account	.....	1, 432.08	
From provisions, naval auxiliaries	.....	73, 691.68	
From clothing and small stores accounts	.....	
			<u>139, 074.68</u>
Transfers between accounts	.....		<u>18, 835, 086.97</u>
Expended:			
Issues to crew and marines	.....	8, 817, 448.21	
Sales for cash	.....	1, 777, 391.15	
To Marine Corps	.....	562, 243.12	
To naval hospitals	.....	172, 128.91	
To Naval Militia	.....	29, 316.71	
Miscellaneous expenditures	.....	42, 403.08	
To manufacture	.....	376, 267.23	
Refugees and supernumeraries	.....	2, 068.09	
Allied powers (British)	.....	4, 345.46	
To other Government departments	.....	26, 440.34	
Condemned by survey to loss	.....	139, 663.87	
Loss by wreck <i>Milwaukee</i>	.....	14, 554.22	
Condemned by survey to be sold	.....	5, 974.07	
Crew's entertainment allotment	.....	232.61	
For testing and use	.....	14, 778.40	
			<u>11, 965, 255.47</u>
Final expenditures	.....	11, 647.20	
To naval supply account	.....	77, 024.28	
To ships' store account	.....	113, 939.11	
To provisions, naval auxiliaries	.....	2, 001.50	
To clothing and small stores account	.....	
			<u>204, 612.16</u>
Transfers between accounts	.....	
Balances June 30, 1917:			
At navy yards and stations	.....	2, 998, 747.82	
On board ships	.....	1, 891, 461.16	
In transit	.....	1, 765, 019.36	
			<u>6, 645, 228.34</u>
			<u>18, 835, 086.97</u>
Balance June 30, 1917	.....	6, 645, 228.34	
Balance July 1, 1916	.....	2, 562, 118.57	
Increase	.....		<u>4, 083, 109.77</u>

MAINTENANCE NAVAL AUXILIARIES.

Balance July 1, 1916	.....		838, 185.76
Received:			
From purchase	.....		124, 136.45
From provisions account	.....	\$109, 548.73	
From naval supply account	.....	33.00	
			<u>109, 581.73</u>
Transfer between accounts	.....	
			<u>371, 908.94</u>
Expended:			
Issues to crew	.....	154, 773.57	
Subsistence of supernumeraries	.....	20, 726.97	
Sales for cash	.....	18, 132.95	
Condemned by survey to loss	.....	6, 735.62	
Deficit in accounts	.....	3, 842.50	
Loss by wreck	.....	2, 961.82	
			<u>209, 173.43</u>
Final expenditures	.....		<u>2, 383.08</u>
To provisions account	.....	

BUREAU OF SUPPLIES AND ACCOUNTS.

Balance June 30, 1917:		
On hand.....	\$60,372.58	
In transit.....	122.87	
		<u>\$60,495.45</u>
		<u>271,908.94</u>
Balance June 30, 1917.....		60,495.45
Balance July 1, 1916.....		38,185.76
Increase.....		<u>22,309.67</u>

Statement 23.—PROVISIONS ACCOUNT, AFLOAT AND ASHORE.

PROVISIONS, NAVY

Balances July 1, 1916:		
At navy yards and stations	9976, 566.22	
On board ships	1, 085, 901.95	
In transit	489, 650.40	
		\$2, 562, 118.57
Received:		
From purchase	15, 642, 423.05	
From Marine Corps	1, 457.38	
From naval hospitals	4, 253.93	
From Naval Militia	14.40	
From manufacture	382, 022.52	
From other Government departments	19, 458.80	
From miscellaneous receipts	4, 919.94	
From ex-German vessel	16, 715.41	
From gain by inventory	9, 124.83	
From advanced prices	53, 512.46	
		16, 133, 902.72
New material		
To naval supply account	63, 950.92	
From provisions, naval auxiliaries	1, 432.08	
From clothing and small stores accounts	73, 691.68	
		139, 074.68
Transfers between accounts		18, 835, 095.97
Expended:		
Issues to crew and marines	8, 817, 448.21	
Sales for cash	1, 777, 391.15	
To Marine Corps	562, 243.12	
To naval hospitals	172, 128.91	
To Naval Militia	29, 316.71	
Miscellaneous expenditures	42, 403.08	
To manufacture	376, 267.23	
Refugees and supernumeraries	2, 068.09	
Allied powers (British)	4, 345.46	
To other Government departments	26, 440.34	
Condemned by survey to loss	139, 063.87	
Loss by wreck <i>Milwaukee</i>	14, 554.22	
Condemned by survey to be sold	5, 974.07	
Crew's entertainment allotment	232.61	
For testing and use	14, 778.40	
		11, 985, 255.47
Final expenditures		204, 612.16
To naval supply account	11, 647.20	
To ships' store account	77, 024.26	
To provisions, naval auxiliaries	113, 939.11	
To clothing and small stores account	2, 001.59	
		204, 612.16
Transfers between accounts		6, 645, 228.34
Balances June 30, 1917:		
At navy yards and stations	2, 968, 747.82	
On board ships	1, 891, 461.16	
In transit	1, 765, 019.36	
		6, 645, 228.34
		18, 835, 095.97
Balance June 30, 1917		6, 645, 228.34
Balance July 1, 1916		2, 562, 118.57
Increase		4, 083, 109.77

MAINTENANCE NAVAL AUXILIARIES.

Balance July 1, 1916		\$38, 185.76
Received:		
From purchase		124, 136.45
From provisions account	\$109, 548.73	
From naval supply account	33.00	
		109, 581.73
Transfer between accounts		371, 908.94
Expended:		
Issues to crew	156, 773.57	
Subsistence of supernumeraries	20, 726.97	
Sales for cash	18, 132.95	
Condemned by survey to loss	6, 735.62	
Deficit in accounts	3, 842.50	
Loss by wreck	2, 961.82	
		209, 173.43
Final expenditures		2, 288.08
To provisions account		

BUREAU OF SUPPLIES AND ACCOUNTS.

Balance June 30, 1917:		
On hand.....	\$80,372.56	
In transit.....	122.87	
		<u>\$80,495.43</u>
		<u>271,908.94</u>
Balance June 30, 1917.....		80,495.43
Balance July 1, 1916.....		38,185.76
Increase.....		22,309.67

Statement 33.—SHIP'S STORE ACCOUNT, AFLOAT.

Balance July 1, 1916:			
On hand.....		\$265, 288. 13	
In transit.....		8, 598. 88	
			<u>\$373, 887. 01</u>
Received:			
From purchase.....	1, 116, 164. 84		
From other Government departments.....	111. 00		
Miscellaneous receipts.....	88. 40		
Gain on inventory.....	71. 39		
			<u>1, 116, 435. 63</u>
New material.....			
From naval supply account.....	11, 731. 40		
From clothing and small stores account.....	1, 708. 08		
From provisions account.....	78, 167. 62		
			<u>91, 607. 10</u>
Transfer between accounts.....			146, 516. 05
From gain by advanced prices.....			<u>1, 028, 416. 69</u>
Expended:			
Sales for cash.....	1, 274, 832. 03		
Condemned by survey.....	18, 825. 92		
			<u>1, 293, 657. 95</u>
Final expenditures.....			
To naval supply account.....	694. 33		
To clothing and small stores accounts.....	9, 255. 28		
To crew's entertainment.....	7, 386. 11		
			<u>17, 335. 72</u>
Transfer between accounts.....			17, 337. 72
Balance June 30, 1917:			
On hand.....	292, 835. 54		
In transit.....	54, 585. 48		
			<u>\$17, 421. 02</u>
			<u>1, 028, 416. 69</u>
Balance June 30, 1917.....		317, 421. 02	
Balance June 30, 1916.....		273, 858. 01	
			<u>43, 563. 01</u>
Increase.....			43, 563. 01

Statement 34.—CLOTHING ACCOUNT, AFLOAT AND ASHORE.

Balances July 1, 1916, at issuing prices:		
At navy yards and stations.....	\$1,890,548.85	
On board ships.....	1,029,962.92	
In transit.....	481,313.17	
	<u>3,401,814.64</u>	
Add difference between cost and issuing prices.....	58,577.11	\$3,460,391.75
Received:		
From purchase.....	5,873,071.56	
From Marine Corps.....	33,990.15	
From Naval Militia.....	23,141.99	
From manufacture.....	2,625,838.23	
From other Government departments.....	119,063.95	
Miscellaneous receipts.....	43.18	
Gain on inventory.....	7,386.73	
From condemned to be sold.....	41,248.66	
	<u>8,723,764.37</u>	
New material.....		8,723,764.37
From naval supply account.....	342,545.08	
From provisions account.....	7,020.99	
	<u>349,566.07</u>	
Transfers between accounts.....		349,566.07
		<u>12,533,722.19</u>
Expended:		
Issued to officers, crew and marines.....	4,592,428.55	
Issued to prisoners and prisoners.....	18,015.93	
Sales for cash.....	93,222.94	
To Marine Corps.....	19,025.39	
To Naval Militia.....	296,870.67	
Miscellaneous expenditures.....	20,915.00	
To other Government departments.....	108,330.80	
To manufacture.....	2,250,947.43	
Loss by survey.....	17,406.49	
Loss by wreck— <i>Memphis, Hector, and Milwaukee</i>	28,473.08	
Alterations of clothing.....	117.08	
For testing and use.....	1,355.74	
Loss from reduced prices.....	486,349.96	
	<u>7,933,459.01</u>	
Final expenditures.....		7,933,459.01
To naval supply account.....	256,663.22	
To provisions account.....	76,853.44	
To crew's entertainment.....	72.85	
	<u>333,589.51</u>	
Transfers between accounts.....		333,589.51
Balances June 30, 1917, at issuing prices:		
At navy yards and stations.....	1,631,246.12	
On board ships.....	1,351,706.83	
In transit.....	938,797.91	
	<u>3,921,749.86</u>	
Add difference between cost and issuing prices.....	344,923.81	4,266,673.67
		<u>4,266,673.67</u>
		12,533,722.19
Balance June 30, 1917.....		4,266,673.67
Balance June 30, 1916.....		3,460,391.75
		<u>806,281.92</u>
Increase.....		806,281.92

Statement 35.—MEDICAL STORES.

RECEIPTS.	
Balance July 1, 1916.....	\$332,965.97
Purchases.....	795,505.77
Total.....	1,148,471.74
EXPENDITURES.	
Maintenance of ships in commission (title C).....	235,049.69
Miscellaneous (title V).....	386,853.17
Condemned.....	464.63
Balance June 30, 1917.....	527,094.85
Total.....	1,148,471.74
Balance June 30, 1917.....	527,094.85
Balance July 1, 1916.....	332,965.97
Increase.....	174,128.86

Statement 36.—MANUFACTURING ACCOUNT.

	Naval supply account.	Ordnance account.	Clothing account.	Provisions account.	Total.
RECEIPTS.					
Balance July 1, 1916.....	\$1,405,883.86	\$3,368,320.07	\$27,280.15	.....	\$9,801,484.08
Labor, indirect, and material....	16,172,922.08	17,406,553.08	3,132,802.98	\$382,022.52	37,094,300.66
Total.....	17,578,805.94	25,774,873.15	3,160,083.13	382,022.52	46,895,784.74
EXPENDITURES.					
Completed work.....	14,515,997.22	11,948,022.10	2,625,912.51	382,022.52	29,471,954.35
Balance June 30, 1917.....	3,062,808.72	13,826,851.05	534,170.62	.....	17,423,830.39
Total.....	17,578,805.94	25,774,873.15	3,160,083.13	382,022.52	46,895,784.74
Work in process June 30, 1917.....	.....	.....	.....	.....	17,423,830.39
Work in process July 1, 1916.....	.....	.....	.....	.....	9,801,484.08
Increase.....	.....	.....	.....	.....	7,622,346.31

REPORT OF THE SECRETARY OF THE NAVY.

Statement 37.—MARINE CORPS STORES.

	Clothing.	Public property.	Total.
RECEIPTS.			
Balance July 1, 1916.....	\$971,264.85	\$2,689,225.58	\$3,660,490.43
Received during fiscal year 1917.....	1,805,755.96	4,166,194.70	5,971,950.66
Total.....	2,777,020.81	6,855,420.28	9,632,441.09
EXPENDITURES.			
Expended by regular issues.....	1,324,627.30	.....	1,324,627.30
Expended by extra issues (sold, etc.).....	100,810.42	878,282.87	979,093.29
Expended for manufacture, etc.....	3,098.23	983,957.48	987,055.71
Condemned by survey.....	28,159.91	236,385.43	264,545.34
Balance June 30, 1917.....	1,319,726.95	4,806,794.50	6,126,521.45
Total.....	2,777,020.81	6,855,420.28	9,632,441.09
Balance June 30, 1917.....	.....	.....	6,126,521.45
Balance July 1, 1916.....	.....	.....	3,660,490.43
Increase.....	.....	.....	2,466,031.02

REPORT OF THE SECRETARY OF THE NAVY.

Statement 38.—SHIP'S STORE PROFITS FUND.

DEBIT.	
Balance July 1, 1916.....	\$56,509.53
Profits current fiscal year.....	84,405.40
	<u>140,905.93</u>
CREDIT.	
Expenditures for current fiscal year for entertainment of enlisted men.....	105,537.06
Balance June 30, 1917.....	35,068.86
	<u>140,905.92</u>

Statement 39.—CLOTHING AND SMALL-STORES FUND.

ASSETS.

Cash balance in United States Treasury.....		\$7,874,529.02
Stock at issuing prices:		
At navy yards and stations.....	\$1,631,246.12	
On board ships.....	1,351,706.83	
In transit.....	938,797.91	
	<u>3,921,749.86</u>	
Add difference between cost and issuing prices.....	344,923.81	
		4,266,673.67
Work in process.....		534,170.62
Condemned stock (estimated sale value).....		17,705.92
Machinery.....		25,583.43
Accounts in course of adjustment by the Auditor for Navy Department: For issues, sales, and transfers.....		4,340,845.63
Total.....		<u>17,059,508.29</u>

LIABILITIES.

Accounts in course of adjustment by the Auditor for the Navy Department:		
For purchases, labor, and transfers.....	395,048.80	
Purchases for which payment has not been made.....	1,082,364.46	
Value of clothing and small-stores fund June 30, 1917.....	15,582,095.03	
Total.....	<u>17,059,508.29</u>	
Value of fund June 30, 1916.....	4,959,350.80	
Appropriation, act Mar. 4, 1917.....	1,500,000.00	
Appropriation, act June 15, 1917.....	9,571,000.00	
	<u>16,030,350.80</u>	
Value of fund June 30, 1917.....	15,582,095.03	
Decrease.....		<u>448,255.77</u>

Statement 40.—MIDSHIPMEN'S STORE FUND.

BALANCE SHEET—MIDSHIPMEN'S STORE.

ASSETS.		
Advanced to Naval Academy dairy, act of Mar. 4, 1913.....		\$100,000.00
Advanced to Naval Academy dairy, act of Aug. 29, 1916.....		100,000.00
Naval Academy dairy loan.....		40,000.00
Cash on hand and in subtreasury, Baltimore, Md.....		44,673.23
Merchandise on hand June 30, 1917:		
In midshipmen's store.....	\$86,271.22	
In tailor shop.....	1,427.41	
		87,698.63
Accounts receivable:		
Naval Academy dairy.....	11,505.25	
Officers and others.....	905.43	
Midshipmen.....	1,450.50	
		13,860.28
Automobile.....		593.85
Total		386,925.99

LIABILITIES.		
Accounts payable:		
Due the United States, act Mar. 4, 1913.....	100,000.00	
Due the United States, act Aug. 29, 1916.....	100,000.00	
Due on deposits by midshipmen.....	53,278.38	
Due merchants.....	26,427.73	
		279,706.11
Value of midshipmen's store fund as at June 30, 1917.....		107,221.88
Total		386,925.99

PROFIT AND LOSS STATEMENT—MIDSHIPMEN'S STORE.

Income from sales of merchandise.....	\$17,511.75	
Income from tailor shop.....	783.67	
Income on account of discounts received.....	3,017.91	
		\$21,298.33
Deduct operating expenses:		
Salaries of clerks and other employees.....	10,237.01	
Office fixtures.....	171.98	
Miscellaneous expense.....	913.24	
Depreciation on automobile.....	300.00	
		11,622.23
Net income for the fiscal year 1917.....		9,671.10
Add value of midshipmen's store fund as at June 30, 1916.....		97,550.78
Value of midshipmen's store fund as at June 30, 1917.....		107,221.88

NAVAL ACADEMY DAIRY APPROPRIATION (REIMBURSABLE).

RECEIPTS.		
Appropriation, act of Mar. 4, 1913.....	\$100,000.00	
Appropriation, act of Aug. 29, 1916.....	100,000.00	
		\$200,000.00
EXPENDITURES.		
Land.....	65,185.00	
Improvements.....	100,078.16	
Equipment.....	33,258.83	
Obligations incurred, but not paid.....	1,478.01	
		200,000.00

Statement 41.—APPROPRIATION BALANCES.

[Appropriations and funds, June 30, 1917.]

RECAPITULATION.

[Figures in *italics*, column 1, represent appropriations overobligated; figures in *italics*, column 4, represent appropriations overexpended.]

Appropriations.	Unallotted balances.	Unencumbered balances of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unexpended expenditures.	Unaudited reimbursements.	Treasury balance.
	1	2	3	4	5	6	7	8
Total of appropriations and funds	\$997,285,462.26	\$7,347,814.26	\$487,698,865.70	\$1,192,381,972.21	\$98,536.32	\$24,721,811.49	\$8,629,568.49	\$1,208,522,750.63

FISCAL YEARS 1917-1918 AND CONTINUING APPROPRIATIONS.

Appropriations.	Unallotted balances.	Unencumbered balances of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unexpended expenditures.	Unaudited reimbursements.	Treasury balance.
	1	2	3	4	5	6	7	8
SECRETARY'S OFFICE.								
8101. Pay, miscellaneous, 1917-18.....	\$2,315,702.23	\$22,461.28	\$270,871.72	\$2,619,035.23		\$14,158.66		\$2,604,876.56
8102. Contingent, Navy, 1917-18.....	28,707.95	15,300.00	203.00	19,210.95		2,672.95		14,842.90
8103. Care of papers, etc., State of Guam, 1917-18.....	19,847.26			19,847.26				19,847.26
8104. Aviacon, Navy, 1917-18 (see under bureaus concerned).	12,132,000.00			12,133,000.00				12,133,000.00
8105. Installation, mission, civilian employees, Naval Establishment, 1918.....								
8113. Increase of the Navy, C. and M.....	18,723,204.85	992,595.00	126,087,716.87	145,813,516.52		998,317.68	\$8,032.08	145,773,892.14
8115. Increase of the Navy, torpedo boats.....	23,549,170.02	96,925.00	28,083,768.86	51,679,858.87		69,130.62	3,080.96	51,748,070.53
8117. Navy fins and forfeitures (special fund).....	659,036.97			659,036.97		119,963.12	678,703.61	200,268.48
8121. Purchase of land, Peabodest Bay, Me.....	663.34			663.34				663.34
8122. Naval Observatory, purchase of land.....								
8124. Improving and equipping navy yards for construction of ships.....	12,681,166.63		4,741,381.17	17,322,547.80		236,700.77		17,559,248.57
8140. Expenses, Civilian Naval Consulting Board, 1917-18.....	25,000.00			25,000.00				25,000.00
8141. Investigation of fuel oil, etc., Navy, 1917-18.....	58,859.59			58,859.59		414.97		59,274.56

Statement 40.—MIDSHIPMEN'S STORE FUND.

BALANCE SHEET—MIDSHIPMEN'S STORE.

ASSETS.

Advanced to Naval Academy dairy, act of Mar. 4, 1913.....		\$100,000.00
Advanced to Naval Academy dairy, act of Aug. 29, 1916.....		100,000.00
Naval Academy dairy loan.....		40,000.00
Cash on hand and in subtreasury, Baltimore, Md.....		44,673.23
Merchandise on hand June 30, 1917:		
In midshipmen's store.....	\$86,271.22	
In tailor shop.....	1,427.41	
		87,698.63
Accounts receivable:		
Naval Academy dairy.....	11,595.35	
Officers and others.....	905.43	
Midshipmen.....	1,459.50	
		13,960.28
Automobile.....		523.85
Total.....		<u>396,926.99</u>

LIABILITIES.

Accounts payable:		
Due the United States, act Mar. 4, 1913.....	100,000.00	
Due the United States, act Aug. 29, 1916.....	100,000.00	
Due on deposits by midshipmen.....	53,276.38	
Due merchants.....	26,427.73	
		279,704.11
Value of midshipmen's store fund as at June 30, 1917.....		107,221.88
Total.....		<u>386,926.99</u>

PROFIT AND LOSS STATEMENT—MIDSHIPMEN'S STORE.

Income from sales of merchandise.....	\$17,511.75	
Income from tailor shop.....	783.67	
Income on account of discounts received.....	3,017.91	
		\$21,313.33
Deduct operating expenses:		
Salaries of clerks and other employees.....	16,237.01	
Office fixtures.....	171.96	
Miscellaneous expense.....	913.24	
Depreciation on automobile.....	300.00	
		11,622.21
Net income for the fiscal year 1917.....		9,671.10
Add value of midshipmen's store fund as at June 30, 1916.....		97,550.78
Value of midshipmen's store fund as at June 30, 1917.....		<u>107,221.88</u>

NAVAL ACADEMY DAIRY APPROPRIATION (REIMBURSABLE).

RECEIPTS.

Appropriation, act of Mar. 4, 1913.....	\$100,000.00
Appropriation, act of Aug. 29, 1916.....	100,000.00
	<u>\$200,000.00</u>

EXPENDITURES.

Land.....	65,185.00
Improvements.....	109,078.16
Equipment.....	33,256.83
Obligations incurred, but not paid.....	1,478.01
	<u>208,008.00</u>

Statement 41.—APPROPRIATION BALANCES.

[Appropriations and funds, June 30, 1917.]

RECAPITULATION.

[Figures in *italics*, column 1, represent appropriations overobligated; figures in *italics*, column 4, represent appropriations overexpended.]

Appropriations.	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
	1	2	3	4	5	6	7	8
Total of appropriations and funds	\$697,285,462.26	\$7,347,614.25	\$487,698,966.70	\$1,192,331,972.21	\$68,535.32	\$24,721,811.49	\$5,629,568.49	\$1,208,522,750.63

FISCAL YEARS 1917-1918 AND CONTINUING APPROPRIATIONS.

Appropriations.	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
	1	2	3	4	5	6	7	8
SECRETARY'S OFFICE.								
8101. Pay, miscellaneous, 1917-18.....	\$2,315,702.23	\$32,461.28	\$270,871.72	\$2,619,035.23		\$14,158.65		\$2,604,876.58
8102. Contingent, Navy, 1917-18.....	28,767.95	13,300.00	203.00	42,270.95		2,672.95		44,943.90
8104. Care of lepers, etc., island of Guam, 1917-18.....	19,847.26			19,847.26				19,847.26
8105. Aviation, Navy, 1917-18 (see under bureaus concerned).	12,133,000.00			12,133,000.00				12,133,000.00
8110. Increased compensation, civilian employees, Naval Establishment, 1918.....								
8113. Increase of the Navy, C. and M.....	18,783,204.85	992,595.00	126,087,716.67	145,813,516.52		968,317.68	\$8,032.06	146,773,802.14
8115. Increase of the Navy, torpedo boats.....	23,549,170.02	96,925.00	23,033,763.85	51,979,858.87		69,130.63	3,060.96	51,745,928.53
8117. Navy lines and forfeitures (special fund).....	659,693.34			659,693.97		119,953.13	578,703.61	200,286.48
8121. Purchase of land, Peabodcot Bay, Me.....				693.34				693.34
8122. Naval Observatory, purchase of land.....								
8124. Improving and equipping navy yards for construction of ships.....	12,581,166.63		4,741,381.17	17,322,547.80		236,700.77		17,559,248.57
8140. Expenses, Civilian Naval Consulting Board, 1917-18.....	25,000.00			25,000.00				25,000.00
8141. Investigation of fuel oil, etc., Navy, 1917-18.....	58,859.59			58,859.59		414.97		59,274.56

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.	1	2	3	4	5	6	7	8
	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaided expenditures.	Unaudited reimbursements.	Treasury balance.
SECRETARY'S OFFICE—continued.								
8143. State marine schools, act Mar. 4, 1911:								
1. New York.....	\$25,000.00			\$25,000.00				\$25,000.00
2. Massachusetts.....	25,000.00			25,000.00				25,000.00
8144. Naval emergency fund.....	10,086,487.78			10,086,487.78				10,086,487.78
8145. Basic patents of aircraft, 1917-18.....	1,000,000.00			1,000,000.00				1,000,000.00
8146. National security and defense.....	226,998.35			346,498.35		\$19,000.00		355,498.35
8147. Naval emergency fund (now construction).....	33,193,896.72	\$661,500.00	\$119,500.00	55,460,476.59		192,943.96	\$8.40	55,653,412.15
8148. Naval emergency fund (increased compensation).....	20,000,000.00		21,605,079.87	20,000,000.00				20,000,000.00
8149. Naval emergency fund (vessels purchased).....	137,551.93		2,859,498.29	2,722,146.36		2,270,852.89		4,992,999.25
8150. Naval emergency fund (contingent).....	25,000.00			25,000.00				25,000.00
BUREAU OF YARDS AND DOCKS.								
8201. Maintenance, Yards and Docks, 1917-18.....	4,355,939.66		96,640.15	4,455,579.81	\$7,956.47	117,321.29	14.63	4,575,842.94
8202. Repairs and preservation, 1917-18.....	2,256,244.94		20,479.09	2,282,724.03		77,938.47		2,360,662.50
8203. Contingent, Yards and Docks, 1917-18.....	795,532.63		2,180.75	796,013.38		3,103.80		799,117.18
8205. Aviation, Navy, 1917-18 (Yards and Docks allotment).....	86,556.18		3,856.50	296,469.68		7,002.86		16,496.82
8209. Naval emergency fund (Yards and Docks allotment).....	6,364,656.96		730,865.48	7,095,525.44		49,901.09		7,145,426.53
8210. Four timber dry docks.....			11,365.43	11,365.43				11,365.43
8211. Consolidating power plants, navy yards and stations.....	1,611.74		1,611.74	1,611.74				1,611.74
8212. Floating derrick.....	3,491.14			3,491.14		7.84		3,498.98
8213. Marine Corps rifle range, Winthrop, Md.: 1. Extension of existing quarters, buildings, etc.....	313.14			343.14				1,921.27
2. Range improvements.....	10,000.00			10,000.00		1,578.13		10,000.00
8214. Rifle range, naval station, Bremerton, Wash.....	7,000.00			7,000.00				7,000.00
8215. Navy yard, Portsmouth, N. H.: Surplus fund.....	53.69			53.69				53.69
151. For continuing the extension of the quay wall.....	894.51		1,569.54	2,466.05				2,466.05
152. Crane-track, and railroad, extension.....	463.98			463.98				463.98
160. Toilet and locker facilities.....	766.50			766.50		411.65		308.46
161. Crane-track extension.....	11,000.00			11,000.00				11,000.00
162. Distributing-system extension.....	18,000.00			18,000.00				18,000.00
163. Power-plant improvements.....	14,804.00		80,196.00	105,000.00				105,000.00

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

	Appropriations.							
	1	2	3	4	5	6	7	8
	Unallotted balances.	Unencumbered balance of allotments, and contracts.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF YARDS AND DOCKS—Continued.								
220.								
Navy yard, Washington, D. C.—Continued.								
112. Railroad system, improvements and extensions	\$6,012.06			\$6,012.06				\$6,012.06
113. Fireproof model storage	65,000.00			65,000.00				65,000.00
116. Fuel-oil storage	18,000.00			18,000.00				18,000.00
117. Toilet and locker facilities	2,000.00			2,000.00				2,000.00
118. Purchase of land	98,049.31			98,049.31				98,049.31
119. Gun-shop, to complete	442,280.00		\$657,720.00	1,100,000.00				1,100,000.00
120. Extending sight shop	40,000.00			40,000.00				40,000.00
121. Improving lighting facilities	16,000.00			16,000.00				16,000.00
122. Improvements, central power plant and distributing systems	493,170.76		152,077.67	645,248.43				645,248.43
221.								
Navy yard, Norfolk, Va.:								
Surplus fund	62.65			62.65				62.65
171. To enlarge Dry Dock No. 3	85.80		2,000.00	2,085.80				2,085.80
193. Purchase of land and widening of channel	1,131.92			1,131.92				1,131.92
196. Electric plant, extensions	639.36			639.36				639.36
207. Heating system, extensions	1,011.31			1,011.31				1,011.31
210. Water system, extensions	2.57			2.57				2.57
211. Sewer system, extensions	583.64			583.64				583.64
213. Compressed-air system, extensions	848.01			848.01				848.01
214. Repairs buildings, St. Helena	3,630.44			3,630.44		\$563.67		10,292.53
215. Building for school	88.59			88.59				3,630.44
216. Railroad system, extensions	388.53			388.53				388.53
218. For concreting of a building slip and equipment	3,014.94			3,014.94				3,014.94
219. Ventilating system	9,384.26			9,384.26		681.31		10,065.70
220. Toilet and locker facilities	10,168.25			10,168.25		1,140.00		11,308.25
221. To complete 150-ton crane	2,622.46		44,665.17	47,287.63				47,287.63
224. Salvage and tools	1,628.61			1,628.61				1,700.87
225. Dry dock, to continue	1,075,672.78		2,165,061.32	1,090,185.60		172.56		1,093,720.19
226. One structural shop, to complete	419,458.12		355,375.33	773,833.45		3,661.59		583,146.64
227. Water-front improvements	499,678.44			499,678.44		\$69,685.81		569,364.25
228. Improvements central power plant and distributing systems	299,568.78			299,568.78				499,678.44

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

	Appropriations.							
	1	2	3	4	5	6	7	Treasury balance.
	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, account.	Other unaudited expenditures.	Unaudited reimbursements.	
BUREAU OF YARDS AND DOCKS—continued.								
827.	Navy Yard, Puget Sound, Wash.—Continued.							
	213. Railroad system, extensions.....	\$4,536.07		\$4,536.07				\$4,536.07
	214. Building ship for submarines.....	2,543.83		2,543.83		\$470.05		3,013.88
	215. Dredging, to continue.....	16,530.00		16,530.00				16,530.00
	216. Toilet and locker facilities.....	1,355.50	\$178.00	1,533.50		186.90		1,720.40
	217. Improvements, central power plant and distributing systems.....	144,130.92		149,130.92		255.47		149,386.39
	218. Purchase of land and fitting up trial course (Vashon Island).....	5,000.00	5,000.00	5,000.00				5,000.00
	219. Improved drainage in dry docks.....	12,000.00		12,000.00				12,000.00
	220. Storage facilities.....	500,000.00		500,000.00				500,000.00
	221. Installation, telephone, power, and distant control line.....	3,500.00		3,500.00				3,500.00
828.	Naval station, Cavite, P. I.							
	22. Improvements, No. 1 ways.....				\$162.60	42.10		204.70
829.	Naval station, Isla de Guam.							
	24. Water system, extensions.....	9,537.28		9,537.28				9,537.28
	25. Water system, extensions.....	1,000.00		1,000.00				1,000.00
	26. Roads.....	10,000.00		10,000.00				10,000.00
	27. Storage facilities.....	5,000.00		5,000.00				5,000.00
	28. Purchase of land.....	15,000.00		15,000.00				15,000.00
	29. Water supply and power plant improvements.....	28,722.06		28,722.06				28,722.06
830.	Naval station, Guantanamo, Cuba.							
	Surplus fund.....	322.60		322.60				322.60
	6. For emergency repair installation.....	1,011.46		1,011.46				1,011.46
	8. Recreation building for enlisted men.....	4,104.42		4,104.42				4,104.42
	9. Dredging and fill (to cost not exceeding \$25,000).....	7,642.08		7,642.08		465.36		8,107.44
	10. Water supply.....	25,000.00		25,000.00				25,000.00
831.	Naval station, Olongapo, P. I.							
	Surplus fund.....	47.59		47.59				47.59
	28. Steel pontoons for approach to floating dry dock Dewey.....	1,510.34		1,510.34				1,510.34

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.	1	2	3	4	5	6	7	8
	Unallotted balances.	Unencumbered balances of allotments, and contracts.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF YARDS AND DOCKS—Continued.								
8239. Naval magazine, Fort Mifflin, Pa.—Continued.								
30. Concrete fence.....	\$46,800.00			\$46,800.00				\$46,800.00
31. One set of quarters for chief gunner or gunner.....	7,000.00			7,000.00				7,000.00
32. Fire-protection system, extension.....	7,500.00			7,500.00				7,500.00
8240. Naval magazine, Norfolk, Va.:								
Surplus fund.....	2.04			2.04				2.04
3. Acquiring fresh-water supply and additional fire protection.....	1,720.23			1,720.23				1,720.23
7. Wharf and approaches.....	608.60			608.60				608.60
12. Filling house.....	1,780.60			1,780.60		\$49.68		1,780.28
13. Railroad system.....	4,183.48			4,183.48		480.08		4,663.56
14. Locomotive house.....	1,110.00		\$2,380.00	3,500.00				3,500.00
15. Purchase of additional land.....	60,000.00			60,000.00				60,000.00
16. Extension of small-arms ammunition building.....	8,000.00			8,000.00				8,000.00
17. One mine storage building, etc.....	8,018.76			8,018.76				8,018.76
18. One magazine.....	29,882.27			29,882.27				29,882.27
19. Two shell houses.....	69,743.06			69,743.06				69,743.06
8241. Naval magazine, Mare Island, Cal.:								
24. Laboratory and testing building.....	3,000.00			3,000.00				3,000.00
25. One explosive D loading house and equipment.....	3,867.06			3,867.06		466.97		4,454.03
26. Building for mine storage.....	5,088.66			5,088.66		287.53		5,376.19
8242. Naval magazine, Puget Sound, Wash.:								
Surplus fund.....	566.10			566.10				566.10
21. Extension of fire-protection system.....	331.79			331.79				331.79
33. Pier extension.....	126.16			126.16				126.16
34. Lightning protection.....	1,344.48			1,344.48				1,344.48
35. Two filling houses.....			427.80	427.80				427.80
36. Guardhouse.....			275.71	275.71				275.71
37. Shop for loading shells.....	7,000.00			7,000.00				7,000.00
38. Extension of water system.....	30,000.00			30,000.00				30,000.00
39. One fuse and detonator house.....	3,600.00			3,600.00				3,600.00
40. One mine storage building.....	9,000.00			9,000.00				9,000.00
8244. Naval magazine, Kuaehua, Hawaii:								
Surplus fund.....	580.77			580.77				580.77
8. Electric power installation.....	3,388.01			3,388.01				3,388.01

16. Machinery and tools.	25,000.00			25,000.00			25,000.00
20. One bomb proof.	1,500.00			1,500.00			1,500.00
21. One unfusing roof.	500.00			500.00			500.00
23. Compressed-air locomotive plant.	3,467.42			3,467.42			3,470.42
24. Surveillance test house.	3,000.00			3,000.00	3.00		3,000.00
25. Filling house for explosive D.	2,000.00			2,000.00			2,000.00
8245. Naval magazine, Olongapo, P. I.; surplus fund.	49.09			49.09	50.91		100.00
8246. Marine barracks, Norfolk, Va.: 1. Barracks.	2,435.20	747.39		3,182.59			3,182.59
2. Station improvements.	8,667.83			8,667.83	1,302.13		9,969.96
3. Housing for artillery.	4,000.00			4,000.00			4,000.00
4. Housing for trucks for artillery.	2,500.00			2,500.00			2,500.00
5. Stable.	3,000.00			3,000.00			3,000.00
6. Shops and storeroom.	3,500.00			3,500.00			3,500.00
8247. Marine barracks, Philadelphia, Pa.: Surplus fund.	1.89			1.89			1.89
2. Central heating plant for Marine Corps, establishment.	11.66			11.66			11.66
4. Advance base storage.	80,000.00			80,000.00			80,000.00
5. Additional barracks.	200,000.00			200,000.00			200,000.00
8249. Marine barracks, Pearl Harbor, Hawaii: 1. One set double quarters.	51.99			51.99	70.97		122.96
2. Quartermaster's storehouse.	25,000.00			25,000.00			25,000.00
3. Post exchange, gymnasium.	20,000.00			20,000.00			20,000.00
8250. Marine barracks, Mare Island, Cal.: 1. Barracks.	17,523.63	7,747.63		9,776.40	5,077.51		14,853.91
2. Remodeling old barracks.	35,000.00			35,000.00			35,000.00
3. Extension of roads and walks.	19,499.86			19,499.86	463.15		19,963.01
8251. Surplus fund.							
0. General purposes.	1,423.53			1,423.53			1,423.53
51. (C) Pearl Harbor, Hawaii.	13,935.90			13,935.90	190.00		14,115.90
52. (F) Boston, Mass.	245.21			245.21	5,094.53		5,339.74
1. To complete coaling plant, Pearl Harbor, Hawaii.	4,202.50	351.50		4,554.00	604.58		5,158.58
2. Heater coils in fuel-oil tanks.	43,500.00			43,500.00	3,194.09		46,694.09
4. Fuel-oil tank at Boston, Mass.	581.07			581.07			581.07
9. Steel coaling tower at San Diego, Cal.	5,467.50			5,467.50	422.48		5,889.98
11. Fuel-oil storage at San Francisco Bay, Cal.	49,630.80	240.23		49,871.03			49,871.03
14. Additional fuel-oil storage at Norfolk, Va.	197,560.28			197,560.28			197,560.28
17. Fuel-oil storage at Mare Island, Cal.	80,000.00			80,000.00			80,000.00
22. Fuel storage at Guantanamo Bay, Pearl Harbor and Guam	329,703.66	129,000.00		458,703.66	1,296.34		460,000.00
25. Fuel storage at Guantanamo Bay, Cuba.	190,000.00	190,000.00		380,000.00			380,000.00
26. Fuel storage at Pearl Harbor, Hawaii.	273,906.81			273,906.81	702.56		274,609.37
27. Fuel storage at Puget Sound, Wash.	428,190.37			428,190.37			428,190.37
28. Fuel storage at San Diego, Cal.	224,548.67			224,548.67			224,548.67
29. Fuel storage at Melville, R. I.	180,453.71			180,453.71	389.20		180,842.91
30. Contingent.	105,330.79			105,330.79	1,053.42		106,384.21
31. Custody and care of naval petroleum reserves.	20,096.71	27,930.61		48,027.32	104.89		48,132.21
32. Fuel-oil storage.	1,500,000.00			1,500,000.00			1,500,000.00

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.		1	2	3	4	5	6	7	8
		Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF YARDS AND DOCKS—continued.									
8252.	Naval coal depot, Melville Station, R. I.:	\$2.25		\$14.40	\$12.17	\$149.70	\$5.64		\$131.89
	1. Extension of wharf.....	15,000.00			15,000.00				15,000.00
	5. Improvements to water supply, including purchase of land.....	1,236.79		14,939.46	16,176.25	149.70	1,018.95		17,344.90
8253.	6. Construction of building for storage of torpedoes.....	7,125.59			7,125.59				7,125.52
	Buildings and grounds, Naval Academy:	1,522.53		63,481.39	65,003.92				65,003.9
	1. General account.....								
	12. Sea wall.....								
	13. Extension of Bancroft Hall (to cost not to exceed \$2,270,000).....	999,810.00		190.00	1,000,000.00				1,000,000.00
	14. Improvements central power plant and distributing systems.....	300,000.00			300,000.00				300,000.00
	15. Two freight elevators, Bancroft Hall.....	14,507.06			14,507.06		34.86		14,941.92
8255.	16. Addition to Fisherwood Hall.....	300,000.00			300,000.00				300,000.00
8256.	Naval dispensary barracks, Newport, R. I., buildings: Surplus station, Newport, R. I., buildings:	10,064.55		22.68	10,087.23				10,087.23
	30. One academy shop.....	80.48			80.48				80.48
	31. One torpedo storehouse.....	18.29		719.16	700.90		504.18		894.18
	32. One machine shop.....						373.13		1,074.03
	33. Seaman gunners' quarters.....	105,000.00			105,000.00		252.42		105,252.42
	34. Sea wall and filling.....	9,333.14		7,395.77	16,728.91		39.58		16,818.49
	35. Primer filling house.....	29,770.00		5,246.36	35,016.36				35,016.36
	36. Extension of fire-protection system.....	2,733.64		5,596.15	8,330.00				8,330.00
	37. Building for mine storage, Rose Island.....	2,300.37			2,300.37		619.81		2,920.18
	Pacific coast torpedo station, Indianhead, Md.:	3,491.18		27,803.00	31,294.18				31,294.18
8257.	Naval proving ground, Indianhead, Md.:	200.00			200.00				200.00
8258.	32. Purchase of 5 acres (more or less) of additional land, exceed \$500,000) to complete public-work features.....	6,100.97		4,422.12	10,523.09		4,886.97		15,410.06
	38. Three powder dry houses.....	326.85		15,000.00	15,000.00				15,000.00
	39. Fire protection.....	25,000.00			25,000.00				25,000.00
	40. Bridge over Mattawoman Creek.....			28,000.00	28,000.00				28,000.00
	41. Fence around powder factory.....			46,157.48	142,769.98				142,769.98
	42. Improvements to powder factory.....	96,603.50					1,752.80		144,513.84

8266.	Naval hospital, New York, N. Y.:	98.40				98.40			98.40
	1. Three contagious-disease units.	10,000.00				10,000.00			10,000.00
8266.	2. Remodeling house No. 4.								
8266.	Naval hospital, Chelsea, Mass.:	587.80	6,197.16			5,609.96			5,609.96
8266.	1. Sea wall.								
8266.	Naval hospital, Newport, R. I.:	9,640.44				9,640.44			9,640.44
8266.	1. Three contagious wards.								
8266.	Naval hospital, Maro Island, Cal.:	15,000.00				15,000.00			15,000.00
8266.	1. Mess hall, extension.								
8266.	Naval hospital, Canacao, P. I.:	3,600.00				3,600.00			3,600.00
8266.	1. Six contagious-disease units.								
8266.	Naval hospital, Portsmouth, N. H.:	19,841.75				19,841.75	42.16		19,883.91
8266.	1. Three contagious wards.								
8266.	Naval hospital, Great Lakes:	20,000.00				20,000.00			20,000.00
8266.	Three contagious wards.								
8270.	Naval station, Tutuila, Samoa:	386.85				386.85	623.86		1,010.21
	23. Officers' quarters.	30,000.00				30,000.00			30,000.00
	24. Admittal men's quarters.	10,000.00				10,000.00			10,000.00
8271.	Marine barracks, Island of Guam:	10,000.00				10,000.00			10,000.00
8272.	Marine recruiting station, Port Royal, S. C.:		4,240.95			4,240.95			4,240.95
	1. New building for naval hospital, etc.	6,000.00				6,000.00			6,000.00
	2. Two bungalows for officers' quarters.	20,429.96				20,429.96	70.06		20,500.00
	3. Station improvements.								
	4. Twelve sets of noncommissioned officers' quarters including not to exceed \$5,000 for the purchase of a strip of land along the south boundary of the station.								
8273.	Navy aeronautic station, Pensacola, Fla.:	23,000.00				23,000.00			23,000.00
	1. Repair, etc., public works damaged by storm of July, 1916.								
	2. Improvements central power plant.	299,753.85	35,864.85			335,618.70	21,461.44		357,080.14
	3. Water system.	50,000.00				50,000.00			50,000.00
	4. Repair and resurfacing roads.	33,176.67	6,683.12			39,859.79	140.21		40,000.00
	5. Quarters for enlisted men.	10,000.00				10,000.00			10,000.00
	6. Two magazines and one building for the storage of torpedoes.	20,000.00				20,000.00			20,000.00
8275.	Land for naval base, San Diego County, Cal.	125,000.00				125,000.00			125,000.00
8277.	Torpedo station, Keyport, Wash.:						250,000.00		250,000.00
	1. Railroad system.	1,581.08				1,581.68	340.06		1,921.76
	2. One officers' quarters.	5,842.43				5,842.43	157.87		6,000.00
	3. Freight wharf.	7,966.27				7,966.27	3.73		8,000.00
	4. One set of quarters for commissioned officers.	7,967.07				7,967.07	32.93		8,000.00
8280.	Experimental and research laboratory.								
8281.	Guns and munitions storage at navy yards and stations:	1,480,710.80	1,200.00			1,481,910.80			1,481,910.80
	1. Gun storage, navy yard, Washington, D. C.								
	2. One magazine building, naval magazine, Fort Mifflin, Pa.	23,000.00				23,000.00			23,000.00
	3. Mine storage, naval magazine, Fort Mifflin, Pa.	25,000.00				25,000.00			25,000.00
	4. One magazine building, naval magazine, Hingham, Mass.	25,000.00				25,000.00			25,000.00
		96.26	2,176.80			2,272.05			2,272.05

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.	BUREAU OF YARDS AND DOCKS—continued.							
	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
	1	2	3	4	5	6	7	8
8281. Guns and munitions storage at navy yards and stations.—Continued.								
5. One shell house, naval magazine, Hingham, Mass.	\$96.25		\$2,175.80	\$2,272.05				\$2,272.05
6. Detonating fuse house, naval magazine, Iona Island, N. Y.	1,965.44			1,965.44		\$34.56		2,000.00
7. Two subsurface magazines, naval magazine, Iona Island, N. Y.	2,236.66			2,236.66		523.80		2,760.46
8. Four subsurface magazines, naval powder depot, Lake Denmark, N. J.	5,201.10			5,201.10		228.16		5,429.26
9. Magazine for explosive D, naval magazine, Kuahua, Hawaii.	3,000.00			3,000.00				3,000.00
10. Shell house, naval magazine, Mare Island, Cal.	19,200.00			19,200.00				19,200.00
11. Extension of fuse and primer house, naval magazine, Puget Sound, Wash.	270.00		1,339.00	1,339.00				1,339.00
12. Storehouse, naval magazine, St. Julians Creek, Va.			16,730.00	16,000.00				16,000.00
13. Soda storehouse, naval proving ground, Indianhead, Md.	508.34		29,681.56	30,187.90				30,187.90
14. Sulphur storehouse, naval proving ground, Indianhead, Md.			18,500.00	18,500.00				18,500.00
15. Cotton storehouse, naval proving ground, Indianhead, Md.	2,622.20		4,742.92	7,365.12				7,365.12
16. Magazine for war heads, Pacific coast torpedo station, Keyport, Wash.	1,383.00		3,345.03	4,678.03				4,678.03
8282. Naval magazine, Charleston, S. C.:	70,000.00			70,000.00				70,000.00
1. Two buildings for ammunition storage.	50,000.00			50,000.00				50,000.00
2. One building, with necessary equipment, for the storage of torpedoes.	20,000.00			20,000.00				20,000.00
8283. Marine barracks, Peking, China:	50,000.00			50,000.00				50,000.00
1. Barracks building.	50,000.00			50,000.00				50,000.00
8284. Marine barracks, San Diego, Cal.:	12,000.00			12,000.00				12,000.00
1. Toward the establishment of a Marine Corps base.	600,000.00			600,000.00				600,000.00
8285. Reimbursement for property damaged, Indianhead, Md.			765.01	765.01				765.01
8286. Lighting facilities, navy yards and stations.	176,263.64		2,973.00	179,236.64		5,304.00		184,540.64

8287	Submarine base, New London, Conn.	1,250,000.00		1,250,000.00		1,250,000.00			
8288	Quarters for marine guards at naval magazines.	100,000.00		100,000.00		100,000.00			
8289	Submarine facilities, navy yards and stations.	1,500,000.00		1,500,000.00		1,500,000.00			
8290	Power plants and distributing systems, navy yards and stations.	728,487.03		749,887.03	110.04	749,887.03			
8291	Ordnance storages.	2,948,150.00		3,000,000.00		3,000,000.00			
8292	Naval operating base, Hampton Roads, Va.	2,800,000.00		2,800,000.00		2,800,000.00			
8293	Hospitals and medical supply depots.	844,478.81		994,478.81		994,478.81			
8294	1. Temporary hospital construction.	350,000.00		350,000.00		350,000.00			
8295	2. Medical supply depots, Brooklyn, N. Y., and Mare Island, Cal.								
BUREAU OF NAVIGATION.									
8301	Contingent, Navigation, 1917-18.	19,450.00	550.00	20,000.00		20,000.00			20,000.00
8302	Transportation, Navigation, 1917-18.	2,523,197.73	197.00	2,523,394.73	2,681.74	2,526,076.47			2,526,076.47
8303	Recruiting, Navigation, 1917-18.	1,258,311.49	58,057.43	1,316,368.92	37,428.72	1,353,796.64			1,353,796.64
8304	Gunners and engineering exercises, 1917-18.	221,828.96	3,150.00	224,978.96		224,978.96			224,978.96
8305	Arming and equipping Naval Militia, 1917-18.	836,363.28	604,552.72	1,440,916.00		1,440,916.00			1,440,916.00
8306	Outfits on first enlistment, 1917-18.	10,164,053.70		10,164,053.70		10,164,053.70			10,164,053.70
8307	Instruments and supplies, 1917-18.	6,068,012.82	28,446.26	6,136,459.11	1,639.09	6,138,098.20			6,138,098.20
8308	Ocean and lake surveys, 1917-18.	145,639.97	5,945.50	151,585.47		151,585.47			151,585.47
8309	Naval training station, Rhode Island, 1917-18.	183,657.00	5,835.50	189,492.50	401.00	189,893.50			189,893.50
8310	Naval training station, St. Helena, Va., 1917-18.	67,963.10	135.00	68,118.10		68,118.10			68,118.10
8311	Naval training station, Great Lakes, 1917-18.	114,068.08	53,032.86	167,100.94	262.41	167,363.35			167,363.35
8312	Naval training station, California, 1917-18.	182,587.22	1,247.00	183,834.22	1,933.02	185,767.24			185,767.24
8313	Naval War College, 1917-18:								
8314	1. Maintenance and care of grounds.	32,453.06	2,795.92	35,250.00		35,250.00			35,250.00
8315	2. Services of lecturer on international law.		2,000.00	2,000.00		2,000.00			2,000.00
8316	3. Services of civilian lecturer, rendered at War College.		300.00	300.00		300.00			300.00
8317	4. Care and preservation of library, etc.	1,300.00		1,300.00		1,300.00			1,300.00
8318	5. Naval Home, Philadelphia, Pa., 1918:								
8319	2. Maintenance.	46,114.33	46,114.33	387,993.20		387,993.20			387,993.20
8320	3. Pay, Naval Academy, 1917-18.	387,993.20		387,993.20		387,993.20			387,993.20
8321	4. Current and miscellaneous expenses, Naval Academy, 1917-18:								
8322	1. Text and reference books for instructors, etc.	43,250.00	250.00	43,500.00		43,500.00			43,500.00
8323	2. Purchase, binding, and repair of books for the library.	2,043.26	456.74	2,500.00		2,500.00			2,500.00
8324	3. Expenses of the Board of Visitors.	3,000.00		3,000.00		3,000.00			3,000.00
8325	4. Contingencies for the superintendent.	3,000.00		3,000.00		3,000.00			3,000.00
8326	Maintenance and repairs, Naval Academy, 1917-18:								
8327	1. General purposes.	444,518.62	9,408.25	453,926.87	825.00	454,751.87			454,751.87
8328	2. Rent of buildings for use of the academy and commutation of rent for bandsmen.	3,936.00		3,936.00		3,936.00			3,936.00
8329	3. Equipment for the commissary department.	80,000.00		80,000.00		80,000.00			80,000.00
8330	4. Vahdon, Navy, 1917-18 (Navigation allotment).	251.66	25.00	276.66	150.66	427.32			427.32
8331	Ships, Naval Militia, 1917-18.	135,500.00		135,500.00		135,500.00			135,500.00
8332	Organizing Naval Reserve Force, 1917-18.	239,541.96	\$2,427.50	241,969.46	21,458.57	263,428.03			263,428.03
8333	1917-18. Camps of instruction, Naval Reserve Force, Reserve material, Navy (Navigation allotment)	14,621.87	7,157.50	21,779.37	2,368.03	24,147.40			24,147.40
8334	Reserve material, Navy (Navigation allotment)	79,825.00	70,174.00	150,000.00		150,000.00			150,000.00
8335	Naval emergency fund (Navigation allotment)	1,366,903.70	108,470.46	1,475,374.16	39,424.50	1,514,798.66			1,514,798.66

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.	1	2	3	4	5	6	7	8
	Unallotted balances.	Unaccumulated balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF YARDS AND DOCKS—continued.								
8252. Naval coal depot, Melville Station, R. I.								\$131.89
1. Extension of wharf.....	\$2.23		\$14.40	\$12.17	\$149.70	\$5.64		15,000.00
5. Improvements to water supply, including purchase of land.....	1,236.79		14,939.46	16,176.25	149.70	1,018.95		17,344.80
6. Construction of building for storage of torpedoes.....								7,125.52
8253. Buildings and grounds, Naval Academy:								65,003.9
1. General account.....	1,522.53		63,481.39	65,003.92				
12. Sea wall.....	7,125.59			7,125.59				
13. Extension of Bancroft Hall (to cost not to exceed \$2,270,000).....	999,810.00		190.00	1,000,000.00				1,000,000.00
14. Improvements central power plant and distributing systems.....	300,000.00			300,000.00				300,000.00
15. Two freight elevators, Bancroft Hall.....	14,907.06			14,907.06		34.86		14,941.92
16. Addition to fishwood Hall.....	300,000.00			300,000.00				300,000.00
8255. Naval disciplinary barracks.....	10,064.55		22.68	10,087.23				10,087.23
8256. Torpedo station, Newport, R. I., buildings: Surplus fund.....	80.48			80.48				80.48
30. One assembly shop.....			719.16			804.18		804.18
31. One torpedo storehouse.....	18.86			700.90		373.13		1,074.03
32. One machine shop.....						232.42		232.42
33. Seaman gunners' quarters.....	9,383.14			105,000.00				105,000.00
34. Sea wall and filling.....	29,770.00			16,778.91		39.58		16,818.49
35. Primer filling house.....	2,783.64		7,385.77	30,000.00				30,000.00
36. Extension of fire-protection system.....	2,303.37		5,246.30	9,000.00				9,000.00
37. Building for mine storage, Rose Island.....	3,491.18		5,596.15	7,860.52		619.81		8,470.33
Pacific coast torpedo station.....			27,803.00	31,294.18				31,294.18
8257. Naval proving ground, Indianhead, Md.: Purchase of 5 acres (more or less) of additional land.....	200.00			200.00				200.00
8258. Forward extension of powder factory (cost not to exceed \$50,000) to complete public-work features:	6,100.97		4,422.12	10,523.09		4,886.97		15,410.06
38. Three powder dry houses.....	236.85		15,000.00	16,000.00				16,000.00
39. Fire production.....	25,000.00		326.85	326.85				326.85
40. Bridge over Matawoman Creek.....				28,000.00				28,000.00
41. Fence around powder factory.....			28,000.00	28,000.00				28,000.00
42. Improvements to powder factory.....	96,603.50		46,157.46	142,760.96		1,752.86		144,513.82

8260.	Naval hospital, New York, N. Y.:	98.40				98.40			98.40
	1. Three contagious-disease units.	10,000.00				10,000.00			10,000.00
8260.	Remedial house No. 4.....								
	Naval hospital, Chelsea, Mass.:	687.80				6,197.16			5,609.96
8261.	Naval hospital, Newport, R. I.:	9,640.44				9,640.44			9,640.44
8262.	Naval hospital, Mare Island, Cal.:	15,000.00				15,000.00			15,000.00
8263.	Naval hospital, Camacao, P. I.:	3,600.00				3,600.00			3,600.00
8264.	Naval hospital, Portsmouth, N. H.:	19,841.75				19,841.75	42.16		19,883.91
8265.	Naval hospital, Great Lakes:	20,000.00				20,000.00			20,000.00
8270.	Naval station, Tutuilla, Samoa:	386.85				386.85	623.36		1,010.21
	23. Officers' quarters.....	30,000.00				30,000.00			30,000.00
	23. Additional water supply.....	10,000.00				10,000.00			10,000.00
	24. Enlisted men's quarters.....	10,000.00				10,000.00			10,000.00
8271.	Marine barracks, Island of Guam:	10,000.00				10,000.00			10,000.00
8272.	Marine recruiting station, Port Royal, S. C.:	6,000.00			4,240.95	4,240.95			4,240.95
	1. New building for naval hospital, etc.	6,000.00				6,000.00			6,000.00
	2. Two bungalows for officers' quarters.....	20,429.95				20,429.95	70.05		20,500.00
	3. Station improvements.....								
	4. Twelve sets of noncommissioned officers' quarters, including net to exceed \$5,000 for the purchase of a strip of land along the south boundary of the station.....	23,000.00				23,000.00			23,000.00
8273.	Navy aeronautic station, Pensacola, Fla.:	299,758.85			35,864.85	335,623.70	21,461.44		357,085.14
	1. Repair, etc., public works damaged by storm of July, 1916.....	50,000.00				50,000.00			50,000.00
	2. Improvements central power plant.....	33,176.67			6,083.12	39,259.79	140.21		40,000.00
	3. Water system.....	10,000.00				10,000.00			10,000.00
	4. Repair and resurfacing roads.....	20,000.00				20,000.00			20,000.00
	5. Quarters for enlisted men.....	125,000.00				125,000.00			125,000.00
	6. Two magazines and one building for the storage of torpedoes.....						250,000.00		250,000.00
8275.	Land for naval base, San Diego County, Cal.								
8277.	Torpedo station, Keyport, Wash.:	1,581.68				1,581.68			1,921.76
	1. Railcad system.....	5,842.43				5,842.43	340.08		6,000.00
	2. One officers' quarters.....	7,996.27				7,996.27	8.73		8,000.00
	3. Freight wharf.....	1,480,710.80			1,200.00	1,481,910.80	32.93		1,481,910.80
8280.	Experimental and research laboratory.....	23,000.00				23,000.00			23,000.00
8281.	Guns and munitions storage at navy yards and stations:	25,000.00				25,000.00			25,000.00
	1. Gun storage, navy yard, Washington, D. C.	25,000.00				25,000.00			25,000.00
	2. One magazine building, naval magazine, Fort Mifflin, Pa.								
	3. Mine storage, naval magazine, Fort Mifflin, Pa.								
	4. One magazine building, naval magazine, Hingham, Mass.	98.25			2,175.80	2,274.05			2,272.05

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.		1	2	3	4	5	6	7	8
		Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF YARDS AND DOCKS—continued.									
8281.	Guns and munitions storage at navy yards and stations—Continued.	\$96.25		\$2,175.80	\$2,272.05				\$2,272.05
	5. One shell house, naval magazine, Hingham, Mass.	1,965.44			1,965.44		\$34.56		2,000.00
	6. Detonating fuse house, naval magazine, Iona Island, N. Y.	2,236.66			2,236.66		523.80		2,760.46
	7. Two subsurface magazines, naval magazine, Iona Island, N. Y.	5,201.10			5,201.10		228.16		5,429.26
	8. Four subsurface magazines, naval powder depot, Lake Denmark, N. J.	3,000.00			3,000.00				3,000.00
	9. Magazine for explosive D, naval magazine, Kinabalu, Hawaii.	19,200.00			19,200.00				19,200.00
	10. Shell house, naval magazine, Mare Island, Cal.								
	11. Extension of fuse and primer house, naval magazine, Puget Sound, Wash.	270.00		1,339.00	1,339.00				1,339.00
	12. Storehouse, naval magazine, St. Julian's Creek, Va.			15,730.00	16,000.00				16,000.00
	13. Soda storehouse, naval proving ground, Indianhead, Md.	506.34		29,081.56	30,187.90				30,187.90
	14. Sulphur storehouse, naval proving ground, Indianhead, Md.			18,500.00	18,500.00				18,500.00
	15. Cotton storehouse, naval proving ground, Indianhead, Md.	2,622.20		4,742.92	7,365.12				7,365.12
	16. Magazine for war heads, Pacific coast torpedo station, Keyport, Wash.	1,333.00		3,345.03	4,678.03				4,678.03
8282.	Naval magazine, Charleston, S. C.	70,000.00			70,000.00				70,000.00
	1. Two buildings for ammunition storage.	50,000.00			50,000.00				50,000.00
	2. One building, with necessary equipment, for the storage of torpedoes.	20,000.00			20,000.00				20,000.00
8283.	Marine barracks, Peking, China:	50,000.00			50,000.00				50,000.00
	1. Barracks building.	50,000.00			50,000.00				50,000.00
	2. Laundry, including machinery.	12,000.00			12,000.00				12,000.00
8284.	Marine barracks, San Diego, Cal.								
	1. Toward the establishment of a Marine Corps base.	600,000.00			600,000.00				600,000.00
8285.	Reimbursement for property damaged, Indianhead, Md.			755.01	755.01				755.01
8286.	Lighting facilities, navy yards and stations.	176,283.84		2,973.00	179,256.84		5,364.09		184,620.93

8287.	Submarine base, New London, Conn.....	1, 250,000.00	1, 250,000.00	1, 250,000.00	1, 250,000.00	1, 250,000.00	1, 250,000.00	1, 250,000.00	1, 250,000.00	
8288.	Quarters for marine guards at naval magazines.....	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	
8289.	Submarine facilities, navy yards and stations.....	1, 500,000.00	1, 500,000.00	1, 500,000.00	1, 500,000.00	1, 500,000.00	1, 500,000.00	1, 500,000.00	1, 500,000.00	
8290.	Power plants and distributing systems, navy yards and stations.....	728,457.03	21,400.00	749,857.03	749,857.03	749,857.03	749,857.03	749,857.03	749,857.03	
8291.	Naval operating base, Hampton Roads, Va.....	2,948,160.00	51,940.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	
8292.	Hospitals and medical supply depots.....	2,800,000.00	150,000.00	2,950,000.00	2,950,000.00	2,950,000.00	2,950,000.00	2,950,000.00	2,950,000.00	
8293.	1. Temporary hospital construction, Brooklyn, N. Y., and Mare Island, Cal.....	844,478.81		994,478.81	994,478.81	994,478.81	994,478.81	994,478.81	994,478.81	
	2. Medical supply depots, Brooklyn, N. Y., and Mare Island, Cal.....	350,000.00		350,000.00	350,000.00	350,000.00	350,000.00	350,000.00	350,000.00	
BUREAU OF NAVIGATION.										
8301.	Contingent, Navigation, 1917-18.....	19,450.00	550.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	
8302.	Transportation, Navigation, 1917-18.....	2,522,197.73	197.00	2,523,394.73	2,523,394.73	2,523,394.73	2,523,394.73	2,523,394.73	2,523,394.73	
8303.	Recruiting, Navigation, 1917-18.....	1,258,311.49	88,057.43	1,346,368.92	1,346,368.92	1,346,368.92	1,346,368.92	1,346,368.92	1,346,368.92	
8304.	Gunnery and engineering exercises, 1917-18.....	221,628.96	3,150.00	224,778.96	224,778.96	224,778.96	224,778.96	224,778.96	224,778.96	
8305.	Arms and equipment Naval Militia, 1917-18.....	836,863.28	604,552.72	1,441,416.00	1,441,416.00	1,441,416.00	1,441,416.00	1,441,416.00	1,441,416.00	
8306.	Ordnance on first enlistment, 1917-18.....	10,164,063.70		10,164,063.70	10,164,063.70	10,164,063.70	10,164,063.70	10,164,063.70	10,164,063.70	
8307.	Instruments and supplies, 1917-18.....	6,098,012.82	28,446.29	6,126,459.11	6,126,459.11	6,126,459.11	6,126,459.11	6,126,459.11	6,126,459.11	
8310.	Ocean and lake surveys, 1917-18.....	145,639.97	5,846.50	151,486.47	151,486.47	151,486.47	151,486.47	151,486.47	151,486.47	
8311.	Naval training station, Rhode Island, 1917-18.....	183,657.00	5,835.50	189,492.50	189,492.50	189,492.50	189,492.50	189,492.50	189,492.50	
8312.	Naval training station, St. Helena, Va., 1917-18.....	67,963.10	135.00	68,118.10	68,118.10	68,118.10	68,118.10	68,118.10	68,118.10	
8313.	Naval training station, Great Lakes, 1917-18.....	114,098.08	59,632.86	167,730.94	167,730.94	167,730.94	167,730.94	167,730.94	167,730.94	
8314.	Naval training station, California, 1917-18.....	182,567.22	1,247.00	183,814.22	183,814.22	183,814.22	183,814.22	183,814.22	183,814.22	
8315.	Naval War College, 1917-18.....									
	1. Maintenance and care of grounds.....	32,453.08	2,794.92	35,250.00	35,250.00	35,250.00	35,250.00	35,250.00	35,250.00	
	2. Services of lecturer on international law.....		2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	
	3. Services of civilian lecturer, rendered at War College.....		300.00	300.00	300.00	300.00	300.00	300.00	300.00	
	4. Care and preservation of library, etc.....									
8316.	Naval Home, Philadelphia, Pa., 1918.....	1,300.00		1,300.00	1,300.00	1,300.00	1,300.00	1,300.00	1,300.00	
8317.	Pay, Naval Academy, 1917-18.....	46,114.87	46,114.32	387,963.20	387,963.20	387,963.20	387,963.20	387,963.20	387,963.20	
8318.	Current and miscellaneous expenses, Naval Academy, 1917-18.....	387,963.20		387,963.20	387,963.20	387,963.20	387,963.20	387,963.20	387,963.20	
	1. Text and reference books for instructors, etc.....	43,250.00	260.00	43,510.00	43,510.00	43,510.00	43,510.00	43,510.00	43,510.00	
	2. Purchase, binding, and repair of books for the library.....	2,043.26	456.74	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	
	3. Expenses of the Board of Visitors.....	3,000.00		3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	
	4. Contingencies for the superintendent.....									
8319.	Maintenance and repairs, Naval Academy, 1917-18.....	444,518.62	9,408.25	453,926.87	453,926.87	453,926.87	453,926.87	453,926.87	453,926.87	
	1. General purposes.....									
	2. Rent of buildings for use of the academy and commitment of the cadets.....	3,936.00		3,936.00	3,936.00	3,936.00	3,936.00	3,936.00	3,936.00	
	3. Expenses of the commissary department.....	86,000.00		86,000.00	86,000.00	86,000.00	86,000.00	86,000.00	86,000.00	
8320.	Aviation, Navy, 1917-18 (Navigation allotment).....	84,841.86	25.00	84,866.86	84,866.86	84,866.86	84,866.86	84,866.86	84,866.86	
8321.	Ships, Naval Militia, 1917-18.....	135,500.00		135,500.00	135,500.00	135,500.00	135,500.00	135,500.00	135,500.00	
8322.	Organizing Naval Reserve Force, 1917-18.....	239,541.86	\$2,427.50	241,969.36	241,969.36	241,969.36	241,969.36	241,969.36	241,969.36	
8323.	Schools or camps of instruction, Naval Reserve Force, 1917-18.....	14,621.37	7,157.50	21,778.87	21,778.87	21,778.87	21,778.87	21,778.87	21,778.87	
8324.	Reserve material, Navy (Navigation allotment).....	79,525.00	70,175.00	149,700.00	149,700.00	149,700.00	149,700.00	149,700.00	149,700.00	
8325.	Naval emergency fund (Navigation allotment).....	1,396,963.70	108,470.46	1,505,434.16	1,505,434.16	1,505,434.16	1,505,434.16	1,505,434.16	1,505,434.16	

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.	1	2	3	4	5	6	7	8
	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF NAVIGATION—continued.								
8326. Schools or camps of instruction for recruits and naval reserve forces, 1917-18.....	\$2,098,973.31		\$225,068.47	\$2,424,041.78		\$77,874.33		\$2,501,916.11
8332. Naval station, Great Lakes, buildings (act May 13, 1903).....	2,700.00		24,875.14	27,575.14				27,575.14
8334. Medals for officers and men, Navy and Marine Corps, War with Spain.....	9,592.73		105.00	9,697.73		.66		9,698.39
BUREAU OF ORDNANCE.								
8401. Ordnance and ordnance stores, 1917-18:								
1. General purposes.....	18,207,571.43	\$815,435.00	5,139,637.88	24,162,644.31		277,690.08	\$47,630.36	24,392,743.03
2. Purchase and manufacture of smokeless powder.....	484,853.65	260,000.00	975,694.65	1,720,518.30		10,388.70		1,730,904.00
8402. Contingent, Ordnance, 1917-18.....	8,882.71		477.00	9,359.71				9,359.71
8403. Repairs, Ordnance, 1917-18.....	30,000.00			30,000.00		41.64		29,958.36
8404. Torpedo station, Newport, R. I., 1917-18:								
1. General purposes.....	84,306.03	11,000.00	2,141.22	97,447.25		279.06		97,726.91
2. New and improved machinery and tools for torpedo factory.....	65,655.15		155,655.15	100,000.00				100,000.00
8405. Naval Gun Factory, Washington, D. C., 1917-18:								
1. New and improved machinery for existing shops.....	85,180.50		389,912.90	304,732.00				304,732.00
2. Repairs and betterments to present facilities.....	299,330.20		155,869.80	395,200.00				395,200.00
3. Machinery and equipment for new gun shop.....	705,445.64		2,461,833.44	1,756,384.80				1,756,384.80
8406. Experiments, Ordnance, 1917-18.....	89,131.25	4,000.00	6,868.75	100,000.00				100,000.00
8409. New batteries for ships of the Navy, 1917-1919:								
1. Liners for eroded guns.....	52,156.30		47,843.70	100,000.00				100,000.00
2. One 12-inch 45-caliber gun.....	60,000.00	3,000.00	325,195.05	623,719.16		28.40		60,000.00
3. Antiaircraft guns and mounts complete.....	295,624.11	3,000.00		161,905.66		47		623,747.56
4. One-pounder boat guns and mounts complete.....	156,905.66	5,000.00		1,245,500.00				161,906.13
5. Machine guns and equipment.....	457,039.55		788,460.45	1,478,500.00				1,245,500.00
7409. New batteries for ships of the Navy, 1917-18.....	21,664,500.00		768,500.00	22,433,000.00		74,800.00		22,433,000.00
8410. Batteries for merchant auxiliaries, 1917-1920.....	1,324,060.42		3,052,826.20	4,376,886.20				4,376,886.20
8411. Torpedoes and appliances, 1917-1920.....	904,994.42	5,000.00	138,192.50	1,043,186.92		25.89		1,043,212.81
7411. Torpedoes and appliances, 1917-1919.....	249,263.42	130,000.00	311,210.72	690,474.14				690,498.84
6411. Torpedoes and appliances, 1916-1918.....	50,073.78		140,217.56	190,291.34		62,483.73		248,774.08
8412. Reserve ordnance supplies, 1917-1919.....	2,351,918.85	245,000.00	1,860,133.74	4,457,052.39		200,407.61		4,657,460.00

7415.	Reserve ordnance supplies, 1917-18.....	10,571,133.90	20,999,021.50	31,570,155.39	33.00	161,559.58	31,408,700.17
8416.	Contingent building fund, 1917-18.....	5,857.48	4,445,060.00	5,887.48		7,039.70	5,980.74
8417.	Ammunition for merchant auxiliaries, 1917-1920.....	3,183,542.24	24,000.00	7,652,602.24			7,659,642.03
8418.	1917-18.....						
8419.	Merchant guns and ammunition at naval stations, 1917-18.....	321,361.25	10,000.00	3,798,641.25		306.39	3,799,947.64
8420.	Increase of the Navy, ammunition.....	13,454,926.27	65,000.00	22,076,510.04	257.38	13,713.70	32,089,966.36
8421.	Increase of the Navy, armor and armament.....	13,079,138.07	462,300.00	86,076,020.88	12,807.60	88,603.31	86,151,816.59
8422.	Ammunition for ships of the Navy.....	2,138,968.32	178,300.00	14,612,638.01	27,413.88	20,765.88	14,605,990.01
8423.	Ordnance material, proceeds of sales:						
8425.	1. General account.....	424,430.15	5,465.95	424,430.15			424,430.15
8426.	2. Powder factory, Indianhead, Md.....	17,967.74	824,900.00	26,433.69		263.24	26,433.69
8427.	3. Projectile plant, Navy.....	1,254,886.86	450.00	2,080,146.89		253.24	2,080,400.13
8428.	4. Armor plant, Navy.....	10,996,714.84	196.00	10,998,385.84		108.24	10,998,494.08
8429.	5. Batteries for merchant auxiliaries.....	597,593.08	1,690,962.08	1,354,569.06	5,661.81	70,125.83	1,275,752.02
8430.	6. Armament and ammunition for Coast Guard cutters.....	84,530.00	75,000.00	159,590.00			159,590.00
8431.	7. Naval emergency fund (Ordnance allotment).....	800,429.48	18,965,570.00	19,755,999.48	40.15		19,755,979.35
8432.	8. Ammunition for vessels, 1917-18.....	46,341,020.48	22,323,837.50	68,664,858.00			68,664,858.00
8433.	9. Batteries for auxiliaries and merchantmen, 1917-18.....	11,099,304.82	18,570,618.70	20,696,923.52	1,222.13		20,671,145.65
8434.	10. Ammunition for auxiliaries and merchantmen, 1917-18.....	5,646,300.00	14,342,500.00	19,988,800.00			19,988,800.00
8435.	11. Torpedoes and appliances, 1917-18.....	11,120,141.00	14,121,869.00	11,242,000.00			11,242,000.00
BUREAU OF CONSTRUCTION AND REPAIR.							
8501.	Construction and repair, 1917-18.....	64,635,412.00	199,930.40	67,696,298.40	21,018.93	584,321.71	68,299,571.18
8502.	Construction plants at navy yards, 1917-18:						
	1. Portsmouth, N. H.....	150.81	9,625.00	9,775.81		69.09	9,844.90
	2. Boston, Mass.....	14,250.00	10,750.00	25,000.00			25,000.00
	3. New York, N. Y.....	33,000.00	2,000.00	35,000.00			35,000.00
	4. Philadelphia, Pa.....	20,000.00	5,000.00	25,000.00			25,000.00
	5. Norfolk, Va.....	25,109.62	9,860.38	35,000.00			35,000.00
	6. Charleston, S. C.....	8,550.00	1,450.00	10,000.00			10,000.00
	7. Mare Island, Cal.....	22,928.10	10,033.40	32,961.50			32,961.50
	8. Puget Sound, Wash.....	17,700.00	3,300.00	25,000.00		288.56	25,288.56
8505.	Aviation, Navy, 1917-18 (Construction and Repair allotment).....	3,952,359.48	27,740.00	3,989,398.08			3,998,398.08
8506.	Reserve material, Navy (Construction and Repair allotment).....	412,427.93	487,572.07	900,000.00			900,000.00
8509.	Naval emergency fund (Construction and Repair allotment).....	2,185,142.97	401,639.75	2,586,782.72	666.28		2,587,449.00
8510.	Construction plant, navy yard, Portsmouth, N. H.....	71.01		71.01			71.01
8511.	Construction plant, navy yard, Boston, Mass.....	228.69		228.69			228.69
8515.	Construction plant, navy yard, Pensacola, Fla.....	62,276.52		62,276.52			62,276.52
8519.	Construction plant, naval station, Pearl Harbor, Hawaii.....	1,357.46	719.68	2,107.14			2,107.14
BUREAU OF STEAM ENGINEERING.							
8601.	Engineering, 1917-18.....	43,250,013.07	690,145.45	43,940,158.52	8,338.85	748,202.38	44,689,022.05
8602.	Engineering, experimental station, Annapolis, Md., 1917-18:						
	1. Experimental and research work.....	82,402.97	2,498.50	84,901.47			84,901.47
	2. Equipment of building.....	16,899.40	3,100.60	20,000.00			20,000.00

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917 AND CONTINUING APPROPRIATIONS—Continued.

Appropriations.		1	2	3	4	5	6	7	8	
		Unallotted balances.	Unencumbered balances of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.	
BUREAU OF STEAM ENGINEERING—Continued.										
8604.	Machinery plants at navy yards, 1917-18:									
	1. Portsmouth, N. H.....	\$10,800.00		\$9,200.00	\$20,000.00				\$20,000.00	
	2. Boston, Mass.....	15,364.50		9,635.50	25,000.00				25,000.00	
	3. New York, N. Y.....	16,315.84		12,885.60	29,201.44				29,201.44	
	4. Philadelphia, Pa.....	19,637.11		4,933.00	24,570.11		\$71.60		24,641.71	
	5. Norfolk, Va.....	1,407.00		26,407.00	25,000.00				25,000.00	
	6. Charleston, S. C.....	4,865.15		15,134.85	20,000.00				20,000.00	
	7. Mare Island, Cal.....	2,897.00		27,297.00	25,000.00				25,000.00	
	8. Puget Sound, Wash.....	19,700.00		300.00	20,000.00		869.65		19,000.05	
8605.	Aviation, Navy, 1917-18 (Steam Engineering allotment)	1,850,247.79		1,220,282.07	1,893,495.41		520.00		1,893,495.41	
8606.	Reserve material, Navy (Steam Engineering allotment)	1,113,657.62		3,007,353.23	5,447,087.27		220.87		5,447,308.14	
8607.	Naval emergency fund (Steam Engineering allotment)	3,234,514.18		2,212,573.09	5,447,087.27	\$119.67	5.50		115.77	
8611.	Machinery plant, navy yard, New York, N. Y.....	484.10		3,267.00	3,751.10				3,751.10	
8613.	Machinery plant, navy yard, Norfolk, Va.....	1,105.94		7,174.65	8,280.59		730.48		9,011.07	
8615.	Machinery plant, navy station, Pensacola, Fla.....	30,998.69		658.46	30,998.69				30,998.69	
8620.	Machinery plant, naval station, Cavite, P. I.....	9,500.03		559.85	10,158.49				10,158.49	
8621.	Machinery plant, naval station, Olongapo, P. I.....	1,091.66			532.11					
8624.	High-power radio stations:					34.94	497.17			
	1. For the completion of six stations, Canal Zone, California coast, Hawaiian Islands, American Samoa, Island of Guam, and Philippine Islands.....									
	2. Porto Rico.....	2,665.00		289,974.84	287,009.84		1,178.11		288,187.95	
8625.	Building, Bureau of Steam Engineering, Annapolis, Md.: Surplus fund.....	394,900.00		5,100.00	400,000.00				400,000.00	
	7. To complete the installation of steam, air, and water lines, etc.....	4,833.65			4,833.65				4,833.65	
8626.	Machinery plant, navy yard, Boston, Mass.....	413.74			413.74				413.74	
8630.	Construction of propelling engines, Bureau of Steam Engineering.....	394.01		1,050.00	655.99				655.99	
		598,850.00		336,924.00	935,774.00				935,774.00	
BUREAU OF SUPPLIES AND ACCOUNTS.										
8701.	Pay of the Navy, 1917-18.....	127,378,926.82		2,192,270.36	127,378,926.82	143.38	29,547.68		127,358,522.52	
8702.	Provisions, Navy, 1917-1919.....	7,384,814.30			9,577,084.56		1,843.53		9,578,928.09	

7702. Provisions, Navy, 1917-18.....	22, 168, 056.15	7, 784, 690.34	29, 952, 746.49	1, 016, 065.82	2, 837, 208.91	28, 581, 602.40
7703. Maintenance, Supplies and Accounts, 1917-18.....	5, 536, 245.75	93, 282.89	6, 080, 967.05	32, 983.85	280.71	6, 013, 550.79
7704. Freight, Supplies and Accounts, 1917-18.....	2, 419, 364.07	6, 915.00	2, 426, 279.07	7, 004.26		2, 426, 983.33
7706. Fuel and transportation, 1917-18.....	24, 602, 147.46	45, 209.00	24, 726, 339.97	1, 929.59	1, 087.11	24, 727, 202.45
7708. Naval Academy dairy, Annapolis, Md. (reimbursable)	1, 564.49	78, 983.51	1, 478.01			1, 478.01
7715. Aviation, Navy, 1917-18 (Supplies and Accounts)	4, 838.89	3, 140.00	62.00			62.00
7716. Clothing and small-stores fund.....	44, 825, 536.71	36, 085, 662.56	11, 820, 225.85	385, 048.80	4, 340, 845.63	7, 874, 529.02
7717. Ships' stores profits, Navy.....	35, 088.86		35, 088.86	5, 119.13	39, 652.42	535.57
7718. Reserve material, Navy.....	2, 050, 000.00		2, 050, 000.00			2, 050, 000.00
7719. Naval emergency fund (Supplies and Accounts allotment)	228, 068.72	286, 800.50	484, 869.22	6, 327.65		491, 196.87
BUREAU OF MEDICINE AND SURGERY.						
8801. Medical Department, 1917-18.....	3, 345, 287.87	706, 440.86	4, 111, 728.73	1, 200.05		4, 112, 928.78
8802. Contingent, Medicine and Surgery, 1917-18:						
1. General purposes.....	1, 089, 155.36	157, 534.07	1, 246, 689.43	283.06		1, 246, 982.49
2. Dental outfits and dental material.....	14, 517.50	23, 482.50	38, 000.00			38, 000.00
8808. Bringing home remains of officers, etc., Navy Department, 1917-1919.....	317, 100.47	7, 813.00	324, 913.47	33.50		324, 946.97
7908. Bringing home remains of officers, etc., Navy Department, 1917-18.....	37, 116.98	30, 809.00	307.89	652.40		344.42
8804. Care of hospital patients, 1917-18.....	2, 866, 513.46	109, 253.77	2, 995, 799.23	47.65		2, 995, 846.88
8811. Naval Hospital, Newport, R. I.....	20, 000.00		20, 000.00			20, 000.00
8812. Naval Hospital, Pensacola, Fla.....	9, 912.12		9, 912.12			9, 912.12
8812. Naval hospital, Great Lakes.....	185.76		11, 536.45	5, 315.66		16, 852.06
8813. Naval hospital fund.....	478, 444.99	11, 350.66	478, 444.99	56, 327.75	178, 888.76	227, 643.26
MARINE CORPS.						
8901. Pay, Marine Corps, 1917-18.....	13, 521, 634.91	13, 521, 634.91				13, 521, 634.91
8902. Maintenance, Quartermaster's Department, Marine Corps, 1917-18.....	23, 754, 835.79	23, 754, 835.79		273, 228.08		24, 028, 063.87
9003. Expenses, Marine Corps Reserve, 1917-18.....	25, 000.00		25, 000.00			25, 000.00
9015. Barracks and quarters, Marine Corps.....	8, 931.58		8, 931.58	560.14		9, 491.72
DEPOSIT FUNDS.						
Pay, Navy, deposit fund.....	273, 790.47		273, 790.47		78, 666.07	307, 456.10
Pay, Marine Corps, deposit fund.....	387, 653.20		387, 653.20	9, 633.00	34, 612.00	362, 674.20

FISCAL YEAR 1917.

7101. Pay, miscellaneous.....	\$160, 016.80	\$79, 845.47	\$40, 170.73	\$114, 408.08	\$64, 647.55	\$9, 587.80
7102. Contingent, Navy, 1917.....	7, 352.20	525.14	7, 887.43	7, 529.18		15, 416.61
7104. Care of laps, etc., Guam, 1917.....	1, 401.78	1, 837.36	1, 837.36	1, 074.89		15, 763.37
7108. Aviation, Navy, 1917.....	1, 397, 673.34	485.58	1, 397, 673.34			1, 397, 673.34

SECRETARY'S OFFICE.

7101. Pay, miscellaneous.....	\$160, 016.80	\$79, 845.47	\$40, 170.73	\$114, 408.08	\$64, 647.55	\$9, 587.80
7102. Contingent, Navy, 1917.....	7, 352.20	525.14	7, 887.43	7, 529.18		15, 416.61
7104. Care of laps, etc., Guam, 1917.....	1, 401.78	1, 837.36	1, 837.36	1, 074.89		15, 763.37
7108. Aviation, Navy, 1917.....	1, 397, 673.34	485.58	1, 397, 673.34			1, 397, 673.34

Statement 41.—APPROPRIATION BALANCES—Continued.
FISCAL YEAR 1917—Continued.

Appropriations.	1	2	3	4	5	6	7	8
	Unallotted balances.	Unencumbered balances of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unexpended expenditures.	Unaudited reimbursements.	Treasury balances.
SECRETARY'S OFFICE—continued.								
7108. Arming and equipping Naval Militia, 1917.	\$78,618.89		\$779,807.68	\$701,294.39		\$151,338.86	\$1,108.74	\$851,529.51
7109. Arms, uniforms, equipment, etc., Naval Militia, 1917.	4,471.48		34,218.23	38,684.71		3,268.83		89,198.19
7140. Expenses, civilian naval consulting board, 1917.	13,831.17		8.00	13,839.17				13,839.17
7141. Investigation of fuel oil, etc., Navy, 1917.	4,239.22		47,897.32	52,136.54				52,136.54
7142. Ships, Naval Militia, 1917:								
1. Illinois.....	125,000.00		99,700.04	125,000.00				125,000.00
2. Minnesota.....	38,754.20			138,464.24		751.55		139,205.79
BUREAU OF YARDS AND DOCKS.								
7201. Maintenance, Yards and Docks, 1917.	95,493.55		288,699.74	193,206.19	\$9,956.47	58,817.64	10,297.61	238,769.75
7202. Repairs and preservation, 1917.....	53,348.72		80,857.55	134,207.27		52,852.50		187,026.38
7203. Contingent, Yards and Docks, 1917.....	8,699.03		4,199.36	4,736.66		4,739.66		5,093.70
7204. Commission on additional navy yards and stations, 1917.	5,100.36		4,123.09	3,223.45		4,789.79		5,093.70
7205. Aviation, Navy, 1917 (Yards and Docks allotment).	1,018,850.58		1,208,213.27	184,282.75		47,080.11		231,362.86
BUREAU OF NAVIGATION.								
7301. Contingent, Navigation, 1917.....	1,690.82		2,320.14	4,019.98		97.48		3,923.54
7302. Transportation, Navigation, 1917.....	\$17,781.88		917.45	\$10,837.45		493,291.64	26,841.26	185,529.96
7303. Recruiting, Navigation, 1917.....	145,640.92		15,854.00	166,094.92		215,468.92	14,149.43	85,287.70
7304. Maintenance, Naval Militaries, 1917.....	72,580.82		73,580.82	73,580.82		372,510.59	12,221.31	483,870.21
7305. Gunnery and engineering expenses, 1917.....	6,780.45		13,573.55	6,783.10		26,971.85	10.50	33,754.25
7306. Outfits on first enlistment, 1917.....	1,849,805.11		26,755.74	1,849,801.11		3,143,384.69	171.69	1,800,987.35
7307. Instruments and supplies, 1917.....	8,757.56		3,493.42	26,863.17		7,411.95	8,227.12	24,517.32
7310. Ocean and lake surveys, 1917.....	8,680.06		2,564.96	736.07		2,601.53	3,010.48	2,507.64
7311. Naval training station, Rhode Island, 1917.....	1,168.03		860.47	1,744.81		7,781.24	1,018.41	2,507.64
7312. Naval training station, St. Helena, Va., 1917.....	420.31		588.90	1,260.78		3,698.91		2,406.39
7313. Naval training station, Great Lakes, 1917.....	5,127.46		588.90	5,714.36		3,322.67	2,197.06	133.25
7314. Naval War College, 1917:								
1. Maintenance and care of grounds.....	2,034.00		3,675.51	5,709.51		1,698.28		7,217.79
2. Services of lecturer on international law.....			1,000.00	1,000.00				1,000.00
3. Services of civilian lecturer, rendered at War College.....			190.00	190.00				190.00
4. Care and preservation of library, etc.....	134.98		361.62	496.58		28.64		629.12

Statement 41.—APPROPRIATION BALANCES—Continued.

FISCAL YEAR 1917—Continued.

Appropriations.	FISCAL YEAR 1917—Continued.							
	1	2	3	4	5	6	7	8
	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, navy supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
BUREAU OF STEAM ENGINEERING.								
7601. Engineering, 1917.	\$1,428.10		\$542,335.90	\$540,907.80		\$174,929.59	\$90,965.90	\$694,841.49
7602. 1. Engineering experimental station, Annapolis, Md., 1917: 1. Experimental and research work. 2. Equipment of building.	158.11 .09		4,400.00	669.39 4,400.09		6,087.91 578.68		6,737.30 4,021.41
7604. Machinery plants at navy yards, 1917: 1. Portsmouth, N. H. 2. Boston, Mass. 3. New York, N. Y. 4. Philadelphia, Pa. 5. Norfolk, Va. 6. Charleston, S. C. 7. Mare Island, Cal. 8. Puget Sound, Wash.	394.71 261.50 1,358.46 3,085.25 795.15 1,121.60 375.00 2,530.76		14,443.90 31,136.68 8,170.44 20,913.50 22,866.19 21,122.60 24,625.00 6,580.00	14,838.61 31,397.18 9,528.90 24,011.75 23,661.34 20,000.00 26,000.00 8,960.76	\$270.76 270.75			14,567.86 31,397.18 9,799.65 24,011.75 23,661.34 20,000.00 26,000.00 10,918.37
7605. Aviation, Navy, 1917 (Steam Engineering allotment).	1,066,196.76		1,407,727.68	341,530.92		1,857.61 43,368.23		386,916.13
BUREAU OF SUPPLIES AND ACCOUNTS.								
7701. Pay of the Navy, 1917.	719,897.61			719,897.61	12,032.99	5,904,526.30		5,094,716.20
4702. Pay of the Navy, 1916-17.	152,165.74			152,165.74		770,082.81		594,779.72
7703. Maintenance, Supplies and Accounts, 1917.	401,694.77			401,694.77		270,635.80		564,243.12
7704. Freight, Supplies and Accounts, 1917.	59,180.69		182,263.14	59,180.69		115,528.84		74,863.93
7708. Fuel and transportation, 1917.	824,084.83		799,982.17	824,084.83		16,934.03		74,381.60
7709. Naval Reserve, 1917.	5,589.81		9,716.75	18,345.58		27,050.42		55,724.42
7710. Organizing Naval Reserve Force, 1917.	16,648.89		30,837.18	15,291.96		38,401.08		51,663.04
7711. Schools or camps of instruction, Naval Reserve Force, 1917.	6,114.98 2,714.05			6,114.98 2,714.05		2,361.11		6,114.98 5,075.16
7715. Aviation, Navy, 1917 (Supplies and Accounts allotment)								
BUREAU OF MEDICINE AND SURGERY.								
7801. Medical Department, 1917.	145,476.18		358,410.77	212,634.59		29,046.04		241,980.63
7802. 1. Contingent, Medicine and Surgery, 1917: 1. General purposes. 2. Dental outfits and dental material. 3. Dairy herd and land, Los Animas, Colo.	180,416.70 20,631.14 2,126.99		104,373.13 6,724.18 7,442.90	16,146.87 21,038.96 9,589.89		7,865.81 20.15 4,176.10	13.00	8,462.79 21,080.11 9,394.79

6003. Bringing home remains of officers, etc., Navy Department, 1916-17.....	846.14	28.40	874.54	283.33	591.22
MARINE CORPS.					
7901. Pay, Marine Corps, 1917.....	401,001.70		401,001.70		852,353.08
7902. Maintenance, Quartermasters' Department, Marine Corps, 1917.....	826,434.18		826,434.18	474,675.62	23,924.24
7903. Expenses, Marine Corps Reserve, 1917.....	25,000.00		25,000.00	617,034.24	1,430,746.90
					25,000.00

FISCAL YEAR 1916.

SECRETARY'S OFFICE.					
6101. Pay, miscellaneous, 1916.....	\$1,650.19	\$26,125.92	\$27,776.11	\$107,640.95	\$198,942.13
6102. Contingent, Navy, 1916.....	30,913.48		30,913.48	207.53	31,121.01
6103. Contingent, Navy, 1915-16.....	101,462.60		101,462.60		101,462.60
6104. Care of lepers, etc., Guam, 1916.....	286.45		286.45		286.45
6105. Committee to investigate cost of United States Army plant, 1916.....	4,581.57		4,581.57		4,581.57
6106. Aeronautics, Navy, 1916.....	54,275.23	64,043.65	118,318.88		118,318.88
6107. Advisory Committee for Aeronautics, 1916.....	3.52		3.52		3.52
6108. Arming and equipping Naval Militia, 1916.....	388.	16,110.74	16,798.39		20,134.60
6109. Arms, uniforms, equipment, etc., Naval Militia, 1916.....	10,202.04	13,500.90	3,300.86	3,407.01	3,094.83
6110. Relief on inhabitants American Samoa hurricanes damages, 1915-16.....	1,665.04		1,665.04	269.09	1,665.01
YARDS AND DOCKS.					
6201. Maintenance, 1916.....	24,455.36	40,772.21	16,316.85	3,494.35	19,707.17
6202. Repairs and preservation, 1916.....	3,119.53	4,811.58	1,692.05	77.84	1,716.14
6203. Contingent, 1916.....	2,674.17		2,674.17	416.44	2,255.73
NAVIGATION.					
6301. Contingent, 1916.....	194.58		194.58		323.23
6302. Transportation, 1916.....	32,435.63		32,435.63	1,985.24	33,915.45
6303. Recruiting, 1916.....	3,989.49	562.70	4,552.19		4,551.91
6304. Maintenance, naval auxiliaries, 1916.....	116,424.66		116,424.66	118,018.67	1,563.69
6305. Gunnery exercises, 1916.....	5,902.57	422.70	6,226.36	530.54	6,758.97
6306. Steaming exercises, 1916.....	396.07		396.07		396.07
6307. Outfits on first enlistment, 1916.....	8,898.96		8,898.96	8,898.95	
6308. Instruments and supplies, 1916.....	17,009.62	907.09	17,916.71	2,843.58	20,760.29
6309. Ocean and lake surveys, 1916.....	10,911.87	735.74	11,647.61	1,331.78	12,979.39
6310. Naval training station, Rhode Island, 1916.....	10,87.51		87.51		177.89
6311. Naval training station, St. Helena, Va., 1916.....	155.54		155.54	265.90	133.54
6312. Naval training station, Great Lakes, 1916.....	945.84	841.65	1,026.19	362.68	221.04
6313. Naval training station, California, 1916.....	1,357.88	319.50	1,657.38		1,651.75

Statement 41.—APPROPRIATION BALANCES—Continued.

FISCAL YEAR 1916—Continued.

Appropriations.	NAVIGATION—continued.							
	1	2	3	4	5	6	7	
	Unallotted balances.	Unencumbered balances of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unallotted expenditures.	Unaudited reimbursements.	Treasury balance.
315 Naval War College, 1916:								
1. Maintenance and care of grounds.....	\$100.10		\$160.00	\$100.10				\$100.10
3. Services of civilian lecturer rendered at the War College.....	26.26		868.40	423.66				160.00
3316. Naval Home, Philadelphia, Pa., 1916:								423.66
4. Care and preservation of the library, etc.....	513.82			513.82		\$79.46		563.28
1. Employees.....	83.83			83.83		214.35		268.18
3317. Pay, Naval Academy, 1916.....	1,326.96			1,326.96				1,326.96
3318. Current and miscellaneous expenses, Naval Academy, 1916:								
1. Text and reference books for instructors, etc.....	4,836.29			4,836.29				4,836.29
2. Purchase, binding, repair of books for the library.....	1,740.24		22.00	1,740.24				1,740.24
3. Expenses of the Board of Visitors.....	475.69			475.69				475.69
4. Contingencies for the superintendent.....	1.30			1.30				1.30
3319. Maintenance and repairs, Naval Academy, 1916:								
1. General account.....	765.09		230.08	965.17				965.17
2. Rent of buildings for the use of the academy, and commutation of rent for bandsmen.....	159.24			159.24				159.24
ORDNANCE.								
6401. Ordnance and ordnance stores, 1916:								
1. General account.....	35,301.50		288,409.44	293,710.94		\$41.38	\$15.12	294,637.20
2. Purchase and manufacture of smokeless powder.....	243.04		12,708.28	13,141.30				13,141.30
6402. Contingent, 1916.....	2,826.36		119.89	3,046.25		1.00		3,046.27
6403. Torpedo, 1916.....	2,830.75		28.48	2,859.23			\$0.98	2,860.21
6404. Torpedo station, 1916:								
1. General account.....	1,874.72		598.62	2,473.34		1,450.80		1,243.14
2. New machinery and tools for torpedo factory.....	418.10		45.00	463.10				463.10
6405. Naval Gun Factory, Washington, D. C., 1916.....	149.89		1,478.11	1,628.00		1,629.20		3,657.43
6406. Experiments, 1916.....	180.86		4,644.00	4,824.86				4,824.74
5410. New batteries for ships of the Navy, 1915-16:								
2. Replacing Mark VI 6-inch guns, etc.....	3,053.15		2,680.84	5,733.99				5,733.99
3. Linters for eroded guns.....	1,125.43			1,125.43				1,125.43

CONSTRUCTION AND REPAIR.

6501. Construction and repair, 1916.....	122,519.57	57,706.94	1,513.98	267.16	59,578.07
6502. Construction plants at navy yards, 1916:					
1. Portsmouth, N. H.....	2,580.00	3,016.03	65.20	286.23	2,705.01
2. Boston, Mass.....	436.03	271.81			271.81
3. New York, N. Y.....	1,090.10	1,900.10			1,900.10
4. Philadelphia, Pa.....	780.00	719.87			719.87
5. Norfolk, Va.....	1,507.00	1,358.07			1,358.07
6. Charleston, S. C.....	5,086.80	3,039.99			3,039.99
7. Mare Island, Cal.....	286.80	635.03			635.03
8. Puget Sound, Wash.....	222.26	222.26			222.26
STEAM ENGINEERING.					
6601. Engineering, 1916.....	169,769.04	119,719.94	5,815.18	348.34	125,186.76
6602. Engineering experimental station, Annapolis, Md., 1916:					
1. Experimental and research work.....	1.00	1.00			1.00
2. Equipment of building.....	1.00	1.00			1.00
SUPPLIES AND ACCOUNTS.					
6701. Pay of the Navy, 1916.....	45,707.57	45,707.57	6.85	28,240.09	1,254,238.15
6702. Provisions, Navy, 1915-16.....	42,947.79	66,272.69		44,370.47	30,438.66
6703. Maintenance, 1916.....	4,517.75	788.09		30	949.69
6704. Freight, 1916.....	144,238.55	144,238.55		43.67	284,550.33
6705. Fuel and transportation, 1916.....	9,391.24	13,600.48		166.33	65,931.74
6710. Naval Reserve, 1915-16.....	41.13	41.13		41.13	
MEDICINE AND SURGERY.					
6801. Medical Department, 1916.....	11,338.84	12,745.12	280.25	238.96	12,706.41
6802. Contingent, 1916:					
1. General account.....	187.53	187.53	1,160.69	9.40	33,710.21
5803. Bringing home remains of officers, etc., Navy Department, 1915-16.....	8.34	8.34		1.24	7.10
MARINE CORPS.					
6901. Pay, Marine Corps, 1916.....	143,924.93	143,924.93		606.86	29,740.91
6902. Maintenance, Marine Corps, 1916.....	7,518.43	7,518.43		3,689.34	7,380.54

FISCAL YEAR 1915.

5101. Pay miscellaneous, 1915.....	82,690.89	82,690.89			
5102. Contingent, Navy, 1915.....	15,038.71	15,038.71		\$2,185.71	
SECRETARY'S OFFICE.					
				\$4,746.00	
				15,038.71	

Statement 41.—APPROPRIATION BALANCES—Continued.

FISCAL YEAR 1915—Continued.

	1	2	3	4	5	6	7	8
Appropriations.	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated requisitions and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unexpended expenditures.	Unaudited reimbursements.	Treasury balance.
YARDS AND DOCKS.								
5201. Maintenance, 1915.....	\$119.89			\$119.89		\$6.39	\$126.28	
5202. Repairs and preservation, 1915.....	\$4.19			\$4.19		24.19		
NAVIGATION.								
5302. Transportation, 1915.....	1,658.48			1,838.48		4,200.86	2,362.38	
5303. Recruiting, 1915.....	1,109.16			1,109.16		1,112.01	2.85	
5304. Maintenance, Naval Auxiliaries, 1915.....	16.79			16.79		16.79		
5305. Gunnery exercises, 1915.....	666.89			666.89		556.99		
5306. Outfits on first enlistment, 1915.....	560.68			560.68		772.05	1,832.73	
5310. Ocean and lake surveys, 1915.....	\$0.87			\$0.87		20.87		
5313. Naval training station, Great Lakes, 1915.....	9.19			9.19		9.19		
ORDNANCE.								
5401. Ordnance and ordnance stores, 1915:								
1. General account.....	\$1.89			\$1.89		45.49	14.20	
5408. Experiments, 1915.....	76.00			76.00		76.00		
5108. Arming and equipping Naval Militia, 1915.....	1,168.10			1,168.10		1,168.10		
5109. Arms, uniforms, equipment, etc., Naval Militia, 1915.....	1,987.63			1,987.63		1,987.63		
5406. New batteries for ships of the Navy, 1915.....	17.68			17.68		17.62		
CONSTRUCTION AND REPAIR.								
5501. Construction and repair, 1915.....	\$01.91			\$01.91		589.87	387.96	
STEAM ENGINEERING.								
5601. Engineering, 1915.....	40,831.04			40,831.04		4.68	5,828.72	\$85,000.00

SUPPLIES AND ACCOUNTS.

5701. Pay of the Navy, 1915.....	17,852.81	17,852.81			12,112.19	29,268.48	708.52
5703. Provisions, Navy, 1914-15.....	7,706.61	7,706.61			63,727.79	71,409.16	28.24
5704. Maintenance, Supplies and Accounts, 1915.....	52.07	52.07			17.98	34.71	
5705. Freight, Supplies and Accounts, 1915.....	25,792.23	25,792.23			19,956.23	83.07	45,655.39
5708. Coal and transportation, 1915.....	13,671.97	13,671.97		27,827.15		178.66	14,076.52
MEDICINE AND SURGERY.							
5801. Medical Department, 1915.....	381.76	381.76			381.76		
5802. Contingent, Medicine and Surgery, 1915.....	60.98	60.98			50.98		
MARINE CORPS.							
5901. Pay, Marine Corps, 1915.....	3,919.60	3,919.60			32.70	3,886.90	
5902. Maintenance, Marine Corps, 1915.....	69,944.87	69,944.87			99,944.87		

PRIOR YEARS.

Pay, miscellaneous, 1914.....	\$50,722.10	\$50,722.10					
Transportation, Navigation, 1914.....	177.24	177.24					
Outfits on first enlistment, 1914.....	27.83	27.83					
Construction and repair, 1914.....	437.00	437.00					
Steam machinery, 1914.....	8.00	8.00					
Freight, Supplies and Accounts, 1914.....	2.04	2.04					
Pay, Marine Corps, 1914.....	43.94	43.94					
Outfits on first enlistment, 1913.....	58.87	58.87					
Ammunition for ships of the Navy, 1913.....	97,187.20	97,187.20					\$97,187.20
Torpedoes and appliances, 1913.....	13,983.82	13,983.82					13,983.82
Pay, miscellaneous, 1912.....	8.78	8.78					
Transportation, Navigation, 1912.....	35.15	35.15					

CERTIFIED CLAIMS.

Pay, miscellaneous.....	\$17.92	\$17.92					
Contingent, Navigation.....	9.14	9.14					
Transportation, Navigation.....	3,468.84	3,468.84					
Construction and repair.....	5.46	5.46					
Freight, Supplies and Accounts.....	9,153.03	9,153.03					\$5.46

Statement 41.—APPROPRIATION BALANCES—Continued.

MISCELLANEOUS.

Appropriations.	1	2	3	4	5	6	7	Treasury balance.
	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated obligations and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	
Bounty for destruction of enemy's vessels.....	\$52,351.52			\$52,351.52				\$52,351.52
Claims for destruction of enemy's vessels, certified claims.....	180.00			180.00				180.00
Claims reported by Court of Claims under Bowman and Tucker Acts, etc.....	649.22			649.22				649.22
Indemnity for loss, property, naval services under act of Mar. 2, 1895.....	165.78			165.78				165.78
Judgments bounty for destruction of enemy's vessels.....	60,095.29			60,095.29				60,095.29
Judgments, Court of Claims, Navy.....	7,492.73			7,492.73				7,492.73
Navy pension fund, interest.....	240,062.67			240,062.67				240,062.67
Navy pension principal trust fund.....	14,771,418.76			14,771,418.76			\$76.33	14,771,342.43
Payment of certain claims arising under the Navy Department.....	2,372.59			2,372.59				2,372.59
Payment of certain services arising under the Navy Department.....	21.15			21.15				21.15
Payment of Japanese award.....	28,492.18			28,492.18				28,492.18
Relief of Mathilda Hesterman, widow of Herman Hesterman.....	1,248.00			1,248.00				1,248.00
Relief of De Barbieri & Co. of Valparaiso, Chile.....	2,470.00			2,470.00				2,470.00
Prize money, Battle of Manila Bay.....	32,633.44			32,633.44				32,633.44
Prize money to captors.....	429,391.45			429,391.45				429,391.45
Prize money to captors, Spanish War.....	27,861.62			27,861.62				27,861.62
Refract of stolen deposits of enlisted men of the Navy and Marine Corps.....	648.62			648.62				648.62
Reimbursements to enlisted men, Navy, for clothing and bedding destroyed.....	147.51			147.51				147.51
Relief of owners of American schooner Walter B. Chester.....	269.64			269.64				269.64

RECAPITULATION.

[Figures in *italics*, column 1, represent appropriations overobligated; figures in *italics*, column 4, represent appropriations overexpended.]

Appropriations.	Unallotted balances.	Unencumbered balance of allotments.	Unliquidated obligations and contracts.	Unexpended balances.	Unaudited expenditures, naval supply account.	Other unaudited expenditures.	Unaudited reimbursements.	Treasury balance.
	1	2	3	4	5	6	7	8
Total of appropriations and funds.....	\$697,265,462.26	\$7,347,614.25	\$487,668,865.70	\$1,192,331,972.21	\$66,035.33	\$24,721,811.49	\$8,629,568.49	\$1,208,522,750.5

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES.

RECAPITULATION.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material lost on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$68,121,992.99							
Amount appropriated.....	1,356,119,436.35							
Miscellaneous receipts.....	152,524,497.41							
	<u>1,576,765,926.75</u>							
Net total expenditures by titles (naval appropriations)	242,726,549.72							
Miscellaneous adjustments in appropriations.....	140,162,899.60							
Total expenditures under naval appropriations.	382,889,449.32							
Carried to surplus fund.....	1,541,505.22							
Balance June 30, 1917.....	<u>1,192,331,972.21</u>							
	1,576,765,926.75							

RECONCILEMENT WITH STATEMENT 16 (GROSS EXPENDITURES BY YARDS AND TITLES).

Net total expenditures by titles (Statement 42).....	\$242,726,549.72	\$68,789,725.36		\$53,425,997.46	\$103,301,824.97	\$3,609,438.11	\$1,741,232.49	\$61,911,331.33
Other Government departments.....	1,494,967.76	456,253.10		259,722.19		660,232.52		
Special deposits.....	7,524,737.52	102,274.55		132,453.45		71.50		
Cash sales.....	49,014.83					7,840,012.43		
Proceeds of sales.....	49,014.83	39,536.93		7,017.89				
Alcohol powers.....	67,921.99					67,921.99		
Purchases under naval supply account.....	51,528,969.17			51,528,969.17				
Issues under naval supply account, title X, to naval supply account, title Z, and other applied to same.....	18,172,922.08	4,551,735.99		11,621,186.09				
Issues of stores previously charged to appropriations.....	40,363,927.10					40,363,927.10		
Total, Statement 16.....	390,419,674.99	43,920,245.93		45,419,367.08	154,830,794.14	52,556,603.62	1,741,232.49	61,911,331.33

NOTE.—Statement 42 reconciles with Statement 1 (cost of the NAVY) through the above reconciliation with Statement 16.

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS.

8101. Pay, miscellaneous, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$2,935,500.00							
Expenditures by titles:								
C.....	1,070.98				\$956.69	\$114.29		
E.....	124.00			\$124.00				
F.....	124.00				124.00			
G.....	8,093.28	\$6,558.30		1,423.98	111.00			
H.....	49.81				49.81			
V.....	68,462.74	779.94	\$0.70	589.97	65,091.87			
Indirect expense deducted.....			.70					
Miscellaneous adjustments.....	240,541.42							
Total expenditures.....	316,464.77	7,338.24		2,137.95	66,332.87	114.29		
Unexpended balance.....	2,619,035.23							
	2,935,500.00							

8102. Contingent, Navy, 1917-18.

Amount appropriated.....	\$46,000.00							
Expenditures by titles:								
V.....	1,056.10			\$13.65	\$286.28	\$756.17		
Miscellaneous adjustments.....	2,672.95							
Total expenditures.....	3,729.05			13.65	286.28	756.17		
Unexpended balance.....	42,270.95							
	46,000.00							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
 8104. Care of lepers, etc., Island of Guam, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$20,000.00							
Expenditures by titles:								
S.....	152.74			\$152.74				
Unexpended balance.....	19,847.26							
	20,000.00							

8106. Aviation, Navy, 1917-18.

Amount appropriated.....	\$16,133,000.00							
Miscellaneous adjustments.....	4,000,000.00							
Unexpended balance.....	12,133,000.00							
	16,133,000.00							

8140. Expenses, Civilian Naval Consulting Board, 1917-18.

Amount appropriated.....	\$25,000.00							
Unexpended balance.....	25,000.00							

8141. Investigation of fuel oil, etc., Navy, 1917-18.

Amount appropriated.....	\$60,000.00							
Expenditures by titles:								
G.....	100.92	\$60.61					\$40.31	
V.....	1,204.29	572.22	\$104.80				467.27	
Indirect expense deducted.....	164.80		164.80					
Total expenditures.....	1,469.91	632.83					507.58	
Unexpended balance.....	58,530.09							
	\$7,000.00							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

§194. Care of lepers, etc., Island of Guam, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$20,000.00							
Expenditures by titles:								
§.....	152.74			\$152.74				
Unexpended balance.....	19,847.26							
	20,000.00							

§106. Aviation, Navy, 1917-18.

Amount appropriated.....	\$16,133,000.00							
Miscellaneous adjustments.....	4,000,000.00							
Unexpended balance.....	12,133,000.00							
	16,133,000.00							

§140. Expenses, Civilian Naval Consulting Board, 1917-18.

Amount appropriated.....	\$25,000.00							
Unexpended balance.....	25,000.00							

§141. Investigation of fuel oil, etc., Navy, 1917-18.

Amount appropriated.....	\$60,000.00							
Expenditures by titles:								
G.....	100.92	\$60.61				\$40.31		
V.....	1,204.29	572.22	\$164.80			467.27		
Indirect expense deducted.....	164.80		164.80					
Total expenditures.....	1,140.41	632.83				507.58		
Unexpended balance.....	58,859.59							
	60,000.00							

8146. Basic patents for aircraft, 1917-18.

Amount appropriated.....	\$1,000,000.00						
Unexpended balance.....	1,000,000.00						

8201. Maintenance, Yards and Docks, 1917-18.

Amount appropriated.....	\$4,769,060.84						
Miscellaneous receipts.....	60.84						
	4,769,060.84						
Expenditures by titles:							
B.....	6,769.79						
E.....	30,093.51						
C.....	244,844.17	\$689.72	\$21,322.91	\$3,724.00	\$6,759.79		
R.....	241,655.17		90,256.15	3,142.20			
S.....	24,121.32		8,688.70				
V.....	5,089.82		8,688.70	1,083.80			
X.....	488.81	682.37	901.48	680.20	348.74		
Indirect expense deducted.....	663.85	663.85			288.84		
Indirect expense divided.....		708.24	157.82				
Total expenditures.....	313,481.03		95,280.50	8,580.20	6,869.69		
Unexpended balance.....	4,455,579.81						
	4,769,060.84						

8302. Repairs and preservation, 1917-18.

Amount appropriated.....	\$2,605,000.00						
Expenditures by titles:							
E.....	101,881.33						
R.....	2,762.53	\$6,677.29	\$49,268.27	\$11,000.00			
G.....	168,605.51		59,555.33	1,373.03			
S.....	48,844.78		24,479.26	10,478.51			
V.....	265.46	6.16	211.26				
Indirect expense deducted.....	85.64	85.64					
Indirect expense divided.....		6,649.81	1,432.69				
Total expenditures.....	322,275.97		135,414.77	22,977.74			
Unexpended balance.....	2,282,724.03						
	2,605,000.00						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
 890. Contingent, Yards and Docks, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$825,000.00							
Expenditures by titles:								
E.....	17,109.76	\$8,551.19	\$1,490.33	\$7,128.24				
R.....	34.00			34.00				
G.....	385.89	176.72		169.17				
S.....	315.36	149.34		166.02				
Indirect expense divided.....		1,068.08	1,490.33	407.26				
Miscellaneous adjustments.....	11,131.61							
Total expenditures.....	28,966.62	9,960.33		7,894.68				
Unexpended balance.....	796,033.38							
	\$825,000.00							

890a. Aviation, Navy, 1917-18 (Yards and Docks).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Expenditures by titles:								
E.....	\$21,858.39	\$9,401.79	\$1,602.39	\$10,654.21				
G.....	615.58			615.58				
V.....	28.85					\$25.85		
X.....	.14					.14		
Indirect expense divided.....		1,281.85	1,602.39	320.44				
Total expenditures.....	22,499.68	10,683.74		11,590.23		25.71		
Unexpended balance.....	\$5,499.63							

3301. Contingent, Navigation, 1917-18.

Amount appropriated.....	\$20,000.00							
Unexpended balance.....	20,000.00							

3302. Transportation, Navigation, 1917-18.

Amount appropriated.....	\$2,781,348.00							
Expenditures by titles:								
C.....	1,155.96				\$1,105.96			
V.....	5,674.61				5,674.61	\$50.00		
Miscellaneous adjustments.....	201,122.71							
Total expenditures.....	207,953.27				6,780.56	50.00		
Unexpended balance.....	2,523,394.73							
	2,781,348.00							

3303. Recruiting, Navigation, 1917-18.

Amount appropriated.....	\$1,419,228.84							
Expenditures by titles:								
C.....	2,734.79							
E.....	37,551.27							
R.....	13,611.43				\$5,972.12			
G.....	13,761.99				8,524.29			
S.....	19,002.30				6,594.74			
V.....	16,460.39				16,302.20			
X.....	202.25				1.38			
						19.66		\$12.98
						262.25		
Indirect expense divided.....		473.53		142.34				
Total expenditures.....	102,896.92				37,537.07			62.98
Unexpended balance.....	1,316,368.92							
	1,419,228.84							

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

8305. Gunnery and engineering exercises, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances
Amount appropriated.....	\$225,000.00							
Expenditures by titles:								
G.....	.40	\$0.34		\$0.06				
V.....	21.11	1.30	\$0.47	19.34				
Indirect expense deducted.....	.47		.47					
Total expenditures.....	21.04	1.64		19.40				
Unexpended balance.....	224,978.96							
	225,000.00							

8306. Arming and equipping Naval Militia, 1917-18.

Amount appropriated.....	\$1,527,617.70							
Expenditures by titles:								
C.....	108.14					\$108.14		
V.....	86,595.56					86,595.56		
Total expenditures.....	86,703.70					86,703.70		
Unexpended balance.....	1,440,914.00							
	1,527,617.70							

8308. Outfits on first enlistment, 1917-18.

Amount appropriated.....	\$10,164,920.00							
Miscellaneous receipts.....	133.70							
	10,164,086.30							
Unexpended balance.....	10,164,086.70							

8300. Instruments and supplies, 1917-18.

Amount appropriated.....	\$6,193,440.00								
Miscellaneous receipts.....	336.56								
	6,193,776.56								
Expenditures by titles:									
A.....	9,085.00					\$9,085.00			
B.....	35,413.11						\$4.00	\$35,409.11	
C.....	1,851.02	\$4.91					1,119.91	91.99	\$618.05
D.....	1,356.45	\$16.16					120.00		
E.....	297.37	170.30				20.16			
F.....	1,276.83	110.36				157.64			
G.....	744.00	549.99				170.73	405.00		
H.....	137.00					744.00			
I.....	13,807.55	869.06				137.00			
J.....	4,669.23	318.32				2,338.49	10,600.00		
K.....	6.60					131.31	75.00	4,062.47	
L.....	313.51					313.51		6.60	
Indirect expense deducted.....									
Total expenditures.....	67,317.45	2,034.19				12,784.33	12,323.91	39,556.97	618.05
Unexpended balance.....	0,126,459.11								
	6,193,776.56								

8310. Ocean and lake surveys, 1917-18.

Amount appropriated.....	\$155,000.00								
Expenditures by titles:									
A.....	\$2.74	\$2.16							
B.....	2.50	2.11				\$0.58			
C.....	3,510.19	5.98				1.32	\$2,279.43		\$1,223.28
D.....	1.60					1.00			
Indirect expense deducted.....									
Total expenditures.....	3,513.53	10.25				.57	2,279.43		1,223.28
Unexpended balance.....	151,486.47								
	155,000.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

8311. Naval training station, Rhode Island, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$200,000.00							
Expenditures by titles:								
B.....	5,433.74	\$971.55		\$4,462.19				
E.....	5,073.76	683.12		4,390.64				
Total expenditures.....	10,507.50	1,654.67		8,852.83				
Unexpended balance.....	189,492.50							
	200,000.00							

8312. Naval training station, St. Helena, Va., 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$80,000.00							
Expenditures by titles:								
E.....	10,409.21	\$30.77	\$9.69	\$10,368.75				
G.....	1,472.69		9.69	1,472.69				
Indirect expense divided.....		7.75		1.94				
Total expenditures.....	11,881.90	38.52		11,843.38				
Unexpended balance.....	68,118.10							
	80,000.00							

8313. Naval training station, Great Lakes, 1917-18

Amount appropriated.....	\$196,400.00					
Expenditures by titles:						
R.....	1,488.75				\$1,488.75	
S.....	27,180.31	\$648.81	\$10,097.25		10,494.25	
Total expenditures.....	28,669.06	648.81	10,097.25		17,923.00	
Unexpended balance.....	167,730.94					
	196,400.00					

8314. Naval training station, California, 1917-18.

Amount appropriated.....	\$192,000.00					
Miscellaneous receipts.....	650.00					
	192,650.00					
Expenditures by titles:						
R.....	264.33			\$594.33		
S.....	8,231.45	\$1,833.02		6,298.43		
Total expenditures.....	8,515.78	1,833.02		6,892.76		
Unexpended balance.....	183,834.22					
	192,650.00					

8315. Naval War College, 1917-18.

Amount appropriated.....	\$38,850.00					
Unexpended balance.....	38,850.00					

8317. Pay, Naval Academy, 1917-18.

Amount appropriated.....	\$387,993.20					
Unexpended balance.....	387,993.20					

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

8318. Current and miscellaneous expenses, Naval Academy, 1917-18.

	Total.	Lebor	Indirect	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$29,000.00							
Unexpended balance.....	32,000.00							

8319. Maintenance and repairs, Naval Academy, 1917-18.

Amount appropriated.....	\$548,068.00							
Expenditures by titles:								
8.....	11,193.13	\$5,863.76		\$5,309.37				
Unexpended balance.....	537,862.87							
	548,068.00							

8320. Aviation, Navy, 1917-18 (navigation).

Expenditures by titles:								
V.....	\$266.66					\$266.66		
Unexpended balance.....	266.66							

8331. Ships, Naval Militia, 1917-18.

Amount appropriated.....	\$135,500.00							
Unexpended balance.....	135,500.00							

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

8401. Ordnance and ordnance stores, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlement.	Pay and allowances.
Amount appropriated.....	\$27,193,699.00							
Miscellaneous receipts.....	49,067.94							
Expenditures by titles:	27,242,766.94							
A.....	659.86	\$659.86						
B.....	12,803.78	10.58	\$2.24			\$12,803.78	\$1,076.37	
C.....	1,536.21	16,108.72	4,788.77	\$803.63		473.30		
D.....	20,701.01	49,373.55	16,225.26	5,799.34	\$45.51			
K.....	71,443.66	45,891.38	8,494.04	10,845.09				
L.....	66,231.11	795.12	163.17	234.16				
E.....	1,192.45	3,453.63		6,261.04	1,000.00			
R.....	10,694.67	81,738.58		14,177.93	1,316.28			
G.....	97,252.79	40,021.18		10,825.85	6.50			
S.....	29,703.85	80,005.81	5,616.12	18,367.03				
V.....	109,407.82							
Y.....	747,163.10							
Z.....	226,955.27	56,808.06	12,981.31	157,106.90				
Indirect expense deducted.....	56,181.86		86,171.89					
Indirect expense divided.....		10,088.67	13,144.43					
Total expenditures.....	1,350,604.33			3,055.81				
Unexpended balance.....	25,883,162.61	383,914.04		206,867.19	785,497.66	86,746.09	12,561.60	
27,242,766.94								

8402. Contingent, Ordnance, 1917-18.

Amount appropriated.....	\$9,500.00							
Expenditures by titles:								
V.....	140.29			\$136.95				\$3.34
Unexpended balance.....	9,359.71							
9,500.00								

8403. Repairs, Ordnance, 1917-18.

Amount appropriated.....	\$30,000.00								
Unexpended balance.....	30,000.00								

8404. Torpedo station, Newport, R. I., 1917-18.

Amount appropriated.....	\$200,000.00								
Expenditures by titles:									
R.....	1,231.00						\$1,231.00		
S.....	372.70	\$322.70			\$50.00				
X.....	949.06						949.06		
Total expenditures.....	2,552.76	322.70			50.00		2,180.06		
Unexpended balance.....	197,447.24								
	200,000.00								

8405. Naval Gun Factory, Washington, D. C., 1917-18.

Amount appropriated.....	\$2,500,736.00								
Expenditures by titles:									
E.....	44,419.20						\$44,419.20		
Unexpended balance.....	2,456,316.80								
	2,500,736.00								

8406. Experiments, Ordnance, 1917-18.

Amount appropriated.....	\$100,000.00								
Unexpended balance.....	100,000.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

840. New batteries for ships of the Navy, 1917-1919.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$2,201,000.00							
Expenditures by title:								
G.....	83.11	\$61.98		\$26.13				
Y.....	7,652.74	243.11	\$68.20	1,823.09	\$7,609.35	\$43.89		
Z.....	2,134.53							
Indirect expense divided.....		51.17	68.20	17.03				
Total expenditures.....	9,870.38	356.26		1,866.18	7,609.35	43.39		
Unexpended balance.....	2,191,124.52							
	2,201,000.00							

841. Batteries for merchant auxiliaries, 1917-1920.

Amount appropriated.....	\$4,731,174.00							
Expenditures by title:								
X.....	354,287.80				\$354,287.80			
Unexpended balance.....	4,376,886.20							
	4,731,174.00							

841I. Torpedoes and appliances, 1917-1920.

Amount appropriated.....	\$1,049,260.00							
Expenditures by title:								
G.....	8.60	\$6.13		\$2.47				
Z.....	1,094.48	40.58	\$19.63	1,094.27				
Indirect expense divided.....		14.70	19.63	4.93				
Total expenditures.....	1,098.08	61.41		1,031.67				
Unexpended balance.....	1,046,196.92							
	1,049,260.00							

8415. Reserve ordnance supplies, 1917-1919.

Amount appropriated.....	\$4,657,460.00					
Expenditures by titles:						
X.....	200,407.61				\$200,407.61	
Unexpended balance.....	4,457,052.39					
	4,657,460.00					

8416. Contingent, building fund, 1917-18.

Amount appropriated.....	\$10,000.00					
Expenditures by titles:						
R.....	2,665.78	\$817.78			\$1,878.00	
Miscellaneous adjustments.....	1,416.74					
Total expenditures.....	4,112.52	817.78			1,878.00	
Unexpended balance.....	5,887.48					
	10,000.00					

8417. Ammunition for merchant auxiliaries, 1917-1920.

Amount appropriated.....	\$7,731,941.00					
Expenditures by titles:						
G.....	888.26	\$650.64			\$237.61	
S.....	504.13	504.13				
X.....	62,100.00					\$62,100.00
Z.....	15,846.38	7,197.65				8,169.16
				\$479.57		
Indirect expense divided.....		359.68		479.57	119.89	
Total expenditures.....	79,338.76	8,712.10			8,526.66	62,100.00
Unexpended balance.....	7,652,602.24					
	7,731,941.00					

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
 8418. Antiaircraft guns and ammunition for naval stations, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on Invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$3,800,000.00							
Expenditures by titles:								
S.....	24.01	\$24.01						
Z.....	384.74	382.38		\$2.36				
Total expenditures.....	388.75	306.39		52.36				
Unexpended balance.....	\$3,796,611.26							
	\$3,800,000.00							

8433. Ammunition for vessels, 1917-18.

Amount appropriated.....	\$68,664,858.00							
Unexpended balance.....	66,664,858.00							

8435. Batteries for auxiliaries and merchantmen, 1917-18.

Amount appropriated.....	\$26,672,000.00							
Expenditures by titles:								
G.....	\$206.02	\$217.13		\$90.89				
Z.....	1,778.40	806.87	\$204.18	707.41				
Indirect expense divided.....		198.13	204.18	66.05				
Total expenditures.....	\$2,078.46	1,222.13		854.35				
Unexpended balance.....	\$26,669,921.52							
	\$26,672,000.00							

8434. Ammunition for auxiliaries and merchantmen, 1917-18.

Amount appropriated.....	\$19,988,800.00								
Unexpended balance.....	19,988,800.00								

8435. Torpedoes and appliances, 1917-18.

Amount appropriated.....	\$11,242,000.00								
Unexpended balance.....	11,242,000.00								

8601. Construction and Repair, 1917-18.

Amount appropriated.....	\$70,177,340.00								
Miscellaneous receipts.....	24,486.36								
	70,201,826.36								
Expenditures by titles:									
A.....	35,140.09	\$35,231.81	\$6.16	\$86.59	\$3,225.58	\$377,400.92			
B.....	380,226.80	96.36	30.15	7,701.65	1,264.80	489,745.07			
C.....	438,434.75	314,307.81	90,405.01	106,539.73	68,112.03	32,078.81			
D.....	606,500.39	281,404.53	86,141.57	162,193.64	780.00	461.92			
K.....	530,981.86	19,437.44	6,865.26	7,791.29	17,025.00	15,690.70			
P.....	54,293.71	2,212.26		96,039.06	2,601.93				
E.....	32,743.46	14.00			14.00				
R.....	2,212.26	62,764.93	4,342.39	11,891.39	1,233.75	8,771.32			
G.....	523,722.76					163.66			
V.....	14.00								
X.....	86,053.78								
	187,668.22	187,668.22							
Indirect expense deducted.....									
Indirect expense divided.....		1,267.08	1,649.36	382.28					
Total expenditures.....	2,505,560.96	1,145,269.64		397,312.70	89,386.63	873,592.09			
Unexpended balance.....	67,696,265.40								
	70,201,826.36								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
8602. Construction plants at navy yards, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$200,000.00							
Expenditures by titles:								
E.....	\$934.50	\$933.28	\$98.50	\$472.72				
G.....	1,328.19	74.76		1,253.43				
Indirect expense divided.....		70.14	98.50	28.26				
Total expenditures.....	2,262.69	508.18		1,754.51				
Unexpended balance.....	197,737.31							
	200,000.00							

8605. Aviation, Navy, 1917-18 (Construction and Repair).

Miscellaneous receipts.....	\$4,000,000.00							
Expenditures by titles:								
C.....	52.03					\$52.03		
G.....	318.34			\$318.34				
V.....	1,231.55					1,231.55		
Total expenditures.....	1,601.92			318.34		1,283.68		
Unexpended balance.....	2,398,398.08							
	4,000,000.00							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
8604. Machinery plants at navy yards, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$190,000.00							
Expenditures by titles:								
E.....	798.56				798.56			
G.....	429.89	\$198.16		\$231.73				
Total expenditures.....	1,228.45	198.16		231.73	798.56			
Unexpended balance.....	188,771.55							
	190,000.00							

8605. Aviation, Navy, 1917-18 (Steam Engineering).

Expenditures by titles:								
B.....	\$907.32					\$907.32		
G.....	275.43			\$275.43				
V.....	8,782.96				\$520.00	8,262.96		
Total expenditures.....	9,965.71			275.43	520.00	9,170.30		
Unexpended balance.....	9,065.74							

8701. Pay of the Navy, 1917-18.

Amount appropriated.....	\$127,379,333.57							
Expenditures by titles:								
G.....	462.02							\$262.02
S.....	146.73							146.73
Total expenditures.....	411.75							411.75
Unexpended balance.....	127,378,921.82							
	127,379,333.57							

8702. Provisions, Navy, 1917-1918.

Amount appropriated.....	\$10,144,943.40						
Expenditures by titles:							
C.....	12,928.90				\$12,928.90		
S.....	444.26				444.26		
V.....	2,083.92				2,083.92		
X.....	552,429.77				552,429.75	\$169.02	
Total expenditures.....	567,886.84				567,886.82	169.02	
Unexpended balance.....	9,577,056.56						
	10,144,943.40						

8704. Maintenance, Supplies and Accounts, 1917-18.

Amount appropriated.....	\$6,250,000.00						
Miscellaneous receipts.....	280.71						
	6,250,280.71						
Expenditures by titles:							
B.....	18,498.97						\$17,496.97
C.....	4,284.53						3,865.65
P.....	2,484.13						5.00
E.....	2,563.63						786.50
G.....	119,081.30						280.20
V.....	1,936.56						743.90
X.....	7.00						201.91
Indirect expense deducted.....	76.20						2.00
Indirect expense divided.....							
Miscellaneous adjustments.....	122,662.15						
Total expenditures.....	280,413.06						21,542.53
Unexpended balance.....	5,969,867.66						
	6,250,280.71						

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
 8708. Freight, Supplies and Accounts, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$2,600,000.00							
Expenditures by titles:								
G.....	1,218.96	\$1,108.98		\$15.00	\$3.98			
V.....	3.53							
Miscellaneous adjustments.....	172,558.42							
Total expenditures.....	173,720.93	1,108.98		15.00	3.98			
Unexpended balance.....	2,426,279.07							
	2,600,000.00							

8708. Fuel and transportation, 1917-18.

Amount appropriated.....	\$25,862,424.00							
Miscellaneous receipts.....	1,077.11							
	26,939,497.11							
Expenditures by titles:								
B.....	8.00							
C.....	70,672.44							
G.....	6,804.97	\$4,660.19		\$2,244.78	\$923.58	\$8.00		
S.....	224.45	108.00			116.45	69,748.86		
V.....	1,218.45	8.40		5.40	1,200.00			
Indirect expense deducted.....	1.68		\$1.68					
Miscellaneous adjustments.....	1,068,138.48		7.68					
Total expenditures.....	1,127,157.14	4,776.59		2,250.18	2,240.03	69,756.86		
Unexpended balance.....	24,792,336.97							
	26,939,497.11							

5715. Aviation, Navy, 1917-18 (Supplies and Accounts).

Expenditures by titles:									
V.....	\$62.00								\$62.00
Unexpended balance.....	68.00								

5801. Medical Department, 1917-18.

Amount appropriated.....	\$4,121,740.00								
Expenditures by titles:									
C.....	272.83						\$253.12		
G.....	231.84	\$231.84					670.58	\$19.71	
S.....	6,834.86	816.00	\$3,240.00				253.23		\$2,108.30
V.....	263.23						1,802.73		
X.....	1,802.73								
Miscellaneous adjustments.....	615.78								
Total expenditures.....	10,011.27	1,047.84	3,240.00				2,979.68	19.71	2,108.30
Unexpended balance.....	4,111,728.73								
	4,121,740.00								

5802. Contingent, Medicine and Surgery, 1917-18.

Amount appropriated.....	\$1,291,080.00								
Expenditures by titles:									
C.....	384.33						\$881.70		\$2.68
E.....	62.00						1,024.00		
F.....	1,363.50						179.70		
G.....	3,309.70	\$150.38					3,807.95	62.00	
S.....	3,525.71						881.30		\$97.20
V.....	489.11	7.82					120.00		
X.....	120.00								
Miscellaneous adjustments.....	46.20								
Total expenditures.....	6,300.57	158.20	801.68				5,222.57	64.63	97.20
Unexpended balance.....	1,294,689.43								
	1,291,080.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

8808. Bringing home remains of officers, etc., Navy Department, 1917-1918.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$332,658.00							
Expenditures by titles:								
V.....	33.50				\$33.50			
Miscellaneous adjustments.....	7,711.08							
Total expenditures.....	7,744.58				33.50			
Unexpended balance.....	\$294,913.47							
	\$32,658.00							

8804. Care of hospital patients, 1917-18.

Amount appropriated.....	\$3,000,000.00							
Expenditures by titles:								
S.....	4,183.12				\$4,183.12			
V.....	47.65				47.65			
Total expenditures.....	4,200.77				4,200.77			
Unexpended balance.....	2,995,799.23							
	\$3,000,000.00							

8801. Pay, Marine Corps, 1917-18.

Amount appropriated.....	\$13,631,802.78							
Miscellaneous adjustments.....	9,967.87							
Unexpended balance.....	13,621,834.91							
	\$13,631,802.78							

8903. Maintenance, Quartermaster's Department, Marine Corps, 1917-18.

Amount appropriated.....	\$25,005,546.00							
Expenditures by titles:								
Marine Corps.....	2,800,369.05	\$10,134.33	\$1,069.90	\$9,525.79	\$2,773,200.54	\$2,126.23	\$4,703.13	
Indirect expense divided.....		1,169.16	1,069.90	500.83				
Miscellaneous adjustments.....	53,341.16							
Total expenditures.....	2,853,710.21	11,303.49		10,026.63	2,773,200.54	2,126.23	4,703.13	
Unexpended balance.....	26,005,546.00							

8903. Expenses of Marine Corps Reserve, 1917-18.

Amount appropriated.....	\$25,000.00							
Unexpended balance.....	25,000.00							

Pay of the Navy, deposit fund.

Balance July 1, 1916.....	\$376,069.83							
Miscellaneous receipts.....	253,230.00							
Total.....	629,299.83							
Miscellaneous adjustments.....	365,499.36							
Unexpended balance.....	273,760.47							
Total.....	629,299.83							

Pay of the Marine Corps, deposit fund.

Balance July 1, 1916.....	\$312,913.20							
Miscellaneous receipts.....	273,300.88							
Total.....	586,214.08							
Miscellaneous adjustments.....	198,660.88							
Unexpended balance.....	387,553.20							
Total.....	586,214.08							

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
716L. Pay, miscellaneous, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on Involes.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$915,000.00							
Miscellaneous receipts.....	344,940.87							
1,259,940.87								
Expenditures by titles:								
C.....	27,997.81				\$27,993.18	\$132.23		\$2.40
D.....	1,400.00				1,400.00			
F.....	7.50				7.50			
P.....	578.19	\$13.44	\$2.42	\$20.55	541.36	.43		
E.....	900.00			186.00	774.00			
R.....	208,335.80	131,266.24		41,527.04	35,362.71	178.08	\$1.73	
G.....	53,029.92	63,009.47	1.06	9,215.85	20,010.31	793.23		
S.....	945,599.30	6,298.07	380.24	7,706.78	906,458.93	4,209.90	19,442.88	1,094.50
V.....	75.60					16.60		
X.....	853.73		353.73					
Indirect expense deducted.....	22,612.40							
Miscellaneous adjustments.....								
Total expenditures.....	1,800,111.00	200,535.22		85,653.22	992,417.98	5,298.27	19,444.61	1,093.90
Unexpended balance.....	40,779.73							
1,259,940.87								

716C. Contingent, Navy, 1917.

Amount appropriated.....	\$46,000.00							
Expenditures by titles:								
C.....	847.22				\$781.32	\$80.35	\$15.55	
G.....	1,943.94	\$730.42		\$445.08	768.44			
B.....	3,053.11	814.75		2,268.36				
V.....	29,496.17	2,776.86	\$735.88	5,990.47	15,191.74	520.49	4,314.75	\$87.00
X.....	600.00					600.00		
700.45		700.45						
Indirect expense deducted.....			35.40					

Indirect expense divided.....									
Miscellaneous adjustments.....	3,942.61	28.32				7.08			
Total expenditures.....	38,112.57	4,350.35				8,589.99	10,741.50	70.84	4,330.28
Unexpended balance.....	7,887.43								
	46,000.00								

7104. Care of lepers, etc., Island of Guam, 1917.

Amount appropriated.....	\$14,000.00								
Expenditures by titles:									
b.....	7,392.31								
v.....	948.76								
Miscellaneous adjustments.....	3,821.57	\$8,571.90				\$8,230.82	\$699.59	948.76	
Total expenditures.....	12,162.64	3,571.90				3,220.82	1,548.35		
Unexpended balance.....	1,837.36								
	14,000.00								

7106. Aviation, Navy, 1917.

Amount appropriated.....	\$3,500,000.00								
Miscellaneous adjustments.....	2,102,826.66								
Unexpended balance.....	1,397,673.34								
	3,500,000.00								

7107. Advisory Committee for Aeronautics, 1917.

Amount appropriated.....	\$87,515.70								
Expenditures by titles:									
v.....	4,510.72								
Miscellaneous adjustments.....	83,004.98						\$4,300.56	\$10.86	\$199.30
Total expenditures.....	87,515.70						4,300.56	10.86	199.30

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued

8604. Machinery plants at navy yards, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$190,000.00							
Expenditures by titles:								
F.....	798.56				798.56			
G.....	429.89	\$198.16		\$231.73				
Total expenditures.....	1,228.45	198.16		231.73	798.56			
Unexpended balance.....	188,771.55							
Unexpended balance.....	190,000.00							

8605. Aviation, Navy, 1917-18 (Steam Engineering).

Expenditures by titles:								
B.....	\$907.32					\$907.32		
G.....	275.42			\$275.42				
V.....	8,782.98				\$520.00	8,262.98		
Total expenditures.....	9,965.72			275.42	520.00	9,170.30		
Unexpended balance.....	9,065.72							

8701. Pay of the Navy, 1917-18.

Amount appropriated.....	\$127,379,338.57							
Expenditures by titles:								
G.....	262.02							\$262.02
S.....	169.72							169.72
Total expenditures.....	431.74							431.74
Unexpended balance.....	127,378,926.83							
Unexpended balance.....	127,379,338.57							

8702. Provisions, Navy, 1917-1919.

Amount appropriated.....	\$10,144,943.40						
Expenditures by titles:							
C.....	12,928.90					\$12,928.90	
S.....	466.25					466.25	
V.....	2,083.92					2,083.92	
X.....	552,429.77					552,429.75	\$169.53
Total expenditures.....	567,868.84					567,869.33	169.53
Unexpended balance.....	9,577,074.56						
	10,144,943.40						

8704. Maintenance, Supplies and Accounts, 1917-18.

Amount appropriated.....	\$6,250,000.00						
Miscellaneous receipts.....	280.71						
	6,250,280.71						
Expenditures by titles:							
B.....	18,498.97					\$1,012.00	\$17,486.97
C.....	4,284.53					428.58	3,855.95
P.....	484.13					5.00	
E.....	2,563.63	\$32.92		\$107.28		786.50	
G.....	119,081.30	3.19		1,761.78		280.20	
V.....	1,936.55	111,098.28		7,882.82		743.90	
X.....	2.00	767.87		1.06			201.91
Indirect expense deducted.....	76.80			76.80			2.00
Indirect expense divided.....				10.97			
Miscellaneous adjustments.....	122,662.15	7.85		3.12			
Total expenditures.....	269,413.06	112,174.61		9,777.26		3,256.48	21,542.53
Unexpended balance.....	5,980,867.65						
	6,250,280.71						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
 8708. Freight, Supplies and Accounts, 1917-18.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$2,600,000.00							
Expenditures by titles:								
G.....	1,213.96	\$1,193.96		\$15.00	\$3.58			
V.....	3.53							
Miscellaneous adjustments.....	172,503.42							
Total expenditures.....	173,720.93	1,193.96		15.00	3.58			
Unexpended balance.....	2,426,279.07							
	2,600,000.00							

8708. Fuel and transportation, 1917-18.

Amount appropriated.....	\$25,862,420.00							
Miscellaneous receipts.....	1,077.11							
	26,939,497.11							
Expenditures by titles:								
B.....	8.00							
C.....	70,672.44							
G.....	6,904.97	\$4,960.19		\$2,244.78	\$923.58	\$3.00		
S.....	224.45	103.00			116.45	69,746.86		
V.....	1,215.48	8.40		5.40	1,200.00			
Indirect expense deducted.....	7.68		\$1.68					
Miscellaneous adjustments.....	1,066,133.48		7.68					
Total expenditures.....	1,137,157.14	4,776.59		2,250.18	2,240.03	69,756.86		
Unexpended balance.....	24,792,339.97							
	26,939,497.11							

8715. Aviation, Navy, 1917-18 (Supplies and Accounts).

Expenditures by titles:									
V.....	\$62.00								\$62.00
Unexpended balance.....	68.00								
Amount appropriated.....	\$4,121,740.00								
Expenditures by titles:									
C.....	272.83					\$283.12			
G.....	231.84	\$231.84						\$19.71	
S.....	6,834.88	816.00	\$3,240.00			670.68			\$2,108.30
V.....	253.23					253.23			
X.....	1,802.73					1,802.73			
Miscellaneous adjustments.....	616.76								
Total expenditures.....	10,011.27	1,047.84	3,240.00			2,979.66		19.71	2,108.30
Unexpended balance.....	4,111,728.73								
Amount appropriated.....	4,121,740.00								

8801. Medical Department, 1917-18.

8802. Contingent, Medicine and Surgery, 1917-18.

Amount appropriated.....	\$1,291,080.00								
Expenditures by titles:									
C.....	354.33					\$381.70			
E.....	62.00							\$2.08	
R.....	1,363.50					1,024.00			
G.....	396.70	\$150.38				7.63		62.00	
S.....	3,525.71					217.76			
V.....	489.13					3,307.95			
X.....	120.00	7.82				881.30			\$97.20
Miscellaneous adjustments.....	46.20					120.00			
Total expenditures.....	6,390.57	186.20				5,222.67		64.08	97.20
Unexpended balance.....	1,284,689.43								
Amount appropriated.....	1,291,080.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

8903. Bringing home remains of officers, etc., Navy Department, 1917-1918.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$32,658.00							
Expenditures by titles:								
V.....	33.50				\$33.50			
Miscellaneous adjustments.....	7,711.08							
Total expenditures.....	7,744.58				33.50			
Unexpended balance.....	\$24,913.47							
	\$32,658.00							

8904. Care of hospital patients, 1917-18.

Amount appropriated.....	\$3,000,000.00							
Expenditures by titles:								
S.....	4,153.12				\$4,153.12			
V.....	47.65				47.65			
Total expenditures.....	4,200.77				4,200.77			
Unexpended balance.....	2,995,799.23							
	\$3,000,000.00							

8901. Pay, Marine Corps, 1917-18.

Amount appropriated.....	\$13,531,602.78							
Miscellaneous adjustments.....	9,957.87							
Unexpended balance.....	13,521,634.91							
	\$13,531,602.78							

8902. Maintenance, Quartermaster's Department, Marine Corps, 1917-18.

Amount appropriated.....	\$26,005,545.00						
Expenditures by titles:							
Marine Corps.....	2,800,360.05	\$10,134.33	\$1,669.90	\$9,525.79	\$2,773,205.54	\$2,126.22	\$4,703.13
Indirect expense divided.....		1,169.16	1,669.90	500.83			
Miscellaneous adjustments.....	53,341.16						
Total expenditures.....	2,853,710.21	11,303.49		10,026.63	2,773,205.54	2,196.23	4,703.13
Unexpended balance.....	26,005,545.00						

8903. Expenses of Marine Corps Reserve, 1917-18.

Amount appropriated.....	\$25,000.00						
Unexpended balance.....	25,000.00						

Pay of the Navy, deposit fund.

Balance July 1, 1916.....	\$376,059.83						
Miscellaneous receipts.....	268,230.00						
	629,289.83						
Miscellaneous adjustments.....	365,499.36						
Unexpended balance.....	273,790.47						
	629,289.83						

Pay of the Marine Corps, deposit fund.

Balance July 1, 1916.....	\$212,913.20						
Miscellaneous receipts.....	273,300.88						
	586,214.08						
Miscellaneous adjustments.....	198,650.88						
Unexpended balance.....	387,653.20						
	586,214.08						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

716L. Pay, miscellaneous, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$915,000.00							
Miscellaneous receipts.....	844,940.87							
1,259,940.87								
Expenditures by titles:								
C.....	27,997.81				\$27,893.18	\$132.23		\$2.40
D.....	1,400.00				1,400.00			
E.....	575.50		\$2.42	520.55	7.53	.43		
F.....	645.00	\$13.44		180.00	541.80			
G.....	208,324.80	181,266.24		41,527.84	35,362.71	178.08	\$1.73	
H.....	42,020.92	63,000.47	1.08	9,313.56	26,010.31	703.23		
I.....	946,589.30	6,298.07	380.24	7,706.78	906,488.93	4,299.60	19,442.88	1,094.50
J.....	55.60					15.60		
K.....	553.74		568.77					
L.....	22,612.40							
M.....	1,300,111.60	200,585.22		58,656.22	992,417.98	5,288.27	19,444.61	1,096.90
N.....	40,170.73							
1,259,940.87								
Unexpended balance.....								

710E. Contingent, Navy, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$46,000.00							
Expenditures by titles:								
C.....	847.22				\$781.32	\$60.35	\$15.55	
D.....	1,943.04	\$730.42		\$445.08	708.44			
E.....	3,083.17	814.73		2,268.38				
F.....	26,498.17	2,776.86	\$736.88	5,808.47	15,191.74	520.49	4,314.76	857.00
G.....	600.00					600.00		
H.....	700.48		700.48					
I.....	85.40							
J.....								
K.....								
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Indirect expense deducted.....								

Indirect expense divided.....	28.32	7.08			
Miscellaneous adjustments.....					
Total expenditures.....	3,942.61	4,350.35	16,741.50	70.84	4,330.28
Unexpended balance.....	38,112.57	7,887.43			
	46,000.00				

7104. Care of lepers, etc., Island of Guam, 1917.

Amount appropriated.....	\$14,000.00				
Expenditures by titles:					
A.....	7,392.31	\$8,571.90	\$8,220.82	\$690.59	
B.....	948.70			948.70	
Miscellaneous adjustments.....	3,821.57				
Total expenditures.....	12,162.64	3,571.90	3,220.82	1,548.35	
Unexpended balance.....	1,837.36				
	14,000.00				

7106. Aviation, Navy, 1917.

Amount appropriated.....	\$8,500,000.00				
Miscellaneous adjustments.....	2,102,328.66				
Unexpended balance.....	1,397,673.34				
	3,500,000.00				

7107. Advisory Committee for Aeronautics, 1917.

Amount appropriated.....	\$87,515.70				
Expenditures by titles:					
A.....	4,510.72		\$10.86	\$199.30	
Miscellaneous adjustments.....	83,004.98				
Total expenditures.....	87,515.70		10.86	199.30	

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7108. Arming and equipping Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$1,270,737.73							
Miscellaneous receipts.....	3,770.60							
1,274,508.33								
Expenditures by titles:								
B.....	2,594.68				\$908.67	\$2,594.68		
C.....	1,515.29					1,116.62		
D.....	3,317.32	\$3,317.32						
R.....	7.20	4.72		\$2.48				
G.....	662.96	662.96						
S.....	327,973.45	7.52	\$1.88	32.67	192,229.06	13,960.43	\$27,208.16	\$94,513.78
V.....	1.88					.96		
X.....	1.88							
Indirect expense deducted.....			1.88					
Miscellaneous adjustments.....	287,216.28							
Total expenditures.....	573,213.94	3,982.52		35.15	192,627.73	17,681.37	27,208.16	94,513.78
Unexpended balance.....	1,274,508.33							

7109. Arms, uniforms, equipment, etc., Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$290,000.00							
Miscellaneous receipts.....	12,842.15							
212,842.15								
Expenditures by titles:								
B.....	2,871.67				\$2,868.25	\$2,871.67		
C.....	10,205.90					7,867.66		
G.....	64,331.87	\$134.35		\$24.67				
V.....	41,497.31	221.14	\$71.06	269.50	40,725.05	47,239.90	\$5,815.11	
X.....	55,163.43				42,499.40	1,008.19		
Indirect expense deducted.....			71.06					
Miscellaneous adjustments.....	174,157.44	355.49		283.67	85,532.71	27,007.03	5,815.11	
Total expenditures.....	212,842.15	355.49		283.67	85,532.71	27,007.03	5,815.11	
Unexpended balance.....	212,842.15							

7113. Increase of the Navy, construction and machinery.

Balance, July 1, 1916.....	\$15,814,495.70							
Amount appropriated.....	152,125,024.80							
Miscellaneous receipts.....	576,982.30							
168,313,671.99								
Expenditures by titles:								
A.....	19,985,714.13	\$4,110,622.77	\$1,141,699.31	\$3,930,563.13	\$10,704,918.28	\$9,010.64		
B.....	1,011,880.81				48,733.67	982,447.14		
C.....	18,451.54				285.97	18,165.57		
D.....	6,173.65	149.65	37.39	1,197.30	4,794.31			
E.....	47.78				47.78			
F.....	143,857.75	41,224.88	7,652.80	31,783.54	63,216.46			
G.....	2,880,334.02	1,862,699.43	2,730.28	513,950.11	3,684.48			
H.....	93,571.16	5,231.69		13,982.38	37,883.11			
I.....	5,901.21				7,298.77			
J.....								
K.....								
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Indirect expense deducted.....	1,160,807.18		1,502.69			4,701.99	\$29,101.71	
Indirect expense divided.....		1,111.56				1,535.69		
Miscellaneous adjustments.....	4,365.60							
Total expenditures.....	22,600,155.47	6,021,039.96		4,491,847.69	10,960,810.83	992,989.78	29,101.71	
Unexpended balance.....	145,813,516.52							
168,313,671.99								

7115. Increase of the Navy, torpedo boats.

Balance July 1, 1916.....	\$6,975,257.25							
Amount appropriated.....	64,680,873.00							
Miscellaneous receipts.....	98,989.62							
61,754,819.87								
Expenditures by titles:								
A.....	9,907,070.91	\$259,962.12	\$77,045.17	\$357,961.22	\$9,205,685.19	\$7,417.21		
B.....	51,392.02				764.50	50,627.52		
C.....	186,926.36	136,403.97		50,098.34	424.05			
D.....	12.40				28.10			
E.....	6,615.93	281.68	.40	23.00	2,928.16	119.70	\$3,262.50	
F.....								
G.....								
H.....								
I.....								
J.....								
K.....								
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Indirect expense deducted.....	77,045.67		77,045.67					
Total expenditures.....	10,074,941.00	395,647.77		408,082.50	9,209,821.09	58,147.08	3,262.50	
Unexpended balance.....	51,679,858.87							
61,754,819.87								

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
7117. Navy fines and forfeitures (special fund).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$686,876.89							
Miscellaneous receipts.....	694,449.60							
	1,381,326.49							
Expenditures by titles:								
v.....	222,280.48				\$3,334.84		\$11,172.34	\$207,778.30
Miscellaneous adjustments.....	500,009.04							
Total expenditures.....	722,289.52				3,334.84		11,172.34	207,778.30
Unexpended balance.....	659,036.97							
	1,381,326.49							

7121. Purchase of land, Penobscot Bay, Me.

Balance July 1, 1916.....	\$693.34							
Unexpended balance.....	693.34							

7122. Naval Observatory, purchase of land.

Balance July 1, 1916.....	\$0.30							
Unexpended balance.....	.30							

7194. Improving and equipping navy yards for construction of ships.

Amount appropriated.....	\$18,000,000.00							
Expenditures by titles:								
E.....	652,372.57	\$59,926.11	\$8,850.84	\$85,944.99	\$497,650.03			
G.....	19,278.23	10,263.02	70.42	9,671.10	2,864.11			
V.....	6,833.98	4,796.21	1,064.66	1,267.42				
Indirect expense deducted.....	1,634.66							
Indirect expense divided.....		6,678.22	8,586.61	1,908.39				
Total expenditures.....	677,452.20	81,645.56		95,791.90	500,014.74			
Unexpended balance.....	17,322,547.80							
	18,000,000.00							

7140. Expenses Civilian Naval Consulting Board, 1917.

Amount appropriated.....	\$25,000.00							
Expenditures by titles:								
V.....	11,660.83				\$11,155.18			\$505.65
Unexpended balance.....	13,339.17							
	25,000.00							

7141. Investigation of fuel oil, etc., Navy, 1917.

Amount appropriated.....	\$60,000.00							
Expenditures by titles:								
G.....	1,209.16	\$784.59	\$395.08	\$524.57	\$1,118.92			
V.....	6,282.88	3,016.95	586.08	1,751.83				
Indirect expense deducted.....	656.50							
Miscellaneous adjustments.....								
Total expenditures.....	7,863.46	3,801.54		2,276.50	1,118.92			
Unexpended balance.....	52,136.54							
	60,000.00							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7142. Ships, Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$200,000.00							
Expenditures by titles:								
B.....	11,060.12	\$6,973.85	\$1,700.30	\$2,385.97				
C.....	1,546.22	7,043.79	2,227.06	2,278.40				
G.....	4,868.75	4,169.84		3,679.11	\$117.80			
Indirect expense deducted.....	3,297.39		3,297.39					
Total expenditures.....	24,512.28	18,187.48	8,240.48	8,240.48	117.80			
Unexpended balance.....	263,454.24							
Total.....	290,000.00							

7143. State marine schools, act Mar. 4, 1911.

Amount appropriated.....	\$300,000.00							
Expenditures by titles:								
V.....	250,000.00				\$125,000.00		\$125,000.00	
Unexpended balance.....	50,000.00							
Total.....	\$300,000.00							

7144. Naval emergency fund.

Amount appropriated.....	\$115,000,000.00							
Miscellaneous adjustments.....	125,068,477.78							
Unexpended balance.....	10,068,477.78							
Total.....	115,000,000.00							

7146. National security and defense.

Amount appropriated.....	\$400,000.00						
Expenditures by titles:							
V.....	53,501.65					\$53,501.65	
Unexpended balance.....	346,498.35						
	400,000.00						

7147. Naval emergency fund (new construction).

Miscellaneous receipts.....	\$57,561,508.40						
Expenditures by titles:							
A.....	2,056,914.16	\$333,115.28	\$101,628.10	\$306,628.03	\$1,315,544.75		
D.....	147.66	95.77	38.04	13.85			
K.....	69,180.49	34,481.50	8,200.52	26,488.47			
R.....	2,238.27	1,677.24		561.03			
G.....	83,428.58	65,544.90		17,673.34	210.34		
X.....	1,012.69					\$1,012.69	
Indirect expense deducted.....	109,864.66		109,864.66				
Total expenditures.....	2,101,081.81	484,924.69		35,130.47	1,315,755.09	1,012.69	
Unexpended balance.....	55,460,476.59						
	57,561,508.40						

7148. Naval emergency fund (increased compensation).

Miscellaneous receipts.....	\$20,000,000.00						
Unexpended balance.....	20,000,000.00						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7161. Pay, miscellaneous, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$915,000.00							
Miscellaneous receipts.....	844,940.87							
1,259,940.87								
Expenditures by titles:								
C.....	27,997.61				\$27,993.18	\$132.23		\$2.40
D.....	1,400.00				1,400.00			
E.....	7.50				541.56	.43		
F.....	578.19	\$13.44	\$2.42	\$20.55	774.00			
G.....	940.00			186.00				
H.....	208,235.86	131,266.24		41,527.04	35,393.71	173.08	\$1.73	
I.....	63,029.92	63,009.47	1.05	9,215.85	20,016.31	703.23		
J.....	945,559.30	6,298.07	380.24	7,708.78	906,458.83	4,209.00	19,442.88	1,094.50
K.....	15.60					15.60		
L.....	833.74		363.73					
Miscellaneous adjustments.....	22,612.40							
Total expenditures.....	1,300,111.00	200,585.22		58,658.22	992,417.98	5,298.27	19,444.61	1,095.90
Unexpended balance.....	40,170.75							
1,259,940.87								

7102. Contingent, Navy, 1917.

Amount appropriated.....	\$46,000.00							
Expenditures by titles:								
C.....	847.22				\$781.22	\$50.36	\$15.55	
D.....	1,943.04			\$445.08	768.44			
E.....	3,083.11	\$730.42		2,268.39				
F.....	28,495.17	2,176.86	\$735.88	5,809.47	15,191.74	530.49	4,314.79	887.00
G.....	600.00		700.43			600.00		
H.....	700.43							
Indirect expense deducted.....			35.40					

Indirect expense divided.....	3,942.61	28.32	7.08		
Miscellaneous adjustments.....					
Total expenditures.....	38,112.57	4,350.35	8,689.99	16,741.80	70.84
Unexpended balance.....	7,887.43				4,350.28
Unexpended balance.....	46,000.00				

7104. Care of lepers, etc., Island of Guam, 1917.

Amount appropriated.....	\$14,000.00				
Expenditures by titles:					
B.....	7,392.31	\$3,571.90	\$3,220.83	\$599.59	
V.....	948.76			948.76	
Miscellaneous adjustments.....	3,821.57				
Total expenditures.....	12,162.64	3,571.90	3,220.83	1,548.35	
Unexpended balance.....	1,837.36				
Unexpended balance.....	14,000.00				

7106. Aviation, Navy, 1917.

Amount appropriated.....	\$3,500,000.00				
Miscellaneous adjustments.....	2,102,326.66				
Unexpended balance.....	1,387,673.34				
Unexpended balance.....	3,500,000.00				

7107. Advisory Committee for Aeronautics, 1917.

Amount appropriated.....	\$87,515.70				
Expenditures by titles:					
B.....	4,510.72			\$4,300.56	\$10.86
V.....	83,004.98				
Miscellaneous adjustments.....				4,300.56	10.86
Total expenditures.....	87,515.70			4,300.56	199.30
Unexpended balance.....					

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
7108. Arming and equipping Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$1,270,737.73							
Miscellaneous receipts.....	3,770.60							
1,274,508.33								
Expenditures by titles:								
B.....	2,534.68				\$388.67	\$2,534.68		
C.....	1,515.29					1,116.02		
D.....	3,317.32	\$3,317.32						
E.....	7.29			\$2.48				
F.....	652.04	652.04						
G.....	7.52	7.52		32.67	192,229.00	13,980.43	\$27,208.16	\$94,513.78
H.....	1.83		1.83			.89		
I.....								
J.....								
K.....								
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Indirect expense deducted.....	1.83		1.83					
Miscellaneous adjustments.....								
Total expenditures.....	237,215.23							
Total expenditures.....	573,213.94	3,982.52		35.15	192,627.73	17,681.37	27,208.16	94,513.78
Unexpended balance.....	701,294.39							
1,274,508.33								

7109. Arms, uniforms, equipment, etc., Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$200,000.00							
Miscellaneous receipts.....	12,842.15							
212,842.15								
Expenditures by titles:								
B.....	2,871.67				\$2,308.25	\$2,871.67		
C.....	10,205.90					7,867.65		
D.....	158.42	\$134.35		\$24.07				
E.....	64,331.87	221.14		259.60	40,725.05	27,239.90	\$5,815.11	
F.....	41,497.21		\$71.06		43,499.40	1,008.19		
G.....								
H.....								
I.....								
J.....								
K.....								
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Indirect expense deducted.....	71.06		71.06					
Miscellaneous adjustments.....								
Total expenditures.....	56,163.43							
Total expenditures.....	174,157.44	355.49		283.67	85,532.71	27,007.08	5,815.11	
Unexpended balance.....	286,684.71							
212,842.15								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
7108. Arming and equipping Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$1,270,757.73							
Miscellaneous receipts.....	3,770.50							
1,274,528.23								
Expenditures by titles:								
B.....	2,534.68				\$368.67	\$2,134.68		
C.....	7,515.29					1,116.62		
D.....	3,317.32	\$3,317.32						
E.....	4.72			\$2.48				
G.....	7.20							
H.....	682.06	682.06						
I.....	327,973.45	7.52	\$1.88	32.67	192,229.06	13,680.43	\$27,208.10	\$94,513.73
J.....	1.89							
K.....	1.89		1.88					
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Total expenditures.....	573,213.94	3,982.52		35.15	192,627.73	17,681.87	27,208.16	94,513.73
Unexpended balance.....	701,294.39							
1,274,528.33								

7109. Arms, uniforms, equipment, etc., Naval Militia, 1917.

Amount appropriated.....	\$200,000.00							
Miscellaneous receipts.....	12,842.15							
212,842.15								
Expenditures by titles:								
B.....	2,871.67				\$2,308.26	\$2,871.67		
C.....	10,206.90					7,667.66		
D.....	158.42	\$134.35		\$24.07				
E.....	64,331.87	221.14	\$71.06	269.50	40,725.06	27,239.90	\$6,815.11	
F.....	41,497.21				42,499.40	1,099.19		
G.....	71.09		71.08					
H.....	56,163.43							
I.....								
J.....								
K.....								
L.....								
M.....								
N.....								
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Total expenditures.....	174,157.44	365.49		283.67	86,632.71	27,007.08	6,815.11	
Unexpended balance.....	36,684.71							
212,842.15								

7113. Increase of the Navy, construction and machinery.

Balance, July 1, 1916.....	\$15,814,495.79								
Amount appropriated.....	152,123,194.00								
Miscellaneous receipts.....	575,982.20								
168,313,671.99									
Expenditures by titles:									
A.....	19,986,714.13	\$4,110,622.77	\$1,141,609.31	\$3,930,563.13	\$10,794,918.28		\$9,010.64		
B.....	1,011,180.81				49,733.67		962,447.14		
C.....	18,451.54				285.97		18,165.57		
D.....	6,178.65	149.65	37.39	1,197.30	4,794.31				
E.....	47.78				47.78				
F.....	143,857.75	41,224.83	7,652.86	31,783.54	63,216.46				
G.....	2,330,324.02	1,862,699.43		513,950.11	3,664.43				
H.....	93,671.16	5,231.69	2,720.28	13,982.38	37,853.11		4,701.99		
I.....	5,901.21				7,296.77		7,535.69		
X.....	4,160,607.18		1,150,607.18						
Indirect expense deducted.....			1,502.69						
Indirect expense divided.....		1,111.56			391.13				
Miscellaneous adjustments.....	4,365.60								
Total expenditures.....	22,600,155.47	6,021,039.96		4,491,847.59	10,960,810.83		992,968.78		29,101.71
Unexpended balance.....	145,813,516.52								
168,313,671.99									

7115. Increase of the Navy, torpedo boats.

Balance July 1, 1916.....	\$6,975,257.25								
Amount appropriated.....	54,680,873.00								
Miscellaneous receipts.....	98,689.62								
61,754,819.87									
Expenditures by titles:									
A.....	9,907,070.91	\$258,962.12	\$77,045.17	\$357,961.22	\$9,205,685.19		\$7,417.21		
B.....	51,362.02				764.50		50,627.52		
C.....	196,926.36	136,403.97		50,098.34	424.05				
D.....	12.40				12.40				
E.....	6,616.82	281.68	.40	23.00	2,923.15		119.79		\$3,262.50
F.....	77,042.64				6.50		77.44		
X.....			77,045.87						
Indirect expense deducted.....									
Total expenditures.....	10,074,941.00	395,647.77		408,082.56	9,209,821.09		58,147.08		3,262.50
Unexpended balance.....	51,679,868.87								
61,754,819.87									

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7117. Navy fines and forfeitures (special fund).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$686,876.89							
Miscellaneous receipts.....	694,449.60							
	1,381,326.49							
Expenditures by titles:								
V.....	222,280.49				\$3,334.84		\$11,172.84	\$207,778.30
Miscellaneous adjustments.....	500,009.04							
Total expenditures.....	722,289.53				3,334.84		11,172.84	207,778.30
Unexpended balance.....	659,036.97							
	1,381,326.49							

7121. Purchase of land, Penobscot Bay, Me.

Balance July 1, 1916.....	\$693.34							
Unexpended balance.....	693.34							

7122. Naval Observatory, purchase of land.

Balance July 1, 1916.....	\$0.30							
Unexpended balance.....	.30							

7194. Improving and equipping navy yards for construction of ships.

Amount appropriated.....	\$18,000,000.00						
Expenditures by titles:							
E.....	652,372.57	\$59,926.11	\$85,850.84	\$85,944.90	\$497,650.03		
G.....	19,278.23	10,253.02		0,571.10	2,364.11		
V.....	6,836.06	4,795.21	770.42	1,267.52			
Indirect expense deducted.....	1,654.66		1,654.66				
Indirect expense divided.....		6,678.22	8,586.61	1,008.39			
Total expenditures.....	677,452.20	81,645.56		95,791.90	500,014.74		
Unexpended balance.....	17,322,547.80						
	18,000,000.00						

7140. Expenses Civilian Naval Consulting Board, 1917.

Amount appropriated.....	\$25,000.00						
Expenditures by titles:							
V.....	11,660.83				\$11,156.18		\$505.65
Unexpended balance.....	13,339.17						
	25,000.00						

7141. Investigation of fuel oil, etc., Navy, 1917.

Amount appropriated.....	\$60,000.00						
Expenditures by titles:							
G.....	1,209.16	\$784.59	\$395.08	\$524.57			
V.....	6,282.88	3,016.95	\$395.08	1,751.93	\$1,116.92		
Indirect expense deducted.....	6,595.08		\$395.08				
Miscellaneous adjustments.....	666.50						
Total expenditures.....	7,863.46	3,801.54		2,276.50	1,118.92		
Unexpended balance.....	52,136.54						
	60,000.00						

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7143. Ships, Naval Militia, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$200,000.00							
Expenditures by titles:								
D.....	11,060.12	\$6,973.85	\$1,700.30	\$2,285.97				
K.....	11,546.28	7,043.79	2,227.09	2,275.40				
G.....	7,866.75	4,169.84		3,578.11	\$117.80			
Indirect expense deducted.....	3,987.59		3,987.59					
Total expenditures.....	26,546.76	18,187.48		8,240.48	117.80			
Unexpended balance.....	263,454.24							
	260,000.00							

7143. State marine schools, act Mar. 4, 1911.

Amount appropriated.....	\$300,000.00							
Expenditures by titles:								
V.....	260,000.00				\$125,000.00		\$125,000.00	
Unexpended balance.....	60,000.00							
	300,000.00							

7144. Naval emergency fund.

Amount appropriated.....	\$115,000,000.00							
Miscellaneous adjustments.....	125,000,427.78							
Unexpended balance.....	10,000,427.78							
	115,000,000.00							

7144. National security and defense.

Amount appropriated.....	\$400,000.00						
Expenditures by titles:							
V.....	53,501.65					\$53,501.65	
Unexpended balance.....	346,498.35						
	400,000.00						

7147. Naval emergency fund (new construction).

Miscellaneous receipts.....	\$57,561,508.40						
Expenditures by titles:							
A.....	2,056,914.16	\$333,115.28	\$101,628.10	\$306,628.03	\$1,315,544.75		
D.....	69,147.66	96.77	35.04	13.85			
K.....	69,180.49	34,491.50	8,200.52	26,488.47			
R.....	2,238.27	1,677.24		561.03			
G.....	83,428.58	65,544.90		17,673.34	210.34		
X.....	1,012.69					\$1,012.69	
Indirect expense deducted.....	109,864.69		109,864.69				
Total expenditures.....	2,101,081.81	484,924.69		35,136.47	1,315,755.09	1,012.69	
Unexpended balance.....	56,460,476.59						
	57,561,508.40						

7148. Naval emergency fund (increased compensation).

Miscellaneous receipts.....	\$20,000,000.00						
Unexpended balance.....	20,000,000.00						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7149. Naval emergency fund (vessels purchased).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Miscellaneous receipts.....	\$7,056,629.00							
Expenditures by titles:								
A.....	3,756,292.87				\$3,756,292.87			
B.....	553.40				203.75	\$355.65		
C.....	187,556.61	\$196.78	\$54.56	\$300.09	186,904.00	102.08		
D.....	6,845.47	4,459.13	1,347.44	1,038.90				
K.....	135,697.26	74,006.90	21,116.46	35,624.91	4,949.99			
E.....	1,278.99	832.68	235.39	210.92				
G.....	140,613.86	103,356.01		37,187.85				
S.....	55,144.65	4,213.35		50,931.30				
V.....	80,106.24	21,967.53	6,893.15	42,118.89	9,126.67			
X.....	700.00					100.00		
Indirect expense deducted.....	\$9,417.61		\$9,417.61					
Indirect expense divided.....		176.56	235.39	58.84				
Total expenditures.....	4,324,452.64	309,206.93		167,441.70	3,967,476.28	357.73		
Unexpended balance.....	2,732,146.36							

7150. Naval emergency fund (contingent).

Miscellaneous receipts.....	\$25,000.00							
Unexpended balance.....	25,000.00							

7201. Maintenance, Yards and Docks, 1917.

Amount appropriated.....	\$2,206,000.00								
Miscellaneous receipts.....	52,918.94								
	2,258,918.94								
Expenditures by titles:									
H.....	1,828.73								
C.....	677.33								
E.....	167,736.46	\$11,368.01	\$1,686.71	\$24,079.24	\$190.66	\$1,638.07		\$36.00	
R.....	74,476.00	3,510.99		18,828.51	120,703.50				
G.....	1,242,711.79	880,703.41		270,315.94	52,136.50				
V.....	363,284.29	239,641.69	11.75	115,350.57	41,648.24		\$44.20		
X.....	199,150.92	149,270.68	1,172.39	14,838.94	28,066.23		214.15		
Indirect expense deducted.....	4,307.18				19,306.13		12,892.07		1.20
	4,339.37				152.69		2,569.87		
Indirect expense divided.....		330.67	439.98	109.31					
Miscellaneous adjustments.....									
Total expenditures.....	2,068,712.75	1,834,815.85		453,622.51	262,845.28		1,201.86		37.20
Unexpended balance.....	183,206.19								
	2,258,918.94								

7202. Repairs and preservation, 1917.

Amount appropriated.....	\$1,414,000.00								
Miscellaneous receipts.....	133.27								
	1,414,133.27								
Expenditures by titles:									
E.....	103,415.94	\$47,572.07	\$7,850.79	\$45,089.20	\$2,933.88				
R.....	18,097.59	6,004.47		3,574.77	8,513.35				
G.....	855,812.65	525,660.86		290,483.95	39,067.84				
S.....	303,372.75	147,187.63	26.93	90,921.76	65,236.43				
V.....	3,163.85	31.25	2.77	36.09	1,777.06		\$1,316.66		
X.....	216.45						218.45		
Indirect expense deducted.....	5,668.53								
Indirect expense divided.....		3,205.15	4,222.16	1,017.01					
Total expenditures.....	1,279,986.00	729,661.43		461,122.76	118,103.58		1,098.21		
Unexpended balance.....	134,207.27								
	1,414,133.27								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7149. Naval emergency fund (vessels purchased).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Miscellaneous receipts.....	\$7,056,629.00							
Expenditures by titles:								
A.....	3,756,292.87				\$3,756,292.87			
B.....	553.40				203.75	\$355.65		
C.....	187,556.51	\$186.78	\$54.56	\$300.09	186,904.00	102.08		
D.....	6,845.47	4,459.13	1,347.44	1,038.90				
E.....	135,697.26	74,006.90	21,116.46	35,624.91	4,948.99			
F.....	1,278.99	832.68	235.39	210.92				
G.....	140,613.96	103,356.01		37,157.85				
H.....	55,144.65	4,213.35		50,931.30				
I.....	80,105.24	21,967.53	6,883.15	42,118.89	9,125.67			
J.....	100.00					100.00		
X.....	\$9,411.61		\$9,411.61					
Indirect expense deducted.....			235.39					
Indirect expense divided.....		176.55		58.84				
Total expenditures.....	4,324,452.64	309,206.93		167,441.70	3,957,476.28	357.73		
Unexpended balance.....	2,732,146.36							
	7,056,629.00							

7150. Naval emergency fund (contingent).

Miscellaneous receipts.....	\$25,000.00							
Unexpended balance.....	25,000.00							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7903. Contingent, Yards and Docks, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$50,000.00							
Miscellaneous receipts.....	11,131.61							
	61,131.61							
Expenditures by titles:								
C.....	20.00							
E.....	21,965.21	88,563.66	31,374.26	\$12,027.10			\$20.00	
R.....	13,880.11	7,202.19		6,650.89	\$27.03			
G.....	7,339.00	2,766.07		3,518.57	1,054.36			
S.....	20,083.81	8,684.06		891.70	15,577.56			
V.....	3,237.42	53.81	15.91	1.17	1,707.15		1,459.38	
Indirect expense deducted.....	683.78		683.78					
Indirect expense divided.....		686.97	766.38	179.41				
Total expenditures.....	65,871.37	22,755.95		23,268.84	18,366.10		1,479.38	
Unexpended balance.....	4,759.66							
	61,131.61							

7904. Commission on Additional Navy Yards and Stations, 1917.

Amount appropriated.....	\$10,000.00							
Expenditures by titles:								
V.....	4,776.55			\$5.88	\$4,651.74		\$118.98	
Unexpended balance.....	5,223.45							
	10,000.00							

7905. Aviation, Navy, 1917 (Yards and Docks).

Miscellaneous receipts.....	\$480,000.00					
Expenditures by titles:						
E.....	139,005.36	\$4,844.04	\$984.91	\$7,345.73	\$125,960.03	
R.....	85,886.48	22,478.18		10,745.03	52,670.27	
G.....	1,106.43	40			1,106.03	
S.....	70,843.08	46,418.59		13,681.89	11,233.10	
V.....	25.90				2.28	
			864.91		828.62	
Indirect expense divided.....		651.72		183.19		
Total expenditures.....	296,377.25	74,422.66		30,968.39	190,962.31	28.62
Unexpended balance.....	184,262.75					
	480,000.00					

7909. Naval emergency fund (Yards and Docks).

Miscellaneous receipts.....	\$7,469,850.00					
Expenditures by titles:						
E.....	308,153.38	\$44,306.03	\$7,621.73	\$108,464.74	\$129,639.86	
R.....	33,201.40	10,681.76		20,108.51	70.00	
G.....	14,780.21	10,681.49		2,768.81	1,243.27	
S.....	4,180.27	1,757.76		2,018.83	2,627.87	
V.....	1,682.28	4,843.46		2,362.48	2,403.70	
	4,367.43			2,868.48		
Indirect expense deducted.....				7,621.73		
Total expenditures.....	374,324.56	5,844.49		1,777.24		
Unexpended balance.....	7,095,525.44	76,867.91		161,501.83	135,964.82	
	7,469,850.00					

7910. Four timber dry docks.

Balance, July 1, 1916.....	\$11,365.48					
Unexpended balance.....	11,365.48					

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7211. Consolidating power plants, navy yards and stations.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance, July 1, 1916.....	\$1,611.74							
Unexpended balance.....	1,611.74							

7212. Floating derrick.

Balance, July 1, 1916.....	\$8,464.56							
Expenditures by titles:								
E.....	4,971.93	\$443.32	\$151.53	\$4,376.59				
G.....	1.49	1.49						
Indirect expense divided.....		109.70	151.53	41.83				
Total expenditures.....	4,973.42	555.01		4,418.41				
Unexpended balance.....	3,491.14							
	8,464.56							

7213. Marine Corps rifle range, Winthrop, Md.

Balance July 1, 1916.....	\$2,056.32							
Amount appropriated.....	10,000.00							
	12,056.32							
Expenditures by titles:								
S.....	1,716.18				\$1,716.18			
Unexpended balance.....	10,343.14							
	12,056.32							

7114. Rifle range, naval station, Bremerton, Wash.

Balance July 1, 1916.....	\$7,000.00								
Unexpended balance.....	7,000.00								
7115. Navy yard, Portsmouth, N. H.									
Balance July 1, 1916.....	\$2,983.72								
Amount appropriated.....	137,000.00								
	139,983.72								
Expenditures by titles:									
E.....	3,094.96	\$1,195.54	\$127.03	\$632.99	\$839.40				
G.....	10.24	10.24							
		101.62	127.03	25.41					
Indirect expense divided.....									
Total expenditures.....	3,105.20	1,307.40		958.40	839.40				
Unexpended balance.....	136,878.52								
	139,983.72								

7116. Navy yard, Boston, Mass.

Balance July 1, 1916.....	\$16,952.47								
Amount appropriated.....	321,000.00								
	337,952.47								
Expenditures by titles:									
E.....	50,066.05	\$16,207.07	\$3,887.30	\$9,773.06	\$20,769.22				
G.....	16,765.30	6,632.29		2,600.28	7,532.73				
X.....	5.00							\$5.00	
Indirect expense deducted.....	1,865.77		1,865.77						
			2,023.53	408.86					
Indirect expense divided.....		1,619.95							
Total expenditures.....	66,565.18	24,459.31		12,776.92	28,331.96			5.00	
Unexpended balance.....	272,387.29								
	337,952.47								

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7217. Naval station, Narragansett Bay, R. I.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$17.68							
Carried to surplus fund.....	17.68							
7218. Navy yard, New York, N. Y.								
Balance July 1, 1916.....	\$53,985.42							
Amount appropriated.....	1,327,900.00							
	1,384,895.42							
Expenditures by titles:								
F.....	55,104.39	86,015.46	\$1,005.93	\$20,295.88	\$27,789.14			
C.....	108,674.53	11,898.47	499.01	8,282.98	88,498.08			
Indirect expense deducted.....	469.01							
Indirect expense divided.....		380.27	505.92	126.65				
Total expenditures.....	163,279.91	18,292.20		28,705.49	116,282.22			
Unexpended balance.....	1,221,615.51							
	1,384,895.42							

7219. Navy yard, Philadelphia, Pa.

Balance July 1, 1916.....	\$73,222.86						
Amount appropriated.....	2,135,000.00						
	2,211,222.86						
Expenditures by titles:		\$580.30	\$5,445.45	\$10,167.60		\$1,287.96	
A.....	28,808.03						
B.....	46,610.80						
C.....	1,227.96						
D.....	544.40	349.40					
E.....							
F.....							
G.....							
H.....							
I.....							
J.....							
K.....							
L.....							
M.....							
N.....							
O.....							
P.....							
Q.....							
R.....							
S.....							
T.....							
U.....							
V.....							
W.....							
X.....							
Y.....							
Z.....							
Indirect expense deducted.....		349.40					
Indirect expense divided.....		190.33	47.60				
Total expenditures.....	78,452.33	5,193.71	10,546.23	59,424.43		1,287.96	
Unexpended balance.....	2,134,770.03						
	2,211,222.86						

7220. Navy yard, Washington, D. C.

Balance July 1, 1916.....	\$182,912.00						
Amount appropriated.....	2,344,000.00						
	2,526,912.00						
Expenditures by titles:		\$605.89	\$1,955.60	\$23,554.74			
A.....	530,004.26						
B.....	2,041.02						
C.....	79.06						
D.....							
E.....							
F.....							
G.....							
H.....							
I.....							
J.....							
K.....							
L.....							
M.....							
N.....							
O.....							
P.....							
Q.....							
R.....							
S.....							
T.....							
U.....							
V.....							
W.....							
X.....							
Y.....							
Z.....							
Indirect expense deducted.....		19.06					
Indirect expense divided.....		365.13	121.70				
Total expenditures.....	532,086.22	2,468.64	2,080.24	23,554.74			
Unexpended balance.....	1,994,825.78			527,529.34			
	2,526,912.00						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7221. Navy yard, Norfolk, Va.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$39,400.52							
Amount appropriated.....	3,642,000.00							
	3,731,400.52							
Expenditures by titles:								
E.....	955,421.75	\$57,927.94	\$11,794.93	\$52,081.73	\$333,617.15			
G.....	24,898.35	12,327.27		7,595.41	4,985.67			
V.....	1,025.89	396.05	81.71	546.13				
Indirect expense deducted.....	7,146.75		7,146.75					
Indirect expense divided.....		3,783.89	4,729.89	946.00				
Total expenditures.....	974,199.24	74,437.15		61,159.27	838,602.82			
Unexpended balance.....	2,757,201.28							
	3,731,400.52							

7222. Navy yard, Charleston, S. C.

Balance July 1, 1916.....	\$38,808.30							
Amount appropriated.....	452,000.00							
	540,808.30							
Expenditures by titles:								
E.....	172,431.73	\$17,644.50	\$3,066.61	\$32,624.95	\$119,085.67			
G.....	15,801.59	11,704.78		4,066.81				
Indirect expense deducted.....	186.16		186.16					
Indirect expense divided.....		2,141.67	2,878.45	736.78				
Total expenditures.....	188,046.16	31,490.95		37,468.54	119,085.67			
Unexpended balance.....	352,762.14							
	540,808.30							

722. Naval station, Key West, Fla.

Balance July 1, 1916.....	\$5,804.90					
Expenditures by titles:						
R.....	2,355.00			\$12.00		\$2,343.00
S.....	701.66	\$403.18		208.47		
Total expenditures.....	3,057.64	403.18		220.47		2,343.00
Unexpended balance.....	2,747.26					
	5,804.90					

724. Navy yard, Pensacola, Fla.

Balance July 1, 1916.....	\$24,313.39					
Miscellaneous receipts.....	87.88					
	24,401.27					
Expenditures by titles:						
R.....	4,093.85	\$583.60		\$482.62		\$3,027.63
S.....	28.66	20.40		5.25		
Total expenditures.....	4,119.50	604.00		487.87		3,027.63
Unexpended balance.....	20,281.77					
	24,401.27					

725. Naval station, New Orleans, La.

Balance July 1, 1916.....	\$108,307.33					
Amount appropriated.....	210,000.00					
	318,307.33					
Expenditures by titles:						
R.....	3,550.36	\$1,029.28		\$2,521.08		
S.....	83,096.02	40,478.39		31,647.63		\$10,970.00
V.....	211.64	174.82		36.82		
Miscellaneous adjustments.....	4.34					
Total expenditures.....	86,862.36	41,682.49		34,205.53		10,970.00
Unexpended balance.....	231,444.97					
	318,307.33					

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
7336. Navy yard, Mare Island, Cal.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$40,234.06							
Amount appropriated.....	989,000.00							
	1,049,234.06							
Expenditures by titles:								
E.....	21,224.13	\$5,347.26	\$908.44	\$932.37	\$14,136.06			
G.....	19,206.26	12,134.72	784.88	4,599.05	2,482.59			
Indirect expense deducted.....	784.88							
Indirect expense divided.....		16.49	23.56	7.07				
Total expenditures.....	39,645.61	17,498.47		5,528.49	16,618.65			
Unexpended balance.....	1,009,588.45							
	1,049,234.06							

7337. Navy yard, Puget Sound, Wash.

Balance July 1, 1916.....	\$42,089.10							
Amount appropriated.....	688,500.00							
Miscellaneous receipts.....	63.85							
	730,652.95							
Expenditures by titles:								
E.....	18,975.05	\$6,442.05	\$1,361.61	\$11,171.19				
G.....	1,262.61	962.90	486.61	309.51				
Indirect expense deducted.....	456.61							
Indirect expense divided.....		656.45	926.20	269.75				
Total expenditures.....	19,692.05	8,051.30		11,760.75				
Carried to surplus fund.....	28.00							
Unexpended balance.....	710,822.90							
	730,652.95							

7222. Naval station, Caribs, P. I.

Balance July 1, 1916.....	\$214.94						
Expenditures by titles:							
C.....	213.93	\$257.04			\$45.11		
Carried to surplus fund.....	1.02						
	214.94						

7223. Naval station, Isle of Guam.

Balance July 1, 1916.....	\$12,548.31						
Amount appropriated.....	61,000.00						
	73,548.31						
Expenditures by titles:							
R.....	4,288.97	\$340.48			\$3,948.49		
Unexpended balance.....	69,259.34						
	73,548.31						

7230. Naval station, Guantanamo, Cuba.

Balance July 1, 1916.....	\$12,381.48						
Amount appropriated.....	34,000.00						
	46,381.48						
Expenditures by titles:							
R.....	8,995.92	\$4,079.67			\$2,815.51		
S.....	1,807.52	1,285.32			72.60		
Total expenditures.....	10,803.44	5,364.99			2,888.11		
Unexpended balance.....	36,027.64						
	46,381.48						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7231. Naval station, Olongapo, P. I.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$2,103.44							
Expenditures by titles:								
E.....	498.38	\$259.66	\$91.90	\$144.82				
G.....	141.03	112.05		28.98				
Indirect expense deducted.....	91.90		91.90					
Total expenditures.....	545.51	371.71		173.80				
Unexpended balance.....	1,557.93							
	2,103.44							

7232. Naval station, Pearl Harbor, Hawaii.

Balance July 1, 1916.....	\$1,576,100.61							
Amount appropriated.....	1,736,500.00							
	3,312,600.61							
Expenditures by titles:								
R.....	961,929.14	\$54,856.40		\$43,718.45	\$863,354.29			
S.....	1,415.57				1,415.57	\$2.60	\$1,478.29	
V.....	1,480.89							
Total expenditures.....	964,825.60	54,856.40		43,718.45	864,769.86	2.60	1,478.29	
Unexpended balance.....	2,347,775.01							
	3,312,600.61							

7233. Naval training station, Rhode Island, buildings.

Balance July 1, 1916.....	\$497.57						
Amount appropriated.....	33,000.00						
	33,497.57						
Expenditures by titles:							
R.....	496.18						
Carried to surplus fund.....	11.39				\$206.18		\$280.00
Unexpended balance.....	33,000.00						
	33,497.57						

7234. Naval training station, California, buildings.

Balance July 1, 1916.....	\$4,937.15						
Amount appropriated.....	57,475.00						
	62,412.15						
Expenditures by titles:							
R.....	21,659.04				\$4,059.93		\$15,746.19
S.....	6,715.21				4,543.15		890.10
Miscellaneous adjustments.....	650.00						
Total expenditures.....	30,024.25				8,603.08		16,636.29
Unexpended balance.....	32,387.90						
	62,412.15						

7235. Naval magazines, New England coast.

Balance July 1, 1916.....	\$1,269.75						
Amount appropriated.....	111,301.00						
	112,569.78						
Expenditures by titles:							
R.....	893.66						\$932.66
S.....	665.00						606.00
Total expenditures.....	1,498.66						1,498.66
Unexpended balance.....	111,061.12						
	112,569.78						

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued

CURRENT APPROPRIATIONS—Continued.

7284. Naval magazine, New York Harbor.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$55,000.00							
Unexpended balance.....	56,000.00							

7285. Naval magazine, Dover, N. J.

Amount appropriated.....	\$110,000.00							
Unexpended balance.....	110,000.00							

7286. Naval magazine, Fort Mifflin, Pa.

Balance July 1, 1916.....	\$24,577.81							
Amount appropriated.....	147,700.00							
	172,277.81							
Expenditures by titles:								
R.....	29,531.38	\$90.96		\$8,494.46	\$14,945.94			
S.....	780.13				780.13			
Total expenditures.....	24,311.50	90.96		8,494.46	15,676.00			
Unexpended balance.....	148,016.31							
	172,277.81							

7940. Naval magazine, Norfolk, Va

Balance July 1, 1916.....	\$12,988.24						
Amount appropriated.....	146,000.00						
	207,988.24						
Expenditures by titles:							
R.....	20,549.20	\$1,256.80		\$9,692.30		\$9,692.10	
Unexpended balance.....	187,889.04						
	207,988.24						

7941. Naval magazine, Mare Island, Cal.

Amount appropriated.....	\$19,000.00						
Expenditures by titles:							
E.....	6,924.28	\$1,250.99	\$128.04	\$5,565.26			
		89.64	128.04	38.40			
Indirect expense divided.....							
Total expenditures.....	6,924.28	1,820.63		5,608.65			
Unexpended balance.....	12,075.72						
	19,000.00						

7942. Naval magazine, Puget Sound, Wash.

Balance July 1, 1916.....	\$24,324.49						
Amount appropriated.....	56,600.00						
	80,924.49						
Expenditures by titles:							
R.....	26,617.45	\$1,604.76		\$1,617.64	\$22,385.13		
X.....	2,635.02				2,635.02		
Total expenditures.....	29,252.47	1,604.76		1,617.64	25,080.15		
Unexpended balance.....	52,672.04						
	80,924.49						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7944. Naval magazine, Kuausua.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$34,446.20							
Amount appropriated.....	5,000.00							
Unexpended balance.....	39,446.20							
	39,446.20							

7945. Naval magazine, Olongapo, P. I.

Balance July 1, 1916.....	\$49.09							
Unexpended balance.....	49.09							

7946. Marine barracks, Norfolk, Va.

Balance July 1, 1916.....	\$139,102.69							
Amount appropriated.....	25,700.00							
	164,802.69							
Expenditures by titles:								
E.....	139,801.20	\$2,160.54	\$347.71	\$3,285.10	\$134,007.85			
G.....	254.89	119.57	103.89	30.78	104.54			
Indirect expense deducted.....	168.39		243.89	48.76				
Indirect expense divided.....		195.14						
Total expenditures.....	139,852.27	2,475.25		3,364.63	134,112.39			
Unexpended balance.....	24,950.42							
	164,852.69							

7247. Marine barracks, Philadelphia, Pa.

Balance July 1, 1916.....	\$508.10							
Amount appropriated.....	280,000.00							
	280,508.10							
Expenditures by titles:								
F.....	\$71.56	\$0.19	\$270.80					
G.....	753.99	45.20	508.04				\$120.75	
Indirect expense deducted.....	.12	.12						
Total expenditures.....	492.55	44.90	327.44				120.75	
Unexpended balance.....	280,015.55							
	280,508.10							

7249. Marine barracks, Pearl Harbor, Hawaii.

Balance July 1, 1916.....	\$45,051.99							
Unexpended balance.....	45,051.99							

7250. Marine barracks, Mare Island, Cal.

Balance July 1, 1916.....	\$128,753.51							
Amount appropriated.....	56,000.00							
	183,753.51							
Expenditures by titles:								
F.....	111,998.54	\$5,749.61	\$4,442.28				\$100,985.50	
G.....	7,899.26	3,228.32	927.56				3,731.97	
Indirect expense deducted.....	480.67	480.67						
Indirect expense divided.....		280.25	120.17					
Total expenditures.....	119,477.25	9,269.68	5,490.04				104,717.53	
Unexpended balance.....	64,276.26							
	183,753.51							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.
CURRENT APPROPRIATIONS—Continued.
751. Depots for coal.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$72,208.01							
Amount appropriated.....	3,000,000.00							
Miscellaneous receipts.....	794.20							
	3,873,002.21							
Expenditures by titles:								
E.....	9,303.67	\$154.86	\$66.47	\$923.60	\$6,188.74			
F.....	29,531.47	13,578.96		6,503.18	19,746.33			
G.....	3,482.01	7,684.62		345.44	2,451.95			
S.....	8,514.38	2,640.43		4,394.73	1,479.22			
V.....	5,039.31	1,800.00			3,239.31			
Indirect expense deducted.....	37.39		37.39					
Indirect expense divided.....		3.38	4.15	.82				
Miscellaneous adjustments.....	222.66							
Total expenditures.....	66,361.18	19,862.20		12,167.77	36,108.55			
Unexpended balance.....	3,806,641.03							
	3,873,002.21							

752. Naval coal depot, Melville station, R. I.

Balance July 1, 1916.....	\$4,408.43							
Amount appropriated.....	35,000.00							
	39,408.43							
Expenditures by titles:								
E.....	8,068.77	\$5,106.80		\$2,222.16	\$736.81			\$5.64
S.....	151.24				145.60			
Total expenditures.....	8,220.01	5,106.80		2,222.16	882.41			5.64
Unexpended balance.....	31,188.42							
	39,408.43							

7883. Building and grounds, Naval Academy.

Balance July 1, 1916.....	\$7,125.59						
Amount appropriated.....	1,685,000.00						
	1,692,125.59						
Expenditures by titles:							
R.....	4,640.10	\$24.86	\$58.08	\$4,547.16			
S.....	288.92	1.68	257.24				
V.....	190.00			190.00			
Total expenditures.....	5,099.02	36.54	315.32	4,737.16			
Unexpended balance.....	1,687,026.57						
	1,692,125.59						

7885. Naval disciplinary barracks.

Balance July 1, 1916.....	\$21,727.11						
Expenditures by titles:							
S.....	11,630.88		\$9,428.17	\$314.00	\$1,897.71		
Unexpended balance.....	10,096.23						
	21,727.11						

7884. Torpedo station, Newport, R. I., buildings.

Balance July 1, 1916.....	\$11,406.97						
Amount appropriated.....	188,000.00						
	199,406.97						
Expenditures by titles:							
R.....	30,128.32	\$1,020.64	\$846.35	\$28,261.33			
S.....	720.00			720.00			
Miscellaneous adjustments.....	41.84						
Total expenditures.....	30,890.16	1,020.64	846.35	28,981.33			
Unexpended balance.....	168,516.81						
	199,406.97						

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7257. Pacific coast torpedo station.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$31,514.18							
Expenditures by titles:								
R.....	100.00				\$100.00			
S.....	120.00				120.00			
Total expenditures.....	220.00				220.00			
Unexpended balance.....	31,294.18							
	31,514.18							

7258. Naval proving ground, Indianhead, Md.

Balance July 1, 1916.....	\$91,068.78							
Amount appropriated.....	256,000.00							
Miscellaneous receipts.....	5,777.85							
	352,846.63							
Expenditures by titles:								
R.....	135,330.61	\$13,506.57		\$19,699.21	\$102,232.63			
S.....	1,294.56				1,294.56			
X.....	6,608.46				3,956.54	\$9,566.00		
Z.....	9.00			9.00				
Total expenditures.....	131,025.71	13,506.57		19,699.21	107,483.93	9,566.00		
Unexpended balance.....	221,810.92							
	352,846.63							

7259. Naval hospital, New York, N. Y.

Balance July 1, 1916.....	\$66.40							
Amount appropriated.....	10,000.00							
Unexpended balance.....	10,066.40							
	10,066.40							

7860. Naval hospital, Chelsea, Mass.

Amount appropriated.....	\$14,700.00								
Expenditures by titles:									
R.....	8,402.84							\$8,402.84	
S.....	754.21			\$754.21					
Total expenditures.....	9,157.05			754.21				8,402.84	
Unexpended balance.....	5,542.95								
	14,700.00								

7861. Naval hospital, Newport, R. I.

Amount appropriated.....	\$18,000.00								
Expenditures by titles:									
R.....	8,359.56							\$8,359.56	
Unexpended balance.....	9,640.44								
	18,000.00								

7862. Naval hospital, Mare Island, Cal.

Amount appropriated.....	\$15,000.00								
Unexpended balance.....	15,000.00								

7863. Naval hospital, Canacao, P. I.

Amount appropriated.....	\$3,600.00								
Unexpended balance.....	3,600.00								

7864. Naval hospital, Portsmouth, N. H.

Amount appropriated.....	\$20,000.00								
Expenditures by titles:									
E.....	158.25		\$42.16					\$116.09	
Unexpended balance.....	19,841.75								
	20,000.00								

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7866. Naval hospital, Great Lakes.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$20,000.00							
Unexpended balance.....	20,000.00							

7870. Naval station, Tutuila, Samoa.

Amount appropriated.....	\$44,000.00							
Expenditures by titles:								
B.....	3,613.15	\$1,636.28		\$2,076.87				
Unexpended balance.....	40,386.85							
	44,000.00							

7871. Marine barracks, Island of Guam.

Amount appropriated.....	\$10,000.00							
Unexpended balance.....	10,000.00							

7872. Marine recruiting station, Port Royal, S. C.

Amount appropriated.....	\$64,500.00							
Expenditures by titles:								
B.....	10,759.05				\$10,759.05			
S.....	70.05				70.05			
Total expenditures.....	10,829.10				10,829.10			
Unexpended balance.....	53,670.90							
	64,500.00							

7773. Navy aeronautic station, Pensacola, Fla.

Amount appropriated.....	\$665,000.00						
Expenditures by titles:							
R.....	42,293.17	\$17,109.43		\$6,289.34		\$18,894.40	
S.....	35,773.34	24,766.96		5,884.35		5,072.04	
Miscellaneous adjustments.....	6,500.00						
Total expenditures.....	84,516.51	41,876.39		12,173.69		23,966.44	
Unexpended balance.....	680,483.49						
	665,000.00						

7775. Land for naval base, San Diego, Cal.

Amount appropriated.....	\$250,000.00						
Expenditures by titles:							
R.....	250,000.00					\$250,000.00	

7777. Torpedo station, Keyport, Wash.

Amount appropriated.....	\$27,000.00						
Expenditures by titles:							
R.....	\$43.28	\$4.07	\$1.53	\$37.63			
S.....	3,566.32	1,074.67		2,491.65			
Indirect expense divided.....		1.09	1.53	.44			
Total expenditures.....	3,612.55	1,079.83		2,532.72			
Unexpended balance.....	23,387.45						
	27,000.00						

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued
7290. Experimental and research laboratory.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$1,500,000.00							
Expenditures by titles:								
Y.....	18,089.20				\$18,089.20			
Unexpended balance.....	1,481,910.80							
	1,500,000.00							

7291. Guns and munition storage at navy yards and stations.

Amount appropriated.....	\$280,400.00							
Expenditures by titles:								
E.....	89,182.65	\$2,596.80			\$90,585.85			
Unexpended balance.....	187,217.35							
	280,400.00							

7292. Naval magazine, Charleston, S. C.

Amount appropriated.....	\$120,000.00							
Unexpended balance.....	120,000.00							

7293. Marine barracks, Peking, China.

Amount appropriated.....	\$62,000.00							
Unexpended balance.....	62,000.00							

7264. Marine barracks, San Diego, Cal.

Amount appropriated.....	\$600,000.00								
Unexpended balance.....	600,000.00								

7265. Reimbursement for property damaged, Indianhead, Md.

Amount appropriated.....	\$755.01								
Unexpended balance.....	755.01								

7266. Lighting facilities, navy yards and stations.

Amount appropriated.....	\$200,000.00								
Expenditures by titles:									
E.....	1,470.76	\$609.49	\$152.56	\$708.71					
G.....	16,247.56	7,696.61		11,647.95	\$3.00				
S.....	24.84	12.80		12.04					
			152.56						
Indirect expense divided.....		117.81		34.75					
Total expenditures.....	20,743.16	8,336.71		12,403.45	3.00				
Unexpended balance.....	179,256.84								
	200,000.00								

7267. Submarine base, New London, Conn.

Amount appropriated.....	\$1,250,000.00								
Unexpended balance.....	1,250,000.00								

7268. Quarters for marine guards at naval magazines.

Amount appropriated.....	\$100,000.00								
Unexpended balance.....	100,000.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7289. Submarine facilities, navy yards and stations.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$1,500,000.00							
Unexpended balance.....	1,500,000.00							

7290. Power plants and distributing systems, navy yards and stations.

Amount appropriated.....	\$750,000.00							
Expenditures by titles:								
E.....	112.97	\$98.37	\$14.60					
Indirect expense divided.....		11.67	14.60	\$2.93				
Total expenditures.....	112.97	110.04		2.93				
Unexpended balance.....	749,887.03							
	750,000.00							

7291. Ordnance storage.

Amount appropriated.....	\$3,000,000.00							
Unexpended balance.....	3,000,000.00							

7292. Naval operating base, Hampton Roads, Va.

Amount appropriated.....	\$2,800,000.00							
Unexpended balance.....	2,800,000.00							

7282. Hospitals and medical supply depots.

Amount appropriated.....	\$1,350,000.00							
Expenditures by titles:								
R.....	5,521.19		\$997.97		\$4,523.22			
Total expenditures.....	5,521.19		997.97		4,523.22			
Unexpended balance.....	1,344,478.81							
	1,350,000.00							

7201. Contingent, Navigation, 1917.

Amount appropriated.....	\$10,000.00							
Miscellaneous receipts.....	100.00							
	10,100.00							
Expenditures by titles:								
B.....	90.28				\$90.28			
C.....	224.00				224.00			
P.....	13.00			\$13.00				
G.....	60.28		\$22.69	34.00				
S.....	563.96		544.56	19.40				
V.....	5,126.40		94.11	2,818.43				
Indirect expense deducted.....	.83	\$0.83			1.50			\$100.00
Total expenditures.....	6,080.04	13.11	661.36	2,894.83	315.78			100.00
Unexpended balance.....	4,019.96							
	10,100.00							

7302. Transportation, Navigation, 1917.

Amount appropriated.....	\$1,010,524.00							
Miscellaneous receipts.....	239,037.58							
	1,249,561.58							
Expenditures by titles:								
C.....	195.60			\$89.55	\$106.05			
S.....	10.17			7.33				
V.....	1,568,810.39	\$2.84		992,682.50	14.05		\$259,038.27	\$307,075.57
Miscellaneous adjustments.....	1,412.85							
Total expenditures.....	1,580,429.01	2.84		992,778.38	130.10		259,038.27	307,075.57
Unexpended balance.....	510,867.45							
	1,249,561.58							

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7303. Recruiting, Navigation, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$244,228.84							
Miscellaneous receipts.....	154.93							
	244,383.77							
Expenditures by titles:								
C.....	291.85				\$252.05	\$39.80		
G.....	558.46	\$397.37		\$140.20	20.80			
S.....	5,196.95	3,157.59		2,020.55	8.81			
V.....	357,814.87	1,103.59	\$299.70	6,140.10	841,755.06	7,442.67	\$1,073.75	
Indirect expense deducted.....	299.70		299.70					
Miscellaneous adjustments.....	8,847.63							
Total expenditures.....	372,410.06	4,668.55		8,300.94	342,036.72	7,482.47	1,073.75	
Unexpended balance.....	128,096.29							
	244,383.77							

7304. Maintenance, naval auxiliaries, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$1,069,460.00							
Miscellaneous receipts.....	55,104.51							
	1,124,564.51							
Expenditures by titles:								
C.....	811,324.73				\$63,346.07		\$747,978.66	
V.....	3,006.22				1,868.35		\$701.24	
X.....	123,426.10				126,426.10			
Miscellaneous adjustments.....	112,806.83							
Total expenditures.....	1,050,963.88				189,640.52		701.24	749,015.20
Unexpended balance.....	73,596.93							
	1,124,564.51							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

709. Instruments and supplies, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$380,000.00							
Miscellaneous receipts.....	61,908.65							
	411,908.65							
Expenditures by titles:								
A.....	171,076.48				\$2,921.91	\$108,154.57	\$1,266.26	\$4.80
B.....	90,861.42		\$231.42	\$167.65	74,091.43	16,009.94		
C.....	1,703.86	\$972.05			289.00	43.76		
D.....	4,249.64	1,011.46	279.38	784.64	1,812.25	662.02		
E.....	16,810.68	4,898.38	1,266.10	888.80	8,688.07	32.23		
F.....	248.00	149.81	11.71	888.00				
G.....	60,364.27				33,603.77			
H.....	3,808.69	8,113.96		18,647.04				
I.....	45,353.08	12,073.31	366.40	3,174.24				
J.....	4,075.78			318.11				
K.....	2,880.48		\$,880.48					
L.....								
M.....	487.51	47.84	66.45					
N.....								
O.....	386,046.48	26,862.10		20,574.63	132,430.61	185,608.21	20,078.62	4.80
P.....	25,862.17							
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Indirect expense deducted.....			\$,880.48					
Indirect expense divided.....								
Miscellaneous adjustments.....								
Total expenditures.....	386,046.48	26,862.10		20,574.63	132,430.61	185,608.21	20,078.62	4.80
Unexpended balance.....	25,862.17							
	411,908.65							

710. Ocean and lake surveys, 1917.

Amount appropriated.....	\$105,000.00							
Miscellaneous receipts.....	4,862.62							
	109,862.62							

Expenditures by titles:									
B	9,193.34	\$11.76	\$0.28	\$222.87	\$8,940.47				
C	30,097.73	70.74	201.55	18,707.99	11,278.46				
P	268.87								
R	5,074.63	4,983.06	491.57						
G	117.18	71	33.75	12.40					
S	5,459.08	5,011.36	45.04	368.22	36.41				
V	55,834.61	3,070.62	100.68	5,708.18	259.63				
Indirect expense deducted									
Miscellaneous adjustments	3,277.84		63.68						
Total expenditures	108,246.55	12,828.57	862.85	25,014.66	20,514.97				
Unexpended balance	738.07								
	108,984.62								

7111. Naval training station, Rhode Island, 1917.

Amount appropriated	\$85,000.00								
Miscellaneous receipts	5,924.61								
Expenditures by titles:									
R	6,325.83	\$942.41	\$3,519.57	\$1,863.85					
S	82,653.97	24,744.32	54,372.87	3,736.78					
Total expenditures	89,179.80	25,686.73	57,892.44	5,600.63					
Unexpended balance	1,744.81								
	90,924.61								

7112. Naval training station, St. Helena, Va., 1917.

Amount appropriated	\$25,000.00								
Expenditures by titles:									
B	266.10			\$295.10	\$17.00				
C	268.42			236.42					
E	2,115.72		\$2.43	1,610.15					
G	22,546.42	\$376.89	\$126.25	1,118.13					
S	258.00	1,257.02	21,168.27	256.00					
Indirect expense divided			126.25						
Total expenditures	26,465.66	1,734.90	21,195.96	2,515.80	17.00				
Unexpended balance	465.66								
	26,000.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
713. Naval training station, Great Lakes, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$80,000.00							
Miscellaneous receipts.....	6,368.42							
Expenditures by titles:								
S.....	85,080.77	\$38,891.43		\$40,140.59	\$6,048.75			
V.....	6.87					\$6.87		
Total expenditures.....	85,087.64	38,891.43		40,140.59	6,048.75	6.87		
Unexpended balance.....	1,280.78							
	\$6,368.42							

714. Naval training station, California, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$70,000.00							
Expenditures by titles:								
R.....	1,463.86	\$96.40		\$1,254.46	\$143.00			
S.....	62,785.46	26,977.86		30,994.69	4,862.77	\$0.14		
V.....	9.68					9.68		
X.....	3.39					3.39		
Total expenditures.....	64,262.64	27,024.26		32,249.15	5,005.77	4.46		
Unexpended balance.....	5,714.36							
	70,000.00							

7315. Naval War College, 1917.

Amount appropriated.....	\$38,850.00								
Expenditures by titles:									
R.....	165.00					\$165.00			\$1.70
S.....	29,432.44	\$19,451.32				8,161.52			33.04
V.....	33.74								
Miscellaneous adjustments.....	1,808.43								
Total expenditures.....	31,453.61	19,451.32				8,326.52			34.74
Unexpended balance.....	7,396.09								
	38,850.00								

7316. Naval Home, Philadelphia, Pa., 1917.

Amount appropriated.....	\$82,117.00								
Miscellaneous receipts.....	8,178.06								
	90,292.06								
Expenditures by titles:									
E.....	72,397.79	\$27,890.54				\$37,403.77			\$1,028.93
G.....	268.24					232.57			36.67
X.....	432.05					432.05			
Miscellaneous adjustments.....	7,203.57								
Total expenditures.....	80,301.65	27,890.54				38,068.39			1,064.60
Unexpended balance.....	9,990.41								
	90,292.06								

7317. Pay, Naval Academy, 1917.

Amount appropriated.....	\$334,521.92								
Expenditures by titles:									
S.....	270,282.67	\$270,282.67							\$1,436.39
V.....	1,436.39								
Total expenditures.....	271,719.06	270,282.67							1,436.39
Unexpended balance.....	62,802.86								
	334,521.92								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7518. Current and miscellaneous expenses, Naval Academy, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$42,785.00							
Expenditures by titles:								
R.....	1,186.76			\$1,172.76	\$14.00			
S.....	26,263.83	\$1,491.05		23,355.66	1,304.42		\$112.70	
V.....	2,869.19				2,630.01		239.18	
Total expenditures.....	30,319.77	1,491.05		24,528.41	3,948.43		361.88	
Unexpended balance.....	12,465.23							
Total.....	42,785.00							

7519. Maintenance and repairs, Naval Academy, 1917.

Amount appropriated.....	\$331,840.00							
Miscellaneous receipts.....	11,307.01							
Total.....	343,147.01							
Expenditures by titles:								
R.....	309.80			\$265.00	\$44.80			
S.....	340,141.03	\$199,273.91		131,647.85	4,833.36		\$1,134.38	\$3,262.13
V.....	1,038.16	4.76					\$503.27	530.13
X.....	22.00						22.00	
Total expenditures.....	341,467.59	199,278.67		131,912.85	4,898.16		1,134.38	3,792.26
Unexpended balance.....	1,679.42							
Total.....	343,147.01							

7330. Aviation, Navy, 1917 (Navigation).

Miscellaneous receipts.....	\$55,000.00						
Expenditures by titles:							
A.....	831.67					\$831.67	
B.....	12,724.99					628.50	\$12,096.49
C.....	190.77	\$30.20				130.56	30.01
K.....	42.26					42.26	
F.....	837.07	742.01			\$27.39	67.67	
R.....	2,028.58				2,028.58	781.70	55.05
S.....	827.31	20.48			89.99	1,187.38	5,815.03
V.....	7,092.26	.72			89.12		
Miscellaneous adjustments.....	.50						
Total expenditures.....	24,575.40	793.41			2,115.17	3,669.74	17,996.58
Unexpended balance.....	30,424.60						
	55,000.00						

7334. Reserve material, Navy (Navigation).

Miscellaneous receipts.....	\$150,000.00						
Unexpended balance.....	150,000.00						

7335. Naval emergency fund (Navigation).

Miscellaneous receipts.....	\$1,690,000.00						
Expenditures by titles:							
B.....	227.99						\$227.99
C.....	3,297.90					\$3,298.85	2.65
K.....	13.32						
E.....	3,946.06	\$2.37				\$3,946.08	
R.....	26,145.29				26,855.09		
G.....	1,511.17	290.20			1,507.75		
S.....	4,417.53	3.42			2,853.33	1,664.20	
V.....	43,068.93					43,039.27	29.66
Indirect expense deducted.....	2.37				2.37		
Total expenditures.....	82,625.84	304.57			34,162.25	47,899.32	259.70
Unexpended balance.....	1,507,374.16						
	1,690,000.00						

Indirect expense divided.....	138,804.22	45,362.28			
Miscellaneous adjustments.....	12,164.87				
Total expenditures.....	8,805,878.85	4,595,881.20	1,016,191.60	5,805,807.45	1,227.37
Unexpended balance.....	52,415.14				
	8,858,293.99				

7402. Contingent, Ordnance, 1917.

Amount appropriated.....	\$9,500.00				
Miscellaneous receipts.....	70.97				
Expenditures by titles:	9,570.97				
E.....	62.00				
F.....	398.63				
G.....	5,414.87	\$340.88		\$62.00	
H.....	1,807.52	635.45		8.50	
I.....	117.69	456.31		260.84	
J.....				1,161.24	\$189.97
K.....				203.55	383.61
L.....					\$2.40
M.....					
N.....					
O.....					
P.....					
Q.....					
R.....					
S.....					
T.....					
U.....					
V.....					
W.....					
X.....					
Y.....					
Z.....					
Total expenditures.....	7,595.53	684.90	1,046.13	155.67	2.40
Unexpended balance.....	1,975.44				
	9,570.97				

7403. Repairs, Ordnance, 1917.

Amount appropriated.....	\$30,000.00				
Expenditures by titles:					
A.....	\$87.21				
B.....	20.68				
C.....	2,839.20				
D.....	4.66				
E.....	24,240.27				
F.....	5.15				
G.....	80.69				
H.....	1.72				
I.....					
J.....					
K.....					
L.....					
M.....					
N.....					
O.....					
P.....					
Q.....					
R.....					
S.....					
T.....					
U.....					
V.....					
W.....					
X.....					
Y.....					
Z.....					
Indirect expense deducted.....					
A.....					
B.....					
C.....					
D.....					
E.....					
F.....					
G.....					
H.....					
I.....					
J.....					
K.....					
L.....					
M.....					
N.....					
O.....					
P.....					
Q.....					
R.....					
S.....					
T.....					
U.....					
V.....					
W.....					
X.....					
Y.....					
Z.....					
Indirect expense divided.....					
Total expenditures.....	26,614.56	12,272.53	25,039.26	23.59	10,719.68
Unexpended balance.....	3,385.44				
	30,000.00				

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7494. Torpedo stations, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$200,000.00							
Miscellaneous receipts.....	103,915.27							
	303,915.27							
Expenditures by titles:								
R.....	97,534.83	84,401.67		\$24,580.88	\$127,662.98			
S.....	47,408.44	59,855.00		27,882.53	16,432.77			
V.....	134.58				90.01			
X.....	108,250.60				3,567.98	102,682.62	\$19.52	
Total expenditures.....	261,328.45	64,256.67		62,412.15	146,753.74	102,707.67	19.52	
Unexpended balance.....	52,586.82							
	303,915.27							

7495. Naval Gun Factory, Washington, D. C., 1917.

Amount appropriated.....	\$150,000.00							
Expenditures by title:								
E.....	17,009.41				\$17,009.41			
Unexpended balance.....	132,990.59							
	150,000.00							

7404. Experiments, Ordnance, 1917.

Amount appropriated.....	\$100,000.00								
Miscellaneous receipts.....	193.02								
	100,193.02								
Expenditures by titles:									
C.....	2,451.85					\$311.91	\$14.08	\$3,484.75	\$66.00
1, 194.21		\$667.02					21.00		
G.....	20.00								
E.....	46,497.01					24,977.11	8,861.62		34.20
X and Z.....	3,031.75	18,790.87				2,868.66	928.66		
Indirect expense deducted.....	1,168.79	9,441.71						13,469.39	
Indirect expense divided.....		2,048.77				681.20			
Total expenditures.....	54,693.11	26,148.97				28,883.90	9,819.96	9,967.67	100.80
Unexpended balance.....	45,501.91								
	100,193.02								

7411. Torpedoes and appliances, 1917-1919.

Amount appropriated.....	\$800,000.00								
Miscellaneous receipts.....	1.30								
	800,001.30								
Expenditures by titles:									
B.....	9,242.65							30,242.65	
C.....	6.07							6.07	
G.....	10,012.21					22,768.39			
V.....	179.66	87,248.82							
X.....	21,740.96	186.55				4.15			
Z.....	66,854.64	838.96					880,368.07		
Indirect expense deducted.....		30,878.02				27,835.06		17,687.09	
Indirect expense divided.....		9,671.66				2,417.91			
Total expenditures.....	109,627.26	7,263.66				33,020.50	30,368.07	8,378.37	
Unexpended balance.....	690,374.14	45,817.06							
	800,001.39								

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7412. Air compressors for destroyers, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$108,000.00							
Unexpended balance.....	180,000.00							

7413. Torpedo nets for battleships.

Amount appropriated.....	\$480,000.00							
Unexpended balance.....	480,000.00							

7420. New batteries for ships of the Navy, 1917-18.

Amount appropriated.....	\$22,452,000.00							
Unexpended balance.....	22,452,000.00							

7414. Naval magazine, Puget Sound, Wash., 1917.

Amount appropriated.....	\$600.00							
Expenditures by title:								
R.....	595.00				\$698.00			
Unexpended balance.....	5.00							
	600.00							

7415. Reserve ordinance supplies, 1917-18.

Amount appropriated.....	\$33,763,524.00								
Miscellaneous receipts.....	33,763,557.00								
Expenditures by titles:									
G.....	1,442.83	\$1,757.88	\$232.45	\$53.24					
S.....	4,555.09	4,130.97	365.62	49.50					
V.....	185,320.50	907.01	18,470.42		\$135,653.32				
B, K, and Z.....	2,036,263.00	100,603.28	370,361.21	1,535,722.13	15,350.85				
Indirect expense deducted.....	\$63.75	\$63.75							
Indirect expense divided.....		30,061.50	6,012.29						
Total expenditures.....	2,193,401.61	24,049.21	395,441.99	1,635,854.87	123,278.09			1,868.11	
Unexpended balance.....	\$1,570,155.39								
	\$3,763,557.00								

7416. Contingent building fund, 1917.

Amount appropriated.....	\$10,000.00								
Miscellaneous receipts.....	1,416.74								
Expenditures by titles:									
S.....	9,383.60	\$3,106.81	\$6,276.79	\$29.07					
B.....	29.07								
Total expenditures.....	9,412.67	3,106.81	6,276.79	29.07					
Unexpended balance.....	2,004.07								
	\$1,416.74								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7419. Increase of the Navy, ammunition.

	Total.	Lebor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$24,012,543.00							
Miscellaneous receipts.....	15,245.82							
34,028,888.82								
Expenditures by titles:								
F.....	2,163.62	\$1,124.42	\$280.15	\$764.05				
G.....	11,078.34	7,887.65		3,220.69				
H.....	6,872.48	6,872.48						
V.....	72.37	10.72		61.65				
X.....	1,708,247.37				\$1,704,114.68	\$667.81		
Z.....	228,953.43	87,524.00	10,907.34	130,552.08				
Indirect expense deducted.....	43.88							
Indirect expense divided.....		9,357.75	11,143.67	2,785.92				
Total expenditures.....	1,932,378.78	111,747.02		137,384.30	1,704,114.68	667.81		
Unexpended balance.....	28,076,510.04							
34,028,888.82								

7420. Increase of the Navy, armor and armament.

Balance July 1, 1916.....	\$12,178,651.20							
Amount appropriated.....	91,280,000.00							
Miscellaneous receipts.....	196,210.30							
103,654,861.50								

Expenditures by titles:						
A.....	7,848,997.49	\$38,506.26	\$10,516.37	\$4,221.00	\$7,816,723.96	40,941.66
C.....	40,941.66					
P.....	117.83	29.24	7.01	1.58	80.00	
E.....	\$39.51	163.19	65.54	12.58		
R.....	331.10				331.10	
G.....	757,638.79	542,845.11		207,086.08	7,737.60	624.50
S.....	24,580.13	25,555.03		139,616.51	9,532.47	1,808.30
V.....	186,538.18	35,994.36		3,063,350.03	5,237,383.53	\$2.88
B, X and Z.....	8,675,711.05	1,975,268.47	1,903.66			\$,119,147.27
Indirect expense deducted.....	12,397.51		12,397.51			
Indirect expense divided.....		422,083.95	569,719.16	137,636.21		
Miscellaneous adjustments.....	16,401.21					
Total expenditures.....	17,560,940.02	2,941,217.83		3,551,867.88	13,120,788.56	\$,076,772.81
Unexpended balance.....	86,076,020.88					
	169,636,961.90					

7481. Ammunition for ships of the Navy.

Balance July 1, 1916.....						
Amount appropriated.....	\$6,610,423.58					
Miscellaneous receipts.....	17,290,000.00					
	106,412.72					
	24,026,836.30					
Expenditures by titles:						
C.....	36,817.97					\$38,817.97
E.....	66,248.89	\$2.00	\$0.78	\$406.99	\$56,251.67	
R.....	1,132.85					
G.....	89,116.33	26,700.48		12,368.93	45.92	
S.....	22,273.94	18,728.28		3,550.56		
V.....	124,854.12	31,544.68	2,334.35	90,931.43		23.67
X.....	7,611,898.14				8,348,561.50	786,675.36
Z.....	1,620,765.51	281,033.30	103,307.69	1,186,404.52		
Indirect expense deducted.....	\$,533.57		\$,533.57			
Indirect expense divided.....		77,721.09	103,307.69	25,586.60		
Miscellaneous adjustments.....	1,449.17					
Total expenditures.....	9,414,183.29	436,471.72		1,299,280.03	8,404,859.09	697,831.72
Unexpended balance.....	14,612,653.01					
	24,026,836.30					

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7432. Ordnance material, proceeds of sale.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$540,073.31							
Miscellaneous receipts.....	32,266.42							
Expenditures by titles:								
X.....	581,329.73							
Miscellaneous adjustments.....	166,809.15				\$166,809.15			
X.....	90.43							
Total expenditures.....	166,899.58				166,809.15			
Unexpended balance.....	494,480.15							
X.....	581,329.73							

7433. Powder factory, Indianhead, Md.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance, July 1, 1916.....	\$58,964.72							
Miscellaneous receipts.....	156.46							
Expenditures by titles:								
R.....	59,121.12							
S.....	17,711.60	\$1,946.21			\$6,745.97			
X.....	14,424.71				21,519.61	\$7,064.80		
Total expenditures.....	32,657.43	1,946.21			28,316.70	7,064.80		
Unexpended balance.....	26,453.69							
X.....	59,121.12							

7487. Projectile plant, Navy.

Amount appropriated.....	\$2,080,966.00				
Expenditures by titles:					
V.....	806.11				
Y.....	777.62			802.00	80.59
Unexpended balance.....	2,080,146.89				
	2,080,966.00				

7488. Armor plant, Navy.

Amount appropriated.....	\$11,000,000.00				
Expenditures by titles:					
V.....	1,008.01	\$1,432.93			\$14.88
X.....	6.15				6.15
Total expenditures.....	1,614.16	1,432.93		106.35	14.88
Unexpended balance.....	10,998,385.84				
	11,000,000.00				

7489. Batteries for merchant auxiliaries.

Amount appropriated.....	\$1,650,000.00				
Miscellaneous receipts.....	9,527.87				
	1,659,527.87				
Expenditures by titles:					
Q.....	23,149.44	\$15,727.54		86,421.90	
X.....	133,027.93			\$155,094.25	\$17,666.33
Z.....	144,781.44	63,806.33		60,268.24	
		\$20,705.87			
Indirect expense divided.....		20,705.87		5,176.73	
		15,530.15			
Total expenditures.....	304,958.81	95,064.02		71,666.86	17,666.33
Unexpended balance.....	1,354,569.06				
	1,659,527.87				

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7482. Ordnance material, proceeds of sale.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$546,073.31							
Miscellaneous receipts.....	32,266.42							
	581,339.73							
Expenditures by titles:								
X.....								
Miscellaneous adjustments.....	166,809.15				\$166,809.15			
	90.43							
Total expenditures.....	166,899.58				166,809.15			
Unexpended balance.....	424,439.15							
	581,329.73							

7483. Powder factory, Indianhead, Md.

Balance, July 1, 1916.....	\$58,964.72							
Miscellaneous receipts.....	156.40							
	59,121.12							
Expenditures by titles:								
R.....								
S.....	17,711.60	\$1,946.21		\$9,019.43	\$6,745.97			
X.....	14,424.71				21,519.61	\$7,094.90		
Total expenditures.....	32,687.43	1,946.21		9,019.43	28,316.70	7,094.90		
Unexpended balance.....	26,433.69							
	59,121.12							

7487. Projectile plant, Navy.

Amount appropriated.....	\$2,000,968.00				
Expenditures by titles:					
Y.....	800.11				
X.....	8787.82				
Unexpended balance.....	2,000,168.00	\$02.00			\$0.89

7488. Armor plant, Navy.

Amount appropriated.....	\$11,000,000.00				
Expenditures by titles:					
Y.....	1,008.01	\$1,432.93			\$14.88
X.....	6.15		\$100.20		
Total expenditures.....	1,014.16	1,432.93	100.20		14.88
Unexpended balance.....	10,998,985.84				
	11,000,000.00				

7489. Batteries for merchant auxiliaries.

Amount appropriated.....	\$1,680,000.00				
Miscellaneous receipts.....	9,527.87				
	1,689,527.87				
Expenditures by titles:					
Q.....	22,149.44	\$15,727.54		\$6,421.90	
R.....	1385,027.93				
Z.....	144,781.44	68,808.33	\$20,708.87	60,288.24	\$17,608.38
			20,708.87		
Indirect expense divided.....		15,820.15		5,178.72	
Total expenditures.....	304,958.81	95,064.02		71,688.86	17,608.38
Unexpended balance.....	1,384,569.06				
	1,689,527.87				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7494. Armament and ammunition for Coast Guard cutters.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$129,800.00							
Unexpended balance.....	169,800.00							

7451. Naval emergency fund (Ordnance).

Miscellaneous receipts.....	22,771,981.26							
Expenditures by titles:								
C.....	76.08	\$20.20	\$16.66	80.47				
K.....	99.10	54.09	15.38	26.08				
G.....	2,114.64	1,813.08		602.09				
V.....	28,674.99	1,094.88	183.83	219.67	\$18,748.80	\$8,406.00	63.11	
Z.....	2,876,486.27				2,991,205.08	114,718.76		
Z.....	113,716.74	1,136.47	333.83	113,262.74				
Z.....	166.87		166.87					
Indirect expense deducted.....			333.83					
Indirect expense divided.....		280.15	333.83					
Total expenditures.....	3,015,981.80	4,101.25	113,167.81	113,167.81	3,009,953.89	111,862.76	2.11	
Unexpended balance.....	19,765,999.46							
Total.....	22,771,981.26							

7461. Construction and Repair, 1917.

Amount appropriated.....	\$11,786,069.16							
Miscellaneous receipts.....	467,879.54							
Total.....	12,253,948.70							

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

766. Aviation, Navy, 1917 (Construction and Repair).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Miscellaneous receipts.....	\$781,333.32							
Expenditures by titles:								
A.....	201,300.37	\$19,020.13	\$7,464.03	\$17,067.13	\$102,508.08	85,210.03		
B.....	16,254.93	4,945.36		10,490.42	5,044.90	2,063.68		
C.....	17,400.45	8,589.36		7,066.80	124.12			
D.....	16,033.37				1,411.57			
E.....	1,411.57			4.68				
F.....	38.02	33.94						
G.....	2,228.25	1,125.36	384.84	423.05				
H.....	5,129.13	4,199.71		4,199.71	867.49			
I.....	5,129.13	172.45		1,113.67	5.41			
J.....	6,340.52	4,010.05		27,413.60	2,650.84			
K.....	69,640.73	37,438.57		27,413.60	15,006.86			
L.....	17,463.18	1,638.24	3,819.47	3,848.13		9.80		
M.....	463.00					165.00		
N.....	4,089.40		4,089.40					
O.....	325,265.95	72,185.37		67,649.50	188,283.57	7,138.51		
P.....	446,076.37							
Unexpended balance.....	781,333.32							

766. Reserve material, Navy, (Construction and Repair).

Miscellaneous receipts.....	\$900,000.00							
Unexpended balance.....	900,000.00							

768. Naval emergency fund (Construction and Repair).

Miscellaneous receipts.....	\$2,000,000.00				
Expenditures by titles:					
G.....	2,046.25		\$2,046.25		
V.....	1,171.03		504.75		666.28
Total expenditures.....	3,217.28		2,551.00		666.28
Unexpended balance.....	2,596,782.72				
	2,000,000.00				

7610. Construction of plant, navy yard, Portsmouth, N. H.

Balance July 1, 1916.....	\$242.01				
Miscellaneous adjustments.....	171.00				
Unexpended balance.....	71.01				
	242.01				

7611. Construction of plant, navy yard, Boston, Mass.

Balance July 1, 1916.....	\$435.47				
Miscellaneous receipts.....	96.90				
	532.37				
Expenditures by titles:					
G.....	305.68		\$305.68		
Unexpended balance.....	226.69				
	532.37				

7612. Construction of plant, navy yard, Norfolk, Va.

Balance July 1, 1916.....	\$29.75				
Expenditures by titles:					
B.....	29.75		29.75		

Indirect expense divided.....		2,507.83					
Miscellaneous adjustments.....	1,810.23		704.00				
Total expenditures.....	10,681,511.85	5,170,444.92		485,073.95	2,285,963.75	100,315.00	545.20
Unexpended balance.....	846,907.80						
	11,222,419.66						

7002. Engineering experimental station, Annapolis, Md., 1917.

Amount appropriated.....	\$105,000.00						
Expenditures by titles:							
R.....	19,051.58	87,441.70		81,252.40	810,077.48		
G.....	58,000.14	1.50		16,510.06	6,047.98		
S.....	21,069.32	21,061.63		458.44	83.37	874.54	
V.....	1.46		81.45				
Indirect expense deducted.....		1.46					
Total expenditures.....	99,980.52	64,508.92		18,260.28	17,068.83	74.54	
Unexpended balance.....	5,009.48						
	105,000.00						

7004. Machinery plants at navy yards, 1917.

Amount appropriated.....	\$200,000.00						
Expenditures by titles:							
R.....	28,218.03	23,130.24	3506.38	23,940.71	331,072.20		
G.....	5,802.47	1,700.80		2,423.67	650.00		
X.....	1,895.00					81,895.00	
Indirect expense deducted.....	184.61		164.61				
Indirect expense divided.....		308.26	411.74	108.48			
Total expenditures.....	42,601.46	4,148.40		7,486.86	33,281.20	1,895.00	
Unexpended balance.....	157,308.54						
	200,000.00						

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7008. Aviation, Navy, 1917 (Steam Engineering).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Miscellaneous receipts.....	877,833.34							
Expenditures by titles:								
A.....	311,499.15	\$971.12	\$108.37	\$30,598.64	\$180,064.02			
B.....	31,917.71				6,997.05	\$34,920.66		
C.....	74,695.59	19,317.10		50,650.07	152.50	4,846.92		
D.....	9,783.70	5,021.36	18.76	4,077.70	667.88			
E.....	181,453	114.62		66.80				
F.....	78,555							
G.....	6,651.78	1,223.47	300.79	4,945.13	78.55			
H.....	4,304.65	161.12		4,437.83	215.70			
I.....	15,656.76	5,949.04		12,532.47	185.26			
J.....	67,631.71	37,299.95		27,732.33	2,619.44			
K.....	31,170.91	2,280.53	302.59	5,895.80	21,009.87			
L.....	19,945.00					1,682.13		
M.....	784.51		784.51			19,945.00		
indirect expense deducted.....								
Total expenditures.....	498,302.42	72,008.30		140,316.75	212,772.66	11,204.71		
Unexpended balance.....	341,530.92							
	777,833.34							

7009. Reserve material, Navy (Steam Engineering).

Miscellaneous receipts.....	\$1,900,000.00							
Expenditures by titles:								
B.....	234.21					8294.21		
X.....	6,270.38				\$6,504.69	831.81		
Total expenditures.....	6,504.59				6,504.69			
Unexpended balance.....	1,893,495.41							
	1,900,000.00							

700. Naval emergency fund (Steam Engineering).

Miscellaneous receipts.....	\$5,502,887.00						
Expenditures by title:							
C.....	1,250.00					\$1,250.00	
R.....	1,460.00				\$1,200.00	460.00	
G.....	26.13					26.13	
S.....	1,752.96				108.17	1,644.79	
V.....	1,581.64					1,581.64	
X.....	49,500.00					49,500.00	
Total expenditures.....	55,769.73				1,308.17	54,461.56	
Unexpended balance.....	5,447,087.27						
	5,502,887.00						

7010. Machinery plant, navy yard, Portsmouth, N. H.

Balance July 1, 1916.....	\$300.00						
Expenditures by title:							
E.....	280.00					280.00	
Carried to surplus fund.....	10.00						
	300.00						

7011. Machinery plant, navy yard, New York.

Balance July 1, 1916.....	\$104.89						
Expenditures by title:							
B.....	105.11					\$105.08	
C.....	2.15			\$1.60		1.02	
Indirect expense deducted.....	1.60			1.60			
Total expenditures.....	104.86			3.12		108.01	

7012. Machinery plant, navy yard, Philadelphia, Pa.

Balance July 1, 1916.....	\$64.88						
Carried to surplus fund.....	54.88						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7613. Machinery plant, navy yard, Norfolk, Va.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$5,563.38							
Expenditures by title:								
E.....	1,852.28				\$1,852.28			
Unexpended balance.....	3,761.10							
	5,563.38							

7614. Machinery plant, navy yard, Charleston, S. C.

Balance July 1, 1916.....	\$2,928.00							
Expenditures by title:								
E.....	2,927.00				\$2,927.00			
Carried to surplus fund.....	1.00							
	2,928.00							

7615. Machinery plant, navy yard, Pensacola, Fla.

Balance July 1, 1916.....	\$14,610.97							
Expenditures by title:								
E.....	7,303.55			\$5,921.00	\$1,382.55			
S.....	1,024.83				1,024.83			
Total expenditures.....	8,328.38			5,921.00	2,407.38			
Unexpended balance.....	5,282.59							
	16,610.97							

7617. Machinery plant, navy yard, Mare Island, Cal.

Balance July 1, 1915.....	\$450.13					
Expenditures by title:						
E.....	988.00				\$398.00	
Carried to surplus fund.....	32.13					
	450.13					

7619. Machinery plant, naval station, Cavite, P. I.

Balance July 1, 1916.....	\$33,260.00					
Expenditures by titles:						
E.....	2,261.31	\$18.43	\$3.09	\$2,239.79		
G.....	3.09	1.86		1.23		
Indirect expense deducted.....	5.09		5.09			
Total expenditures.....	2,261.31	20.29		2,241.02		
Unexpended balance.....	\$30,998.69					
	\$33,260.00					

7620. Machinery plant, naval station, Olongapo, P. I.

Balance July 1, 1916.....	\$21,205.27					
Expenditures by titles:						
E.....	5,712.53				\$5,712.53	
G.....	5,194.75				5,194.75	
S.....	5,139.50				5,139.50	
Total expenditures.....	11,046.78				11,046.78	
Unexpended balance.....	10,158.49					
	\$21,205.27					

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

703. Machinery plant, navy yard, Norfolk, Va.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$5,583.38							
Expenditures by title:								
E.....	1,892.28							
S.....	3,761.10				\$1,832.28			
Unexpended balance.....	5,583.38							

704. Machinery plant, navy yard, Charleston, S. O.

Balance July 1, 1916.....	\$2,928.00							
Expenditures by title:								
E.....	2,927.00				\$9,927.00			
S.....	1.00							
Carried to surplus fund.....	2,928.00							

705. Machinery plant, navy yard, Pensacola, Fla.

Balance July 1, 1916.....	\$14,610.67							
Expenditures by title:								
E.....	7,302.55			\$5,921.00	\$1,382.55			
S.....	1,088.83				1,088.83			
Total expenditures.....	8,391.38			5,921.00	2,471.38			
Unexpended balance.....	16,610.67							

7017. Machinery plant, navy yard, Mare Island, Cal.

Balance July 1, 1913.....	\$450.13				
Expenditures by title:					
E.....	898.00				\$998.00
Carried to surplus fund.....	32.13				
	480.13				

7019. Machinery plant, naval station, Cavite, P. I.

Balance July 1, 1916.....	\$83,260.00				
Expenditures by titles:					
E.....	2,261.31	\$18.48	\$3.00	\$2,298.79	
F.....	3.09	1.86		1.23	
G.....	5.09		3.09		
Indirect expense deducted.....					
Total expenditures.....	2,261.31	20.29		2,241.02	
Unexpended balance.....	\$8,998.69				
	\$8,260.00				

7020. Machinery plant, naval station, Olongapo, P. I.

Balance July 1, 1916.....	\$21,205.27				
Expenditures by titles:					
E.....	5,712.83				\$5,712.83
F.....	5,194.76				5,194.76
G.....	139.50				139.50
S.....					
Total expenditures.....	11,046.78				11,046.78
Unexpended balance.....	10,158.49				
	21,205.27				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.
7651. Machinery plant, naval station, Pearl Harbor, Hawaii.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$3,740.50							
Miscellaneous receipts.....	.50							
	3,741.00							
Expenditures by titles:								
R.....	3,754.16	\$1,285.99		\$2,202.77	\$265.90			
S.....	518.95	185.54		333.41				
Total expenditures.....	4,273.11	1,471.53		2,535.68	265.90			
Unexpended balance.....	557.11							
	3,741.00							

7664. High-power radio stations.

Balance July 1, 1916.....	\$492,989.80							
Amount appropriated.....	700,000.00							
Miscellaneous receipts.....	207.96							
	1,193,197.66							
Expenditures by titles:								
E.....	31,247.43	\$6,919.16	\$1,014.40	\$20,262.57	\$3,051.00			
R.....	358,031.05	17,177.02	20.46	26,233.57	294,540.00			
G.....	8,451.07	7,820.22		517.85	143.00			
S.....	128,697.48				128,697.48			
V.....	742.04				659.19	\$82.85		
X.....	1.50					1.50		
Indirect expense deducted.....	1,009.78		1,009.78					
			26.14					
Indirect expense divided.....		17.61		7.53				
Total expenditures.....	509,187.55	31,934.01		47,081.82	427,090.67		81.35	
Unexpended balance.....	687,009.84							
	1,193,197.66							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7702. Provisions, Navy, 1917-1918.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$41,847,892.70							
Miscellaneous receipts.....	3,761,650.01							
45,009,542.71								
Expenditures by titles:								
C.....	1,066,131.14				8675,308.94		86,845.88	\$873,978.82
G.....	46,652.17	\$1,212.67			636.30		12,497.40	82,206.80
S.....	198,135.98	424.93			100,491.24		2,025.32	96,196.36
V.....	537,645.64				485,508.31		21,662.23	57,378.10
X.....	13,112,628.63				13,421,183.82		1,194.31	
Z.....	382,022.52	4,721.48		\$377,301.04		\$507,361.88		
328,779.27								
Miscellaneous adjustments.....								
Total expenditures.....	15,668,798.22	6,359.08		377,301.04	14,686,123.61	307,361.88	41,836.02	568,759.08
Unexpended balance.....	29,340,744.49							
45,009,542.71								

7704. Maintenance, Supplies and Accounts, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$2,623,640.00							
Miscellaneous receipts.....	143,760.98							
2,767,400.98								
Expenditures by titles:								
B.....	123,618.60			\$101.61	80,735.57	\$113,883.03		
C.....	306,973.00			580.23	4,860.83	290,476.42	\$12.15	
P.....	8,361.75	\$2,317.00	\$658.38					
E.....	44,424.02	57.13	12.83	10,759.59	33,594.97			
R.....	2,185.18			686.70	1,498.48			
G.....	2,281,661.66	1,941,670.73		199,835.24	110,246.98			
S.....	210,645.78	172,084.59		21,635.26	15,407.82		8.64	
X.....	87,134.99	1,288.00	12.81	1,344.44	48,769.74	118.01		
890.74					1,727.19	28,286.26	9,894.63	
2,767,400.98								
Miscellaneous adjustments.....								
Total expenditures.....	2,767,400.98							
Unexpended balance.....								
2,767,400.98								

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7702. Provisions, Navy, 1917-1918.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$41,847,892.70							
Miscellaneous receipts.....	3,781,650.01							
45,609,542.71								
Expenditures by titles:								
C.....	1,056,131.14				\$675,305.04		\$6,845.88	\$873,078.83
D.....	46,532.17	\$1,212.67			436.30		19,407.40	22,294.50
E.....	129,544.85	424.93			100,436.21		2,023.32	27,194.86
F.....	57,548.64				458,451.31		21,669.23	57,378.10
G.....	13,119,639.63				13,421,183.82		1,196.51	
H.....	823,029.52	4,721.48		\$377,301.04		\$637,561.68		
I.....	323,779.27							
Miscellaneous adjustments.....								
Total expenditures.....	15,654,794.22	6,359.08		377,301.04	14,656,133.61	\$637,561.68	41,836.02	558,759.06
Unexpended balance.....	29,954,748.49							
45,609,542.71								

7704. Maintenance, Supplies and Accounts, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$2,623,640.00							
Miscellaneous receipts.....	143,760.98							
2,767,400.98								
Expenditures by titles:								
B.....	123,615.60			\$101.61	\$9,735.57	\$113,893.08	\$12.16	
C.....	306,973.00			690.22	39,383.82	299,476.42		
D.....	8,361.75	\$2,317.00	\$655.98		4,866.09			
E.....	44,424.02	82,571.13	12.83	10,759.99	33,594.97			
F.....	2,185.18			696.70	1,498.48			
G.....	2,261,661.68	1,941,670.72		199,635.34	110,246.98		8.64	
H.....	210,645.78	172,064.59		21,635.36	16,407.82			
I.....	87,124.99	1,288.09		1,844.44	48,759.74			
J.....	860.74				1,737.19			
Miscellaneous adjustments.....								
Total expenditures.....	3,251,957.64	2,263,961.51	668.81	212,367.42	1,777,191.19	\$113,893.08	9,394.66	
Unexpended balance.....	495,443.34							
2,767,400.98								

Indirect expense deducted.....	610.58				
Miscellaneous adjustments.....	3,086,348.83				
Total expenditures.....	3,086,452.56	2,117,617.59	294,653.26	266,223.66	406,193.79
Unexpended balance.....	562,051.55				9,415.44
	2,767,400.98				

706. Freight, Supplies and Accounts, 1917.

Amount appropriated.....	\$725,000.00				
Miscellaneous receipts.....	175,028.98				
	900,028.98				
Expenditures by titles:					
O.....	13.63			\$13.13	\$0.50
G.....	126,734.72	\$42,914.45	\$2,853.31	79,946.96	
S.....	7,925.03	5,439.12	227.45	327.10	1,991.38
V.....	806,170.19	6,722.62	103.79	573,231.16	82.06
X.....	59.00				\$9.00
Total expenditures.....	999,904.57	49,076.39	3,194.55	653,598.35	36.94
Unexpended balance.....	39,160.99				285,002.22
	900,028.98				

708. Fuel and transportation, 1917.

Amount appropriated.....	\$5,000,000.00				
Miscellaneous receipts.....	1,066,003.31				
	6,066,003.31				
Expenditures by titles:					
B.....	5,642,913.12			\$167,456.33	\$5,484,885.71
C.....	160,971.27			277.10	
G.....	160,315.64	\$80,000.64	\$537.92	649.53	
S.....	223,740.71	130,640.82	69,539.47	669.53	
V.....	58,394.16	6,868.08	69,724.23	20,976.63	842.09
Y.....	73.54		6,572.80	28,549.78	1,555.54
Indirect expense deducted.....	613.71			88.54	
Miscellaneous adjustments.....	2,670.24	643.71			16.00
Total expenditures.....	6,068,145.97	227,418.64	145,378.97	203,087.91	5,503,165.93
Unexpended balance.....	2,132.89				6,430.38
	6,066,003.31				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.
CURRENT APPROPRIATIONS—Continued.
770. Naval Reserve, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$112,871.71							
Miscellaneous receipts.....	7.10							
Expenditures by titles:								
B.....	2,814.80				\$2,814.80			
C.....	395.70							
D.....	11.25				11.25			
E.....	1,313.08			\$1,313.08				
S.....	87,003.93				60,991.81		\$6,984.17	\$19,077.95
V.....	3,034.49							
Miscellaneous adjustments.....								
Total expenditures.....	94,573.25			1,313.08	64,213.56		6,984.17	19,077.95
Unexpended balance.....	18,306.56							
	112,878.81							

7710. Organizing Naval Reserve Force, 1917.

Amount appropriated.....	\$130,000.00							
Miscellaneous receipts.....	1,155.41							
Expenditures by titles:								
B.....	14.50				\$14.50			
C.....	97.81				97.81			
E.....	94.50				94.50			
F.....	840.00							
G.....	4,385.76	\$3,858.62		\$549.00				
H.....	7,797.55	3,161.80		4,639.75				
V.....	102,665.75	5,106.17	\$41.42	11,143.73	72,070.11	\$3,066.42	\$10,184.90	\$450.00
Indirect expense deducted.....	41.42		41.42					
Total expenditures.....	115,963.45	11,626.59		17,213.57	72,718.97	3,066.42	10,184.90	450.00
Unexpended balance.....	15,291.96							
	181,155.41							

7711. Schools or camps of instruction, Naval Reserve Force, 1917.

Amount appropriated.....	\$30,000.00								
Expenditures by titles:									
B.....	1,455.81					\$1,455.81			
R.....	9,676.82	\$40.28				9,677.04			
C.....	3,682.42					3,682.42	\$320.00		
V.....	9,089.97	4.50		\$1.61		4,949.16	1,368.90		\$3,305.90
Indirect expense divided.....			1.21	1.51		.30			
Total expenditures.....	23,895.02	84.99				18,075.22	1,788.90		3,305.90
Unexpended balance.....	6,104.98								
	\$30,000.00								

7712. Naval Academy, dairy, Annapolis, Md. (reimbursable).

Amount appropriated.....	\$100,000.00								
Expenditures by titles:									
R.....	50,855.24					32,884.06	\$46,971.18		
S.....	47,666.75					47,666.75	47,666.75		
Total expenditures.....	98,521.99					3,884.06	94,637.93		
Unexpended balance.....	1,478.01								
	100,000.00								

7713. Aviation, Navy, 1917 (Supplies and Accounts).

Miscellaneous receipts.....	\$7,500.00								
Expenditures by titles:									
S.....	4,785.96						\$4,785.96		
Unexpended balance.....	2,714.04								
	7,500.00								

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7718. Clothing and small stores fund.

	Total.	Lebor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$1,452,672.57							
Amount appropriated.....	11,071,000.00							
Miscellaneous receipts.....	6,567,391.24							
18,091,063.81								
Expenditures by titles:				\$962.81		\$2,376.62	\$27,797.33	\$2.91
E.....	1,614.10	\$632.76	\$128.54			1,909,068.11		
F.....	2,379.53							
G.....	3,126,493.33			2,419,391.06	\$6,001,751.11			
X.....	3,132,802.98	713,411.98	108.60					
Z.....	108.06							
Indirect expense deducted.....			19.88	4.00				
Indirect expense divided.....		15.79						
Miscellaneous adjustments.....	19,569.78							
Total expenditures.....	6,270,738.06	713,960.47		2,420,347.96	6,001,751.11	1,909,068.19	27,797.33	2.91
Unexpended balance.....	11,820,325.85							
18,091,063.81								

7717. Ship's stores, profits, Navy.

Balance, July 1, 1916.....	\$56,500.22							
Miscellaneous receipts.....	84,008.40							
140,508.62								
Expenditures by titles:				\$1,822.12				
R.....	2,828.46	\$463.34		100.00				
G.....	100.00			167.44				
S.....	490.01	322.57		82.70	\$94,018.32	\$67.34		
Y.....	94,168.36					247.60		
X.....	247.60							
Z.....	8,006.68							
Miscellaneous adjustments.....								
Total expenditures.....	108,827.06	815.91		2,182.26	94,018.32	314.94		
Unexpended balance.....	36,681.56							
140,508.62								

7718. Reserve material, Navy.

Amount appropriated.....	\$5,000,000.00						
Miscellaneous adjustments.....							
Expenditures by titles.....	2,860,000.00						
A.....	140.48					\$140.48	
X.....	140.48					140.48	
Total expenditures.....	2,860,000.00						
Unexpended balance.....	2,060,000.00						
	5,000,000.00						

7719. Naval emergency fund (Supplies and Accounts).

Miscellaneous receipts.....	\$508,610.50						
Expenditures by titles:							
C.....	6,000.00				\$6,000.00		
R.....	881.68				881.68		
V.....	16,880.00	\$318.66		\$533.03	16,880.60		
Total expenditures.....	23,741.28	318.66		533.03	22,880.00		
Unexpended balance.....	484,869.22						
	508,610.50						

7801. Medical Department, 1917.

Amount appropriated.....	\$821,740.00						
Miscellaneous receipts.....	428.16						
	923,168.16						
Expenditures by titles:							
C.....	3,679.35				\$3,643.29		\$138.06
E.....	74.00				74.00		
R.....	6,138.14				31.50		
G.....	18,183.54	\$5,106.64		\$43.83	7,783.84		
S.....	271,746.18	10,885.87		2,167.82	8,562.60		\$1,284.00
V.....	46,359.26	269,771.76		4.92	28,012.57		12,682.32
X.....	357,836.13	10,644.66	\$5.68		357,838.13		
Indirect expense deducted.....							9.11
Miscellaneous adjustments.....	6,217.65						
Total expenditures.....	709,280.57	285,908.98		2,206.57	400,816.98		13,986.32
Unexpended balance.....	212,684.59						
	923,168.16						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7802. Contingent, Medicine and Surgery, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$241,080.00							
Miscellaneous receipts.....	558.44							
	241,638.44							
Expenditures by titles:								
B.....	12.24					\$12.24		
C.....	11,513.38				\$9,184.08	2,329.30		
P.....	50.85	\$47.97	\$11.32	\$0.56				
E.....	952.09	159.64	39.58	641.87	211.50	250.00		
R.....	16,330.02	11.84		5,206.80	10,870.38	216.45	\$26.25	
G.....	13,616.95	3,148.34		7,899.01	2,326.90	1,288.60	75.33	
S.....	136,594.33	11,346.31	8.84	38,638.08	84,241.82	1,568.66	17,387.99	
V.....	27,383.66	344.79	81.32	515.29	13,485.61	\$0.50		
X.....	15,689.00		95.98		15,689.50			
Indirect expense deducted.....	56.98							
Indirect expense divided.....		81.76	39.88	7.82				
Miscellaneous adjustments.....	1,128.62							
Total expenditures.....	227,178.16	15,090.65		52,809.76	135,979.74	4,674.80	17,489.57	
Unexpended balance.....	14,462.28							
	241,638.44							

7803. Bringing home remains of officers, etc., Navy Department, 1917-18.

Amount appropriated.....	\$24,905.00							
Miscellaneous receipts.....	7,923.23							
	22,831.23							
Expenditures by titles:								
V.....	23,130.21				\$29,637.87		\$3,501.84	
Total expenditures.....	23,130.21				29,637.87		3,501.84	
Unexpended balance.....	807.02							
	22,831.23							

7810. Naval hospital, Chelsea, Mass.

Balance July 1, 1916.....	\$67.01					
Unexpended balance.....	67.01					

7811. Naval hospital, Newport, R. I.

Balance July 1, 1916.....	\$20,000.00					
Unexpended balance.....	20,000.00					

7812. Naval hospital, Pensacola, Fla.

Balance July 1, 1916.....	\$10,000.00					
Miscellaneous adjustments.....	87.88					
Unexpended balance.....	9,912.12					
	10,000.00					

7813. Naval hospital, Great Lakes.

Balance July 1, 1916.....	\$11,536.42					
Unexpended balance.....	11,536.42					

7815. Naval hospital fund.

Balance July 1, 1916.....	\$169,227.97					
Miscellaneous receipts.....	946,243.35					
	786,015.38					
Expenditures by titles:						
B.....	1.00					
C.....	1,662.85					\$1.00
D.....	514.27					197.72
E.....	65,637.18	\$39.21	\$46.91			
F.....	703.98		55,960.33			
G.....	294.83		219,422.04			
H.....	940,906.01	3.83	219,422.04			
I.....	16,784.92	5.03	16.17			
J.....	24,416.45		35.69			
K.....	83.95					
L.....	188,062.37					
Miscellaneous adjustments.....						
Total expenditures.....	1,268,480.37		275,317.97			8,472.38
Unexpended balance.....	472,444.89					9,344.09
	786,015.38					

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CURRENT APPROPRIATIONS—Continued.

7601. Pay, Marine Corps, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$5,673,866.30							
Miscellaneous receipts.....	35,662.19							
Expenditures by titles:								
C.....	650,272.77							\$650,272.77
Marine Corps.....	4,609,897.34				\$15,249.38		\$2,798.77	4,601,861.19
Miscellaneous adjustments.....	47,766.68							
Total expenditures.....	5,307,926.79				15,249.38		2,798.77	5,249,138.96
Unexpended balance.....	401,601.70							
	5,709,528.49							

7602. Maintenance, Quartermaster's Department, Marine Corps, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$7,165,831.71							
Miscellaneous receipts.....	184,068.22							
Expenditures by titles:								
X.....	7,340,899.93							
Marine Corps.....	6,120,705.04	\$13,447.69	\$2,065.26	\$11,146.85	\$5,931,938.41	\$19,417.65	\$87,665.56	\$7,685.29
Indirect expense divided.....	405,177.36	1,647.48	2,065.26	887.76				
Miscellaneous adjustments.....	6,523,465.75	14,963.17		11,054.63	5,931,938.41	96,319.31	87,665.56	7,685.29
Total expenditures.....	7,340,899.93							
Unexpended balance.....								

7002. Expenses, Marine Corps Reserve, 1917.

Amount appropriated.....	\$25,000.00								
Unexpended balance.....	25,000.00								

701A. Barracks and quarters, Marine Corps.

Balance July 1, 1916.....	\$18,447.62								
Expenditures by titles:									
Marine Corps.....	9,516.04	\$4,662.27							
Unexpended balance.....	8,931.58								
	18,447.62								

FISCAL YEAR 1918.

6101. Pay, miscellaneous, 1918.

Balance July 1, 1916.....	\$5,860.06								
Amount appropriated.....	194,508.62								
Miscellaneous receipts.....	16,983.22								
	194,511.78								
Expenditures by titles:									
C.....	1,511.08					\$1,511.08			
G.....	9,846.94					9,846.94			
V.....	87,616.22	\$608.86				2,568.60			
W.....	88,638.77					78,217.96	\$47.72		
Miscellaneous adjustments.....	12,124.21	3.00							\$5,414.19
Total expenditures.....	106,783.62	607.46				88,540.04	47.72		5,414.19
Carried to surplus fund.....	3.02								
Unexpended balance.....	27,776.11								
	184,511.78								

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

6182. Contingent, Navy, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$28,411.29							
Miscellaneous receipts.....	124.84							
	28,536.13							
Expenditures by titles:								
Y.....	\$,484.07			85,165.00	\$639.25		\$91.68	
X.....	21.04				37.96			
Miscellaneous adjustments.....	18.77							
Total expenditures.....	\$,523.88			\$,165.00	\$677.20		\$91.68	
Unexpended balance.....	28,012.25							
	28,536.13							

6184. Care of lamps, Gram, 1916.

Balance July 1, 1916.....	\$661.09							
Expenditures by titles:								
S.....	562.61				\$562.61			
Unexpended balance.....	98.48							
	\$661.09							

6185. Committee to investigate cost of United States armor plant, 1916.

Balance July 1, 1916.....	\$4,561.57							
Unexpended balance.....	4,561.57							

6104. Aeronautics, Navy, 1916.

Balance July 1, 1916.....	\$24,497.14					
Expenditures by titles:			\$4,364.05		\$316,200.98	
A.....	330,565.03				408.20	
B.....	408.20				5,910.69	
P.....	5,910.69				64,501.34	
R.....	64,501.34				2,247.00	
S.....	2,247.00				12,523.69	
V.....	12,523.69				18.60	
Y.....	18.60					
X.....	3.12					
Miscellaneous adjustments.....	3.12					
Total expenditures.....	406,172.67		4,364.05		401,810.50	
Unexpended balance.....	118,319.47					
	\$24,497.14					

6107. Advisory Committee for Aeronautics, 1916.

Balance July 1, 1916.....	\$2,938.35					
Miscellaneous receipts.....	4.77					
	2,938.12					
Expenditures by titles:					\$2,378.96	
V.....	2,761.26					
Miscellaneous adjustments.....	173.24					\$382.30
Total expenditures.....	2,934.50				2,378.96	
Unexpended balance.....	3.62					
	2,938.12					

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

6104. Arming and equipping Naval Militia, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$46,096.13							
Miscellaneous receipts.....	16.40							
	46,112.53							
Expenditures by titles:								
B.....	988.89					\$398.89		
C.....	183.74				\$183.42			
V.....	23,374.84				13,980.78	761.28	\$8,642.88	
X.....	5,365.65							
Miscellaneous adjustments.....								
Total expenditures.....	29,312.90				14,164.20	1,160.17	8,642.88	
Carried to surplus fund.....	16,799.59							
Unexpended balance.....	46,112.53							

6109. Arms, Uniforms, equipment, etc., Naval Militia, 1914.

Balance July 1, 1916.....	\$27,719.19							
Expenditures by titles:								
B.....	37.36					\$37.36		
C.....	249.60				\$41.40	188.20		
V.....	22,009.09				19,411.93	768.97	\$1,828.10	
X.....	5,365.65							
Y.....	2,122.67							
Miscellaneous adjustments.....								
Total expenditures.....	24,412.33				19,473.33	994.23	1,828.10	
Unexpended balance.....	3,306.86							
	\$7,719.19							

6110. Relief of inhabitants, American Samoa, hurricane damages 1915-16.

Balance July 1, 1916.....	\$1,665.04								
Unexpended balance.....	1,665.04								
6301. Maintenance, Yards and Docks, 1916.									
Balance July 1, 1916.....	\$84,672.38								
Miscellaneous receipts.....	2,098.06								
101,376.43									
Expenditures by titles:									
E.....	34,572.13							\$84,672.13	
F.....	247.35							247.35	
G.....	31,280.12							29,690.24	
S.....	5,841.16		\$398.60		\$1,021.28			5,798.68	
V.....	10,107.40				74.27			7,931.19	\$2,176.21
Total expenditures.....	82,068.15		398.60		1,095.55			78,397.79	2,176.21
Carried to surplus fund.....	2,991.43								
Unexpended balance.....	16,316.85								
101,376.43									

6302. Repairs and preservation, 1916.

Balance July 1, 1916.....	\$10,697.02								
Miscellaneous receipts.....	7.36								
10,694.37									
Expenditures by titles:									
E.....	1,437.75							\$1,437.75	
F.....	49.57							49.57	
G.....	5,851.46				\$1.57			48.10	
S.....	1,442.69				27.22			5,824.24	
V.....	150.00				650.30			650.30	150.00
Total expenditures.....	8,981.47				679.09			8,352.38	
Carried to surplus fund.....	40.85								
Unexpended balance.....	1,692.05								
10,694.37									

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

603. Contingent, Yards and Docks, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$3,017.57							
Miscellaneous receipts.....	447.60							
	3,465.17							
Expenditures by titles:				\$762.50	\$1,553.50			
F.....	762.50							
G.....	1,553.50							
Total expenditures.....	791.00			762.50	1,553.50			
Unexpended balance.....	2,674.17							
	3,465.17							

6101. Contingent, Navigation, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$2,399.30							
Expenditures by titles:					\$1,312.05		\$881.72	
V.....	2,193.77							
Miscellaneous adjustments.....	10.95							
Total expenditures.....	2,204.72				1,312.05		881.72	
Unexpended balance.....	194.58							
	2,399.30							

6302. Transportation, Navigation, 1916.

Balance July 1, 1916.....	\$106,476.45					
Miscellaneous receipts.....	196.71					
Expenditures by titles:						
V.....						
Miscellaneous adjustments.....	66,733.12			\$52,291.51	\$14,105.13	\$336.49
Total expenditures.....	74,267.03			52,291.51	14,105.13	336.49
Unexpended balance.....	32,435.63					
Unexpended balance.....	106,672.66					

6303. Recruiting, Navigation, 1916.

Balance July 1, 1916.....	\$8,077.82					
Miscellaneous receipts.....	3,588.76					
Expenditures by titles:						
V.....	11,666.08					
Total expenditures.....	7,112.50			\$7,032.73	79.86	
Carried to surplus fund.....	7,112.50			7,032.73	79.86	
Unexpended balance.....	1,301.30					
Unexpended balance.....	4,552.19					
Unexpended balance.....	11,666.08					

6304. Maintenance, naval auxiliaries, 1916.

Balance July 1, 1916.....	\$112,204.65					
Miscellaneous receipts.....	18,262.34					
Expenditures by titles:						
C.....	93,942.31					
V.....	\$12,343.12			\$2,617.00		\$9,726.12
X.....	1,045.51			195.30		852.21
Miscellaneous adjustments.....	3,729.06			3,729.06		
Total expenditures.....	5,364.98					
Unexpended balance.....	22,452.67			6,539.36		9,726.12
Unexpended balance.....	116,444.98					
Unexpended balance.....	65,942.31					

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

6306. Gunnery exercises, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$14,110.75							
Miscellaneous receipts.....	326.98							
14,437.73								
Expenditures by titles:								
C.....	210.97				\$210.97			
R.....	1,111.27				1,111.27			
S.....	427.93			\$3.00	424.93			
V.....	6,318.20				466.39		\$1,379.77	\$4,442.04
Total expenditures.....	8,068.37			3.00	2,243.56		1,379.77	4,442.04
Carried to surplus fund.....	9,144.00							
Unexpended balance.....	6,225.36							
14,437.73								

6306. Steaming exercises, 1916.

Balance July 1, 1916.....	\$1,658.87							
Miscellaneous receipts.....	4.00							
1,662.87								
Expenditures by titles:								
V.....	1,266.80						\$1,266.80	
Unexpended balance.....	396.07							
1,662.87								

6308. Outfits on first enlistment, 1916.

Balance July 1, 1916.....	\$41,997.88								
Expenditures by titles:									
A.....	27,868.16								\$27,868.16
Miscellaneous adjustments.....	23,028.07								
Total expenditures.....	50,896.23								
Unexpended balance.....	8,868.96								27,868.16
	41,997.88								

6309. Instruments and supplies, 1916.

Balance July 1, 1916.....	\$35,904.68								
Miscellaneous receipts.....	36,892.26								
Expenditures by titles:									
B.....	248.07								
C.....	1,635.27					\$172.35			
D.....	1,770.51					1,196.22		\$75.72	
E.....	6,559.54					1,770.51		118.45	\$618.60
K.....	2,914.34					5,559.54			
P.....	1,284.30					2,914.34			
G.....	1,933.76					1,284.30			
S.....	31.90					308.82			
V.....	1,941.96					594.53		515.91	843.34
X.....								31.90	
Miscellaneous adjustments.....									
Total expenditures.....	17,846.39					13,802.61		741.88	1,361.94
Carried to surplus fund.....	1,127.16								
Unexpended balance.....	17,916.71								
	36,892.26								

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

630. Ocean and lake surveys, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$20,627.16							
Miscellaneous receipts.....	3,172.37							
	23,799.53							
Expenditures by titles:								
B.....	2,457.25				\$2,457.25			
C.....	54.70				54.70			
V.....	9,639.97				266.44		\$9,373.53	
Total expenditures.....	12,151.92				2,778.39		9,373.53	
Unexpended balance.....	11,647.61							
	23,799.53							

631. Naval training station, Rhode Island, 1916.

Balance July 1, 1916.....	\$427.56							
Miscellaneous receipts.....	23.96							
	403.60							
Expenditures by titles:								
S.....	249.74				\$249.74			
Miscellaneous adjustments.....	241.17							
Total expenditures.....	490.91				249.74			
Unexpended balance.....	87.57							
	403.60							

6312. Naval training station, St. Helena, Va., 1916.

Balance July 1, 1916.....	\$236.26				
Expenditures by titles:					
C.....	281.05			\$281.05	
G.....	88.75			88.75	
Total expenditures.....	369.80			369.80	
Unexpended balance.....	735.54				
	236.26				

6313. Naval training station, Great Lakes, 1916.

Balance July 1, 1916.....	\$680.37				
Expenditures by titles:					
S.....	670.89			\$670.89	
Miscellaneous adjustments.....	211.67				
Total expenditures.....	782.56			570.89	
Unexpended balance.....	102.19				
	680.37				

6314. Naval training station, California, 1916.

Balance July 1, 1916.....	\$1,803.36				
Miscellaneous receipts.....	10.10				
	1,819.46				
Expenditures by titles:					
S.....	162.08			\$162.08	
Unexpended balance.....	1,657.38				
	1,819.46				

6315. Naval War College, 1916.

Balance July 1, 1916.....	\$1,726.04				
Expenditures by titles:					
S.....	1,242.48			\$1,242.48	
Unexpended balance.....	483.56				
	1,726.04				

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

6316. Naval Home, Philadelphia, Pa., 1916.

	Total.	Lebor.	Indirect.	Material applied by yard labor.	Publio vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$7, 527. 71							
Miscellaneous receipts.....	768. 47							
	8, 596. 18							
Expenditures by titles:								
B.....	372. 66				\$372. 66			
R.....	7, 107. 53				7, 107. 53			
V.....	510. 94				288. 00		\$258. 94	
Total expenditures.....	7, 998. 53				7, 738. 19		258. 94	
Miscellaneous adjustments.....	1. 40							
Unexpended balance.....	897. 65							
	8, 596. 18							

6317. Pay, Naval Academy, 1916.

Balance July 1, 1916.....	\$1, 493. 63							
Miscellaneous adjustments.....	166. 67							
Unexpended balance.....	1, 326. 96							
	1, 493. 63							

6318. Current and miscellaneous expense, Naval Academy, 1916.

Balance July 1, 1916.....	\$12, 153. 19							
Expenditures by titles:								
B.....	8, 992. 48				\$3, 992. 48			
R.....	784. 77				784. 77			
V.....	352. 42				352. 42			
Total expenditures.....	5, 129. 67				5, 129. 67			
Unexpended balance.....	7, 023. 52							
	12, 153. 19							

639. Maintenance and repairs, Naval Academy, 1916.

Balance July 1, 1916.....	84,217.70						
Miscellaneous receipts.....	112.17						
	4,329.87						
Expenditures by titles:							
R.....	162.75			\$162.75			
S.....	2,996.51		\$73.13	2,722.38		\$200.00	
V.....	5.76						\$5.76
Total expenditures.....	3,164.02		73.13	2,875.13		200.00	5.76
Carried to surplus fund.....	31.44						
Unexpended balance.....	1,144.41						
	4,329.87						

6401. Ordnance and ordnance stores, 1916.

Balance July 1, 1916.....	8073,166.08						
Miscellaneous receipts.....	21,156.90						
	994,322.98						
Expenditures by titles:							
B.....	384.45			\$384.45			
C.....	3,059.47			3,059.47			
D.....	193.50			193.50			
K.....	4,946.21			4,946.21			
L.....	1,824.22			1,824.22			
E.....	4,259.12			4,259.12			
F.....	12,636.19			12,636.19			
G.....	1,068.22			1,068.22			
H.....	4,218.52			4,218.52			
I.....	13,705.52			13,705.52			
J.....	639,479.20			639,479.20			
X.....	10.24			10.24			
Miscellaneous adjustments:							
Total expenditures.....	686,113.27		8.50	687,628.95		10,861.05	17,363.07
Carried to surplus fund.....	1,357.47						
Unexpended balance.....	306,852.24						
	994,322.98						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.
6402. Contingent, Ordnance, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$3,349.97							
Expenditures by titles:								
G.....	4.51				\$4.51			
S.....	101.32				101.32			
V.....	255.12				251.87		\$3.25	
X.....	40.75				40.75			
Total expenditures.....	401.70				398.45		3.25	
Unexpended balance.....	2,948.27							
	3,349.97							

6403. Repairs, Ordnance, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$4,765.76							
Expenditures by titles:								
R.....	346.60					\$346.60		
S.....	163.24					8.40		
Y.....	1,357.02						\$158.44	
Miscellaneous adjustments.....	20.96						1,357.02	
Total expenditures.....	1,918.63					352.09	1,548.46	
Unexpended balance.....	2,847.23							
	4,765.76							

6404. Torpedo station, 1916.

Balance July 1, 1916.....	\$26,509.99					
Miscellaneous receipts.....	1,524.45					
	28,034.44					
Expenditures by titles:						
B.....	3,890.98					
E.....	890.83					
F.....	7.00					
V.....	20,000.00	\$133.05			\$3,890.98	\$7.00
Miscellaneous adjustments.....						
Total expenditures.....	24,797.91	133.05			4,667.86	7.00
Unexpended balance.....	3,236.53					
	28,034.44					

6406. Naval Gun Factory, Washington, D. C., 1916.

Balance July 1, 1916.....	\$41,862.70					
Miscellaneous receipts.....	2.50					
	41,865.20					
Expenditures by titles:						
E.....	40,669.40					
V.....	8.08					
Total expenditures.....	40,664.48					
Carried to surplus fund.....	2.50					
Unexpended balance.....	1,228.22					
	41,865.20				\$40,669.40	8.08
						40,664.48

6406. Experiments, Ordnance, 1916.

Balance July 1, 1916.....	\$22,817.94					
Expenditures by titles:						
Y.....	1,500.00					
X.....	16,710.00					
Miscellaneous adjustments.....	82.20					
Total expenditures.....	18,292.20					
Unexpended balance.....	4,525.74					
	22,817.94					
					\$1,500.00	16,710.00
						18,210.00

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

6409. New batteries for ships of the Navy, 1916-17.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$88,169.20							
Expenditures by titles:								
V.....	6,170.10			\$6,170.10		\$6,170.10		
X.....	55,917.95				\$62,088.05			
Total expenditures.....	62,088.05			6,170.10	62,088.05	6,170.10		
Unexpended balance.....	26,071.15							
	\$88,169.20							

6411. Torpedoes and appliances, 1916-16.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$339,554.25							
Miscellaneous receipts.....	41,615.56							
	\$81,169.80							
Expenditures by titles:								
C.....	360.22							
G.....	452.82	\$359.98		\$122.84		\$286.42		\$73.80
H.....	41,890.43	41,890.43						
V.....	244.54	140.92	453.15	66.52		16.02		
B, X, and Z.....	712,662.02	329,176.46	447.09	1,380,361.34	\$187,906.19	1,185,827.05		
Indirect expense deducted.....	53.13		53.13					
			447.09					
Indirect expense divided.....		386.06		111.03				
Miscellaneous adjustments.....	25,672.51							
Total expenditures.....	790,876.59	371,621.01		1,380,528.69	187,906.19	1,184,924.61		73.80
Carried to surplus fund.....	1.87							
Unexpended balance.....	190,261.34							
	\$61,169.80							

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.
 FISCAL YEAR 1916—Continued.
 6601. Engineering, 1917.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$548,387.77							
Miscellaneous receipts.....	128,733.79							
	674,121.56							
Expenditures by titles:								
B.....	19,737.12				\$19,453.45	\$283.67		
C.....	26,293.11				699.12	24,587.62	86.57	\$69.80
D.....	146,691.05				139,690.81		9,891.14	
E.....	18,204.55				16,654.20	1,640.35		
F.....	2,124.43		\$87.68	\$60.11	2,303.68			
G.....	56,151.24	\$71.86			56,151.24			
H.....	140,134.24				140,447.30			
I.....	4,698.60	70.14		86.85	4,503.89			
J.....	14,952.76			24.57	8,789.16		6,163.60	
K.....	31,802.40	760.59	141.09	112.03	25,465.19	4,051.40	1,372.10	
L.....	182.96					182.96		
M.....	113.41							
N.....	62							
O.....								
P.....								
Q.....								
R.....								
S.....								
T.....								
U.....								
V.....								
W.....								
X.....								
Y.....								
Z.....								
Miscellaneous adjustments.....								
Total expenditures.....	463,240.57	759.37		143.34	414,148.03	30,696.00	17,433.41	59.80
Carried to surplus fund.....	91,161.05							
Unexpended balance.....	119,719.94							
	674,121.56							

6602. Engineering experimental station, Annapolis, Md., 1916.

Balance July 1, 1916.....	82,140.55							
Expenditures by titles:								
B.....	1,768.35							
F.....	370.20							
Total expenditures.....	2,138.55							
Unexpended balance.....	2.00							
	82,140.55							

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

6704. Maintenance, Supplies and Accounts, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$16,307.38							
Miscellaneous receipts.....	17,266.46							
Expenditures by title:								
B.....	996.25				\$687.75	\$8.50		
C.....	5,126.33				2,047.42	3,061.36	\$17.55	
F.....	837.00				837.00			
R.....	140.00				140.00			
G.....	5,978.54	\$45.36			5,933.18			
S.....	367.43				367.42			
V.....	2,901.12				838.50	141.78	1,920.84	
Total expenditures.....	16,046.96	45.36			10,861.27	3,211.64	1,938.39	
Carried to surplus fund.....	441.71							
Unexpended balance.....	768.09							
	17,266.46							

6705. Freight, Supplies and Accounts, 1916.

Balance July 1, 1916.....	\$31,807.23							
Amount appropriated.....	361,746.97							
Miscellaneous receipts.....	13,187.68							
	385,777.37							
Expenditures by title:								
G.....	1,063.99				\$1,063.99		\$68,706.84	
V.....	208,424.83				136,717.99			
Total expenditures.....	209,488.82				140,781.98		68,706.84	
Unexpended balance.....	144,288.55							
	385,777.37							

6708. Fuel and transportation, 1916.

Balance July 1, 1916.....	\$761,455.40						
Amount appropriated.....	934,059.46						
Miscellaneous receipts.....	5,971.10						
	175,595.10						
Expenditures by titles:							
C.....	157,350.25			\$11,540.02	\$145,674.44		\$165.79
G.....	280.20			280.20			
S.....	967.57	\$312.33		655.24			
V.....	1,832.37			1,427.24	170.95		234.18
Miscellaneous adjustments.....	1,279.97						
Total expenditures.....	161,740.36	312.33		13,902.70	145,845.39		399.97
Carried to surplus fund.....	13,600.48						
Unexpended balance.....	175,595.10						

6801. Medical Department, 1916.

Balance July 1, 1916.....	\$29,552.37						
Amount appropriated.....	65,000.00						
Miscellaneous receipts.....	84,731.33						
Expenditures by titles:							
C.....	402.31			\$335.79	\$1.11		\$65.41
R.....	233.75			233.75			
G.....	451.23			451.23			
S.....	2,768.42	\$2.50		2,770.92			
V.....	5,186.09			3,175.81			2,010.28
X.....	62,822.15			62,496.95			325.20
Miscellaneous adjustments.....	172.26						
Total expenditures.....	72,036.21	\$2.50		69,404.45	1.11		2,400.89
Unexpended balance.....	12,745.12						
	84,731.33						

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1916—Continued.

687. Contingent, Medicine and Surgery, 1916.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$1,496.06							
Amount appropriated.....	35,000.00							
Miscellaneous receipts.....	173.73							
	36,669.79							
Expenditures by titles:								
C.....	1,105.09				\$1,068.31	\$11.78		
E.....	26.60				26.60			
R.....	6,209.45				6,209.45			
G.....	348.14				348.14			
S.....	19,359.66			\$1,168.27	17,190.81	18.78		
V.....	3,560.68				2,019.98		\$1,540.70	
X.....	7,180.56				7,180.56			
Miscellaneous adjustments.....	6.94							
Total expenditures.....	36,797.12			1,168.27	34,058.65	27.96	1,540.70	
Unexpended balance.....	187.55							
	36,669.79							

688. Bringing home remains, officers, etc., Navy Department, 1916-17.

Balance July 1, 1916.....	\$366.26							
Amount appropriated.....	6,000.00							
	6,366.26							
Expenditures by titles:								
V.....	6,176.54				\$4,983.44		\$213.10	
Miscellaneous adjustments.....	316.18							
Total expenditures.....	5,491.72				4,983.44		213.10	
Unexpended balance.....	6,366.26							

6001. Pay, Marine Corps, 1916.

Balance July 1, 1916.....	\$381,542.75								
Amount appropriated.....	70,000.00								
Miscellaneous receipts.....	491.19								
	452,033.94								
Expenditures by titles:									
C.....	7,448.19								
Marine Corps.....	19,680.73			\$1,139.58				\$8,764.42	\$7,448.19
Miscellaneous adjustments.....	280,909.09								9,786.73
Total expenditures.....	308,038.01			1,139.58				8,764.42	17,234.92
Unexpended balance.....	146,895.93								
	452,033.94								

6002. Maintenance, Quartermaster's Department, Marine Corps, 1916.

Balance July 1, 1916.....	\$24,479.38								
Amount appropriated.....	404,024.18								
Miscellaneous receipts.....	140,140.09								
	519,684.95								
Expenditures by titles:									
Marine Corps.....	478,629.56			\$431,897.17		\$732.07		\$45,331.68	\$633.27
Miscellaneous adjustments.....	48,573.83								
Total expenditures.....	527,203.39			431,897.17		732.07		45,331.68	633.27
Unexpended balance.....	7,518.43								
	519,684.95								

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915.

5101. Pay, miscellaneous, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1915.....	\$22,358.87							
Miscellaneous receipts.....	366.06							
	22,724.73							
Expenditures by titles:								
S.....	26.97				\$26.97			
V.....	998.08				701.90		\$106.18	
Total expenditures.....	925.05				728.87		106.18	
Carried to surplus fund.....	24,559.87							
Unexpended balance.....	\$2,660.89							
	22,724.73							

5102. Contingent, Navy, 1915.

Balance July 1, 1915.....	\$21,081.16							
Miscellaneous receipts.....	68.40							
	21,149.56							
Carried to surplus fund.....	36,188.27							
Unexpended balance.....	16,058.71							
	21,149.56							

5103. Contingent, Navy, 1915-16.

Balance July 1, 1916.....	\$101,462.60							
Unexpended balance.....	101,462.60							

5104. Care of lepers, etc., Guam, 1916.

Balance July 1, 1916.....	\$371.76								
Carried to surplus fund.....	371.76								

5107. Advisory Committee for Aeronautics, 1915.

Balance July 1, 1916.....	\$2,040.37								
Miscellaneous adjustments.....	1,907.60								
Carried to surplus fund.....	133.17								
	2,040.37								

5301. Maintenance, Yards and Docks, 1916.

Balance July 1, 1916.....	\$1,200.60								
Miscellaneous receipts.....	2.16								
	1,202.76								
Expenditures by titles:									
G.....	416.88	\$12.00				\$404.88			
Miscellaneous adjustments.....	111.03								
Total expenditures.....	527.91	12.00				404.88			
Carried to surplus fund.....	554.86								
Unexpended balance.....	119.89								
	1,202.76								

5302. Repairs and preservation, 1915.

Balance July 1, 1916.....	\$3,791.09								
Miscellaneous receipts.....	22.00								
	3,813.09								
Carried to surplus fund.....	3,837.28								
Unexpended balance.....	24.19								
	3,813.09								

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5303. Contingent, Yards and Docks, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$475.85							
Carried to surplus fund.....	475.85							

5301. Contingent, Navigation, 1915.

Balance July 1, 1916.....	\$4,306.06							
Miscellaneous adjustments.....	30.19							
Carried to surplus fund.....	4,275.89							
	4,306.06							

5302. Transportation, Navigation, 1915.

Balance July 1, 1916.....	\$221,397.22							
Miscellaneous receipts.....	61.20							
	221,428.42							
Expenditures by titles:								
V.....	117.97				\$51.05		\$66.92	
Miscellaneous adjustments.....	116,606.88							
Total expenditures.....	116,724.85				51.05		66.92	
Carried to surplus fund.....	106,542.05							
Unexpended balance.....	1,886.44							
	221,428.42							

3303. Recruiting, Navigation, 1915.

Balance July 1, 1916.....	\$36,423.03						
Miscellaneous receipts.....	203.50						
	36,626.53						
Carried to surplus fund.....	37,735.69						
Unexpended balance.....	1,109.16						
	36,626.53						

3304. Maintenance, naval auxiliaries, 1915.

Balance July 1, 1916.....	\$20,090.86						
Expenditures by titles:							
V.....	30.26						\$30.26
Miscellaneous adjustments.....	8.40						
Total expenditures.....	38.66						30.26
Carried to surplus fund.....	20,068.99						
Unexpended balance.....	16.79						
	20,090.86						

3305. Gunnery exercises, 1915.

Balance July 1, 1916.....	\$10,627.50						
Expenditures by titles:							
V.....	45.00						\$20.00
Miscellaneous adjustments.....	229.11						\$25.00
Total expenditures.....	274.11						25.00
Carried to surplus fund.....	10,910.38						
Unexpended balance.....	666.69						
	10,627.50						

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5304. Steaming exercises, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$3,555.03							
Expenditures by titles:								
V.....	12.00						\$12.00	
Miscellaneous adjustments.....	2,437.94							
Total expenditures.....	2,439.94						12.00	
Carried to surplus fund.....	1,115.09							
	3,555.03							

5307. Experiments, aviation, 1915.

Balance July 1, 1916.....	\$5,118.95							
Expenditures by titles:								
S.....	1,074.36				\$1,074.36			
Carried to surplus fund.....	4,044.59							
	5,118.95							

5308. Outfits on first enlistment, 1915.

Balance July 1, 1916.....	\$145,277.03							
Expenditures by titles:								
V.....	817.34						\$16.08	\$801.26
Miscellaneous adjustments.....	3,684.33							
Total expenditures.....	4,501.67						16.08	801.26
Carried to surplus fund.....	140,775.36							
Unexpended balance.....	540.68							
	145,277.03							

5309. Instrument and supplies, 1915.

Balance July 1, 1916.....	\$147,867.16				
Miscellaneous receipts.....	2,506.98				
	150,364.14				
Expenditures by titles:					
B.....	35.00	\$35.00			
C.....	45.00			\$45.00	
V.....	245.00	245.00			
Total expenditures.....	325.00	280.00		45.00	
Carried to surplus fund.....	150,039.14				
	150,364.14				

5310. Ocean and lake surveys, 1915.

Balance July 1, 1916.....	\$9,585.32				
Carried to surplus fund.....	9,616.19				
Unexpended balance.....	80.87				
	9,585.32				

5311. Naval training station, Rhode Island, 1915.

Balance July 1, 1916.....	\$189.51				
Miscellaneous receipts.....	120.31				

5312. Naval training station, St. Helen, Va., 1915.

Balance July 1, 1916.....	\$346.23				
Carried to surplus fund.....	346.23				

5313. Naval training station, Great Lakes, 1915.

Balance July 1, 1916.....	\$19,352.88				
Carried to surplus fund.....	19,362.07				
Unexpended balance.....	9.19				
	19,352.88				

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5314. Naval training station, California, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$11.82							
Miscellaneous adjustments.....	2.38							
Carried to surplus fund.....	9.44							
	11.82							

5315. Naval War College, 1915.

Balance July 1, 1916.....	\$1,187.69							
Expenditures by titles:								
8.....	8.09				\$8.09			
Carried to surplus fund.....	1,179.60							
	1,187.69							

5316. Naval Home, Philadelphia, Pa., 1915.

Balance July 1, 1916.....	\$2,043.15							
Miscellaneous receipts.....	1.42							
	2,044.58							
Miscellaneous adjustments.....	2,044.58							

5317. Pay, Naval Academy, 1915.

Balance July 1, 1916.....	\$2,106.53							
Carried to surplus fund.....	2,106.53							

5315. Current and miscellaneous expenses, Naval Academy, 1915.

Balance July 1, 1916.....	5,684.69				
Expenditures by titles:					
S.....	39.88				\$39.88
Carried to surplus fund.....	5,644.81				
	5,684.69				

5319. Maintenance and repairs, Naval Academy, 1915.

Balance July 1, 1916.....	\$5,878.04				
Miscellaneous receipts.....	15.06				
	5,893.10				
Carried to surplus fund.....	5,893.10				

5401. Ordnance and ordnance stores, 1915.

Balance July 1, 1916.....	\$229,864.04				
Miscellaneous receipts.....	191.62				
	230,055.66				
Expenditures by titles:					
B.....	150.00				\$150.00
E.....	11,238.08				11,238.08
R.....	13,048.07				13,048.07
G.....	6.48				
S.....	\$6.48				
8.....	4.00				4.00
V.....	2,022.23				2,022.23
X.....	137,229.27				137,229.27
Miscellaneous adjustments.....	10,647.57				
Total expenditures.....	174,345.70		6.48		163,691.65
Carried to surplus fund.....	55,741.25				
Unexpended balance.....	55,711.29				
	230,055.66				

5408. Experiments, Ordnance, 1915.

Balance July 1, 1916.....	\$39,503.53					
Miscellaneous receipts.....	.01					
	39,503.54					
Carried to surplus fund.....	39,578.54					
Unexpended balance.....	76.00					
	39,503.54					

5108. Arming and equipping Naval Militia, 1915.

Balance July 1, 1916.....	\$9,878.66					
Miscellaneous adjustments.....	81.69					
Carried to surplus fund.....	10,965.07					
Unexpended balance.....	1,168.10					
	9,878.66					

5109. Arms, uniforms, equipment, etc., Naval Militia, 1915.

Balance July 1, 1916.....	\$8,228.04					
Miscellaneous receipts.....	7.20					
	8,235.24					
Expenditures by titles: B.....	32.35					
Carried to surplus fund.....	10,190.41				\$32.35	
Unexpended balance.....	1,987.68					
	8,235.24					

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5409. New batteries, ships of the Navy, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1915.....	\$7,220.54							
Expenditures by titles:								
X.....	91.67				\$91.67			
Carried to surplus fund.....	7,146.40							
Unexpended balance.....	17.68							
	7,220.54							

5410. New batteries, ships of the Navy, 1915-16.

Balance July 1, 1915.....	\$6,059.67							
Miscellaneous receipts.....	1,038.75							
	7,098.42							
Unexpended balance.....	7,098.42							

5411. Torpedoes and appliances, 1915-1917.

Balance July 1, 1915.....	\$302,251.63							
Miscellaneous receipts.....	96,267.11							
	398,518.74							
Expenditures by titles:								
S.....	32,445.65	\$32,445.65						
V.....	14,318.90				\$14,318.90			
B, X, and Z.....	331,949.82	246,998.06		\$832,892.93	7,223.31	\$814,868.60		
Total expenditures.....	378,715.27	299,142.73		332,892.93	21,542.11	\$14,868.60		
Unexpended balance.....	19,803.47							
	398,518.74							

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5314. Naval training station, California, 1915.

	Total.	Lebor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$11.82							
Miscellaneous adjustments.....	2.38							
Carried to surplus fund.....	9.44							
	11.82							

5315. Naval War College, 1915.

Balance July 1, 1916.....	\$1,187.69							
Expenditures by titles:	8.09				\$8.09			
Carried to surplus fund.....	1,179.60							
	1,187.69							

5316. Naval Home, Philadelphia, Pa., 1915.

Balance July 1, 1916.....	\$2,043.16							
Miscellaneous receipts.....	1.42							
Miscellaneous adjustments.....	2,044.58							
	2,044.58							

5317. Pay, Naval Academy, 1915.

Balance July 1, 1916.....	\$2,196.53							
Carried to surplus fund.....	2,196.53							

5312. Current and miscellaneous expenses, Naval Academy, 1915.

Balance July 1, 1916.....	\$5,684.69				
Expenditures by titles:					
B.....	39.88				\$39.88
Carried to surplus fund.....	5,644.81				
	5,684.69				

5319. Maintenance and repairs, Naval Academy, 1915.

Balance July 1, 1916.....	\$5,878.04				
Miscellaneous receipts.....	15.06				
Carried to surplus fund.....	5,883.10				
	5,883.10				

5401. Ordnance and ordnance stores, 1915.

Balance July 1, 1916.....	\$229,864.04				
Miscellaneous receipts.....	191.62				
	230,055.66				
Expenditures by titles:					
B.....	150.00			\$150.00	
E.....	11,238.08			11,238.08	
R.....	13,048.07			13,048.07	
G.....	6.48	\$6.48			
S.....	4.00			4.00	
V.....	2,022.23			2,022.23	
X.....	137,229.27			137,229.27	
Miscellaneous adjustments.....	10,647.57				
Total expenditures.....	174,345.70	6.48		163,691.65	
Carried to surplus fund.....	55,741.25				
Unexpended balance.....	51.29				
	230,055.66				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.
 5402. Contingent, Ordnance, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$3,077.77							
Expenditures by titles:								
V.....	1.50				\$1.50			
Carried to surplus fund.....	3,076.27							
	3,077.77							

5403. Repairs, Ordnance, 1915.

Balance July 1, 1916.....	\$1,631.48							
Carried to surplus fund.....	1,631.48							

5404. Torpedo station, 1915.

Balance July 1, 1916.....	\$1,945.83							
Carried to surplus fund.....	1,945.83							

5405. Naval Gun Factory, Washington, D. C., 1915.

Balance July 1, 1916.....	\$6,800.02							
Expenditures by titles:								
E.....	8,010.00				\$8,010.00			
Carried to surplus fund.....	790.02							
	6,800.02							

5406. Experiments, Ordnance, 1915.

Balance July 1, 1916.....	\$39,503.53					
Miscellaneous receipts.....	.01					
	39,503.54					
Carried to surplus fund.....	39,578.54					
Unexpended balance.....	76.00					
	39,503.54					

5105. Arming and equipping Naval Militia, 1915.

Balance July 1, 1916.....	\$9,878.66					
Miscellaneous adjustments.....	81.69					
Carried to surplus fund.....	10,965.07					
Unexpended balance.....	1,188.10					
	9,878.66					

5109. Arms, uniforms, equipment, etc., Naval Militia, 1915.

Balance July 1, 1916.....	\$8,228.04					
Miscellaneous receipts.....	7.20					
	8,235.24					
Expenditures by titles:						
B.....	32.35				\$32.35	
Carried to surplus fund.....	10,190.41					
Unexpended balance.....	1,987.62					
	8,235.24					

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5409. New batteries, ships of the Navy, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1915.....	\$7,220.54							
Expenditures by titles:								
X.....	91.67				891.67			
Carried to surplus fund.....	7,146.49							
Unexpended balance.....	17.69							
	7,220.54							

5410. New batteries, ships of the Navy, 1915-16.

Balance July 1, 1915.....	\$6,059.67							
Miscellaneous receipts.....	1,038.75							
Unexpended balance.....	7,098.42							
	7,098.42							

5411. Torpedoes and appliances, 1915-1917.

Balance July 1, 1915.....	\$302,251.63							
Miscellaneous receipts.....	96,267.11							
	398,518.74							
Expenditures by titles:								
B.....	32,446.65	\$32,446.65						
V.....	14,318.80				\$14,318.80			
B, X, and Z.....	331,949.82	206,696.06			7,228.31	\$14,869.60		
	\$332,692.93							
Total expenditures.....	378,715.27	239,142.73			21,542.11	\$14,869.60		
Unexpended balance.....	19,803.47							
	398,518.74							

5501. Construction and Repair, 1915.

Balance July 1, 1915.....	\$192,373.59								
Miscellaneous receipts.....	5,336.99								
	198,710.58								
Expenditures by titles:									
A.....	38,983.76					\$38,983.76			
B.....	3,690.00					3,690.00	\$894.60		
C.....	1,334.98					1,334.98			
D.....	4,467.90					4,467.90			
E.....	2,084.10					2,084.10			
G.....	6,374.05					6,267.15			\$106.90
Total expenditures.....	57,819.39					56,827.89	894.60		106.90
Carried to surplus fund.....	141,083.10								
Unexpended balance.....	198,710.58								

5502. Construction, plants at navy yards, 1915.

Balance July 1, 1915.....	\$20,328.10								
Miscellaneous receipts.....	1,049.06								
	21,375.16								
Expenditures by titles:									
E.....	5,889.53					5,889.53			
Carried to surplus fund.....	15,485.63								
	21,375.16								

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

6601. Engineering, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$40,755.93							
Amount appropriated.....	35,000.00							
Miscellaneous receipts.....	5,387.64							
	81,143.57							
Expenditures by titles:								
C.....	9.00				\$9.00			
D.....	33.10				33.10			
S.....	3.60				3.60			
V.....	62.77						\$62.77	
Miscellaneous adjustments.....	18,933.12							
Total expenditures.....	19,041.59				45.70		62.77	
Carried to surplus fund.....	21,270.94							
Unexpended balance.....	40,831.04							
	81,143.57							

6602. Engineering experimental station, Annapolis, Md., 1915.

Balance July 1, 1916.....	\$1,264.57							
Expenditures by titles:								
R.....	1,133.12				\$1,133.12			
Carried to surplus fund.....	131.45							
	1,264.57							

5701. Pay of the Navy, 1915.

Balance July 1, 1915.....	\$1,081,014.68						
Amount appropriated.....	852,953.30						
Miscellaneous receipts.....	100,311.65						
	32,250.37						
Expenditures by titles:							
S.....	4.26						\$4.26
V.....	14,393.30				\$855.90		\$13,537.40
Total expenditures.....	14,397.56				855.90		13,537.40
Unexpended balance.....	17,852.51						4.26
	32,250.37						

5702. Provisions, Navy, 1915-16.

Balance July 1, 1915.....	\$113,655.69						
Miscellaneous receipts.....	16,443.80						
	130,109.49						
Expenditures by titles:							
C.....	19.20				\$19.20		
S.....	9.00				9.00		
X.....	61,808.60				61,650.15		\$158.45
Total expenditures.....	61,836.80				61,678.35		158.45
Unexpended balance.....	68,272.69						
	130,109.49						

5704. Maintenance, Supplies and Accounts, 1915.

Balance July 1, 1915.....	\$102,027.54						
Expenditures by titles:							
P.....	68.00				\$62.00		
G.....	4.15				4.15		
V.....	8,515.67				8,515.67		
Miscellaneous adjustments.....	8,656.74						
Total expenditures.....	17,290.56				8,612.82		
Earned to surplus fund.....	84,708.91						
Unexpended balance.....	62.07						
	102,027.54						

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.
5705. Freight, Supplies and Accounts, 1915.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1915.....	\$181,802.74							
Amount appropriated.....	149,715.37							
Miscellaneous receipts.....	1,310.36							
	29,222.99							
Expenditures by titles:								
V.....	3,229.10				\$479.49		\$2,759.61	
Carried to surplus fund.....	191.66							
Unexpended balance.....	25,792.23							
	29,222.99							

5708. Coal and transportation, 1915.

Balance July 1, 1915.....	\$314,160.08							
Amount appropriated.....	326,457.94							
	6,337.81							
Expenditures by titles:								
C.....	\$ 173.61				\$18.00	\$8,198.61		
Miscellaneous adjustments.....	23,088.39							
Total expenditures.....	19,909.75				18.00	\$8,198.61		
Unexpended balance.....	15,371.97							
	6,337.81							

5710. Naval Reserve, 1915-16.

Balance July 1, 1915.....	\$115, 775. 23					
Miscellaneous receipts.....	37. 50					
	115, 812. 73					
Expenditures by titles:						
G.....	2, 628. 65					\$38. 27
S.....	112, 148. 95		\$2, 500. 38			
Miscellaneous adjustments.....						
Total expenditures.....	115, 775. 60		2, 500. 38			38. 27
Unexpended balance.....	41. 13					
	115, 816. 73					

5801. Medical Department, 1915.

Balance July 1, 1915.....	\$7, 820. 69					
Amount appropriated.....	7, 011. 91					
Miscellaneous receipts.....	1, 190. 94					
	381. 76					
Unexpended balance.....	381. 76					

5802. Contingent, Medicine and Surgery, 1915.

Balance July 1, 1915.....	\$15, 188. 34					
Expenditures by titles:						
G.....	42. 00				\$12. 00	
S.....	60. 35				60. 35	
Miscellaneous adjustments.....	91. 40					
Total expenditures.....	193. 75				102. 35	
Carried to surplus fund.....	16, 046. 57					
Unexpended balance.....	60. 98					
	15, 188. 34					

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1915—Continued.

5803. Bringing home remains of officers, etc., 1914-15.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$936.58							
Amount appropriated.....	939.40							
Miscellaneous receipts.....	21.33							
	44.40							
Expenditures by titles:								
"v.....	36.06						\$36.06	
Unexpended balance.....	8.34							
	44.40							

5901. Pay, Marine Corps, 1915.

Balance July 1, 1916.....	\$38,330.36							
Expenditures by titles:								
Marine Corps.....	321.69						\$321.69	
Miscellaneous adjustments.....	11,784.85							
Total expenditures.....	12,106.54						321.69	
Carried to surplus fund.....	22,304.22							
Unexpended balance.....	3,919.60							
	38,330.36							

408. Maintenance, Quartermaster's Department, Marine Corps, 1915

Balance July 1, 1916.....	\$1,884.94						
Miscellaneous receipts.....	24.08						
	1,909.02						
Expenditures by titles:							
Marine Corps.....	385.43				\$129.30		\$256.13
Miscellaneous adjustments.....	877.79						
Total expenditures.....	1,263.22				129.30		256.13
Carried to surplus fund.....	100,540.67						
Unexpended balance.....	89,844.87						
	1,909.02						

FISCAL YEAR 1914

4101. Pay, miscellaneous, 1914.

Balance July 1, 1916.....	\$1,325.77						
Miscellaneous adjustments.....	52,031.02						
Carried to surplus fund.....	16.86						
Unexpended balance.....	60,722.10						
	1,325.77						

4102. Contingent, Navy, 1914

Balance July 1, 1916.....	\$358.36						
Carried to surplus fund.....	358.36						

4901. Maintenance, Yards and Docks, 1914.

Balance July 1, 1916.....	\$3,598.58						
Amount appropriated.....	670.64						
Miscellaneous receipts.....	2,760.15						
Carried to surplus fund.....	32.27						
	32.27						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.

4902. Repairs and preservation, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$777.47							
Miscellaneous receipts.....	802.24							
Carried to surplus fund.....	24.77							
	24.77							

4903. Transportation, Navigation, 1914.

Balance July 1, 1916.....	\$1,159.86							
Miscellaneous receipts.....	1,015.05							
	124.81							
Expenditures by titles:								
Y.....	1.00						\$1.00	
Carried to surplus fund.....	53.43							
Unexpended balance.....	177.24							
	124.81							

4903. Recruiting, Navigation, 1914.

Balance July 1, 1916.....	\$74.23							
Miscellaneous receipts.....	77.02							
Carried to surplus fund.....	2.80							
	2.80							

4303. Credits on first enlistment, 1914.

Balance July 1, 1916.....	\$89,689.86								
Miscellaneous receipts.....	26,743.96								
	74.00								
Expenditures by titles:									
V.....	101.83								\$101.83
Unexpended balance.....	47.83								
	74.00								

4401. Ordnance and ordnance stores, 1914.

Balance July 1, 1916.....	\$1,695.04								
Miscellaneous receipts.....	2,691.05								
Carried to surplus fund.....	695.01								
	695.01								

4501. Construction and Repair, 1914.

Miscellaneous receipts.....	\$1,435.26								
Miscellaneous adjustments.....	381.65								
Carried to surplus fund.....	1,490.61								
Unexpended balance.....	47.00								
	1,435.26								

4601. Steam machinery, 1914.

Miscellaneous receipts.....	\$3,312.12								
Carried to surplus fund.....	3,390.12								
Unexpended balance.....	8.00								
	3,312.12								

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.

4701. Pay of the Navy, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$13,652.15							
Miscellaneous receipts.....	35.00							
	13,687.15							
Miscellaneous adjustments.....	13,321.40							
Carried to surplus fund.....	365.75							
	13,687.15							

4703. Provisions, Navy, 1914-15.

Balance July 1, 1916.....	\$46,466.13							
Amount appropriated.....	46,614.95							
Miscellaneous receipts.....	7,592.15							
	7,740.97							
Expenditures by titles:								
C.....	25.24				\$25.24			
X.....	9.12						\$9.12	
Total expenditures.....	34.36							
Unexpended balance.....	7,706.61							
	7,740.97							

4704. Maintenance, Supplies and Accounts, 1914.

Miscellaneous receipts.....	\$5.56							
Miscellaneous adjustments.....	5.00							
Carried to surplus fund.....	.56							
	5.56							

4705. Freight, Supplies and Accounts, 1914.

Balance July 1, 1916.....	\$10, 185.27				
Miscellaneous receipts.....	1, 182.46				
	11, 267.73				
Expenditures by titles:					
V.....	989.80				\$989.80
Carried to surplus fund.....	10, 278.97				
Unexpended balance.....	1, 008.76				
	11, 287.73				

4706. Equipment of vessels, 1914.

Miscellaneous receipts.....	\$275.40				
Miscellaneous adjustments.....	40				
Carried to surplus fund.....	275.00				
	275.40				

4706. Coal and transportation, 1914.

Balance July 1, 1916.....	\$16, 760.76				
Amount appropriated.....	12, 445.28				
Miscellaneous receipts.....	4, 345.51				

4801. Medical Department, 1914.

Miscellaneous receipts.....	\$11.28				
Carried to surplus fund.....	11.28				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.

4902. Contingent, Medicine and Surgery, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$69.55							
Miscellaneous receipts.....	6.49							
	76.04							
Miscellaneous adjustments.....	6.49							
Carried to surplus fund.....	69.55							
	76.04							

4903. Bringing home remains of officers, etc., 1914.

Balance July 1, 1916.....	\$157.57							
Carried to surplus fund.....	157.57							

4901. Pay, Marine Corps, 1914.

Balance July 1, 1916.....	\$3,725.11							
Miscellaneous receipts.....	95.60							
	3,820.71							
Miscellaneous adjustments.....	3,864.65							
Unexpended balance.....	43.94							
	3,820.71							

4902. Maintenance, Quartermaster's Department, Marine Corps, 1914.

Balance July 1, 1916.....	\$195,052.20				
Miscellaneous receipts.....	8.30				
Expenditures by titles:					
Marine Corps.....	3.47				\$3.47
Carried to surplus fund.....	195,057.03				
	195,060.50				

FISCAL YEAR 1913 AND PRIOR YEARS.

3101. Pay, miscellaneous, 1913.

Balance July 1, 1916.....	\$6,768.62				
Amount appropriated.....	94.50				
Miscellaneous receipts.....	1,933.55				
Expenditures by titles:					
V.....	8,796.67				
Carried to surplus fund.....	94.50				\$94.50
	8,692.17				
	8,786.67				

3201. Maintenance, Yards and Docks, 1913.

Miscellaneous receipts.....	\$7.00				
Carried to surplus fund.....	7.00				

3302. Transportation, Navigation, 1913.

Balance July 1, 1916.....	\$57.86				
Expenditures by titles:					
V.....	1.60				\$1.60
Carried to surplus fund.....	56.36				
	57.86				

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.
4902. Contingent, Medicine and Surgery, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$69.55							
Miscellaneous receipts.....	6.49							
	76.04							
Miscellaneous adjustments. Carried to surplus fund.....	6.49							
	69.55							
	76.04							

4903. Bringing home remains of officers, etc., 1914.

Balance July 1, 1916.....	\$157.57							
Carried to surplus fund.....	157.57							

4901. Pay, Marine Corps, 1914.

Balance July 1, 1916.....	\$3,725.11							
Miscellaneous receipts.....	95.60							
	3,820.71							
Miscellaneous adjustments. Unexpended balance.....	3,804.65							
	45.64							
	3,820.71							

4902. Maintenance, Quartermaster's Department, Marine Corps, 1914.

Balance July 1, 1916.....	\$195,052.20						
Miscellaneous receipts.....	8.30						
	195,060.50						
Expenditures by titles:							
Marine Corps.....	3.47					\$3.47	
Carried to surplus fund.....	195,057.03						
	195,060.50						

FISCAL YEAR 1913 AND PRIOR YEARS.

3101. Pay, miscellaneous, 1913.

Balance July 1, 1916.....	\$6,753.62						
Amount appropriated.....	94.50						
Miscellaneous receipts.....	1,833.55						
	8,786.67						
Expenditures by titles:							
V.....	94.50					\$94.50	
Carried to surplus fund.....	8,692.17						
	8,786.67						

3201. Maintenance, Yards and Docks, 1913.

Miscellaneous receipts.....	\$7.00						
Carried to surplus fund.....	7.00						

3302. Transportation, Navigation, 1913.

Balance July 1, 1916.....	\$57.86						
Expenditures by titles:							
V.....	1.60					\$1.60	
Carried to surplus fund.....	56.36						
	57.86						

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.

4302. Repairs and preservation, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$777.47							
Miscellaneous receipts.....	802.24							
Carried to surplus fund.....	24.77							
	24.77							

4303. Transportation, Navigation, 1914.

Balance July 1, 1916.....	\$1,182.86							
Miscellaneous receipts.....	1,016.06							
	184.81							
Expenditures by titles:								
y.....	1.00							
Carried to surplus fund.....	53.43						\$1.00	
Unexpended balance.....	177.84							
	184.81							

4303. Recruiting, Navigation, 1914.

Balance July 1, 1916.....	\$74.22							
Miscellaneous receipts.....	77.02							
Carried to surplus fund.....	2.80							
	2.80							

4504. Outfits on first enlistment, 1914.

Balance July 1, 1916.....	\$29,692.96								
Miscellaneous receipts.....	26,743.96								
	74.00								
Expenditures by titles:									
V.....	101.83								\$101.83
Unexpended balance.....	27.85								
	74.00								

4401. Ordnance and ordnance stores, 1914.

Balance July 1, 1916.....	\$1,698.01								
Miscellaneous receipts.....	2,691.05								
Carried to surplus fund.....	695.01								
	695.01								

4501. Construction and Repair, 1914.

Miscellaneous receipts.....	\$1,435.26								
Miscellaneous adjustments.....	381.65								
Carried to surplus fund.....	1,490.01								
Unexpended balance.....	457.00								
	1,435.26								

4601. Steam machinery, 1914.

Miscellaneous receipts.....	\$3,312.12								
Carried to surplus fund.....	3,320.12								
Unexpended balance.....	8.00								
	3,312.12								

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.

4701. Pay of the Navy, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$13,682.15							
Miscellaneous receipts.....	35.00							
	13,687.15							
Miscellaneous adjustments.....	13,321.40							
Carried to surplus fund.....	365.75							
	13,687.15							

4702. Provisions, Navy, 1914-15.

Balance July 1, 1916.....	\$16,466.13							
Amount appropriated.....	46,614.96							
Miscellaneous receipts.....	7,592.15							
	7,740.97							
Expenditures by titles:								
C.....	26.24							
X.....	9.12				\$25.24		\$9.12	
Total expenditures.....	34.36							
Unexpended balance.....	7,706.61							
	7,740.97							

4704. Maintenance, Supplies and Accounts, 1914.

Miscellaneous receipts.....	\$5.56							
Miscellaneous adjustments.....	5.00							
Carried to surplus fund.....	.56							
	5.56							

4705. Freight, Supplies and Accounts, 1914.

Balance July 1, 1914.....	\$10,185.27						
Miscellaneous receipts.....	1,182.46						
	11,367.73						
Expenditures by titles:							
V.....	989.80					\$989.80	
Carried to surplus fund.....	10,377.97						
Unexpended balance.....	3.04						
	11,367.73						

4706. Equipment of vessels, 1914.

Miscellaneous receipts.....	\$275.40						
Miscellaneous adjustments.....	.40						
Carried to surplus fund.....	275.00						
	275.40						

4708. Coal and transportation, 1914.

Balance July 1, 1914.....	\$16,780.79						
Amount appropriated.....	12,445.28						
Miscellaneous receipts.....	4,345.51						

4801. Medical Department, 1914.

Miscellaneous receipts.....	\$11.26						
Carried to surplus fund.....	11.26						

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1914—Continued.

4902. Contingent, Medicine and Surgery, 1914.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$69.55							
Miscellaneous receipts.....	6.49							
	76.04							
Miscellaneous adjustments.....	6.49							
Carried to surplus fund.....	69.55							
	76.04							

4903. Bringing home remains of officers, etc., 1914.

Balance July 1, 1916.....	\$157.57							
Carried to surplus fund.....	157.57							

4904. Pay, Marine Corps, 1914.

Balance July 1, 1916.....	\$3,725.11							
Miscellaneous receipts.....	85.60							
	3,810.71							
Miscellaneous adjustments.....	3,864.65							
Unexpended balance.....	43.94							
	3,820.71							

4902. Maintenance, Quartermaster's Department, Marine Corps, 1914.

Balance July 1, 1916.....	\$196,002.20				
Miscellaneous receipts.....	8.30				
	196,000.50				
Expenditures by titles:					
Marine Corps.....	3.47			\$3.47	
Carried to surplus fund.....	196,067.03				
	196,060.50				

FISCAL YEAR 1913 AND PRIOR YEARS.

3101. Pay, miscellaneous, 1913.

Balance July 1, 1916.....	\$6,768.62				
Amount appropriated.....	94.50				
Miscellaneous receipts.....	1,933.55				
	8,796.67				
Expenditures by titles:					
v.....	94.50			\$94.50	
Carried to surplus fund.....	8,692.17				
	8,786.67				

3201. Maintenance, Yards and Docks, 1913.

Miscellaneous receipts.....	\$7.00				
Carried to surplus fund.....	7.00				

3302. Transportation, Navigation, 1913.

Balance July 1, 1916.....	\$57.86				
Expenditures by titles:					
v.....	1.50			\$1.50	
Carried to surplus fund.....	56.36				
	57.86				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1913 AND PRIOR YEARS—Continued.

3303. Recruiting Navigation, 1913.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$6.95							
Carried to surplus fund.....	6.95							

3308. Outfits on first enlistment, 1913.

Balance July 1, 1916.....	\$19.78							
Miscellaneous receipts.....	15.60							
	53.68							
Expenditures by titles:								
Y.....	4.19							45.19
Unexpended balance.....	53.87							
	53.68							

3451. Ammunition for ships of the Navy, 1913.

Amount appropriated.....	\$180,873.50							
Expenditures by titles:								
X.....	53,684.30				\$23,686.30			
Unexpended balance.....	127,189.20							
	180,873.50							

3411. Torpedoes and appliances, 1913.

Amount appropriated.....	\$13,983.52							
Unexpended balance.....	13,983.52							

3601. Construction and Repair, 1913.

Amount appropriated.....	\$9.89				
Miscellaneous receipts.....	1.04				
	10.93				
Expenditures by titles:					
D.....	9.89			\$9.89	
Carried to surplus fund.....	1.04				
	10.93				

3601. Steam Machinery, 1913.

Balance July 1, 1913.....	\$9,682.76				
Amount appropriated.....	427.13				
Miscellaneous receipts.....	2,868.76				
	427.13				
Expenditures by titles:					
C.....	18.85			\$18.85	
D.....	12.28			12.28	
E.....	386.00			386.00	
Total expenditures.....	427.13			427.13	

3701. Pay of the Navy, 1913.

Balance July 1, 1913.....	\$308.19				
Miscellaneous receipts.....	426.54				
Carried to surplus fund.....	118.35				
	118.35				

3702. Provisions, Navy, 1913.

Miscellaneous receipts.....	\$20.96				
Miscellaneous adjustments.....	18.82				
Carried to surplus fund.....	2.14				
	20.96				

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1913 AND PRIOR YEARS—Continued.

3705. Freight, Supplies and Accounts, 1913.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance, July 1, 1916.....	\$19,448.71							
Miscellaneous receipts.....	2,061.14							
	21,494.85							
Expenditures by titles:								
Carried to surplus fund.....	176.87						\$176.87	
	21,671.82							
	21,494.85							

3706. Coal and transportation, 1913.

Balance July 1, 1916.....	\$4,737.48							
Miscellaneous receipts.....	4.71							
	4,732.19							
Carried to surplus fund.....	4,732.19							

3803. Bringing home remains, etc., 1913.

Balance July 1, 1916.....	\$364.55							
Miscellaneous receipts.....	401.20							
	765.75							
Carried to surplus fund.....	765.75							

2001. Pay, Marine Corps, 1913.

Balance July 1, 1913.....	841.60				
Miscellaneous receipts.....	41.10				
Carried to surplus fund.....	.60				
	.60				

2003. Provisions, Marine Corps, 1913.

Miscellaneous receipts.....	\$513.91				
Miscellaneous adjustments.....	513.91				

2101. Pay, miscellaneous, 1913.

Balance July 1, 1913.....	\$2.00				
Amount appropriated.....	4.30				
Miscellaneous receipts.....	1.24				
	7.54				
Expenditures by titles:					
V.....	4.30			\$4.30	
Carried to surplus fund.....	12.00				
Unexpended balance.....	8.76				
	7.54				

2302. Transportation, Navigation, 1913.

Balance July 1, 1913.....	\$17.02				
Miscellaneous receipts.....	18.77				
	35.79				
Miscellaneous adjustments.....	53.93				
Carried to surplus fund.....	17.02				
Unexpended balance.....	56.16				
	35.79				

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1913 AND PRIOR YEARS—Continued.

2998. Outfits on first enlistment, 1912.

	Total.	Laber.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	452.41							
Miscellaneous receipts.....	90.45							
Miscellaneous adjustments.....	38.04							
	38.04							

2701. Pay of the Navy, 1912.

Balance July 1, 1916.....	688.65							
Miscellaneous receipts.....	117.39							
Carried to surplus fund.....	29.14							
	29.14							

2702. Provisions, Navy, 1912.

Miscellaneous receipts.....	927.03							
Miscellaneous adjustments.....	927.03							

2708. Coal and transportation, 1912.

Amount appropriated.....	\$15.84							
Expenditures by titles:								
8.....	15.84				\$15.84			

2801. Pay, Marine Corps, 1912.

Miscellaneous receipts.....	\$10.00							
Carried to surplus fund.....	10.00							

1909. Outfits on first enlistment, 1911.

Balance July 1, 1916.....	688.04				
Miscellaneous receipts.....	38.04				

1701. Pay of the Navy, 1911.

Balance July 1, 1916.....	\$19.06				
Miscellaneous receipts.....	22.42				
Miscellaneous adjustments.....	3.36				
	3.36				

1702. Provisions, Navy, 1911.

Miscellaneous receipts.....	\$114.66				
Carried to surplus fund.....	114.66				

501. Construction and Repair, 1910.

Amount appropriated.....	\$170.73				
Expenditures by titles:					
D.....	170.73		\$170.73		

701. Pay of the Navy, 1910.

Balance July 1, 1916.....	\$27.58				
Miscellaneous receipts.....	51.52				

501. Construction and Repair, 1909.

Amount appropriated.....	\$120.28				
Expenditures by titles:					
D.....	120.28		\$120.28		

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

FISCAL YEAR 1913 AND PRIOR YEARS—Continued.

313. Naval training station, Great Lakes, 1907.

	Total.	Laber.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Miscellaneous receipts.....	\$3,324.53							
Miscellaneous adjustments.....	3,324.53							
Miscellaneous receipts.....	\$3.52							
Miscellaneous adjustments.....	3.52							

701. Pay of the Navy, 1907.

CERTIFIED CLAIMS.

Pay of the Navy (certified claims).

Amount appropriated.....	\$14,489.22							
Expenditures by titles:								
V.....	14,466.07						\$14,466.07	
Miscellaneous adjustments.....	23.15							
Total expenditures.....	14,489.22						14,466.07	

Pay, Miscellaneous (certified claims).

Balance July 1, 1916.....	\$17.98							
Amount appropriated.....	159.22							
	141.30							
Expenditures by titles:								
V.....	189.22						\$159.22	
Unexpended balance.....	17.98							
	141.30							

Contingent, Navy (certified claims).

Amount appropriated.....	\$30.00								
Expenditures by titles:									
V.....	30.00								30.00

Maintenance, Yards and Docks (certified claims).

Amount appropriated.....	\$128.72								
Expenditures by titles:									
V.....	128.72								\$128.72

Contingent, Navigation (certified claims).

Expenditures by titles:	\$0.14								
V.....	2.14								\$7.14
Unexpended balance.....									

Transportation, Navigation (certified claims).

Balance July 1, 1916.....	\$3,451.53								
Amount appropriated.....	503.96								
Miscellaneous receipts.....	1.00								
	\$,963.77								
Expenditures by titles:									
V.....	492.47								\$492.47
Unexpended balance.....	\$,468.84								
	\$,586.77								

Maintenance, naval auxiliaries (certified claims).

Amount appropriated.....	\$5.75								
Expenditures by titles:									
V.....	6.75								\$5.75

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CERTIFIED CLAIMS—Continued.

Gunnery exercises (certified claims).

	Total.	Lebor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.	\$17.34							
Expenditures by titles:	17.34						\$17.34	
V.....								

Outfits on first enlistment (certified claims).

Balance July 1, 1916.	\$45.00							
Amount appropriated.	10.72							
Miscellaneous receipts.	45.00							
Expenditures by titles:	10.72							
V.....	10.72						10.72	

Ocean and lake surveys (certified claims).

Amount appropriated.	\$19.67							
Expenditures by titles:	19.67						\$19.67	
V.....								

Pay, Naval Academy (certified claims).

Amount appropriated.	\$37.00							
Expenditures by titles:	37.00						\$37.00	
V.....								

Repairs, Naval Academy (certified claims).

Amount appropriated.	\$3.04							
Expenditures by titles:	3.04						\$3.04	
V.....								

Ordnance and ordnance stores (certified claims).

Amount appropriated.....	\$4,849.00						
Expenditures by titles: V.....	4,849.00						\$4,849.00

Fire control for ships of the Navy (certified claims).

Amount appropriated.....	\$5,970.00						
Expenditures by titles: V.....	5,970.00						\$5,970.00

New batteries for ships of the Navy (certified claims).

Amount appropriated.....	\$51.27						
Expenditures by titles: V.....	51.27						\$51.27

Construction and Repair (certified claims).

Balance July 1, 1916.....	\$5.46						
Amount appropriated.....	473.56						
	479.02						
Expenditures by titles: V.....	473.56						\$473.56
Unexpended balance.....	5.46						
	479.02						

Steam machinery (certified claims).

Amount appropriated.....	\$393.72						
Expenditures by titles: V.....	393.72						\$393.72

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

CERTIFIED CLAIMS—Continued.
Maintenance, Supplies and Accounts (certified claims).

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Amount appropriated.....	\$10.00							
Expenditures by titles: V.....	10.00						\$10.00	

Freight, Supplies and Accounts (certified claims).

Balance July 1, 1916.....	\$9,472.52							
Amount appropriated.....	1,833.56							
	7,608.96							
Expenditures by titles: V.....	1,644.07						\$1,644.07	
Unexpended balance.....	7,608.96							

Equipment of vessels (certified claims).

Amount appropriated.....	\$81.50							
Expenditures by titles: V.....	81.50						\$81.50	

Coal and transportation (certified claims).

Amount appropriated.....	\$1,008.44							
Expenditures by titles: V.....	1,008.44						\$1,008.44	

Pay, Marine Corps (certified claims).

Amount appropriated.....	\$5,230.26					
Expenditures by titles:						
V.....	5,230.26					\$5,230.26

Maintenance, Quartermaster's Department, Marine Corps (certified claims).

Amount appropriated.....	\$33.80					
Expenditures by titles:						
V.....	33.80					\$33.80

Transportation, recruiting, Marine Corps (certified claims).

Amount appropriated.....	\$186.70					
Expenditures by titles:						
V.....	186.70					\$186.70

Contingent, Marine Corps (certified claims).

Amount appropriated.....	\$251.73					
Expenditures by titles:						
V.....	251.73					\$251.73

MISCELLANEOUS.

Bounty for destruction of enemy's vessels (certified claims).

Balance July 1, 1916.....	\$0.56					
Unexpended balance.....	.56					

Bounty for destruction of enemy's vessels (act July 7, 1884).

Balance July 1, 1916.....	\$2,351.52					
Unexpended balance.....	52,351.52					

Statement 49.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

MISCELLANEOUS—Continued.

Claims for damages by collision with naval vessels.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.	\$175.00							
Amount appropriated.	463.26							
	638.26							
Expenditures by titles:								
V	458.26						\$458.26	
Unexpended balance.	180.00							
	638.26							

Claims reported by Court of Claims, Bowman and Tucker Acts.

Balance July 1, 1916.	\$649.22
Unexpended balance.	649.22

Indemnity for lost property, naval service (act Mar. 2, 1895).

Balance July 1, 1916.	\$170.56
Amount appropriated.	6,719.25
	6,889.81
Expenditures by titles:	
V	6,724.03
Unexpended balance.	165.78
	6,889.81

Destruction of clothing and bedding for sanitary reasons (certified claims).

Amount appropriated.....	\$117.55				
Expenditures by titles:					
V.....	117.55				\$117.55

Judgments, bounty for destruction of enemy's vessels.

Balance July 1, 1916.....	\$60,379.28				
Expenditures by titles:					
V.....	283.99				\$283.99
Unexpended balance.....	60,095.29				
	60,379.28				

Judgments, Court of Claims, Navy.

Balance July 1, 1916.....	\$5,525.38				
Amount appropriated.....	73,470.65				
	78,996.03				
Expenditures by titles:					
V.....	71,503.30				\$71,503.30
Unexpended balance.....	7,492.73				
	78,996.03				

Navy pension fund, interest.

Balance July 1, 1916.....	\$435,725.04				
Miscellaneous receipts.....	443,018.09				
	878,743.13				
Miscellaneous adjustments.....	1,640,725.04				
Unexpended balance.....	285,018.09				
	878,743.13				

1 Transferred to appropriation Naval Home, Philadelphia, Pa., 1916, and to the Interior Department to pay Navy pensions.

Payment of Japanese award.

Balance July 1, 1916.....	\$28,492.18						
Unexpended balance.....	28,492.18						
Private act.							
Amount appropriated.....	\$23,258.57						
Expenditures by titles:							
V.....	19,540.57					\$19,540.57	
Unexpended balance.....	3,718.00						
	23,258.57						

Prize money, Battle of Manila Bay.

Balance July 1, 1916.....	\$32,888.93						
Expenditures by titles:							
V.....	235.49					\$235.49	
Unexpended balance.....	32,653.44						
	32,888.93						

Prize money to captors.

Balance July 1, 1916.....	\$429,352.17						
Expenditures by titles:							
V.....	1.72					\$1.72	
Unexpended balance.....	429,350.45						
	429,352.17						

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

MISCELLANEOUS—Continued.

Prize money to captors, Spanish War.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowance.
Balance July 1, 1916.....	\$28,076.74							
Expenditures by titles:								
V.....	186.12						\$186.12	
Unexpended balance.....	27,891.62							
	28,076.74							

Refund of stolen deposits of enlisted men of the Navy and Marine Corps.

Balance July 1, 1916.....	\$648.62							
Unexpended balance.....	648.62							

Reimbursement to enlisted men, Navy, for clothing and bedding destroyed.

Balance July 1, 1916.....	\$147.51							
Unexpended balance.....	147.51							

Relief of owner, American schooner Walter B. Chester.

Balance July 1, 1916.....	\$269.64							
Unexpended balance.....	269.64							

7992. Allied powers.

Expenditures by titles:							
Allied powers.....	\$67,921.99						\$67,921.99
Total expenditures.....							

7995. Other Government departments.

Expenditures by titles:							
X.....	\$0.25						\$0.25
Other Government departments.....	1,409,697.76	\$414,761.64	\$96,055.39	\$208,588.26			690,292.47
Indirect expense divided.....		71,921.46	96,055.39	24,133.93			
Total expenditures.....	1,409,697.51	496,683.10		232,722.19			690,292.22

7996. Special deposit.

Expenditures by titles:							
Special deposits.....	\$284,729.52	\$89,249.32	\$17,213.80	\$128,264.88			\$11.52
Indirect expense divided.....		13,025.23	17,213.80	4,188.57			
Total expenditures.....	284,729.52	102,274.55		132,443.45			11.52

7997. Proceeds of sales.

Expenditures by titles:							
Proceeds of sales.....	\$46,844.52	\$39,740.97	\$1,363.14	\$6,740.71			
Indirect expense divided.....		1,065.96	1,363.14	277.18			
Total expenditures.....	46,844.52	39,826.93		7,017.89			

Statement 43—APPROPRIATION ACCOUNTS BY TITLES—Continued.

MISCELLANEOUS—Continued.

7998. Cash sales.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Expenditures by titles:								
Cash sales.....	\$7,840,012.43					\$7,840,012.43		

7999. Naval supply account.

Expenditures by titles:								
X.....	\$51,528,969.17							
Z.....	16,172,922.08	\$4,046,114.72	\$651,091.37	\$11,475,715.99	\$51,528,969.17			
			651,091.37					
Indirect expense divided.....		505,621.27		145,470.10				
Total expenditures.....	67,701,891.25	4,551,735.99		11,621,186.09	51,528,969.17			

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES.
RECAPITULATION.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$68,121,992.99							
Amount appropriated.....	1,356,119,436.36							
Miscellaneous receipts.....	152,524,497.41							
1,576,765,926.75								
Net total expenditures by titles (naval appropriations)	242,729,549.72							
Miscellaneous adjustments in appropriations.....	140,162,889.60							
Carried to surplus and.....	382,897,449.32							
Total expenditures under naval appropriations	1,541,549.22							
Balance June 30, 1917.....	1,192,331,972.21							
1,576,765,926.75								

RECONCILEMENT WITH STATEMENT 16 (GROSS EXPENDITURES BY YARDS AND TITLES).

Net total expenditures by titles (Statement 42).....	\$242,729,549.72	\$39,739,725.36		\$33,425,997.46	\$103,301,824.97	\$3,609,438.11	\$1,741,232.49	\$61,911,331.33
Other Government departments.....	1,409,697.76	486,963.10		232,722.19		690,252.47		
Special deposits.....	234,729.52	102,274.55		132,443.45		11.52		
Cash sales.....	7,840,012.43					7,840,012.43		
Proceeds of sales.....	46,844.82	39,526.93		7,017.89				
Allied powers.....	67,921.99					67,921.99		
Purchases under naval supply account.....	51,528,969.17				51,528,969.17			
Issues naval supply account, title X, to naval supply account, title Z, and labor applied to same.....	16,172,922.08	4,551,735.99		11,621,186.09				
Issues of stores previously charged to appropriations.....	40,388,927.10					40,388,927.10		
Total, Statement 16.....	360,419,574.59	43,920,245.93		45,419,367.08	154,830,794.14	52,596,603.62	1,741,232.49	61,911,331.33

NOTE.—Statement 42 reconciles with statement 1 (cost of the NAVY) through the above reconciliation with statement 16.

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

MISCELLANEOUS—Continued.
7888. Cash sales.

Expenditures by titles:	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Cash sales.....	\$7,840,012.43					\$7,840,012.43		

7889. X—aval supply account.

Expenditures by titles:	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
X.....	\$51,528,969.17		\$651,091.37	\$11,475,715.99	\$51,528,969.17			
Y.....	16,172,922.08	\$4,046,114.72						
Z.....	67,701,891.25	505,621.27	651,091.37	145,470.10				
Indirect expense divided.....				11,621,186.09				
Total expenditures.....		4,551,735.99			51,528,969.17			

Statement 42.—APPROPRIATION ACCOUNTS BY TITLES.

RECAPITULATION.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$68,121,992.99							
Amount appropriated.....	1,356,119,436.35							
Miscellaneous receipts.....	162,594,497.41							
	1,576,765,926.75							
Net total expenditures by titles (naval appropriations)	242,729,549.72							
Miscellaneous adjustments in appropriations.....	140,162,899.60							
Total expenditures under naval appropriations	382,892,449.32							
Carried to surplus fund.....	1,541,506.22							
Balance June 30, 1917.....	1,192,331,972.21							
	1,576,765,926.75							

RECONCILEMENT WITH STATEMENT 16 (GROSS EXPENDITURES BY YARDS AND TITLES).

Net total expenditures by titles (Statement 42).....	\$242,729,549.72	\$38,739,725.36		\$33,425,997.46	\$103,301,624.97	\$3,609,438.11	\$1,741,232.49	\$61,911,331.33
Other Government departments.....	1,409,697.76	486,683.10		232,722.19		690,292.47		
Special deposits.....	234,729.52	102,274.55		132,443.45		11.52		
Cash sales.....	7,840,012.43					7,840,012.43		
Proceeds of sales.....	46,844.83	39,526.93		7,017.89				
Allied powers.....	67,921.99					67,921.99		
Purchases under naval supply account.....	51,528,969.17				51,528,969.17			
Issues naval supply account, title X, to naval supply account, title Y, and labor applied to same.....	16,172,922.08	4,551,735.99		11,621,186.09				
Issues of stores previously charged to appropriations.....	40,388,927.10					40,388,927.10		
Total, Statement 16.....	360,419,574.59	43,920,245.93		45,419,367.08	154,830,794.14	52,596,603.62	1,741,232.49	61,911,331.33

NOTE.—Statement 42 reconciles with statement 1 (cost of the NAVY) through the above reconciliation with statement 16.

Statement 48.—APPROPRIATION ACCOUNTS BY TITLES—Continued.

MISCELLANEOUS—Continued.

7888. Cash sales.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoice.	Auditor's settlements.	Pay and allowances.
Expenditures by titles:								
Cash sales.....	\$7,840,012.43					\$7,840,012.43		

7899. Naval supply account.

Expenditures by titles:								
X.....	\$51,528,969.17				\$51,528,969.17			
Z.....	16,172,922.06	\$4,046,114.72	\$651,091.37	\$11,475,715.99				
Indirect expense divided.....		505,621.27	651,091.37	145,470.10				
Total expenditures.....	67,701,891.25	4,551,735.99		11,621,186.09	51,528,969.17			

Statement 43.—APPROPRIATION ACCOUNTS BY TITLES.

RECAPITULATION.

	Total.	Labor.	Indirect.	Material applied by yard labor.	Public vouchers.	Material issued on invoices.	Auditor's settlements.	Pay and allowances.
Balance July 1, 1916.....	\$68,121,992.99							
Amount appropriated.....	1,356,119,436.35							
Miscellaneous receipts.....	152,524,497.41							
	1,576,765,926.75							
Net total expenditures by titles (naval appropriations)	242,729,549.72							
Miscellaneous adjustments in appropriations.....	140,162,889.60							
Total expenditures under naval appropriations	382,892,449.32							
Carried to surplus fund.....	1,541,505.22							
Balance June 30, 1917.....	1,192,331,972.21							
	1,576,765,926.75							

RECONCILEMENT WITH STATEMENT 16 (GROSS EXPENDITURES BY YARDS AND TITLES).

Net total expenditures by titles (Statement 42).....	\$242,729,549.72	\$39,739,725.36		\$33,425,997.46	\$103,301,824.97	\$3,609,438.11	\$1,741,232.49	\$61,911,331.33
Other Government departments.....	1,409,697.76	486,663.10		232,722.19		690,292.47		
Special deposits.....	234,729.32	102,274.55		132,443.45		11.52		
Cash sales.....	7,840,012.43					7,840,012.43		
Proceeds of sales.....	45,844.82	39,826.93		7,017.89				
Allied powers.....	45,844.82							
Purchases under naval supply account.....	51,328,969.17				51,523,969.17	67,921.99		
Issues naval supply account, title X, to naval supply account, title Z, and labor applied to same.....	16,172,922.08	4,551,735.99		11,621,186.09		40,388,927.10		
Issues of stores previously charged to appropriations.....	40,388,927.10							
Total, Statement 16.....	360,419,574.59	43,920,245.93		45,419,387.08	154,830,794.14	52,596,603.62	1,741,232.49	61,911,331.33

Note.—Statement 43 reconciles with statement 1 (cost of the NAVY) through the above reconciliation with statement 16.

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917.

[Compiled from Treasury Department warrants (i. e., certificates) of moneys appropriated for the Naval Establishment.]

	1884	1885	1886	1887	1888	1889	1890	1891
SECRETARY'S OFFICE.								
Pay, miscellaneous.....	\$301,884.97	\$341,500.88	\$611,654.97	\$238,203.45	\$219,427.62	\$284,615.41	\$251,784.31	\$269,422.69
Contingent, Navy.....	100,141.25	57,508.59	76,824.06	10,000.00	7,000.00	58,122.72	7,000.00	7,000.00
Mileage, Navy and Marine Corps.....			209,808.86	144,453.71		30,061.37	3,906.26	58,034.29
NAVIGATION.								
Contingent.....	4,215.33	4,284.40	7,557.43	5,178.13	5,000.00	5,480.22	5,182.32	15,000.00
Gunners exercise.....								6,000.00
Ocean and lake surveys.....								10,000.00
Naval Home, Philadelphia, Pa.....							68,517.00	73,115.00
Naval Asylum.....	59,813.00	59,813.00	59,867.00	63,067.00	63,167.00	82,367.00		
Transportation and recruiting.....	40,000.00	33,524.50	46,588.10	26,990.46	27,406.04	30,920.74	31,652.83	30,474.70
Survey, west coast Mexico, Hydrographic Office.....				310.86				
Velocity of light, Nautical Almanac.....				14.56				
Ocean surveys.....	10,000.00	10,000.00	10,000.00	4,000.00	5,000.00	5,000.00	5,000.00	5,000.00
Publication of surveys, Mexican coast.....				7,000.00				
Outfits for naval apprentices.....								
Naval training station, navigation.....				6,224.20				
Naval War College and torpedo school.....	100,000.00	87,500.00	95,038.83	82,990.66	83,500.00	97,818.67	106,181.38	14,000.00
Navigation and navigation supplies.....			7,000.00	2,000.00		32.86		10,000.00
Compass-testing house.....			5,000.00	9,000.00	9,000.00	9,300.00	9,000.00	
Civil establishment.....								
ORDNANCE.								
Ordnance and ordnance stores.....	150,000.00	126,000.00	147,660.28	109,300.00	126,400.00	263,000.00	141,000.00	144,000.00
Torpedoes.....	100,000.00				30,000.00			60,000.00
Torpedo station, Newport, R. I.....								
Torpedo Corps.....	50,000.00	50,001.00	62,679.79	58,600.00	57,800.00	65,700.00	75,000.00	
Torpedo Corps and War College.....								
Testing American armor.....			25,000.00					
Testing torpedoes.....								
Repairs.....	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	20,000.00
Civilians, Ordnance.....	5,000.00	5,002.89	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
Civil establishment, Ordnance.....	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
Steel rifled breech-loading guns.....	50,265.00	41,632.50	50,000.00	28,204.00	24,528.00	24,528.00	24,528.00	26,624.00
Wire-wound guns.....								
Breech-loading rifled cannon.....			4,000.00					
Submarine guns.....			80,000.00					80,000.00
Purchase of armor plates.....								50,000.00

EQUIPMENT.

Equipment of vessels.....	900,000.00	750,463.30	1,201,063.69	782,200.00	625,000.00	735,066.87	775,000.00	913,560.00
Civil establishment, Equipment.....	9,000.00	9,000.00	9,000.00	16,800.00	11,525.00	11,525.00	11,525.00	19,025.00
Contingent, Equipment.....	18,534.77	11,190.18	42,788.02	20,000.00	15,951.14	16,130.94	15,000.00	10,459.05
Electric welding machine.....				20,000.00				12,000.00

YARDS AND DOCKS.

Maintenance, Yards and Docks.....	264,000.00	200,000.00	200,000.00	170,000.00	170,000.00	165,000.00	165,000.00	280,000.00
Contingent, Yards and Docks.....	20,000.00	15,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00
Civil establishment, Yards and Docks.....	24,000.00	24,000.00	24,000.00	62,000.00	45,893.09	46,580.70	46,754.60	25,986.04

PUBLIC WORKS, BUREAU OF YARDS AND DOCKS.

Navy yard— Portsmouth, N. H.					25,000.00	32,000.00	28,610.00	62,430.00
Boston, Mass.						143,940.47	55,000.00	50,000.00
Brooklyn, N. Y.	100,000.00	30,000.00	30,000.00	100,000.00		76,000.00	101,416.40	170,000.00
League Island, Pa.	15,000.00					1,000.00	15,000.00	15,000.00
Washington, D. C.					20,000.00	114,688.00	16,000.00	40,000.00
Norfolk, Va.					46,364.00	54,700.00	145,755.40	80,000.00
Mare Island, Cal.	275,000.00	250,000.00	276,000.00	213,595.00				6,500.00

Naval station— New London, Conn.						1,623.00	2,000.00	
And coaling depot— Port Royal, S. C., site for.	5,000.00			4,000.00			8,000.00	1,000.00
Port Royal, S. C.							100,000.00	
Key West, Fla.							90,000.00	
Pago Pago, Samoa							240,000.00	
Naval wharf, Key West, Fla.								
Purchase of and adjacent to Naval Academy— New Naval Observatory, Indianhead, Md.				50,000.00	60,000.00	50,000.00		
Naval proving ground, Coasters Harbor, R. I.	45,000.00	21,000.00	33,000.00	8,000.00	14,000.00	14,000.00	20,000.00	25,000.00
Buildings for steam launches.						30,000.00		
Building, naval torpedo station and war college.							100,000.00	
Purchase of construction of four steel tugs.					1,100,000.00		140,000.00	
Timber dry docks.								
Navy yard— Boston, dry dock.					31,000.00			
League Island, timber dry dock.						550,000.00		
Construction of dry dock, Port Royal, S. C.								200,000.00
Adjustable stern dock.						30,000.00		
New naval magazine.							60,000.00	75,000.00
Electric lighting of navy yards.								
Launching ways and slips, New York and Norfolk.								13,000.00
Buildings and grounds, Naval Academy.								43,500.00
Repairs and preservation at navy yards.	200,000.00	125,000.00	125,000.00	125,000.00	450,000.00	300,000.00	225,000.00	250,000.00
Naval hospital, Widows Island.					50,000.00			
Sick quarters, navy yard, Portsmouth, N. H.							35,000.00	8,000.00
Repairs, sea wall, naval hospital, Norfolk, Va.						20,000.00		
Laundry, at naval hospital, New York.								5,600.00

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1888, TO JUNE 30, 1917—Continued.

	1884	1885	1886	1887	1888	1889	1890	1891
PUBLIC WORKS, BUREAU OF YARDS AND DOCKS—Continued.								
Marine barracks—								
Navy yard, Norfolk, Va.							\$15,000.00	\$6,000.00
Sites, Alaska								
Officers' quarters, navy yard, Mare Island, Cal.								
Repair of barracks, Brooklyn, N. Y.					\$15,000.00	5,000.00	20,000.00	
MEDICINE AND SURGERY.								
Medical Department	\$40,000.00	\$40,208.00	\$89,980.35	\$55,000.00	57,500.00	58,300.49	57,500.00	60,000.00
Contingent, Medicine and Surgery	25,045.36	25,000.00	29,562.27	20,000.00	25,094.31	26,084.21	25,000.00	25,440.88
Civil establishment, Medicine and Surgery	20,000.00	20,000.00						
Repairs, Medicine and Surgery	15,000.00	10,000.00	10,000.00	15,000.00	30,000.00	25,000.00	20,000.00	20,368.62
Naval hospital fund	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	20,000.00	20,000.00	20,000.00
SUPPLIES AND ACCOUNTS.								
Pay of the Navy	7,133,980.00	6,986,218.03	7,487,793.88	7,001,633.99	7,215,350.17	7,349,942.55	7,254,799.66	7,250,000.00
Provisions, Navy	1,102,002.90	1,111,189.04	1,495,788.50	1,052,000.00	1,121,016.20	1,082,375.44	1,077,336.15	1,096,000.00
Civil establishment, Supplies and Accounts	6,000.00	6,000.00	6,000.00	35,000.00	70,000.00	67,287.66	66,510.03	67,532.03
Contingent, Supplies and Accounts	40,000.00	35,000.00	57,074.13	70,000.00	51,027.62	47,135.29	40,000.00	42,740.54
Clothing				1,068.95				
Small stores, Navy				30.26				
Clothing and small stores fund								27,900.33
CONSTRUCTION AND REPAIR.								
Construction and repair	1,334,000.00	1,005,308.68	1,011,163.38	900,055.89	943,461.25	975,000.00	900,000.00	1,000,000.00
Civil establishment, Construction and Repair	20,000.00	20,000.00	20,000.00	45,000.00	20,983.75	20,162.01	19,972.50	19,792.50
Repair of vessels								
Improvement, Navy—								
Brooklyn, N. Y.								
Mare Island, Cal.								
Portsmouth, N. H.								
Boston, Mass.								
Brooklyn, N. Y.								
League Island, Pa.								
Norfolk, Va.								
Mare Island, Cal.								
Construction plant—								
Navy yard—								
Portsmouth, N. H.								
Boston, Mass.								
Brooklyn, N. Y.								
League Island, Pa.								
Norfolk, Va.								
Mare Island, Cal.								
Improvement, Navy—								
Brooklyn, N. Y.								
Mare Island, Cal.								
Portsmouth, N. H.								
Boston, Mass.								
Brooklyn, N. Y.								
League Island, Pa.								
Norfolk, Va.								
Mare Island, Cal.								

STEAM ENGINEERING.

Steam machinery.....	1,000,000.00	920,000.00	1,053,046.13	753,000.00	675,000.00	605,000.00	605,000.00	650,000.00
Civil establishment, Steam Engineering.....	10,000.00	10,000.00	10,000.00	27,667.25	17,200.00	17,018.63	17,000.00	11,900.00
Contingent, Steam Engineering.....	1,000.00	1,000.00	1,000.00	500.00	500.00	1,000.00	1,000.00	1,000.00
Machinery, double-turreted monitors.....	1,000,000.00	1,000,000.00	1,000,000.00					
Testing Clark's defective turrets.....	20,000.00							
Machinery plants—								
Navy yard—								
Boston, Mass.....								40,000.00
New York, N. Y.....								75,000.00
Mare Island, Cal.....								50,000.00

NAVAL ACADEMY.

Pay, Naval Academy.....	98,882.73	98,886.10	98,829.45	103,731.97	104,000.45	104,013.45	104,013.45	104,217.45
Special course, Naval Academy.....	17,000.00	17,000.00	17,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
Heating and lighting, Naval Academy.....	44,400.00	44,783.61	44,517.83	42,300.00	41,500.00	41,800.00	41,800.00	41,800.00
Contingent, Naval Academy.....	21,000.00	21,000.00	21,000.00	21,000.00	36,000.00	21,000.00	21,000.00	21,000.00
Repairs, Naval Academy.....								
Furniture for cadets' quarters, Naval Academy.....								
Furnishing gymnasium, Naval Academy.....								

MARINE CORPS.

Pay, Marine Corps.....	642,985.00	653,517.35	649,671.91	649,668.00	654,574.97	673,807.66	685,708.35	687,471.79
Provisions, Marine Corps.....	60,002.40	72,096.44	61,257.79	62,500.00	62,233.43	62,185.05	64,617.64	66,137.72
Clothing, Marine Corps.....	77,000.00	77,000.00	77,000.00	55,384.03	75,279.83	65,000.00	74,927.00	75,000.00
Fuel, Marine Corps.....	18,000.00	18,000.00	18,000.00	18,000.00	18,079.82	20,778.60	21,330.13	20,000.00
Military stores, Marine Corps.....	9,786.50	9,786.50	9,786.50	9,786.50	9,797.00	10,786.50	12,000.00	12,000.00
Transportation and recruiting, Marine Corps.....	10,000.00	21,158.62	13,759.68	10,000.00	9,843.95	12,500.00	10,873.23	12,000.00
Repairs of barracks, Marine Corps.....	14,500.00	15,182.20	14,500.00	16,664.21	14,530.00	10,780.00	16,780.00	18,850.00
Forage, Marine Corps.....	5,400.00	5,400.00	5,400.00	4,400.00	4,000.00	3,596.38	3,817.80	3,500.00
Hire of quarters, Marine Corps.....				4,500.00	6,624.00	6,560.00	6,624.00	6,624.00
Contingent, Marine Corps.....	25,721.86	26,358.66	27,538.83	26,946.19	26,565.90	29,437.07	30,687.79	29,804.26

INCREASE OF THE NAVY.

Construction and machinery.....								
Armor and armament.....								
Vessels and monitors.....								
Gunboats and cruisers.....								
Vessels for coast and harbor defense.....								
Steel cruisers—								
Construction and repair.....	1,300,000.00	921,500.00	115,510.84	95,861.00				
Machinery, Steam Engineering.....		620,000.00	86,963.57					
Equipment.....		78,600.00						
Navigation.....		30,000.00						
Ordnance.....		500,000.00						
Labor.....								
Freight and material.....								
Foreign and domestic bills.....								
Construction and machinery.....								
Armor and armament.....								
Vessels and monitors.....								
Gunboats and cruisers.....								
Vessels for coast and harbor defense.....								
Steel cruisers—								
Construction and repair.....								
Machinery, Steam Engineering.....								
Equipment.....								
Navigation.....								
Ordnance.....								
Labor.....								
Freight and material.....								
Foreign and domestic bills.....								

Statement 49.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1884	1885	1886	1887	1888	1889	1890	1891
INCREASE OF THE NAVY—Continued.								
Steel cruisers—Continued.								
Ordnance—Continued.								
Existing contracts.				\$83,655.16				
Powder for the "Boston"				12,000.00				
Gun carriages for the "Chicago"				10,000.00				
Armor and gun steel.				\$4,000,000.00				\$1,000,000.00
Nickel.						\$260,000.00		
Steel practice vessel.			\$1,885,000.00					
Vessels authorized Mar. 3, 1885.							\$50,000.00	
Rapid twist guns and reinforce cartridges.							625,000.00	
Gun plant, navy yard, Washington, D. C.			5,000.00					145,000.00
Care of monitors.			50,000.00					
Completing U. S. S. Mohican.								
MISCELLANEOUS.								
Bounty for destruction of enemy's vessels.		\$144,981.94	46.70					15,000.00
Commission on Dry Docks.						15,000.00		
Commission on New Navy Yards and Dry Docks.								10,000.00
Commission on Navy Yards.	\$2,500.00	3,788.81						
Consolidating naval supplies.	19,987.15							
Claims for damages by collision with naval vessels.								406,863.93
Certified claims.				2,132.01		497.11		
Destruction of clothing and bedding for sanitary reasons.		5,134.67	1,635.80					
Enlistment bounty to seamen.								
Expenses in connection with Arctic exploring expedition.	12,504.64							
Extra pay to officers, etc., who served in the Mexican War.	1,028.00		\$8,310.72	15,079.06	5,781.51	13,437.33	11,250.00	2,287.50
Extra pay to officers and men who served in the Pacific.		122,659.81				239.91		
Furniture, State, War, and Navy Department Building.	26,000.00							
Gratuities to machinists in lieu of reenlistments.					918.00			
Indemnity for lost clothing.	1,429.93	10,370.56	1,136.95	2,867.49		300.00	18,796.36	299.91
Observation of eclipse of sun, Dec. 22, 1889.							5,000.00	
Observation of transit of Venus.		5,000.00		4,100.63				
Pay civilian members Naval Advisory Board.				5,500.00				
Payment of officers and crew U. S. S. Kearsarge for destruction of "Alabama".	9,388.74		31,718.92		780.00	541.04	9,924.64	15,064.85
Private acts, etc. (various).								
Payment to Harlan & Hollingsworth Co. for use of shipyard and care of "Amphitrite".			67,987.00					
Payment to John Roach for use of shipyard and care of monitor "Puritan".			69,201.00					
Payment to Wm. Cramp & Sons for use of shipyard and care of "Puritan".			76,700.00					
Payment to Wm. Cramp & Sons for use of shipyard and care of "Puritan".						9,352.00		

	1883 and prior years.	1884	1885	1886	1887	1888	1889	1890	1891
Payment to captain and owners North Star, rescue crew U. S. S. Rogers.			20,000.00						
Payment to H. H. Nichols for engraving Bowditch Navigator.....			2,561.79						
Payment of Japanese award.....			140,000.00						2,250.00
Purchase of farmer's house, Coasters Harbor Island, R. I.....						25,000.00			
Purchase steamer "Sajido", Coasters Harbor Island, R. I.....						16,948.58			
Relief of survivors and others exploring steamer "Jeannette".....						12,822.00			
Relief of survivors by deck of the U. S. S. Ashuelot.....									
Relief of Lady Franklin Bay expedition to Arctic regions.....									
Relief of sufferers by wreck of United States steamers at Apia, Samoa.....			762,933.15						201,873.73
Relief of officers and crew U. S. S. Rodgers.....			5,218.32	215.00					183.00
Relief of sufferers wreck U. S. S. Huron.....			318.00					1,532.86	
Relief for services impressed into U. S. naval service.....									
Reward for services to officers and crew U. S. S. Rogers.....			3,000.00						
Reward for rescue of Lady Franklin Bay expedition to Arctic regions.....				25,000.00				2,150.75	
Search of steamer "Jeannette".....			900.00						
Tuition of two naval cadets, Royal Naval College at Greenwich.....									
	1883 and prior years.	1884	1885	1886	1887	1888	1889	1890	1891
Amount of appropriations for each fiscal year		\$17,189,340.49	\$16,796,714.21	\$18,256,336.45	\$17,412,520.02	\$26,091,338.34	\$20,935,210.90	\$22,246,567.06	\$24,742,263.05
TOTALS.									
Amount appropriated and warranted during—									
Current fiscal year.....		16,920,288.80	10,430,249.26	16,372,981.81	17,864,822.25	25,994,105.58	20,251,058.53	21,935,567.35	24,707,070.09
First subsequent fiscal year.....		\$27,406.51	282,400.00	6,230,253.26	20,000.00	51,514.77	169,635.29	178,460.85	5,000.00
Second subsequent fiscal year.....		37,194.57	3,690.91	82.25	9,318.73	171,456.52	504,767.00	80,894.71	27,149.15
Third subsequent fiscal year.....		36,877.57	6,930.13	572,396.95	17,972.54	64,257.47	9,714.68	4,714.16	3,063.81
Fourth subsequent fiscal year.....		174,928.07	141.25	93,204.68	74.50				
Fifth subsequent fiscal year.....				1,310,873.74					
Sixth subsequent fiscal year.....			3,250.84		24.00	24.00	35.45		
Seventh subsequent fiscal year.....									

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1892	1893	1894	1895	1896	1897	1898	1899	1900
SECRETARY'S OFFICE.									
Pay, miscellaneous.....	\$286,408.52	\$273,716.36	\$256,699.62	\$329,380.96	\$304,246.27	\$302,179.82	\$400,237.22	\$400,000.00	\$592,977.20
Coalition, Navy.....	10,062.15	7,000.00	7,000.00	8,526.52	7,000.00	8,968.04	7,240.08	7,000.00	10,452.99
Training and equipping Naval Militia.....	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	50,000.00	50,000.00	60,000.00	60,000.00
Agency fund.....								26,001,840.37	626,792.99
Mileage, Navy and Marine Corps.....	19,278.26	46,567.96	15,319.76	26,256.77	11,037.26	15,097.87	11,822.68	8,210.48	626,313.00
National defense.....							20,623,413.20	6,197,701.02	1,045,064.40
NAVIGATION.									
Gunnery exercises.....	\$6,000.00	\$6,000.00	\$6,124.17	\$6,000.00	\$6,252.95	\$6,148.99	\$6,000.00	\$6,000.00	\$12,200.00
Ocean and lake surveys.....	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00	16,416.60	44,007.62	100,000.00
Naval training station, California.....									30,413.32
Naval training station, Rhode Island.....									30,000.00
Naval War College.....									9,200.00
Naval Home, Philadelphia, Pa.....	71,215.00	70,215.00	69,215.00	60,465.00	79,315.00	79,725.00	78,725.00	77,725.00	76,425.00
Transportation, recruiting, and contingent.....	45,000.00	40,000.00	45,000.00	45,546.00	50,681.30	45,000.00	94,407.46	320,000.00	106,861.48
Ocean surveys.....									
Outfits for naval apprentices.....	30,000.00	30,000.00	41,610.00	30,000.00	25,000.00	33,750.00	46,372.29	41,250.00	112,500.00
Naval training station, Navigation, hospital.....	18,000.00	18,000.00	44,000.00	30,000.00	30,015.69	32,500.00	30,000.00	30,000.00	
Naval training station, Navigation, hospital.....							33.40		
Naval War College and torpedo school.....	10,000.00	8,000.00	8,000.00	8,000.00	10,000.00	11,200.00	11,200.00	19,200.00	
Ourdan & Kold Letter Engraving Co.....				20,000.00					
Telegraphic cable surveys between San Francisco and Honolulu.....	25,000.00		40,108.87	74.09	45,371.70	10,158.77	19,231.68	50,857.07	68,980.43
Navy transportation, Pacific roads.....								276,000.00	
Naval coast signal system.....									2,500.00
Transportation of officers' effects.....									
ORDNANCE.									
Ordnance and ordnance stores.....	156,000.00	156,000.00	200,000.00	200,000.00	300,000.00	460,000.00	700,001.00	7,820,000.00	2,036,908.80
Modern battery for "Hartford".....							150,000.00		
Modern battery for "Chicago".....								50,000.00	
Reserve projectiles.....	30,000.00					200,000.00			
Reserve torpedoes and appliances.....								260,000.00	
Torpedoes.....	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	142,000.00	71,500.00	97,500.00	66,000.00
Torpedo station, Newport, R. I.....									
Testing high explosives.....									
Experimenting with armor-piercing projectiles.....									
Repairs, Ordnance.....	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	25,000.00	20,000.00
Contingent, Ordnance.....	8,200.56	8,082.28	9,097.94	8,338.47	8,000.00	18,860.68	16,161.07	8,000.00	96,000.36
Civil establishment, Ordnance.....	26,824.00	26,824.00	26,824.00	26,824.00	26,824.00	26,824.00	26,824.00	26,824.00	32,654.00
Patent rights, breech-loading ordnance.....									
Reserve guns, auxiliary cruisers.....						400,000.00	260,000.00	260,000.00	260,000.00
Floating tug or crane.....	20,000.00								

EQUIPMENT.

Equipment of vessel.....	990,000.00	925,063.82	948,180.09	1,060,114.30	1,278,292.50	1,319,648.00	3,056,085.05	6,683,804.00	2,784,458.13
Civil establishment, Equipment.....	19,025.00	19,025.00	19,025.00	19,025.00	19,625.00	19,625.00	16,500.00	16,500.00	17,475.00
Contingent, Equipment.....	15,000.00	12,000.00	12,889.66	13,911.44	17,009.08	17,695.28	22,625.38	37,074.00	42,500.25
Equipment plant, Philippine Islands.....									30,000.00
Coal barges, Equipment.....									150,000.00
Water boat, Equipment.....									25,000.00

YARDS AND DOCKS.

Maintenance, Yards and Docks.....	230,000.00	230,000.00	230,000.00	250,000.00	250,000.00	265,000.00	375,000.00	350,000.00	400,012.16
Contingent, Yards and Docks.....	20,000.00	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	20,000.00	20,000.00	30,000.00
Civil establishment, Yards and Docks.....	59,197.37	61,380.69	61,494.54	61,494.54	61,597.37	61,486.04	67,110.44	72,710.44	83,412.23
Naval Observatory, land.....				23,856.00	22,000.00	14,300.00	5,000.00	11,200.00	10,000.00

PUBLIC WORKS, BUREAU OF YARDS AND DOCKS.

Navy yard—	22,287.00	13,500.00	15,000.00	29,019.00	110,874.00	97,294.57	216,785.00	632,571.00	935,750.00
Portsmouth, N. H.....	17,000.00	30,000.00	30,000.00	15,000.00	1,500.00	9,000.00	14,500.00	177,400.00	306,000.00
Boston, Mass.....	128,838.00	43,600.00	78,000.00	81,900.00	151,385.00	185,000.00	153,000.00	855,037.00	379,000.00
Brooklyn, N. Y.....	127,278.62	15,000.00	30,500.00	50,044.00	44,500.00	37,580.00	193,222.00	286,500.00	1,047,062.00
League Island, Pa.....	21,788.00	15,000.00	30,500.00	110,468.07	51,879.00	77,669.21	5,132.82	96,347.00	800,767.00
Washington, D. C.....	29,166.00	31,500.00	23,000.00		46,012.00	44,000.00	130,000.00	171,000.00	205,000.00
Norfolk, Va.....									500,000.00
Pensacola, Fla.....									110,000.00
Mare Island, Cal.....	51,785.24	19,800.00	41,648.00		110,874.00	97,294.57	216,785.00	632,571.00	935,750.00
Puget Sound, Wash.....							80,143.62	132,832.00	48,500.00
Naval station—									
New London, Conn.....									200,000.00
Port Royal, S. C.....									45,000.00
Key West, Fla.....									112,520.00
Additional land, navy yard, Norfolk, Va.....									146,687.50
New Naval Observatory.....	136,680.00	17,500.00	16,500.00						
Gannett factory, torpedo station									
Naval proving ground, Indianhead, Md.....									
Teloid, Md.....									
line to naval proving ground, Indian-									
head, Md.....		25,000.00			20,000.00				
Smokeless-powder factory.....									
Naval training station—									
Rhode Island, buildings.....									25,000.00
California, buildings.....									125,000.00
Naval station, Newport, R. I.....									50,000.00
Depots for coal.....									1,000.00
Naval coaling stations.....									250,000.00
Coaling wharf, Japonski Island, Alaska.....		250,000.00							400,000.00
Steam tug—									
Navy yard, Mare Island, Cal.....		50,000.00	30,000.00						5,000.00
League Island, Pa.....			25,000.00						
Naval station, Port Royal, S. C.....						8,000.00			50,000.00
Puget Sound, Wash.....									50,000.00

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1892	1893	1894	1895	1896	1897	1898	1899	1900
* PUBLIC WORKS, BUREAU OF YARDS AND DOCKS—continued.									
Steel lighter, navy yard, New York, N. Y.							\$20,000.00		
Steam lighters, navy yard, League Island, Pa.								\$1,000.00	\$30,000.00
Board on Dry Docks									800,000.00
Four timber dry docks									250,000.00
Floating dry docks, Gulf coast									200,000.00
Dry dock, Puget Sound, Wash.	\$210,000.00		\$225,000.00	\$51,079.83	\$250,000.00	\$101,230.00			
Steel floating dock, Algiers, La.									
Dry dock, Algiers, La.			25,000.00	23,025.03					
Repairs to dry dock, Brooklyn, N. Y.							100,000.00		
Construction of dry dock, Fort Royal, S. C.	150,000.00	\$156,500.00		18,521.42					
Naval magazine—									
Fort Lafayette, N. Y.								15,000.00	5,000.00
New York Harbor									600,000.00
Dover, N. J.						15,000.00			
Fort Mifflin, Pa.						50,000.00		45,000.00	98,000.00
Norfolk, Va.									27,500.00
Crane Island	15,000.00				75,000.00				
Removal of naval magazine, Crane Island									
Naval magazine—									
Mare Island, Cal.	10,000.00			17,900.00					
Alaska									
Launching ways and slips, New York and Norfolk	13,000.00								
Housing torpedo vessels	19,000.00		56,000.00	28,000.00		43,000.00		180,000.00	
Buildings and grounds, Naval Academy	300,000.00		275,000.00	300,000.00	400,000.00	400,000.00	2,500.00	505,000.00	720,000.00
Repairs and preservation at navy yards		275,000.00					565,000.00	450,000.00	500,000.00
Naval hospital—									
Chelsea, Mass.							6,000.00		45,000.00
For contagious diseases, Newport, R. I.									
Fort Royal, S. C.							4,000.00		
Mare Island, Cal., medical director's house.	15,500.00								
Naval cemetery—									
Chelsea, Mass.									
Brooklyn, N. Y.									
Norfolk, Va.									
Mare Island, Cal.						1,000.00		1,000.00	2,500.00
Marine barracks—									
Porters Harbor Island			15,000.00						
Fort Royal, S. C.		3,000.00	2,600.00						
Sitka, Alaska		431.01							
And quarters, Annapolis, Md.									81,000.00

BUREAU OF SUPPLIES AND ACCOUNTS.

MEDICINE AND SURGERY.									
Medical Department.....	60,000.00	55,553.73	60,000.00	60,000.00	62,450.46	75,026.00	75,020.95	175,010.00	89,020.03
Contingent, Medicine and Surgery.....	25,494.10	25,966.29	25,523.12	26,158.24	26,159.55	30,553.51	31,033.20	50,000.00	32,927.65
Repairs, Medicine and Surgery.....	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00
Reimbursement for bringing home remains, etc.									
Ambulances for naval hospitals.....				1,800.00		1,200.00	1,200.00	600.00	851.12
Naval hospital fund.....	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	30,000.00
SUPPLIES AND ACCOUNTS.									
Pay of the Navy.....	7,300,123.70	7,300,574.06	7,380,069.05	7,555,261.61	7,980,908.92	8,345,684.96	8,238,157.87	17,955,480.00	13,500,399.95
Provisions, Navy.....	1,100,000.00	1,060,000.00	1,149,077.27	1,175,244.20	1,175,000.00	1,405,039.60	2,810,155.30	2,500,000.00	3,000,353.44
Civil establishment, Supplies and Accounts.....				67,532.03	67,531.09	67,532.03	70,432.03	70,432.03	70,432.03
Contingent, Supplies and Accounts.....	44,034.96	42,462.56	43,521.75	47,553.06	45,000.00	55,851.65	101,864.32	150,000.00	150,137.76
Transportation of naval supplies.....									
Clothing and small stores fund.....									
Naval supply fund.....	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	300,000.00	1,000,000.00	1,000,000.00	1,000,000.00
CONSTRUCTION AND REPAIR.									
Construction and repair.....	1,000,000.00	950,000.00	950,000.00	900,000.00	1,750,000.00	1,250,000.00	4,600,143.20	8,950,000.00	5,080,220.28
Civil establishment, Construction and Repair.....	19,972.50	19,972.50	19,972.50	19,972.50	19,972.50	19,972.50	19,972.50	23,407.00	23,407.00
Coaling barge, Bureau Construction and Repair								16,000.00	
Repairs to—									
U. S. S. Hartford.....				150,000.00		100,000.00	70,000.00	30,000.00	
U. S. S. Chicago.....						250,000.00	50,000.00	225,000.00	
U. S. S. Constitution.....				8,000.00		7,500.00	92,500.00		
Model tank, navy yard, Washington, D. C.									
Construction plant—									
Navy yard—									
Portsmouth, N. H.....	25,000.00							50,000.00	25,000.00
Boston, Mass.....								50,000.00	25,000.00
Brooklyn, N. Y.....								50,000.00	25,000.00
League Island, Pa.....								50,000.00	25,000.00
Norfolk, Va.....								50,000.00	25,000.00
Pensacola, Fla.....								50,000.00	25,000.00
Mare Island, Cal.....								50,000.00	25,000.00
Puget Sound, Wash.....								50,000.00	25,000.00
Naval station—									
Port Royal, S. C.....							50,000.00		25,000.00
Key West, Fla.....									25,000.00
STEAM ENGINEERING.									
Steam machinery.....	700,000.00	650,000.00	768,729.24	907,055.00	883,225.32	1,329,646.69	2,254,262.98	5,600,000.00	2,676,028.43
Civil establishment, Steam Engineering.....	11,900.00	11,900.00	11,900.00	11,900.00	11,900.00	11,900.00	11,900.00	11,900.00	13,200.00
Contingent, Steam Engineering.....	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
Experiments with liquid fuel, Bureau of Steam Engineering.....								15,000.00	

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1902	1903	1904	1905	1906	1907	1908	1909	1900
STEAM ENGINEERING—Continued.									
Machinery plant—									
Navy yard—									
Boston, Mass.								\$15,000.00	
New York, N. Y.									\$900,000.00
League Island, Pa.	\$25,000.00								75,000.00
Norfolk, Va.								35,000.00	16,000.00
Mare Island, Cal.							\$50,000.00		
Puget Sound, Wash.								30,000.00	25,000.00
Naval station—									
Fort Royal, S. C.								50,000.00	
Key West, Fla.								30,000.00	
NAVAL ACADEMY.									
Pay, Naval Academy.....	\$104,273.45	104,265.45	\$104,265.45	\$107,158.97	\$105,186.13	\$106,401.45	106,401.45	106,401.45	107,353.45
Special course, Naval Academy.....	5,000.00	5,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
Heating and lighting, Naval Academy.....	17,000.00	18,730.20	18,218.86	18,400.52	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00
Contingent, Naval Academy.....	41,800.00	41,800.00	41,800.00	42,610.56	41,300.00	49,000.00	43,800.00	45,848.00	43,800.00
Repairs, Naval Academy.....	21,000.00	21,000.00	21,000.00	31,000.00	21,000.00	62,873.52	21,000.00	38,632.00	21,000.00
MARINE CORPS.									
Pay, Marine Corps.....	696,993.80	687,543.67	696,983.52	700,832.65	729,804.93	702,570.99	816,661.78	878,554.28	1,587,919.23
Provisions, Marine Corps.....	74,580.64	90,802.70	109,775.08	84,191.10	60,085.33	120,642.75	103,370.35	131,911.60	438,613.24
Clothing, Marine Corps.....	70,000.00	70,000.00	85,000.00	81,034.10	80,000.00	97,265.00	97,265.00	213,210.40	290,198.54
Fuel, Marine Corps.....	28,000.00	19,500.00	19,500.00	19,500.00	19,500.00	19,500.00	19,500.00	19,500.00	25,000.00
Military stores, Marine Corps.....	17,010.50	13,286.50	13,286.50	13,534.74	13,297.00	13,677.34	13,267.00	15,500.00	47,515.21
Transportation and recruiting, Marine Corps.....	15,083.33	16,780.24	15,000.00	15,000.00	15,021.38	15,070.34	15,425.92	23,064.00	31,192.83
Repairs of barracks, Marine Corps.....	14,300.00	16,512.00	12,000.00	20,000.00	12,000.00	23,500.00	45,892.51	18,925.00	16,300.00
Ferries, Marine Corps.....	3,500.00	2,800.00	2,800.00	3,389.85	3,242.13	2,800.00	3,000.00	3,000.00	6,000.00
Hire of quarters, Marine Corps.....	6,024.00	6,024.00	6,024.00	6,024.00	6,024.00	6,024.00	6,996.00	7,358.00	12,624.00
Contingent, Marine Corps.....	33,056.31	28,064.61	34,036.71	32,275.61	32,781.39	35,707.46	20,400.00	567,900.00	82,580.07
Pay, provisions, etc., Marine Corps.....									
Reimbursement to enlisted men of Marine Corps for losses.....								51.73	
INCREASE OF THE NAVY.									
Construction and machinery.....	13,107,000.00	7,000,000.00	6,875,000.00	5,955,028.00	8,364,851.30	6,870,600.00	6,425,359.00	13,648,473.00	5,992,402.00
Armor and armament.....	4,000,000.00	2,000,000.00	4,000,000.00	4,000,000.00	4,837,670.00	4,371,484.00	7,220,798.00	7,162,800.00	4,000,000.00
Equipment.....	400,000.00	400,000.00	250,000.00	4,000,000.00	125,000.00	287,000.00	1,162,628.00	415,000.00	400,000.00
Training vessel for Naval Academy.....									
Traveling cranes.....	100,000.00	60,000.00							

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1888, TO JUNE 30, 1917—Continued.

	1892	1893	1894	1895	1896	1897	1898	1899	1900
TOTALS.									
Amount of appropriations for each fiscal year.....	\$32,723,493.45	\$24,025,688.67	\$22,928,254.60	\$25,759,215.64	\$30,686,652.32	\$31,268,274.90	\$62,993,512.90	\$119,921,780.10	\$59,088,546.98
Amount appropriated and warranted during—									
Current fiscal year.....	32,680,521.30	23,962,657.47	22,583,638.85	25,535,535.19	29,431,923.39	30,688,712.64	55,034,653.20	116,152,715.04	58,546,175.88
First subsequent fiscal year.....	89,648.40	100,278.04	36,300.00	107,800.00	147,815.89	266,058.96	7,515,866.54	3,710,817.14	394,455.23
Second subsequent fiscal year.....	38,064.07	61,721.34	107,390.61	186,896.45	795,242.60	140,300.78	380,553.25	21,325.56	28,580.41
Third subsequent fiscal year.....	4,152.13	639.16	136,377.03	253.81	11,368.88	173,074.87	64,093.65	4,834.20	84,397.70
Fourth subsequent fiscal year.....	81.25	93.82	440.73	461.41	.....	.....	.....	2,087.56	21,369.66
Fifth subsequent fiscal year.....	126.30	576.88	475.41	272.66	.....	.....	8,071.52	.....	13,254.97
Sixth subsequent fiscal year.....	.....	.....	66	.....	.....	.....	.....	.....	.....
Seventh subsequent fiscal year.....	.....	.....	(1904) 94.00	(1903) 16.80	(1905) 21.38	(1905) 30.00	(1911) 2.15	.....	313.13
Other subsequent fiscal years.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SECRETARY'S OFFICE.									
Pay, miscellaneous.....	\$631,147.65	.....	\$651,535.98	.....	\$602,881.71	\$640,744.71	\$675,243.38	\$650,000.00	\$675,000.00
Contingent, Navy.....	11,340.85	.....	11,590.19	.....	17,410.29	65,113.24	45,000.00	65,000.00	65,000.00
Arming and equipping Naval Militia.....	60,000.00	.....	60,000.00	.....	60,000.00	60,000.00	60,000.00	60,000.00	16,000.00
Buildings for depots, Island of Guam, etc.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Expenses of the Bureau.....	485,359.10	.....	245,501.60	112,792.49	37,216.67	.....	.....	.....	.....
National Defense.....	263,886.74	.....	24,999.72	17,634.10	67,664.28	11.44	.....	.....	.....
NAVIGATION.									
Transportation, Navigation.....	.....	.....	.....	.....	295,671.94	319,094.40	380,000.00	508,543.84	724,679.16
Recruiting.....	.....	.....	.....	.....	88,633.10	97,141.00	90,141.00	121,373.00	121,340.00
Contingent.....	.....	.....	.....	.....	27,694.40	30,398.20	25,000.00	15,000.00	15,000.00
Gunnery exercises.....	13,068.73	.....	16,142.30	12,000.00	120,262.88	120,338.88	120,000.00	120,000.00	120,000.00
Outfits on first enlistment.....	.....	.....	.....	250,770.20	463,610.32	450,121.62	567,000.00	567,000.00	1,022,830.82
Maintenance, naval auxiliaries.....	.....	.....	.....	.....	100,885.00	75,000.00	75,000.00	75,000.00	75,000.00
Ocean and lake surveys.....	100,425.00	.....	100,050.00	100,000.00	40,000.00	40,000.00	40,000.00	50,000.00	64,664.08
Naval training station, California.....	37,494.32	.....	30,014.31	33,200.65	40,000.00	40,000.00	61,000.00	71,511.50	71,000.00
Naval training station, Rhode Island.....	45,000.00	.....	45,069.60	58,652.00	60,298.68	56,000.00	.....	26,940.00	26,940.00
Naval training station, Great Lakes.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Naval War College.....	9,200.00	.....	11,200.00	16,845.25	11,200.00	13,300.00	16,900.00	16,900.00	18,700.00
Naval Home, Philadelphia, Pa.....	76,428.00	.....	76,428.00	76,428.00	77,344.00	76,735.00	76,823.00	77,215.00	78,683.00
Transportation, recruiting, and contingent.....	143,804.01	.....	201,463.96	269,410.28	.....	.....	.....	.....	.....
.....	112,500.00	.....	117,336.30	117,000.00	.....	.....	.....	.....	.....

Outfits for landmen.....	146,231.28	226,187.50	225,318.99	422,251.21	383,084.00	383,084.00	450,000.00	14,941.19	
Maintenance of colliers.....	25,000.00	350,000.00	412,171.04			10,000.00			
Medals for officers and men, Navy and Marine Corps.....	71,400.21	64,383.28	44,486.78	96,660.84	77,203.10	83,938.85	45,772.40		
Navy transportation, Pacific roads.....									
ORDNANCE.									
Ordnance and ordnance stores.....	1,562,960.00	1,825,000.00	2,359,486.62	2,581,003.04	3,529,301.78	3,511,300.00	4,015,000.00	5,289,000.00	
New Batteries for ships of the Navy.....		175,000.00						349,200.00	
New Batteries for "Baturoys".....			175,000.00						
New Batteries for "New York".....			200,000.00	100,000.00					
Modernizing batteries, "Massachusetts" and "Albatross".....									
Modernizing batteries, "Massachusetts" and "Oregon," and new guns and armor for "New York".....							466,000.00	4,000,000.00	
Reserve ammunition.....									
Reserve powder and shell.....									
Reserve torpedoes and appliances.....									
Torpedo station, Newport, R. I.....	65,000.00	65,000.00	65,006.92	65,105.00	65,000.00	100,000.00	65,000.00	250,000.00	
Repairs, Ordnance.....	38,199.48	42,352.73	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	70,000.00	
Contingent, Ordnance.....	70,000.00	75,013.39	87,239.08	76,355.80	93,373.86	25,000.00	25,000.00	30,000.00	
Civil establishment, Ordnance.....	32,624.00	38,608.75	41,006.75	46,006.75	47,006.75	47,006.75	47,006.75	27,222.60	
Reserve guns, auxiliary cruisers.....	250,000.00	250,000.00	250,000.00		125,000.00	50,000.00		47,206.75	
Reserve guns for ships of the Navy.....					125,000.00	150,000.00	750,000.00	750,000.00	
Reserve mines and appliances.....								100,000.00	
Fire control for ships of the Navy.....								300,000.00	
Torpedoes and converting torpedo boats.....								300,000.00	
Ordnance machinery, navy yard, New York, N. Y.....			11,000.00						
Ordnance machinery, navy yard, Pensacola, Fla.....			12,000.00						
Ordnance machinery, navy yard, Mare Island, Cal.....		24,000.00							
Ordnance machinery, navy yard, Puget Sound, Wash.....			50,000.00						
Ammunition lighter, naval station, Puget Sound, Wash.....		18,000.00							
Ammunition lighter, naval station, Cavite, P. I.....				30,000.00					
EQUIPMENT									
Equipment of vessels.....	3,952,072.46	1,951,639.04	2,834,829.37	3,056,276.22	3,000,127.78	3,001,693.00	3,000,000.00	3,250,000.00	
Civil establishment, Equipment.....	19,502.52	20,802.52	31,402.52	33,602.52	38,028.00	38,028.00	38,028.00	38,028.00	
Contingent, Equipment.....	27,503.25	35,042.22	35,049.90	41,537.42	50,408.27	14,000.00	11,000.00	16,183.21	
Equipment plant, Philippine Islands.....	20,000.00								
YARDS AND DOCKS.									
Maintenance, Yards and Docks.....	500,654.17	674,127.35	702,689.83	792,989.11	796,066.72	765,235.53	867,816.86	950,000.00	
Contingent, Yards and Docks.....	50,000.00	50,000.00	40,000.00	40,000.00	40,000.00	30,000.00	105,000.00	30,000.00	
Civil establishment, Yards and Docks.....	83,639.83	104,879.08	108,760.58	108,903.70	146,790.92	142,443.92	143,308.93	149,494.24	
Naval Observatory.....	12,500.00	12,000.00	5,000.00	10,000.00	7,800.00	10,000.00	10,000.00	10,000.00	

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1901	1902	1903	1904	1905	1906	1907	1908
PUBLIC WORKS, BUREAU OF YARDS AND DOCKS.								
Navy yard—								
Portsmouth, N. H.	\$406,000.00	\$364,850.00	\$372,575.00	\$917,000.00	\$149,000.00	\$400,400.00	\$367,498.33	\$279,900.00
Boston, Mass.	966,300.00	551,000.00	702,700.00	479,200.00	258,800.00	162,800.00	95,050.00	128,500.00
New York, N. Y.			560,500.00	313,000.00	371,500.00	82,200.00	128,500.00	263,800.00
Brooklyn, N. Y.	1,208,900.00	1,009,000.00		349,200.00	512,970.00	377,000.00	108,000.00	125,500.00
League Island, Pa.	839,500.00	686,200.00	522,300.00	274,240.00	575,908.00	137,000.00	63,200.00	85,000.00
Washington, D. C.	444,102.32	318,210.00	241,000.00	193,000.00	959,000.00	148,000.00	404,500.00	365,500.00
Norfolk, Va.	477,700.00	594,260.00	344,000.00	300,000.00	706,500.00	396,000.00	471,500.00	287,000.00
Charleston, S. C.			913,300.00	300,000.00	14,000.00	135,500.00	40,000.00	242,500.00
Pensacola, Fla.	9,500.00	41,500.00	2,500.00	148,000.00	94,000.00	322,200.00	143,000.00	248,500.00
Mare Island, Cal.	478,200.00	331,660.00	225,500.00	188,000.00	260,000.00	322,200.00	143,000.00	248,500.00
Puget Sound, Wash.	286,165.00	273,000.00	610,500.00	295,200.00	292,500.00	213,500.00	205,000.00	288,500.00
Naval station—								
New London, Conn.			41,000.00	2,500.00				
And coaling depot, Port Royal, S. C.	227,000.00	144,000.00	118,950.00	165,000.00	2,000.00	29,000.00	39,200.00	44,500.00
Key West, Fla.	100,000.00	330,000.00						
Algebra, La.	145,000.00							
New Orleans, La.			339,000.00	111,800.00	271,500.00	95,000.00	215,500.00	156,300.00
Cavite, P. I.			233,500.00	322,800.00	735,000.00			13,000.00
Culebra, P. I.				300,000.00	388,000.00			2,000.00
Guantanamo, Cuba.		107,300.00		10,000.00		10,000.00		22,500.00
Guam, M. I.		225,000.00			(*) 868,395.00	100,000.00	35,000.00	3,100.00
Honolulu, Hawaii.		40,000.00	60,000.00	39,000.00	5,000.00	1,000.00	207,000.00	90,000.00
Olongapo, P. I.				100,000.00				6,000.00
Tutuhila, Samoa.								
San Juan, P. R.	52,000.00							
Purchase of wharftand adjoining land, Newport, R. I.		149,571.08						7,840.00
Government land, Newport, R. I.		23,000.00	26,000.00	25,000.00	34,100.00		9,400.00	12,500.00
Naval Observatory, purchase of land, Newport, R. I.			25,000.00	10,500.00	121,500.00	25,000.00	19,700.00	34,130.00
Torpedo station buildings.								
Quarters, Rose Island, Narragansett Bay.								
Naval proving ground, Narragansett Bay.								
Naval training station buildings.								
Rhode Island buildings.	58,850.00	52,170.00	114,280.00	232,000.00	14,000.00	74,500.00	162,971.00	58,912.00
California, buildings.	34,750.00	6,814.85	5,200.00	4,250.00	19,000.00	15,000.00	66,750.00	39,000.00
Build on Naval Training Station, Great Lakes.			60,000.00	12,835.00	250,000.00	5,000.00	750,000.00	700,000.00
Blids range, Blythe Island, Ga.			5,000.00		8,125.00		1,200.00	
Depots for coal.		2,000.00						
Steel tugs, general services.	700,000.00	750,000.00	140,000.00		600,000.00	300,000.00		
Seagoing tugs.					350,000.00			
Board on Dry Docks, Columbia River, Oreg.	1,000.00							
Four timber dry docks.	900,000.00	1,000,000.00	1,060,000.00	295,033.61				

Statement 48.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1901	1902	1903	1904	1905	1906	1907	1908
MEDICINE AND SURGERY.								
Medical Department.....	\$115,045.72	\$135,000.00	\$175,243.96	\$200,120.03	\$225,200.44	\$240,000.00	\$255,000.00	\$290,983.40
Contingent, Medicine and Surgery.....	37,868.01	44,493.54	54,240.55	66,846.96	53,417.11	50,000.00	55,000.00	58,145.53
Bringing home remains, etc.....	10,000.00		30,000.00	40,000.00	15,000.00	14,119.85	10,000.00	15,200.00
Repairs, Medicine and Surgery.....	20,966.94	30,170.32	40,000.00	40,000.00	45,000.00	46,000.00	45,000.00	45,000.00
Reimbursement for bringing home remains, etc.....	33.50							
Naval hospital fund.....	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00
Equipment of naval hospital Guantanamo, Cuba.....							900.00	
SUPPLIES AND ACCOUNTS.								
Pay of the Navy.....	12,861,720.02	15,150,285.00	16,139,072.26	17,707,249.66	19,328,034.13	20,000,000.00	21,290,775.89	23,973,659.35
Provisions Navy.....	2,500,416.86	3,231,052.59	3,969,517.19	4,598,357.86	4,863,314.22	3,230,569.14	3,220,000.00	6,144,942.29
Civil establishments, Supplies and Accounts.....	81,222.03	94,174.28	100,100.73	101,973.34	103,822.25	104,010.23	103,000.00	103,802.04
Contingent, Supplies and Accounts.....	180,000.00	200,121.06	200,000.00	231,304.76	231,063.62	170,000.00	160,000.00	185,000.00
Freight, Supplies and Accounts.....						475,000.00	460,000.00	500,000.00
Coal and transportation.....			2,500,131.86	2,690,537.10	2,960,000.00	3,250,000.00	3,750,000.00	3,850,000.00
Clothing and small stores fund.....		200,000.00		1,000,000.00				
Naval supply fund.....								
CONSTRUCTION AND REPAIR.								
Construction and repair.....	7,500,477.29	7,001,190.16	8,011,099.18	8,001,811.32	8,024,324.34	7,804,868.00	7,900,000.00	7,903,306.23
Civil establishment, construction and repair.....	25,824.25	28,824.25	25,824.25	27,024.25	40,824.25	40,824.25	40,824.25	40,824.25
Construction plant—								
Navy yard—								
Portsmouth, N. H.....	25,000.00	50,000.00	30,000.00	20,000.00	20,000.00	15,000.00	15,000.00	15,000.00
Boston, Mass.....	25,000.00	50,000.00	50,000.00	50,000.00	30,000.00	20,000.00	20,000.00	20,000.00
Brooklyn, N. Y.....	25,000.00	25,000.00	50,000.00	50,000.00	50,000.00	20,000.00	20,000.00	20,000.00
New York, N. Y.....				50,000.00	60,000.00	20,000.00	20,000.00	20,000.00
League Island, Pa.....	25,000.00	50,000.00	50,000.00	30,000.00	20,000.00	15,000.00	15,000.00	15,000.00
Norfolk, Va.....	25,000.00	50,000.00	50,000.00	30,000.00	20,000.00	15,000.00	15,000.00	15,000.00
Pensacola, Fla.....	5,000.00	15,000.00	50,000.00	30,000.00	20,000.00	15,000.00	15,000.00	15,000.00
Mare Island, Cal.....	25,000.00	50,000.00	50,000.00	30,000.00	20,000.00	15,000.00	15,000.00	15,000.00
Charleston, S. C.....	25,000.00	50,000.00	50,000.00	30,000.00	20,000.00	15,000.00	15,000.00	15,000.00
Puget Sound, Wash.....	25,000.00	30,000.00	75,000.00	75,000.00	30,000.00	20,000.00	20,000.00	20,000.00
Naval station—								
Port Royal, S. C.....	5,000.00							
New Orleans, La.....	25,000.00	15,000.00	15,000.00	25,000.00			10,000.00	10,000.00
Albany, La.....								
Cavite, P. I.....			50,000.00					

STEAM ENGINEERING.

Steam machinery.....	3, 160, 001.86	3, 246, 853.81	3, 439, 552.40	4, 009, 149.58	4, 105, 187.82	4, 014, 335.70	5, 505, 000.00	5, 506, 000.00
Engineering experimental station, Annapolis, Md.....	13, 300.00	16, 900.00	17, 900.00	17, 900.00	17, 900.00	17, 900.00	30, 520.00	30, 520.00
Civil establishment, Steam Engineering.....	1, 000.00	1, 000.00	20, 000.00				17, 900.00	17, 900.00
Contingent, Steam Engineering.....					25, 000.00			
Tests of liquid fuel for naval purposes.....								
Extended tests, marine steam turbines.....								
Naval wireless telegraph station, Pacific coast.....								
Machinery plants:.....								
Navy yard—.....								
Borismouth, N. H.....	25, 000.00							
Boston, Mass.....	50, 000.00			60, 000.00	75, 000.00		110, 000.00	30, 000.00
New York, N. Y.....								40, 000.00
Longue Point, Pa.....		100, 000.00	130, 000.00			40, 000.00		25, 000.00
Norfolk, Va.....			23, 000.00	25, 000.00	50, 000.00		25, 000.00	50, 000.00
Pensacola, Fla.....								10, 000.00
Puget Island, Cal.....		100, 000.00	80, 000.00			15, 000.00		
Purget Sound, Wash.....	50, 000.00		125, 000.00					
Naval stations:.....								
New Orleans, La.....								25, 000.00
San Juan, P. R.....	25, 000.00							
Alceter, La.....	25, 000.00							
Honolulu, Hawaii.....	25, 000.00							
Cavite, P. I.....								25, 000.00
Olongapo, P. I.....								20, 000.00

NAVAL ACADEMY.

Pay, Naval Academy.....	107, 055.45	107, 815.45	112, 605.77	138, 597.34	160, 608.46	171, 175.96	233, 751.32	233, 751.32
Special course, Naval Academy.....	3, 000.00	4, 500.00	4, 500.00	3, 000.00	3, 000.00	3, 000.00	3, 000.00	3, 000.00
Heating and lighting, Naval Academy.....	20, 000.00	20, 000.00	20, 000.00	31, 400.00	40, 000.00	40, 000.00	72, 120.00	72, 120.00
Contingent, Naval Academy.....	43, 800.59	43, 800.00	61, 800.00	72, 800.00	103, 500.00	103, 500.00	105, 447.04	105, 447.04
Repairs, Naval Academy.....	77, 000.00		111, 000.00	31, 000.00	31, 000.00	31, 000.00	30, 000.00	30, 000.00
Tablets on historic places, Naval Academy.....				500.00			20, 259.48	20, 259.48

MARINE CORPS.

Pay, Marine Corps.....	1, 094, 139.86	1, 784, 652.34	1, 883, 602.13	2, 154, 217.75	2, 355, 653.62	2, 595, 282.28	2, 968, 998.46	2, 968, 998.46
Provisions, Marine Corps.....	371, 854.03	371, 052.80	446, 071.50	462, 122.42	492, 826.32	512, 090.00	548, 506.25	548, 506.25
Clothing, Marine Corps.....	290, 199.54	290, 199.54	382, 000.00	472, 370.00	422, 412.00	607, 370.00	600, 920.00	600, 920.00
Fuel, Marine Corps.....	32, 234.01	39, 074.08	42, 890.38	55, 024.52	61, 133.26	65, 000.00	73, 691.43	106, 000.00
Military stores, Marine Corps.....	77, 595.50	46, 297.00	76, 328.12	135, 865.00	160, 908.61	185, 000.00	202, 304.25	225, 762.00
Transportation and recruiting, Marine Corps.....	86, 279.18	70, 000.00	110, 067.90	141, 735.37	121, 962.73	236, 823.99	156, 591.87	186, 006.00
Repairs of barracks, Marine Corps.....	85, 701.63	30, 191.48	71, 572.42	72, 341.82	72, 336.00	66, 335.00	66, 336.00	88, 836.00
Forage, Marine Corps.....	6, 000.00	8, 803.01	11, 000.00	17, 700.00	17, 700.00	17, 724.33	17, 700.00	17, 700.00
Hire of quarters, Marine Corps.....	14, 748.00	19, 372.00	22, 069.60	31, 166.15	35, 748.00	37, 541.13	45, 261.89	51, 548.00
Contingent, Marine Corps.....	101, 110.44	100, 916.54	134, 982.77	233, 242.53	210, 576.54	228, 784.08	286, 584.60	345, 422.14
Arms and equipment, Marine Corps.....								
Replacing stores, etc., Marine Corps, destroyed at San Francisco.....						150, 000.00		

Statement 43. — APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1901	1902	1903	1904	1905	1906	1907	1908
INCREASE OF THE NAVY.								
Construction and machinery.....	\$12,740,699.00	\$21,000,000.00	\$13,303,010.00	\$15,025,632.00	\$26,826,800.00	\$23,410,833.00	\$17,830,826.00	\$12,713,915.00
Armor and armament.....	4,000,000.00	8,000,000.00	9,000,000.00	12,000,000.00	18,000,000.00	18,000,000.00	15,145,000.00	12,000,000.00
Equipment.....	400,000.00	400,000.00	400,000.00	400,000.00	100,000.00	845,000.00	250,000.00	500,000.00
Torpedo boats.....				500,000.00	350,000.00		500,000.00	500,000.00
Gun plant, navy yard, Washington, D. C.....	175,000.00	199,849.00	65,000.00	190,000.00	120,500.00	188,000.00	200,000.00	160,000.00
MISCELLANEOUS.								
Claims for damages by collision with naval vessels.....				9,518.28				
Certified claims.....	75.00	9,398.70	1,698.83	19,521.34		38,264.42	74,860.48	74,020.64
Canal connecting Atlantic and Pacific Oceans.....	12,142.80		34,579.56	2,500.00				
Entertainment of foreign naval representatives, Jamestown Exposition.....								
Exhibit of monitors, Jamestown Exposition.....								
Enlistment bounty to seamen.....							100,000.00	
Extra pay to officers and men who served in Mexican War.....							10,000.00	
Expenses incidental to burial of officers and men who died on the Mission.....	2,248.00	348.00	63.00					30.00
Judgments, claims, British steamship <i>Foccolia</i>				10,000.00				
Judgments, bounty for destruction of enemy's vessels.....	458,300.00	50,000.00		232,219.33				
Judgments, Court of Claims and United States courts.....	10,000.00			57,500.00				
Observation of eclipses of sun, May 19, 1901.....				88,820.29		689,056.93	171,959.14	32,250.03
Private acts, etc. (various).....	124.63	17,926.25	11,113.49	63,620.59	4,458.45		4,097.56	748.00
Payment of certain claims arising under the Navy Department.....								
Prize money <i>Battle of Manila Bay</i>			946,083.89				11,397.20	6,544.98
Permanent moorings.....							15,000.00	
Relief of sufferers by destruction of U. S. S. <i>Maine</i>	192.00	650.00	432.00					
Relief of officers and crew U. S. S. <i>Charleston</i>				14,263.47		199.98	209.88	60.86
Reimbursement of Philippine Insular funds for gunboats etc.....		208,819.67			1,440.50			
Reimbursement to officers and men for losses at San Francisco, Cal.....								
Reimbursement to California State prison.....			265.50				7,000.00	
Reimbursement to enlisted men Navy and Marine Corps for clothing and bedding destroyed.....								
Reimbursement to American Society in London.....								
Transporting contributions for famishing poor of India.....	20,000.00							

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1888, TO JUNE 30, 1917—Continued.

	1909	1910	1911	1912	1913	1914	1915	1916
ORDNANCE.								
Ordnance and ordnance stores.....	\$8,079,780.17	\$6,228,861.99	\$6,587,345.60	\$6,650,000.00	\$6,550,000.00	\$6,950,000.00	\$6,950,000.00	\$7,940,420.00
Naval Gun Factory, Washington, D. C.....			150,000.00	125,000.00	321,642.44	125,000.00	75,000.00	75,000.00
Powder Factory, Indianhead, Md.....			303,000.00	845,000.00	1,307,715.21	414,000.00	380,000.00	141,620.00
New batteries for ships of the Navy.....	1,120,000.00	722,000.00	8,657.60					100,000.00
New batteries for "Newark".....			2,500,000.00	2,850,000.00	7,818,235.23	3,850,000.00	1,000,000.00	3,000,000.00
Ammunition for ships of the Navy.....		3,000,000.00			1,208,637.78	750,000.00	1,000,000.00	1,000,000.00
Torpedoes and appliances.....			650,000.00	650,000.00	130,000.00	95,000.00	95,000.00	130,000.00
Reserve torpedoes and appliances.....	300,000.00	625,000.00	170,000.00	70,000.00	173,180.05	200,000.00	150,000.00	100,000.00
Torpedo station, Newport, R. I.....	20,000.00	100,000.00	100,000.00	100,000.00	30,000.00	30,000.00	30,000.00	30,000.00
Experiments, Bureau of Ordnance.....	30,000.00	30,849.70	30,000.00	30,000.00	9,500.00	9,500.00	9,500.00	9,500.00
Repairs, Ordnance.....		9,500.00						
Contingent, Ordnance.....	14,066.00							
Civil establishment, Ordnance.....	47,206.75							
Reserve guns for ships of the Navy.....		250,000.00	250,000.00	420,000.00	410,068.14			
Small arms and machine guns.....			100,000.00					
Mines and mine appliances.....		150,000.00	100,000.00	80,000.00	182,976.45			
Fire control for ships of the Navy.....	300,000.00							
Torpedoes and converting torpedo boats.....	650,000.00							
Modernizing turrets of ships of the Navy.....		288,000.00	564,000.00		282,630.09	150,000.00		
Modernizing projectiles.....					300,000.00			
EQUIPMENT.								
Equipment of vessels.....	3,755,391.07	3,981,432.50	3,863,322.47	3,843,300.00	3,843,300.00	4,550,000.00		
Civil establishment, Equipment.....	38,028.00							
Contingent, Equipment.....		11,281.00	10,000.00	10,000.00	10,000.00	10,000.00		
Equipment, machinery plants.....	100,000.00							
YARDS AND DOCKS.								
Maintenance, Yards and Docks.....	1,250,000.00	1,514,419.71	1,394,498.85	1,540,000.00	1,600,030.64	1,570,670.64	1,600,000.00	1,647,698.00
Contingent, Yards and Docks.....	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	50,000.00	50,000.00
Civil establishment, Yards and Docks.....	149,428.34							
Naval Observatory.....	10,000.00	10,000.00	10,000.00	5,000.00	5,000.00	5,000.00		
PUBLIC WORKS, BUREAU OF YARDS AND DOCKS.								
Navy yard—								
Portsmouth, N. H.....	251,647.80	96,500.00	55,260.00	229,000.00	44,000.00	35,000.00		25,000.00
Hoston, Mass.....	197,800.00	210,000.00	105,000.00	377,000.00	240,000.00	120,800.00		135,000.00
New York, N. Y.....	246,000.00	397,530.00	1,266,000.00	879,000.00	125,000.00	270,000.00		145,500.00
Philadelphia, Pa.....	190,000.00	467,600.00	1,218,000.00	160,000.00	150,397.19	223,491.99		58,000.00
Washington, D. C.....	60,000.00	60,000.00	146,000.00	109,500.00	200,000.00	53,000.00		145,000.00
Norfolk, Va.....	768,000.00	300,000.00	896,000.00	382,500.00	158,284.73	262,500.00	25,000.00	120,000.00

Charleston, S. C.	167,000.00	135,500.00	2,000.00	70,000.00	38,000.00	159,000.00	180,000.00	95,000.00
Pensacola, Fla.	36,900.00	20,000.00	102,000.00	345,000.00	80,000.00	80,000.00	257,000.00	15,000.00
Mare Island, Cal.	211,000.00	620,636.46	885,000.00	989,000.00	227,000.00	246,000.00	155,000.00	65,000.00
Fuget Sound, Wash.	560,000.00	655,000.00				40,000.00	10,000.00	60,000.00
Naval station—								
Narragansett Bay								
Key West, Fla.	56,000.00	45,000.00	137,767.22	107,000.00	50,500.00	40,000.00	10,000.00	5,000.00
New Orleans, La.	59,700.00	15,900.00	64,677.71				29,084.87	
Cavite, P. I.	11,100.00							
Culebra, P. R.				378,500.00			38,000.00	
Guantanamo, Cuba.				32,000.00		25,000.00		
Guam, M. I.	32,000.00	44,000.00	5,000.00					
Honolulu, Hawaii.	6,000.00							
Olongapo, P. I.	100,000.00							
Pearl Harbor, Hawaii.	1,000,000.00	1,200,000.00	2,535,000.00	2,262,000.00	1,532,000.00	629,000.00	70,000.00	
Tutuila, Samoa.	15,000.00	5,500.00		300.00				
Purchase of land, Penobscot Bay, Me.	54,150.00	39,500.00	3,400.00	87,200.00	135,000.00	30,000.00	260,000.00	
Torpedo station buildings.			57,100.00					
Pacific coast torpedo station.			145,000.00					
Naval proving ground, Indianhead, Md.	14,760.00	32,125.00	10,000.00	24,500.00	31,200.00	44,000.00	200,000.00	184,380.00
Naval training station—								
Rhode Island, buildings.	139,890.00	79,716.72	16,300.00	59,000.00	15,000.00	26,000.00		15,000.00
California, buildings.	29,500.00	18,445.52	57,100.00	4,100.00	1,500.00	10,000.00		
Great Lakes, buildings.	1,065,600.00	413,400.00			7,000.00			
Rifle range, Brenterton, Wash.				20,000.00				
Marine Corps rifle range, Wintthrop, Md.	450,000.00	450,000.00	110,000.00	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00
Depots for coal.	504,729.99				38,622.20	26,000.00		
Naval coaling depot, Melville Station, R. I.					3,322.54			
Four timber dry docks.								
Repairing dry dock Dewey.								
Naval magazines—								
Fort Langford, coast		100,000.00			53,000.00	22,445.00		
New York Harbor.	10,000.00	28,000.00		30,000.00	40,000.00	17,500.00		
Dover, N. J.		28,000.00		15,000.00	26,500.00	3,500.00		
Fort Mifflin, Pa.	14,600.00	45,000.00	18,500.00	18,000.00	11,100.00			64,000.00
Norfolk, Va.		13,000.00		45,000.00	24,500.00	46,500.00		20,000.00
Pensacola, Fla.	5,000.00							
Mare Island, Cal.	11,500.00	11,500.00	8,600.00	18,000.00	26,939.84	19,900.00		
Fuget Sound, Wash.	34,350.00	4,250.00	21,600.00	39,000.00	13,000.00	40,500.00		58,000.00
Kaunaha, Hawaii.					152,500.00	250,500.00		
Guantanamo, Cuba.								
Olongapo, P. I.	8,000.00		8,800.00	51,000.00		15,300.00		
Naval disciplinary barracks.				20,377.00			75,000.00	
Floating crane Hercules.			115,000.00					
Floating crane.			125,000.00					
Floating derricks.	100,000.00	150,000.00			210,000.00			
Plans and specifications.	30,000.00	30,000.00						
Consolidating power plants, navy yards and stations.	29,677.71	30,000.00						
Buildings and grounds, Naval Academy.	47,000.00	75,000.00	187,000.00	25,000.00	85,000.00	50,000.00	75,000.00	
Repairs and preservation at navy yards.	611,609.79	700,000.00	700,000.00	800,000.00	800,000.00	800,000.00	1,100,000.00	1,097,436.00

CONSTRUCTION AND REPAIR.										
Construction and repair.....	8,000,120.25	8,979,144.00	8,479,144.00	8,479,153.89	8,250,000.00	9,786,000.00	9,835,077.00			
Civil establishment, Construction and Repair.....	40,824.25				300,000.00					
Wrecking pontoon for submarines.....					115,000.00					110,000.00
Construction plants at navy yards.....										
Construction plant—										
Navy yard—										
Portsmouth, N. H.....	15,000.00	15,000.00	15,000.00							
Boston, Mass.....	20,000.00	20,000.00	20,000.00							
New York, N. Y.....	20,000.00	20,000.00	20,000.00							
Philadelphia, Pa.....	15,000.00	15,000.00	15,000.00							
Norfolk, Va.....	12,000.00	12,000.00	12,000.00							
Pensacola, Fla.....	15,000.00	15,000.00	15,000.00							
Mare Island, Cal.....	15,000.00	15,000.00	15,000.00							
Puget Sound, Wash.....	20,000.00	20,000.00	20,000.00							
Naval stations—										
New Orleans, La.....	10,000.00			200,000.00						
Pearl Harbor, Hawaii.....										
Pearl Harbor, Hawaii.....										
Steam machinery.....	6,006,000.00	6,663,005.60	6,256,000.00	6,256,427.13	6,006,000.00	8,115,000.00	8,681,583.40			
Engineering.....										
Engineering experimental station, Annapolis, Md.....	30,520.00	17,568.42	40,000.00	40,011.82	86,000.00	80,000.00	80,000.00			
Civil establishment, Steam Engineering.....	17,900.00									
High-power radio stations.....										
Development of heavy oil engine.....										
Machinery plants—										
Navy yard—										
Portsmouth, N. H.....	30,000.00	30,000.00								
Boston, Mass.....	25,000.00									
New York, N. Y.....	40,000.00									
Philadelphia, Pa.....	25,000.00									
Norfolk, Va.....	25,000.00									
Pensacola, Fla.....	10,000.00									
Mare Island, Cal.....	15,000.00	15,000.00								
Puget Sound, Wash.....	25,000.00	25,000.00								
Naval station—										
New Orleans, La.....	10,000.00									
Pearl Harbor, Hawaii.....										
Cavite, P. I.....	15,000.00	15,000.00		300,000.00						
Olongapo, P. I.....	25,000.00									
NAVAL ACADEMY.....										
Pay, Naval Academy.....	291,251.32	318,516.18	186,704.00	190,504.00	188,534.00	186,084.00	186,084.00			186,084.00
Special course, Naval Academy.....	5,000.00	5,000.00								
Heating and lighting, Naval Academy.....	60,265.64	70,000.00								
Contingent, Naval Academy.....	100,777.04	110,838.42								
Current and miscellaneous expenses, Naval Academy.....		44,500.00	46,500.00	46,000.00	43,500.00	33,500.00	33,500.00			

Statement 43.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

	1909	1910	1911	1912	1913	1914	1915	1916
NAVAL ACADEMY—continued.								
Maintenance, Naval Academy.....	\$30,000.00	\$40,000.00	\$214,116.00	\$214,116.00	\$219,116.00	\$354,116.00	\$279,116.00	\$279,116.00
Repairs, Naval Academy.....			65,000.00	100,013.24	125,000.00			
Maintenance and repairs, Naval Academy.....				3,000.00				
Memorials, Naval Academy.....				75,000.00				
Completion of crypt of chapel, Naval Academy.....								
MARINE CORPS.								
Pay, Marine Corps.....	3,922,959.63	4,349,910.28	4,176,134.50	4,281,001.28	4,387,131.78	4,503,296.78	4,345,469.86	4,580,834.33
Clothing, Marine Corps.....	256,655.35	732,309.22	845,822.17	820,000.00	831,540.00			
Food, Marine Corps.....	113,810.97	146,500.00	146,400.00	152,928.00	144,000.00			
Military stores, Marine Corps.....	270,000.00	267,737.00	358,467.00	447,970.90	307,737.00			
Repairs of barracks and recruiting, Marine Corps.....	264,000.04	262,000.00	262,000.00	262,000.00	317,000.00			
Forage, Marine Corps.....	96,536.00	100,007.37	110,000.00	110,000.00	120,000.00			
Fortifications, Marine Corps.....	28,320.00	24,700.00	24,200.00	20,200.00	24,000.00			
Contingent, Marine Corps.....	82,000.00	73,000.00	80,500.00	80,500.00	74,000.00			
Maintenance, quartermaster's department, Marine Corps.....	426,000.00	410,000.00	420,018.15	456,517.05	460,000.00	3,308,598.80	3,000,000.00	3,404,024.18
INCREASE OF THE NAVY.								
Construction and machinery.....	12,832,962.00	23,766,823.00	19,400,733.00	13,781,785.79	9,846,205.00	19,818,228.00	19,647,617.00	20,664,459.00
Armor and armament.....	11,000,000.00	12,452,773.00	11,565,122.00	10,532,928.00	7,265,200.00	11,724,192.00	17,412,500.00	18,957,998.00
Equipment.....	3,000,000.00	3,000,000.00	3,399,500.00	3,000,000.00	3,555,000.00	4,480,000.00	5,221,647.00	6,231,344.00
Torpedo boats.....	1,500,000.00	3,000,000.00	2,104,971.00	1,690,833.88	2,521,647.00	3,353,275.00	3,810,617.00	
Coiffers.....	1,575,000.00		300,000.00		581,321.48			
Purchase of steam coiffers.....	150,000.00	205,000.00						
Gun plant, navy yard, Washington, D. C.....								
MISCELLANEOUS.								
Claims for damages by collision with naval vessels.....			226.06		3,946.45	2,183.29	1,296.71	2,703.89
Certified claims.....	74,479.20	30,825.63	44,909.75		163,740.42	65,479.82	86,834.19	53,683.06
Extra pay to officers and men who served in Mexican War.....	1,601.14	6,350.31	279,002.55		175,327.37	11,738.80	32,206.53	97,373.74
Judgments, Court of Claims and United States courts.....		25,561.00	13,037.80	5,751.75	26,938.08	2,248.00	9,178.45	3,174.13
Private acts, etc. (various).....								
Payment of certain claims arising under Navy Department.....	1,570.17		30,116.79			4,313.58	46,169.95	
Payment to certain Government employees for injuries received.....					2,750.00			
Payment to Fort Graham Coal Co., Seldovia, Alaska.....						5,000.00		
Relief of sufferers, earthquake in Italy.....	600,000.00							

Statement 48.—APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1888, TO JUNE 30, 1917—Continued.

	1909	1910	1911	1912	1913	1914	1915	1916
NAVAL ACADEMY—continued.								
Maintenance, Naval Academy.....	\$30,000.00	\$40,000.00	\$214,116.00	\$214,116.00	\$219,116.00	\$354,116.00	\$279,116.00	\$279,116.00
Repairs, Naval Academy.....			65,000.00	100,013.24	125,000.00			
Maintenance and repairs, Naval Academy.....				3,000.00				
Memorials, Naval Academy.....				75,000.00				
Completion of crypt of chapel, Naval Academy.....								
MARINE CORPS.								
Pay, Marine Corps.....	3,922,259.63	4,349,910.28	4,176,124.50	4,281,001.28	4,387,121.78	4,503,296.78	4,345,469.86	4,580,824.33
Provisions, Marine Corps.....	756,855.33	781,302.22	654,628.17	820,000.00	821,500.00			
Fuel, Marine Corps.....	758,990.00	781,302.22	654,628.17	752,900.00	821,500.00			
Food, Marine Corps.....	119,810.97	145,500.00	145,500.00	157,000.00	161,000.00			
Military stores, and recruiting, Marine Corps.....	270,000.00	297,737.00	355,467.00	447,927.90	307,737.00			
Transportation, Marine Corps.....	261,000.00	282,000.00	282,000.00	265,000.00	317,000.00			
Repairs of boats, Marine Corps.....	86,824.04	109,097.37	114,000.00	110,000.00	120,000.00			
Forage, Marine Corps.....	28,320.00	22,700.00	24,200.00	24,200.00	24,200.00			
Communication of orders, Marine Corps.....	83,000.00	75,000.00	80,500.00	80,500.00	79,000.00			
Contingent, Marine Corps.....	420,000.00	410,000.00	420,018.15	458,517.05	460,000.00			
Maintenance, quartermaster's department, Marine Corps.....						3,308,598.80	3,000,000.00	3,404,024.18
INCREASE OF THE NAVY.								
Construction and machinery.....	12,832,982.00	22,766,823.00	19,400,753.00	13,781,785.79	9,846,205.00	19,818,228.00	19,647,617.00	20,664,459.00
Armor and armament.....	11,000,000.00	12,452,772.00	11,565,122.00	10,532,928.00	7,265,200.00	11,724,192.00	17,412,500.00	18,957,988.00
Equipment.....	400,000.00	600,000.00	399,500.00	399,500.00	3,355,000.00	430,000.00	521,000.00	1,857,988.00
Torpedo boats.....	3,000,000.00	3,000,000.00	2,104,871.00	1,690,833.88	2,521,647.00	3,353,275.00	3,810,617.00	6,231,344.00
Collars.....	1,500,000.00		300,000.00		581,321.48			
Purchase of steam collars.....	1,575,000.00							
Gun plant, navy yard, Washington, D. C.....	150,000.00	205,000.00						
MISCELLANEOUS.								
Claims for damages by collision with naval vessels.....			226.06		3,946.45	2,183.26	1,256.71	2,703.89
Certified claims.....			44,969.75		163,740.42	65,479.52	86,334.19	53,663.06
Extra pay to officers and men who served in Mexican War.....	74,479.20	30,825.63						
Judgments, Court of Claims and United States courts.....	45.00	30.00						
Private acts, etc. (various).....	1,601.14	6,350.31	279,072.55		175,327.37	11,738.89	32,206.53	97,373.74
Payment of certain claims arising under Navy Department.....		25,561.00	13,037.80	5,751.75	28,958.06	2,248.00	9,178.45	3,174.13
Payment to certain Government employees for injuries received.....	1,570.17		30,116.79			4,313.38	46,109.95	
Payment to Fort Graham Coal Co, Seldovia, Alaska.....					2,750.00	6,000.00		
Relief of sufferers, earthquake in Italy.....	800,000.00							

Relief of officers and crew U. S. S. Charleston.....					66.86	191,348.60	9.86
Relief and transportation of American citizens in Mexico.....							3,225.00
Relief of sufferers by wreck of United States steamers at Apia, Samoa.....					288.00	228.00	
Relief of food sufferers, Ohio and Indiana, and on the Ohio and Mississippi Rivers and tributaries.....						130,940.38	
Refund of stolen deposits, enlisted men of the Navy and Marine Corps.....					4,300.00		
Repair, preservation, and exhibition of Navy trophy flags.....					30,000.00		
TOTALS.							
Amount of appropriations for each fiscal year.....	124,618,907.90	137,779,343.11	133,376,688.21	128,207,382.88	130,644,875.46	142,968,280.22	147,788,807.39
Amount appropriated and warranted during—							
Current fiscal year.....	124,337,253.40	137,396,102.45	133,033,749.08	126,514,089.99	129,476,088.24	141,675,267.48	146,177,679.57
First subsequent fiscal year.....		292,468.17		1,296,897.81		1,233,281.90	1,145,000.00
Second subsequent fiscal year.....			285,895.49	441,033.84			1,458,382.35
Third subsequent fiscal year.....	168,723.97			15,841.10			7,744.97
Fourth subsequent fiscal year.....	117,344.89			39,219.51		59,730.84	
Fifth subsequent fiscal year.....	355.26						
Seventh subsequent fiscal year.....	120.28			20.14			

	1917	1918	1917	1918
SECRETARY'S OFFICE.				
Pay, miscellaneous.....	\$915,000.00	\$2,935,500.00	\$105,000.00	\$155,000.00
Coastguard Navy.....	46,000.00	46,000.00	70,000.00	127,000.00
Aviation Navy.....	3,600,000.00	16,133,000.00	85,000.00	196,400.00
Advisory Committee for Aeronautics.....	87,515.70		85,000.00	200,000.00
Care of Lopez, Island of Guam, etc.....	14,000.00	20,000.00	25,000.00	80,000.00
Expenses, civilian naval consulting board.....	25,000.00	25,000.00	38,850.00	38,850.00
Investigation of fuel oil, etc., Navy.....	60,000.00	60,000.00	350,000.00	6,183,440.00
State marine schools, act Mar. 4, 1911.....	250,000.00	400,000.00	82,117.00	115,585.00
National security and defense.....		1,000,000.00	130,000.00	330,000.00
Basic patents of aircraft.....				30,000.00
NAVIGATION.				
Transportation, Navigation.....	1,010,524.00	2,719,843.00		
Recruiting, Navigation.....	244,228.84	1,419,228.84		
Contingent, Navigation.....	10,000.00	20,000.00		
Gunners and engineering exercises.....	135,000.00	225,000.00		
Outfits on first enlistment.....	2,065,920.00	10,163,920.00		
Maintenance, naval auxiliaries.....	1,069,460.00	1,144,300.00		
Arming and equipping Naval Militia.....	1,270,737.73	1,527,617.70		
Arms, uniforms, equipment, Naval Militia.....	200,000.00	200,000.00		
Ships for Naval Militia.....	280,000.00	136,500.00		
NAVIGATION—continued.				
Ocean and lake surveys.....				\$105,000.00
Naval training station, California.....				70,000.00
Naval training station, Great Lakes.....				85,000.00
Naval training station, Rhode Island.....				25,000.00
Naval training station, St. Helena, Va.....				38,850.00
Naval War College.....				38,850.00
Instruments and supplies.....				350,000.00
Naval Home, Philadelphia, Pa.....				82,117.00
Organizing Naval Reserve Force.....				130,000.00
Schools or camps of instruction for Naval Reserve Force.....				30,000.00
Schools or camps of instruction for recruits and Naval Reserve Force.....				2,655,360.00
ORDNANCE.				
Ordnance and ordnance stores.....				8,517,485.00
Naval Gun Factory, Washington, D. C.....				150,000.00
New batteries for ships of the Navy.....				100,000.00
Ammunition for ships of the Navy.....				13,720,000.00
Ammunition for vessels.....				68,684,888.00
Ammunition for merchant auxiliaries.....				7,731,941.00

Statement 44.—SUMMARY OF NAVAL APPROPRIATION ACTS, FEB. 22, 1883, TO JUNE 30, 1917.

Date of act.	Congress.	Amount.	Fiscal year.	Date of act.	Congress.	Amount.	Fiscal year.
Mar. 3, 1883.....	47-2	\$16,037,512.23	1884	Mar. 3, 1901.....	56-2	\$78,101,791.00	1902
July 7, 1884.....	48-1	8,931,856.12	1885	July 1, 1902.....	57-1	78,858,761.07	1903
Jan. 30, 1885.....	48-2	6,290,061.98		Mar. 3, 1903.....	57-2	81,876,791.43	1904
Mar. 3, 1885.....	45-2	15,170,867.56	1886	Apr. 27, 1904.....	58-2	97,505,140.94	1905
July 26, 1886.....	49-1	12,989,556.72	1887	Mar. 3, 1905.....	58-3	* 102,836,679.94	1906
Aug. 3, 1886.....	49-1	3,500,000.00		June 29, 1906.....	59-1	* 102,371,670.27	1907
Mar. 3, 1887.....	49-2	25,786,847.79	1888	Mar. 2, 1907.....	59-2	* 99,971,449.79	1908
Sept. 7, 1888.....	50-1	* 19,943,281.05	1889	May 13, 1908.....	60-1	** 122,666,133.27	1909
Mar. 2, 1889.....	50-2	21,692,510.27	1890	Mar. 3, 1909.....	60-2	** 136,935,199.05	1910
June 30, 1890.....	51-1	23,136,035.53	1891	June 24, 1910.....	61-2	** 131,510,246.01	1911
Mar. 2, 1891.....	51-2	31,541,645.78	1892	Mar. 4, 1911.....	61-3	** 126,478,838.24	1912
July 19, 1892.....	52-1	23,543,266.65	1893	Aug. 22, 1912.....	62-2	** 128,908,196.96	1913
Mar. 3, 1893.....	52-2	22,504,061.38	1894	Mar. 4, 1913.....	63-3	** 141,050,643.53	1914
July 26, 1894.....	53-2	25,866,826.72	1895	June 30, 1914.....	63-2	** 145,503,963.48	1915
Mar. 2, 1895.....	53-3	29,416,077.31	1896	Mar. 3, 1915.....	63-3	** 149,763,563.45	1916
June 10, 1896.....	54-1	30,862,660.95	1897	Aug. 29, 1916.....	64-1	** 212,888,060.26	1917
Mar. 3, 1897.....	54-2	34,128,234.19	1898	Mar. 4, 1917.....	64-2	516,007,387.08	1913
May 4, 1898.....	55-2	56,085,783.68	1899				
Mar. 3, 1899.....	55-3	48,099,969.58	1900				
June 7, 1900.....	56-1	* 61,140,916.67	1901	Total.....		3,070,014,967.92	

* Includes \$83,265 unexpended balance "Steel rifled breech loading guns" reapportioned.

† Includes \$140,000 unexpended balance "Machinery double turreted monitors" reapportioned to "Steam machinery, 1885."

‡ Includes \$40,182.61 unexpended balance "Construction and repair, 1883," reapportioned to "Increase of the Navy, steel cruisers, Construction and Repair."

§ Includes \$6,000 unexpended balance "Repairs, Naval Academy, 1888," reapportioned to "Boat house for steam launches, Naval Academy."

¶ Includes \$200,000 appropriated from the "General account of advances" to form a "Naval supply fund"; also \$200,000 reapportioned from the unexpended balance of "Increase of the Navy, armor and armament," to "Increase of the Navy, submarine torpedo boats."

** This amount does not include 4,000,000 authorized for factory for the manufacture of armor. This amount was never warranted by the Treasury Department.

†† Includes \$2,397.94 reapportioned from unexpended balances under "Repairs of barracks, Marine Corps," act June 10, 1896.

††† Includes \$2,500,000 reapportioned from the unexpended balance under "Pay of the Navy, 1908," and "Pay of the Navy, 1902."

†††† Includes \$300,000 reapportioned from the unexpended balance under "Construction and repair, 1904."

††††† Includes reapportionments from unexpended balances as follows: "Provisions, Navy, 1914, \$324,868.87"; "Provisions, Navy, 1906, \$878,075.42;" and "Contingent, Supplies and Accounts, 1904, \$10,000."

†††††† Includes \$3,647.80 reapportioned from unexpended balance "Navy yard, Boston, Mass.," to "Navy yard, Portsmouth, N. H."

††††††† Includes \$84,677.71 "previously appropriated and erroneously transferred to 'Consolidating power plants, navy yards and stations'" under "Naval station, New Orleans, La.;" also \$35,000 reapportioned from unexpended balance "Naval station, Honolulu, Hawaii," to "Naval station, Pearl Harbor, Hawaii."

†††††††† Includes \$5,668,189.20 unexpended balances under various Bureau of Ordnance appropriations reapportioned for the fiscal year 1913; also \$15,000 of unexpended balance "Barracks and quarters, Marine Corps," reapportioned under "Naval station, Key West, Fla."

††††††††† Includes \$250,000 unexpended balance under "Steam machinery, 1912," reapportioned under "Development of heavy-oil engine."

†††††††††† Includes reapportionments as follows: \$148,000 unexpended balance under "Marine barracks, navy yard, Boston, Mass.," reapportioned under "Navy yard, Boston, Mass.;" 300,000 unexpended balance under "Wrecking pontoon for submarines," reapportioned under "Increase of the Navy, torpedo boats;" \$33,394.87 unexpended balance under "Naval Academy, dairy, Annapolis, Md. (reimbursable)," reapportioned for the same purpose; \$76,735 unexpended balance "Development of heavy-oil engine," reapportioned for the same purpose.

††††††††††† Includes reapportionments from various unexpended balances amounting to 2,219,581.57 as follows: \$1,000,000 under "Aeronautics, 1916"; \$15,000 under "Naval station, Pensacola, Fla.;" \$800,000 under "Increase of the Navy, torpedo boats;" \$4,881.57 under "Committee to investigate cost of United States armor plant;" \$200,000 under "Marine barracks, Mare Island, Cal.;" \$200,000 under "Marine barracks, Norfolk, Va.;" also \$10,000 of the amount authorized for an "Advisory committee for aeronautics."

†††††††††††† Includes reapportionments from unexpended balances amounting to \$132,871.71 as follows: "Naval coal depot, Melville station, R. I." \$30,000; "Naval Reserve," \$112,871.71.

Statement 45.—SUMMARY OF MISCELLANEOUS APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917.

[Includes certain amounts warranted by the Treasury Department subsequent to Feb. 22, 1883, but appropriated for prior to that date under indefinite appropriations, as explained in footnotes.]

Date of act, etc.	Name of act.	Congress and session.	Amount.	Total.	Year, Congress, and session.		
Feb. 22, 1883	(1).....	47-2	\$140,000.00	1882, 776.57	1883-47-2		
Mar. 2, 1883	Private.....	47-2	6,556.85				
Mar. 3, 1883	do.....	47-2	1,781.89				
Do.....	Deficiency.....	47-2	13,404.64				
Do.....	Sundry civil.....	47-2	713,038.94				
Do.....	.....	47-2	5,218.32			
R. S., 3689.....	(1).....	Prior.	1,429.93				
Dec. 15, 1877	(2).....	Prior.	318.00				
Feb. 19, 1879	(3).....	Prior.	1,028.00				
Feb. 13, 1884	Joint resolution.....	48-1	762,953.15			1,757,293.14	1884-49-1
Apr. 17, 1884	Reward for Greely expedition..	48-1	25,000.00				
May 1, 1884	Urgent deficiency.....	48-1	254,000.00				
July 7, 1884	Sundry civil.....	48-1	426,000.00				
Do.....	Legislative.....	48-1	5,000.00				
Do.....	Deficiency.....	48-1	152,498.64				
R. S., 3689.....	(4).....	Prior.	8,986.54				
Feb. 19, 1879	(5).....	Prior.	122,639.81				
Mar. 3, 1883	(6).....	Prior.	215.00				
Mar. 3, 1885	Deficiency.....	48-2	690,579.84	1,145,386.43	1885-49-2		
Do.....	Sundry civil.....	48-2	480,237.92				
Jan. 20, 1885	Private.....	48-2	501.00				
Mar. 3, 1885	do.....	48-2	12,500.00				
Do.....	do.....	48-2	2,300.00				
R. S., 3689.....	(7).....	Prior.	956.95				
Feb. 19, 1879	(8).....	Prior.	58,310.72				
Mar. 26, 1886	Urgent deficiency.....	49-1	251,863.00			922,143.49	1886-49-1
Aug. 4, 1886	Sundry civil.....	49-1	462,595.00				
Do.....	Deficiency.....	49-1	202,606.43				
Feb. 19, 1879	(9).....	Prior.	15,079.06				
Jan. 3, 1887	(10).....	49-2	16,956.28				
Jan. 20, 1887	(11).....	49-2	12,822.00				
Feb. 21, 1887	Private.....	49-2	270.00				
Feb. 23, 1887	do.....	49-2	510.00				
Feb. 19, 1879	(12).....	Prior.	5,781.51				
June 16, 1880	(13).....	Prior.	918.00				
Feb. 1, 1888	Deficiency.....	50-1	67,230.53	1,034,551.56	1887-49-2		
Mar. 30, 1888	Urgent deficiency.....	50-1	349,430.54				
June 18, 1888	Private.....	50-1	275.13				
Aug. 15, 1888	do.....	50-1	5,156.64				
Aug. 21, 1888	do.....	50-1	250.00				
Oct. 19, 1888	do.....	50-1	13,508.33				
Do.....	do.....	50-1	370.50				
Do.....	Deficiency.....	50-1	584,534.56				
R. S., 3689.....	(14).....	Prior.	360.00				
Feb. 19, 1879	(15).....	Prior.	13,437.33				
Mar. 2, 1889	Deficiency.....	50-2	1,922,992.21	1,663,027.17	1889-50-2		
Jan. 21, 1889	Private.....	50-2	1,237.50				
Feb. 23, 1889	do.....	50-2	3,591.90				
Mar. 1, 1889	do.....	50-2	3,626.34				
R. S., 3689.....	(16).....	Prior.	18,796.36				
Feb. 19, 1879	(17).....	Prior.	11,250.00				
Mar. 3, 1881	(18).....	Prior.	1,532.86				
Feb. 19, 1890	Relief sufferers, etc. ¹⁴	51-1	201,878.73			1,318,815.22	1890-51-1
Apr. 4, 1890	Urgent deficiency.....	51-1	56,000.00				
Apr. 11, 1890	Joint resolution.....	51-1	75,000.00				
June 9, 1890	Private.....	51-1	6,717.12				
Sept. 29, 1890	Joint resolution.....	51-1	1,000,000.00				
Sept. 30, 1890	Deficiency.....	51-1	970,174.73				
R. S., 3689.....	(19).....	Prior.	299.91				
Feb. 19, 1879	(20).....	Prior.	2,287.50				
Dec. 15, 1877	(21).....	Prior.	186.00				
Sept. 26, 1890	Private.....	51-1	271.23				
Mar. 3, 1891	Deficiency.....	51-2	1,131,942.99	1,234,394.86	1891-51-2		
Feb. 21, 1891	Private.....	51-2	21,230.67				
Mar. 3, 1891	do.....	51-2	4,617.60				
Mar. 2, 1891	do.....	51-2	59,114.65				
R. S., 3689.....	(22).....	Prior.	7,329.32				
Dec. 15, 1877	(23).....	Prior.	156.00				
Feb. 19, 1879	(24).....	Prior.	1,525.50				
Feb. 19, 1890	(25).....	Prior.	8,478.13				

For footnotes. see p. 465.

Statement 45.—SUMMARY OF MISCELLANEOUS APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1888, TO JUNE 30, 1917—Continued.

Date of act, etc.	Name of act.	Congress and session.	Amount.	Total.	Year, Congress, and session.
July 28, 1892	Deficiency.....	52-1	\$148,461.53		
Aug. 5, 1892	Sundry civil.....	52-1	250,000.00		
Feb. 19, 1890	(14).....	Prior.	3,812.78		
Feb. 19, 1879	(9).....	Prior.	2,579.67		
Sept. 30, 1890	(17).....	Prior.	734.13		
Feb. 23, 1891	(16).....	Prior.	45,204.08		
R. S., 3689	(7).....	Prior.	180.00		
Jan. 5, 1893	Private ¹⁹	52-2	830.83	\$450,972.19	1892-93-1
Feb. 25, 1893	Private.....	52-2	175.39		
Mar. 3, 1893	Deficiency.....	52-2	100,241.95		
R. S., 3689	(1).....	Prior.	9,499.74		
Feb. 19, 1879	(9).....	Prior.	2,597.50		
Feb. 19, 1890	(14).....	Prior.	308.77		
Feb. 23, 1891	(16).....	Prior.	7,900.00		
Mar. 9, 1894	Public ²⁰	53-2	45,000.00	121,553.68	1893-93-2
Apr. 21, 1894	Urgent deficiency.....	53-2	40,000.00		
Aug. 18, 1894	Sundry civil.....	53-2	45,000.00		
Aug. 23, 1894	Deficiency.....	53-2	193,417.11		
R. S., 3689	(1).....	Prior.	1,171.64		
Feb. 19, 1879	(9).....	Prior.	485.00		
Mar. 2, 1895	(21).....	53-3	20,606.68	325,073.75	1894-93-2
Do.....	Deficiency.....	53-3	148,195.85		
Feb. 19, 1879	(9).....	Prior.	650.50		
Feb. 19, 1890	(14).....	Prior.	1,125.75		
Feb. 26, 1896	Urgent deficiency.....	54-1	102,810.56	170,578.78	1895-93-3
May 15, 1896	Private.....	54-1	3,519.15		
June 8, 1896	Deficiency.....	54-1	395,960.77		
June 9, 1896	Private.....	54-1	670.58		
June 10, 1896	(22).....	54-1	87,646.48		
Feb. 19, 1879	(9).....	Prior.	2,609.25		
Feb. 19, 1890	(14).....	Prior.	447.45		
Mar. 2, 1895	(21).....	Prior.	2,496.94		
Dec. 22, 1896	Urgent deficiency.....	54-2	700,000.00	506,161.18	1896-94-1
Feb. 8, 1897	Private.....	54-2	5,216.85		
June 4, 1897	Sundry civil.....	55-1	10,000.00	706,216.85	1897-94-2
June 26, 1897	Joint resolution.....	55-1	100,000.00		
July 19, 1897	Deficiency.....	55-1	433,001.83		
Feb. 19, 1879	(9).....	Prior.	2,656.50		
Mar. 2, 1895	(21).....	Prior.	40.25		
Mar. 3, 1881	(18).....	Prior.	732.60		
Feb. 19, 1890	(14).....	Prior.	270.25		
June 10, 1896	(22).....	Prior.	10,859.59		
Dec. 16, 1897	Deficiency.....	55-2	5,000.00	557,561.02	1897-95-1
Feb. 23, 1898	Joint resolution.....	55-2	200,000.00		
Jan. 28, 1898	Urgent deficiency.....	55-2	940,000.00		
Feb. 19, 1898	Deficiency.....	55-2	125,000.00		
Mar. 9, 1898	Urgent deficiency.....	55-2	117,000.00		
Do.....	Deficiency ²¹	55-2	26,820,116.22		
Mar. 30, 1898	Joint resolution.....	55-2	²⁴ 127,432.92		
Apr. 4, 1898	Private.....	55-2	330,151.42		
May 4, 1898	Deficiency.....	55-2	100,000.00		
May 7, 1898	Private.....	55-2	69,550.39		
May 26, 1898	Joint resolution.....	55-2	3,000,000.00		
June 3, 1898	.....do.....	55-2	10,000.00		
Do.....	Private.....	55-2	28,160.25		
June 8, 1898	Urgent deficiency.....	55-2	12,000,000.00		
July 7, 1898	Deficiency.....	55-2	44,541,261.66		
Feb. 19, 1879	(9).....	Prior.	4,435.33		
Feb. 19, 1890	(14).....	Prior.	39.00		
Mar. 3, 1881	(18).....	Prior.	860.10		
Feb. 23, 1891	(16).....	Prior.	23,100.00		
June 10, 1896	(22).....	Prior.	16,016.06		
Mar. 2, 1895	(21).....	Prior.	333.75		
Jan. 5, 1899	Deficiency.....	55-3	²⁵ 5,568,853.00	88,458,167.00	1898-95-2
Mar. 3, 1899	.....do.....	55-3	²⁶ 2,281,017.32		
Do.....	Claims.....	55-3	247,019.77		
Feb. 19, 1879	(9).....	Prior.	3,066.17		
Feb. 19, 1890	(14).....	Prior.	312.00		
June 10, 1896	(22).....	Prior.	26,635.54		

For footnotes, see p. 465.

Statement 45.—SUMMARY OF MISCELLANEOUS APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

Date of act, etc.	Name of act.	Congress and session.	Amount.	Total.	Year, Congress, and session.
Apr. 7, 1897	Private resolution.....	Prior.	\$20,000.00	\$9,197,600.20	1899-55-3
June 1, 1897	.....	Prior. (28)	1,045,064.40	
Mar. 9, 1898	.....	Prior. (28)	5,733.00	
Mar. 30, 1898	.....	Prior. (24)		
Feb. 9, 1900	Urgent deficiency.....	55-1	\$ 4,605,000.00	5,808,369.95	1900-56-1
Mar. 30, 1900	do.....	55-1	645,000.00		
May 12, 1900	Private.....	55-1	32,823.00		
June 5, 1900	do.....	55-1	3,500.00		
June 6, 1900	Deficiency.....	55-1	227,463.09		
Do.....	Rivers and harbors.....	55-1	10,000.00		
Feb. 19, 1879	.....	Prior. (9)	2,249.00	
June 10, 1896	.....	Prior. (22)	58,213.62	
Apr. 7, 1897	Private resolution.....	Prior.	20,000.00		
June 1, 1897	.....	Prior. (28)	203,895.74	
Mar. 3, 1898	.....	Prior. (28)	192.00	
Mar. 30, 1898	.....	Prior. (24)	33.50	
Mar. 3, 1899	.....	Prior. (25)		
Jan. 4, 1901	Urgent deficiency.....	55-2	10,000.00	4,918,299.23	1901-56-2
Mar. 3, 1901	Deficiency.....	55-2	4,798,879.02		
Do.....	Joint resolution.....	55-2	25,000.00		
Feb. 19, 1879	.....	Prior. (9)	349.00	
June 10, 1896	.....	Prior. (22)	83,411.21	
Mar. 30, 1898	.....	Prior. (24)	660.00	
Feb. 14, 1902	Urgent deficiency.....	57-1	\$ 6,165,157.12	6,488,584.22	1902-57-1
Do.....	.....	57-1	42,633.82	
Apr. 7, 1902	Urgent deficiency.....	57-1	3,189.39		
May 27, 1902	Private act.....	57-1	701.25		
Do.....	Claims.....	57-1	5,063.75		
July 1, 1902	Deficiency.....	57-1	233,739.80		
Feb. 19, 1879	.....	Prior. (9)	63.00	
June 10, 1896	.....	Prior. (22)	37,604.09	
Mar. 30, 1898	.....	Prior. (24)	432.00	
Feb. 7, 1903	.....	57-2	14,263.47	
Feb. 5, 1903	Private.....	57-2	4,000.00		
Mar. 3, 1903	do.....	57-2	1,851.01		
Do.....	Deficiency.....	57-2	2,683,083.22		
Do.....	Sundry civil.....	57-2	100,000.00		
June 10, 1896	.....	Prior. (22)	99,725.25	
Feb. 14, 1902	.....	Prior. (24)	664.28	
May 27, 1902	Claims.....	Prior.	203,219.33		
Feb. 18, 1904	Urgent deficiency.....	58-2	3,181,145.16	6,347,029.97	1904-58-2
Mar. 11, 1904	Private.....	58-2	63,620.59		
Apr. 27, 1904	Deficiency.....	58-2	3,025,908.59		
Apr. 28, 1904	Panama Canal.....	58-2	2,500.00		
Feb. 19, 1879	.....	Prior. (9)	50.00	
June 10, 1896	.....	Prior. (22)	22,353.69	
Feb. 14, 1902	.....	Prior. (24)	11.44	
Feb. 7, 1903	.....	Prior. (26)	1,440.50	
Jan. 5, 1905	Private.....	58-3	3,758.45		
Jan. 12, 1905	do.....	58-3	700.00		
Feb. 24, 1905	Claims.....	58-3	470,556.20		
Mar. 3, 1905	Deficiency.....	58-3	15,079,110.82		
Feb. 19, 1879	.....	Prior. (9)	24.00	
June 10, 1896	.....	Prior. (22)	68,868.07	
Feb. 7, 1903	.....	Prior. (26)	199.98	
Feb. 27, 1906	Urgent deficiency.....	59-1	1,772,758.21	15,623,217.62	1905-58-3
Apr. 23, 1906	Deficiency.....	59-1	4,000.00		
May 3, 1906	Earthquake, Pacific coast.....	59-1	100,000.00		
June 30, 1906	Deficiency.....	59-1	1,238,082.91		
June 10, 1896	.....	Prior. (22)	96,363.10	
Feb. 7, 1903	.....	Prior. (26)	209.88	
Mar. 3, 1903	Naval ^a	Prior.	57,498.33		
Apr. 27, 1904	Naval ^a	Prior.	43,857.47		
Mar. 3, 1905	Treasury ^b	Prior.	125,000.00		
Do.....	Deficiency (indefinite).....	Prior.	5,892.33		
Jan. 25, 1907	Private.....	59-2	1,000.00	3,443,672.23	1906-59-1
Do.....	do.....	59-2	1,844.00		
Feb. 9, 1907	Urgent deficiency.....	59-2	260,000.00		
Feb. 26, 1907	Private.....	59-2	1,157.00		

For notes, see p. 465.

Statement 45.—SUMMARY OF MISCELLANEOUS APPROPRIATIONS FOR THE NEW NAVY, FEB. 23, 1883; TO JUNE 30, 1917—Continued.

Date of act, etc.	Name of act.	Congress and session.	Amount.	Total	Year, Congress, and session.
Mar. 4, 1907	Deficiency—11 a. m.....	59-2	\$486,145.27		
Do.....	Deficiency—10 a. m.....	59-2	17,906.32		
Feb. 19, 1879	(*).....	Prior.	30.00		
June 10, 1896	(*).....	Prior.	67,832.14		
Feb. 7, 1903	(*).....	Prior.	66.86		
Apr. 27, 1904	Naval *.....	Prior.	95,000.00		
Mar. 3, 1906	Claims (indefinite).....	Prior.	1,448.60		
				8321,982.19	1907-59-2
Feb. 15, 1908	Deficiency.....	60-1	824.18		
May 20, 1908	Urgent deficiency.....	60-1	1,614,568.35		
Feb. 15, 1908	do.....	60-1	2,000,000.00		
Apr. 7, 1908	Deficiency.....	60-1	3,664,134.69		
May 20, 1908	Private.....	60-1	1,068.80		
Feb. 19, 1879	(*).....	Prior.	45.00		
June 10, 1896	(*).....	Prior.	5,130.45		
Apr. 27, 1896	Naval *.....	Prior.	29,677.71		
Mar. 4, 1907	Deficiency (indefinite).....	Prior.	1,570.17		
				7,347,020.33	1908-60-1
Jan. 5, 1909	Italian earthquake.....	60-2	800,000.00		
Mar. 4, 1909	Deficiency.....	60-2	2,281,866.60		
Feb. 19, 1879	(*).....	Prior.	30.00		
Feb. 25, 1906	Omnibus claims.....	Prior.	25,561.00		
				3,107,456.80	1909-60-2
Feb. 25, 1910	Urgent deficiency.....	61-2	436,773.06		
Do.....	Deficiency.....	61-2	4,111.29		
June 25, 1910	do.....	61-2	1,233,558.54		
Do.....	Claims.....	61-2	30,084.16		
Feb. 19, 1879	(*).....	Prior.	100.00		
Feb. 25, 1905	Omnibus claims.....	Prior.	1,787.50		
Mar. 4, 1907	Deficiency (indefinite).....	Prior.	32.63		
				1,708,447.18	1910-61-2
Dec. 23, 1910	Urgent deficiency.....	61-3	550,000.00		
Feb. 13, 1911	Private.....	61-3	1,315.00		
Feb. 18, 1911	do.....	61-3	1,022.00		
Do.....	do.....	61-3	5,751.75		
Mar. 4, 1911	Deficiency.....	61-3	782,254.49		
				1,340,343.24	1911-61-3
Apr. 8, 1912	Repair, etc., trophy flags.....	62-2	30,000.00		
July 3, 1912	Private.....	62-2	1,572.04		
July 6, 1912	do.....	62-2	701.12		
July 30, 1912	do.....	62-2	3,000.00		
Aug. 21, 1912	do.....	62-2	1,000.00		
Aug. 26, 1912	Deficiency.....	62-2	771,542.98		
Feb. 19, 1890	(*).....	Prior.	288.00		
Feb. 7, 1903	(*).....	Prior.	66.86		
June 25, 1910	Claims.....	Prior.	22,684.92		
				830,858.92	1913-62-2
Feb. 7, 1913	Private.....	62-3	2,000.00		
Feb. 18, 1913	do.....	62-3	750.00		
Mar. 4, 1913	Deficiency.....	62-3	1,492,426.36		
Feb. 19, 1890	(*).....	Prior.	228.00		
Mar. 4, 1907	Deficiency (indefinite).....	Prior.	4,313.58		
				1,499,720.94	1913-62-3
Oct. 22, 1913	Deficiency.....	63-1	198,802.80		
				198,802.80	1913-63-1
Feb. 16, 1914	Naval Militia.....	63-2	400,000.00		
Apr. 6, 1914	Deficiency.....	63-2	753,786.89		
Apr. 15, 1914	Private.....	63-2	1,248.00		
Apr. 16, 1914	do.....	63-2	1,000.00		
Apr. 24, 1914	Relief American citizens in Mexico.....	63-2	^a 191,349.69		
Apr. 25, 1914	Public resolution.....	63-2	^b 29,084.67		
July 17, 1914	Private.....	63-2	2,500.00		
July 29, 1914	Deficiency.....	63-2	1,319,864.33		
Aug. 21, 1914	Private.....	63-2	642.40		
Do.....	do.....	63-2	46,169.95		
Sept. 15, 1914	do.....	63-2	1,500.00		
Oct. 22, 1914	do.....	63-2	1,500.00		
Do.....	do.....	63-2	1,750.00		
				2,780,368.96	1914-63-2
Feb. 17, 1915	do.....	63-3	855.20		
Mar. 4, 1915	do.....	63-3	230.88		
Do.....	Deficiency.....	63-3	1,067,756.50		
Do.....	Omnibus claims.....	63-3	1,302.00		
Feb. 16, 1914	Naval Militia.....	Prior.	200,000.00		
				1,270,344.58	1915-63-3

For footnotes, see p. 465.

Statement 45.—SUMMARY OF MISCELLANEOUS APPROPRIATIONS FOR THE NEW NAVY, FEB. 22, 1883, TO JUNE 30, 1917—Continued.

Date of act, etc.	Name of act.	Congress and session.	Amount.	Total.	Year, Congress, and session.
Feb. 7, 1903	(*).....	Prior.	\$9.86		
Feb. 16, 1914	Naval Militia.....	Prior.	200,000.00		
Apr. 24, 1914	(*).....	Prior.	3,225.00		
Feb. 28, 1916	Deficiency.....	64-1	241,341.09		
Mar. 31, 1916	Urgent deficiency.....	64-1	2,627,000.00		
May 3, 1916	Private.....	64-1	2,000.00		
June 12, 1916	.....do.....	64-1	1,174.13		
July 1, 1916	Deficiency.....	64-1	326,000.00		
July 31, 1916	Private.....	64-1	13,561.88		
Aug. 7, 1916	.....do.....	64-1	762.00		
Do.....	.....do.....	64-1	1,248.00		
Aug. 9, 1916	.....do.....	64-1	2,470.00		
Aug. 21, 1916	.....do.....	64-1	624.00		
Sept. 8, 1916	Deficiency.....	64-1	1,898,711.87		
Do.....	Private.....	64-1	1,019.69		
Mar. 3, 1915	Naval.....	Prior.	5,000.00		
Feb. 8, 1917	Private, No. 166.....	64-2	1,073.00	\$5,324,147.52	1916-64-1
Feb. 14, 1917	Private, No. 181.....	64-2	2,500.00		
Feb. 16, 1914	Naval Militia.....	Prior.	200,000.00		
Apr. 17, 1917	Deficiency.....	65-1	9,081,569.71	203,573.00	1917-64-2
Do.....	.....do.....	65-1	400,000.00		
June 15, 1917	Urgent deficiency.....	65-1	514,805.033.87		
	Total.....			708,407,270.76	1917-65-1

- ¹ "Payment of Japanese award."
- ² In addition to this amount \$27,406.51 was appropriated for 1883 and prior fiscal years.
- ³ "Relief of officers and crew of the U. S. S. Rodgers." Indefinite appropriation. Amount warranted for the fiscal year.
- ⁴ "Indemnity for lost clothing." Indefinite appropriation. Amount warranted for the fiscal year.
- ⁵ "Relief of sufferers, wreck U. S. S. Huron." Indefinite appropriation. Amount warranted for the fiscal year.
- ⁶ "Extra pay to officers and men who served in the Mexican War." Indefinite appropriation. Amount warranted for the fiscal year.
- ⁷ In addition to this amount \$57,186.47 was appropriated for 1883 and prior fiscal years.
- ⁸ In addition to this amount \$36,877.57 was appropriated for 1883 and prior fiscal years.
- ⁹ In addition to this amount \$174,926.07 was appropriated for 1883 and prior fiscal years.
- ¹⁰ "Relief of survivors, etc., steamer Jeannette."
- ¹¹ "Relief of sufferers, wreck steamer Ashuelot."
- ¹² "Gratuities to machinists in lieu of reenlistment."
- ¹³ "Relief of persons impressed into U. S. naval service." Indefinite appropriation. Amount warranted for the fiscal year.
- ¹⁴ "Relief of sufferers, wreck of U. S. steamers at Apia, Samoa." Indefinite appropriation. Amount warranted for the fiscal year.
- ¹⁵ "Site for magazine, New York Harbor"
- ¹⁶ "Increase of the Navy, nickel."
- ¹⁷ "Medals, Jeannette arctic expedition."
- ¹⁸ "Relief of Rodman M. Price."
- ¹⁹ "Removal of remains of D. F. Terrell, ensign, U. S. Navy, from Alaska."
- ²⁰ "Reclaiming wreck of the U. S. S. Kearsarge."
- ²¹ "Indemnity for lost property, naval service." Indefinite appropriation. Amount warranted for the fiscal year.
- ²² "Navy transportation, Pacific railroads." Indefinite appropriation. Amount warranted for the fiscal year.
- ²³ "National defense." Amount warranted to the Navy Department for the fiscal year.
- ²⁴ "Relief of sufferers by destruction of the U. S. S. Maine." Indefinite appropriation. Amount warranted for the fiscal year.
- ²⁵ Includes various reappropriations amounting to \$5,307,878.
- ²⁶ Includes various reappropriations amounting to \$850,000; also \$351.12 warranted from indefinite appropriation.
- ²⁷ Includes various reappropriations amounting to \$1,850,000.
- ²⁸ "Transporting contributions to famishing poor in India."
- ²⁹ Includes \$200,000 reappropriated from the unexpended balance of "Provisions, Navy, 1900," to the "Naval Supply Fund."
- ³⁰ "Relief of officers and crew of the U. S. S. Charleston."
- ³¹ "Entertainment of foreign naval representatives, Jamestown Exposition."
- ³² "Reappropriation of unexpended balances," appropriation, "Navy yard, Boston, Mass.," to "Navy yard, Portsmouth, N. H.," warranted during the fiscal year.
- ³³ Amount warranted during the fiscal year 1906 by act consolidating power plants at navy yards and stations.
- ³⁴ Amount warranted under act reappropriating unexpended balances of "Construction plant, naval station, New Orleans, La.," and "Machinery plant, naval station, New Orleans, La.," to "Naval station, New Orleans, La."
- ³⁵ Amount warranted to the Navy Department on account of the act for the "Relief and transportation of American citizens in Mexico."
- ³⁶ Amount warranted to the Navy Department from the appropriation "National security and defense."

**Statement 46.—SUMMARY OF ALL APPROPRIATIONS FOR THE NEW NAVY,
FEB. 23, 1883, TO JUNE 30, 1917.**

Year, Congress, and session.	By naval appropriation acts.	Miscellaneous acts.	Total.
1883 (47-2).....	\$16,037,512.23	\$882,776.57	\$16,920,288.80
1884 (48-1).....	8,931,856.12	1,757,293.14	10,689,149.26
1885 (48-2).....	21,460,929.54	1,145,386.43	22,606,315.97
1886 (49-1).....	16,489,556.72	922,143.49	17,411,700.21
1887 (49-2).....	25,786,847.79	37,257.79	25,824,105.58
1888 (50-1).....	19,943,281.05	1,034,551.56	20,977,832.61
1889 (50-2).....	21,692,510.27	1,963,027.17	23,655,537.44
1890 (51-1).....	23,136,035.53	2,318,815.22	25,454,850.75
1891 (51-2).....	31,541,645.78	1,234,394.86	32,776,040.64
1892 (52-1).....	23,543,266.65	450,972.19	23,994,238.84
1893 (52-2).....	22,504,061.38	121,553.68	22,625,615.06
1894 (53-2).....	25,366,826.72	325,073.75	25,691,900.47
1895 (53-3).....	29,416,077.31	170,578.78	29,586,656.09
1896 (54-1).....	30,862,660.95	596,161.18	31,458,822.13
1897 (54-2).....	34,128,234.19	705,216.85	34,833,451.04
1897 (55-1).....	.....	557,561.02	557,561.02
1898 (55-2).....	56,098,783.68	88,458,157.09	144,556,940.77
1899 (55-3).....	48,099,969.58	9,197,600.20	57,297,569.78
1900 (56-1).....	61,140,916.67	5,808,369.95	66,949,286.62
1901 (56-2).....	78,101,791.00	4,918,299.23	83,020,090.23
1902 (57-1).....	78,858,761.07	6,488,684.22	85,347,445.29
1903 (57-2).....	81,876,791.43	3,116,906.56	84,993,697.99
1904 (58-2).....	97,505,140.94	6,347,029.97	103,852,170.91
1905 (58-3).....	102,836,679.94	15,623,217.62	118,459,897.56
1906 (59-1).....	102,371,670.27	3,443,672.23	105,815,342.50
1907 (59-2).....	99,971,449.79	921,982.19	100,893,431.98
1908 (60-1).....	122,666,133.27	7,347,020.33	130,013,153.60
1909 (60-2).....	136,935,199.05	3,107,456.80	140,042,655.85
1910 (61-2).....	131,510,246.01	1,706,447.18	133,216,693.19
1911 (61-3).....	126,478,338.24	1,341,343.24	127,819,681.48
1912 (62-2).....	128,908,196.96	830,858.92	129,739,055.88
1913 (62-3).....	141,050,643.53	1,499,720.94	142,550,364.47
1913 (63-1).....	.....	193,802.80	193,802.80
1914 (63-2).....	145,503,963.48	2,750,368.93	148,254,332.41
1915 (63-3).....	149,763,563.45	1,270,344.58	151,033,908.03
1916 (64-1).....	312,888,060.25	5,324,147.52	318,212,207.77
1917 (64-2).....	516,607,387.08	203,573.00	516,810,960.08
1917 (65-1).....	.....	524,286,603.58	524,286,603.58
Total.....	3,070,014,987.92	708,407,270.76	3,778,422,258.68
Total expenditures for the Navy from 1884 to 1917, inclusive.....	.....	.....	2,580,265,479.61

NOTES.

Statements 43, 44, 45, and 46 do not include the act of Mar. 3, 1875, authorizing the expenditure each year of \$75,000 from the proceeds of sales of ordnance material nor to appropriations for clerical and contingent expenses of Navy Department.

In the preparation of Statements 43, 44, 45, and 46 all reappropriations warranted by the Treasury Department have been treated the same as new appropriations.

Statement 47.—SALES OF CONDEMNED PROPERTY, FISCAL YEAR 1917.

Date of sales.	Places of sales.	By whom deposited.	Gross receipts.	Expenses of sales.	Net receipts.	Credited to miscellaneous receipts.	Credited to Navy funds.	
							Naval pension fund.	Clothing and stores fund.	Ordnance material, proceeds of sales.
Jan. 18, 1916	Navy yard, Boston, Mass.	J. S. Carpenter	\$102.23		\$102.23	\$102.23		
Sept. 5, 1916	do.	do.	16,801.28	\$7,726.93	13,081.35	13,081.35		
Nov. 14, 1916	do.	do.	5,596.24	339.70	5,256.54	5,256.54		
Nov. 21, 1917	do.	do.	1,860.60	1,018.94	841.66	841.66		
Mar. 25, 1917	do.	do.	201.00	6.50	194.50	194.50		
Dec. 18, 1916	Naval torpedo station, Newport, R. I.	C. W. Elison	1,237.17	8.52	1,228.65	372.12		\$866.53
July 20, 1915	Navy yard, New York, N. Y.	W. J. Litvell	684.45	9.00	675.45	675.45		
Do.	do.	do.	128.94		128.94	128.94		
Do.	do.	do.	54.61		54.61	54.61		
Do.	do.	do.	24.83		24.83	24.83		
Aug. 31, 1915	do.	do.	28.89		28.89	28.89		
Aug. 31, 1916	do.	do.	47,916.76	11,333.78	36,582.98	33,779.75	\$1,818.23	985.06
Nov. 2, 1916	do.	do.	11,789.16	11,789.16	31,421.20	26,432.04	4,779.70	237.85
Nov. 9, 1917	do.	do.	43,410.30	9.00	31.00	31.00		
Aug. 17, 1916	Navy yard, Philadelphia, Pa.	S. L. Heep	16,618.87	5,598.23	11,020.64	10,988.85		33.99
Oct. 25, 1916	do.	do.	14,368.59	1,687.28	12,701.31	12,701.31		
June 26, 1916	Naval Home, Philadelphia, Pa.	do.	80.00		80.00	80.00	\$80.00	
Oct. 20, 1916	do.	do.	14.96		14.96	14.96	8.25	
Mar. 20, 1917	do.	do.	12.00		12.00	12.00	12.00	
Apr. 12, 1917	do.	do.	12.51		12.51	12.51		
Apr. 9, 1916	Navy yard, Washington, D. C.	F. B. Colby	17,137.15	2,324.06	14,813.09	833.40		13,979.69
Aug. 24, 1916	do.	do.	579.01		579.01	579.01		
Mar. 30, 1917	do.	do.	200.00	51.05	148.95	148.95		
May 25, 1916	Navy yard, Norfolk, Va.	H. A. Dent	13,137.76	6,260.20	6,868.56	6,868.56		3.14
Oct. 24, 1916	do.	do.	36,357.26	5,441.68	30,915.58	30,915.58		
Jan. 25, 1917	do.	do.	121.08		121.08	121.08		
Feb. 17, 1917	do.	do.	5,900.42		5,900.42	5,900.42		
Apr. 9, 1917	do.	do.	3,263.46	1,971.84	1,291.62	1,291.62	42.49	52.39
Apr. 11, 1916	Navy yard, Charleston, S. C.	G. G. Seibela	9,109.73	1,126.18	7,983.55	4,583.18	3,395.90	4.38
May 23, 1916	Naval training station, Great Lakes.	W. Gowel	635.15	5.47	629.68	629.68		
June 9, 1915	Naval training station, California.	R. W. Schumann	110.00		110.00	110.00		
Mar. 18, 1915	Navy yard, Mare Island, Cal.	J. Brookes	7,063.00		5,757.30	4,981.35	686.52	90.43
Oct. 3, 1916	do.	do.	39.50		39.50	39.50		
Nov. 2, 1917	do.	do.	12,278.59	1,212.67	11,065.92	7,351.81	3,111.79	602.32
Feb. 9, 1917	do.	do.	3,698.78		3,698.78	3,698.78		
Aug. 16, 1916	Navy yard, Puget Sound, Wash.	B. P. DuBois	6,981.51	908.27	6,073.24	5,729.68	326.03	20.53
Sept. 20, 1916	Naval station, Cavite, P. I.	D. V. Chadwick	6,933.76	838.83	6,094.93	5,729.68	169.59	8.35
Mar. 27, 1916	Naval station, Olongapo, P. I.	F. F. Foxwell	2,102.39	4.53	2,097.86	2,097.86		
Oct. 26, 1916	do.	do.						

Statement 47.—SALES OF CONDEMNED PROPERTY, FISCAL YEAR 1917—Continued.

Date of sales.	Places of sales.	By whom deposited.	Gross receipts.	Expenses of sales.	Net receipts.	Credited to miscellaneous receipts.	Credited to Navy funds.		
							Naval pension fund.	Clothing and small stores fund.	Ordnance material, proceeds of sales.
Mar. 20, 1917	Troy, N. Y. (chain)	J. S. Carpenter	\$71.40		\$71.40	\$71.40			
June 26, 1916	Bureau of Supplies and Accounts (U. S. S. Alice)	W. A. Merritt	4,600.00	\$63.16	4,531.84	4,531.84			
Oct. 23, 1916	Bureau of Supplies and Accounts (U. S. S. Fox)	F. D. Colby	3,111.00	23.96	3,087.04	3,087.04			
Dec. 7, 1916	Bureau of Supplies and Accounts (U. S. S. Severn)	do.	41,025.00	39.64	40,985.36	40,985.36			
May 30, 1916	Chicago, Ill. (flags of Isla de Luzon)	do.	27.96		27.96	27.96			
Dec. 12, 1916	Winthrop, Md. (engine)	do.	25.00		25.00	25.00			
May 2, 1917	Panama Canal (scrap lead)	S. McGowan	5,121.14	228.37	4,894.77	4,894.77			
Nov. 20, 1916	U. S. S. Cuzgoa (flour)	J. E. McDonald	1,040.50	1.40	1,039.10	1,039.10			
Nov. 25, 1916	U. S. S. Cuzgoa (flour and coal)	do.	1,142.16		1,142.16	1,142.16			
	Total		330,623.40	56,476.96	274,151.54	242,834.76	\$112.76	\$14,319.47	\$16,984.56

Statement 48.—PURCHASERS OF CONDEMNED PROPERTY, FISCAL YEAR 1917.

Navy yard, Boston, Mass., Jan. 13, 1916:	
James F. Moran.....	\$102.23
Navy yard, Boston, Mass., Sept. 5, 1916:	
Luria Bros. & Co.....	3,277.29
Perry Buxton Doane Co.....	296.80
Massachusetts Iron & Metal Co.....	1,353.53
Joseph Josephs Bros. & Co.....	10,316.73
J. Lipsitz Co.....	59.47
Max Smalley.....	158.43
James F. Nolan.....	311.00
J. W. Cullen.....	37.03
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	15,810.28
Navy yard, Boston, Mass., Nov. 14, 1916:	
Boston Rope Co.....	5,595.94
Navy yard, Boston, Mass., Feb. 21, 1917:	
J. Lipsitz Co.....	1,860.60
Navy yard, Boston, Mass., Mar. 23, 1917:	
Columbus Chain Co.....	201.00
Naval torpedo station, Newport, R. I., Dec. 13, 1916:	
N. Dannin & J. Friedlander.....	912.29
Riverside Contracting Co.....	153.00
F. E. White.....	176.00
B. Kalodny.....	5.88
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	1,247.17
Navy yard, New York, N. Y., July 20, 1915:	
Vincenzo Ferragimo.....	684.45
A. De Angellis.....	123.94
Williams Haws.....	170.91
Navy yard, New York, N. Y., Aug. 3, 1915:	
Julius Herms.....	1.88
P. Caravella (forfeiture).....	25.00
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	26.88
Navy yard, New York, N. Y., Aug. 31, 1915:	
Julius Herms.....	28.89
Navy yard, New York, N. Y., Feb. 3, 1916:	
B. B. Abraham & Co.....	94.97
B. Abramowitz.....	5.00
W. S. Anderson.....	8.39
New York Army & Navy Stores.....	22.72
Philadelphia Army & Navy Stores.....	318.42
Atlantic Manufacturing Co.....	231.18
S. Aurigemma.....	9.36
Francis Bannerman.....	316.17
M. P. Barr.....	5.25
L. Berman.....	149.65
J. Blum.....	3,069.50
W. F. Carr.....	56.66
M. P. Coleman.....	359.86
Edward Corner.....	2.60
Fred Craemer.....	1,001.22
M. S. Davis.....	10.00
F. J. Devine.....	271.66
Richard Delap.....	5.00
L. C. Dooley (Inc.).....	5.00
R. Dorlety.....	5.00
W. Driefus.....	564.93
Driefus Co. (Inc.).....	160.72
Federal Iron & Steel Co.....	4,019.60
B. Feldman.....	33.40
H. M. Freder.....	23.95
A. Freedman.....	1,356.25
Franchi Bros.....	1.00
J. Gallagher.....	6.05
Fred Geggors.....	36.09
George Geschwind.....	20.40
The Great Western Machinery Co.....	220.40
John Greig.....	301.30
G. Grodensky.....	10.00
Frank Haassler.....	75.00
M. Karger.....	44.06
H. Kenny.....	3.50
W. S. Kirk.....	723.53

Navy yard, New York, N. Y., Feb. 3, 1916—Continued.	
Kirkland Bros. & Co.....	\$180.00
S. Krantz.....	43.63
J. Liberman & Co.....	110.61
M. Liberman.....	351.72
J. Lipsitz & Co.....	5,872.06
R. F. Levy.....	6.40
Herman Lewinsky.....	324.55
Luria Bros. & Co.....	7,011.06
Manhattan Rubber Co.....	538.36
Phillip Moresca.....	7.78
B. Marks.....	37.50
B. L. Marks.....	3,979.04
J. Martin.....	40.00
Marvin Briggs (Inc.).....	93.00
Thomas Matthews.....	86.05
J. McGovern.....	4.10
H. Miller.....	20.15
John Mullen.....	3.65
W. Mulvaney.....	2.26
Nutnick Bros.....	24.12
Ninan Greenblatt.....	96.84
C. Osterman.....	19.25
L. C. Pontez.....	55.80
C. F. Quinn.....	10.00
C. A. Ronaghan.....	1.15
Rawitzer & Co. (Inc.).....	2,783.83
J. Reynolds.....	230.49
C. W. Rockefeller.....	3.00
M. R. Rodrigues.....	49.44
I. Rosenbaum.....	5,453.12
John R. Sanford.....	5.05
H. J. Satran.....	198.00
G. F. Seding.....	20.00
L. F. Seyferts Sons (Inc.).....	502.37
Emil Schneider (Inc.).....	129.96
F. W. Schuck.....	18.00
J. H. Sheridan.....	35.07
Emil Smith.....	25.00
Thomas Smith & Sons Corporation.....	237.40
Micell Stapleton.....	1.00
Sterling Machine Co.....	1.00
R. H. Thayer.....	15.50
Mrs. A. Thomas.....	6.06
E. C. Tovey.....	24.40
R. Tobin & Sons.....	3,837.82
Warren Metal Co.....	786.89
G. Weinstein.....	466.71
C. Weiss.....	20.10
C. S. Williams.....	54.41
W. C. Wilson.....	5.00
Stern & Co.....	5.00
	<hr/>
	47,916.76
Navy yard, New York, N. Y., Nov. 2, 1916:	
R. Amster.....	608.00
Army & Navy Stores.....	159.85
Atlantic Manufacturing Co.....	770.18
Atlantic Marine Exchange Co.....	63.64
Mrs. J. E. Bailey.....	17.00
W. J. Bannerman, estate of.....	22.01
M. B. Barr.....	16.26
H. P. Vrearly.....	3.60
W. F. Carr.....	1.57
William J. Crowley.....	18.80
E. Damage.....	20.60
George H. Doty.....	42.00
Max Duchman.....	7.85
L. Gardner.....	63.00
Andrew Greeley.....	37.00
John Greig.....	10.65
P. Hamil.....	3.31
H. S. Hamilton.....	16.50
Leon Hirsch & Son.....	60.00
B. Holzman & Co. (Inc.).....	177.38
Illinois Smelting & Refining Co.....	283.79
William O. D. Islin.....	33.20
Joseph Josephs Bros. & Co.....	15,809.92
I. Kamrass.....	2,777.38
Joseph Kaplan.....	19.06
M. Karger.....	37.75
Kirkland Bros. & Co.....	757.10
K. Komensky.....	13.76

Statement 42.—PURCHASERS OF CONDEMNED PROPERTY, FISCAL YEAR 1917—Continued.

Navy yard, New York, N. Y., Nov. 2, 1916—Continued.

J. C. Latham	524.30
F. B. Leaf & Co.	4,457.00
Joseph Lehmman & Co.	1,254.24
K. Levi	4.15
Herman Lewinshak	125.57
K. Linn	51.03
Lauria Bros. & Co.	225.28
Manhattan Rubber Manufacturing Co.	.....
B. Marks	24.00
David L. Marks	44.42
J. Martin	19.00
Marvin Briggs (Inc.)	693.41
C. W. Mason	6.00
Thomas Mathews	14.20
George Miller & Co.	594.00
Henry Miller	22.28
I. Minsky	4.57
J. H. Murphy	14.05
Nutnick Bros.	2,145.05
National Wooden Co.	22.12
New York Machinery Exchange	693.22
C. Ostermann	24.55
Ferry Burton Doane & Co.	1,497.35
Phoenix Iron & Steel Co.	2,922.02
L. C. Pontes	954.20
J. F. Reardon	.....
M. R. Rodriguez	12.92
Royal Pressing Iron Co.	26.97
H. J. Satran	673.65
B. F. Sefer Sons (Inc.)	152.28
A. Schrader's Sons (Inc.)	100.00
James S. Sheridan	1.85
E. J. Smith	1,745.78
Thomas Smith & Son	7.51
John Spero	15.00
Talbot Boiler Co.	14.00
Thomas R. Isaac	20.00
Peter J. Thomson	60.00
R. Tobin & Son	756.32
C. H. Westland	32.02
G. B. Wilson	90.42
F. H. Wilkenson	21.17
B. Kaufman & Sons Co.	100.00
W. Stokes Kirk	169.75
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	43,210.20

Navy yard, New York, N. Y., June 9, 1917:

J. Bendit	40.00
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Navy yard, Philadelphia, Pa., Aug. 17, 1916:

George L. Allen	6.00
Atlantic Manufacturing Co.	674.25
Army & Navy Store Co.	60.50
Burcher & Bro.	254.20
J. J. Chaulk Co.	626.50
Edward Cooner	191.02
Richard Cox	201.00
Fred Cramer	1,730.70
F. J. Deebold	4.00
E. Donage	551.50
W. J. Doyle	10.11
Dreifus & Co.	46.20
J. Dreifus & Sons	35.55
H. K. Fort Co.	92.31
L. H. Garrison	16.50
T. C. Gill	.....
H. Goldberg	88.80
Fred Gunton	205.00
I. Guttman	3,143.25
Great Eastern Metal Refining Co.	2,330.00
R. J. Hoban	10.80
D. J. Hoopes	41.00
H. Hubber	6.75
Samuel Hurley	51.25
Illinois Smelting & Refining Co.	28.05
Albert Johnson	40.00
W. B. Kirk	148.00
A. B. Knoblanck	53.70
James McFeeley	25.03

Navy yard, Philadelphia, Pa., Aug. 17, 1916—Continued.

W. B. Mason	592.20
Mrs. C. A. Marsh	20.25
Henry Miller	2,620.25
H. G. Miller	90.21
Levin & Roberts	15.00
J. J. Lynch	157.00
G. E. Lawrence	25.00
National Docking & Lighterage Co.	125.00
Joseph Richter	10.00
Rasmussen's Sons (Inc.)	115.00
Thaddeus Reubak	222.55
George F. Schilling	223.12
L. F. Stryker's Sons (Inc.)	178.20
George P. Sutter	7.20
H. Scheinisky	923.10
F. Small	1.00
M. Sobel	407.00
Spayd Furnishings Co.	5.25
E. B. Storer	140.00
Prosper Bros. (Inc.)	30.00
Trouton Machine Specialty Co.	31.75
August Weber	115.00
F. & J. Zelar	40.45

 15,622.57

Navy yard, Philadelphia, Pa., Oct. 25, 1916:

John J. Chalm	222.12
Fred Cramer	100.00
Joseph Joseph & Bro. Co.	2,572.05
L. F. Stryker's Sons (Inc.)	20.20
Cal Hirsch & Sons	5,222.23
H. A. Hiltner's Sons Co.	4,082.00
Lauria Bros. & Co.	2,211.04

 14,208.29

Naval Home, Philadelphia, Pa., June 26, 1916:

Robert Kinsey	20.00
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Naval Home, Philadelphia, Pa., Oct. 20, 1916:

William J. Neely	6.70
T. B. Subers	8.25

 14.95

Naval Home, Philadelphia, Mar. 28, 1917:

H. A. McClellan & Bro.	12.05
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Naval Home, Philadelphia, Pa., Apr. 12, 1917:

William J. Neely	12.51
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Navy yard, Washington, D. C. Aug. 9, 1916:

Nathan Frank & Sons	14.05
E. J. Kelly	60.00
R. C. Hoffman & Co.	321.64
Ben Elinstein	705.00
Louis Simon	1,024.74
Illinois Smelting & Refining Co.	2,026.20
International Purchasing Co.	673.84
J. Dreifus & Sons	25.20
A. Smith	5.00
I. A. Freedman	27.00
Great Eastern Metal Refining Co.	4,252.73
Boston Iron & Metal Co.	5,332.14
J. D. Chapman	11.52
W. H. Flaherty	690.00

 17,137.15

Navy yard, Washington, D. C., Au. 24, 1916:

Edward Mullin	578.00
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Navy yard, Washington, D. C., Mar. 30, 1917:

John F. Myers & Co.	200.00
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 200.00

Statement 48.—PURCHASERS OF CONDEMNED PROPERTY, FISCAL YEAR, 1917—Continued.

Navy yard, Norfolk, Va., May 25, 1916:

S. Baker.....	\$2.50
Edgar Baum.....	243.90
N. Block.....	2,635.13
Marvin Briggs.....	460.00
William A. Burchard Co. (Inc.).....	222.15
John J. Chaulk.....	499.77
M. T. Cashin.....	245.30
C. H. Culpepper.....	20.10
E. Dommage.....	50.45
J. Dreffus & Sons.....	64.75
Ben Einstein.....	31.50
I. A. Friedman.....	139.00
A. Guttman.....	4,053.80
A. Hamlin.....	60.72
J. M. Hayden.....	20.75
M. A. Hifner's Sons Co.....	2,342.80
R. C. Irwin.....	2.00
Jordan Bros. Lumber Co.....	9.00
Walter C. Joynes.....	6.32
John T. Keville.....	43.59
E. G. Kintner.....	10.00
H. F. Larimore.....	137.50
J. E. Liggan.....	6.50
H. S. Mackan.....	37.02
Manhattan Rubber Manufacturing Co.....	179.52
J. W. Mattox.....	7.50
Nichols & Hodges.....	20.70
Norfolk Hide & Metal Co.....	502.13
David Peoples.....	16.00
C. A. Raleigh.....	10.00
B. R. Richardson.....	3.77
H. J. Segall.....	56.92
J. C. Simpson.....	13.25
Warren Metal Co.....	870.71
Warrick Machine Co.....	42.00
Frank M. Watson.....	5.15
John T. Whelan.....	10.00
C. L. Wiggins.....	5.56

13,137.76

Navy yard, Norfolk, Va., Oct. 24, 1916:

Atlantic Manufacturing Co.....	347.88
Ben Block & Co.....	1,537.79
George A. Broughton.....	34.50
Boston Iron & Metal Co.....	7,394.69
A. Cacace.....	190.13
M. T. Cashin.....	206.50
Cook, Bernheimer & Co.....	23.00
C. H. Culpepper.....	5.20
Gordon DeCordy.....	73.90
Cal Hirsch & Sons Co.....	2,014.04
Illinois Smelting & Refining Co.....	458.25
Miles Jennings.....	150.23
Robert Johnson.....	18.00
Jordan Bros. Lumber Co.....	8.24
B. A. Kelly.....	68.50
J. T. Keville.....	28.48
H. Klaff & Co.....	7,675.24
H. F. Larimore.....	85.75
Luria Brothers & Co.....	2,455.06
D. L. Marks.....	65.05
Nichols & Hodges.....	26.10
Norfolk Hide & Metal Co.....	5,889.84
J. J. Phillips.....	25.99
W. M. Reay & Co.....	19.75
F. K. Rogers.....	125.01
W. L. Roane.....	12.00
H. J. Segall.....	961.52
F. M. Silgar.....	37.00
Southern Brass Works.....	6,272.02
J. T. Whelan.....	61.50
Mary V. Wilson.....	86.10

36,357.26

Navy yard, Norfolk, Va., Jan. 25, 1917:

M. T. Cashin.....	112.58
Gordon De Cordy.....	8.50

121.08

Navy yard, Norfolk, Va., Feb. 17, 1917:

Boston Iron & Metal Co.....	\$1,704.48
I. Guttman.....	4,195.94
	<u>5,900.42</u>

Navy yard, Norfolk, Va., May 9, 1917:

S. Baker.....	9.75
George M. Billups.....	10.00
M. Block & Co.....	410.64
George A. Broughton.....	10.00
William A. Burchard Co. (Inc.).....	121.50
Herbert C. Cassell.....	4.50
M. T. Cashin.....	375.10
H. H. Cory.....	15.00
C. H. Culpepper.....	5.78
Dixie Junk & Waste Co.....	828.30
Frank Drake.....	5.80
Dreffus & Sons.....	118.75
Ben Einstein.....	78.50
F. J. Einstein.....	52.80
A. Gordon.....	6.20
R. L. Haywood.....	5.00
T. C. Hurst & Son.....	28.40
John T. Keville.....	19.43
H. F. Larimore.....	78.25
Samuel Marsh.....	131.85
F. H. Miller.....	40.25
Newport News H. & M. Co.....	462.00
Nichols & Hodges.....	34.75
J. C. Pendleton.....	53.00
B. R. Richardson.....	9.81
L. Rose & Co.....	210.00
H. J. Segall.....	1.58
Southern Storage Warehouse Co.....	45.54
Virginia Hide & Fur Co.....	5.00
H. L. Warren.....	88.00

3,263.46

Navy yard, Charleston, S. C., Apr. 11, 1916:

L. P. Andrews.....	7.66
F. C. Arnold.....	101.26
F. Bannerman.....	150.87
G. Bellows.....	2.25
E. S. Bagrot.....	16.96
Boyle Hardware Co.....	.75
F. P. Burton Lumber Co.....	47.50
C. W. Blitch.....	5.00
C. A. Bellows.....	5.80
J. A. Croak.....	7.90
M. Christensen & Sons.....	104.50
Charleston Lighterage & Transfer Co.....	15.75
Charleston Steel & Metal Co.....	227.04
W. Dehon.....	3.05
J. S. Garrason.....	12.20
L. F. Hildebrandt.....	14.75
C. D. Hasbrock.....	10.30
G. G. Huneken.....	3.61
G. Haymaker.....	6.16
J. A. Hughes.....	5.10
Micah Jenkins.....	9.35
W. L. Johnson.....	.57
Dr. W. H. Johnson.....	8.50
K. Koplin.....	160.00
H. Livingston.....	30.25
Mill Scrap & Rubber Co.....	20.70
J. T. Molony.....	7.85
W. R. Mayrant.....	3.05
A. E. Nimitz.....	3.10
J. F. O'Brien.....	90.90
Palmer & Ness.....	4,181.10
J. P. Pigot.....	18.55
H. Pearlstine.....	44.50
Palmetto Bag & Waste Co.....	2,506.93
B. Shapiro.....	356.60
J. S. Sosnowski.....	16.40
E. W. Schlenzig.....	2.33
H. Svendsen.....	70.88
Street Bros.....	713.53
L. G. Smith.....	108.30

Statement 48.—PURCHASERS OF CONDEMNED PROPERTY, FISCAL YEAR, 1917—Continued.

Navy yard, Charleston, S. C., Apr. 11, 1916—Continued.	
C. E. Tipton.....	\$3.10
J. D. Varn.....	1.30
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	9,109.73

Naval training station, Great Lakes, May 23, 1916:	
W. J. Elliott.....	5.50
S. S. Fagg.....	8.50
H. Hadelman.....	210.81
Northwestern Iron & Metal Co....	98.34
Western Cooperage Co.....	312.00
	<hr/>
	635.15

Naval training station, California, June 9, 1915:	
San Francisco Disposal Co.....	110.00

Navy yard, Mare Island, Cal., Mar. 18, 1915:	
American Machine Works.....	41.31
H. C. Ashley.....	5.25
C. E. Bains & Co.....	406.00
J. E. Baker.....	1.05
Francis Bannerman.....	41.00
H. T. Baxter.....	32.50
A. Bloom.....	223.50
Daniel R. Buckley.....	170.25
H. Burstein.....	94.50
Charles E. Clarke.....	170.85
N. C. Cleaves.....	35.50
Thomas Conolly.....	37.00
S. Cooper.....	805.50
H. C. Cutting.....	72.88
George E. Dickie.....	231.90
E. Domage.....	33.90
George Draiger.....	56.50
Dyer Bros.....	1,206.50
J. C. Godley.....	20.50
Charles Goldman.....	53.50
H. Greenstein.....	41.25
J. R. Greig.....	3.33
Charles Harley & Co.....	273.10
N. R. Harris.....	3.50
Cal Hirsch & Sons.....	64.38
W. J. Holzhauser.....	1.90
C. K. Howe.....	130.75
Frank Jessup.....	36.00
J. N. Jones.....	15.05
W. S. Kirk.....	280.75
A. Lietz & Co.....	28.50
William E. Love.....	1.00
Frank H. Miller.....	31.50
J. R. McMillan.....	2.50
S. Monticello & Co.....	5.00
Muir & Symon.....	521.15
Multnomah Metal Co.....	5.10
B. H. Paul.....	1.75
Charles Ravinovich.....	41.75
Richard Schnalle.....	75.00
Emil Schneider.....	24.68
P. Schecter.....	454.35
Smith Music Co.....	79.05
Stabens & Friedman.....	387.61
D. Stampa.....	183.78
S. Steinburg.....	357.78
Spiro Harness Co.....	34.05
Charles A. Triebel.....	65.55
J. Wallenberg.....	20.65
H. W. Wernse.....	9.34
Thomas C. Williams.....	22.00
J. Woolworth & Strong.....	134.05
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	7,058.00

Navy yard, Mare Island, Cal., Oct 3, 1916:	
C. J. Kramer.....	11.50
Thomas McGill, jr.....	28.00
	<hr/>
	39.50

Navy yard, Mare Island, Cal., Nov. 2, 1916:	
B. B. Abraham & Co.....	\$570.05
J. L. Ackerman.....	4.16
F. J. Othausen.....	2.84
American Machine Works.....	145.79
J. C. Baker.....	159.70
Bedford Furniture Co.....	41.85
A. Bercowich & Co.....	619.40
H. G. Bergwall.....	5.00
D. F. Beveredge.....	5.94
California Construction Co.....	33.00
Joe Cannon.....	20.58
Amilia E. Carlson.....	4.20
E. L. Carlton.....	7.92
J. J. Cheatham.....	5.04
James E. Childs.....	7.20
Charles E. Clarke.....	17.55
John S. Cuttleben.....	3.50
J. H. Diamond.....	8.54
George E. Dickie.....	133.55
E. Domage.....	44.15
J. M. Donovan.....	7.00
Herbert E. Dugan.....	21.80
J. E. Dunne.....	11.50
George Drager.....	13.00
William E. Ellis.....	16.02
Harry A. Elsworth.....	85.00
Charles N. Fiske.....	6.45
J. O. Gawne.....	15.96
R. L. Grissett.....	1.20
Frank D. Hansen.....	10.00
N. E. Hansen.....	12.00
Lucille Hamilton.....	7.15
W. J. Halzhauer.....	1.56
Charles Harley & Sons.....	525.05
Cal Hirsch & Sons.....	536.00
J. J. Hoose.....	3.00
Charles Hunn.....	35.00
Illinois Smelting Co.....	47.20
W. S. Kirk.....	3.10
J. B. Lamont.....	11.38
C. A. Lee.....	4.08
Frank H. Lee.....	19.30
Levine & Sons.....	2,905.45
B. H. McManus.....	2.30
J. W. Mahoney.....	6.82
David Martin.....	15.75
E. E. Marshall.....	8.20
George Mendelson & Sons.....	54.70
W. M. Metcalf.....	8.01
M. M. Morris.....	14.25
T. F. Murphy.....	5.32
Carl Neilson.....	17.20
George K. O'Hara.....	2.64
Pacific Pipe Co.....	42.00
S. P. Pankost.....	3.00
Clarence P. Padgett.....	2.20
Edward W. Poore.....	20.21
James Patterson.....	1.00
Charles Rabinovich.....	132.45
James Reed.....	9.00
E. E. Rehm.....	3.00
A. R. Rice.....	11.04
R. J. Robinson.....	5.05
Shecter Machine Co.....	200.15
W. R. Seibert.....	5.25
Mac Silverstein.....	173.00
R. H. Sherman.....	14.30
Stavens & Friedman.....	955.25
Spiro Harness Co.....	2,311.61
S. Steinberg.....	1,098.45
William Stewart.....	43.00
Marvin A. Taylor.....	18.00
H. B. Tiedman.....	30.00
Mrs. Mary Turner.....	12.13
Charles T. Tyte.....	3.20
Milton Undergraft.....	4.20
R. K. Van Marter.....	10.00
Charles J. Vogel.....	4.70
Elizabeth P. Webb.....	10.20
William G. Weir.....	9.00
H. W. Wernse.....	42.05
G. V. Whaley.....	5.00
I. Wallenburg.....	62.70

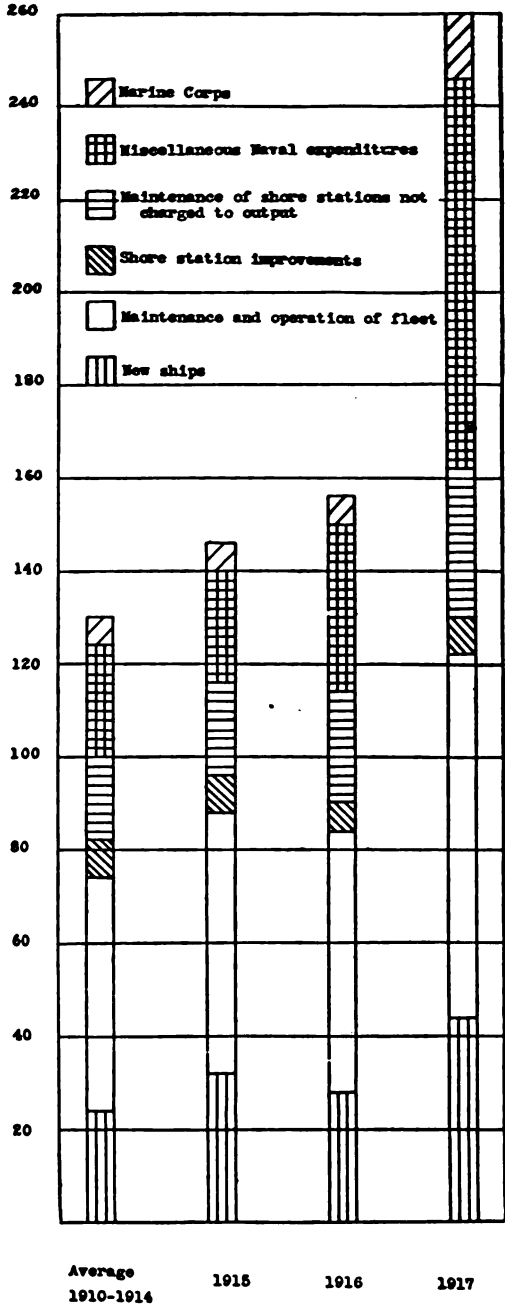
Statement 48.—PURCHASERS OF CONDEMNED PROPERTY, FISCAL YEAR, 1917—Continued.

Navy yard, Mare Island, Cal., Nov. 2, 1916—Continued.	
Bert Wilson.....	\$3.15
E. B. Wilson.....	3.30
R. W. Wuest.....	2.20
L. W. Williams.....	11.00
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	12,278.59
	<hr/>
Navy yard, Mare Island, Cal., Feb. 9, 1917:	
S. Steinberg.....	3,698.78
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Navy Yard, Puget Sound, Wash., Nov. 10, 1916:	
Burt S. Cole.....	10.00
T. O. Buffington.....	18.09
V. E. Haulsen.....	4.00
John Nymann.....	2.00
J. Schmidt.....	2.00
John A. Bennett.....	2.25
W. H. Murphy.....	10.04
Morse & Co.....	20.00
Tacoma Junk Co.....	254.19
P. J. Theisen.....	7.85
Chicago Junk Co.....	40.00
Albert Stell.....	1.50
Northwestern Junk Co.....	62.40
George B. Summer.....	100.00
Starr Machinery Co.*.....	10.10
B. L. Douglass.....	9.30
Mrs. C. B. Burlaw.....	2.06
Homer Feas.....	3.25
Ray Kaness.....	3.52
Puget Sound Junk Co.....	5.00
V. W. Barnell.....	.65
A. R. McNeill.....	6.55
Roy Culbertson.....	7.75
Kahan Falk Co.....	121.05
Nieder & Marcus.....	291.88
Foss Launch Co.....	36.77
Frank Schwartz.....	299.55
J. C. Jose.....	3.84
J. T. Shanley.....	5.85
A. H. Rambo.....	3.80
American Junk Co.....	18.77
C. A. Cooper.....	7.00
Peter Peterson.....	3.35
Seattle Grocery Co.....	1.05
Otto Christensen.....	5.00
Walls & Sons.....	34.35
A. McArthur.....	55.25
W. E. Melker.....	2.13
John M. Stephenson.....	30.75
Beatrice H. Hastings.....	1.05
Martin Hansen.....	52.00
W. Stokes Kirk.....	233.35
F. W. Wienand.....	3.05
George Broom.....	212.50
William Trumbull.....	5.00
Charles S. Ziegler.....	41.50
A. Pallo.....	44.05
Mike Cohen.....	18.00
A. Reanick.....	8.00
Harriet W. Brown.....	15.75
W. H. Roxburgh.....	15.69
Wendell Foss.....	10.55
Sam Henderson.....	24.00
W. W. Nearhoff.....	141.00
P. W. Peterson.....	161.00
E. Domage.....	38.05
B. E. Stebbins.....	40.00
Seattle Grocery Co.....	14.28
Pacific Coast Steel Co.....	4,399.80
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	6,981.51
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Naval station, Cavite, P. I., Sept. 20, 1916:	
P. Johnson.....	8.50
Cong Le.....	6.75

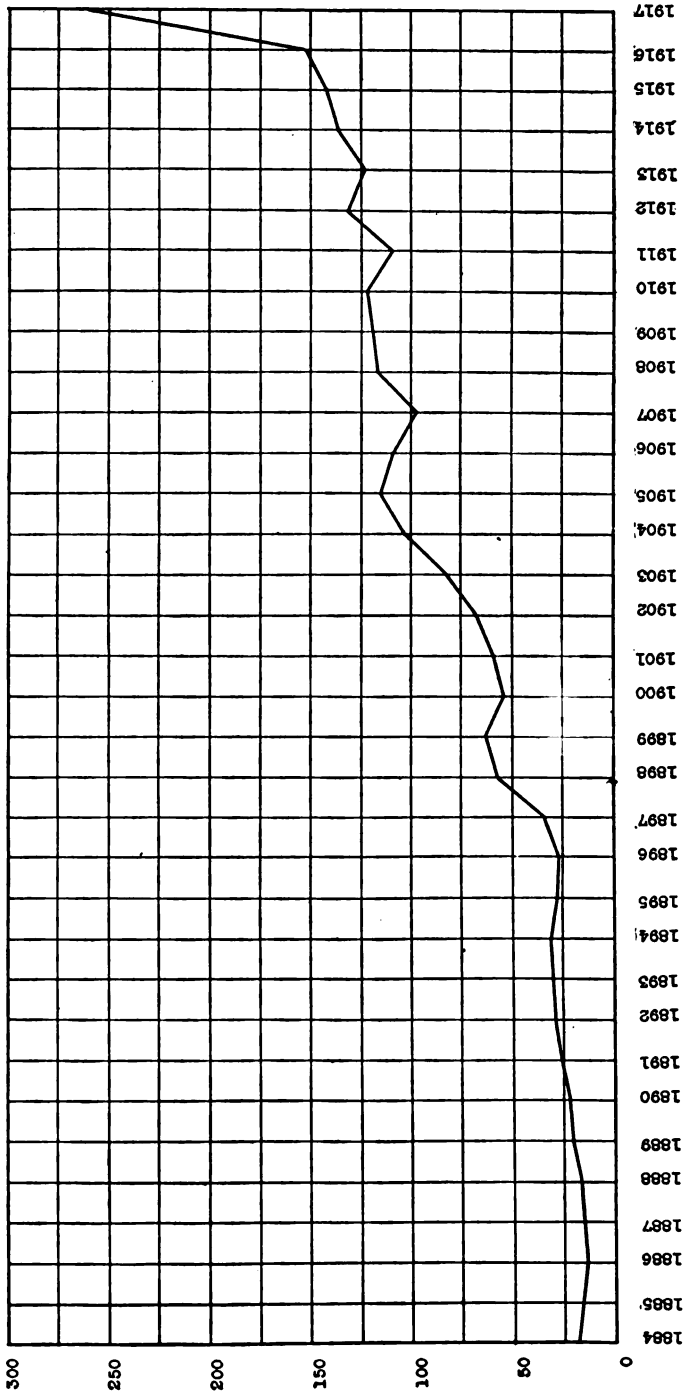
Naval station, Cavite, P. I., Sept. 20, 1916—Continued.	
Teng Kook.....	\$65.00
T. Delgado.....	379.00
S. D. Martinez.....	447.25
P. W. Guilmond.....	28.25
Co Beho.....	55.50
M. Goldstein.....	67.50
Sy Put.....	304.00
Tan Tiam.....	5.00
Chang Chia Boc.....	28.00
Z. Forlich.....	436.70
Tam Te.....	11.00
Chan Suy Hua.....	74.50
C. W. H. Aitken.....	17.25
L. Octavo.....	39.00
Cheng Boe.....	28.50
Cheng Bee Lay.....	493.50
Uy Eng Kuei.....	68.50
J. G. Marino.....	612.50
Ong Che.....	771.00
John Smith.....	13.00
W. L. Mann.....	3.75
L. Marzall.....	11.00
S. Balayan.....	5.25
J. E. De Muth.....	25.00
F. L. Conklin.....	5.50
A. Dano.....	8.50
E. A. Cuddy.....	115.00
Yap Se.....	57.50
Philippine Manufacturing Co.....	406.50
Madrigal & Co.....	212.50
Tan Limco.....	368.00
B. Descalco.....	800.00
D. C. Worcester.....	568.56
Chan Bun Do.....	77.50
C. Balcano.....	145.50
Pacific Commercial Co.....	57.50
Juan Garcia.....	37.50
C. C. Gildert.....	67.50
	<hr/>
	6,933.76
	<hr/>
Naval station, Olongapo, P. I., Mar. 27, 1916:	
Jose Ong Che.....	2,694.42
Naval station, Olongapo, P. I., Oct. 26, 1916:	
Thomas Bezick.....	102.39
Troy, N. Y., Mar. 20, 1917 (chain):	
John Trautwein.....	71.40
Bureau of Supplies and Accounts, June 26, 1916 (U. S. S. Alice):	
Fields S. Pendleton.....	4,600.00
Bureau of Supplies and Accounts, Oct. 23, 1916 (U. S. S. Fox):	
Nieder and Marcus.....	3,111.00
Bureau of Supplies and Accounts, Dec. 7, 1916 (U. S. S. Severn):	
Francis J. McDonald.....	41,025.00
Chicago, Ill., May 30, 1916 (flags of Isla de Luzon):	
James L. Foord.....	27.96
Winthrop, Md., Dec. 12, 1916 (engine):	
Peter Sullivan.....	25.00
Panama Canal, May 2, 1917 (scrap lead):	
Nassau Smelting & Refining Works.....	5,121.14
	<hr/>
U. S. S. Cuiqoa, Nov. 20, 1916 (flour):	
A. Sarenelli.....	978.00
Araza & Co.....	62.50
	<hr/>
	1,040.50
	<hr/>
U. S. S. Cuiqoa, Nov. 25, 1916 (flour and coal):	
Divanna Grisolia & Co.....	1,076.04
Department of Public Works, Puerto Plata, Dominican Republic.....	68.12
	<hr/>
	1,142.16

REPORT OF THE SECRETARY OF THE NAVY.

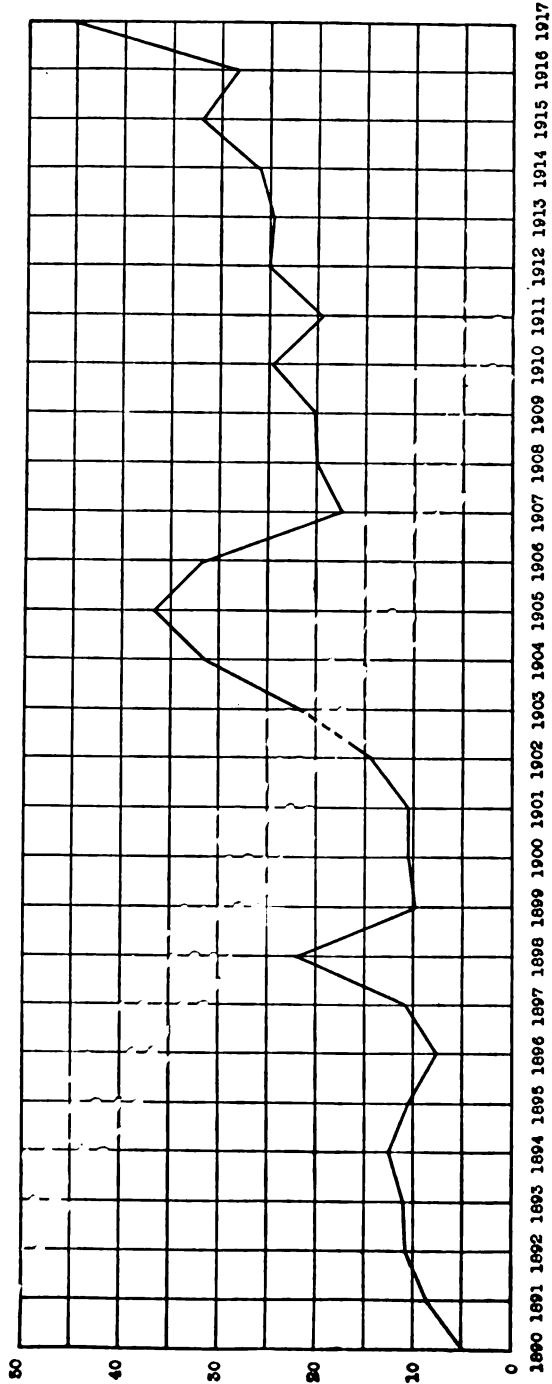
A.- EXPENDITURES FOR THE NAVY
(In millions of dollars)



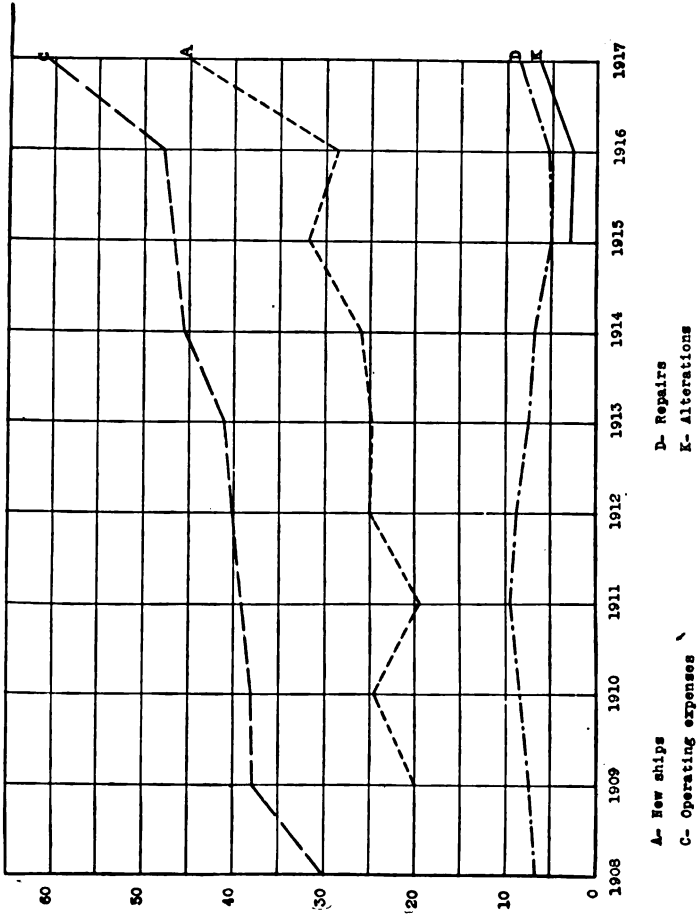
B.- TOTAL EXPENDITURES FOR THE NEW NAVY BY FISCAL YEARS
(In millions of dollars)



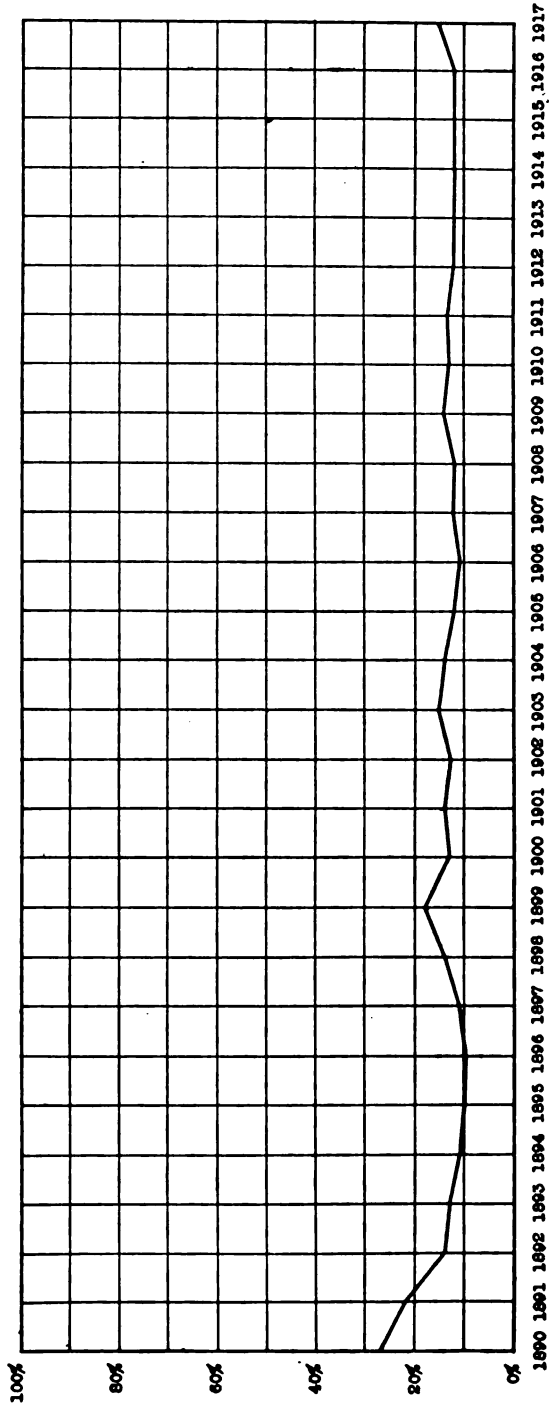
C.- EXPENDITURES FOR NEW SHIPS BY FISCAL YEARS
(In millions of dollars)



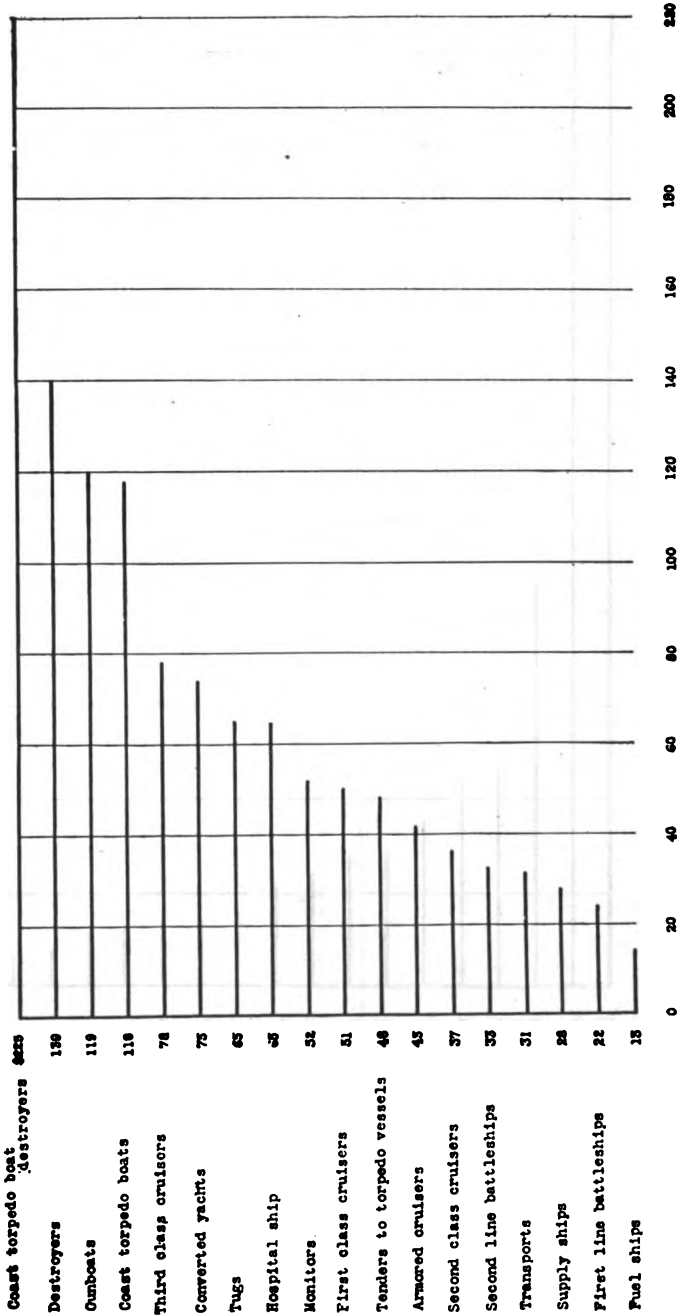
D.- EXPENDITURES FOR SHIP TYPES A, C, D AND K BY FISCAL YEARS
(in millions of dollars)



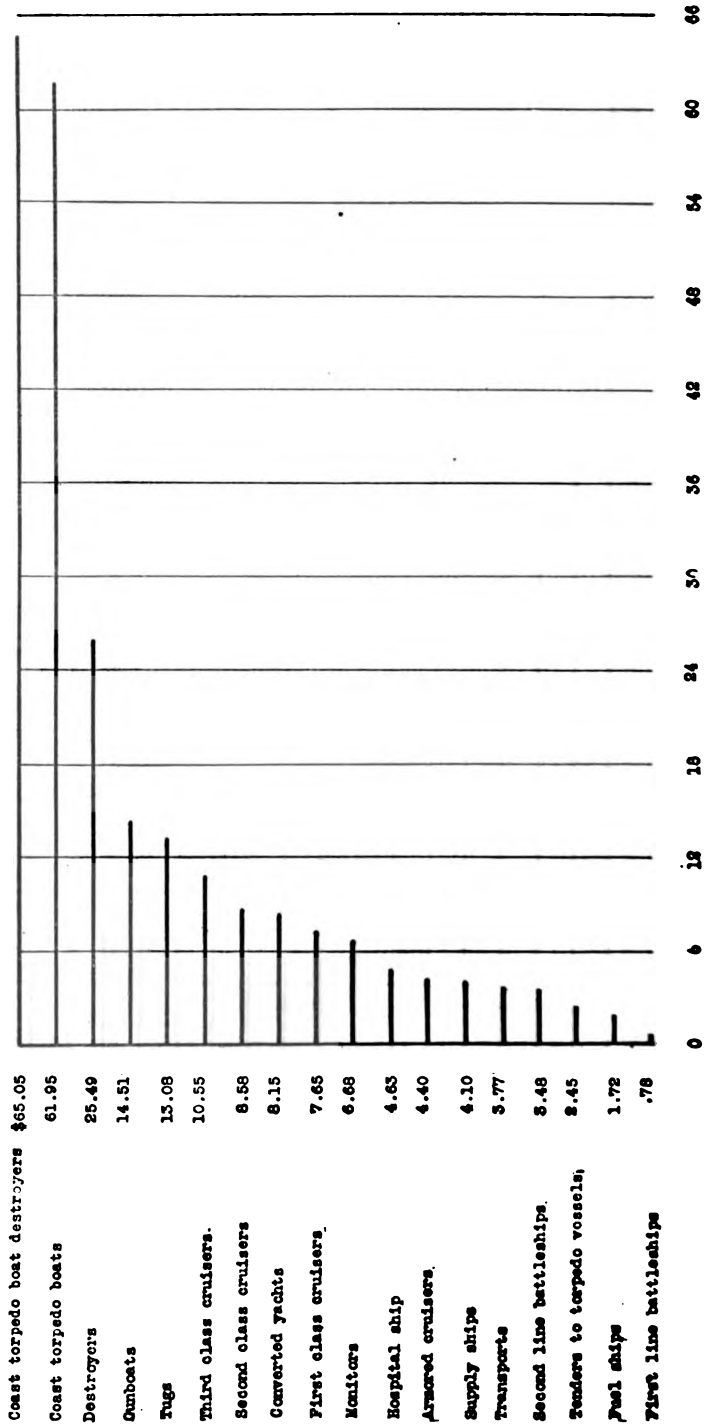
E.-RATIO OF MAINTENANCE AND OPERATION OF THE FLEET TO ITS VALUE BY FISCAL YEARS



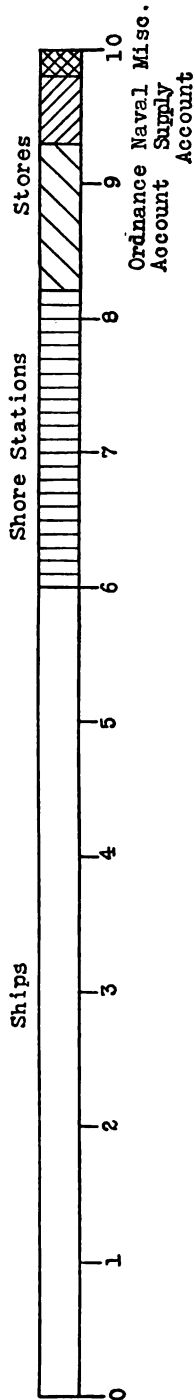
F.- COST OF MAINTENANCE AND OPERATION PER TON DURING THE FISCAL YEAR 1917.



G.- COST OF REPAIRS PER TON DURING THE FISCAL YEAR 1917

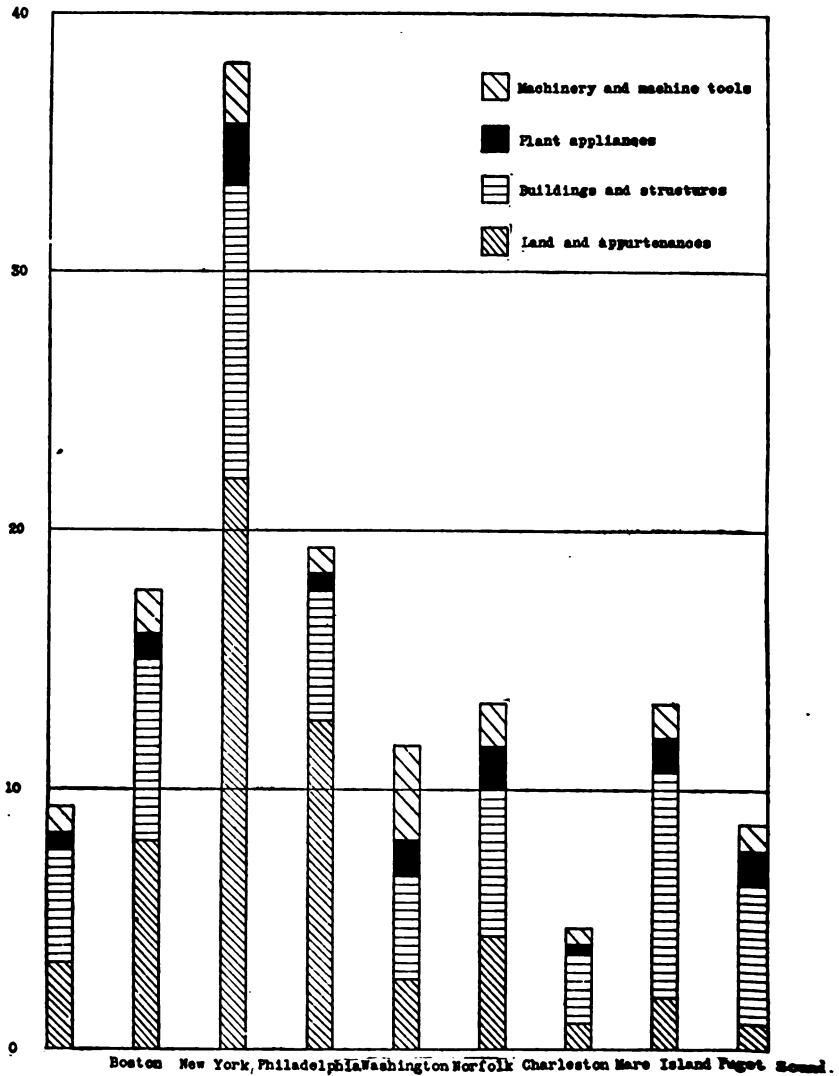


H.- TOTAL PROPERTY INVESTMENT OF THE NAVY
(In hundreds of millions)

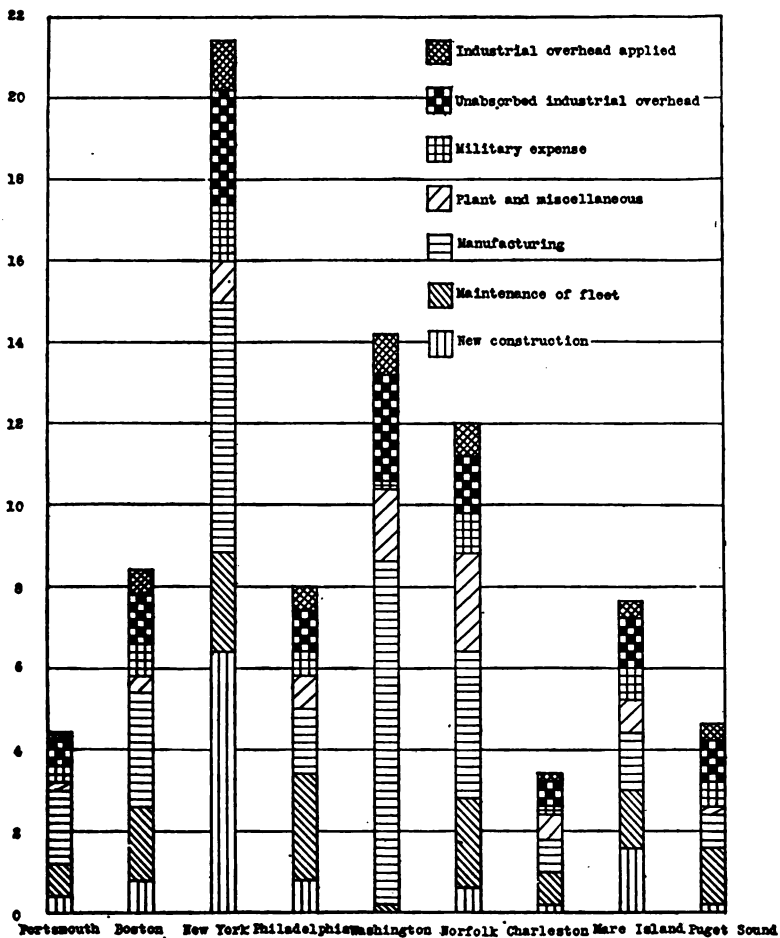


I.- REPRODUCTION COST OF INDUSTRIAL PLANTS

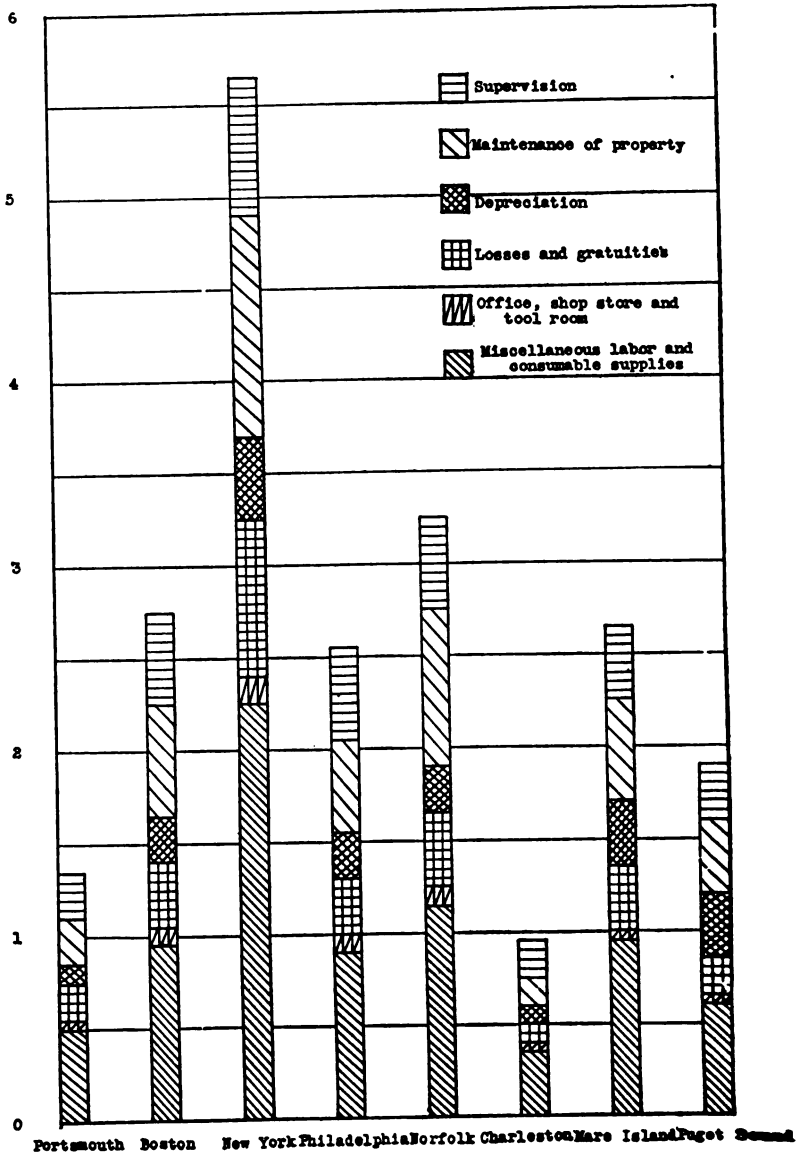
(In millions of dollars)



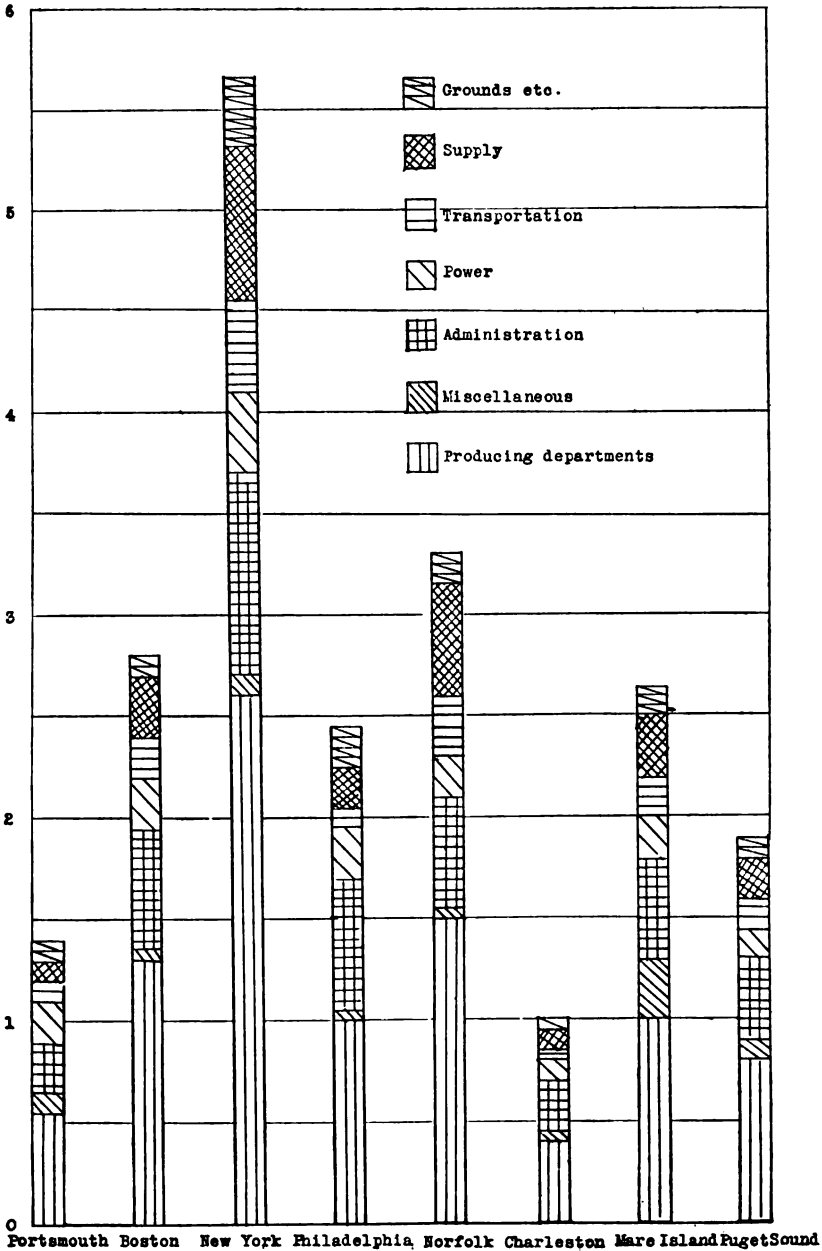
J.- EXPENDITURES AT INDUSTRIAL YARDS FOR FISCAL YEAR 1917
(in millions of dollars)



K.- INDUSTRIAL YARD EXPENSE BY PHYSICAL CLASSES
(In millions of dollars)

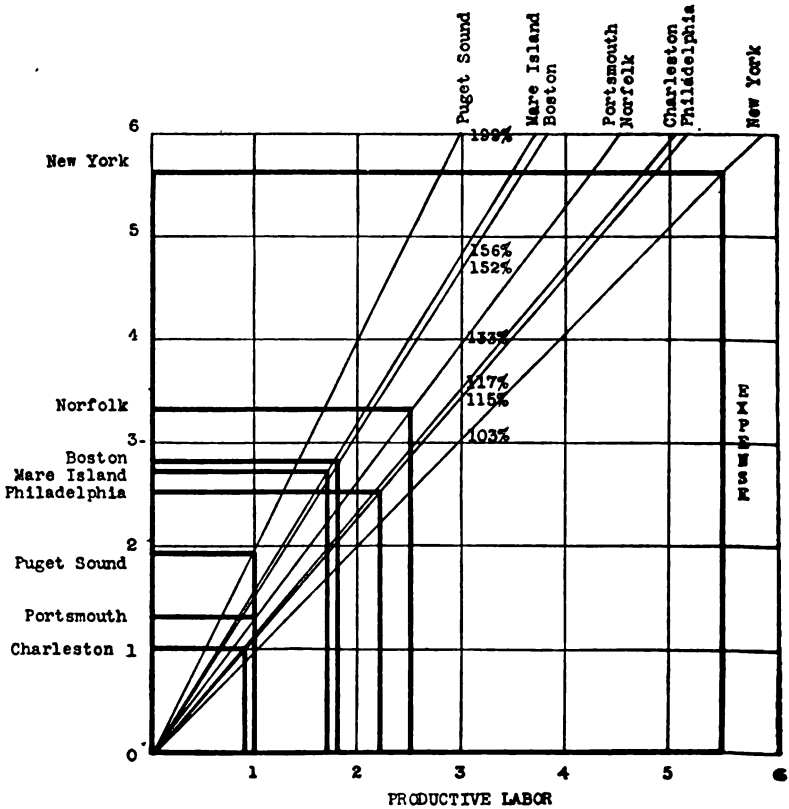


L.- INDUSTRIAL YARD EXPENSE BY PURPOSE GROUPS
(In millions of dollars)



M.- EXPENSE AND PRODUCTIVE LABOR OF INDUSTRIAL YARDS FOR FISCAL YEAR 1917.

(In millions of dollars):



REPORT OF THE SURGEON GENERAL.

DEPARTMENT OF THE NAVY,
BUREAU OF MEDICINE AND SURGERY,
WASHINGTON, D. C., *October 1, 1917.*

To: Secretary of the Navy.

Subject: Annual report for fiscal year 1917.

The following report of the activities of the bureau is submitted.

PERSONNEL.

MEDICAL CORPS.—The administration of the medical department has long been hampered by numerically insufficient personnel. A ready illustration of this is afforded by the necessity which the bureau has been under for a number of years of delegating to physicians under a temporary appointment with no experience at sea a considerable portion of the examining work at recruiting offices. However able and conscientious these physicians may be, they necessarily labor under the disadvantage of being unacquainted with practical service conditions; with the physical, mental, and moral environment which will surround the recruit and infallibly affect his performance of duty at sea and which should be considered in determining his ability to undertake it.

Again every battleship should in times of peace have two medical officers because duty on courts, boards, inspections interfere with routine duties; because cases constantly arise demanding mutual aid and consultation; because medical officers, like other men, get sick and require leave. To-day our hospital staff must comprise men specially trained in bacteriology, diseases of special organs, Roentgenology, surgery, diagnosis. Outlying stations like Guam, Samoa, the newly acquired Virgin Islands, and territories of military occupation like Haiti and Santo Domingo require medical officers not only to minister to the personnel of the service, but to care for the native populations, too often without capable physicians of their own and laboring under handicaps of poverty and prejudice as well as of ignorance and indifference.

In view of what has gone before and of reiterated statements in the past to the same effect, the material increase in total personnel of the Navy and Marine Corps, and the reapportionment of grades and ranks in line and in Staff Corps as established by the act of August 29, 1916, affords relief to a trying and embarrassing situation.

The closing months of the fiscal year 1917 have seen an increase of the activities of this bureau without parallel in its history. They were proportionate to the general expansion of work in all depart-

¹ All statistics cover the calendar year 1916.

ments of the Government service and to the universal interest and widespread efforts at cooperation manifested by individuals and by societies in civil life for the welfare of the naval service. But even before the demands made by a state of war increased a hundred-fold the work of the Medical Department the demands of the increased personnel had thrown a heavy burden on the bureau and its agents in hospitals and navy yards, on foreign stations, on board ship, at recruiting stations, on examining boards, etc. Less conspicuous but equally important is the fact that each year sees medicine and surgery approaching the goal of its highest ambition and more entitled to discharge its functions on a scientific basis, with the result that all branches of the Medical Department of the Navy must advance and enlarge. Medical officers require longer and better training as the field of knowledge widens and must be increased in numbers as specialized services are increasingly required. The same is true of nurses and hospital corpsmen. Stores, medicines and appliances must be constantly brought up to date, hospital facilities must be of more elaborate character, provision for the adequate care of the sick and wounded afloat becomes ever a more exacting problem. Prevention of disease is the cry of the hour, but inoculations and vaccinations are the least potent measure to this end and do not compare in value with efforts both direct and indirect to improve the conditions of daily life. Food, bedding, berthing, ventilation, heating, exercise, recreation and all the conditions under which labor is performed must be made adequate to the needs of the human animal. The difficulty of obtaining improvements seems to increase rather than diminish with the increased necessity for them, owing to the speed and complexity of modern life and endeavor. Above all stands the necessity for the dissemination of elementary knowledge of hygienic requirements and an appreciation of their importance among nonmedical men, so that they will be willing to apply them *before instead of after* the epidemic and the ravages of death. And so, in season and out of season, by direct appeal and open agitation and by circuitous measures and tactful pressure through the power of personal influence, military and civilian officials must be instructed and the ever-fresh instrumentalities required must be sought.

Prior to the passage of the above act the authorized strength of the Medical Corps was 345, and this number had not been filled at that time. The increase provided for an immediate allowance of over 600, with a permanent increase, at the discretion of the President of the United States, to over 800. This latter figure has, by Executive order, been made permanent, and by the act of May 22, 1917, a considerable further temporary increase has been authorized. The above computations are based upon the authorized allowance of sixty-five one-hundredths of 1 per cent of the total authorized number of the officers and enlisted men of the Navy and Marine Corps, including midshipmen, Hospital Corps, prisoners undergoing sentence of discharge, enlisted men detailed for duty with the Navy Militia, and the Flying Corps.

It was evident at the time of the initial increase indicated above that a very energetic campaign would be necessary to secure desirable candidates to fill these immediate and prospective vacancies.

The fundamental objection, the one operating most effectually to keep men from choosing the Medical Corps of the Navy for a life work, is the inevitable separation from home and family necessitated by sea service. Candidates for the Naval Academy are younger by many years than the average graduate in medicine and are less deterred by such considerations, but the doctor is already married, or contemplating marriage, and has a somewhat larger view of life. In the second place, the rising standard of professional attainments is reducing the number of practitioners in this country; the longer and severer preparation required for a diploma and license leads men to demand larger rewards in emoluments, reputation, and opportunities in return for the time and money and labor expended in college. Finally there is more generally present than might appear on the surface a disinclination to enter into a contract with the Government, based on the fear that, while the Government may be exacting with the individual, the individual is not in a position to compel the Government to keep its contract, and that the legitimate hopes and expectations of years of service may end in disappointment and no opportunity for redress.

Every medical graduate in the country within the legal age limits for the Medical Corps was reached by circulars from this bureau describing the advantages and activities of a medical career in the Navy. Not only was an energetic propaganda undertaken in all the larger medical centers, in medical schools and in hospitals, but the American Medical Directory, containing the names of over 145,000 physicians resident in the United States, was thoroughly and completely utilized in the successful effort to reach all the above-mentioned eligibles. In response to a request from this bureau, the deans of all Class A medical schools furnished lists of their senior students to the number of about 2,300, and to these also the advantages offered by the Navy were presented.

Despite all these efforts, it seemed that results would be far from commensurate with the thought and material expended, but later developments showed that this sowing was to provide an abundant harvest when the crop would most be needed, and this was particularly true regarding the publicity campaign among the senior students.

Early in this year the Secretary of the Navy addressed letters to all the State boards of licensure requesting that they approve the advance graduation of selected medical students who would be recommended for enrollment in the Naval Reserve Force with a view to subsequent examinations for appointment in the Medical Corps of the Navy. An immediate response in the affirmative was received, extending enthusiastic and patriotic cooperation, and with a like spirit upon the part of the deans and faculties of all the Class A medical colleges, special examinations were arranged for these selected students. Upon certificate by the respective deans that the students whose names were submitted had attained the high mark of 85 per cent during their entire stay in the institution, the inference was accepted by this bureau that sufficient evidence was carried thereby to guarantee unusual qualifications, training, theoretical and clinical knowledge, and aptitude. Careful physical examinations were necessary, however, which regrettably eliminated many candi-

dates most desirable from the professional standpoint. Three hundred and twenty-nine officers were obtained in this way for the Naval Reserve Force. All have recently been reexamined for commissions in the Medical Corps of the Navy, and about 70 per cent have been found qualified and recommended for commissions as assistant surgeons, United States Navy. To reiterate, not only are these officers products of our best schools, but they are the cream of their respective institutions, inasmuch as this opportunity was offered only to students who had shown themselves exceptionally qualified by the character of the work performed and the excellence of the marks attained during their entire course of study.

This step represented a radical departure from previous practice and was not taken without due deliberation. The need of the moment was for an immediate accession to the corps of large numbers of qualified men in whom possible deficiencies on the practical side of their profession could be supplemented in the service *pari passu* with the acquisition of that knowledge of administrative measures and service requirements without which even great professional ability is largely reduced. Especially is this true in handling the sick and wounded of war. It is not enough to do brilliant operations. The sick must be quartered, subsisted, and transported by the most approved sanitary methods. If they die, certain forms have to be observed. Records of disability from sickness and wounds must be accurately kept in order to do justice to the individual and to the Government in regard to retirements and pensions. There are innumerable details to be attended to, an ignorance of which entails confusion and disaster.

The naval profession is a highly technical one, including many specialties, of which the work of the Medical Department with its own specialties is but one. The efficient conduct of the affairs of the Medical Department is dependent upon a thorough appreciation of the naval profession as a whole and an intimate knowledge of the principles and practice of naval administration and discipline, as much as upon the principles and practice of medicine. Every measure adopted and every scheme proposed is intimately connected with the military side of the situation, and the greater the scope of an undertaking the more likely it is to be modified by military necessities which only those can appreciate who in addition to their medical training have had experience or special instruction in the routine methods of the military organization.

Many recent graduates do not offer for service appointments because of exaggerated ideas of the requirements. Others are afraid that failure to pass may be prejudicial to their reputation in the community where they begin to practice. Many have not the time nor the funds necessary for attendance on the examining boards, in view of the possibility of failure to pass. There are many advantages, from the employer's standpoint, in times of emergency, in securing the recent graduate. So great is the insistence to-day on the value of hospital experience and so limited is the relative number of available internships that many a graduate intending to do general practice will seize with alacrity a chance to give a year to pediatrics, gynecology, psychiatry, or obstetrics rather than enter on his profession and solicit patronage without a record of hospital

service behind him. Such work is not without value to a man who later enters the Navy, but it involves a misuse of time and energy when there is an urgent call for medico-military service.

Spurred by the stimulus provided by the outbreak of hostilities and guided by the educational propaganda of the past year, the medical profession has made proffers of service that have more than satisfied the needs of the Medical Department of the Navy. Exclusive of the above-mentioned accession, the Naval Reserve Force has at present a total of some 800, which with the 760 officers of the Medical Corps (commissioned or recommended for commission), 94 members of the Medical Reserve Corps, 114 retired officers, 23 acting assistant surgeons, and 86 medical officers of the Naval Militia and the National Naval Volunteers affords a total of 1,800 officers available for duty of one kind or another. Outstanding permits extending authority to appear for examination number 150, and applications are being constantly received and filed for future reference and use.

As the above increase has presented itself as practically one increment, it has been found impossible to put those young officers who were prospective candidates for the permanent service (i. e., Medical Corps) through the Naval Medical School in one class. We have, therefore, with the enthusiastic assistance of the teaching staffs of the medical colleges of our larger centers, instituted courses of instruction for these officers in Boston, New York, Philadelphia, Chicago and San Francisco, as well as at the Naval Medical School, Washington, D. C. In addition ample bedside, clinical, and operative work is furnished by our naval hospitals, supplementing the above. We are thus at a very rapid rate converting this material, of excellent professional training but unused to Navy routine, into medical officers of initiative and self-reliance who will be well qualified for independent duty when the necessity arises.

It is fitting to speak here of the loyalty and patriotism displayed by officers of the Medical Reserve Corps. In most instances they are already men of eminence in their profession, or on the way to become so, with valuable hospital connections and extensive practice. They have cheerfully sacrificed their personal interests to the good of the service and thrown themselves unreservedly into the work demanded by the Navy, often at no small cost of time and labor.

DENTAL CORPS.—As mentioned in my report of last year, the act of August 29, 1916, provided an ample and justifiable increase in the number of officers in the Dental Corps, based upon the total authorized enlisted strength of the Navy and Marine Corps. This provides an authorized total for permanent appointment of 104. Offers of service for dental duty in the present emergency have been, relatively, even more numerous than offers of medical assistance. Examinations for the regular service have been held in this city, and at the navy yard, Mare Island, Cal., with the result that over 80 officers are now commissioned or recommended for commission as dental surgeon, probationary appointment, United States Navy. From the number of applications that are being received it is not doubted that the corps will soon be filled to the authorized limit.

A very large number of proffers of service for duty with the Naval Reserve Force has been received, and as many men as could profitably be accepted are now on duty. Considerable difficulty has been expe-

rienced in acquiring the necessary dental equipment for these officers and, as this becomes more available, the offers of service which are now on file will receive favorable consideration.

AMERICAN RED CROSS.—This bureau has on detail with the American Red Cross, Medical Inspector T. W. Richards, United States Navy, as assistant director general of military relief. Dr. Richards has most ably handled the formation of the commissioned and enlisted personnel of the various Navy base hospital units and the naval station hospital units.

Five large Navy base hospital units have been manned and equipped through the generous aid of the Red Cross, numbered from 1 to 5, respectively, at New York, San Francisco, Los Angeles, Providence, and Philadelphia.

Ten smaller units for duty with the new temporary hospital construction at our naval hospitals and stations have also been provided, or are being provided. The most eminent talent in each one of these large centers has been utilized, and a most valuable adjunct to the regular corps thereby established.

The commissioned personnel to properly administer these hospitals has been enrolled in the Naval Reserve Force upon recommendation of the Red Cross and, to the extent of approximately 120, is included in the total figures given above, being necessarily deductible therefore from the list of those available for general detail.

The outbreak of war aroused the patriotic feelings of the women of the country and they sought at once a practical outlet for their energy in measures to give comfort and aid to the men joining the colors and to further the organized work of the Government.

Through the instrumentality of the American Red Cross occupation has been found for thousands of women by employing them in the confection of standard surgical dressings. The Bureau of Medicine and Surgery accepted an offer from this source to supply fleets and hospitals with surgical dressings, the Government paying for the material and the pupils under instruction at Red Cross centers giving their time and labor without charge.

While the Medical Department of the Navy was not without its own resources in these requirements, the offer was gladly accepted as it permitted our nursing force (Nurse Corps and Hospital Corps) to devote its time to other urgent work. The large accessions to the Hospital Corps referred to elsewhere include many untrained men in need of special instruction along many lines and it is a real economy of time and effort to have dressings made up by voluntary workers outside the service so that the new hospital corpsmen may devote themselves wholly to nursing and to learning the details of sanitary, surgical, dispensary, and ward work.

ACTIVITIES CONNECTED WITH WAR SERVICE.

For a considerable time prior to the declaration of war and while yet this contingency seemed remote and improbable to many this bureau instituted steps for preparation against such a development. The commanding officers of hospitals were directed to consider all the features of a possible situation calling for large increase in their equipment, and were directed to make tentative plans for installation

of tents, beds, and cots to permit the maximum expansion. Plans were definitely completed for utilizing these institutions to their utmost capacity. Likewise in the matter of stores the bureau has been acquiring large quantities of drugs, surgical dressings, and appliances for issue from the various medical supply depots. The individual hospitals and ships also largely increased their reserve supplies, so as to be ready for any emergency.

In addition to the facilities thus provided and being provided in naval institutions, properly so called, the medical officers in command of the various naval hospitals have been busily engaged in organizing the naval hospital bases and arranging for adjuncts to them, such as civilian hospitals, municipal hospitals, private institutions, either to provide for evacuation on overflow of naval hospitals or to receive patients direct.

In connection with the preparations for war the American Red Cross has erected, without cost to the Government, in the grounds of the New York Naval Hospital, a steel building for the housing of their stores.

Soon after the declaration of war steps were taken to secure the cooperation and assistance of the highly trained sanitary officers of the United States Public Health Service. The act of July 1, 1902, section 4, provides for the utilization of the Public Health Service in times of threatened or actual war, in such manner as shall best promote the public interests. By an executive order of the President of the United States, dated April 3, 1917, the United States Public Health Service was directed to work in cooperation with the Army and Navy. Members of this body are now on duty at various points assisting the medical department of the Navy in the selection and inspection of sites for camps and hospitals, in sanitary and laboratory work and in the manifold forms of endeavor represented by the various naval districts.

The survey of civil hospital facilities—general, insane, etc.—begun by the bureau in 1915 was brought to completion, and charts presenting the findings were prepared for distribution. It was found that while the authorities of all institutions showed the utmost willingness and readiness to help, yet they were not inclined to restrict themselves to any one service, but rather to accept all cases, from whatever service, in the order in which they required assistance. State institutions for the care of the insane showed a hearty desire to cooperate to the limits of their capacity.

Upon the declaration of war the medical service to be rendered to all personnel of all forces was promptly organized in accordance with prepared plans, particularly with attention to naval districts and naval hospital bases. This organization consists of two divisions—dispensary service, general, and hospital service, central.

The dispensary service, under the charge of the medical aid to the commandant of each naval district, was developed to serve the many outlying stations for patrol, aero, radio, and other forces. Dispensaries, or temporary sick quarters, were established, equipped, and manned with proper personnel at all places where the need existed.

The hospital service, under the charge of the medical officer in command of the naval hospital in each district, was developed upon a naval hospital base, the established naval hospital being surrounded

by adjuncts in the form of temporary structures, tents, buildings converted to hospital purposes, United States Public Health Service or civil hospitals, to accommodate patients for whom, for any reason, there might be no accommodations within the naval hospital itself.

The medical officers in charge of both divisions of medical work have perfected the general plans and have made complete arrangements at all stations for adequate care and treatment of the sick and wounded should they be received in large numbers.

Special letters of instructions describing the lines upon which the development of these divisions of medical service was to be conducted were sent to all medical aids and medical officers in command of naval hospitals, together with blue-print charts of all data concerning civil and Public Health Service facilities, etc., which the bureau had been able to obtain.

In connection with this development of the medical service, changes in the regulations for naval districts so far as they concern the medical department have been recommended, and a pamphlet of general instructions for the use of medical aids and medical officers in connection with the application of these regulations and medical services, has been prepared, printed, and distributed to the service.

It is believed that ample provisions for caring for the sick and wounded under this division of medical service have been made.

The following summary of the medical organization for war in actual operation in a certain naval district is submitted to illustrate how members of the Medical Corps, in its various subdivisions, are actually employed. This summary shows the assignments of medical and dental officers demanded by the war situation at places other than navy yards and stations proper, hospitals, and on board regular cruising ships. The latter, of course, require a much larger personnel under present conditions, but no account is taken of this in the appended list. The names of places given are fictitious, but represent actual localities.

Camp H, having a force of 1,200 officers and men, requires the services of one medical officer, National Naval Volunteers; two medical officers, United States Naval Reserve Force; one dental surgeon, United States Naval Reserve Force.

Receiving Station I, having a force of 2,000 to 2,500 officers and men, requires the services of two medical officers, National Naval Volunteers; two medical officers, United States Naval Reserve Force; two dental surgeons, National Naval Volunteers; one pharmacist, National Naval Volunteers.

Training Station J, having a force of 46 officers and men, requires the services of one medical officer, United States Naval Reserve Force.

Camp K, having a force of 500 officers and men, requires the services of one medical officer, United States Naval Reserve Force.

Air Station L, having a force of 300 officers and men, requires the services of one medical officer, United States Naval Reserve Force.

Radio School M, having a force of 1,200 officers and men, requires the services of one medical officer, United States Naval Reserve Force; one dental surgeon, United States Naval Reserve Force.

Cadet School N, having a force of 60 officers and men, requires the services of one medical officer, United States Naval Reserve Force.

Section bases O, P, Q, R, S, T, U, and V, having an aggregate of 1,350 officers and men, require the services of one medical officer, United States Navy, retired; thirteen medical officers, United States Naval Reserve Force; two medical officers, National Naval Volunteers; two dental surgeons, United States Naval Reserve Force; one pharmacist, National Naval Volunteers.

Interned ships *W*, *X*, and *Y*, having an aggregate of 838 officers and men (skeleton crew), require the services of six medical officers.

To visit recruiting offices throughout district, two dental surgeons, United States Naval Reserve Force, are employed.

EMERGENCY HOSPITAL CONSTRUCTION.

The following emergency hospital construction, at a total estimated cost of \$4,000,000, was begun as soon as appropriations were available and the necessary specifications and plans could be gotten up:

Portsmouth, N. H.—Nine buildings, consisting of five pavilion wards, nurses' quarters, Hospital Corps quarters, garage and subsistence facilities, to increase the capacity of that institution so as to handle a hundred additional patients.

Newport, R. I.—Thirteen buildings, six pavilion wards, nurses' quarters, quarters for Hospital Corps, garage, subsistence facilities for immediate increase by 330 beds.

Navy Yard, League Island.—Twenty-four hospital buildings, including five pavilion wards, with toilets and wash rooms, nurses' quarters, Hospital Corps barracks, quarters for civilian employees, quarters for medical staff, operating building, administration building, mess halls, kitchens, storehouses, garage, laundry, dispensary building, and appropriate heating plant to accommodate 200 patients.

Norfolk, Va.—Twenty buildings, 14 pavilion wards, four barracks for Hospital Corps, two subsistence buildings, to give an increase of 420 beds. Here the contagious camp will be increased by 400 beds, distributed in 25 buildings of the bungalow type.

Charleston, S. C.—Twenty-four buildings, five pavilion wards, and buildings and equipment as in the case of the navy yard, League Island, to accommodate 200 additional patients.

Pensacola, Fla.—Twenty-four buildings, five pavilion wards, etc., as for Charleston, S. C.

Work has been rapidly pushed on all construction, and many of the buildings are equipped and fully ready for occupancy.

With the successive increases in the personnel which marked the early months of the year it became evident that even this large increase in the facilities for the sick and the number of beds over the original capacity of 1,600 beds afforded by our 18 naval hospitals would probably be inadequate for the full and proper care of the sick and wounded of the Navy during a prolonged and bitter war. At an estimated additional cost of \$1,467,000 plans were made for the immediate further expansion of the hospitals at Portsmouth, N. H.; New York; Annapolis, Md.; Jamestown, Va.; Norfolk, Va.; Key West, Fla.; Great Lakes, Ill.; Mare Island, Cal.; Puget Sound, Wash.; and Newport, R. I. When the establishment of training camps at Gulfport, Miss.; Cape May, N. J.; and Pelham Manor, N. Y., was decided upon this bureau immediately began the con-

struction of adequate but temporary hospital establishments at these places.

When all the carefully matured plans have been carried out and the construction begun and well under way has been accomplished, the Medical Department expects to have available in institutions of its own a patient receiving capacity of 10,000 beds.

At the large training camps there will be, besides regular hospital establishments, dispensaries, sick quarters, laboratories, disinfecting plants, isolation wards, and all the necessary equipment as to buildings, apparatus and utensils for assisting in receiving the large numbers of recruits and in successfully carrying on the process of amalgamating them into the service. At the training station, Great Lakes, Ill., there will be 49 new buildings, 29 pavilion wards, the usual quarters for nurses and Hospital Corps, storerooms, garage, civilian employees' building, laundry, heating and disinfection plant, and a capacity of 1,240 beds. At Jamestown, Va., the Medical Department will have under its jurisdiction 26 buildings, with 8 pavilion wards, barracks for Hospital Corps, nurses' quarters, quarters for medical staff, administration building, operating building, subsistence building, storehouses, laundry equipment, garage, mortuary, shops, barracks for civilian employees.

Expansion of facilities at Fort Lyon (Las Animas), Colo.:

Present capacity -----	280
Estimated (ratio 4-1,000, complement Navy and Marine Corps, 180,000) -----	720
Additional patients to provide for -----	445

In order to provide for the increase of approximately 445 patients and locate buildings on the present building area all available sites will have to be utilized.

The lean-to type.—At the men's infirmary the wards will be of stone veneer, the internal arrangements corresponding to present structure. These additions are to the north, east, and south of the present building. In addition to the above there is planned another ward west of the surgical ward, which is to be so constructed as to be available for heliotherapy during the winter months. When these additions are completed they will provide for about 200 patients. This will necessitate the enlargement of the dining room and refurnishing of the kitchen.

This same lean-to type is recommended for the extension of our convalescent wards, modified to the extent of doing away with the two-story central administration section.

The above type will utilize all the available ground space suitable for the erection of ward buildings, accommodating from 18 to 24 patients each, but they will not provide enough ward space and will not utilize all the available ground space on account of their size. Accordingly it will be necessary to provide 30 dwellings of the so-called readi-cut type.

The above wards will provide for about 245 patients, at an estimated cost of about \$400 per patient (at present cost of material and labor).

This will necessitate the addition to dining room and kitchen of the west subsistence building of sufficient space to accommodate 525 patients, plans and estimates for which are being prepared.

CONTAGIOUS DISEASES.—At the beginning of mobilization one of the most serious problems which confronted the medical department was in connection with contagious diseases. Contagious diseases have been very prevalent throughout the United States during the past winter, and the assemblage of large numbers of young men, many of them at the time of enlistment already in the incubation stage of contagious disease, led to the introduction of these diseases into the training stations, where they assumed epidemic proportions, so that the utmost sanitary skill was required to stamp them out and at the same time permit the training to proceed without serious interruption. At the present time health conditions in the service are excellent, and the sick rate compares favorably with that under peace conditions.

Segregation of recruits in strict detention after arrival at a training station or camp for a minimum period of three weeks is a necessary and most important measure for the prevention of the introduction and spread of contagious diseases. Without such separation of newly arrived recruits from the main body of men undergoing training contagious diseases can not be kept from the main camp, and there will result such enforced isolation of patients and contacts as to cause serious interference with the course of training and a loss of valuable time.

With contagious diseases prevalent in civil communities from which recruits are drawn cases will inevitably appear from time to time in the detention section. It is a matter of common knowledge now that the most important mode of spread for the common communicable diseases, including measles, scarlet fever, diphtheria, and cerebro-spinal fever, is through direct or indirect conveyance of the infective agents by the moist secretions from the noses and throats of patients or healthy carriers, and the danger therefrom in the aggregate is directly proportioned to the closeness and intimacy of personal contact. In all new construction it is the aim of this bureau to see that space is provided in quarters equivalent to a unit standard of 500 cubic feet per individual and permitting maintenance of adequate ventilation with the air in motion at all times. To facilitate the handling of epidemics and the separation of contacts when disease appears recruits in detention sections should be quartered in groups of not more than nine men, that number representing a tactical unit, a squad with its petty officer. In the main camp it is desirable that men in training be housed in groups of 25 or less to insure a minimum of interference by disease with the course of training.

There should be also large and well-equipped laboratories in conjunction with the training camp. The demand for them is imperative when communicable diseases appear. Messing facilities, toilets, bathhouses, and regimental dispensaries must also be adequate and arranged in proportion to military units on a company and regimental basis, with a view always to keeping personal contact within safe limits. Contact, the most important single factor in promoting the spread of contagion, is proportional always to the number and extent of points at which groups of men necessarily congregate, as determined by the plan of the camp or station.

In older stations with buildings already in use and in certain places such as at San Diego, where the exposition grounds were taken

over and where the buildings already erected were put to use, the attempt has been made to house men in groups as small as the facilities at hand would permit. In fact, it has been necessary to use large numbers of tents not only at San Diego, but also at the training station, Great Lakes, Ill. Tents with flooring and screening are sanitary and desirable, of course, in summer weather. Experience has shown that large buildings, housing large numbers of men, are not satisfactory, because even if the cubic space per individual be up to standard and their ventilation adequate, they are always a source of anxiety and they have to be abandoned or the occupants reduced to a small number upon the appearance of communicable disease in the station.

The appropriations available for war measures are: (1) Balance of appropriation for the fiscal year 1917; (2) entire appropriation for the fiscal year 1918, available from March 4, 1917; (3) appropriations provided by the urgent-deficiency act approved June 15, 1917.

THE COUNCIL OF NATIONAL DEFENSE.

In connection with the medical section of the Council of National Defense, the bureau, represented by various medical officers of the corps, has taken part in the numerous activities of the work on medical preparedness, as developed by this division of the council.

The General Medical Board, under the chairmanship of Dr. Franklin H. Martin, has covered most minutely all the different phases of medical preparedness. The Surgeon General, as a member of the executive committee of the General Medical Board, has participated in the work in a general way. Medical Director Cary T. Grayson, United States Navy, has also represented the Naval Medical Department in this connection. Medical Inspector R. C. Holcomb, United States Navy, as a member of the General Munitions Board, has represented the bureau in this division of the Council of National Defense. Passed Assistant Surgeon R. C. Ransdell and Passed Assistant Surgeon J. R. Phelps, United States Navy, have represented the Medical Department of the Navy on the committees on statistics and hygiene and sanitation.

Under the chairmanship of Dr. Frank F. Simpson, as chief of investigation of matters pertaining to medical preparedness, a committee on standardization of medical and surgical supplies and equipment was organized.

Medical Inspector T. W. Richards, United States Navy, representing the American Red Cross, and Medical Inspector Joseph A. Murphy, United States Navy, representing the bureau, serve as members of the executive committee.

The committee on standardization of medical and surgical supplies and equipment was engaged for a long period in preparing lists of staple medical and surgical supplies selected to meet war conditions and with a view to simplifying, as far as possible, packages, instruments, etc., and so to permit an increase in the output of these articles, particularly those most urgently needed and which are difficult to obtain promptly, even under ordinary circumstances. It is expected that the various supply tables of the Army, Navy, and Public Health Service will be based, as far as possible, on these

lists. It is expected also that the American Red Cross and civil requirements will follow suit.

In this connection, an illustrated catalogue of instruments showing those selected and advocated by the committee was first compiled and printed. Standardization of medicines, hospital equipment of all kinds, and of all other articles used in the care of sick or wounded, both in the military service and in civil life, has been decided upon. Subcommittees of noted professional men in the various professional specialties were invited to comment upon these matters in order that a general opinion as to the advantage or disadvantage of any step might be formulated. Representatives of all manufacturers in the various medical and surgical lines were invited to several conferences in this connection the result of which was to bring out the necessity of some form of standardization in order that output might be increased to an extent commensurate with war preparations. Steps were also taken to prevent manufacturers bidding against each other for the raw materials which were necessary to produce the finished product required by the military services and civil population. This tended to keep prices down to a more normal basis.

At the request of Dr. Frank F. Simpson, various representatives of the Medical Department, among others, Medical Director Philip Leach, Medical Director George A. Lung, Medical Inspector James F. Leys, and Medical Inspector Joseph A. Murphy took part in the organization of various State and county committees on medical preparedness, the object of these committees being to perfect an organization for an effective mobilization of the medical resources of the various States, and to aid in obtaining officers for the Regular Army and Navy Medical Corps and the Reserve Corps of both services.

At the present time the committee on standardization of medical and surgical supplies and equipment is engaged in obtaining information as to the requirements of the military services, as to the quantities of surgical dressings, instruments and medicines, in order, more particularly, that articles which are urgently needed may be given priority in production and that an estimate of the raw materials required may be accurately made in advance.

MEDICAL OBSERVATIONS IN THE WAR ZONES.

While speaking of the systematic sanitary studies undertaken by this bureau it is pertinent to refer to the very valuable work done, often under circumstances of great difficulty, by its medical representatives sent abroad to collect information, in regard to the conduct of the war, likely to be of service to this country. Surgeon Karl Ohnesorg, United States Navy, returned to this country after a sojourn of two years in Germany, bringing with him much valuable material, in addition to that sent home by him while abroad.

An invitation having been extended by the British authorities for a number of medical officers to visit Great Britain and study the advances made in medical organization and administration, on nomination by the bureau and by direction of the Secretary of the Navy, Medical Inspector F. L. Pleadwell, United States Navy, was ordered

as the naval representative of the joint Army and Navy contingent of four medical officers selected for this purpose. Medical Inspector Pleadwell arrived in England in May, 1916. Somewhat later he was given additional duties as assistant to the naval attaché, American Embassy, London, and finally as aid to Vice Admiral W. S. Sims, United States Navy, commanding the United States naval forces operating in European waters. Besides being received and entertained with great cordiality and kindness and introduced to leading officers of the medical branch of both services, the presidents of various learned and scientific societies, heads of colleges and hospitals, editors and publishers, every facility was afforded him for studying military and medical conditions.

An elaborate program was gotten up to insure his being able to see hospitals, hospital ships, ambulance trains, camps and training establishments both in the United Kingdom and France.

When some time had been consumed in this way Medical Inspector Pleadwell was put in touch with the various administrative departments in London to familiarize himself with the methods employed at headquarters. He also had the privilege of visiting the great fleet, the British trenches in France, and the Italian front on the Isonzo.

In all Dr. Pleadwell visited and inspected 64 hospitals, 5 ambulance trains, 6 training and convalescent camps, 20 naval vessels (including 11 hospital ships), and 4 service medical schools.

Dr. Pleadwell has recently returned to this country and is now engaged in tabulating and coordinating the mass of information accumulated abroad with a view to publishing all that which is not of a confidential nature on administration, transportation, sanitation, construction, methods of treatment, the venereal problem, alcoholism, cremation, disinfection, various modern devices for camp use, education of the disabled, artificial limbs, etc.

AVIATION.

The problems of aviation have naturally received deep thought and been made the subject of much painstaking investigation by this bureau, which is intimately concerned with them through its obligation to determine a standard of fitness for candidates for the corps. A great many points have to be considered, as, for example, the weight to be given to evidence of practical experience and efficiency in aviation work on the part of applicants who have physical defects which should, *a priori*, exclude them.

It is clear, of course, that, in time of war and when a large number of flyers are needed and are to be used for the necessities of the moment, the requirements are not those which the Government must hold to in peace times, when it relies entirely on officers and men whose training in various naval activities gives them a distinct value in other lines of work as well—when it is desired to elaborate the naval branch of aviation and study the requirements of this field and to work out a solution for the problems which present themselves, especially in regard to the best type of machine, methods of orientation, and methods of communication with the ship or fleet.

The bureau has kept in close touch with the scientific investigation and experiments being conducted with a view to elaborating a def

nite and concise method of testing the psychic factors and the psychomotor phenomena that come into play with flying and the physical effects of high atmospheric tenuity.

Experiments and observations are also being made by the naval ear specialist in Washington, Surgeon G. B. Tribble, United States Navy, who is at present studying the question of fitness for aviation training in all its aspects.

In concluding this brief outline of the huge volume of work being carried on ashore, reference must be made to the prompt and generous offers of service received from medical colleges, medical societies, dental and pharmaceutical associations, and individual members of these professions in all parts of the country. The offers originated in the purest patriotism and in the devotion to duty which characterizes medical men. The Rockefeller Institute, the Russell Sage Foundation, the health departments of many cities, public and private bacteriological laboratories have not only offered their services to the Government but in many cases have gone out of their way to render assistance, without thought of recompense or recognition. As a single instance of almost daily similar occurrences may be mentioned the action of the Commissioner of Health of New York City in putting at the disposal of the commandant of the third naval district 300 beds for the isolation and treatment of contagious cases, only requesting that as far as possible the different types be segregated in transit, and that information be furnished at the time of transfer, if in any given case there had been previous exposure to other infection. The laboratory of the health department of New York City has also been made available for the examination of "suspects" and "carriers."

But this is not all. The American Association of Anæsthetists offered its services for giving special training to young medical officers. Miss Lilian Bell, of Chicago, offered to purchase and equip a hospital ship. The Colonial Dames of America have presented an ambulance. Several clubs have expressed their willingness to turn over their premises for any use for which they were available. Private residences, too, have been offered. Boards of commerce, laboratories, drug firms, manufacturers of all classes, have put themselves in line for such service as the Government might see fit to assign.

THE HOSPITAL CORPS.

The Hospital Corps of the Navy on July 1, 1916, numbered 23 pharmacists and chief pharmacists, 365 hospital stewards, 740 hospital apprentices first class, and 480 hospital apprentices second class, a total of 1,585. This force was entirely inadequate for the work it was called upon to perform. It required the most judicious and painstaking effort to distribute these few men in such a way as to provide even half-way adequate assistance to the medical officers in hospitals, ships, and navy yards and in the many outlying but important fields of work like Haiti, Guam, Peking, Samoa, Cuba, etc. With the slightest variation in the requirements of different localities and upon the least demand for additional services at a given point, a general shifting of details was unavoidable. From every quarter the shortage in numbers of this corps was complained of and tended not alone to reduce the efficiency of the medical department, but also

to lessen contentment among the hospital corpsmen themselves. Often they were called upon to be on duty a greater number of hours in the day than is considered best for efficiency and contentment, and it constantly happened that if a single man went on leave or got sick there was no one available to take his place.

On August 29, 1916, when Congress passed the new personnel bill, the ability and importance of this corps was properly recognized for the first time in its history. Congress allowed a complement of hospital corpsmen equal to $3\frac{1}{2}$ per cent of the total personnel of the Navy and gave to this corps *the same opportunity for advancement* in rating as had long obtained in the seaman branch. After the law went into effect, December 1, 1916, was set as the date for reorganization on this new basis. On that date many men who had been loyal to the corps for years and who had been denied merited promotion, were promoted to ratings for which they were well qualified and the entire corps began to realize not only that it was an important branch of the naval service, but that its importance was at last recognized. On January 1, after readjustments in ratings had been made, the results of the new law began to appear. Men who, under the old law, had not reenlisted began to reenlist and the corps began to grow. By February there were about 1,700 men of all ratings, and still the corps was short of its then allowed complement.

Congress having recognized its needs, the Bureau of Medicine and Surgery was confronted with two problems in connection with the Hospital Corps: First, its proper training; second, recruiting it up to its full strength. A campaign of publicity to aid recruiting was begun. A poster descriptive of the work and opportunities of the corps was prepared by the Navy publicity bureau and placed in every post office and in every recruiting office throughout the country. A pamphlet descriptive of the Hospital Corps was published and widely circulated. The pharmaceutical schools of the country were circularized; then the high schools and colleges were approached. Articles were published in pharmaceutical papers and in high-school and college magazines. Recruiting officers stimulated interest in this corps, recruiting parties were organized at naval hospitals, the Marine Corps was asked to furnish a quota of recruits from that branch. Medical officers everywhere began to seek men adapted to the Hospital Corps and to stimulate changes in rate. The corps suddenly took on a rapid growth after January 1, 1917. Month by month its number increased. In January approximately 70 men enlisted; in February, 118; in March, 148; in April, 982; in May, 1,928; in June, 1,287. By July 1, 1917, the total allowed strength of over 6,000 had practically been reached, and the problem of bringing the corps to its allowed strength had been solved. In these months the corps had grown from 1,600 men to over 6,000 men.

For the first time in its history an adequate number had enlisted, but this great mass of men were untrained, as a hospital corpsman can not be sufficiently trained to be of value to the doctor with whom he serves in the Navy in less than six months, and even in that time he can only be trained to the work of the lower grades. Even the man who is a graduate pharmacist, a trained male nurse, a college student, or a first-year medical or dental student, can not learn to be an efficient hospital corpsman of higher rating in a short time. He

must have wide experience in the Navy before he is fitted to hold the rate of pharmacist's mate second class; while to be adequately trained to perform the duties of pharmacist's mate first class, or chief pharmacist's mate, he must have had service in many places and for long periods of time to be able to render the varied and comprehensive service demanded of him.

Just at the time when the Hospital Corps began its sudden growth, when it doubled and then trebled in number, when trained men of the corps were needed rather than untrained men, the nation went to war and Congress authorized an increase of the naval personnel to 87,000 and an increase of the Marine Corps to 18,000. Hardly had the recruiting up to this strength begun when Congress further raised the naval personnel to 150,000 and the Marine Corps to 30,000, and in addition great numbers of men and some women began enrolling in the Naval Reserve Force until that force grew to 25,000 and now is well on its way to a strength of about 40,000. Ship after ship, formerly out of commission or only in partial commission because of inadequate personnel, was rapidly placed in full commission. The small force of trained hospital corpsmen was suddenly called upon to help in the work of the medical department which was caring for a force of over 200,000 men instead of a force of about 80,000, and at the same time that this great burden was thrust upon them they were called upon to help the medical officers in the training of the large number of new hospital corpsmen.

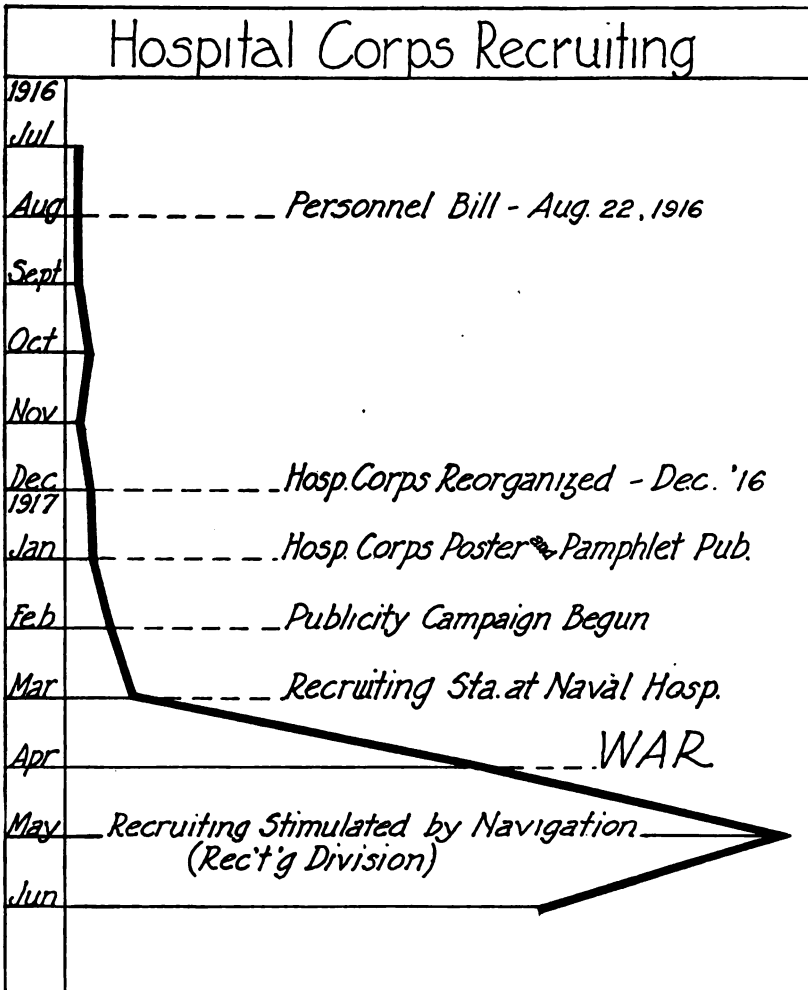
The two Hospital Corps schools, one at Newport and one at San Francisco, were not sufficient to train the old Hospital Corps. A third school at Great Lakes was placed in commission about March of this year. These three schools were to take the recruit, give him a six months' course in the rudiments of his work in anatomy, physiology, pharmacy, chemistry, materia medica, toxicology, nursing, hygiene and sanitation, in minor surgery and operating-room technique, transportation of the sick and injured, clerical forms and procedures of the medical department of the Navy. The sudden increase in the authorized strength of the Hospital Corps soon overtaxed the facilities of these three schools. They grew from a personnel of 50 or 100 each to 200 each. Then at the beginning of the war in a month's time they grew to 500 and finally to 800 each. The system of training almost broke down, but the cooperation of the commanding officers of the training stations and the loyalty, enthusiasm, and devotion of the medical officers in charge of the schools and of the members of the Hospital Corps who assisted in the teaching saved the day, and the schools were kept going. The bureau was obliged, temporarily, to reduce the course at the schools from six to three months. Commanding officers of hospitals and medical officers afloat were asked to assist in every way possible in the training of the new men, and all took hold of the problem with a will so that to-day, in spite of the great influx of new men, they are well along in their initial training. A fourth school at the new training station at Norfolk (the old Jamestown Exposition grounds) is authorized and will be placed in commission when the station is ready for occupation. Columbia University offered its College of Pharmacy to help in the work, and 318 men received training there during the college vacation period, July 15 to September 20, 1917.

Now that the Hospital Corps has a proper number of men and a fairly adequate system of training, it should be well started on its way to the day when as a corps it can be both efficient and contented. The bureau feels that the highest praise is due to Passed Assistant Surgeon G. F. Cottle, United States Navy, in charge of organizing and training the Hospital Corps, and to the few trained hospital corpsmen who in the past few months have borne the burden of assisting in the medical work of a greatly augmented naval personnel and in training a new Hospital Corps personnel.

The new Handy Book for the Hospital Corps, revised by Passed Assistant Surgeon John B. Kaufman, United States Navy, places in the hands of every hospital corpsman the opportunity to study for advancement in rating. The bureau policies for the transfer, promotion, and training of the corps, largely formulated by Passed Assistant Surgeon William E. Eaton, United States Navy, and in harmony with the policies of the Bureau of Navigation, make an adequate basis for the contentment of the corps. During the past few months the warrant rank of pharmacist has been given to 23 chief pharmacist's mates, while over 100 pharmacist's mates, first class, have been promoted to chief pharmacist's mate, and just at the end of the year covered by this report the Secretary of the Navy gave to 57 more chief pharmacist's mates the temporary warrant rank of pharmacist and to 16 chief pharmacist's mates the temporary warrant rank of pay clerk (acting).

Aside from the Hospital Corps of the regular naval establishment enlisted for four years, there are other hospital corpsmen in the Navy enrolled for the period of the war. About 100 hospital corpsmen of the National Naval Volunteers came in when this body was mobilized. Many of these men are at sea, and are rapidly becoming familiar with their work. About 50 trained men of the Hospital Corps are in the Fleet Naval Reserve, and their services have been of the greatest importance both at the beginning of the war and since. There are in the Naval Coast Defense Reserve, class 4, Naval Reserve Force, and in class 4 for service in class 2, about 500 hospital corpsmen. The members of this force were enrolled only in the ratings given to men upon first enlistment, namely, hospital apprentice second-class and first-class, and they have the same opportunities for advancement in rating as are accorded the regular enlisted personnel. Upon the medical aid to the commandant rests primarily the problem of education, transfer, and promotion of these men. Their training has been begun in many ways. Two hundred of them slated for duty with naval base hospitals are being trained by the recently appointed medical officers in charge of these hospitals. About 300 of them are on duty in the naval districts in connection with the medical work of the reserve force; a few of them have been in training at our naval hospitals. Eventually it is expected that many of these men will be sufficiently trained to do the Hospital Corps work aboard the naval district vessels and at the district section bases. Some of those in class 4 for general service may be trained and used with the regular naval personnel.

The trained hospital corpsmen of the Navy in the higher ratings must be capable of nursing the sick, of compounding simple prescriptions, of efficiently administering first-aid in the field and aboard



Hospital Corps School

1916	1917
Newport <u>50</u>	Newport <u>640</u> H.A. 2 cl.
S. Francisco <u>50</u>	S. Francisco <u>703</u> H.A. 2 cl.
	Gt. Lakes <u>621</u> H.A. 2 cl.
	Columbia <u>294</u> H.A. 2 cl.
	Norfolk <u>700</u> H.A. 2 cl.

⊙ School under construction: Hosp. Apprentices at home: not yet called in

Chart to show increase in Hospital Corps and attendance at Hospital Corps School, 1916 and 1917.

ship, of transporting the sick and wounded, of administering medicines, of caring for an operating room and of preparing a patient for operation. They must be able to care for surgical instruments, must be familiar with the stores of the Medical Department, and with its clerical work. They must have the ability to handle men, to help with the insane, with contagious cases, with the wounded and with those who are dangerously ill. They must understand camp sanitation, disinfection and methods of surgical asepsis. They must combine the pharmacist, the nurse, the first-aid man, the laboratory assistant, the X-ray technician, the dental assistant and the operating room nurse in one person. When they rise to the highest ratings, pharmacist's mate, first-class, or chief pharmacist's mate, they should be capable of conducting the nursing and dispensing work required on board such smaller craft as carry no medical officer.

THE NURSE CORPS.

On July 1, 1917, the Navy Nurse Corps numbered 425. Of these, 194 were members of the Navy Nurse Corps. During the year there have been 82 regular appointments, 3 honorable discharges, 22 resignations, 1 revocation of appointment. One member of the corps died during the year.

Since April 15, 1917, in order to meet the demand for nurses at the naval hospitals already established and those which have been opened, the Secretary of the Navy directed that Reserve Nurses be appointed. Up to July 1, 231 had been secured. Of this number, 3 have been disenrolled.

In the majority of cases when resignations are submitted by members of the Nurse Corps it is to accept a more lucrative position, and it is believed that in order to maintain the standard of nursing we desire for the naval service the rate of pay of the chief nurses and nurses should be increased.

The expansion of the hospitals has resulted in a great increase of work for the chief nurses of hospitals and greater efficiency would result from the appointment of an assistant chief nurse at each hospital, with an increase of pay proportionate to the duties which would be indicated in this position.

A field of activity which has been developed during the past year has been the class work in connection with the instruction of hospital corpsmen, and especially qualified nurses have been appointed with a view to systematizing the method of instruction in the various naval hospitals.

The work of giving instruction to native women carried on at the stations of Guam, Samoa, and, in a lesser degree, Canacao, has increased and additional native nurses have been added to the classes. This work is entirely altruistic and the interest and labor of the members of the Navy Nurse Corps on duty at these stations is fully appreciated.

Since the end of the fiscal year there have been further additions to the available nursing force under naval jurisdiction. The number of members of the regular Nurse Corps has risen to 225. The Reserve Force nurses enrolled are 260.

With the equipping of three base-hospital units, 65 appointments have been issued to Reserve Nurses. The total strength of the nursing force is therefore 550.

SCHOOLS.

In working out the conception that the Navy is a great educational institution in which its members not only store their minds with valuable knowledge but acquire habits, modes of thought, and principles of conduct which make for success throughout life, whether in the service or in civil occupations, the Medical Department plays its full part. The Naval Medical School gives the newly appointed medical officer a technical course, designed to supplement his previous educational opportunities, along lines peculiar to naval and military duties. The Correspondence School aims to reach members of the Reserve Corps unable to attend the sessions of the Medical School in Washington and to render them familiar with special forms of procedure and special methods necessary to the practice of medicine in Government service. As noted elsewhere, the exigencies of the moment and the large numerical increase in the Medical Corps since the inception of war, together with the limited accommodations at the school and the burdensome additional duties ascribed to the members of the faculty, have made it impossible to train the recent acquisitions to the corps in that institution and so provisions have been made for their training by men of eminence, in most cases members of the Medical Reserve Corps, in large medical centers like San Francisco, Boston, New York and Philadelphia.

The special training schools for the members of the Hospital Corps have, relatively speaking, even greater significance, since, in the majority of cases, the members of this corps enter the service without previous knowledge or experience of their specific duties. In addition to the training schools already in existence at Newport, R. I., and San Francisco, Cal., a school has been opened at the training station, Great Lakes, Ill., and more recently at Norfolk, Va. The following reports and tables summarize briefly the work done.

UNITED STATES NAVAL MEDICAL SCHOOL.—In former years the instruction given to each class at the Naval Medical School has extended over a period of from six to seven months. The purpose of the instruction was (1) to refresh the memory on the principal branches of medicine of such members as had come to the service after one or more years of private practice or who had served in hospitals where the work of any given interne was exclusively surgical or medical; (2) to give specific instruction on subjects such as tropical medicine, sanitation, etc., not always fully covered in the ordinary curriculum but of immense importance in the naval service; (3) to give practical illustration of the limitations, modifications, or facilities in the practice of medicine and surgery imposed by service conditions; (4) to acquaint in some measure the practitioners fresh from civil life with the military features of their chosen career; (5) to impart or review a standard requirement of familiarity with details of laboratory technique.

Six months was none too long for the realization of these aims, but in September, 1916, it was found necessary to shorten the period of instruction to four months. More recently the exigencies of the service have compelled a further abbreviation of the course to two months, and while this permits a survey of the field rather than an exhaustive study thereof, there is still much value in the course. The incidental advantages of even the briefest attendance at the school can not be

overestimated. Perhaps none but the newly appointed medical officer himself can fully appreciate the advantage derived from the association with older men in the service and from the grasp of the military features of his work thus afforded to him at the very moment of that radical change in his life and habits and mode of thought involved in appointment to the Navy.

It must be understood that the members of the teaching staff at the Naval Medical School, unlike the usual college instructors, can give but a portion of their time to this work. They are on duty at the Naval Hospital, at the Naval Dispensary, at St. Elizabeths Hospital, and in the laboratory of the school. They serve as members of examining boards and are constantly burdened with varied additional duties.

In the 10-year period from September, 1906 to 1916, there were 235 students under instruction in the regular school course of six months. During the single year just ended 175 student officers received instruction, a number which nearly equals that representing the entire previous attendance.

Synopsis of six weeks' course of instruction, 1917:

Tropical medicine and naval medicine.—Tropical diseases; physical examination of recruits; diagnosis and prophylaxis of various cosmopolitan quarantinable diseases.

Bacteriology, parasitology, and clinical microscopy.—Separation of colonies from agar plates, inoculation of media, staining, etc. Separation of organisms of typhoid Colon groups. Plating from feces. Carbohydrate fermentation. Separation of streptococci and pneumococci by use of blood agar plates. Recognition of meningococcus, gonococcus, B. diphtheriae, B. tuberculosis, B. pestis, Sp. cholerae asiaticae. Isolation of organisms from urine, feces, sputum, pus. Blood examination. Wassermann and colloidal gold test. Standardization of reagents for Wassermann test. Demonstration of important human parasites.

Hygiene.—Air, water, food, light, clothing, marching, camps, laundry, personal health. Communicable disease; disinfection and fumigation.

Chemical laboratory.—Volumetric work with acids, bases and salts. Examination of gastric and duodenal juices, urine, water supplies; for occult blood, non-protein nitrogen and sugar.

Ophthalmology and otology.—Routine eye examination and external diseases. Refraction and use of retinoscope and ophthalmoscope. Test of visual acuity and color perception. Minor operative procedures. Routine examination of ear and external diseases. Use of otoscope, tuning fork, acoumeter, etc. Tests of auditory perception. Therapeutics and operative procedure.

Psychiatry.—Toxic psychoses; dementia of senility; dementia praecox; character formation and complexes; psychoanalysis; manic depressive psychoses; paresis and cerebro-spinal syphilis; paranoia and paranoid states; detection of mentally unfit on enlistment.

Naval drills.—1. School of recruit. 2. School of squad. 3. School of company. 4. Signals by wigwag. 5. Manual of the sword. 6. Tent pitching. 7. Litter drill. 8. Physical exercises.

Military duties.—Personnel; government of Navy; shore establishments; enlistments; training stations; naval hospitals; force afloat; medical officer of a ship; Hague convention.

Surgery.—Sterilization; blood transfusion; intravenous injections; treatment of burns and war wounds; amputations; trephining; laminectomy; laparotomy; intestinal drainage and suturing; herniotomy; cystotomy.

Roentgenology.—Fractures and dislocations; head, neck, and spinal column; chest, gall bladder and kidney; gastrointestinal tract; localization of foreign bodies.

NAVAL MEDICAL CORRESPONDENCE COURSE.—As authorized by the Navy Department on January 24, 1916, the correspondence course was begun on October 16, 1916. This course is open to acting assistant surgeons of the Navy, officers of the Medical Reserve Corps, medical officers of the Naval Reserve Force, and medical officers of the Naval Militia.

The course is administered by the Naval Medical School, Passed Assistant Surgeon H. F. Dollard having direct charge. Systematic instruction is given in naval forms, customs, regulations, and procedure. Special attention is given to instructions in recruiting duty and the duties of a medical officer of a ship. The textbooks used are: (a) The Manual for the Medical Department; (b) Extracts from the Navy Regulations and Naval Instructions; (c) Circular Relating to the Physical Examination of Recruits; (d) Handy Book for the Hospital Corps; (e) Drill Book for the Hospital Corps; (f) Bulletins of instruction.

Question papers are mailed to the participants at intervals of three weeks, and the answers received are criticized and corrected and returned to the writers. The first session began with 139 participants, of which number 20 have resigned or been dropped because of nonreceipt of answers, and 1 has died. The present term will be completed October 1, 1917.

Report of men under instruction at the HOSPITAL CORPS TRAINING SCHOOL, Naval Training Station, NEWPORT, R. I., for the fiscal year 1916:

Received during the year:	
Hospital apprentices, first class.....	5
Hospital apprentices, second class.....	945
Total received.....	950
Transfers, discharges, and desertions:	
Discharged as undesirable.....	24
Discharged as inapt.....	9
Discharged, by special order of Secretary of Navy.....	3
Discharged, purchase.....	2
Discharged, survey.....	6
Deserted.....	13
Changed rate.....	47
Transferred to Naval Hospital, Newport, R. I., patients.....	129
Transferred, extended furlough, without pay.....	4
Transferred for duty.....	278
Total removals.....	515
Remaining in school, July 1, 1917.....	514
Total received during the year.....	950
Grand total.....	1,464

HOSPITAL CORPS TRAINING SCHOOL, SAN FRANCISCO, CAL.—Number of men under instruction during current year, 196. Number of men graduated and transferred to duty elsewhere, 95. Number of men discharged for various reasons, 46.

Passed Assistant Surgeon W. H. Halsey reports marked increase of efficiency in the corps of instructors of the school since last year. While the average age of the men in the school remains the same, the average number of school years for these men has risen from 9.5 to 12, indicating that a more highly educated class of men are coming into the Hospital Corps and that a shorter time elapses between the end of their school course and enlistment. He says: "The results of recent legislation in the interests of the Hospital Corps have so stimulated the ambition of the men and increased their esprit de corps that I can not refrain from commenting thereon."

PUBLICATIONS.

The United States Naval Medical Bulletin has entered upon its eleventh year of uninterrupted issue, and continues to supply the officers of the Medical Corps with information in regard to medical features of the naval service, with reports of advances in all fields of medicine, and to serve as a permanent record of unusual and interesting cases, and as a repository of statistics valuable for medical students and authors. The numerical increase of the corps and the steady increase in the demand for this publication from outside sources, such as libraries, colleges, and private individuals, has made it necessary to almost double the edition of the last issues, and yet the requests for copies of the publication are beyond what the bureau can satisfy. We are fortunate in having had many contributions of scientific value and interest from eminent men whose only connection with the service was that of patriotic interest in the Medical Department of the Navy and a hearty desire to cooperate in the furtherance of its best interests.

In the July and October numbers for the year 1917 subject matter of special interest to the Hospital Corps has been introduced as a separate section. The very considerable increase in the numerical force of this corps promises to demand in the near future a special supplement devoted exclusively to the instruction of that branch of the personnel. Economy suggests that this supplement be printed separately, as the circulation among members of the Hospital Corps will be five or six times as great as that in the Medical Corps.

In connection with the increase in the Hospital Corps it became necessary to revise and enlarge the Handy Book for the Hospital Corps, a book of 386 pages, which serves as a textbook in the Hospital Corps schools and in the classroom instruction given in hospitals and on board ship. Twelve thousand copies of this revised work were printed early in 1917. The merits of this textbook are generally recognized, and the Journal of the National Association of Retail Druggists is reprinting it in the form of a serial.

Many changes in regulations and the improvements and advances in the work of the Medical Department has made necessary a revision and enlargement of the Manual for the Medical Department, of which 4,000 copies have been printed and distributed.

"The Navy as a Special Field for Medical Work" has been reprinted five times during the year with a total issue of 20,000 copies.

The illustrated circular of information entitled "The Hospital Corps of the Navy" has been reprinted three times during the course of the year, with a total issue of 27,000 copies.

The latest publication of the bureau is a summary of regulations for the administration of the medical department of the naval districts of the United States. An edition of 4,000 copies has been distributed to medical officers of the service.

The edition of the Medical Compend for Masters of the Naval Auxiliary Service, 1916, having been exhausted, it is being revised for republication at an early date and it will also be available for use on small vessels of the patrol type, and as a valuable adjunct to ships' libraries.

FINANCIAL.

ESTIMATES AND APPROPRIATIONS.—The principal appropriations for the expenses of the Medical Department of the Navy during the fiscal year 1918 are included in the naval act of March 4, 1917, and the urgent deficiency act of June 15, 1917.

The total appropriations placed directly under the cognizance of the Bureau of Medicine and Surgery by the above-mentioned two acts are as follows:

Medical Department	\$4, 121, 740
Contingent, Medicine and Surgery	1, 291, 080
Bringing Home Remains	332, 658
Hospital Expenses	3, 000, 000

The last above-mentioned appropriation is new, and its language is as follows:

For the care, maintenance, and treatment of patients in naval and in other than naval hospitals, and for the rental of land.

The appropriation "contingent" makes provision for care, transportation, and burial of the dead, *including officers who die within the United States*. The italicized words are new language, which, while not repealing section 1587 of the Revised Statutes, do act to suspend that section during the continuance of the appropriation act.

Another appropriation carried in the act of June 15, 1917, provides \$1,350,000 for temporary hospital construction and for the establishment of new naval medical supply depot buildings at Brooklyn and at Mare Island.

The act of March 4, 1917, in addition to the foregoing, provides as follows, under the caption, Bureau of Yards and Docks:

- Navy yard, Charleston, S. C.; addition to dispensary, \$12,000.
- Naval training station, San Francisco; three contagious wards, \$25,000.
- Naval hospital, Portsmouth, N. H.; three contagious wards, \$20,000.
- Naval hospital, Great Lakes, Ill.; three contagious wards, \$20,000.

MEDICAL SUPPLY DEPOTS.

The bureau is able to report this year not only increased expenditures for increased material at the medical supply depots but improvement and elaboration in the system and methods employed. The most careful examinations and analyses are made of samples submitted by bidders prior to acceptance of the bid and the making of the award, and each subsequent partial or complete delivery by the successful bidder is examined as to specified requirements before acceptance. Surgical instruments are inspected at the factory when forged and before hardening, tempering, and finishing. Suture material, particularly catgut ligatures, are inspected before delivery and

after sterilization, and are tested for pliability and tensile strength by a special apparatus for this purpose. Drugs and chemicals are submitted to a chemical analysis to establish their conformity with standard requirements. Drugs may also be rejected because containing dirt or because improperly labeled, wrapped, etc. Instruments of precision are tested individually for accuracy before being accepted or issued. The amount of work handled by a single supply depot (New York) for the first six months of the present year is shown by the following statement on the number and results of deliveries:

	Rejections
216 analyses, drug deliveries.....	24
55 analyses, hypodermic tablets.....	17
46 analyses, textiles.....	0
13 analyses, rubber goods.....	2
35 analyses, instruments.....	4
29 analyses, surgeons' necessities.....	7

The disturbance of trade conditions due to the war in Europe has made it incumbent on the supply depot to find equivalent substitutes for many substances not manufactured and no longer procurable in this country or else obtainable only at a prohibitive cost. Since our own participation in the great conflict became inevitable, the supply depots have taken steps to provide in every way against the demands of war service. A new synthetic product for ready and accurate preparation of the Carrel-Dakin fluid, and a suitable paraffin preparation for the treatment of burns are in stock for issue. Substitutes for argyrol, protargol, ichtyol have also been secured in large quantities. A modest item, but one which may prove in time the saving of hundreds of dollars, is the issue of bolts of rough toweling material to replace in part the high-grade towels previously in use. Of great practical utility, too, is the standardization of all needles for syringes in hypodermic and intramuscular injections.

The following table shows the biological products furnished to the naval service during the fiscal year 1917, as compared with the fiscal year 1916:

	1917.	1916
Vaccine virus (points).....	180, 125	63, 087
Diphtheria antitoxin (units).....	1, 841, 000	1, 588, 000
Antityphoid vaccine (mils).....	488, 218	134, 040
Tetanus antitoxin (units).....	3, 787, 541	561, 000
Antigonococcc vaccine (syringes).....	196	200
Antistreptococcc vaccine (syringes).....	252	200
Antimentingitis serum (mils).....	100, 105	9, 900
Staphylococcc vaccine (syringes).....	50	50

During the quarter ending June 30, 1917, the supply depot filled 822 requisitions, to the value of \$240,000, as contrasted with 360 requisitions, at a value of \$50,829.40, filled during the entire previous year.

In a word, with an office force little more than double that of previous years, about five times the usual bulk of work has been accomplished. Owing to lack of space, in spite of additional storage space acquired outside the hospital grounds, much of the assembling and shipment is done out of doors.

The depot has recently assembled and shipped several regimental hospital, and field hospital outfits. A modified boat box, for use of scout patrols, has been gotten up, which, in addition to the regular

contents, has dressings, forceps, pins, etc. A special medical outfit has been prepared for use aboard submarines, and is furnished in an ordinary packing case to be placed in specially constructed lockers in the vessels. Besides the utensil cabinet already mentioned, the supply depot has gotten up a surgical roll and an aeronautic pouch. The depot has in store a certain number of specially equipped medicine chests intended for emergency use by medical officers detailed with boards of inspection and survey for acceptance tests of vessels. These are ready for immediate shipment on telegraphic order. A special outfit has been devised for use at recruiting offices in making examinations of eye, ear, nose, and throat.

DIVISION OF SANITATION.

The sanitary problems constantly arising in connection with the administration of the Medical Department of the Navy have so increased in number, importance and complexity in recent years that it has become necessary to create in the bureau a special division to handle this work. Until this year sanitary problems, while studied and discussed by the whole bureau staff, were usually referred to the officer in charge of publications because that officer was able, through the large number of exchanges, medical publications, sanitary bulletins, etc., received by him, to keep in touch with developments on these lines. Latterly the publications of this bureau have increased to the point where they occupy one man's entire time. Passed Assistant Surgeon J. R. Phelps, United States Navy, has been placed in charge of this division, assisted by the necessary clerical force, and has associated with him at present Surgeons Hugh S. Cumming and Carroll Fox, of the United States Public Health Service.

Fifteen other officers of the United States Public Health Service are working at various points in collaboration with the naval medical officers. The essential function of this division is to consider all matters pertaining to naval sanitation and hygiene. With this end in view, the division labors to keep in touch with health conditions ashore both here and abroad, so that with the development of epidemics in any part of the country danger to the enlisted personnel of the Navy may be at once apprehended and measures taken to prevent the spread of contagion to our ships and stations. Not a day passes but what some scheme or device is suggested by civilians or military men bearing on the health of the Navy, and requests for information, requests for guidance come in from all sources, often requiring extended study and research. These are all turned over to the Division of Sanitation for investigation and settlement.

One of the first steps of this division after it was organized was to get in closer touch with ships, stations, and hospitals, and arrange to have full and immediate information regarding epidemic and infectious diseases. It was felt that the quarterly and monthly reports, though accurately prepared and promptly forwarded, did not suffice to give the bureau timely information on such a vital matter. Voluntary telegrams and personal letters from the medical officers of the service might or might not come to the bureau with the detailed information desired, and the all-important time element in dealing with such incidents was not sufficiently considered. Since July 1

it has become mandatory for the medical officer of every hospital, ship, and station to forward one copy of the Form F card as soon as it can be released by filling in the line that shows the disposition of the case, such as "discharged," "transferred," "invalided from the service," "died," or any other disposition. By this simple method, which entails upon the hospital nothing more than the mailing of a duplicate paper, daily reports come in from all stations. Ships and stations more than 24 hours distant from Washington are to telegraph their reports if they have unusual interest. On receipt of these cards by the Division of Sanitation they are sorted, classified, and tabulated. The cause of an epidemic then becomes a subject of study in the division, which seeks to determine whether insanitary conditions, such as overcrowding, prevail locally, or whether an outbreak elsewhere, with which communication has been established by transfer of recruits, drafts, patients, etc., is responsible. A large map of the United States hangs in the office of the Division of Sanitation, and by the use of a colored pin for each epidemic disease, stuck into its proper place on the map, it is possible to have at a glance a picture of the comparative health of different stations, to note the increase of sickness in one place, its diminution in another, etc.

The work of the Sanitary Division extends to the field. An officer of the Public Health Service is detailed to each naval district, where his principal function is to study and direct sanitary measures in the regular naval establishments and their environments. For example, the officer attached to the third naval district, which includes the State of Vermont, began an investigation of the outbreak of poliomyelitis in Vermont, with a view to determining whether the disease was sufficiently widespread to warrant the discontinuance or limitation of recruiting throughout that State. The position of these sanitary inspectors in the field makes them independent. Their orders are for "repeated travel," and under the medical aids to commandants they circulate freely through the naval district assigned, making favorable and unfavorable reports, offering recommendations, and giving timely warning of impending danger to health.

Under the auspices of this division, additional personnel can be secured for places where there is sudden and special need. At New York, at Great Lakes, and elsewhere civilian physicians having expert knowledge of bacteriology, epidemiology, etc., have been secured to render assistance to the working force of the Navy there. Similarly each naval training station now has in attendance a physician especially trained in psychiatry, who examines all recruits with a view to excluding the feeble-minded and intellectually defective. In most cases the services of these men, services of great value, are most easily secured by enrolling them as members of the Naval Reserve Force.

During three weeks in August, 1917, such specialists were able to weed out and recommend for discharge from the service, at the receiving ship, Norfolk, 20 recruits who were feeble-minded or suffering from other psychopathic condition.

At Great Lakes, Illinois, 9 recruits were discharged during August for various types of mental abnormality.

SANITARY MEASURES AND CONDITIONS AFLOAT.

IMPROVED EQUIPMENT OF THE MEDICAL DEPARTMENT OF SHIPS.—Adequate provision for the handling and treatment of the injured in battle and improvement of battle dressing stations continues to be a subject of earnest effort for the bureau. The plan of abandoning the sick bay and adjacent space in battle in favor of sites previously selected, protected by the ship's armor and having more or less permanent installment of lockers for surgical dressings, available running water, etc., is the basis for all elaboration in this regard. The U. S. S. *Pennsylvania* has, and other ships of this type about to be commissioned or building will have, a complete portable sterilizing outfit by which dressings, utensils, instruments and water can be sterilized by electricity at the respective battle dressing stations. Sterile dressings will be in metal containers stored in metal stands which can be carried from place to place as occasion requires. For ships of the older types whose sterilizing outfits in the operating room are immovable and require steam, ample supplies of surgical dressings will be prepared in advance of the dismantling of the sick bay, etc., when going into action, and sterile dressings in metal containers will be carried to battle dressing stations in the movable stands referred to. For all battleships the permanent installation of metal lockers at battle dressing stations behind armor has been recommended and largely carried out and reserve stores of dressings have been generously provided. Passages, ladders, hatches, which are to remain open and give the readiest access to the battle dressing stations, are now indicated by painted red cross and black arrow, so that men, even those who have joined the ship most recently and are least familiar with the intricacies of its structure, will have no difficulty in finding their way to posts of succor. Hereafter and beginning with battleship *No. 43*, vessels of that class will have installed auxiliary electric lighting circuits for operating room and battle dressing stations, so as to insure as far as possible adequate illumination of these important places amid the casualties of battle. The designs for the sick bay, dispensary, etc., of battleships *49* and *51* are based on the idea that the dispensary will be used strictly for the compounding and dispensing of drugs and for the clerical work done by the chief pharmacist's mate. The sick bay will be for the occupation of the sick, and maintained as nearly as possible like a ward in a hospital, all useless thoroughfare being shut off and that quiet and orderly atmosphere maintained so indispensable to the comfort of the sick, the efficient performance of duty by hospital corpsmen detailed for their care and the accurate and painstaking obedience to orders on the part of the Hospital Corps so difficult to enforce where the sick bay proper is used for the examination of drafts of men, for vaccinating, and for the handling of accident cases. By reducing somewhat the dimensions of sick bay and dispensary the space assigned for the doctor's office was increased so as to yield a compartment of ample size to permit daily sick call to be held there. It is intended that all accident cases shall be examined and minor surgical dressings done there. It will also be the place for examining and vaccinating drafts of men and for giving instruction to the Hospital Corps, and there will still be ample room for microscopic and bacteriological

work, facilitated and encouraged by the use of the incubators now carried on the supply table and available for issue to cruising ships.

Among the important additions to the supply table are the following: Cabot steel splints, sheet wadding, basswood splints, rough toweling material for cleaning purposes, and elastic or crêpe (no rubber) bandages. Provision has been made for furnishing all ships with an ample supply of a suitable paraffin preparation for the treatment of burns. There has been issued, also, a chemical substance which permits the ready and accurate preparation of the invaluable Dakin fluid for use in infected wounds. Tetanus antitoxin has also been supplied, and ample stores of the other vaccines, antitoxins, and sera are available for distribution. Economical substitutes have been found for argyrol, protargol, ichthyol, and other expensive importations.

A standard pattern has been adopted for the shell wound or large wound dressing designed for first-aid use by officers and men during an engagement. Other dressings are now being prepared by uniform pattern, which will greatly simplify and accelerate the work.

The disadvantages of the old closed stool for use in the isolation and contagious wards of ships has been made the subject of frequent recommendations by medical officers, and in the construction of battleships 49 and 53 and subsequent vessels of that type there will be installed permanent toilet facilities in the isolation ward, thus increasing the ease with which contagious cases can be handled and obviating the necessity of conveying contagious material and infected articles from place to place on board ship.

A study of the details of the headgear, uniforms, gloves, shoes, and noninflammable clothing for the use of crews of vessels has been undertaken. Instructions have been issued as to the methods of reducing the inflammability of clothing. Changes have been made in the uniform outfits supplied to men serving on submarines.

The question of a proper substitute for the white uniforms of officers and men remains unsolved since this subject assumed conspicuous importance during the operations at Vera Cruz, Mexico, 1914. It can readily be appreciated that such a uniform is entirely unsuited to war conditions either ashore or afloat, and even in times of peace such a uniform when worn ashore, whether on liberty or on duty, entails great inconvenience. No matter how careful a man may be such a uniform soon becomes soiled and unsightly, and men going on liberty riding in street cars or trains, etc., in this apparel are almost certain in a very short while to look anything but neat and military. Rain and dust may render them unsightly in the first half hour of liberty, and if they are away from the ship there is no opportunity to shift into a clean uniform until their return on the expiration of liberty, which may extend for 24 to 48 hours. It is indispensable that the summer uniform should be of washable material, but the color should be different. Some of the Spanish troops in Cuba during and prior to 1898 wore a uniform of dark blue cotton material which kept its shape well, was neat in appearance, and not readily soiled. Khaki cloth has been recommended. It has been thought by many that a battleship gray would have distinct advantages.

The Navy and Marine Corps is still unprovided with any form of headgear adapted for use during operations ashore in hot weather or during tropical service. Neither the officers' cap nor the enlisted

man's white hat affords any protection to the head and neck either against the rays of the sun or in heavy rain. It would seem the part of wisdom to adopt at least for the Marine Corps and those operating with them ashore in the Tropics a khaki-colored helmet of light weight having a prominent visor and a long, wide extension behind to shield the neck from sun and rain.

From the *New York, Texas*, and other vessels where the system of hot air heating is employed there have been received extended and carefully considered criticisms of defects inherent in the present system, which may be summarized briefly as follows: (1) When the heating system is in operation it is impossible to supply a given compartment with fresh air without heating said compartment at the same time, though the location and other conditions of that compartment may at the time call for fresh air and not for additional heat; (2) different parts of the ship where conditions are widely different, as, for example, a gun-deck compartment and a berth-deck compartment, are supplied from the same circuit. They can not be heated or aerated separately and independently. In moderate weather a gun-deck compartment may have sufficient natural ventilation and be cool while a berth-deck compartment is hot and close. These disadvantages are most conspicuous in the officers' quarters, which are divided into many small compartments and heated alike, though individual requirements for comfort vary widely. The low humidity existing in all compartments when heat is being supplied for any length of time has also to be considered and corrected. Abstracts of the reports on this subject have been sent to the Bureaus of Steam Engineering and Construction and Repair, and undoubtedly by the installation of several separate circuits and the use of a sufficient number of humidifiers these evils can be remedied.

Suggestions in regard to the adoption of an emergency ration for the Navy were requested from this bureau by the Bureau of Supplies and Accounts, and after conference with the Department of Agriculture and based on a long course of investigation made in that department a 1-pound ration was recommended. It was to be composed of 13 ounces of biscuit made from hard wheat flour, milk powder, salt, invert sugar, and lean beef free from fat or gristle, supplemented by 3 ounces of peanut butter, and calculated to supply something over 2,000 calories.

An officer of the bureau staff cooperated with representatives of the Bureau of Navigation in formulating specifications for an identification tag which, when employed in conjunction with the records of the identification division under the Bureau of Navigation, probably surpasses any method of identification previously adopted elsewhere.

REPORT OF THE FLEET SURGEON, NORTH ATLANTIC FLEET.—The fleet surgeon reports that 10 cases of pappataci fever occurred on the U. S. S. *Des Moines*, Naples, Italy. The diagnosis was confirmed by Dr. A. Castellani, an expert on tropical medicine. One case of anterior poliomyelitis is reported. It was contracted by a fireman on a navy yard tug in New York. The patient died. The diagnosis was verified by an expert from the New York Board of Health. The fleet surgeon suggests that on each ship a list be prepared of men susceptible to the acute infectious diseases so that in event of epidemics special attention may be focused upon them. The history would be obtained

from the men's health records, and recruiting officers should therefore give particular attention to entries under "former diseases." These entries are too often made in a perfunctory manner. Many a candidate for enlistment will state that he has never been sick, but on being closely questioned will recollect that he had measles, whooping cough, etc., as a child. A most pertinent recommendation is to the effect that spigots be provided similar to the Pullman-car dental fountains, where men can get water for wetting their toothbrushes. The frequency of systemic infections from decayed teeth is universally recognized, dentists with expensive outfits are being assigned to ships, and for some years a regular crusade has been going on in the Navy to teach the importance of the care of the teeth; but it is idle to preach "clean your teeth" unless adequate opportunity to do so is furnished to every man on the ship. The first ship to have a dental fountain was the *Chattanooga*, and now there are similar installations on three of the newer battleships. Eventually a proper type will be generally adopted.

A more startling and radical suggestion is that of providing on all the larger ships laundry facilities for handling the white clothes and undergarments of the entire crew with ample drying-room space for blue clothes. In view of the sanitary advantages of this step, and when one considers the large amount of time consumed by the crew in washing their clothes, hanging them up to dry, etc., it may be well to consider the desirability of having 10 or 15 men give their whole time to this duty, leaving to the balance of the crew that much more available time for the distinctive work of their respective ratings. Ventilated metal lockers are suggested to replace the ditty boxes and canvas bags on board ship, the bags to be packed away and used only as containers when men are transferred. Galvanized-iron cans should be placed here and there on deck for collecting rubbish, paper, etc., as is done on the U. S. S. *Pennsylvania*. All ships should have outside sanitary slop chutes.

In regard to the Navy ration, the fleet surgeon notes that there is an excessive amount of coffee drunk by the men, largely as a matter of habit, and estimates that on an average 5 grains of caffeine are ingested daily per man. Fifty per cent of the bread ration should be from whole-wheat flour, for the sake of the increased nutritive value, the slightly laxative effect, and the vitamins present in the covering of grain, which are lost when the flour is finely bolted. Bronze-wire screening should be installed for all butcher shops, bakeries, and galleys, and for the different compartments assigned to the medical department. All battle-dressing stations should be connected with the ship's drains. The experience of the British Navy during the present war emphasizes the importance of this provision.

From January 1 to September 30, 1916, a systematic study was made of the stools of orientals and southerners in the personnel of the fleet. The percentage of those infected with *Necator americanus* (hookworm) was 8.77.

The following recommendations appear in reports from individual ships of the fleet: Provide cooler bread room, excessive heat in this compartment hindering good bread making; improve ventilation of central station; provide exhaust ventilator hood over steam sterilizers, as escaping steam condenses overhead and drops upon operating

field. Facilities for washing the hands and paper towels should be provided in the crew's heads. The caf eteria system of messing in vogue on the U. S. S. *New York* is recommended for all ships. Aluminum nested carriers should be used in serving food to the men. If mess cooks have to handle food in distributing it to mess tables, they should wear cotton gloves when so doing.

REPORT OF THE FLEET SURGEON, PACIFIC FLEET.—The employment of vessels of the Reserve Force for active service in the Tropics when using reduced complements of officers and men involves a strain upon the physical resistance of the personnel beyond that which should be demanded except in national emergencies. Though a ship may be designated as "reserve," the work required for its upkeep when cruising demands a full crew, especially in the Tropics, and undue physical strain not only reduces the efficiency of the ship's company but tends to create a feeling of discontent, which lessens reenlistments and discourages recruiting. As an example of the effect of this strain, one vessel may be referred to which served with a reduced complement, and within a period of two months in Mexican waters transferred for physical reasons 2 commissioned officers, 2 coxswains, 9 seamen and ordinary seamen, 2 water tenders, 2 oilers, 14 firemen, 1 ship's cook, 1 yeoman, and 1 shipfitter.

The one supply vessel serving with the fleet has been almost continually under way in order to keep the vessels serving in tropical waters supplied with fresh provisions. In spite of this very active service the physical efficiency of her crew has been maintained. This is considered to be due to the fact that in the performance of this duty the vessel spends one-third of the time in a temperate climate.

The use of the *Milwaukee* as tender to the destroyers has proved an admirable arrangement, as her enlarged medical department is able to care for the sick and injured among the thousand or more men serving on the fleet destroyers. In the absence of a hospital ship this has been of great benefit to the well-being of the personnel. Owing to political conditions in Mexico most of the vessels of the fleet have at one time or another transported refugees from Mexican ports on the west coast, but the bulk of this work has fallen upon the *Buffalo* and the *Glacier*.

The need for the services of a hospital ship in this fleet is apparent and the lack of such services has resulted in a diminished conservation of life and health in the personnel. The only naval hospitals on this coast are situated at great distances from the scenes of active operations. The means of transport are few and far between and the facilities for caring for sick and injured on the Government vessels which can be spared to transport patients to hospitals are inadequate. Every naval vessel bound north carries her load of sick and injured. The supply vessel has a medical officer, and for this reason is used as a hospital transport, but the facilities for caring for the sick on such a ship are limited and it is undesirable to employ for this purpose a vessel intended to convey provisions. The colliers do not carry medical officers, and they are in every way unfitted for transporting the sick, but necessity leads to their employment for this duty. Thus patients suffer delay in receiving hospital treatment and are subjected to undue discomfort if not positive injury during transportation by the crude means available.

San Diego, being the United States port nearest to the sphere of operations in waters of the west coast of Mexico and Central America, is a port of call for all vessels of the fleet bound south or north, and it was necessary to make free use of the civil hospitals in that city. Infectious cases were treated at the municipal isolation hospital and noninfectious cases were treated in civil hospitals under the care of the officer of the United States Public Health Service on duty in the port.

Malarial infections have been noted on nearly every ship serving in Mexican and Nicaraguan waters. On one of the vessels of the Reserve Force serving in Mexican waters 46 cases of malarial fever developed within 16 days. An epidemic of measles occurred on the destroyer *Paul Jones*. An epidemic of mumps occurred on the *Oregon*, and there were a few cases on the *South Dakota* and *Pueblo*. A single fatal case of cerebro-spinal meningitis occurred on the *Albany*. Several cases of amebic dysentery were admitted on vessels serving in Mexican and Nicaraguan waters. They probably originated from insufficient precautions in regard to fresh fruit and vegetables obtained from shore. A brief immersion of all fruits and vegetables in boiling water affords reasonable protection against this type of infection and should be rigidly enforced on vessels of the service.

The absence of smallpox in the fleet, in spite of the fact that it exists in epidemic form in several of the Mexican ports and in spite of the number of refugees from infected ports transported on our ships, is a commentary on the efficient precautionary measures adopted in our service. Of accidental injuries occurring in the fleet the most serious was that which involved the death of six men through the taking fire of gasoline which was being used below decks for cleaning purposes on the destroyer *Preble*.

There has been a shortage of medical officers in the fleet to such an extent that the commander in chief viewed the situation with concern when preparations were being made for active service. Except on the flagship there was but one medical officer to a ship. With most of the ships acting singly on patrol off widely separated ports there were no reliefs for medical officers incapacitated by illness or required for sanitary service ashore or with landing parties. It is urgently recommended that no medical officer be ordered to duty with this fleet who has not had previous experience of at least one cruise on a man-of-war and who has not proved his ability. It is only by actual naval experience afloat that a medical officer can learn what can and what can not be done in the handling of sick and wounded on ships of various types and what are the available means of maintaining physical efficiency.

The importance of *sanitation in connection with vessels of the train*, especially in their relation to the active force, is not fully appreciated by the officers of the line. On vessels which carry medical officers sanitary matters are constantly brought to the attention of those in authority with the result that a high standard of sanitation is maintained on them, but on ships of the train which have no medical officers and are often manned by civilian crews little or no attention is paid to sanitary considerations. The *danger of infections being introduced into vessels of the fighting force* through contact with insanitary vessels of the train has not been brought home to the officers

of the service through catastrophe in campaign, nor has it probably been elucidated in courses of instruction at the Naval Academy or War College. The Japanese navy learned the lesson through experience in the war with Russia, with a resulting reorganization of the relations of officers of high command to their sanitary advisors and a rewriting of regulations in regard to inspections and control of sanitary matters in vessels of the train. An officer who served on Admiral Togo's staff once informed the writer that the admiral was more concerned over sanitary affairs than anything else during the war with Russia. He said, in effect, that the admiral was fully conversant with the ships of the line, knew of their training and ability and just what each ship could or could not do, but that when two of the battleships were practically put out of action because of infectious diseases introduced through contact with infected supply ships, and when the trained crews of torpedo vessels were being broken up through physical breakdowns due to improper precautionary and personal hygienic methods, he felt that he was facing a serious problem. During the past year we have had an instance in this fleet which would indicate a similar danger in our own fleets. The collier *Brutus* was sent from the Atlantic to the Pacific coast with a load of coal. At the first Pacific port visited, Corinto, two patients were transferred to the care of the medical officer of the *Raleigh*. One of these cases was further transferred via commercial steamer to hospital at Ancon, Canal Zone, but one case diagnosed as typhoid fever could not be so transferred because the captain of the steamer stated its presence on board would cause his vessel to be put in quarantine at Panama. There being inadequate facilities for treating this case on board the *Raleigh*, the medical officer on duty with the United States marine detachment, legation guard, at Managua, Nicaragua, took this patient to Managua and at personal inconvenience treated the case in his own quarters. The next report from the *Brutus* was contained in a radiogram from the master, while the vessel was at sea, stating that the first officer and one of the electricians had high fever and requesting medical assistance. The ship was accordingly diverted from her assigned duty and directed to proceed to Manzanillo, the nearest port at which a naval medical officer was available, in order to obtain medical treatment for the sick from the *Pittsburgh*. From Manzanillo the *Brutus* proceeded to La Paz, where she fell in with the *Milwaukee*. The *Milwaukee* reported by radio: "*Brutus* * * * is in extremely insanitary condition, has considerable malaria on board. Two cases put on *Pittsburgh* and four men one officer on *Milwaukee*. More will probably develop. Medical board recommends she be sent north immediately. *Brutus* has insanitary ice box needing immediate attention. Freeman." The vessel was ordered to proceed to Mare Island. On arrival, she was inspected by a board of inspection and survey. The board found the ship's quarters dirty and rat and vermin infested, and recommended the permanent removal of the bottom strip of wood sheathing on ship's side in living quarters for cleaning and driving out rats. The yard surgeon at Mare Island recommended fumigation of the ship. The board of inspection stated: "The board finds that discredit attaches to the present commanding officer and the first officer for the dirty and insanitary condition of the ship, especially

in the officers' quarters. Attention is invited, however, to the reduced complement due to illness of part of the crew transferred while the ship was in Mexico." In the opinion of the writer, the board has transposed cause and effect, and the loss of crew through illness, instead of mitigating the discredit attachable to the officers, is to be considered as the inevitable result of the insanitary conditions existing on board the vessel. In this connection, attention is invited to the desirability of having a trained sanitarian as one of the members of each board of inspection and survey.

When the lower Otay Dam, near San Diego, broke in January, and the Otay Valley was flooded, medical relief was afforded to the inhabitants of the district by Assistant Surgeons C. I. Wood and F. L. Conklin, United States Navy, and five hospital corpsmen, at that time attached to vessels of the Reserve Force. These officers and men were indefatigable in the performance of this duty, covering the entire flooded district by boat and on horseback, and rendered efficient and valuable service to the stricken inhabitants. Their work included the establishment of sanitary regulations in refugee camps, the posting of signs and giving instructions in regard to the boiling of drinking water, the burial of dead animals, the disinfection of excreta and decaying matter, the treatment of sick and injured, and the transfer to hospital of a few cases.

THE HOSPITALSHIP "SOLACE."—The hospital ship *Solace*, now twenty-odd years old and in constant need of repair, continues to render invaluable service both to the fleet and to military establishments ashore. From February 9 to April 10, it operated with the fleet in Cuban waters. From June 1 to August 24, it made the round of the principal ports of Haiti and Santo Domingo and returned three times to Guantanamo Bay for coal. On August 24 orders were received to proceed to the United States calling en route at nine ports in the Island of Dominica to receive patients and deliver medical stores. On September 1, in obedience to radio orders, the *Solace* arrived at Santo Domingo City and took on board 40 sick and injured and 8 dead from the U. S. S. *Memphis*. From September 12 to December 31, it operated with the fleet.

Number of patients admitted during 1916, 98; readmitted, 491; discharged to duty, 300. Total number of sick days, 10,936. Major operations performed, 96; minor operations, 27; genito-urinary operations, 89. Examinations, 284. Laboratory examinations, 1,628. Eye, ear, nose, and throat treatments and operations, 4,258; major operations, 3; minor operations, 102.

When the ship is with the fleet, or any considerable portion of it, an ambulance service is put into effect similar to the ambulance service rendered by hospitals ashore. At a definite hour every day the *Solace's* ambulance boat calls at ships having patients for hospital and returns men discharged to duty.

The medical department of the ship is composed of four divisions: (1) Administrative; (2) surgical; (3) medical; (4) commissary.

The disadvantages of coal as a fuel for the motor power of hospital ships is emphasized. It takes from 3 to 8 days to coal the *Solace*, depending on the number and character of the contract laborers employed. During these extensive periods of coaling, all parts of the ship become filthy, discomfort and inconvenience are occasioned

to the patients, and aseptic surgery is rendered difficult. It takes a long time to clean up after each coaling.

Unfavorable and widely advertised criticism of the administration of the *Solace* in May, 1917, lead to prompt official investigation by a board of prominent civilians, one of them a physician, appointed by the Secretary of the Navy. This board heartily exonerated the staff of the hospital ship from the charges preferred and absolved it from responsibility for the overcrowding of the ship which entailed minor discomforts and privations for patients under treatment during the brief periods between their arrival on board and conveyance to hospital ashore.

I can not refrain from testifying here to the zeal and energy generally displayed throughout the medical corps during a vital period of change, expansion and reorganization and from expressing the satisfaction I experienced at a time which was for me full of gravest anxiety on noting from personal observation the earnest devotion to duty which everywhere characterized our medical officers.

HOSPITAL AND AMBULANCE SHIPS.—When Congress by the appropriation act of 1916 authorized the building of a hospital ship for the Navy elaborate plans had already been completed for this work embodying all the features outlined in my report of last year, and it was hoped that the keel would be laid and the construction pushed to completion without delay, so that a hospital ship designed and perfected according to the latest ideas and conforming to the most modern and exacting requirements might be available in the event of any large increase in personnel or of a call to arms. Unfortunately other work has taken precedence of the hospital ship, and it has only attained to about 15 per cent of completion.

Meanwhile there is urgent need for ambulance ships. The ambulance ship is used to transport sick and wounded men from fighting units to hospitals ashore, and while requiring less elaborate equipment must have ample accommodation for a large number of sick, facilities for caring for them in transit, and a large and capable staff of doctors and nurses, and it must be prepared to come and go constantly at a fair rate of speed. Plans for converting certain designated merchant vessels to this use have long been on file in the bureau.

The steamship *Havana* of the New York & Cuba Mail Steamship Co. has been selected and is now at the navy yard, New York, undergoing conversion and will probably be ready for service in four or five months.

Another ship, the *Saratoga*, belonging to the same company, and a sister ship of the *Havana*, is being considered for conversion for this same purpose.

The small ambulance ship *Surf*, affiliated with the American Red Cross, reported for duty with the fleet on June 2. It has been employed since arrival in transporting cases of some of the milder contagious diseases from Fleet Base to a Naval Hospital. The service of this vessel became available through the generosity and patriotism of its owner, Dr. John A. Harris, a public-spirited citizen of New York, who bears all the expenses of upkeep.

SUBMARINES.—Passed Assistant Surgeon R. W. McDowell, in a carefully prepared report from the submarine base, New London,

Conn., urges that especial care be taken in the selection and detail of officers for instruction at the submarine base. He says in part: "Not only should officers be given a special physical examination with higher requirements, but special attention should be given to their temperamental qualifications. The safety of a submarine depends absolutely upon the commanding officer or his second in command, and only the carefully selected and trained officer should be detailed for that duty. Without making any invidious comparisons, it is evident that some of the officers sent to the submarine school were not carefully selected with reference to their temperamental and physical qualities. In addition to a liberal amount of good sound judgment, the following-named qualities are, in the writer's opinion, necessary: Mental and physical alertness, self-reliance, coolness, self-control, attention to detail, appreciation of the necessity for effort, and ability to inspire confidence in men. The following-named qualities are undesirable: Mental or physical weakness, lack of attention to detail, indecision, poor judgment, laziness, carelessness, and hereditary lack of stamina. Officers should be given a careful physical examination before they start on the course of instruction, so as to exclude those having any physical defects, and during the course they should be carefully picked over again with special reference to temperamental qualifications."

It would seem that officers detailed for instruction with a view to duty on board submarine vessels should be as carefully selected as are those for aviation duty, though not necessarily on the same lines. The aviator flies alone or accompanied at the most by one or two men, whereas the submarine commander has from 15 to 20 men under him whose lives are wholly in his keeping, and certainly nothing in the whole range of a naval officer's duty calls for more perfect physical, mental, and moral equilibrium than the command of a submarine in war.

Dr. McDowell comments on the marked physical deterioration manifest in many young officers of his acquaintance since he was first associated with them at the Naval Academy. As a measure to stimulate interest in physical exercise out of doors and to compel them to take it, he makes the suggestion that, instead of the monthly physical exercise for officers hitherto in vogue, officers be permitted to choose the form of exercise they prefer, as walking, tennis, golf, swimming, horseback or bicycle riding, rowing, skating, handball, basketball, baseball, etc., and be required to be engaged in some such form of exercise for a minimum number of hours per month, based on their ages. For example, officers between 20 and 30 years of age might be required to do a minimum of 15 to 20 hours exercise a month, those between 30 and 40 a minimum of 12 hours a month, etc.

The monthly walk, required up to the commencement of the war, was universally regarded as more of a task than a benefit. If he went alone with his thoughts, or if he went in company with another officer, with whom he was sure to discuss features of military life, the officer usually came back physically weary and mentally unrefreshed. When the compulsory physical exercise is resumed it would seem the part of wisdom to consider carefully the psychological side of the subject and to authorize and encourage those forms of physical exercise which call into play something more than the mechanical movement of the limbs.

In addition to the study of matters affecting the personnel of submarines made by Passed Assistant Surgeon R. W. McDowell, already referred to, other medical officers connected with the submarine service have been concentrating their attention on the needs of this important branch. Passed Assistant Surgeon E. W. Brown, United States Navy, has served as member of a board to consider problems of ventilation and air purification and mechanical devices for oxygen supply, the detection of hydrogen, the absorption of CO₂, etc.

In his annual report from the U. S. S. *Ozark* Passed Assistant Surgeon J. R. Phelps, United States Navy, emphasizes the necessity of providing a reasonable degree of comfort, habitable quarters, and ample washing and bathing facilities to crews of submarines after a submersion or cruise. The period of duty when a submarine is submerged or running on the surface entails real hardship as well as personal discomfort and privation, and when the arduous work is temporarily suspended the men must enjoy such privileges and surroundings as will rest, refresh, and rehabilitate them if they are to be contented and efficient. While vessels of the old monitor type, like the *Ozark*, the *Tallahassee*, and the *Tonopah*, are admirably adapted for service as submarine tenders in a few details, such as facilitates for approach and departure of submarines, embarking and disembarking by submarine crews, the merits of the low freeboard are overshadowed by serious objections. The number of available billets barely suffices for the full complement of the vessel itself, so that when the submarines' crews come aboard there is serious overcrowding. These ships have insufficient storage space, little room for messing, and inadequate washing and bathing arrangements. The *Bushnell*, on the other hand, a ship built for the purpose of tending submarines, seems satisfactory in every way.

The accommodation provided for officers on the old type of tenders is also inadequate. Officers on submarine duty require additional clothing and have no space for stowing it. Periodically and after submersions and surface cruises the officers have voluminous reports to prepare, but their small, uncomfortable rooms make the necessary paper work disagreeable and difficult. Dr. Phelps ascribes partly to these conditions the dissatisfaction with submarine work and the frequency with which it is given up after a certain length of time by young officers who entered this field with ambition and ardor. He adverts also to the great importance of care in the selection of enlisted men for submarine duty. The peculiar motion of the submarine, the limited ventilation, and the contamination of air by various gases all tend to produce some degree of seasickness, and those of the complement who are affected in a marked degree should be eliminated, no matter how valuable the services they render in making alterations and repairs during a stay at a navy yard. A clever electrician, for instance, is apt to endear himself to his commanding officer, but he is useless when the submarine is underway if subject to seasickness. Those who suffer from seasickness are a dead weight to be carried and have a demoralizing effect upon the remainder of the personnel.

In general, the report commends the sanitary arrangement on the "L" class, except in regard to the forward compartments, which are without ventilating devices, though a portion of the crew is stationed in them. From the sanitary point of view the larger type of

boat has everything to recommend it, for the comfort of the personnel is always an important contributing factor to health. Better ventilation, more room for stores, more freedom of movement, and less overcrowding are all obtainable in the larger submarine.

Considerable thought and study has been devoted to the question of appropriate clothing for officers and men detailed to submarine duty. The small open bridge of the submarine affords not even the shelter that can be obtained on the bridge of the battleship, and the officer on duty there and his assistant suffer acutely in winter weather from cold extremities. Protection for eyes and ears and means of keeping the feet warm and dry are indispensable. On the submarines that remained north last winter tests were made of especially thick garments, etc., with the above requirements in view.

SANITARY CONDITIONS ASHORE.

Among the permanent features of the expansion of the Navy's facilities for handling the sick connected with the normal progress and development of our sanitary service may be mentioned the work made possible by the naval act of August 29, 1916, which provided for enlargements of existing buildings or the erection of additional buildings at naval hospitals. For the naval hospital, Canacao, P. I., appropriations were made for the erection of six hospital units for the treatment of contagious disease; appropriations were made for three contagious pavilions at the naval hospital, Newport, R. I., which have been completed; at the naval hospital, Mare Island, an extension of the mess halls was appropriated for, designed to double the messing capacity; at the New York Hospital three 2-story brick buildings have been completed. They are for the handling of contagious cases and are installed with the necessary electric connections, gas, water, telephone, and sewerage. Each is provided with diet kitchen, ward, toilet, quiet room, medical officers' room, nurses' room and toilet, and two halls. Three contagious pavilions have also been erected at Puget Sound.

By the naval act of March 4, 1917, provision was made for additions to the dispensary building so as to increase the accommodations for bed patients at the navy yard, Charleston, S. C., and these alterations and enlargements have now been completed.

Three contagious pavilions were authorized for each of the following: Naval training station, San Francisco, Cal.; naval hospital, Portsmouth, N. H.; naval hospital, Great Lakes, Ill.

At the naval hospital, Fort Lyon, Colo. (formerly Las Animas). \$25,000 was appropriated by the act of August 29, 1916, for the erection of necessary buildings, the purchase of land for pasturage, and the purchase of a dairy herd to facilitate the proper subsistence of patients at that institution.

At all our hospitals and establishments in navy yards the work of upkeep has been energetically conducted.

At the Naval Academy, Annapolis, exhaustive studies have been made of the subject of adequate illumination of buildings occupied by midshipmen. This work was carried on with great energy by Passed Assistant Surgeon G. B. Tribble, United States Navy, in consultation with the most eminent specialists in this country.

NAVAL ACADEMY, ANNAPOLIS, MD.—As in the past, the medical officers at this institution display great zeal in safeguarding the health of the midshipmen. Because gastrointestinal disturbances are common in the pupils at the academy in spite of rigid food inspections, it is proposed to keep a sample meal each day to be available for analysis if there should occur any serious disturbance attributable to diet. In January an outbreak of diarrhea occurred, which was ascribed to tinned spinach. In March the dairy herd was tested for tuberculosis, and reactions occurred in four cases. The animals were slaughtered and lesions of tuberculosis discovered. As the cows had been but recently purchased, there was no indication of general infection of the herd. Tin-lined copper kettles in the mess hall have been replaced by aluminum kettles for fear of poisoning. In May the milk from the herd was pasteurized because some of the cows were suffering from garget or inflammation of the udders, a contagious malady which might lead to diarrhea or sore throat in those using the milk.

Contagious diseases have been in abeyance in spite of their prevalence in the vicinity. Influenza alone reached the proportions of an epidemic. Isolation and transfer to hospital have prevented the spread of other acute fevers. Where only two midshipmen occupy a room together it is considered advisable to regard the roommate of any man having a contagious disease as a suspect, and he is transferred with the sick man for observation.

The total number of sick days has been less than last year by 1,091 days. The percentage of sick in 1915 was 0.740; in 1916, 0.514. The following table shows the results of examinations of candidates for admission for three years:

	1914.	1915.	1916.
Total number candidates examined.....	331	296	676
Total number candidates rejected.....	101	75	111
Per cent of rejections.....	30	25	16
Causes of rejection, 1914-1916, both inclusive—			
Defective hearing.....	103	Otitis media.....	1
Defective vision.....	106	Under height.....	1
Enlarged tonsils.....	15	Under weight.....	1
Varicocele.....	15	Hemorrhoids.....	1
Color blindness.....	25	Hallux valgus.....	1
Deviation of nasal septum.....	10	Chronic pharyngitis.....	2
Flat feet.....	9	Hernia.....	2
Poor physique.....	10	Ulcers.....	2
Defective teeth.....	6	Varicose veins.....	1
Persistent albuminuria.....	5	Glycosuria.....	1
Cardiac irregularities.....	10		
Skin diseases.....	2		346
Deformity from old fractures.....	6	Accepted after treatment or op-	
Hydrocele.....	2	eration.....	59
Enlarged turbinates.....	3		
Perforation tympanic membrane.....	3	Final rejections.....	287
Perforation of septum.....	3		

UNITED STATES NAVAL DISPENSARY, WASHINGTON, D. C.—Total number of calls paid by doctors at the dispensary, July, 1916, to July, 1917, 7,931. Office consultations and treatments, 3,104; increase over last year of 2,482 house calls, 872 office consultations. Prescriptions put up, 13,696; increase of 2,074 over last year. One hundred and

thirty-one electric treatments; 238 hot-air treatments for chronic joint troubles. Total number of treatments for eye, ear, nose and throat, 3,962. Dental treatments to officers and men on active list, emergency treatment to members of retired list and Naval Reserve, 758.

STATIONS BEYOND THE SEAS.

VIRGIN ISLANDS OF THE UNITED STATES.—The transfer of the Danish West Indies to the United States under the designation Virgin Islands and the appointment of a naval officer as governor has entailed upon this bureau a careful study of many important problems of sanitation. Surgeon C. S. Butler, United States Navy, was ordered to St. Thomas as principal medical officer, and he has been busily engaged with the many problems that immediately confronted him. The three main islands of the group have an aggregate population of 25,000 or more. The diseases which have to be principally considered in the sanitary survey of the new possessions are: (1) Those of more or less general prevalence everywhere, such as tuberculosis, pneumonia, etc.; (2) diseases spread by mosquitoes; (3) diseases spread by human excreta; (4) diseases spread by sexual intercourse; (5) diseases due to deficient quality and quantity of food. While the physicians of the previous administration were able and conscientious men, they were seriously hampered by lack of funds, the conduct of sanitary affairs being under the home government in Copenhagen, whence very little money was forthcoming for up-to-date work in this line. It can not be held that whatever military or commercial advantages are to be derived from the acquisition of this territory were paid for by the initial purchase price alone. The possession of the territory imposes on our Government the duty of adequately providing for the health and social development of the inhabitants.

At present no measures are in force to exterminate mosquitoes; the disposal of sewage is primitive and inefficient, and this, taken in conjunction with the practice of obtaining drinking water from pools, cisterns, and wells, makes for the dissemination of disease. Venereal diseases are widely prevalent, and laxity of the marriage laws not only contributes to this but has induced a high rate of illegitimate births. There is a chronic condition of underfeeding among the natives, which, by reducing their energy and capacity for work, tends to make the islands unproductive and doubtless contributes a causative factor in the production of pellagra, which is rather conspicuously present.

The hospital at Christiansted was destroyed by the hurricane of 1916. Those at Fredericksted and St. Thomas, inadequate as they are, are crowded to their utmost capacity. There is a dearth of physicians, pharmacists, pharmacies, dentists, dispensaries, laboratories, and health officers. The practice of obstetrics is largely in the hands of midwives.

The conspicuous and crying needs established by Surgeon Butler's survey of the situation are: The appointment of a director and board of public health; one or more sanitary engineers, pharmacists, dentists, local health officers; a well-equipped laboratory; increased hospital facilities and dispensaries and public physicians for effective charity work. In May of this year a building was rented for

temporary use as the naval hospital. A larger building has since been rented and full equipment for accommodating 35 to 40 patients of all classes has been supplied. An officer of the United States Public Health Service has been detailed by the Treasury Department for quarantine work in the islands, at the instance of the Navy Department.

Besides Surgeon Butler there are now six medical officers on duty in the Virgin Islands, assisted by 15 members of the Hospital Corps.

NAVAL STATION, GUAM, L. I.—Reports from the island of Guam show progressive, steady improvement in health conditions since the American occupation. During the year 1916 there were no cases of pneumonia or pleurisy; no typhoid fever; no acute exanthemata. The birth rate is on the increase, and there is a slight reduction in the mortality figures in spite of tuberculosis, which threatens to become a serious factor. It is with regret that we notice the increasing prevalence of this disease in Guam. A hospital for tuberculosis begun in 1913 was finally opened in August, 1916, and eight cases were immediately transported thither. As the facilities of the hospital are limited it is proposed to keep a certain number of mild or incipient cases in the hospital for a limited time and endeavor to build them up by rest and good food and then periodically substitute in turn other groups of patients.

Among the children of the island there exists a widespread chronic conjunctivitis of follicular type, more than 50 per cent of the juvenile population being affected. The conjunctivitis strongly resembles trachoma, but none of the characteristic sequelæ of trachoma are found.

The two remaining cases of leprosy have been deported to Culion. The insane have been sent to the San Lazaro Asylum, Manila. The considerable task of vaccinating every native on the island was completed in July, 1916. The usual medical and sanitary work throughout the island has been continued by medical officers and hospital corpsmen. A certain proportion of the Hospital Corps has been distributed throughout the island. Chief pharmacist's mates are doing useful work as health inspectors in some of the small villages. Owing to the unusual rainfall during the year epidemic asthma has been less prevalent than usual. Twenty-six cases with nine deaths have been recorded. The 369 cases of gangosa report once a month for inspection. It is interesting here to recall the fact that no case of syphilis has ever been acquired in Guam by any member of the American military force.

No diseases due to them prevail in Guam, but strenuous efforts continue to be made to get rid of mosquitos, as they are regarded as pests. Unfortunately the natives do not experience any annoyance from either flies or mosquitoes, and the habits and habitations of the natives are of a character to counteract in large part the efforts at extermination made by the naval authorities. Since October, 1916, 107,830 rats have been killed. The complete extermination of these rodents is impossible without the use of conical tin shields on every young coconut tree.

Weekly conferences of heads of departments are held at the palace, presided over by the governor. At these meetings suggestions are made and discussed and matters of importance for the naval con-

tingent on the island and matters of general public interest are referred to appropriate committees, with great saving of paper, labor, and time and with remarkable coordination of the various activities.

The subject of healthful recreation for the men continues to occupy the attention of the authorities. Moving-picture shows are given whenever films can be obtained. Of the three tennis courts, one is permanently assigned to the use of the enlisted men. Twice a week there are baseball games as part of a 90-game baseball schedule for the year.

There were three deaths in the hospital during the year: (1) Abscess of the liver (not dysenteric); (2) tetanus; (3) traumatism.

Practically 100 per cent of the natives are infected with intestinal parasites, and there can be no marked improvement in this particular until sanitary toilets come into general use.

In 1911 the native population was 11,993. There were 278 deaths and 526 births. In 1916 the native population was 14,142. There were 241 deaths and 643 births.

There are on duty in Guam 8 medical officers, 1 dental officer, and 25 members of the Hospital Corps.

HAITI AND SANTO DOMINGO.—There are now on duty in the Republic of Santo Domingo 11 medical officers, 1 dental officer, and 18 members of the Hospital Corps. There are on duty in Haiti 7 medical officers, 1 dental officer, and 30 members of the Hospital Corps. In addition to this are to be mentioned 3 medical officers and 10 members of the Hospital Corps detailed for duty with the Haitian gendarmerie. In general the work of these officers and men during the past year has been highly satisfactory. They labor under conditions of a most trying and discouraging nature. The sanitary condition of the whole island is indescribably bad, and can not be brought up to a modern standard for many years to come, as it is only by educating the native population that permanent changes for the better can be effected, and this takes time. However, marked local improvement has been brought about in all the towns occupied by our forces, and the medical officers of the Navy and the members of the Hospital Corps under them have been indefatigable in their efforts along these lines. Streets and public squares have been cleared of rubbish and filth, trenches have been dug for drainage, breeding places for mosquitoes have been destroyed, vaccination has been administered, information about safeguarding health has been disseminated, dispensaries and hospitals have been renovated or established, and everything possible has been done within the limits imposed by available funds and workers.

Passed Assistant Surgeon F. X. Koltes, United States Navy, the medical director of the gendarmerie of Haiti, reports that syphilis, malaria, and intestinal parasites are the principal causes of lowered vitality among the native population of Haiti. He has a laboratory in full commission, where about 40 Wassermann tests are made each week. In the tests made on prisoners and members of the gendarmerie 60 to 70 per cent of the Wassermann tests gave a positive reaction. Careful records are kept of these cases, and they are receiving treatment as promptly as it is possible to administer it. Already a noticeable improvement has taken place in the general appearance and physical efficiency of the gendarmerie, this being most conspicuously true of the palace guard. The gendarmerie is making systematic

efforts to secure complete registration of births and deaths throughout the country, with a view to the preparation and study of vital statistics, which constitute such an important feature of the public health service. A native hospital corps is being developed for the gendarmerie under the tutelage of its medical officers. As these men become reasonably proficient they will be detailed to selected posts for independent duty. A small hospital of 20 beds for the use of the gendarmerie is in operation at Port au Prince and hospitals are under construction for Cape Haitien and Aux Cayes. Assistant Surgeon J. B. Helm, United States Navy, the medical officer for the gendarmerie of Cape Haitien, is also the public health officer of that station, and his work in both capacities has been of a high order.

Assistant Surgeon L. F. Drumm, United States Navy, in his report on the town of Jacnel, Haiti, says: "Since the coming of the Americans a general clean-up of the city has been inaugurated. Roads have been built, streets graded, gutters dug and drained, grass and brush have been removed from the streets. Gendarmes are on duty in the market place to prevent the infraction of recently enacted sanitary laws, which aim to suppress the general practice of urination and defecation in public, provide for the collection of refuse from the streets, and for the corralling of stray hogs, goats, and dogs. The town is still filthy, but has improved greatly since 1915. The prevalent diseases are: Leprosy, syphilis, dysentery, gangosa, and a fever resembling dengue."

Assistant Surgeon W. H. Michael, United States Navy, writing from the town of Port de Paix, Haiti, says: "There are no reliable records of death from which vital statistics can be compiled. Mortality in children is known to be very high, due principally to malnutrition and malaria. Puerperal infection plays a considerable rôle in the mortality of the women. They nurse their children from one and one-half to two years, a practice partly justified by the difficulty of obtaining suitable food for children. Venereal diseases are widely present. Practically all open wounds rapidly develop myiasis. Markets have been improved by instituting more careful supervision of the wares offered for sale. Animals are inspected before killing, and milk whose specific gravity indicates dilution is thrown out. The markets are cleaned after market day and a special cleaning is given Sunday morning by prison labor. Efforts are made to keep beggars with open sores out of the market. Early in 1916 a concrete abattoir was constructed near the sea, arranged so that all refuse could easily be washed away."

Assistant Surgeon W. A. Stoops, United States Navy, writing about the town of Miragoane, Haiti, says: "Upon our arrival there were many swampy places in and near the town serving as breeding places for countless mosquitoes. These places have all been filled in or drained. House to house inspections have been made, and the natives have been instructed in the sanitary essentials that relate to privies, open wells, and garbage disposal. As a whole the people responded willingly to our demands and violations of sanitary regulations are mainly due to ignorance or poverty. There appears to be very little disease among the cattle of the country. The principal danger lies in the careless handling of the meat by natives. The houses are dark, poorly ventilated, and overcrowded. Few of the dwellings have latrines or any means for proper disposal of sewage.

A small hospital and dispensary was established in April, 1916, out of appropriations made by the Haitien Government. Up till that time there was no provision for the treatment of the victims of syphilis, leprosy, tropical ulcers, and elephantiasis who were too poor to obtain the services of the native doctors and wandered about the streets begging alms and exposing their disgusting and dangerous condition to the gaze of the public and the bites of flies. I have seen old ulcers teeming with maggots. My hospital apprentice and I have conducted the work of treating these cases in our four-room dispensary and have had as high as 20 patients a day. In Gonaives, a town of 6,000 inhabitants, 75 miles north of Port au Prince, earnest efforts were made to clean up the market place. Many cart loads of manure and refuse were removed, and the lot was filled in to a height of over a foot with crushed rock and sand. A shed 10 feet wide with a sheet-iron roof and cement floor has been constructed forming a hollow square. Within this is a similar but smaller shed, a 25-foot roadway separating the two. All animals on the hoof are now excluded from the market place, as are the vendors of fish and meat for whom there is a separate market on the water front."

For the purposes of military administration, the Dominican Republic has been divided into two districts, the northern and the southern, the former having headquarters at Santiago, the latter at Santo Domingo City. The following are the statistical summaries for the field hospitals at these centers:

Santiago City—		
Total admissions.....	-----	676
Total sick days.....	-----	6,671
Percentage of sick.....	-----	1.6
Santo Domingo City—		
Total admissions.....	-----	557
Total sick days.....	-----	4,480
Percentage of sick.....	-----	3.0

The following tables show admissions and readmissions to the field hospital, Santo Domingo City, for October, November, and December:

	Admissions and readmissions to hospital.	Percentage of total admissions.
Malaria.....	70	22
Dengue.....	56	14
Veneral.....	88	27
Other diseases.....	108	33
	322	100

Admissions to hospital.

	Malaria.	Dengue.	Veneral.	Other diseases.	Total.
August.....	16	0	12		
September.....	34	0	14		
October.....	31	15	22	33	101
November.....	33	17	21	37	108
December.....	3	24	40	38	105

Admissions with malaria from different companies during October and November.

Organization.	Enlisted strength.	Admissions and readmissions.	Per cent of enlisted strength.
First Company	99	12	12
Fourth Company	87	4	5
Fifth Company	111	27	24
Fourteenth Company	87	17	20
Memphis Detachment	54	2	4
Total	438	62	14

The following conclusions appear to be warranted:

That companies which remained in Santo Domingo City upon regular guard duty did not develop malaria, whether they previously had been infected with malaria or not.

That companies going into the interior on prolonged expeditions developed malaria, in part because of exposure to new infections and in part because of the recrudescence of old infections under conditions of severe physical strain and exposure.

During the year 1916 there were in Haiti and Santo Domingo six deaths from casualties in action: One officer and five men.

NAVAL STATION, SAMOA.—Passed Assistant Surgeon F. H. Brooks, United States Navy, reports for the personnel of the station 669 sick days for diseases, 307 sick days for injuries. The principal diseases were filariasis, uncinariasis, gonorrhoea, tuberculosis, malaria. For the native population he reports 12,386 medical cases treated, 385 surgical operations performed, 17,250 surgical dressings done, 505 laboratory examinations, 40 deaths from all causes.

He estimates that in a native population of 7,500 souls at least one-third do not show successful vaccination against smallpox.

The island of Tutuila being, as far as it is known, without a single case of syphilis, it is earnestly recommended that the health record of every officer and enlisted man to be detailed for duty in Samoa be carefully looked over with a view to excluding any possible source of infection with this disease. Civilians with syphilis are not permitted to remain in the island, but are deported.

He calls attention to the urgent need of barracks for the enlisted personnel and for improvement in the station water supply. Happily, the current naval appropriation bill provides liberally for these two details.

There are on duty in Samoa 2 medical officers, 1 dental officer, and 14 members of the Hospital Corps.

Reference is again made to the training school for native girls, as the work carried on in this field is typical of what is being done for the betterment of social and physical conditions in the community wherever the naval medical officer is stationed abroad.

By the instruction of Samoan girls in nursing and hygiene in the Samoa training school it is hoped to bring about important and radical changes in the conditions of life that surround the native population. Babies and young children will be more adequately cared for, dwellings will be cleaner, food will be more suitably prepared, and when sickness supervenes there will be available for nursing a personnel that is not only instructed in modern methods, but that

understands and appreciates the peculiarities, the prejudices, the requirements of the patient, and that will be acceptable to him.

The scheme of sending out undergraduates to various districts to receive a practical training under a graduate nurse not only relieves the present overcrowding in the nurses' quarters, but has an educational value for the pupil and stimulates her to additional effort when she returns to complete the course.

NAVAL STATION, GUANTANAMO, CUBA.—During the months of October, November, and December, 1916, 56 cases of malaria developed in the personnel of the station, all directly traceable to infection at the station. Up to that time it had always been believed that the occasional malarial patient was infected while on liberty in Caimanera or Guantanamo. One of the earliest of the above cases and one whose blood showed the parasite had not been away from the station for over two years. Anopheles were found on the station. It is therefore highly probable that the infection had its origin there. Immediate and drastic steps were taken to eliminate malaria. Over 200 gallons of petroleum were spread on pools of water at the station, target range, and other outlined points. Grass and underbrush were cut down, daily house-to-house inspections were made, and the quarters occupied by native workmen were screened.

The medical officer is unable to refrain from commenting on the readiness with which cooperation is obtained to cure disease and the universal indifference to expensive and painstaking effort to prevent disease both in the service and in civil life. The Bureau of Yards and Docks has decided, on the representations of the medical officer, to increase the allotment under "Maintenance, yards and docks," by \$2,000 per annum to provide for necessary sanitary work indicated in the medical officer's report, which further adverts to the necessity of changing the location of and reconstructing the stables, improving the quarters of the enlisted men, etc.

NAVAL STATION, CAVITE, P. I.—Passed Assistant Surgeon W. L. Mann, United States Navy, reports that out of 2,279 native applicants for enlistment, 1,847 were rejected, 432 accepted. More than one-half of the rejections were for deficiency in height and weight and defective teeth. During the year 1,769 cases of cholera, with 555 deaths, were reported from Manila and vicinity. In Cavite Province there were 590 cases, with 243 deaths. No cases developed among the enlisted personnel of the yard, and but two cases in the native insular force. The station's immunity is ascribed to quarantine and other sanitary precautions taken. The type of cholera differed markedly from the classical description. Symptoms were usually mild and laboratory examinations were necessary to establish the diagnosis.

The recommendations are: That suitable headgear be adopted for the use of the enlisted men in the Tropics; that the tour of duty for officers and enlisted men in the Philippines be limited to two years' actual service on the station.

NAVAL HOSPITALS.

The work at our naval hospitals has continued to increase in scope and to advance in quality during the past year. Many changes of a minor character have been made in buildings and grounds not only

with a view to maintenance and upkeep but to enlarge their capacity in beds and promote their general efficiency. New construction has been undertaken in most of them and all home station hospitals have accumulated large increase of stores and supplies for possible war needs. Many modifications of routine procedure, changes in forms and reports have resulted from recent national events and the legislation incident to them and numerous circular letters have been issued to inform commanding officers of the new rulings.

Since the absorption of Naval Militia and Naval Reserves into the regular service the privileges of hospital treatment in naval establishments have been extended to them.

Commanding officers of hospitals have been authorized to administer oaths and to act as recruiting officers for the Hospital Corps and for extension of enlistment and reenlistment of time-expired patients. In certain hospitals, designated by the Secretary of the Navy, the commanding officer is authorized to order deck courts and summary courts-martial for the administration of justice in the case of offences committed under his immediate jurisdiction.

The general increased cost of labor has naturally been reflected in the Government service and the pay rolls of our hospitals show a rise in the expense for services of civilian employees.

ANNAPOLIS, MD.—Extensive improvements and enlargement are contemplated or begun connected with the nurses' quarters, refrigerator facilities, drinking water, kitchen, mess halls, laundry, etc.

A new and up-to-date X-ray machine has been set up, and the work done in this department equals that of the most skillful specialist. The laboratory has been enlarged and reequipped. Thirty-one major operations and 121 minor operations were successfully performed during the year.

The admissions for venereal disease were less by 15 than last year.

CANACAO, P. I.—During the year 1916, Hospital Steward Allen, under the direction of the medical officers, manufactured 127,075 mils of typhoid vaccine, nearly all of which was shipped in small ampoules to the American Red Cross for use in Siberia in immunizing prisoners of war, the total quantity shipped by the Canacao Naval Hospital to the American Red Cross during the latter part of 1915 and the first part of 1916 being about 40 gallons, in small ampoules, nearly all of which were of 10 milliliters capacity.

Mr. Richard T. Evans, the secretary of the branch of this society at Pei Yang University, Tientsin, China, expressed in several letters his thanks for this valuable vaccine, which was without cost other than for material used and incidental expenses in its manufacture. Hospital Steward Allen should be highly commended for his work.

The condition of public buildings has been and is very good, with the exception of the destruction of wood of the softer types by the larvæ of white ants. Tanguile and yacal woods have been used in replacing ant-eaten pine and other soft types. Eleven of the decayed and ant-eaten steps including nine for the main wards, and one set each for the recreation building and the executive surgeons' quarters were removed and reinforced concrete steps built in place of them by hospital employees. The wooden platform and steps leading to the refrigerator room were unsafe from decay, etc., and were replaced by concrete work. The concrete work is plain, substantial, and

enduring, and should in time prove to be very economical. It is interesting to note that California redwood, which has been said to be rarely attacked by white ants, was quite extensively attacked by these insects in the interior siding of the walls of two of the rooms of the administration building. Samples of this wood, both ant-eaten and unaffected, were taken to the bureau of forestry, Manila, and identified as redwood. In the larger room tanguile was used in replacing the affected wood; in the smaller room cement work with reinforcing "Hy-rib" was used. All this work was done by the hospital force.

The damage done to the sea wall near the medical supply depot by the two typhoons of November and December, 1915, was repaired by the public works department, at a cost of \$233.18.

Carbolineum is used for protecting all wood surfaces beneath buildings and white-ant channels on concrete work between ground and woodwork have been broken down.

The fresh-water supply from the artesian well at the hospital is excellent as to quality, and as soon as the expected deep-well pump is installed the quantity of this water will be ample, so far as can be determined at present.

Considerable difficulty has been experienced during dry seasons and during the quarantine of large drafts of men in keeping a proper quantity of water in the tower tank for protection against fire.

Garbage is properly disposed of, as the incinerator is doing effective work, and as all stable droppings are buried and used as fertilizer for growing plants, very few flies exist. Even in the native city and suburbs far fewer flies are found than would be expected, which fact may be due to the numerous scavenger ants devouring the larvæ of the flies.

Mosquitoes are rarely troublesome. Draining and oiling are continued when necessary. The screened cages in A and D wards are kept in safe condition. Each person is provided with a mosquito net for use at any and all times.

After the completion of the high-power radio station the use of electric current from that source will enable the naval hospital to dispense with one of the three boilers and a small amount of coal will suffice, probably about 300 tons a year. It will be necessary to provide steam for the disinfecting room, the sterilizing room of the operating building, the small sterilizer of the native clinic, and for the laundry.

In September, 1916, many shrubs were procured for the hospital reservation from the Philippine Government free of cost in accordance with Dr. Blackwood's plan in 1912 for beautifying the hospital grounds. Plants to the value of \$900 were to be turned over to the hospital during a series of years. At the present time both shrubs and trees from seeds and clippings are grown on the reservation in considerable numbers, and very few plants from Manila will be required in future, except the rarer types. More than 230 young palomaria trees are now growing on the reservation, either in bamboo tubes or in selected sites where large trees are desired, as along the water front in vacant places and along the driveway between the main gate of the hospital and the radio station. All these have been grown from seeds from the two huge palomaria trees near the old hospital ward. This kind of tree withstands the wind and spray of typhoons well, but grows very slowly. There are also over 80

banana shrubs and 90 papayas, some of the latter now bearing fruit.

At the end of the calendar year 1916 the public works department of the navy yard, Cavite, was about to begin work on the six infectious units. The commanding officer of the hospital recommended that the buildings be constructed of reinforced concrete on account of the ravages of white ants in all soft woods, including California redwood, but the amount appropriated for the six units, \$3,600, would not cover the estimated cost of concrete construction, and Congress had granted that sum for six buildings.

CHELSEA, MASS.—Reporting upon the new buildings completed during the previous fiscal year the commanding officer states that they have given satisfaction except in details of minor importance. However, two unfortunate developments are the apparent porosity of the walls and the rapid deterioration in the pipes of the hot-water service. The former defect has been to some extent mitigated by repointing the brick walls with a rich cement paste. The iron pipes have been replaced by brass pipes, with inevitable extensive mutilation of the plastered walls, which even after repair will never present the original flawless surface. During the winter measures were taken to reduce the fly and mosquito nuisance invariably present each summer. As the mosquitoes are bred chiefly in the extensive salt marshes that fringe a portion of the hospital reservation, the extinction of these breeding places can not be accomplished by the hospital authorities alone. During the statistical year 1,721 Wassermann tests were made at the hospital; 486 X-ray plates were made; 226 major operations were performed; salvarsan or neosalvarsan was administered intravenously 399 times.

GREAT LAKES, ILL.—The total number of subsistence days for the fiscal year was 67,685. Average cost of maintenance per diem, \$1.06; average cost of subsistence per diem, 53 cents. This hospital was reopened February 21, 1914, having been closed May 19, 1913, due to a temporary reduction in the recruits received at the station. In my report of last year I emphasized the necessity of supplying to this establishment, which in all other respects is one of the most modern and ample in its equipment, suitable buildings for the care of contagious disease, which unfortunately has been frequently introduced at the training station since it was opened in the autumn of 1911. The three contagious building units provided by special appropriation have now been erected, and the wisdom of the step has been amply demonstrated by the extensive epidemics of scarlet fever and meningitis which developed at the training station during the winter of 1916-17.

MARE ISLAND, CAL.—Much has been done to improve the appearance of the grounds and to prevent deterioration of buildings. The 3,000-ton motor truck in use since July has been of great service for hauling supplies, and the new motor ambulance has increased the efficiency of the service. It carries two stretcher cases and operates quickly, safely, and economically. The commanding officer urges the erection of additional buildings, not only to replace old structures by up-to-date accommodations but to increase the capacity of the establishment.

NEWPORT, R. I.—Besides constant effort to improve the limited hospital grounds by leveling, filling, grading, etc., a fixed landing stage

on the water front has been constructed at a cost of \$1,000 and proves very satisfactory. Defects in the refrigerating plant have been corrected by the makers. Three pavilion wards are under construction for contagious cases. Reading and writing rooms for staff and patients and an assembly room have been equipped.

Additional quarters are urgently needed for nurses and hospital corpsmen and for civilian employees.

NEW YORK, N. Y.—A large amount of work has been done for the upkeep of the buildings, such as painting roofs and ventilators, repairing chimneys, repairing ceilings and floors, laying concrete floors in basement, installing new meters, renovating roofs and steam and hot-water pipes, laying new sewers to certain buildings, installing new boiler-feed pump. A new concrete ash pit has been built, and additional radiators and toilets have been placed in several buildings.

New construction includes three contagious units—one-story brick buildings, each having ward and toilet, diet kitchen, two halls, nurses' room, etc. They are steam heated and electrically lighted and have telephonic communication. Additional roads through the grounds, either paved with brick, asphalt, macadam, or concrete, and properly drained, have been constructed. Tile flooring, with sanitary bases and glazed wall tile, with proper drainage facilities, has been laid in main kitchen and adjoining storerooms and halls.

A new elevator has been installed. The coal-burning steam-heating plant has been replaced by an oil-burning plant with underground storage for oil.

NORFOLK, VA.—The follow construction was well under way at the close of the fiscal year ending June 30, 1917:

Fourteen buildings, consisting of eight pavilion wards, 4 Hospital Corps barracks, and 2 subsistence buildings; six new wards for contagious diseases; garbage incinerator; new refrigerating plant.

PARIS ISLAND, S. C.—The total number of subsistence days for the fiscal year was 19,605. Average cost of maintenance per diem, 73 cents; average cost of subsistence per diem, 45 cents; new building quarantine station, completed cost, \$541.25; repairs and enlargement of hospital, completed cost, \$15,000; emergency hospital buildings, completed cost, \$125,000.

PEARL HARBOR, HAWAII.—Since the beginning of the year buildings for the accommodation of nurses and staff have been completed. A great deal of work has been done with a view to beautifying the grounds by planting hedges and flowering trees, without the expenditure of any public money. The hospital was commissioned and received its first patient on July 23, 1917. The present capacity is 50 beds, but there is ample opportunity for expansion in case of need.

PHILADELPHIA, PA.—The following improvements have been made during the year: Laboratory with concrete floor installed in basement; diet kitchen moved, enlarged, and supplied with additional equipment; recreation room provided for hospital corpsmen; special room for genito-urinary treatment equipped in basement; complete overhauling of lighting system.

The commanding officer again calls attention to the remoteness of the hospital from the navy yard, and the disadvantages of a loca-

tion surrounded by industrial plants which constantly throw out huge volumes of smoke, soot, and cinders.

PORTSMOUTH, N. H.—Important repairs have been made to the steam and hot water systems. Extensive repairs and alterations have been made to the refrigerating machine, and cement floors in toilets have been renewed.

The commanding officer urges the erection of quarters for medical officers, quarters for certain civilian employees, and a garage.

PUGET SOUND, WASH.—A medical storeroom has been equipped in the basement. A new X-ray table has been installed increasing greatly the facilities for good work. A lathe set up in the engine-room has resulted in considerable saving of expense to the Government by enabling repair work to be done on the premises by the engine-room force instead of having to be sent out. A cold-storage plant is under construction.

WASHINGTON, D. C.—Much work has been done during the year for the beautifying and improvement of the grounds and toward the upkeep of the older buildings which demand constant minor repairs. New electric fixtures, costing \$535.45, have been installed to replace worn out, antiquated types. The mess hall, which is small and unsuitable in many ways, is being enlarged and altered in a manner to permit the most efficient dietetic arrangements.

Other important changes well underway or approaching completion comprise a new laundry outfit and enlargement of the power house.

The number of patients treated from December 31, 1915, to December 1, 1916, was 679.

The X-ray outfit is modern and complete, the pharmacist in charge is a very capable man, and the work done in this department is of a very high order.

NAVY YARDS, RECEIVING SHIPS, TRAINING STATIONS.

NAVY YARD, BOSTON, MASS.—The practice of inspecting all supplies coming to the yard and through it to the ships has been continued. Incoming ships are notified as to which dealers conform to standard and which do not, and dairies are listed according to reports of the bacterial count, etc.

For the six months beginning February 1, 1917, there were 1,660 accident cases among yard workmen, of which 231 entailed absence from work. The time lost to the Government aggregated 6,516 working days.

NAVY YARD, MARE ISLAND, CAL.—Special efforts were directed to preventive measures, instruction, and care of the health for the navy-yard workmen. Smoke helmets and respirators, stretchers, and surgical dressings have been distributed in appropriate places throughout the yard and instruction has been given in their employment. During the year the civilian force has averaged 2,701 men. At the yard dispensary 3,135 first-aid treatments were given. There were 314 cases requiring to be sent home. There were no deaths.

Appropriation has been made for the erection of a much-needed building for the medical supply depot at this yard, which distributes stores to the ships, hospitals, and stations of the Pacific coast and the Pacific and Asiatic stations.

TRAINING STATION, NEWPORT, R. I.—The combined admissions for scarlet fever, measles, German measles, and mumps for the past six years are as follows:

1910-----	446	1914-----	65
1911-----	247	1915-----	20
1912-----	165	1916-----	115
1913-----	90		

During the second quarter of 1916 a virulent epidemic of measles occurred, introduced by a man from the U. S. S. *Constellation*, who contracted the disease on liberty. The crowded condition of the barracks and the bad weather prevailing facilitated the spread of the disease.

There was no interruption to the flow of recruits to ships owing to the use of one building at Barracks A, where the single rooms permitted the isolation of small units during the quarantine period. The special measures comprised quarantine of the station against Newport except for general-service men; quarantine against each other by the barracks and U. S. S. *Constellation*; dormitories and rooms in barracks quarantined against each other; discontinuance of all general gatherings, such as Divine service, musters, moving-picture shows; school periods and Swedish drills were held at different hours for different barracks so as to reduce contact; daily body inspection of every man on the station; all mess gear steamed after meals; dormitories sunned and aired daily, bedding whenever practicable.

During July, owing to prevalence of anterior poliomyelitis in New York and New Jersey, recruits from those States were isolated, and it was recommended that no liberty be granted for recruits coming from them and likely to go home. Though cases occurred in the town of Newport, none developed at the training station.

The discharges for physical disability amounted to 50, of which 13 were for flat foot, 11 for nervous disorders or defects, and 8 for chronic middle ear disease. Of 308 applicants for original enlistment, 180 were rejected, 34 for visual defects, 24 for flat foot, 14 for defective teeth, and 13 for cardiac abnormalities.

UNITED STATES MARINE BARRACKS, NORFOLK, VA.—There have been no contagious diseases and no cases of typhoid fever in the command during the year. The general health has been excellent. Thanks to State prohibition and to the abolition of the segregated districts in the local communities, the admissions for venereal diseases have been less numerous than in the preceding year.

There are no quarters for the medical officer at this post, and it is extremely difficult to secure suitable quarters in town at less than 2 or 3 miles distance.

RECEIVING SHIP, NORFOLK, VA.—Physical examination of recruits forms an important part of the work at the station, including the medical examination of all men sent from other recruiting stations, original enlistments here, reenlistments of general service men, etc.

Summary:

Number examined for enlistment-----	12
Number examined for transfer-----	6, 336
Number examined for discharge-----	1, 048
Number reexamined on arrival-----	3, 241
Number examined for change of rating-----	13

The large new two-story brick building for apprentice seamen was occupied November 15, 1916. The armory and gymnasium occupy the ground floor and on the second are schoolrooms, reading rooms, recreation rooms, and offices.

The new disinfecting plant has been completed and assigned for use. It is a substantial brick building two stories high. The ground floor comprises one large standard disinfector, one small sterilizer, receiving rooms at one end and distributing rooms at the other separated by a solid partition. The second floor is taken up by toilets and bathrooms adjacent to a medical examining room.

New and more sanitary toilets are recommended for installation at various places in the yard. A new and improved swimming pool is needed. A separate building is needed for isolation and observation of contagious disease suspects, as well as a number of barrack or bungalow units with attached toilets.

NAVY AERONAUTIC STATION, PENSACOLA, FLA.—During the past year building No. 52, built in 1907 for use as a paint shop, was renovated and fitted out as a dispensary with sick quarters having a capacity of about 40 beds and additional accommodations for eight hospital corpsmen. Besides these accommodations there is a dressing room, dispensary, sterilizing room, dining room, kitchen, and storeroom, and a detached building which contains a provision storeroom, heating plant, and hot-water heater. In this building will be placed a steam generator to furnish steam for the new sterilizer approved for the station.

There is need here for special provision for aeration and filtration of drinking water, owing to the large iron content that constantly clogs the pipes.

NAVY YARD, PHILADELPHIA, PA.—A new dispensary building to replace the present small inadequate frame building is urged by the medical officer on duty, with a view to accommodating both medical and dental officers. For a period of six months beginning February 1, 1917, the daily average of accidents among yard employees was 15.9.

NAVY YARD, PORTSMOUTH, N. H.—A case of anterior poliomyelitis appeared in the family of the proprietor of the yard lunch room during the summer, 1916. Appropriate quarantine restrictions were imposed and no other cases developed.

At the yard dispensary 1,006 accident cases among yard workmen were treated. The building has been thoroughly renovated, painted, supplied with new plumbing, etc.

NAVY YARD, PUGET SOUND, WASH.—For a period of six months beginning February 1, 1917, there were 1,737 accident cases among the yard workmen.

NAVY YARD, WASHINGTON, D. C.—The principal work of the medical officers at this yard is connected with the care of 4,000 odd workmen employed in the gun foundry and other shops. While the number of civilian employees has increased by nearly 700, and the yard has been unusually busy, there has been no loss of life from accidental injury. There have been 3,912 minor injuries and 486 requiring loss of time from labor. Only 234 cases were sufficiently incapacitated to justify claims for compensation. Owing to the character of the machinery used most of the injuries involve

eyes, hands, or feet. A large proportion of the injuries are fractures of the bones of the extremities. In no case has an injury been serious enough to permanently impair the wage-earning capacity of the victim. In 96 cases X-ray examination was required and pictures or plates were made for them at the United States Naval Hospital. There were 75 eye injuries, of which 59 were classified as foreign bodies in the eye. Usually the foreign body is emery, and it is commonly-not noticed at the time of entry. The services of the Navy specialist at the naval dispensary are constantly required for these cases.

The medical officer urges the erection of a new dispensary building to furnish adequate facilities for the work of the yard.

RECRUITING.

The principal causes of rejection of candidates for original enlistment are as follows:

	Navy.	Marine Corps.	Naval Reserve
Errors of refraction.....	5,360	1,537	20
Under weight.....	4,507	890	7
Defective teeth.....	3,935	943	3
Flat or weak feet.....	3,534	1,494	3
Deformities.....	2,822	731	7
Varicose veins or varicocele.....	2,331	774	3
Under height.....	1,623	501	7
Heart affections.....	1,439	863	5
Color perception defective.....	1,352	363	2
Genito-urinary (venereal).....	914	433	3
Tuberculosis or suspects.....	657	252	3

The rejections for color blindness reach 2.07 per cent of candidates examined for original enlistment. While errors of refraction are the principal cause of rejection in all applicants, weak or flat feet come second as a cause of rejection of candidates for the Marine Corps and fourth in numerical importance for the Navy. The marching and sentry duty required of marines is far in excess of what the sailor has to do, and these figures show that medical officers at recruiting stations have taken this into consideration and very properly been more exacting in this detail in candidates for the Marine Corps. In both branches defective teeth give the third largest number of rejections. Heart affections come fourth in Marine Corps examinations and eighth with Navy candidates. Rejection for varicosities and varicocele holds sixth place for both classes of candidates, which is proper. The minimum age for marines is 21, for the Navy 17. While varicose veins might be more common in older candidates, varicocele is frequent in young subjects and would have relatively greater importance in them if marked. Both conditions persist without operative interference. Color perception stands ninth among main causes of rejection for both classes. This also is as it should be in figures representing a condition which if not due to disease is a congenital defect. (For complete reports of examinations and rejections at recruiting offices, see p. 111.)

HEALTH OF THE NAVY.

Total admissions and readmissions to sick list—Deaths and sick days per 1,000.

	Per 1,000 of personnel.		
	Admissions and re-admissions, all causes.	Deaths.	Total sick days.
Average, years 1901-1910.....	897.35	5.38	10,871.12
1912.....	787.46	4.06	9,449.39
1913.....	760.03	3.82	10,041.41
1914.....	896.58	4.18	10,862.28
1915.....	955.91	4.48	11,402.17
1916.....	998.22	4.83	11,674.18

The above table is included in this report in conformity with the practice of previous years and requires the usual explanatory note. The figures set forth under admissions and readmissions per thousand have only a relative value, and do not present an actual picture of the sickness involved. For example, a man taken sick on a ship, admitted to the sick list, transferred to hospital ashore, and subsequently transferred to another hospital (this is often done at the patient's own request, with a view to being near his home, etc.), would give under the head of admissions and readmissions the figure 3, where there was actually but 1 case of disease. Again, a man with some form of venereal disease might be admitted at first for record only and later, if his condition required it, might be readmitted to the list and transferred to hospital, making for admissions and readmissions a 3, where only 1 case of illness was involved. Finally, a man with some trifling but chronic disability might be admitted and readmitted to the sick list several times merely to excuse him from some unusual or arduous duty.

The actual number of sick days shows only a trifling increase over last year. The deaths reported—4.83 per thousand—though slightly higher than the figure for last year, actually represent a considerable reduction of mortality from general conditions affecting the health of the personnel, inasmuch as it is permissible to deduct from the actual number of deaths those due to such an unusual catastrophe as that which occurred in Santo Domingo in August, 1916, at the time of the tidal wave which wrecked the U. S. S. *Memphis* and led to the death by drowning of 36 men.

Once more attention is invited to the report of the census of 1910, showing a death rate for the registration area of the United States for persons between the ages of 20 and 29 years of 8 per thousand. This includes both sexes, and would be appreciably higher if quoted for males alone. Compared to this, the Navy mortality of 4.83 speaks loudly for the excellence of health conditions surrounding the naval personnel in times of peace. It is to be remembered that some of the deaths reported for 1916 occurred during active campaigning in the island of Dominica.

Special disabilities showing increase:

Appendicitis.	Hernia, inguinal.	Scarlet fever.
Cellulitis.	Lymphadenitis.	Syphilis.
Chancroid.	Malaria.	Tonsillitis.
Conjunctivitis.	Measles.	Tuberculosis.
Dengue.	Pes planus.	Wounds, etc.
Enteritis.	Pleurisy.	Poisons.
Epilepsy.	Rheumatic affections.	
Furunculosis.	Scabies.	

Special disabilities showing decrease:

Bronchitis.	Mumps.	Typhoid fever.
Gonorrhoea.	Neurasthenia.	Varicocele.
Hemorrhoids.	Otitis media.	
Influenza.	Pneumonia.	

Disabilities for all causes show slight increase: For 1915, 2,914.55; for 1916, 2,955.50.

Classes of disabilities showing increase:

Blood.	Lymphatic.	Skin, hair, and nails.
Ear.	Mind.	Tumors.
Eye.	Motor.	Wounds, etc.
Infective (nonvenereal).	Parasites.	
Infective (venereal).	Poisons.	

Classes of disabilities showing decrease:

Circulatory system.	Genito-urinary system	Miscellaneous conditions.
Digestive system.	(nonvenereal).	Nervous.
Ductless glands and spleen.	Hernia.	Respiratory.

DISEASES OF SPECIAL INTEREST.

Leading causes of death for the past 4 years in the Navy.

	1913	1914	1915	1916
Drowning.....	32	42	51	74
Tuberculosis, all forms.....	30	38	36	30
Pneumonia, all forms.....	21	33	22	15
Burns.....	12	6	16	11
Wounds, gunshot.....	19	30	13	27
Nephritis, all forms.....	8	13	13	9

In considering the leading causes of death in the Navy we find that drowning again heads the list. Of the 74 deaths due to this cause 5 were suicidal and 36 occurred at the time of the disaster to the U. S. S. *Memphis* in the harbor of Santo Domingo, August, 1916. The greater portion of the deaths by drowning at this time were actually due to the swamping of small boats which were in the water either leaving or returning to the ship at the time of the sudden and unexpected upheaval of the sea.

From the researches made by Medical Director George H. Barber, United States Navy, in command of the naval hospital, Fort Lyon (formerly Las Animas), Colo., it seems to be clearly established that of the cases of tuberculosis received there for treatment, practically all the cases of tuberculosis in the service, a large majority are contracted prior to enlistment. However elaborate the measures for safeguarding the health of the personnel may be, it is inevitable that incipient or latent cases, especially in the young, should find conditions of life in the service, whether in barracks or aboard ship, unfavorable to health.

Burns and gunshot wounds constitute causes of death natural to military service. Among members of the engine-room force burns from steam must occur occasionally, while even without the military activities in Haiti and Santo Domingo deaths from gunshot wounds accidentally incurred are to be expected where thousands of young and inexperienced men are being daily drilled in the use of firearms and at target practice.

Deaths from pneumonia and nephritis have been less frequent in 1916 than the preceding year. These diseases may be regarded as in some measure consequent upon the inevitable exposure inseparable from life at sea.

Disabilities having the greatest number of sick days during 1916 as compared with the years 1913, 1914, and 1915.

	1913	1914	1915	1916
Tuberculosis, chronic pulmonary.....	2	1	1	1
Syphilis.....	1	2	2	2
Gonorrhœa (urethral).....	3	3	3	3
Malaria.....	12	11	10	4
Tonsillitis.....	7	4	4	5
Hernia, inguinal.....	8	8	9	6
Influenza.....	15	15	7	7
Mumps.....	5	6	5	8
Appendicitis.....	4	5	6	9
Otitis media.....	10	10	11	10
Chancroid.....	9	9	12	11
Bronchitis.....	11	7	8	12
Measles.....	6	12	15	13
Pneumonia.....	14	14	14	14
Pleurisy.....	13	13	13	15

In compiling the above table several classes that would have come within the limits have been omitted as being comparatively unimportant in significance or scientifically loose in application. These are (a) gonorrhœal infections other than urethral; (b) rheumatism (all forms); (c) abscess (unqualified); (d) chancroid of lymph node; and (e) tuberculosis (other forms).

VENEREAL DISEASES.—Students of social problems and others seeking statistics in regard to the prevalence of venereal disease turn to the different military organizations for figures, since usually only vague estimates can be obtained from other sources, with the unintentional but inevitable result that the personnel of the services appears in a bad light. There is no available standard of comparison for the civilian population. The fierce light of publicity beats upon the men of the Army and Navy and no definite statistics can be set forth contrasting male civilians with them. Only the trained judicial mind will fail to receive a biased impression in such a situation.

The following facts seem pertinent in this connection:

In 1912 the medical officer of a certain training station in connection with the verification examination of recruits arriving from recruiting stations ascertained that from 7 to 10 per cent of the youths entering the service at that collecting point, aged 17 to 21, had had from one to four attacks of gonorrhœa prior to reporting at the station, according to their own voluntary statements. It is scarcely necessary to remark that these statements, if inaccurate, did not err on the side of exaggeration.

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Hernia, inguinal.....	8	8	9	6
Influenza.....	15	15	7	7
Mumps.....	5	6	5	8
Appendicitis.....	4	5	6	9
Otitis media.....	10	10	11	10
Chancroid.....	9	9	12	11
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Of candidates examined for Navy, Marine Corps, and Reserve Force in 1916, 1.6 per cent were rejected owing to the existence of active venereal disease. This seems at first blush but a small number, yet it has considerable significance. Perhaps it is not superfluous to call attention to the fact that these figures do not show the existence of active venereal disease in 1.6 per cent of the male civilian population, but that 1.6 per cent of apparently healthy males otherwise physically qualified for military service, out of 83,539 examined, are either unaware of their condition or else are too ignorant to appreciate the seriousness of venereal disease and deem it such a negligible matter that they unhesitatingly present themselves for examination, trusting, of course, that it will not be detected. We have in this figure a partial basis for the estimation of the prevalence of venereal disease in civil life which those may well ponder who are inclined to think of military service as an incubator for immorality.

It is to be noted, further, that of 8,197 applicants examined for reenlistment in the Navy and Marine Corps in 1916 only 41 men, or 0.5 per cent, were rejected for genito-urinary disease of venereal origin. Statistics are the source of many fallacies unless every factor is carefully weighed by a compiler free from any desire to establish a definite postulate. It is not intended by the above citation to prove that men applying for reenlistment are as a class morally superior to new candidates. But it would seem legitimate to conclude that men with previous experience of the service have, through instructions received during its course, become imbued with a sense of the seriousness of venereal disease, and consequently either expose themselves less or take greater precautions to avoid it, are more cleanly in their habits, know better than to appear for examination when diseased, or else have received such rational and beneficial treatment as to be rendered fit to perform military duty and incapable of transmitting venereal disease to others, and thus become eligible for enlistment.

During the past year the official circulars of advice and information regarding venereal disease for use in connection with the systematic instruction given both afloat and ashore have been revised and brought up to date.

A special form has been issued and its use made obligatory with a view to establishing in each case of syphilis a scientific diagnosis and an accurate record of its progress and development and to facilitate *coordination of effort* in this particular among the successive medical officers who may handle a particular case.

At our naval training stations special effort has always been made to warn the young recruit against the perils of venereal disease and to safeguard him from them. Soon after the opening of the training station at Great Lakes, for example, systematic instruction along these lines was begun. Each group or company was instructed by a medical officer on the occasion of its transfer and promotion from the detention barracks to the main barracks. Again at the conclusion of the training before a company or companies were transferred to the fleet the departing units were appealed to and instructed and warned.

The bureau takes this opportunity to commend the strenuous efforts put forth by Surgeon W. D. Owens, United States Navy, re-

cently on duty at the training station, Newport, R. I., who carried on while there an active educational campaign against immorality and venereal disease by lectures, posters, exhibits, the local publication, and stereopticon views. Dr. Owens, in addressing the recruits, took high ground and argued that the true patriotic spirit demanded, especially at this juncture, the control of every passion that might lessen efficiency in the country's cause and stigmatized as in every way unworthy the man who deliberately laid himself open to venereal infection, disability, and the necessity of filling a bed in a hospital while a comrade in arms endured the trial of battle and might need that very bed for recuperation from honorable wounds.

In studying the tables showing incidence of venereal disease three important factors in the proper interpretation of them must be understood. In 1909 and thereafter every venereal case was admitted to the sick list. If it was not such as to need to be excused from duty then the admission was "for record only" and the patient was forthwith discharged to duty. This accounts for the sudden increase in figures so noticeable in that year.

In 1912 the use of salvarsan became general and in a large proportion of cases a patient requiring an injection is sent to hospital to receive the treatment which entails from one to three days on the sick list as a minimum. Often the detention there is measured in weeks instead of days.

Since August 29, 1916, all venereal cases lose pay for the time of detention on the sick list. This operates to affect the figures in two ways. Patients will conceal their condition if it is possible for them to do so and therefore absolutely accurate figures are obtainable only from ships where frequent compulsory examinations of the entire crew are made with a view to discovering concealed diseases. Again there is a strong disposition on the part of patients to minimize their suffering or disability so as to reduce the sick days and thereby the loss of pay. Then too medical officers are disposed to abridge the period on the sick list during convalescence when this can safely be done.

Admission rate for venereal disease.

Year.	Average complement.	Chancroid.		Gonorrhoea.		Syphilis.	
		Admissions.	Rate.	Admissions.	Rate.	Admissions.	Rate.
1903.....	37,248	396	10.63	1,032	27.70	816	21.90
1904.....	40,555	542	13.36	1,512	37.28	580	21.69
1905.....	41,313	538	13.00	2,085	50.46	951	23.73
1906.....	42,529	733	17.23	2,640	62.07	1,147	26.96
1907.....	46,336	554	11.95	2,274	49.07	681	19.01
1908.....	52,913	655	12.56	3,015	56.98	1,001	18.91
1909.....	57,172	1,573	27.51	5,861	102.51	1,476	25.81
1910.....	58,340	1,968	33.73	6,062	103.90	1,515	22.54
1911.....	61,399	1,929	31.41	5,658	92.15	1,665	27.11
1912.....	61,897	2,169	35.04	5,403	87.29	1,424	23.00
1913.....	65,926	1,855	28.13	5,320	80.69	1,447	21.94
1914.....	67,141	2,908	43.31	5,703	84.94	1,532	19.83
1915.....	68,075	2,200	32.31	5,985	87.91	1,454	21.35
1916.....	69,294	2,426	35.01	5,731	82.70	1,542	22.26

Primary venereal diseases and sequelæ.¹

Year.	Average comple- ment.	Admis- sions.	Inva- lided or died.	Admis- sion rate.	Days.	Daily average.	Daily average: correct.	Damage.	Damage: correct.
1903.....	37,248	3,961	212	106.07	98,984	271.189	280.364	377.18	.....
1904.....	40,555	4,817	234	118.77	107,007	292.368	279.207	409.36	.....
1905.....	41,313	5,293	163	128.11	105,099	287.668	273.441	369.16	.....
1906.....	42,529	6,348	144	149.26	116,411	318.901	301.542	390.90	.....
1907.....	46,336	5,528	153	119.30	99,126	271.578	256.430	348.07	.....
1908.....	52,913	6,491	186	122.67	105,142	287.273	269.538	380.27	.....
1909.....	57,172	10,961	287	191.71	136,761	374.687	344.675	.....	488.15
1910.....	58,340	11,071	191	189.76	135,507	371.252	340.920	.....	436.43
1911.....	61,399	10,827	185	176.33	161,358	442.076	412.413	.....	534.57
1912.....	61,897	10,495	153	169.55	146,135	399.275	370.601	.....	447.10
1913.....	65,926	9,434	138	143.09	141,378	.....	387.336	.....	456.33
1914.....	67,141	10,932	118	162.82	142,981	.....	391.728	.....	450.73
1915.....	68,075	10,318	101	151.56	150,939	.....	413.531	.....	464.02
1916.....	69,294	10,261	94	148.07	186,984	.....	453.500	.....	500.80

¹ Includes only: (1) Gonorrhœa, (2) chancroid, (3) syphilis, (4) arthritis gonorrhœica, (5) epididymitis, (6) adenitis inguinalis, (7) prostatitis, (8) orchitis, (9) ophthalmia gonorrhœica.

Chancroid.

Year.	Average comple- ment.	Admis- sions.	Inva- lided or died.	Admis- sion rate.	Days.	Daily average.	Daily average: correct.	Damage.	Damage: correct.
1903.....	37,248	396	0	10.63	7,644	20.9424	19.8575	20.94	.....
1904.....	40,555	542	4	13.36	7,661	20.8852	19.4043	22.88	.....
1905.....	41,313	538	2	13.00	5,469	14.9385	13.5095	15.98	.....
1906.....	42,529	733	0	17.23	6,562	17.9726	15.9698	17.97	.....
1907.....	46,336	564	0	11.95	6,311	17.2904	15.7726	17.29	.....
1908.....	52,913	665	0	12.56	6,570	17.9508	16.1338	17.95	.....
1909.....	57,172	1,573	3	27.51	9,539	26.1342	21.8246	.....	23.33
1910.....	58,340	1,968	1	33.73	9,975	27.3227	21.9369	.....	21.63
1911.....	61,399	1,929	0	31.41	12,547	34.3753	29.0904	.....	29.09
1912.....	61,897	2,169	0	35.04	12,634	34.5191	28.5928	.....	24.59
1913.....	65,926	1,855	0	28.13	9,018	.....	24.7068	.....	24.70
1914.....	67,141	2,908	1	43.31	14,749	.....	40.4082	.....	29.89
1915.....	68,075	2,200	0	32.31	10,521	.....	28.8300	.....	28.83
1916.....	69,294	2,426	1	35.01	12,816	.....	35.0163	.....	35.31

Gonorrhœa.

Year.	Average comple- ment.	Admis- sions.	Inva- lided or died.	Admis- sion rate.	Days.	Daily average.	Daily average: correct.	Damage.	Damage: correct.
1903.....	37,248	1,032	4	27.70	11,653	31.8996	29.0715	33.99	.....
1904.....	40,555	1,512	15	37.28	14,953	40.8551	36.7940	48.25	.....
1905.....	41,313	2,085	11	50.46	15,137	41.4712	35.7589	46.96	.....
1906.....	42,529	2,640	7	62.07	17,958	49.2000	41.0671	52.69	.....
1907.....	46,336	2,274	8	49.07	13,912	38.1150	31.8849	42.11	.....
1908.....	52,913	3,015	14	56.98	18,229	49.8060	41.5633	56.80	.....
1909.....	57,172	5,961	33	102.51	28,801	78.0668	62.8219	.....	78.37
1910.....	58,340	6,062	17	103.90	31,813	87.1589	70.5506	.....	73.08
1911.....	61,399	5,658	26	92.15	33,046	93.0027	77.5013	.....	83.09
1912.....	61,897	5,403	26	87.29	35,140	96.0109	81.2486	.....	84.26
1913.....	65,926	5,320	27	80.69	33,204	.....	90.0668	.....	104.06
1914.....	67,141	5,703	10	84.94	36,218	.....	99.2273	.....	104.23
1915.....	68,075	5,985	11	87.91	35,404	.....	102.494	.....	107.09
1916.....	69,294	5,731	7	82.70	43,357	.....	117.91	.....	121.61

Syphilis.

Year.	Average complement.	Admissions.	Inval- ided or died.	Admis- sion rate.	Days.	Damage.
1903.....	37,248	816	132	21.90	34,112	158.45
1904.....	40,555	880	125	21.69	32,389	150.99
1905.....	41,313	981	97	23.73	39,632	157.06
1906.....	42,529	1,147	91	26.96	41,248	158.49
1907.....	46,336	881	106	19.01	32,656	142.45
1908.....	52,913	1,001	118	18.91	36,645	159.09
1909.....	57,172	1,476	171	25.81	49,647	221.49
1910.....	58,340	1,315	118	22.54	47,893	190.19
1911.....	61,399	1,665	84	27.11	66,210	223.39
1912.....	61,897	1,424	75	23.00	56,759	192.55
1913.....	65,926	1,447	74	21.94	62,630	208.57
1914.....	67,141	1,332	51	19.83	53,016	170.72
1915.....	68,075	1,454	63	21.35	65,682	211.43
1916.....	69,294	1,542	67	22.25	67,814	218.75

It is significant that the admission rate for syphilis has practically not varied in 13 years. A marked permanent drop in the number of those dying of the disease or invalidated from the service on account of it is noticeable since 1911, which is approximately the date of the general liberal use in the service of the arsenic preparation of Ehrlich and its congeners, which by permitting intensive treatment has not only reduced the mortality but justified the retention in the service of men who without it would have been discharged.

In interpreting the above table it is to be noted that in 1908 the reporting of every new case of syphilis as an admission for purposes of record, whether it merited hospital treatment or not, was made obligatory, and by 1909 the practice was in full swing.

More important even than the increased therapeutic facilities available for the treatment of syphilis in the Navy is the constant growth of interest in this disease and the intensified efforts of officers of the Medical Corps to eliminate it from the service by (1) education to prevent its acquisition; (2) systematic, progressive, and persistent treatment to cure acquired cases. The menace to military efficiency on the one hand and on the other the vitiating effect of the disease on the moral and physical stamina of society at large is fully appreciated.

TUBERCULOSIS.—The reports for this disease show an increased number of admissions but fewer sick days and a lower mortality than last year, from which one might infer that cases were diagnosed at an earlier period of the disease and so had a better chance of recovery. Statistics are fallacious, however, and the compiler must carefully avoid unwarranted conclusions.

The two points emphasized by the reports from the commanding officer at Fort Lyon, (formerly Las Animas) Colo., Medical Director George H. Barber, United States Navy, are of the utmost importance to the service and should be pondered by every member of the Medical Corps. First is the importance of excluding incipient or latent tuberculosis at the recruiting office by rejecting all applicants with poor physique or who do not conform to standards of weight; who have distinct stigmata of degeneration.

Second, the importance of making an early diagnosis of tuberculosis. While Dr. Barber admits the difficulties that often attend physical diagnosis on a cruising ship, he maintains that the difficulties are not insurmountable. If there is a doubt in the matter, the suspect should not be branded with the designation "tubercular," but should be sent, nevertheless, to hospital ashore for further study and conclusive diagnosis without waiting for those positive, incontrovertible evidences which often come only when all hope of cure has faded.

Tuberculosis.

	Admitted.		Deaths.	Sick days.
	Number.	Rate per 1,000.		
1909.....	311	5.43	40	52,964
1910.....	349	5.98	44	63,443
1911.....	319	5.19	48	64,688
1912.....	264	4.26	32	57,723
1913.....	325	4.92	30	67,423
1914.....	295	4.39	38	80,357
1915.....	253	3.71	36	82,233
1916.....	287	4.14	30	78,688

MALARIA, which in 1916 furnished 1,205 admissions, 12,150 sick days, and 3 deaths, has during the period of this report occasioned 1,859 admissions and 27,386 sick days with but 1 death. In this connection the bureau wishes to advert to the work of Surgeon A. D. McLean, United States Navy, who reports unusually good results in treatment from the use of *concentrated* solutions of quinine by intravenous injections. Passed Assistant Surgeon F. P. W. Hough, United States Navy, has used acid sodium sulphate with telling results to destroy larvæ of mosquitoes in their breeding places at the Indian Head Proving Grounds, Md. The continued military enterprises in Santo Domingo and Haiti account for the high admission rate and large number of sick days under this head.

PNEUMONIA.—There is little difference in the figures for this year as compared with those for the year before.

	Admissions.	Died.	Sick days.
1915.....	288	22	9,156
1916.....	259	18	9,663

Typhoid fever.

Year.	Admitted.		Died.	Sick days.
	Number.	Rate per 1,000.		
1909.....	189	3.30	17	32,376
1910.....	193	3.30	10	3,426
1911.....	222	3.61	15	14,688
1912.....	57	.92	2	5,201
1913.....	22	.33	4	1,007
1914.....	13	.19	0	1,007
1915.....	18	.26	1	1,007
1916.....	17	.24	0	32

In studying the reports on the incidence of typhoid fever it is gratifying to note that another year has passed without a single death from this disease; that the number of admissions and the admission rate per thousand are less than at any time since 1908 with the exception of a single year—1914. On the other hand, the sick days registered for this disease in 1914 were 1,027, as compared with 921 sick days for 1916. With an admission rate of 0.24 per thousand for the past year the extreme value of antityphoid inoculation is once more demonstrated, and it may be positively stated that typhoid fever, so far as injury to the personnel and mortality is concerned, has become a negligible factor, while the necessity for employment of preventive measures becomes ever more conspicuous.

Owing to the military necessity for frequent transfers of large drafts of recruits since the declaration of war the antityphoid treatment, as used and requiring three injections at 10-day intervals, was often interfered with, and it is possible that the figures for next year may show a slight increase in admissions for this disease due to interference with or irregularity in the administration of the preventive treatment. With this in view the bureau has authorized, when deemed necessary by individual medical officers, a reduction of the interval between injections from 10 to 7 days, based on favorable reports of this method received from the warring armies in Europe.

At present the regulations require revaccination against typhoid every four years or on reenlistment. The bureau has under consideration the propriety of shortening this period.

While the antityphoid vaccination is compulsory for all recruits, a certain number of them every year are excused from this treatment because of their positive declaration that they had experienced an attack of typhoid fever prior to enlistment. In a certain number of cases such a statement may be incorrect, owing to error in diagnosis, ignorance, and the inaccuracy of the young, though made with perfect sincerity and in good faith. In this fact may lie the explanation of the development of some of the small number of cases occurring in the service.

Statistics on typhoid fever from 1900 to 1916, inclusive, giving admissions, deaths, and comment on deaths since prophylaxis began in (Feb.) 1912.

Year.	Admissions.	Deaths.	Year.	Admissions.	Deaths.
1900.....	175	25	1909.....	191	16
1901.....	195	14	1910.....	194	9
1902.....	125	13	1911.....	222	15
1903.....	188	20	1912 ¹	57	2
1904.....	194	19	1913 ²	22	4
1905.....	172	10	1914.....	13	1
1906.....	230	14	1915 ³	18	0
1907.....	249	16	1916.....	17	0
1908.....	176	10			

¹ Prophylaxis began in February of this year. Of the deaths one was a case that had received no prophylactic treatment.

² Of the four deaths only one case had received the full protective treatment. One had received none. Two cases had had only the first injection.

³ All injections given.

In conclusion, it is to be noted that during a period of five years there were in all 7 deaths in the Navy from typhoid fever; that the ratio of admissions per 1,000 has dropped from an average of 3.40

for the 1909 to 1911 period (prior to compulsory use of preventive treatment) to an average admission rate for the 1912 to 1916 period of 0.388; the highest admission rate for the whole eight-year period being 3.61 in 1911 and the lowest 0.19 in 1914.

Contagious diseases.

	Admissions.		Deaths.		Sick days.	
	1915	1916	1915	1916	1915	1916
Mumps.....	1,053	726	0	0	24,781	16,515
Measles.....	308	523	3	0	7,472	10,576
Scarlet fever.....	61	91	0	0	2,430	3,767
German measles.....	100	80	0	0	921	1,286
Diphtheria.....	38	48	1	1	1,401	1,467
Smallpox.....	5	4	1	1	211	32

In the above list the only disease directly preventable by special methods is smallpox. Vaccination is compulsory in the service and every effort is made to insure protection from smallpox for the naval personnel by repeating treatment if a good *pitted* scar is not obtained. During the fiscal year 1916 there were issued to medical officers of the service 62,697 vaccine points.

Unfortunately vaccination is grossly neglected in many sections of our country and a very considerable proportion of candidates presenting themselves for enlistment show no scars on the arm.

In the city of Eastport, Me., in December, 1916, less than 10 per cent of the children enrolled in the schools had been vaccinated, and of those below the grammar grades, less than 5 per cent.

In December, 1916, the State of Kansas reported 183 cases of smallpox. Of the patients, 84 had never been successfully vaccinated. 89 were unable to give any definite history of vaccination, only one had been vaccinated within seven years, while 9 had been vaccinated more than seven years prior to the attack.

For years Waterbury has been the stronghold of anti-vaccination in Connecticut. Between June, 1916, and March, 1917, there have been reported in that State 378 cases of smallpox, two-thirds of which occurred in Waterbury. About 3 per cent of the cases had been vaccinated; two cases, 15 years before the attack; three, 20 years before; one, 30 years before; four, over 40 years before. Prior to compulsory vaccination of school children in Waterbury (January 1, 1917) 50 had been infected. Since that date not a child has caught smallpox, though adults continue to contract it.

It is interesting to note that New Haven and Hartford, cities of 110,000 to 150,000 inhabitants, and but thirty-odd miles from Waterbury, had but one case of smallpox between them. In those two towns from 80 to 85 per cent of the population was protected by vaccination, whereas only 45 per cent of the population of Waterbury had such protection. Subsequently 25,000 vaccinations were performed in Waterbury alone without a fatality and with an average loss of time from temporary disability incident to the vaccination, of less than one hour per individual.

These figures are quoted here because they are typical of the large and ever growing mass of evidence in favor of vaccination which justifies its compulsory use in Government services.

As the statistical tables for the health of the Navy are made up for the calendar year, accurate figures are not yet available to show the exact extent to which contagious diseases were acquired through the large influx from the civilian population occasioned by the authorized increase in numerical force, but there have been many cases of mumps, measles, scarlet fever, and cerebro-spinal meningitis. The last named is of special importance. During the months of March, April, May, and June, 1917, there were treated at the naval hospital, Norfolk, Va., 112 cases, with 29 deaths, 7 of the cases dying on first or second day of hospital treatment (i. e., were advanced cases before they received the benefit of hospital treatment). These figures roughly represent the incidence of the disease in the fleet, to which it was taken from training camps. During the months in question the Navy had been increasing from its strength of 69,294 in 1916 to a strength of 125,363, attained June 27, 1917. The following table shows the number of cases of cerebro-spinal meningitis and the deaths therefrom in the Navy and its total enlisted strength for 15 years:

Table of cerebro-spinal meningitis.

Year.	Number of cases.	Deaths.	Average strength of Navy and Marine Corps.
1902.....	1	0	31,240
1903.....	30	8	37,248
1904.....	10	5	40,555
1905.....	21	9	41,313
1906.....	17	14	42,529
1907.....	30	14	46,336
1908.....	28	12	52,913
1909.....	11	2	57,172
1910.....	6	1	58,340
1911.....	12	3	61,399
1912.....	22	0	61,897
1913.....	9	6	65,926
1914.....	14	1	67,141
1915.....	19	4	68,075
1916.....	2	1	69,294

The outbreaks of this disease in military services have commonly been ascribed in the past to overcrowding and other insanitary conditions in concentration camps. The older books speak vaguely of the effect of collecting large numbers of young men of susceptible age in causing outbreaks of the disease. Undoubtedly the disease spreads under these circumstances, but where and how does it originate? The time has gone by when the sailor can be regarded as in any sense a menace to civilian communities. We know, for example, that he has less venereal disease than the civilian, is more thoroughly treated when he does acquire it and lives under far more favorable conditions for health while in the service than before he entered it.

When cerebro-spinal meningitis threatened to become epidemic in the British Army in 1915, it was appreciated by the authorities that the epidemic must be closely related to the condition of the civilian population. There had indeed been a sudden and widespread epidemic in the British Isles in the winter of 1914-15 with a death rate of 50 to 60 per cent.

Since September 1, 1912, the reporting of cerebro-spinal meningitis has been compulsory in England and Wales. The following

table shows the prevalence of this disease from 1912 to 1915, both inclusive, but the report for 1912 is a partial one only:

1912	1913	1914	1915
272	304	315	2,566

In addition to the 2,566 cases of cerebro-spinal meningitis reported for the civil population, 1915, there were in that year 1,146 cases in the military population of England and Wales, exclusive of cases reported from the armies in the field. The epidemic reached its height during the middle of March and declined rapidly after April. The smallest number of reported cases was in August and September. In 1916 there was a big drop in the number of cases reported. Thus for the week ending April 1 there were 112 cases reported in 1916, as compared with 209 in the week ending March 13, 1915. For the week ending April 15, 1916, there were 61 cases reported, as compared with 163 cases reported during the corresponding week in 1915.

In our own country we recall a large epidemic in New York and other parts of the United States, 1904 to 1906, with a death rate often reaching 75 per cent or higher, and the following year the disease appeared extensively in Ireland.

In 1912 there was a severe epidemic in Texas. A reference to the table above shows that immediately before, during, and immediately after these years of increased meningitis in our country the Navy rate rose markedly and then fell in 1916 to what it had been 14 years before (1 case in 1902 among a personnel numbering 31,240, and 2 cases in 1916 with a personnel of 69,294).

A study of the prevalence of this disease as shown in the carefully compiled reports of the United States Public Health Service yields interesting food for thought. We note that 26 States reported 890 cases of cerebro-spinal meningitis in the first six months of 1916, and 3,421 cases in the corresponding period of the present year. In 22 States there was an increase, in 4 a decrease. In Connecticut the cases reported jumped from 49 to 416; in Kansas, from 29 to 122; in Massachusetts, from 88 to 144; in Minnesota, from 16 to 379; in New York, from 196 to 363; in Ohio, from 89 to 539; in Pennsylvania, from 79 to 787; in Wisconsin, from 69 to 121; in Wyoming, from 5 to 3.

Number of cases of cerebro-spinal meningitis reported by United States Public Health Service during the first six months of 1916 and 1917.

	1916	1917		1916	1917
Alabama	24	8	New Jersey		2
California	32	36	New York	196	363
Colorado		1	Ohio	89	539
Connecticut	49	416	Pennsylvania	79	787
District of Columbia	5	29	Rhode Island	12	38
Indiana	15	88	South Carolina	5	7
Iowa	7	16	Vermont	7	1
Kansas	29	122	Virginia	74	95
Louisiana	18	10	Washington	6	9
Maryland	26	136	West Virginia	20	31
Massachusetts	88	144	Wisconsin	69	121
Minnesota	16	379	Wyoming	5	3
Mississippi	15	11			
Montana	4	1		890	3,421

The following table shows the increase in the same period in 10 important cities of the United States. It would seem from what has gone before that we are justified in concluding that the military services reproduce and emphasize the conditions prevalent in civilian communities, and derive their contagious diseases from them. The conditions of service are inevitably favorable to the spread of cerebro-spinal meningitis when so introduced, unless there is general cooperation to combat it.

Cerebro-spinal meningitis during six months from Jan. 1 to June 30.

	1916	1917		1916	1917
Boston.....	39	35	New York.....	159	221
Chicago.....	60	160	Philadelphia.....	29	379
Cleveland.....	32	133	San Francisco.....	1	11
Detroit.....	9	150	St. Louis.....	33	140
Kansas City, Mo.....	5	47			
Milwaukee.....	40	33		411	1,309

Trachoma.

Year.	Average complement.	Admissions.
1912.....	61,897	3
1913.....	65,926	8
1914.....	67,141	8
1915.....	68,075	31
1916.....	69,294	12

No explanation can be offered for the rather striking disproportionate sudden increase of admissions in 1915.

In concluding this brief summary of the many forms of endeavor planned, undertaken, or accomplished during the vital period embraced in this report, it is my duty and pleasure to invite the attention of the honorable Secretary of the Navy to the loyalty, fidelity, and energy displayed by those associated with me in all branches of the Medical Department. Medical and dental officers and members of the Nurse Corps and the Hospital Corps have displayed unflagging zeal in the performance of their work, and this has been equally true of the civilian force, beginning with the Chief Clerk of the bureau, who for many years has toiled early and late to further the best interests of the service.

W. C. BRAISTED.

STATISTICS.

PREFACE.

The basis for all medical department statistics lies in the forms used in connection with the preparation and keeping of the "Health Record," which deals with the physical requirements and health of the personnel of the Navy and Marine Corps.

Table No. 1.—Detailed statement of diseases and injuries for the calendar year.

(a) This table gives an alphabetical list of disabilities, the Navy class and international numbers (from the Navy nomenclature), shows the method of taking up and disposing of all cases, the number of sick days or time lost to the service (from Form F cards), and a summary with comparative data for 10 previous years (from Form K).

(b) The class number (Roman numerals) refers to the classification of the Navy nomenclature as follows:

- I. Diseases of blood.
- II. Diseases of circulatory system.
- III. Diseases of digestive system.
- IV. Diseases of ductless glands and spleen.
- V. Diseases of ear.
- VI. Diseases of eye and adnexa.
- VII. Diseases of genito-urinary system (nonvenereal).
- VIII. Diseases of infective type (nonvenereal).
- IX. Diseases of infective type (venereal).
- X. Diseases of lymphatic system.
- XI. Diseases of mind.
- XII. Diseases of motor system.
- XIII. Diseases of nervous system.
- XIV. Diseases of respiratory system.
- XV. Diseases of skin, hair, and nails.
- XVI. Hernias.
- XVII. Miscellaneous diseases and conditions.
- XVIII. Parasites (fungi and certain animal parasites).
- XIX. Tumors.
- XX. Injuries (wounds, etc.).
- XXI. Poisons.

(c) The international number refers to the classification of diseases and injuries prepared by the International Commission (Paris, July 1 to 8, 1900).

(d) In the case of wounds, etc., and poisons, key letters immediately following the title (e. g., Abrasion, unqualified "G") are given for classification of the cause of such injury, and are interpreted as follows:

- A. Suicidal.
- B. Homicidal.
- C. Conflagration. Includes all injuries incident to general conflagration. Burns otherwise received are not classed hereunder.
- D. Accidental drowning or submersion.
- E. Traumatism by firearms, accidental. To include all injuries caused by the projectile, the blast from great guns, or from the piece when fired.
- F. Traumatism by explosion. To include powder, gas, compressed air, or steam explosions; also the explosion of a gun.
- G. Traumatism by fall.
- H. Traumatism by machines.
- I. Traumatism by other crushing.
- J. Traumatism due to athletic sports.
- K. Casualty in action.
- L. Traumatism due to other external violence not classified above.

(e) Figures from previous days for the preparation of the summary are as follows:

Year.	Average complement.	Number of cases. ¹	Deaths.	Invalided from service.	Sick days.
1906.....	42,529	43,714	241	1,117	518,461
1907.....	46,336	40,875	263	1,324	498,230
1908.....	52,913	46,390	306	1,878	545,603
1909.....	57,172	51,341	286	1,704	578,842
1910.....	58,340	50,752	363	1,556	613,656
1911.....	61,399	52,953	252	1,559	671,390
1912.....	61,897	50,565	252	1,345	645,079
1913.....	66,926	50,106	252	1,319	682,090
1914.....	67,141	59,526	251	1,426	729,305
1915.....	68,075	65,074	306	1,272	776,208

¹ Number of cases includes remaining from last year, admitted and readmitted.

Table No. 2.—Distribution of diseases and injuries among occupational groups for the calendar year.

(a) This table shows by occupational groups the class of disability, average complement, number of admissions, deaths, suicides, invalided from service (with rates per 1,000), sick days, and a damage figure; also a total for all occupations giving admissions, deaths, invalided from service (with rates per 1,000 based on the entire service complement), sick days, and a damage figure.

(b) The average complement for each occupational group is obtained from the Navy Year Book, except in the case of prisoners, which is obtained from the office of the Judge Advocate General of the Navy, and grouped as follows:

Officers: Line, medical, dental, pay, chaplain, professor of mathematics, naval constructor, civil engineer, chief and warrant, and Marine Corps.

Midshipmen: All classes of this personnel.

Electricians: All classes of this rating.

Engine room: Machinist's mate and oller.

Fireroom: Fireman and water tender.

All other artificers: Blacksmith, boiler maker, carpenter's mate, coppersmith, painter, plumber and fitter, printer, sailmaker's mate, ship fitter, and shipwright.

Clerical: Storekeeper and yeoman.

Culinary: Baker, commissary steward, cook, messman, ship's cook, and steward.

Hospital Corps: All ratings of this corps.

Marines (enlisted): All enlisted ratings except Marine Band and drummer and trumpeter.

Musicians: Bandmaster, bugler, drummer, leader, musician, and trumpeter.

Prisoners: Detentioners and general court-martial prisoners.

Apprentices: Apprentice seamen.

Ordnance: Gunner's mate and turret captain.

All other deck ratings: Boatswain's mate, coxswain, landsman, master-at-arms, mate, quartermaster, seaman, and seaman-gunner.

(c) Number of admissions, deaths, suicides, invalided from service and sick days obtained from Form F cards.

(d) Rate per 1,000 is based on the average complement at the heading for each group.

(e) Damage is in terms of individuals whose loss of service by sickness, discharge from service, or death would be represented as continuous throughout the year. Damage, at the bottom of the table, is based on the average complement and figures under each group and for all occupations, at the right of the table, for the average complement and figures under "Totals for all occupations."

Damage is estimated by adding the death rate to the invalided rate and dividing this sum by 20 (see Gatewood's Hygiene); to this product add the percentage of sick, then multiply this sum by the average complement divided by 100.

Death rate and invalided rate is obtained by dividing the number of deaths or invalided by the average complement divided by 1,000.

Percentage of sick is obtained by dividing the daily average of patients by the average complement and multiplying this product by 100.

Daily average of patients is obtained by dividing the sick days by the number of year days.

Table No. 3.—Casualties in the Navy and Marine Corps for the calendar year. This table is a summary of deaths, showing the cause, number, and the distribution among the officers and men.

Table No. 4.—Discharged from the service by reason of physical disability during the calendar year. This table is a summary of those invalided from the service or retired on account of physical disabilities, showing the disability, number, and distribution among the officers and men.

Table No. 5.—Surgical operations for the calendar year. This table is a summary of surgical operations performed, showing the condition for which the operation was performed, result of the operation, and the anesthetic employed.

Table No. 6.—Dental operations for the calendar year. This table shows a summary of dental operations and treatment, together with the number for each kind.

Table No. 7.—Recruiting statistics for the Navy and Marine Corps for the calendar year. This table is a summary of persons applying, examined, and enlisted showing the total number of applicants, total enlisted, number examined by the medical officer, number rejected by the medical officer for physical disqualifications, in the Navy for original and reenlistment, in the Marine Corps for original and reenlistment; also accepted applicants reexamined, and the number examined, etc., for all classes of the Naval Reserve and for civilians cruise.

A list of the principal causes of rejection by the medical officer is also appended.

TABLE 1.—DETAILED STATEMENT OF DISEASES AND INJURIES FOR THE CALENDAR YEAR 1916.

Diagnosis.	Taken up as—			Disposition.						Number of sick days this year.
	Remaining from last year.	Admitted.	Readmitted.	Duty.	Diagnosis changed.	Died.	Invalided from service.	Ran.	Transferred.		Continued to next year.
DISEASES.										
Abscess about rectum (Class III, Inter. 110B).....	3	91	53	91	10	1		39		14
Abscess about urethra (Class VII, Inter. 125).....		3	1	3	1					11
Abscess of axilla (Class X, Inter. 84).....	2	34	6	38				4		11
Abscess of brain (Class XIII, Inter. 60).....		2				2				3
Abscess of eye and adnexa (Class VI, Inter. 75C).....		5		5						3
Abscess of kidney (Class VII, Inter. 122).....		1	2	1	1			1		3
Abscess of kidney, perinephritic (Class VII, Inter. 122).....	2	5	7	5	3	1		5		10
Abscess of liver (Class III, Inter. 115).....	1	5	5	4	2	3		2		10
Abscess of lung (Class XIV, Inter. 98).....	1	3	3	2	1	1		3	1	10
Abscess of lymph-node (Class X, Inter. 84).....	1	32	4	33	1			2	1	10
Abscess of pharynx (Class XIV, Inter. 87).....	1	10	3	11				3		10
Abscess of prostate gland (Class VII, Inter. 126).....		4	2	3				2		10
Abscess of salivary gland (Class III, Inter. 99B).....		3	2	3				1	1	10
Abscess of scrotum (Class VII, Inter. 127).....		3		3						10
Abscess, subphranic (Class III, Inter. 118).....		2	2	1	1	1		1		10
Abscess, unqualified (Class VIII, Inter. 144).....	35	1,465	201	1,507	47		1	207		10
Achylia gastrica (Class III, Inter. 103).....	1	2	2	3	1			1		10
Acidosis, nondiabetic (Class XVII, Inter. 55).....		1		1						10

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Acne (Class XV, Inter. 145C).....	2	14	14	19	1				9	1	687
Adenoids (Class XIV, Inter. 96).....	1	18	11	15	3				11	1	288
Adenoma (Class XIX, Inter. 46).....		5	5	5	1				4		115
Adhesions about gall bladder (Class III, Inter. 115).....		3	4	3	2				2		117
Adhesions about stomach (Class III, Inter. 117).....		1					1				24
Adhesions of peritoneum (Class III, Inter. 117).....	5	28	58	33	14		7		34	3	1,895
Adhesions, preputial (Class VII, Inter. 127).....		1	1	1					1		6
Albuminuria (Class VII, Inter. 120).....		8	4	7	1		1		3		232
Alopecia areata (Class XV, Inter. 145C).....	1	2		3							55
Amaurosis (Class VI, Inter. 75C).....		3	2		1		2	1	1		57
Amblyopia (Class VI, Inter. 75C).....		4	6	3	1		1		5		144
Amputation stump (Class XVII, Inter. 149).....	1	5	5	5					2	1	250
Anemia, simple (Class I, Inter. 54).....	1	18	18	11	6		3		14	4	896
Aneurism (Class II, Inter. 81).....	1	4	4	1	2	2	1		3		163
Angina ludovici (Class III, Inter. 160).....		2	2	2	1				1		42
Angioma (Class XIX, Inter. 46).....		1		1							5
Angioedema (Class XIII, Inter. 74).....		3	3	2	1				2	1	57
Ankylosis of joint (Class XII, Inter. 147).....	2	21	19	15			9		16	2	733
Ankylosis of ossicles (Class V, Inter. 78).....		1	1		1				1		3
Antinucleation.....unqualified (Class XVII, Inter. 189A).....		212	20	212	4				15	1	526
Aphasia (Class XIII, Inter. 74).....		1					1				9
Apoplexy (Class XIII, Inter. 64).....		1				1					
Appendicitis, acute (Class III, Inter. 108).....	25	497	347	461	74	6		2	287	39	14,989
Appendicitis, chronic (Class III, Inter. 108).....	18	159	160	168	21	1	2	1	117	27	5,961
Arterial sclerosis, cerebral (Class XIII, Inter. 81).....	1	1	2						4		348
Arterial sclerosis, general (Class II, Inter. 81).....	2	8	17	7	5		3		12		811
Arthritis, acute (Class XII, Inter. 147).....	4	70	24	69	9		1		17	2	1,266
Arthritis, chronic (Class XII, Inter. 147).....	9	39	60	32	14		9		41	12	2,649
Arthritis, deformans (Class XII, Inter. 148A).....		2	1	1			1		1		131
Ascariasis (Class XVIII, Inter. 107).....	1	44	12	43	5				8	1	385
Asthma (Class XIV, Inter. 96).....	4	24	57	38	4	1	11		29	2	1,038
Astigmatism (Class VI, Inter. 75C).....	1	54	56	44	15		9		38	5	1,042
Atrophy of muscle (Class XII, Inter. 149).....		1	1	1			1				21
Atrophy of optic nerve (Class VI, Inter. 75C).....	1	3	3		2		3		2		217
Atrophy of testicle (Class VII, Inter. 127).....		3	2	3					2		131
Auto-intoxication, intestinal (Class III, Inter. 110B).....	2	128	23	126	11				11	5	719
Balanoposthitis (Class VII, In- ter. 127).....		22	4	22	1				3		137
Blepharitis (Class VI, Inter. 75C).....		5	4	6					2	1	128
Bradycardia (Class II, Inter. 85).....		2	3	2	1				2		88
Bromidrosis (Class XV, Inter. 145C).....		1					1				10
Bronchiectasis (Class XIV, In- ter. 90).....		1									11
Bronchitis, acute (Class XIV, Inter. 90).....	24	1,044	253	1,022	67			1	186	45	8,065
Bronchitis, chronic (Class XIV, Inter. 90).....	14	127	155	100	60		16	1	104	15	4,097
Bursitis, acute (Class XII, Inter. 149).....	1	49	14	47	5				11	1	669
Bursitis, chronic (Class XII, In- ter. 149).....	1	30	16	28	3				14	2	686
Caisson disease (Class XIII, In- ter. 74).....			2	1					1		16
Calculus in bladder (Class VII, Inter. 123).....	1	1	6	4	1				3		185

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Calculus in ureter, impacted (Class VII, Inter. 123)		4	2	3					3		36
Calculus in urethra, impacted (Class VII, Inter. 123)			1	1					2		12
Callositas (Class XV, Inter. 145C)		8		8					2		121
Carbuncle (Class VIII, Inter. 143)	1	60	10	60		1			10		673
Carcinoma (Class XIX, Inter. 39-45)	3	7	7	1	3	5	1		6	1	862
Cardiospasm (Class III, Inter. 103)		1		1							10
Caries of tooth (Class III, Inter. 99A)		43	11	38	3		4		8	1	197
Carrier, diphtheria bacillus (Class VIII, Inter. 9b)	4	50	37	52	1		1		37		1,622
Cataract (Class VI, Inter. 75C)	3	6	12	5	1		3		9		645
Cellulitis (Class VIII, Inter. 144)	5	382	121	388	12		1		94	13	4,830
Cerebro-spinal fever (Class VIII, Inter. 61a)	1	2	5	1	1	1	1		4		213
Cerumen, accumulation of (Class V, Inter. 76)		2	2	2	1				1		3
Chalazion (Class VI, Inter. 75C)		7	1	7					1		35
Chancroid (Class IX, Inter. 88A)	27	2,426	479	2,504	152		1	1	255	19	12,816
Chancroid of lymph-node (Class IX, Inter. 88A)	35	215	588	547	62			2	202	25	14,406
Chickenpox (Class VIII, Inter. 19)	7	62	55	62	13				43	6	1,120
Chilblain (Class XV, Inter. 145C)		1		1							0
Cholangitis, acute (Class III, Inter. 115)	6	142	73	141	13				62	5	2,888
Cholangitis, chronic (Class III, Inter. 115)	1	4	4	3	2				3	1	16
Cholecystitis, acute (Class III, Inter. 115)	2	39	29	36	10				22	2	858
Cholecystitis, chronic (Class III, Inter. 115)	1	11	11	11	3				8	1	67
Cholelithiasis (Class III, Inter. 114)	3	17	30	16	7				21	6	794
Cholera, Asiatic (Class VIII, Inter. 12)		2	5	3	2				2		0
Chondroma (Class XIX, Inter. 46)	1	2	1	1	1				1		4
Chorea (Class XIII, Inter. 72)		3	5	1	1		1		4		36
Chorea, chronic, progressive (Class XIII, Inter. 74)		1					1				5
Choroiditis (Class VI, Inter. 75C)	3	2	3	3			2		2	1	171
Cicatricial contraction (Class XVII, Inter. 145C)		2	2	2					2		24
Cicatrix of skin (Class XV, Inter. 145C)	1	3	1	2					1		67
Cirrhosis of liver, atrophic (Class III, Inter. 113)		2			1	1					17
Cirrhosis of liver, hypertrophic (Class III, Inter. 113)	1	3	4	3	1	1	1		2		251
Clavus (Class XV, Inter. 146C)	3	26	3	31					1		200
Colitis, acute (Class III, Inter. 105B)	1	17	9	20	2				5		134
Colitis, chronic (Class III, Inter. 105B)		3	6	4	1				3	1	9
Color blindness (Class VI, Inter. 75C)		3					3				19
Congestion of kidney (Class VII, Inter. 122)		1		1							3
Congestion of lung, acute (Class XIV, Inter. 94)		6	4	4	2				3	1	36
Conjunctivitis, acute (Class VI, Inter. 75A)	5	240	60	236	11				53	5	1,322
Conjunctivitis, chronic (Class VI, Inter. 75A)	2	19	20	22	2		4		13		79
Conjunctivitis phlyctenular (Class VI, Inter. 75A)		4		3							12
Constipation (Class III, Inter. 110B)	4	262	52	250	23		1		30	4	1,622
Constitutional inferiority (Class XI, Inter. 68)	2	54	43	7	11		48		30	3	1,322
Constitutional psychopathic state (Class XI, Inter. 68)	1	20	15	8	4		12		10	2	60
Contracture of joint (Class XII, Inter. 147)		1		1							3
Contracture of (muscle, fascia, tendon, or sheath) (Class XII, Inter. 149)	1	9	10	8			3		6	3	28

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Cornu (Class XV, Inter. 145C).....		2		2							22
Cramp of ciliary muscle (Class VI, Inter. 76C).....		1		1							8
Cramp of muscle (Class XII, Inter. 149).....		17	1	17					1		103
Curvature of spine (Class XII, Inter. 36C).....		4	4	1	1		2		3	1	78
Cyuitis (Class VI, Inter. 76C).....		1								1	12
Cystitis, acute (nonvenereal) (Class VII, Inter. 124).....		55	19	50	6				16	2	1,050
Cystitis, chronic (nonvenereal) (Class VII, Inter. 124).....		6	10	8	5				5		709
Cystoma (Class XIX, Inter. 46).....	1	36	19	31	4				17	4	704
Dacryocystitis (Class VI, Inter. 75C).....		5	9	6			1		7		140
Deafness (Class V, Inter. 76).....	1	21	14	9			9		12	6	1,086
Deformity of nose, acquired (Class XIV, Inter. 86).....	2	25	24	25	1				22	3	791
Deformity of stomach, acquired (Class III, Inter. 103).....			3	1	1				1		124
Dementia, cause unknown (Class XI, Inter. 68).....	2	9	16		10		1		15	1	701
Dementia, paralytica (Class XI, Inter. 67).....	11	11	25	3	4	5	5		19	11	4,072
Dementia, praecox (Class XI, Inter. 68).....	15	56	141	4	31		40		122	15	6,572
Dengue (Class VIII, Inter. 19).....	2	280	22	282	3				14	5	1,683
Dentition (Class XVII, Inter. 189A).....	1	3		4							45
Dermatitis, unqualified (Class XV, Inter. 145C).....	1	60	36	58	15				23	1	1,124
Dermatitis, venenata (Class XV, Inter. 145C).....		42	10	44	2				6		280
Detachment of retina (Class VI, Inter. 76C).....	1	1	2	1			1		2		136
Deviation of nasal septum (Class XIV, Inter. 86).....	9	160	127	151	7		3	1	118	16	4,501
Diagnosis undetermined (Class XVII, Inter. 189A).....		3	2					2	2	1	46
Diabetes insipidus (Class XVII, Inter. 55).....		3	8		3		3		5		96
Diabetes mellitus (Class XVII, Inter. 50).....	11	28	6	4	1	5			21	2	662
Dilatation, acute cardiac (Class II, Inter. 79C).....		10	7	3	2	4			6	2	334
Dilatation, chronic cardiac (Class II, Inter. 79C).....	1	2	5	2	1				5		126
Dilatation of stomach, chronic (Class III, Inter. 103).....		1	1	1					1		23
Diphtheria (Class VIII, Inter. 9).....	5	48	15	43	8	1			13	3	1,407
Duodenitis (Class III, Inter. 105B).....	1	12	3	12	1				3		200
Dysentery, bacillary (Class VIII, Inter. 14A).....		9	3	9	1				2		109
Dysentery, balantidic (Class XVIII, Inter. 14B).....		2	2	1	1				2		83
Dysentery, antamebic (Class XVIII, Inter. 14B).....	8	54	80	71	9	2			55	5	2,573
Dysentery, unclassified (Class VIII, Inter. 14D).....		94	22	100	1	1			11	3	757
Dysidrosis (Class XV, Inter. 145C).....		3		3							83
Dystrophy, progressive muscular (Class XIII, Inter. 63).....	1	1							1	1	75
Ecthyma (Class XV, Inter. 145C).....		2		2					1		17
Ectropion (Class VI, Inter. 76C).....		1	1	1					1		19
Exzema (Class XV, Inter. 145C).....	8	86	68	106	6		2		39	9	3,336
Elongation of uvula (Class III, Inter. 100).....		1	1	1					1		2
Emphysema, pulmonary (Class XIV, Inter. 97).....		1	2		1				1	1	18
Encephalitis, acute (Class XIII, Inter. 60).....		1	1		1				1		3
Endocarditis, acute (Class II, Inter. 78).....		15	9	4	6	1	2		9	2	471
Endocarditis, chronic (Class II, Inter. 79B).....	1	13	12	3	2	3	8		9	1	430
Enlargement of prostate (Class VII, Inter. 126).....		1		1							27
Enteritis, acute (Class III, Inter. 105B).....	2	647	98	645	40				58	4	2,555

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Enteritis, chronic (Class III, Inter. 105B).....	2	11	12	9	6	.....	1	.....	8	1	87
Enterocolitis (Class III, Inter. 105B).....	.....	9	3	11	.....	.....	.....	.....	1	.....	32
Epididymitis, acute (nonvenereal) (Class VII, Inter. 127)....	1	42	18	44	3	.....	.....	.....	10	4	655
Epididymitis, chronic (nonvenereal) (Class VII, Inter. 127)....	1	7	3	7	1	.....	1	.....	2	.....	169
Epilepsy (Class XIII, Inter. 69).....	4	70	85	26	15	.....	39	.....	66	11	2,536
Epistaxis (Class XIV, Inter. 85).....	.....	7	2	5	2	.....	.....	.....	2	.....	31
Epthelioma (Class XIX, Inter. 39-45).....	1	6	11	8	2	.....	1	.....	7	.....	58
Erysipelas (Class VIII, Inter. 18).....	4	31	15	32	.....	3	.....	.....	14	1	621
Erythema multiforme (Class XV, Inter. 145C).....	1	9	4	8	3	.....	.....	.....	2	1	97
Erythema nodosum (Class XV, Inter. 145C).....	.....	2	1	3	.....	.....	.....	.....	.....	.....	3
Erythema scarlatiniforme (Class XV, Inter. 145C).....	.....	3	4	2	2	.....	1	.....	2	.....	39
Erythema simplex (Class XV, Inter. 145C).....	.....	3	1	3	.....	.....	.....	.....	1	.....	44
Eustachian salpingitis, acute (Class V, Inter. 76).....	.....	3	1	3	.....	.....	.....	.....	1	.....	51
Eustachian salpingitis, chronic (Class V, Inter. 76).....	.....	2	2	.....	1	.....	1	.....	2	.....	35
Exophthalmic goiter (Class IV, Inter. 51).....	.....	9	11	4	2	.....	3	.....	10	1	729
Favus (Class XVIII, Inter. 25B).....	.....	2	2	1	1	.....	.....	.....	2	.....	32
Fermentation, gastric (Class III, Inter. 103).....	.....	5	1	5	.....	.....	.....	.....	1	.....	26
Fermentation, intestinal (Class III, Inter. 105B).....	.....	9	2	9	.....	.....	.....	.....	2	.....	21
Fever of unknown cause (Class VIII, Inter. 189A).....	1	343	87	346	39	.....	.....	.....	41	5	2,487
Fibroma (Class XIX, Inter. 46).....	.....	11	3	11	1	.....	.....	.....	3	.....	103
Filariasis (Class XVIII, Inter. 19).....	.....	2	4	2	1	.....	1	.....	.....	.....	103
Fissure of anus (Class III, Inter. 110A).....	2	7	10	9	1	.....	1	.....	3	.....	691
Fissure of skin (Class XV, Inter. 145C).....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1
Fistula, fecal (Class III, Inter. 110A).....	.....	2	4	4	1	.....	.....	.....	1	.....	179
Fistula in ano (Class III, Inter. 110A).....	8	47	40	45	6	.....	1	.....	34	4	2,119
Fistula of salivary (gland or duct) (Class III, Inter. 99B).....	1	2	1	1	1	.....	1	.....	1	.....	102
Fistula of urethra (Class VII, Inter. 125).....	1	1	2	1	.....	.....	.....	.....	1	.....	26
Flagellate diarrhea (Class XVIII, Inter. 105B).....	2	7	6	9	2	.....	.....	.....	4	.....	121
Folliculitis decalvans (Class XV, Inter. 145C).....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	4
Foreign body in auditory canal (Class V, Inter. 76).....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1
Foreign body in stomach (Class III, Inter. 103).....	.....	2	1	2	.....	.....	.....	.....	1	.....	16
Foreign body in ureter (Class VII, Inter. 122).....	.....	1	2	1	1	.....	.....	.....	1	.....	11
Foreign body in urethra (Class VII, Inter. 125).....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	4
Functional derangement of liver (Class III, Inter. 115).....	1	20	12	19	5	.....	.....	.....	7	.....	10
Furunculosis (Class VIII, Inter. 143).....	4	635	77	658	5	.....	.....	.....	43	10	6,000
Ganglion (Class XII, Inter. 149).....	2	5	4	7	.....	.....	1	.....	3	.....	10
Gastritis, acute catarrhal (Class III, Inter. 103).....	8	190	70	190	29	.....	.....	.....	35	5	1,000
Gastritis, chronic catarrhal (Class III, Inter. 103).....	11	73	112	71	37	.....	4	1	69	14	1,000
Gastritis, acute phlegmonous (Class III, Inter. 103).....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1
Gastroduodenitis (Class III, Inter. 105B).....	1	34	9	35	3	.....	.....	.....	6	.....	10
Gastroenteritis (Class III, Inter. 105B).....	1	294	60	291	23	.....	.....	.....	26	5	1,000
Gastroptosis (Class III, Inter. 106).....	1	3	3	1	1	.....	1	.....	4	.....	10
German measles (Class VIII, Inter. 19).....	2	80	59	77	14	.....	.....	.....	30	.....	1,000

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Gingivitis (Class III, Inter. 99A)		6		6							27
Glaucoma, chronic (Class VI, Inter. 75C)		1	1			1			1		24
Glycosuria (Class XVII, Inter. 80)	1	1	1	2					1		40
Gonorrhea (Class IV, Inter. 88)	3	19	18	14	1		5		16	4	1,181
Gonococcus infection of conjunctiva (Class IX, Inter. 38B)		5	7	3	3				5	1	70
Gonococcus infection of joints (Class IX, Inter. 38B)	16	52	213	116	15		16	2	113	19	8,210
Gonococcus infection of lymph-node (Class IX, Inter. 38B)	5	31	89	82	10				28	5	2,431
Gonococcus infection of urethra (Class IX, Inter. 38B)	128	5,731	1,545	6,566	104		7	10	651	66	43,357
Gonococcus infection, unqualified (Class IX, Inter. 38B)	51	256	725	753	31		3	4	210	34	16,881
Gout, acute (Class XVII, Inter. 48C)		4	4	5	1				1	1	52
Gout, chronic (Class XVII, Inter. 48C)		1	2	1	1				1		8
Hallux valgus (Class XII, Inter. 149)		7	3	5					4	1	136
Hammer toe (Class XII, Inter. 149)	1	16	12	13			2		11	3	525
Hay fever (Class XIV, Inter. 96)		4	4	4	1		1		2		35
Headache (Class XVII, Inter. 189A)	1	10	7	9	2				6	1	214
Heart block (Class II, Inter. 85)	2			1		1					2
Hematemesis (Class III, Inter. 103)		1	1	1					1		120
Hematoma of external ear, non-traumatic (Class V, Inter. 76)		1								1	6
Hematuria, renal (Class VII, Inter. 122)	1	1	1		1		1		1		144
Hemiplegia, old (Class XIII, Inter. 65)		1	2	1					1	1	80
Hemoglobinuria (Class VII, Inter. 122)		1					1				35
Hemoglobinuric fever (Class VIII, Inter. 19)	3	5	2			1			5		112
Hemophilia (Class I, Inter. 65)	2		1				1				16
Hemoptysis (Class XIV, Inter. 96)	1	1							1	1	51
Hemorrhage, intestinal (Class III, Inter. 110B)		2	2	3					1		8
Hemorrhage into cerebrum (Class XIII, Inter. 64)	1	2	5	1	3	1			2	1	173
Hemorrhage into retina (Class VI, Inter. 75C)		3	4	2	1		1		3		110
Hemorrhage, subdural (Class XIII, Inter. 64)		1				1					34
Hemorrhoids (Class III, Inter. 83)	24	339	248	349	20				227	15	7,909
Hernia, epigastric (Class XVI, Inter. 106)		4	3	4					3		129
Hernia, femoral (Class XVI, Inter. 106)		2	1	2					1		90
Hernia, inguinal (Class XVI, Inter. 106)	38	370	416	396	19		20	1	349	39	16,535
Hernia of (muscle, fascia, tendon, or sheath) (Class XII, Inter. 149)		4	3	3					3	1	132
Hernia, umbilical (Class XVI, Inter. 109)	2	3	1	3	1				1	1	123
Hernia, ventral (Class XVI, Inter. 109)	2	18	23	18	2		1		19	3	1,249
Herpes (Class XV, Inter. 145)		27	3	27	1				2		139
Hodgkin's disease (Class X, Inter. 53A)		1	2	1					1		78
Hordeolum (Class VI, Inter. 75C)		21	1	22							68
Hydrocele of spermatic cord (Class VII, Inter. 127)	1	12	8	16					5		322
Hydrocele of tunica vaginalis (Class VII, Inter. 127)	3	41	39	51	2				26	4	1,262
Hydronephrosis (Class VII, Inter. 122)		2								2	19
Hyperhidrosis (Class XV, Inter. 145C)		1		1							13
Hypermetropia (Class VI, Inter. 75C)		62	31	49	13		14		16	1	817
Hypernephroma (Class XIX, Inter. 46E)	1						1				23

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Hypertrophy of bone (Class XII, Inter. 146).....		8	4	8					4		75
Hypertrophy of mammary gland (Class XVII, Inter. 133).....		1		1							15
Hypertrophy of tonsil (Class III, Inter. 100).....	10	219	179	220	9		1		157	12	2,678
Hypochlorhydria (Class III, Inter. 103).....		6	1	5	1				1		104
Hypochondriasis (Class XIII, Inter. 68).....	1	1	4	2	1		1		2		113
Hysteria (Class XIII, Inter. 73A).....	4	29	28	21	11		9		19	1	776
Imbecility (Class XI, Inter. 74).....		2	1				2		1		61
Impacted feces (Class III, Inter. 110B).....		1		1							5
Impetigo contagiosa (Class XV, Inter. 145C).....		30	11	31	2				7	1	47
Impetigo herpetiformis (Class XV, Inter. 145C).....		1	1	2							20
Impetigo simplex (Class XV, Inter. 145C).....	1	4	2	5					2		71
Incontinence of urine (Class VII, Inter. 124).....	2	17	17	10			12		14		400
Inflammation of salivary gland (Class III, Inter. 90B).....		9	6	6	3				5	1	82
Influenza (Class VIII, Inter. 10).....	89	3,233	444	3,303	107				301	55	14,082
Ingrowing nail (Class XV, Inter. 145C).....	4	214	60	220	1		1		46	10	2,641
Insomnia (Class XVII, Inter. 180A).....		3	3	3	1				2		80
Insufficiency of ocular muscle (Class VI, Inter. 75C).....		2	3	1	1		1		2		128
Intertrigo (Class XV, Inter. 145C).....	1	1		2							6
Iridocyclitis (Class VI, Inter. 75C).....		4	3	4					3		204
Iritis (Class VI, Inter. 75C).....	2	35	35	36	5		1		29	1	1,000
Jaundice, acute infective (Wald's disease) (Class VIII, Inter. 111).....		1	2		1				1	1	13
Keratitis (Class VI, Inter. 75C).....		12	10	18			1		5	1	320
Keratitis, phlyctenular (Class VI, Inter. 75C).....	2	2	2	4					2		70
Keratoiritis (Class VI, Inter. 75C).....			3						2	1	13
Laryngitis, acute (Class XIV, Inter. 87).....	3	72	6	73	3				3	2	602
Laryngitis, chronic (Class XIV, Inter. 87).....	1	4	5	4	1				4	1	208
Leprosy (Class VIII, Inter. 17).....		1						1			4
Leukemia (Class I, Inter. 53C).....	2					2					271
Leukoma (Class VI, Inter. 75C).....	2	2		2			1		1		201
Lichen planus (Class XV, Inter. 145C).....		1	1						1	1	11
Lipoma (Class XIX, Inter. 46).....	1	13	7	11	3				4	3	418
Locomotor ataxia (Class XIII, Inter. 62).....	1	4	8	5	1		1		4	2	275
Loose body in joint (Class XII, Inter. 147).....	1	5	8	4	2				5	2	408
Lupus, erythematosus (Class XV, Inter. 145C).....		1	2	2					1		11
Lymphadenitis, acute (Class X, Inter. 84).....	29	415	259	432	51			1	130	20	11,200
Lymphadenitis, chronic (Class X, Inter. 84).....	9	40	48	44	16		2		22	2	2,000
Lymphangectasis (Class X, Inter. 84).....		1							1		6
Lymphangitis (Class X, Inter. 84).....	2	57	13	54	6				10	2	602
Malaria (Class VIII, Inter. 4).....	36	1,859	1,740	3,038	110	1	3		431	62	17,200
Malformations, congenital (Class XVII, Inter. 150).....		12	4	9			2		3	1	217
Malingering (Class XVII, Inter. 180B).....	1	5	2	5	2				1		68
Malnutrition (Class XVII, Inter. 180A).....		1	2	1	1				1		60
Mastoiditis, acute (Class V, Inter. 146).....	2	14	8	12	3		1		7	1	622
Mastoiditis, chronic (Class V, Inter. 146).....	1	5	4	3	1		1		5		201
Masturbation (Class VII, Inter. 74).....		3	2	2			1		2		30
Measles (Class VIII, Inter. 6).....	4	523	454	446	77			1	412	20	11,000
Melancholia, involutional (Class XI, Inter. 68).....	1	2	6	3	2				4		201

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Ménière's disease (Class XIII, Inter. 76).....	1	2			1				1	1	19
Meningitis, cerebral (Class XIII, Inter. 61).....	5	3	1	1	3				2	1	164
Meningitis, cerebro-spinal (Class XIII, Inter. 61).....	4	3	1	2	2				2		163
Metatarsalgia (Class XII, Inter. 149).....	1	1			1				1		10
Migraine (Class XVII, Inter. 74).....	9	2	11								21
Mumps (Class VIII, Inter. 19).....	78	726	641	741	41				608	55	16,515
Myahlis, transverse (Class XIII, Inter. 63).....	1							1			35
Mycosis fungoides (Class XV, Inter. 25B).....		1		1							17
Myiasis (Class XVIII, Inter. 145C).....	2			2							1
Myocarditis, acute (Class II, Inter. 73).....		4	3	3	1	1			2		151
Myocarditis, chronic (Class II, Inter. 79C).....	1	12	14	7	6	1	4		8	1	352
Myopia (Class VI, Inter. 75C).....	2	40	22	19	6		20		16	3	694
Myositis, acute (Class XII, Inter. 149).....		36	18	38	7				8	1	545
Myositis, chronic (Class XII, Inter. 149).....	1	10	7	5	4		2		6	1	457
Myringitis, acute (Class V, Inter. 76).....		6		6							36
Myringitis, chronic (Class V, Inter. 76).....	1		1	1					1		42
Nausea marina (Class XVII, Inter. 189A).....	1	40	17	47			2	1	7	1	357
Necrosis (Class XII, Inter. 146).....		8	8	6			1		7	2	275
Nephritis, acute (Class VII, Inter. 119).....	10	32	30	24	15	2	3		25	3	1,854
Nephritis, chronic interstitial (Class VII, Inter. 120).....	6	21	29	19	6	4	7		17	3	1,538
Nephritis, chronic parenchymatous (Class VII, Inter. 120).....	6	32	24	19	6	3	12		20	2	1,547
Nephrolithiasis (Class VII, Inter. 123).....	1	21	10	16	1		1		12	2	645
Nephroptosis (Class VII, Inter. 122).....			1						1		9
Nervous dyspepsia (Class III, Inter. 103).....		3	4	2	1				3	1	152
Neuralgia (Class XIII, Inter. 73B).....	3	91	48	96	17				26	3	1,126
Neurasthenia (Class XIII, Inter. 74).....	14	86	155	50	39		19	1	113	24	5,883
Neuritis (Class XIII, Inter. 73B).....	5	62	59	65	16		5		34	6	2,318
Neuritis, multiple (Class XIII, Inter. 73B).....	1	4	4		3		1		4	1	150
Neuritis, optic (Class VI, Inter. 75C).....	2	1		2			1				108
Neurootitis (Class VI, Inter. 75C).....	4	4	1	1	1		1		3	2	239
Neurosis, intestinal (Class III, Inter. 110B).....	1	52	19	55	7		1		8	1	601
Neurosis, occupational (Class XIII, Inter. 74).....	2	2	2	2			1		1		51
Neurosis of bladder (Class VII, Inter. 124).....		32	28	16	2		16		24	2	995
Neurosis, traumatic (Class XIII, Inter. 74).....		5	5	3	2		2		3		93
Nevus (Class XV, Inter. 150).....	1	1		1					1		11
No disease (Class XVII, Inter. 189A).....	4	231	251	233	84		1		163	5	3,457
Nostalgia (Class XVII, Inter. 68).....	3			3							19
Obesity (Class XVII, Inter. 55).....	1	1	1	1					1		84
Obstruction, acute intestinal (Class III, Inter. 109).....	7	6	3	3	2				4	1	111
Obstruction, chronic intestinal (Class III, Inter. 109).....	5	8	3	2			1		4	3	179
Odontoma (Class XIX, Inter. 46).....	1	1		1							48
Omphelia (Class XV, Inter. 145C).....	1	34	6	33	1			1	6		573
Opacity of vitreous humor (Class VI, Inter. 75C).....	1	1							1	1	51
Orchitis, acute (nonvenereal) (Class VII, Inter. 127).....	2	79	19	78	7				12	3	1,069
Orchitis, chronic (nonvenereal) (Class VII, Inter. 127).....	3	1	3	1							82
Osteoma (Class XIX, Inter. 46).....	3	9	13	8	2		3		10	2	444
Osteomyelitis, acute (Class XII, Inter. 146).....		2	4	1					2	3	389

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Osteomyelitis, chronic (Class XII, Inter. 146)		5	3	3			2		2	1	155
Otitis externa (Class V, Inter. 76)	5	184	71	189	15		2		53	1	2,041
Otitis, interna, acute (Class V, Inter. 76)	1	2	1	2	1				1		106
Otitis interna, chronic (Class V, Inter. 76)		14	6	7			5		7	1	327
Otitis, media, acute (Class V, Inter. 76)	13	261	111	241	21		2	1	96	24	5,262
Otitis media, chronic (Class V, Inter. 76)	15	227	202	190	22		76		131	25	8,269
Oxyuriasis (Class XVIII, Inter. 107)		1		1							1
Pachymeningitis, cerebral (Class XIII, Inter. 61)			2						1	1	246
Palpitation, cardiac (Class II, Inter. 85)		11	9	7	4				8	1	235
Pancreatitis, acute (Class III, Inter. 118)		5	3	5	1				2		104
Pancreatitis, chronic (Class III, Inter. 118)		2	1	1	1				1		49
Panophthalmitis (Class VI, Inter. 75C)	1			1							32
Papilloma (Class XIX, Inter. 46)		5	5	5	1				4		202
Pappataci fever (Class VIII, Inter. 19)		10		10							39
Paralysis, agitans (Class XIII, Inter. 63)		1	2		1				1	1	89
Paralysis of nerve (Class XIII, Inter. 66)		15	11	9	4		3		9	1	624
Paralysis of ocular muscle (Class VI, Inter. 75C)	1	8	11	6	3		2		8	1	796
Paralysis of vocal cords (Class XIV, Inter. 74)		1	1				1		1		15
Paranoia (Class XI, Inter. 68)	1	1	3		1		1		3		89
Paranoid state (Class XI, Inter. 68)		2	4		1		1		4		31
Paraphimosis (Class VII, Inter. 127)	2	9	3	12					2		179
Paraplegia, ataxic (Class XIII, Inter. 66)		1								1	39
Paratyphoid fever (Class VIII, Inter. 1)	1	4	1	4	1				1		176
Pediculosis (Class XVIII, Inter. 145C)		42		42							23
Pemphigus (Class XV, Inter. 145C)		2	1	2	1						122
Perforated nasal septum (Class XIV, Inter. 86)			2	1	1						14
Pericarditis (Class II, Inter. 77)		1					1				9
Perichondritis of auricle (Class V, Inter. 76)		1	1	1					1		7
Periostitis, acute (Class XII, Inter. 146)	1	26	5	21	4			1	4	1	512
Periostitis, chronic (Class XII, Inter. 146)	1	11	6	11	1		1		5		629
Peritonitis, acute general (Class III, Inter. 117)		4	4	2	2	3			1		149
Pes cavus (Class XII, Inter. 149)	1	5	5	4	1		1		5		1,444
Pes planus (Class XII, Inter. 149)	3	219	206	98	12		141		163	13	6,221
Pharyngitis, acute (Class III, Inter. 100)		79	9	78	2				8		626
Pharyngitis, chronic (Class III, Inter. 100)		2		2							36
Phimosis (Class VII, Inter. 127)	1	161	26	157	2				24	4	1,444
Phlebitis (Class II, Inter. 83)	1	20	9	20	2		2		6		622
Pityriasis rosea (Class XV, Inter. 145C)		5	3	4	2				2		74
Pityriasis versicolor (Class XVIII, Inter. 25B)		2		2							1
Pleurisy, acute fibrinous (Class XIV, Inter. 93)	7	130	76	111	32				60	9	2,626
Pleurisy, chronic fibrinous (Class XIV, Inter. 93)	2	17	17	10	4		4		12	5	321
Pleurisy, serofibrinous (Class XIV, Inter. 93)	7	28	26	23	12				24	2	2,024
Pleurisy, suppurative (Class XIV, Inter. 93)	7	23	19	18	7	5	3		11	5	2,024
Pleuritic adhesions (Class XIV, Inter. 93)		6	4	1	2		4		3		28

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Pneumonia, broncho (Class XIV, Inter. 91)	8	40	22	24	17	3			23	3	1,162
Pneumonia, interstitial (Class XIV, Inter. 93)		3					3				63
Pneumonia, lobar (Class XIV, Inter. 92)	54	216	148	193	55	15	1	1	125	28	8,438
Poliomyelitis, acute anterior (Class VIII, Inter. 63)		5	9	2	4	1			5	2	383
Polypus, nasal (Class XIV, Inter. 46)	2	12	14	13	1				12	2	401
Presbyopia (Class VI, Inter. 75C)		6	10	5	4		1		6		205
Proctitis (Class III, Inter. 110A)	1	4	1	5					1		72
Prolapse of rectum (Class III, Inter. 110B)		1	3	1	1				2		82
Prostatitis, acute (Class VII, Inter. 126)		6	8	6	2				6		123
Prostatitis, chronic (Class VII, Inter. 126)	1	2	6	7					2		83
Pruritus (Class XV, Inter. 145C)		3	2	3					2		48
Psoriasis (Class XV, Inter. 145C)		16	6	16					3	3	270
Psychasthenia (Class XI, Inter. 68)	5	35	60	10	20		10	1	48	11	2,007
Psychosis due to organic brain disease (Class XI, Inter. 74)		3	8		1	1			9		331
Psychosis, epileptic (Class XI, Inter. 69)	1	3					1		2		20
Psychosis (exhaustive, infective and toxic) (Class XI, Inter. 68)		4	5	2	2	1		1	3		127
Psychosis, hysterical (Class XI, Inter. 73A)	1	5	7	4	1			1	5	2	122
Psychosis, intoxication (Class XI, Inter. 68)	1	17	20	14	6		1		14	3	483
Psychosis, manic depressive (Class XI, Inter. 68)	3	9	11	1	6		4		11	1	1,174
Psychosis, senile (Class XI, Inter. 154A)		1	1	1					1		113
Psychosis, traumatic (Class XI, Inter. 68)	1	3	4	2	1		2		2	1	206
Pterygium (Class VI, Inter. 75C)	2	33	41	33	4		1		32	6	977
Purpura (Class I, Inter. 55)		8	11	10	3				6		284
Purpura, hemorrhagic (Class I, Inter. 55)	1	1	2	1	2				1		35
Pyelitis (Class VII, Inter. 122)		7	3	6	1				3		149
Pyelonephritis (Class VII, Inter. 122)	1	5	7	4		1			7	1	172
Pylorospasm (Class III, Inter. 103)		1	1	1					1		15
Pyorrhoea, alveolar (Class III, Inter. 99A)	1	33	18	20	3		2		12	6	565
Rabies (Class VIII, Inter. 23)		1		1							0
Redundant prepuce (Class VII, Inter. 127)	3	134	15	134	2				13	3	1,186
Redundant scrotum (Class VII, Inter. 127)		2		2							38
Regurgitation of stomach (Class III, Inter. 103)	1	2		1	1				1		78
Retention cyst (Class XIX, Inter. 46)		5	1	5					1		34
Retinitis (Class VI, Inter. 75C)		14	8	7	2		5		6	2	430
Rheumatic fever, acute (Class VIII, Inter. 47)	24	212	166	237	35		1	1	115	13	7,993
Rheumatic fever, subacute (Class VIII, Inter. 47)	4	72	39	70	8		2		31	4	2,063
Rheumatism, chronic articular (Class XVII, Inter. 48B)	19	86	110	94	11		23		73	14	5,069
Rheumatism, muscular (Class XVII, Inter. 48B)	18	316	139	343	30		4		87	9	4,853
Rhinitis, acute (Class XIV, Inter. 86)	2	83	7	86	1				4	1	286
Rhinitis, atrophic (Class XIV, Inter. 86)	2	2	3	2	1		1		3		198
Rhinitis, hypertrophic (Class XIV, Inter. 86)	1	29	29	25	4		3		22	5	804
Sarcoma (Class XIX, Inter. 39-45)	2	1			1	1					127
Scabies (Class XVIII, Inter. 145B)	11	388	124	398	6				106	13	3,920
Scarlet fever (Class VIII, Inter. 7)	7	91	58	91	18				47		3,767
Scleritis (Class VI, Inter. 75C)		1								1	26
Senility (Class XVII, Inter. 154B)	2	2		1			1		2		86
Septicemia (Class VIII, Inter. 20)	4	4			2	5			1		9

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days
DISEASES—Continued.											
Shock (Class XVII, Inter. 189A).....		3		2		1					3
Sinus (Class XVII, Inter. 145C).....	1	6	5	8					3	1	213
Sinusitis, ethmoidal (Class XIV, Inter. 146).....		4	6	5			1		2	1	127
Sinusitis, frontal (Class XIV, Inter. 146).....	4	36	18	37	3		2		14	2	706
Sinusitis, maxillary (Class XIV, Inter. 146).....	3	14	16	13	2				14	4	919
Smallpox (Class VIII, Inter. 5).....		4		2		1			1		22
Somnambulism (Class XIII, Inter. 74).....		5	8	2	1		4		6		187
Spasm habit (Class XIII, Inter. 74).....	1	2			1		1		1		29
Spur on nasal septum (Class XIV, Inter. 86).....		9	5	8					4	2	141
Stenosis of nasal duct (Class VI, Inter. 75C).....		1	2	1	1				1		5
Stenosis of pylorus (Class III, Inter. 103).....		3	1	2	1				1		21
Stomatitis (Class III, Inter. 99B).....		9	2	6	2				2	1	74
Stricture of rectum (Class III, Inter. 110B).....		1	2	2	1						34
Stricture of ureter (Class VII, Inter. 122).....		1		1							16
Stricture of urethra (Class VII, Inter. 125).....	3	27	22	32	2				18		622
Stuttering (Class XIII, Inter. 74).....		1	1				1		1		27
Suppression of urine (Class VII, Inter. 124).....		1	1		1				1		11
Symbplepharon (Class VI, Inter. 75C).....		1	1	1					1		19
Syphilis (Class IX, Inter. 37).....	223	1,542	2,099	2,183	204	5	62	8	1,229	173	67,824
Tachycardia (Class II, Inter. 85).....	1	12	11	8	1		4		10	1	271
Talipes (Class XII, Inter. 149).....		1					1				14
Teniasis (Class X VIII, Inter. 107).....		21	2	20					2	1	151
Tenosynovitis (Class XII, Inter. 149).....	1	41	7	40	2				6	2	622
Teratomas (Class XIX, Inter. 46).....		2		2							25
Tetanus (Class VIII, Inter. 24).....	1	5		2	1	3					123
Thrombosis (Class II, Inter. 82).....	4	1	1	4					2		282
Thyroiditis, acute (Class IV, Inter. 83).....		2	4	2			1		3		147
Tic, convulsive (Class XIII, Inter. 74).....		1	2		1				1	1	61
Tonsillitis, acute follicular (Class III, Inter. 100).....	79	4,092	925	4,114	100			2	801	73	24,267
Tonsillitis, chronic (Class III, Inter. 100).....	7	81	62	95	6		1		43	5	1,009
Trachoma (Class VI, Inter. 75B).....	1	12	5	3			9		6		282
Trichophytosis (Class XVIII, Inter. 145A).....	2	147	29	151	1			1	21	4	1,265
Trichuriasis (Class XVIII, Inter. 107).....		1		1							15
Trichuris trichiura (Class XVIII, Inter. 107).....		1		1							13
Tuberculosis, abdominal (Class VIII, Inter. 31).....	1	7	5	1	3	2	2		2	1	62
Tuberculosis, acute bronchopneumonic (Class VIII, Inter. 29).....	2	5	4		5				4	2	89
Tuberculosis, acute pneumonic (Class VIII, Inter. 29).....	10	12	19		17	4	1		18	1	2,265
Tuberculosis, acute pulmonary miliary (Class VIII, Inter. 29).....	2	6	8		5	2	1		8		21
Tuberculosis, chronic pulmonary (Class VIII, Inter. 28).....	170	235	494	20	65	26	90	5	490	208	71,539
Tuberculosis of joint (Class VIII, Inter. 33).....	2	6	6		4				8	2	282
Tuberculosis of larynx (Class VIII, Inter. 28).....	2	4			1	1			2	2	67
Tuberculosis of pleura (Class VIII, Inter. 28).....	2	1	2	1					2	1	67
Tuberculosis, unqualified (Class VIII, Inter. 34).....	5	12	19	4	4	2			18	5	1,126
Tuberculous meningitis (Class VIII, Inter. 30).....	1	2			1	1			1		3
Typhoid fever (Class VIII, Inter. 1).....	2	17	15	14	7				13		221
Typhus fever (Class VIII, Inter. 2).....		1	1	1	1						14

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Ulcer of duodenum (Class III, Inter. 105A).....	3	12	13	9	6	1			9	3	1,309
Ulcer of eye and adnexa (Class VI, Inter. 75C).....	5	39	19	45	4				14		1,046
Ulcer of intestines (Class III, Inter. 105B).....		1	3		2				2		91
Ulcer of mouth (Class III, Inter. 99B).....	2	3	4	5	2				2		99
Ulcer of nasal passage (Class XIV, Inter. 86).....		7	6	5	2				4	2	215
Ulcer of rectum (Class III, Inter. 110B).....		5	1	4	1				1		128
Ulcer of skin (Class XV, Inter. 145C).....	10	72	52	81	8		3		31	11	3,442
Ulcer of stomach (Class III, Inter. 102).....	3	26	47	20	9	1	2		36	8	2,362
Ulceromembranous angina (Class III, Inter. 100).....	2	53	8	52	1				6	4	515
Uncinariasis (Class XVIII, Inter. 106).....		90	10	91	3				5	1	388
Union of fracture faulty (Class XII, Inter. 146).....	1	6	5	4			3		4	1	461
Ureteral colic (Class VII, Inter. 123).....		5	4	5	2				2		30
Urethritis, acute (nonvenereal) (Class VII, Inter. 125).....		7	2	9							31
Urticaria (Class XV, Inter. 145C).....	1	32	11	34	4				6		251
Vaccinia (Class VIII, Inter. 19).....	3	501	37	500	3				35	3	2,019
Valvular disease, chronic cardiac (Class II, Inter. 79A).....	5	63	46	24	5	5	37	1	39	3	2,289
Varicocoe (Class VII, Inter. 83).....	6	176	128	172	7		2		118	11	4,779
Varix (Class II, Inter. 83).....	3	64	77	61	6		5		67	5	2,789
Vertigo (Class XVII, Inter. 189A).....	2	8	1	8	3						101
Wart (Class XV, Inter. 145C).....	2	38	7	38	2				6	1	382
Whooping cough (Class VIII, Inter. 8).....		3		3							27
Zoster (Class XIII, Inter. 145C).....		20	3	20					3		132
INJURIES.											
Abrasion, unqualified "G" (Class XX, Inter. 186).....		16	1	17							120
Abrasion, unqualified "H" (Class XX, Inter. 186).....		3	1	4							18
Abrasion, unqualified "I" (Class XX, Inter. 186).....		5		5							26
Abrasion, unqualified "J" (Class XX, Inter. 186).....		3		3							11
Abrasion, unqualified "L" (Class XX, Inter. 186).....	1	102	3	102	2				2		601
Abrasions, multiple "G" (Class XX, Inter. 186).....		3	1	3					1		42
Abrasions, multiple "I" (Class XX, Inter. 186).....		1		1							2
Abrasions, multiple "L" (Class XX, Inter. 186).....		20	8	24	1				3		201
Avulsion of limb "F" (Class XX, Inter. 186).....		1				1					0
Avulsion of limb "I" (Class XX, Inter. 186).....		1		1							35
Avulsion of limb "L" (Class XX, Inter. 186).....		1	3						3	1	148
Avulsion, unqualified "H" (Class XX, Inter. 186).....	1	13	8	13	1		2		5	1	464
Avulsion, unqualified "I" (Class XX, Inter. 186).....	1	5	1	5					1	1	100
Avulsion, unqualified "L" (Class XX, Inter. 186).....		1		1							7
Blood donor "L" (Class XX, Inter. 186).....		1		1							5
Burn "C" (Class XX, Inter. 167).....		5		5							62
Burn "F" (Class XX, Inter. 167).....		23	1	23					1		167
Burn "G" (Class XX, Inter. 167).....		4		4							66
Burn "H" (Class XX, Inter. 167).....		5	3	5					3		255
Burn "L" (Class XX, Inter. 167).....	7	186	12	191	1				10	3	1,817
Burns, multiple "C" (Class XX, Inter. 167).....		10	2	10					2		99
Burns, multiple "F" (Class XX, Inter. 167).....		3	53	37	41	4	11		30	7	1,561
Burns, multiple "H" (Class XX, Inter. 167).....		1		1							7

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days
INJURIES—Continued.											
Burns, multiple "L" (Class XX, Inter. 186)	2	81	16	81					17	1	1,112
Compression of chest "D" (Class XX, Inter. 186)		1				1					0
Compression of nerve "G" (Class XX, Inter. 186)		1	1		1				1		43
Compression of nerve "J" (Class XX, Inter. 186)		1							1		0
Compression of nerve "L" (Class XX, Inter. 186)		1	2	1					1	1	31
Contusion "B" (Class XX, Inter. 186)		1		1							1
Contusion "E" (Class XX, Inter. 186)		4		4							10
Contusion "F" (Class XX, Inter. 186)		1	1	2							1
Contusion "G" (Class XX, Inter. 186)	7	309	53	303	13		1	1	45	6	3,210
Contusion "H" (Class XX, Inter. 186)	2	39	6	35	3				7	2	30
Contusion "I" (Class XX, Inter. 186)	3	144	19	142	6				15	3	1,430
Contusion "J" (Class XX, Inter. 186)	1	154	43	152	14				31	1	980
Contusion "L" (Class XX, Inter. 186)	5	509	79	516	18				54	5	3,670
Contusions, multiple "B" (Class XX, Inter. 186)		1		1							1
Contusions, multiple "E" (Class XX, Inter. 186)		1		1							1
Contusions, multiple "F" (Class XX, Inter. 186)		1		1							1
Contusions, multiple "G" (Class XX, Inter. 186)	3	50	14	52	2				12	1	400
Contusions, multiple "H" (Class XX, Inter. 186)		3		3							1
Contusions, multiple "I" (Class XX, Inter. 186)		6	2	6					1	1	1
Contusions, multiple "J" (Class XX, Inter. 186)		14	1	14					1		1
Contusions, multiple "L" (Class XX, Inter. 186)	1	44	15	38					18	4	1
Crush of lower limb "H" (Class XX, Inter. 186)		2		1							1
Crush of lower limb "I" (Class XX, Inter. 186)	1	7	3	7					3	1	1
Crush of lower limb "L" (Class XX, Inter. 186)		2	2	1					2	1	1
Crush of upper limb "H" (Class XX, Inter. 186)		7		7							1
Crush of upper limb "I" (Class XX, Inter. 186)		9		9							1
Crush of upper limb "L" (Class XX, Inter. 186)		2		2							1
Dislocation about ankle "G" (Class XX, Inter. 185A)		3	1	3					1		1
Dislocation about ankle "J" (Class XX, Inter. 185A)		2	1	2					1		1
Dislocation about ankle "L" (Class XX, Inter. 185A)		1	1						1	1	1
Dislocation about wrist "G" (Class XX, Inter. 185A)	1	3	3	3	2				2		1
Dislocation about wrist "I" (Class XX, Inter. 185A)		1	1		1				1		1
Dislocation about wrist "J" (Class XX, Inter. 185A)		1		1							1
Dislocation about wrist "L" (Class XX, Inter. 185A)		7		6			1				1
Dislocation of clavicle "J" (Class XX, Inter. 185A)	1	4	4	5					3	1	1
Dislocation of clavicle "L" (Class XX, Inter. 185A)	1	1	1	1			1		1		1
Dislocation of elbow "G" (Class XX, Inter. 185A)		8	6	7	2				5		1
Dislocation of elbow "H" (Class XX, Inter. 185A)		1	2	2					1		1
Dislocation of elbow "I" (Class XX, Inter. 185A)		1							1		1
Dislocation of elbow "J" (Class XX, Inter. 185A)		3	1	2					1		1

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Dislocation of elbow "L" (Class XX, Inter. 185A).....		3	1	3					1		67
Dislocation of intra-articular cartilage of joint "G" (Class XX, Inter. 185A).....		5	6	6					4	1	415
Dislocation of intra-articular cartilage of joint "H" (Class XX, Inter. 185A).....		1		1							0
Dislocation of intra-articular cartilage of joint "J" (Class XX, Inter. 185A).....	1	2	3	5					1		236
Dislocation of intra-articular cartilage of joint "L" (Class XX, Inter. 185A).....	1	14	12	13	2		1	1	10		681
Dislocation of patella "G" (Class XX, Inter. 185A).....		2	3	4					1		105
Dislocation of patella "J" (Class XX, Inter. 185A).....	1	5	3	4			1		4		108
Dislocation of patella "L" (Class XX, Inter. 185A).....		4	1	1			1		3		118
Dislocation of shoulder "G" (Class XX, Inter. 185A).....	3	15	4	18			1		2	1	279
Dislocation of shoulder "I" (Class XX, Inter. 185A).....		1		1							15
Dislocation of shoulder "J" (Class XX, Inter. 185A).....		12	9	13			1		7		166
Dislocation of shoulder "L" (Class XX, Inter. 185A).....	2	12	9	18					4	1	358
Dislocation of vertebra "L" (Class XX, Inter. 185A).....		1								1	99
Dislocation unqualified "E" (Class XX, Inter. 185A).....			1	1							28
Dislocation unqualified "F" (Class XX, Inter. 185A).....		1	1						2		15
Dislocation unqualified "G" (Class XX, Inter. 185A).....		4		4							99
Dislocation unqualified "H" (Class XX, Inter. 185A).....		1		1							3
Dislocation unqualified "I" (Class XX, Inter. 185A).....		1		1							42
Dislocation unqualified "J" (Class XX, Inter. 185A).....		14	1	14					1		99
Dislocation unqualified "K" (Class XX, Inter. 185A).....			1	1							18
Dislocation unqualified "L" (Class XX, Inter. 185A).....	2	17	1	18	1				1		221
Drowning "A" (Class XX, Inter. 169B).....		5				5					0
Drowning "D" (Class XX, Inter. 169B).....		68				68					0
Drowning "J" (Class XX, Inter. 169B).....		1				1					0
Electric shock, injury from "A" (Class XX, Inter. 181).....		2		1		1					10
Electric shock, injury from "L" (Class XX, Inter. 181).....		5		4		1					4
Exhaustion from overexertion and overexposure "L" (Class XX, Inter. 177A).....		12	5	11	1				5		58
Empyema, traumatic "L" (Class XX, Inter. 186).....		2		2							4
Foreign body, traumatic "E" (Class XX, Inter. 186).....		4	1	2			1		1	1	23
Foreign body, traumatic "G" (Class XX, Inter. 186).....			1	1							46
Foreign body, traumatic "H" (Class XX, Inter. 186).....		7	3	8					2		36
Foreign body, traumatic "L" (Class XX, Inter. 186).....		51	12	52	2				8	1	421
Fracture about ankle joint, compound "C" (Class XX, Inter. 185C).....			1						1		22
Fracture about ankle joint, compound "H" (Class XX, Inter. 185C).....		1	1	1					1		54
Fracture about ankle joint, compound "L" (Class XX, Inter. 185C).....		1	1						1	1	118
Fracture about ankle joint, simple "G" (Class XX, Inter. 185C).....	4	19	20	20	2		3		15	3	1,718

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	R.A.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Burns, multiple "L" (Class XX, Inter. 187).....	2	81	16	81					17	1	1,112
Compression of chest "D" (Class XX, Inter. 186).....		1					1				6
Compression of nerve "G" (Class XX, Inter. 186).....		1	1		1				1		43
Compression of nerve "J" (Class XX, Inter. 186).....		1							1		6
Compression of nerve "L" (Class XX, Inter. 186).....		1	2	1					1	1	23
Contusion "B" (Class XX, Inter. 186).....		1		1							1
Contusion "E" (Class XX, Inter. 186).....		4		4							19
Contusion "F" (Class XX, Inter. 186).....	1		1	2							8
Contusion "G" (Class XX, Inter. 186).....	7	309	53	303	13		1	1	45	6	3,213
Contusion "H" (Class XX, Inter. 186).....	2	39	6	35	3				7	2	269
Contusion "I" (Class XX, Inter. 186).....	3	144	19	142	6				15	2	1,424
Contusion "J" (Class XX, Inter. 186).....	1	154	43	152	14				31	1	265
Contusion "L" (Class XX, Inter. 186).....	5	509	79	516	18				54	5	3,679
Contusions, multiple "B" (Class XX, Inter. 186).....		1		1							17
Contusions, multiple "E" (Class XX, Inter. 186).....		1		1							3
Contusions, multiple "F" (Class XX, Inter. 186).....	1			1							22
Contusions, multiple "G" (Class XX, Inter. 186).....	3	50	14	52	2				12	1	495
Contusions, multiple "H" (Class XX, Inter. 186).....		3		3							21
Contusions, multiple "I" (Class XX, Inter. 186).....		6	2	6					1	1	61
Contusions, multiple "J" (Class XX, Inter. 186).....		14	1	14					1		37
Contusions, multiple "L" (Class XX, Inter. 186).....	1	44	15	38					18	4	415
Crush of lower limb "H" (Class XX, Inter. 186).....		2		1							17
Crush of lower limb "I" (Class XX, Inter. 186).....	1	7	3	7					3	1	267
Crush of lower limb "L" (Class XX, Inter. 186).....		2	2	1					2	1	131
Crush of upper limb "H" (Class XX, Inter. 186).....	1	7		7							227
Crush of upper limb "I" (Class XX, Inter. 186).....		9		9							144
Crush of upper limb "L" (Class XX, Inter. 186).....		2		2							45
Dislocation about ankle "G" (Class XX, Inter. 185A).....		3	1	3					1		49
Dislocation about ankle "J" (Class XX, Inter. 185A).....		2	1	2					1		29
Dislocation about ankle "L" (Class XX, Inter. 185A).....		1	1						1	1	13
Dislocation about wrist "G" (Class XX, Inter. 185A).....	1	3	3	3	2				2		79
Dislocation about wrist "I" (Class XX, Inter. 185A).....		1	1		1				1		1
Dislocation about wrist "J" (Class XX, Inter. 185A).....		1		1							10
Dislocation about wrist "L" (Class XX, Inter. 185A).....		7		6			1				29
Dislocation of clavicle "J" (Class XX, Inter. 185A).....	1	4	4	5					3	1	146
Dislocation of clavicle "L" (Class XX, Inter. 185A).....	1	1	1	1			1		1		75
Dislocation of elbow "G" (Class XX, Inter. 185A).....		8	6	7	2				5		295
Dislocation of elbow "H" (Class XX, Inter. 185A).....		1	2	2					1		267
Dislocation of elbow "I" (Class XX, Inter. 185A).....		1							1		1
Dislocation of elbow "J" (Class XX, Inter. 185A).....		3	1	2					1	1	39

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Dislocation of elbow "L" (Class XX, Inter. 185A).....		3	1	3					1		67
Dislocation of intra-articular cartilage of joint "G" (Class XX, Inter. 185A).....		5	6	6					4	1	415
Dislocation of intra-articular cartilage of joint "H" (Class XX, Inter. 185A).....		1		1							0
Dislocation of intra-articular cartilage of joint "J" (Class XX, Inter. 185A).....	1	2	3	5					1		236
Dislocation of intra-articular cartilage of joint "L" (Class XX, Inter. 185A).....	1	14	12	13	2		1	1	10		681
Dislocation of patella "G" (Class XX, Inter. 185A).....		2	3	4					1		105
Dislocation of patella "J" (Class XX, Inter. 185A).....	1	5	3	4			1		4		108
Dislocation of patella "L" (Class XX, Inter. 185A).....		4	1	1			1		3		118
Dislocation of shoulder "G" (Class XX, Inter. 185A).....	3	15	4	18			1		2	1	279
Dislocation of shoulder "I" (Class XX, Inter. 185A).....		1		1							15
Dislocation of shoulder "J" (Class XX, Inter. 185A).....		12	9	13			1		7		166
Dislocation of shoulder "L" (Class XX, Inter. 185A).....	2	12	9	18					4	1	358
Dislocation of vertebra "L" (Class XX, Inter. 185A).....		1								1	99
Dislocation, unqualified "E" (Class XX, Inter. 185A).....			1	1							28
Dislocation, unqualified "F" (Class XX, Inter. 185A).....		1	1						2		15
Dislocation, unqualified "G" (Class XX, Inter. 185A).....		4		4							99
Dislocation, unqualified "H" (Class XX, Inter. 185A).....		1		1							3
Dislocation, unqualified "I" (Class XX, Inter. 185A).....		1		1							42
Dislocation, unqualified "J" (Class XX, Inter. 185A).....		14	1	14					1		99
Dislocation, unqualified "K" (Class XX, Inter. 185A).....			1	1							18
Dislocation, unqualified "L" (Class XX, Inter. 185A).....	2	17	1	18	1				1		221
Drowning "A" (Class XX, Inter. 169B).....		5					5				0
Drowning "D" (Class XX, Inter. 169B).....		68					68				0
Drowning "J" (Class XX, Inter. 169B).....		1					1				0
Electric shock, injury from "A" (Class XX, Inter. 181).....		2		1			1				10
Electric shock, injury from "L" (Class XX, Inter. 181).....		5		4			1				4
Exhaustion from overexertion and overexposure "L" (Class XX, Inter. 177A).....		12	5	11	1				5		58
Emphysema, traumatic "L" (Class XX, Inter. 186).....		2		2							4
Foreign body, traumatic "E" (Class XX, Inter. 186).....		4	1	2			1		1	1	28
Foreign body, traumatic "G" (Class XX, Inter. 186).....			1	1							46
Foreign body, traumatic "H" (Class XX, Inter. 186).....		7	3	8					2		36
Foreign body, traumatic "L" (Class XX, Inter. 186).....		51	12	52	2				8	1	421
Fracture about ankle joint, compound "C" (Class XX, Inter. 185C).....			1						1		22
Fracture about ankle joint, compound "H" (Class XX, Inter. 185C).....		1	1	1					1		54
Fracture about ankle joint, compound "L" (Class XX, Inter. 185C).....		1	1						1	1	118
Fracture about ankle joint, simple "G" (Class XX, Inter. 185C).....	4	19	20	20	2		3		15	3	1,718

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Fracture about ankle joint, simple "I" (Class XX, Inter. 185C).....		3	4	3					3	1	267
Fracture about ankle joint, simple "J" (Class XX, Inter. 185C).....		15	13	17	1		1		8	1	680
Fracture about ankle joint, simple "L" (Class XX, Inter. 185C).....	3	13	15	13	2		1		12	3	1,016
Fracture about wrist joint, compound "H" (Class XX, Inter. 185C).....			1	1							45
Fracture about wrist joint, simple "G" (Class XX, Inter. 185C).....	1	34	15	33	1				14	2	1,125
Fracture about wrist joint, simple "H" (Class XX, Inter. 185C).....		7	1	6					2		93
Fracture about wrist joint, simple "I" (Class XX, Inter. 185C).....		1								1	25
Fracture about wrist joint, simple "J" (Class XX, Inter. 185C).....	2	9	3	12					3		377
Fracture about wrist joint, simple "K" (Class XX, Inter. 185C).....	1			1							7
Fracture about wrist joint, simple "L" (Class XX, Inter. 185C).....	2	10	3	11			1		2	1	261
Fracture of clavicle, simple "G" (Class XX, Inter. 185C).....		18	11	13	3				9	4	674
Fracture of clavicle, simple "H" (Class XX, Inter. 185C).....		2	1	1	1				1		37
Fracture of clavicle, simple "J" (Class XX, Inter. 185).....	1	9	6	10	1				5		335
Fracture of clavicle, simple "L" (Class XX, Inter. 185C).....		6	4	4	1				4	1	224
Fracture of femur, compound "G" (Class XX, Inter. 185C).....	1	1							1	1	343
Fracture of femur, compound "L" (Class XX, Inter. 185C).....		1	2		1		1		1		21
Fracture of femur, simple "H" (Class XX, Inter. 185C).....	1		1		1				1		16
Fracture of femur, simple "G" (Class XX, Inter. 185C).....	1	2	6	3			1		4	1	705
Fracture of femur, simple "I" (Class XX, Inter. 185C).....		2	1				1		1	1	155
Fracture of femur, simple "J" (Class XX, Inter. 185C).....		1		1							127
Fracture of femur, simple "L" (Class XX, Inter. 185C).....	1	3	3		1		1		4	1	354
Fracture of forearm, compound "F" (Class XX, Inter. 185C).....		1	1						1	1	162
Fracture of forearm, compound "G" (Class XX, Inter. 185C).....		3	2	1					4		157
Fracture of forearm, compound "I" (Class XX, Inter. 185C).....			2		1				1		23
Fracture of forearm, compound "L" (Class XX, Inter. 185C).....			1	1							27
Fracture of forearm, simple "G" (Class XX, Inter. 185C).....	3	13	10	8	2				19	6	730
Fracture of forearm, simple "H" (Class XX, Inter. 185C).....		5	4	5					2	1	47
Fracture of forearm, simple "I" (Class XX, Inter. 185C).....		4	4	2					5	1	155
Fracture of forearm, simple "J" (Class XX, Inter. 185C).....	2	7	3	8	1				3		321
Fracture of forearm, simple "L" (Class XX, Inter. 185C).....	1	9	10	7	1		2		7	3	1,055
Fracture of humerus, compound "G" (Class XX, Inter. 185C).....		1	2	2					1		39
Fracture of humerus, compound "I" (Class XX, Inter. 185C).....		2	3	1	1				2	1	130
Fracture of humerus, compound "K" (Class XX, Inter. 185C).....			1		1						6
Fracture of humerus, simple "G" (Class XX, Inter. 185C).....	1	6	8	7	1				7		285
Fracture of humerus, simple "I" (Class XX, Inter. 185C).....		1	1		1				1		1

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Fracture of humerus, simple "J" (Class XX, Inter. 185C).....		4	2	4					2		177
Fracture of humerus, simple "L" (Class XX, Inter. 185C).....		3	6	3	1				5		226
Fracture of leg, compound "F" (Class XX, Inter. 185C).....	1			1							141
Fracture of leg, compound "G" (Class XX, Inter. 185C).....		1	1						1	1	151
Fracture of leg, compound "T" (Class XX, Inter. 185C).....		1	3	1					2	1	278
Fracture of leg, compound "L" (Class XX, Inter. 185C).....	2	3	7	2	2				4	4	873
Fracture of leg, simple "F" (Class XX, Inter. 185C).....	2			1					1		170
Fracture of leg, simple "G" (Class XX, Inter. 185C).....	4	18	21	18	3				14	8	1,903
Fracture of leg, simple "H" (Class XX, Inter. 185C).....		1							1		0
Fracture of leg, simple "T" (Class XX, Inter. 185C).....	1	6	9	5			1		7	3	705
Fracture of leg, simple "J" (Class XX, Inter. 185C).....		7	12	6	2		1		9	1	425
Fracture of leg, simple "L" (Class XX, Inter. 185C).....	4	5	6	4	1		1		5	4	701
Fracture of maxilla, inferior, compound "G" (Class XX, Inter. 185C).....		1	2			1			1	1	17
Fracture of maxilla, inferior, compound "L" (Class XX, Inter. 185C).....	2	7	9	10	1				6	1	646
Fracture of maxilla, inferior, simple "L" (Class XX, Inter. 185C).....	2	24	18	19	2				19	4	922
Fracture of patella, simple "G" (Class XX, Inter. 185C).....	2	3	2	3	1				2	1	505
Fracture of patella, simple "T" (Class XX, Inter. 185C).....		1	1		1				1		3
Fracture of patella, simple "L" (Class XX, Inter. 185C).....	2			1						1	85
Fracture of pelvis, simple "G" (Class XX, Inter. 185C).....	4	3	3						3	1	132
Fracture of pelvis, simple "T" (Class XX, Inter. 185C).....		1	1				1		1		31
Fracture of rib, simple "G" (Class XX, Inter. 185C).....		24	16	26	3				11		424
Fracture of rib, simple "T" (Class XX, Inter. 185C).....		1	3	1					3		70
Fracture of rib, simple "J" (Class XX, Inter. 185C).....		7	3	7	1				2		49
Fracture of rib, simple "L" (Class XX, Inter. 185C).....		5	2	5					2		113
Fracture of skull, compound "B" (Class XX, Inter. 185C).....	1	1					1		1		225
Fracture of skull, compound "G" (Class XX, Inter. 185C).....	1	8	4	1			7		5		53
Fracture of skull, compound "H" (Class XX, Inter. 185C).....		1							1		0
Fracture of skull, compound "I" (Class XX, Inter. 185C).....		3	1			2	2				43
Fracture of skull, compound "L" (Class XX, Inter. 185C).....		5	9	3		2	2		5	2	669
Fracture of skull, simple "B" (Class XX, Inter. 185C).....		1				1					0
Fracture of skull, simple "F" (Class XX, Inter. 185C).....		1				1					0
Fracture of skull, simple "G" (Class XX, Inter. 185C).....	1	5	5		2	5	1		3		95
Fracture of skull, simple "T" (Class XX, Inter. 185C).....		2					2				44
Fracture of skull, simple "L" (Class XX, Inter. 185C).....	2	5	3		2	1	2		3	2	487
Fracture of vertebra, simple "G" (Class XX, Inter. 185C).....		1	4				1		4		55
Fracture of vertebra, simple "H" (Class XX, Inter. 185C).....		1					1				0
Fracture of vertebra, simple "I" (Class XX, Inter. 185C).....	1	1	1	1					1	1	434
Fracture of vertebra, simple "L" (Class XX, Inter. 185C).....		1	2		1	1			1		10

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Fracture, unqualified, compound "B" (Class XX, Inter. 185C).....		1		1							32
Fracture, unqualified, compound "G" (Class XX, Inter. 185C).....		7	3	5		1			3	1	129
Fracture, unqualified, compound "H" (Class XX, Inter. 185C).....	2	13	7	16	1				4	1	584
Fracture, unqualified, compound "I" (Class XX, Inter. 185C).....		17	7	13	1				6	4	827
Fracture, unqualified, compound "J" (Class XX, Inter. 185C).....		9	2	8					2	1	157
Fracture, unqualified, compound "L" (Class XX, Inter. 185C).....	4	16	4	13	3		1		6	1	465
Fracture, unqualified, simple "E" (Class XX, Inter. 185C).....		3		3							65
Fracture, unqualified, simple "G" (Class XX, Inter. 185C).....	2	47	24	44	2		3		18	6	1,284
Fracture, unqualified, simple "H" (Class XX, Inter. 185C).....	1	24	8	24	1				6	2	614
Fracture, unqualified, simple "I" (Class XX, Inter. 185C).....	2	48	17	44	1				14	8	1,233
Fracture, unqualified, simple "J" (Class XX, Inter. 185C).....	1	87	38	85	7				27	7	1,511
Fracture, unqualified, simple "L" (Class XX, Inter. 185C).....	10	202	62	206	5		3		53	7	3,824
Frostbite "L" (Class XX, Inter. 178).....		8	2	9					1		59
Heat cramps "L" (Class XX, Inter. 179A).....		58	7	59	2				4		157
Heat exhaustion "J" (Class XX, Inter. 179A).....		1		1							25
Heat exhaustion "L" (Class XX, Inter. 179A).....		53	9	52	3				7		285
Hematoma, traumatic "G" (Class XX, Inter. 186).....	1	3	3	5			1		1		135
Hematoma, traumatic "J" (Class XX, Inter. 186).....		3	2	3					2		19
Hematoma, traumatic "L" (Class XX, Inter. 186).....	1	3		4							100
Hemorrhage into eyeball, traumatic "J" (Class XX, Inter. 186).....		1		1							10
Hemorrhage into eyeball, traumatic "L" (Class XX, Inter. 186).....		2		2							9
Hemorrhage under conjunctiva, traumatic "L" (Class XX, Inter. 186).....	1	4	1	5					1		15
Intracranial injury "B" (Class XX, Inter. 186).....		1	1		1				1		3
Intracranial injury "G" (Class XX, Inter. 186).....	1	16	8	13	2	1			9		117
Intracranial injury "H" (Class XX, Inter. 186).....		1	2				1	1	1		5
Intracranial injury "J" (Class XX, Inter. 186).....		4	2	4					2		22
Intracranial injury "L" (Class XX, Inter. 186).....	1	11	7	11	2				5	1	32
Intraspinal injury "G" (Class XX, Inter. 186).....		1		1							5
Multiple injuries, extreme "A" (Class XX, Inter. 186).....		1	1				1		1		9
Multiple injuries, extreme "F" (Class XX, Inter. 186).....		1								1	2
Multiple injuries, extreme "L" (Class XX, Inter. 186).....			1	1							5
Rupture of globe, traumatic "L" (Class XX, Inter. 186).....		1	3	1			1		2		15
Rupture of ligament, traumatic "G" (Class XX, Inter. 186).....		2		2							12
Rupture of ligament, traumatic "J" (Class XX, Inter. 186).....		2	1	2					1		12
Rupture of ligament, traumatic "L" (Class XX, Inter. 186).....		2		2							12

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Rupture of muscle, traumatic "G" (Class XX, Inter. 186).....		1	3	1					3		21
Rupture of muscle, traumatic "I" (Class XX, Inter. 186).....		1		1							24
Rupture of muscle, traumatic "J" (Class XX, Inter. 186).....		1							1		0
Rupture of muscle, traumatic "L" (Class XX, Inter. 186).....			1							1	10
Rupture of tympanum, traumatic "E" (Class XX, Inter. 186).....		3	2	4					1		54
Rupture of tympanum, traumatic "F" (Class XX, Inter. 186).....		3	1	3					1		26
Rupture of tympanum, traumatic "G" (Class XX, Inter. 186).....		1		1							5
Rupture of tympanum, traumatic "H" (Class XX, Inter. 186).....		1							1		0
Rupture of tympanum, traumatic "J" (Class XX, Inter. 186).....		5	2	6					1		37
Rupture of tympanum, traumatic "L" (Class XX, Inter. 186).....		6		6							10
Smoke inhalation "C" (Class XX, Inter. 168B).....		5		5							5
Sprain of joint "G" (Class XX, Inter. 185B).....	10	370	62	368	20				45	9	3,441
Sprain of joint "H" (Class XX, Inter. 185B).....		17	7	17	3				4		131
Sprain of joint "I" (Class XX, Inter. 185B).....	1	13	5	14	1				3	1	204
Sprain of joint "J" (Class XX, Inter. 185B).....	7	339	111	352	21		2		76	6	2,756
Sprain of joint "L" (Class XX, Inter. 185B).....	8	200	44	202	11				31	8	2,787
Strain of muscle "G" (Class XX, Inter. 186).....		22	4	23					3		212
Strain of muscle "H" (Class XX, Inter. 186).....		1		1							3
Strain of muscle "I" (Class XX, Inter. 186).....		1		1							4
Strain of muscle "J" (Class XX, Inter. 186).....	2	51	19	56	2				14		293
Strain of muscle "L" (Class XX, Inter. 186).....	1	80	21	85	3				13	1	945
Strangulation "G" (Class XX, Inter. 186).....		1				1					0
Submersion "A" (Class XX, Inter. 169A).....		1		1							1
Submersion "D" (Class XX, Inter. 169A).....		7		4					3		11
Submersion "G" (Class XX, Inter. 169A).....			3	3							41
Sunburn "J" (Class XX, Inter. 167).....		6		6							24
Sunburn "L" (Class XX, Inter. 167).....		39		39							151
Sunstroke "J" (Class XX, Inter. 179B).....		1		1							2
Sunstroke "L," Class XX, Inter. 179B).....		3	1	2	1				1		23
Synovitis, traumatic "F" (Class XX, Inter. 186).....		1	3	1					3		133
Synovitis, traumatic "G" (Class XX, Inter. 186).....	1	25	20	28	3		2		12	1	425
Synovitis, traumatic "H" (Class XX, Inter. 186).....		1		1							1
Synovitis, traumatic "I" (Class XX, Inter. 186).....		4	1	3					1	1	91
Synovitis, traumatic "J" (Class XX, Inter. 186).....	4	19	21	34					10		517
Synovitis, traumatic "L" (Class XX, Inter. 186).....	2	41	9	35	6				8		728
Thermic fever "L" (Class XX, Inter. 179A).....		15	1	16							33
Wound, gunshot, abdominal viscera "B" (Class XX, Inter. 170).....		1				1					0

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
DISEASES—Continued.											
Wound, gunshot, abdominal viscera "E" (Class XX, Inter. 170).....	1	3	3	1			1	3		2	395
Wound, gunshot, abdominal viscera "K" (Class XX, Inter. 170).....		1					1				1
Wound, gunshot, abdominal viscera "L" (Class XX, Inter. 170).....		1							1		0
Wound, gunshot (main), artery or vein "K" (Class XX, Inter. 170).....		1					1				0
Wound, gunshot, brain "A" (Class XX, Inter. 170).....		9	1				9		1		0
Wound, gunshot, brain "K" (Class XX, Inter. 170).....		6	3				5		3	1	179
Wound, gunshot, heart "A" (Class XX, Inter. 170).....		3					3				0
Wound, gunshot, lower limb "E" (Class XX, Inter. 170).....	2	19	18	15	1		1		15	7	368
Wound, gunshot, lower limb "K" (Class XX, Inter. 170).....	4	9	26	8	1		4		21	4	665
Wound, gunshot, lower limb "L" (Class XX, Inter. 170).....		1	3	1	1				1	1	54
Wound, gunshot, lung "B" (Class XX, Inter. 170).....		1					1				0
Wound, gunshot, lung "E" (Class XX, Inter. 170).....		2	2	1					3		30
Wound, gunshot, lung "K" (Class XX, Inter. 170).....	1	1	1	1			1	1	1		76
Wound, gunshot, pleura "A" (Class XX, Inter. 170).....		1	1	1					1		55
Wound, gunshot, upper limb "B" (Class XX, Inter. 170).....		1	2	1					2		35
Wound, gunshot, upper limb "E" (Class XX, Inter. 170).....	1	11	9	9	1		1		7	3	406
Wound, gunshot, upper limb "K" (Class XX, Inter. 170).....	3	9	18	9			2		15	4	1,129
Wound, gunshot, upper limb "L" (Class XX, Inter. 170).....		1	1	1					1		15
Wound, gunshot, unqualified "A" (Class XX, Inter. 170).....		2	3	1			1		3		94
Wound, gunshot, unqualified "B" (Class XX, Inter. 170).....		3	2	2					3		23
Wound, gunshot, unqualified "E" (Class XX, Inter. 170).....		9	8	6	4				6	1	217
Wound, gunshot, unqualified "F" (Class XX, Inter. 170).....	1	2	1	2			2				19
Wound, gunshot, unqualified "K" (Class XX, Inter. 170).....	1	8	7	7	1		1		6	1	271
Wound, gunshot, unqualified "L" (Class XX, Inter. 170).....		3	7	3			1		6		151
Wound, incised, abdominal viscera "B" (Class XX, Inter. 171).....		3	1				3		1		1
Wound, incised, abdominal viscera "L" (Class XX, Inter. 171).....		1							1		0
Wound, incised, lower limb "B" (Class XX, Inter. 171).....		2		2							10
Wound, incised, lower limb "G" (Class XX, Inter. 171).....		7	1	6	1				1		0
Wound, incised, lower limb "H" (Class XX, Inter. 171).....		3		3							13
Wound, incised, lower limb "J" (Class XX, Inter. 171).....		6	3	7					2		25
Wound, incised, lower limb "L" (Class XX, Inter. 171).....		4	38	9	44	1			6		425
Wound, incised, neck "A" (Class XX, Inter. 171).....		4	1	2			1		2		37
Wound, incised, neck "B" (Class XX, Inter. 171).....			1	1							10
Wound, incised, neck "L" (Class XX, Inter. 171).....		3	1	3					1		21
Wound, incised, upper limb "A" (Class XX, Inter. 171).....		1		1							1
Wound, incised, upper limb "B" (Class XX, Inter. 171).....		1							1		0
Wound, incised, upper limb "E" (Class XX, Inter. 171).....		1		1							3

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Wound, incised, upper limb "G" (Class XX, Inter. 171).....		8		8							72
Wound, incised, upper limb "H" (Class XX, Inter. 171).....		13		13							85
Wound, incised, upper limb "I" (Class XX, Inter. 171).....		4		4							102
Wound, incised, upper limb "L" (Class XX, Inter. 171).....	5	121	7	126					6	1	1,131
Wound, incised, unqualified "B" (Class XX, Inter. 171).....		6	4	6	1					3	54
Wound, incised, unqualified "G" (Class XX, Inter. 171).....		16		16							70
Wound, incised, unqualified "H" (Class XX, Inter. 171).....	1	6		7							122
Wound, incised, unqualified "J" (Class XX, Inter. 171).....		1		1							2
Wound, incised, unqualified "L" (Class XX, Inter. 171).....	1	61	5	61				1	4	1	539
Wound, lacerated, abdominal viscera "G" (Class XX, Inter. 186).....		1					1				0
Wound, lacerated, abdominal viscera "I" (Class XX, Inter. 186).....		2					2				0
Wound, lacerated, abdominal viscera "J" (Class XX, Inter. 186).....	1	2		1					1	1	59
Wound, lacerated, abdominal viscera "L" (Class XX, Inter. 186).....	2			1	1						0
Wound, lacerated, lower limb "E" (Class XX, Inter. 186).....	2			2							11
Wound, lacerated, lower limb "F" (Class XX, Inter. 186).....	1	1	1	1					1		83
Wound, lacerated, lower limb "G" (Class XX, Inter. 186).....	49	6	49	3					3		548
Wound, lacerated, lower limb "H" (Class XX, Inter. 186).....	15	8	16	1					5	1	609
Wound, lacerated, lower limb "I" (Class XX, Inter. 186).....	2	12	4	13	1				4		504
Wound, lacerated, lower limb "J" (Class XX, Inter. 186).....	14	2	14						2		122
Wound, lacerated, lower limb "L" (Class XX, Inter. 186).....	1	66	24	68	1				20	2	1,108
Wound, lacerated, neck "L" (Class XX, Inter. 186).....	1	3	4	4					3	1	414
Wound, lacerated, upper limb "E" (Class XX, Inter. 186).....	2	1	2						1		5
Wound, lacerated, upper limb "F" (Class XX, Inter. 186).....	1	1	1						1		26
Wound, lacerated, upper limb "G" (Class XX, Inter. 186).....	14	3	13	1					3		205
Wound, lacerated, upper limb "H" (Class XX, Inter. 186).....	4	97	14	93	1		2		15	4	2,194
Wound, lacerated, upper limb "I" (Class XX, Inter. 186).....	1	72	12	74	1		1		7	2	1,375
Wound, lacerated, upper limb "J" (Class XX, Inter. 186).....	5		5								36
Wound, lacerated, upper limb "L" (Class XX, Inter. 186).....	8	126	19	138			1		12	2	1,776
Wound, lacerated, unqualified "A" (Class XX, Inter. 186).....	1	1	1						1		X 74
Wound, lacerated, unqualified "B" (Class XX, Inter. 186).....	1		1								2
Wound, lacerated, unqualified "E" (Class XX, Inter. 186).....	6		5							1	29
Wound, lacerated, unqualified "F" (Class XX, Inter. 186).....	3	3	3	1					2		97
Wound, lacerated, unqualified "G" (Class XX, Inter. 186).....	71	17	69	3	1				15		539
Wound, lacerated, unqualified "H" (Class XX, Inter. 186).....	2	43	4	45					3	1	655
Wound, lacerated, unqualified "I" (Class XX, Inter. 186).....	49	4	51						2		681
Wound, lacerated, unqualified "J" (Class XX, Inter. 186).....	14	4	13						5		85
Wound, lacerated, unqualified "L" (Class XX, Inter. 186).....	4	176	16	173	3				19	1	1,056
Wound, punctured, lower limb "E" (Class XX, Inter. 171).....	1		1								2

TABLE 1.—Detailed statement of diseases and injuries for the calendar year 1916—Contd.

Diagnoses.	Rem.	A.	RA.	D.	C	DD.	IS.	R.	T.	Cont.	Days.
INJURIES—Continued.											
Wound, punctured, lower limb "G" (Class XX, Inter. 171)...		5		5							38
Wound, punctured, lower limb "H" (Class XX, Inter. 171)...		1		1							25
Wound, punctured, lower limb "I" (Class XX, Inter. 171)...		1		1							13
Wound, punctured, lower limb "J" (Class XX, Inter. 171)...		3		3							15
Wound, punctured, lower limb "L" (Class XX, Inter. 171)...		41	7	41					6	1	283
Wound, punctured, neck "L" (Class XX, Inter. 171)...		1		1							4
Wound, punctured, pleura "B" (Class XX, Inter. 171)...		1	1	1					1		6
Wound, punctured, pleura "L" (Class XX, Inter. 171)...		1	1	1					1		338
Wound, punctured, upper limb "G" (Class XX, Inter. 171)...		1		1							8
Wound, punctured, upper limb "L" (Class XX, Inter. 171)...		18	2	17					2	1	141
Wound, punctured, unqualified "B" (Class XX, Inter. 171)...	1			1							1
Wound, punctured, unqualified "G" (Class XX, Inter. 171)...		3		3							5
Wound, punctured, unqualified "J" (Class XX, Inter. 171)...		1		1							3
Wound, punctured, unqualified "L" (Class XX, Inter. 171)...		28	8	25	1				9	1	399
POISONS.											
Botulism "L" (Class XXI, Inter. 164)...		2		2							5
Creatoxism "L" (Class XXI, Inter. 164)...		3		2	1						10
Insect sting "L" (Class XXI, Inter. 165A)...		9		9							57
Poisoning by alcohol "L" (Class XXI, Inter. 164)...	8	237	100	237	19	4			79	6	1,497
Poisoning by fish "L" (Class XXI, Inter. 164)...		15	1	15					1		54
Poisoning by fish venom "L" (Class XXI, Inter. 165A)...		1		1							1
Poisoning by gasoline inhaled "F" (Class XXI, Inter. 168B)...		1		1							1
Poisoning by gasoline inhaled "L" (Class XXI, Inter. 168B)...		3		3							4
Poisoning by illuminating gas "A" (Class XXI, Inter. 165B)...		1	1		1	1					3
Poisoning by illuminating gas "L" (Class XXI, Inter. 165B)...	1	8	1	2		7			1		35
Poisoning by lead, acute "L" (Class XXI, Inter. 165B)...	9	45	41	62	3				29	1	1,322
Poisoning by lead, chronic "L" (Class XXI, Inter. 57B)...	3	20	19	25	3				13	1	671
Poisoning by mercury acute "A" (Class XXI, Inter. 165B)...		6	6	5		2			5		104
Poisoning by mercury acute "B" (Class XXI, Inter. 165B)...		1							1		9
Poisoning by mercury, acute, "L" (Class XXI, Inter. 165B)...	1	11	2	13					1		216
Poisoning by methyl alcohol "L" (Class XXI, Inter. 165B)...		2					1		1		9
Poisoning by methyl alcohol vapor "L" (Class XXI, Inter. 165B)...			2	1	1						11
Poisoning by opium, acute "L" (Class XXI, Inter. 165B)...		2		1		1					1
Poisoning by opium, chronic "L" (Class XXI, Inter. 59)...	1	6	1	2				2	2	2	121
Poisoning by phenol "L" (Class XXI, Inter. 165B)...		1		1							4
Poisoning by serum "L" (Class XXI, Inter. 165B)...		4	1	4					1		13
Poisoning by snake venom "L" (Class XXI, Inter. 165A)...		1		1							12
Poisoning by tobacco, chronic "L" (Class XXI, Inter. 59)...		2	3	1	2				2		49

TABLE 1—Detailed statement of diseases and injuries for the calendar year 1916.—Contd.

DIAGNOSES—Continued.	Rem.	A.	RA.	D.	C.	DD.	IS.	R.	T.	Cont.	Days.
POISONS—Continued.											
Poisoning by turpentine "L" (Class XXI, Inter. 165B).....		3		3							3
Poisoning by zinc "L" (Class XXI, Inter. 165B).....		2		2							12
Poisoning, unqualified "L" (Class XXI, Inter. 165B).....		100	14	97	3	3	1		10		284
Totals—											
Diseases.....	1,870	39,094	19,715	41,855	3,022	164	1,086	59	12,650	1,843	710,391
Wounds, etc.....	215	5,936	1,640	5,787	258	153	67	4	1,290	233	94,055
Poisons.....	23	496	192	490	33	19	3		146	10	4,506
Grand total.....	2,108	45,516	21,547	48,132	3,313	335	1,156	63	14,086	2,086	808,951

SUMMARY.

Summary and comparative rates with previous years.	For the year 1916.				Average entire service 10 years, 1906-1915.
	Force afloat.	Stations and yards.	Hospitals.	Entire service.	
Average complement.....	44,860	21,754	2,671	69,294	58,173
Number of cases treated (Rem, A, and RA.)	20,694	22,047	17,430	60,171	51,132
Rate per 1,000 of complement.....	661.79	1,013.46	.....	998.22	878.96
Deaths.....	122	68	145	335	286
Rate per 1,000 of complement.....	2.74	3.12	.....	4.83	4.91
Invalided from service.....	11	465	680	1,156	1,450
Rate per 1,000 of complement.....	0.24	21.37	.....	16.68	24.92
Total number of sick days.....	134,449	127,814	546,688	808,951	623,632
Rate per 1,000 of complement.....	2,996.47	5,875.42	.....	11,674.18	10,720.29

DISTRIBUTION AMONG

TABLE 2.—Table showing distribution of diseases and injuries among occupational rates, deaths and death rates, invalided from service and invalided rates,

Class No.	Class. ¹	Officers.		Artificers.				Miscellaneous force.	
		Navy and Marine.	Midshipmen.	Electricians.	Engine room.	Fire room.	All other artificers.	Clerical.	Culinary.
	Average complement...	4,334	1,230	2,515	3,898	11,072	2,155	1,633	4,063
1	Diseases of blood.....	9			2	3	1		
	Rate per 1,000.....	2.07			0.51	0.27	0.46		
2	Diseases of circulatory system	10	2	12	23	32	7	7	40
	Rate per 1,000.....	2.30	1.62	4.77	5.90	2.89	3.24	4.28	2.46
3	Diseases of digestive system...	344	346	215	319	1,223	188	138	312
	Rate per 1,000.....	79.37	281.30	85.48	81.83	110.45	87.23	84.50	76.29
4	Diseases of ductless glands and spleen.			1	2	6	4		
	Rate per 1,000.....			0.39	0.51	0.54	1.85		0.24
5	Diseases of ear.....	19	30	20	29	120	12	12	27
	Rate per 1,000.....	4.38	24.39	7.95	7.43	10.93	5.56	7.34	4.89
6	Diseases of eye and adnexa...	42	63	30	37	84	18	19	22
	Rate per 1,000.....	9.69	51.21	11.92	9.49	7.58	8.35	11.63	5.67
7	Diseases of genito-urinary system (nonvenereal).	35	8	24	62	161	35	18	38
	Rate per 1,000.....	8.07	6.50	9.54	15.90	14.54	16.24	11.02	9.43
8	Diseases of infective type (nonvenereal)	455	580	231	297	1,491	203	171	411
	Rate per 1,000.....	104.98	471.54	91.84	76.19	134.66	94.19	104.71	101.40
9	Diseases of infective type (venereal)	32	1	250	431	2,243	253	179	558
	Rate per 1,000.....	7.38	0.81	102.98	110.56	202.58	117.40	109.61	145.07
10	Diseases of lymphatic system.	9	4	18	27	102	12	3	20
	Rate per 1,000.....	2.07	3.25	7.15	6.92	9.21	5.56	1.83	6.80
11	Diseases of mind.....	12		10	14	45	3	1	1
	Rate per 1,000.....	2.78		3.97	3.59	4.06	1.39	0.61	2.20
12	Diseases of motor system.....	27	2	13	24	125	19	9	1
	Rate per 1,000.....	6.22	1.62	5.16	6.15	11.28	8.81	5.51	0.41
13	Diseases of nervous system...	45	21	18	19	69	18	9	15
	Rate per 1,000.....	10.39	17.07	7.15	4.87	6.23	8.35	5.51	3.76
14	Diseases of respiratory system	136	69	74	80	285	42	52	82
	Rate per 1,000.....	31.37	56.09	29.42	20.52	25.74	19.42	31.84	20.97
15	Diseases of skin, hair, and nails.	26	33	28	28	127	19	9	29
	Rate per 1,000.....	5.99	26.82	11.12	7.18	11.47	8.81	5.51	7.12
16	Hernia.....	22	2	13	33	61	12	4	4
	Rate per 1,000.....	5.07	1.62	5.16	8.46	5.50	5.56	2.44	5.47
17	Miscellaneous diseases and conditions.	71	53	19	57	167	34	22	21
	Rate per 1,000.....	16.38	43.06	7.55	14.62	15.06	15.77	13.47	15.00
18	Parasites.....	10	14	23	26	115	16	19	19
	Rate per 1,000.....	2.30	11.38	9.14	7.43	10.38	7.42	11.63	14.00
19	Tumors.....	6	4	5	10	15	3	1	1
	Rate per 1,000.....	1.38	3.25	1.98	2.56	1.35	1.39	0.61	0.74
20	Wounds and other injuries...	175	244	181	309	1,242	217	78	200
	Rate per 1,000.....	40.37	196.37	71.96	79.27	112.17	100.69	47.78	49.00
21	Poisons.....	26	1	9	41	111	29	18	17
	Rate per 1,000.....	5.99	0.81	3.57	10.51	10.02	13.45	11.02	4.15
22	Totals for all classes....	1,511	1,477	1,203	1,873	7,827	1,145	769	1,986
	Rate per 1,000.....	348.63	1,200.81	478.33	480.50	708.91	531.32	470.91	487.57
23	Deaths.....	18	2	14	21	58	6	6	20
	Rate per 1,000.....	4.15	1.62	5.56	5.38	5.23	2.78	3.67	6.20
24	Suicides.....	3	1			6			
	Rate per 1,000.....	0.69	0.81			0.54		1.22	
25	Invalided from service.....	29	1	27	40	161	22	12	12
	Rate per 1,000.....	6.69	0.81	10.73	10.26	14.54	10.67	7.99	2.97
26	Total sick days.....	36,946	9,724	26,817	43,822	138,162	25,062	15,422	41,000
27	Damage ²	100.94	28.06	93.75	150.37	493.98	82.08	51.08	151.20

¹ For classes, see table in preface to statistics.

OCCUPATIONAL GROUPS.

groups of the personnel for the calendar year 1916, by classified admissions and admission suicides and suicide rates, sick days, and the computed damage.

Miscellaneous force.				Seaman branch.			Totals for all occupations.					Class No.	
Hospital.	Ma-rines.	Mus-ticians.	Pris-oners.	Ap-pren-tices.	Ordn-ance.	All other deck.	Num-ber.	Deaths.	In-val-ided from service.	Sick days.	Dam-age.*		
1,492	9,965	1,194	518	3,562	2,400	19,273	69,294						
	3		1	4		6	29			1,482	5.08	1	
	0.30		1.93	1.12		0.31	0.41	0.02	0.01				
4	44	5	6	27	6	49	244		19	66	9,515	68.28	2
2.68	4.41	4.18	11.58	7.57	2.49	2.54	3.52	0.27	0.95				
195	1,053	127	69	948	118	2,281	7,906		20	34	93,678	282.62	3
130.69	108.68	106.36	133.20	266.14	49.16	118.35	114.09	0.28	0.49	9	2,048	9.75	4
2	2	1		3	1	7	30						
1.34	0.20	0.83		0.84	0.41	0.36	0.43		0.12				
9	138	9	10	125	19	183	745		96		18,502	98.36	5
6.03	13.84	7.63	19.30	35.06	3.74	9.49	10.75		1.38				
9	88	7	15	82	14	138	669		89		13,633	82.41	6
6.03	8.85	5.86	28.95	23.02	5.83	7.15	9.65		1.28				
28	182	10	19	115	32	242	1,010		11	58	22,987	96.70	7
18.76	18.26	8.37	34.67	32.28	13.33	12.55	14.57	0.15	0.83				
234	2,293	121	60	1,883	156	2,540	11,106	57	105		206,319	722.43	8
158.83	230.10	101.33	115.83	523.02	65.00	131.79	160.27	0.82	1.51				
86	2,163	122	36	315	162	3,391	10,261	5	89		165,984	546.96	9
57.64	217.05	102.17	69.49	88.43	67.50	175.94	148.07	0.07	1.28				
12	164	2	4	20	14	161	580				17,890	49.54	10
8.04	16.45	1.67	7.72	5.61	5.83	8.25	8.37		0.02				
6	59	2	7	32	2	29	235		130		18,802	119.62	11
4.02	5.92	1.67	13.51	8.96	0.83	1.50	3.39	0.10	1.87				
16	170	5	5	83	10	144	658		184		18,722	142.96	12
10.72	17.05	4.18	9.65	17.68	4.16	7.47	9.49		2.65				
8	71	8	5	24	10	87	427	9	90		15,916	92.33	13
5.36	7.12	6.70	9.65	6.73	4.16	4.51	6.16	0.12	1.29				
50	341	22	34	361	43	483	2,157	25	54		42,505	155.28	14
33.51	34.21	18.42	66.63	101.34	17.91	25.06	31.12	0.36	0.77				
12	171	10	20	79	8	158	751		8		14,938	44.62	15
8.04	17.15	8.37	38.61	22.17	3.33	8.19	10.83		0.11				
8	55	7	5	35	13	104	397		21		18,126	59.91	16
5.36	5.51	5.86	9.65	9.82	5.41	5.39	5.72	0.30	0.30				
22	144	7	7	149	13	154	980	2	44		16,725	68.21	17
14.74	14.45	5.86	13.51	41.83	5.41	7.98	14.14	0.02	0.63				
6	129	14	10	83	13	265	806		3		9,481	27.28	18
4.02	12.94	11.72	19.30	23.30	5.41	13.74	11.63		0.04				
2	24			3	5	22	103	7			3,868	15.76	19
1.34	2.40			0.84	2.08	1.14	1.48	0.10	0.05				
64	731	44	18	397	153	1,877	5,938	152	66		94,055	365.75	20
42.89	73.35	36.85	34.74	111.45	63.75	97.39	85.66	2.19	0.95				
16	91	5		6	15	101	488	19	3		4,505	23.04	21
10.72	9.13	4.18		1.68	6.24	5.23	7.01	0.27	0.04				
789	8,146	528	331	4,734	797	12,422	45,518	335	1,156		808,951	2,955.50	22
528.82	817.46	442.21	638.99	1,329.02	332.08	644.52	656.85	4.83	16.68				
10	47	7	1	12	13	95	335						
6.70	4.71	5.86	1.93	3.36	5.41	4.92	4.83						
2	5					5	24						
1.34	0.50					0.25	0.34						
25	292	12	6	267	10	212	1,153						
16.75	29.30	10.05	11.58	74.96	4.16	10.99	16.68						
17,684	142,744	9,414	11,307	68,712	21,852	196,583	908,951						
65.80	559.46	35.21	24.39	327.30	71.18	690.42	2,955.50						

* Damage is in terms of individuals whose loss of service by sickness, discharge from service, or death would be represented as continuous throughout the year.

DEATHS.

TABLE 3.—Casualties in the Navy and Marine Corps during the calendar year 1916.

Cause.	Number.	Navy.		Marine.	
		Officers.	Men.	Officers.	Men.
DISEASES.					
Abscess of brain.....	2		2		
Abscess of kidney, perinephritic.....	1				1
Abscess of liver.....	3		2		1
Abscess of lung.....	1		1		1
Abscess, subphrenic.....	1		1		
Aneurism.....	2		2		
Apoplexy.....	1		1		
Appendicitis, acute.....	6	1	4		1
Appendicitis, chronic.....	1				
Asthma.....	1				1
Carbuncle.....	1		1		
Carcinoma.....	5	1	4		
Cerebro-spinal fever.....	1		1		
Cirrhosis of liver, atrophic.....	1		1		
Cirrhosis of liver, hypertrophic.....	1		1		
Dementia paralytica.....	5	2	3		
Diabetes mellitus.....	1		1		
Dilatation, acute cardiac.....	4		4		
Diphtheria.....	1		1		
Endocarditis, acute.....	1		1		
Endocarditis, chronic.....	3		3		
Erysipelas.....	3		3		
Heart block.....	1		1		
Hemoglobinuric fever.....	1				1
Hemorrhage into cerebrum.....	1		1		
Hypernephroma.....	1		1		
Leukemia.....	2	1	1		
Malaria.....	1				1
Meningitis, cerebral.....	3		2		1
Meningitis, cerebro-spinal.....	2		1		1
Myocarditis, acute.....	1	1			
Myocarditis, chronic.....	1		1		
Nephritis, acute.....	2		2		
Nephritis, chronic interstitial.....	4		4		
Nephritis, chronic parenchymatous.....	3		3		1
Obstruction, acute intestinal.....	2		2		
Pericarditis.....	1		1		
Peritonitis, acute general.....	3		2		1
Pleurisy, suppurative.....	5		5		
Pneumonia, broncho.....	3		3		
Pneumonia, lobar.....	15	1	14		
Polkomyelitis, acute anterior.....	1		1		
Psychosis (exhaustive).....	1		1		
Psychosis, due to organic brain disease.....	1				1
Pyelonephritis.....	1		1		
Sarcoma.....	1		1		
Septicemia.....	5		5		
Shock.....	1	1			
Smallpox.....	1				1
Syphilis.....	5		4		1
Tetanus.....	3				3
Tuberculosis, abdominal.....	3		3		
Tuberculosis, acute pneumonic.....	4		3		1
Tuberculosis, acute pulmonary, miliary.....	2		2		
Tuberculosis, chronic pulmonary.....	26		21		5
Tuberculosis of larynx.....	1		1		
Tuberculosis, unqualified.....	2		1		1
Tuberculous meningitis.....	1		1		
Ulcer of duodenum.....	1		1		
Ulcer of stomach.....	1		1		
Valvular disease, chronic cardiac.....	5		5		
Total diseases.....	164	9	153		3
INJURIES.					
Avulsion of limb "F".....	1		1		
Burns, multiple "F".....	11		11		
Compression of chest "D".....	1		1		
Drowning "A".....	5		5		
Drowning "D".....	68	1	60		
Drowning "J".....	1		1		

TABLE 3.—Casualties, in the Navy and Marine Corps during the calendar year 1916—Continued.

Cause.	Number.	Navy.		Marine.	
		Officers.	Men.	Officers.	Men.
INJURIES—continued.					
Electric shock, injury from "A".....	1	1			
Electric shock, injury from "L".....	1		1		
Fracture of pelvis, simple "I".....	2		1		1
Fracture of skull, compound "I".....	7		7		
Fracture of skull, compound "G".....	2		1		1
Fracture of skull, simple "F".....	1		1		1
Fracture of skull, simple "G".....	1		1		1
Fracture of skull, simple "L".....	5	1	3		1
Fracture of skull, simple "H".....	1		1		
Fracture of vertebra, simple "G".....	1		1		1
Fracture of vertebra, simple "L".....	1		1		
Fracture of vertebra, simple "L".....	1		1		
Fracture, unqualified, compound "G".....	1		1		
Intracranial injury "G".....	1		1		
Multiple injuries, extreme "A".....	1	1			
Strangulation "G".....	1		1		
Wound, gunshot, abdominal viscera "B".....	1		1		
Wound, gunshot, abdominal viscera "B".....	1		1		
Wound, gunshot, abdominal viscera "K".....	1		1		
Wound, gunshot, of brain "A".....	9	1	6		2
Wound, gunshot, of brain "K".....	5			2	2
Wound, gunshot, of heart "A".....	3	1			2
Wound, gunshot, of lung "B".....	1				1
Wound, gunshot, of lung "K".....	1				1
Wound, gunshot, main artery or vein "K".....	1				1
Wound, gunshot, unqualified "A".....	1		1		
Wound, gunshot, unqualified "F".....	2	2			
Wound, gunshot, unqualified "L".....	1		1		
Wound, incised, abdominal viscera "B".....	3		2		1
Wound, incised, neck "A".....	1		1		
Wound, lacerated, abdominal viscera "G".....	1		1		
Wound, lacerated, abdominal viscera "I".....	2		2		
Wound, lacerated, abdominal viscera "L".....	1		1		
Wound, lacerated, unqualified "G".....	1		1		
Total injuries.....	152	8	119	2	23
POISONS.					
Poison by alcohol "L".....	4	1	3		
Poison by illuminating gas "A".....	1				1
Poison by illuminating gas "L".....	7		7		
Poison by mercury, acute "A".....	2		2		
Poison by methyl alcohol "L".....	1		1		
Poison by opium, acute "L".....	1		1		1
Poison, unqualified "L".....	3		3		
Total.....	19	1	16		2
Grand total diseases, injuries, and poisons.....	335	18	267	2	48

INVALIDATED FROM THE SERVICE.

TABLE 4.—Discharged from the service by reason of physical disability during the calendar year 1916.

Disability.	Number.	Navy.		Marine.	
		Officers.	Men.	Officers.	Men.
DISEASES.					
Abscess about rectum.....	1		1		
Abscess, unqualified.....	1		1		
Adhesions about stomach.....	1		1		
Adhesions of peritoneum.....	7	1	4		2
Albuminuria.....	1		1		
Amnesia.....	2		2		
Amblyopia.....	1				1

TABLE 4.—Discharged from the service by reason of physical disability during the calendar year 1916—Continued.

Disability.	Number.	Navy.		Marine.	
		Officers.	Men.	Officers.	Men.
DISEASES—continued.					
Amputation stump.....	3		2		1
Aneurism.....	1		1		
Ankylosis of joint.....	9		8		1
Aphasia.....	1		1		
Appendicitis, chronic.....	2		1		1
Arterial sclerosis, general.....	3	3			
Arthritis, acute.....	1		1		
Arthritis, chronic.....	9		5		4
Arthritis, deformans.....	1		1		
Asthma.....	11		8		6
Astigmatism.....	9		8		1
Atrophy of muscle.....	1				1
Atrophy of optic nerve.....	3		3		
Bromidrosis.....	1		1		
Bronchitis, chronic.....	16		15		1
Carcinoma.....	1		1		
Caries of tooth.....	4		4		
Carrier, diphtheria bacillus.....	1				1
Cataract.....	3		3		
Cellulitis.....	1		1		
Cerebro-spinal fever.....	1		1		
Chancroid.....	1		1		
Chorea.....	1		1		
Chorea, chronic progressive.....	1		1		
Choroiditis.....	2		2		
Cirrhosis of liver, hypertrophic.....	1		1		
Color blindness.....	3		3		
Conjunctivitis, chronic.....	4		3		1
Constipation.....	4				1
Constitutional inferiority.....	48		34		14
Constitutional psychopathic state.....	12		3		1
Contracture of (muscle, fascia, tendon, or sheath).....	3		3		
Curvature of spine.....	2		1		1
Dacryocystitis.....	1		1		
Deafness.....	9	1	7		1
Dementia, cause unknown.....	1		1		
Dementia, paralytic.....	5	1	3		1
Dementia, præcox.....	40	1	31		8
Detachment of retina.....	1				1
Deviation of nasal septum.....	3		2		1
Diabetes insipidus.....	3		1		2
Diabetes mellitus.....	3	3	2		
Dysentery, amoebic.....	2		2		
Dysentery, unclassified.....	1			1	
Eczema.....	2		2		
Endocarditis, acute.....	2		2		
Endocarditis, chronic.....	8		6		2
Enteritis, chronic.....	1		1		
Epididymitis, chronic.....	1		1		
Epilepsy.....	39	1	29		9
Epithelioma.....	1	1			
Erythema scarlatiniforme.....	1		1		
Eustachian salpingitis, chronic.....	1		1		
Exophthalmic goiter.....	3		2		1
Filariasis.....	1		1		
Fissure of anus.....	1				1
Fistula in ano.....	1	1			
Fistula of salivary (gland or duct).....	1		1		
Ganglion.....	1		1		
Gastritis, chronic catarrhal.....	4		2		2
Gastroploosis.....	1		1		
Goiter.....	5		5		
Gonococcus infection of joints.....	16		13		3
Gonococcus infection of urethra.....	7		6		1
Gonococcus infection, unqualified.....	3		2		1
Hammer toe.....	2				2
Hay-fever.....	1		1		
Hematuria renal.....	1		1		
Hemoglobinuria.....	1		1		
Hemophilia.....	1		1		
Hemorrhage into retina.....	1		1		
Hernia, inguinal.....	20		17		3
Hernia, ventral.....	1		1		
Hypermetropia.....	14		14		
Hypertrophy of tonsils.....	1		1		
Hypochondriasis.....	1				1
Hysteria.....	9		8		4

TABLE 4.—Discharged from the service by reason of physical disability during the calendar year 1916—Continued.

Disability.	Number.	Navy.		Marine.	
		Officers.	Men.	Officers.	Men.
DISEASES—continued.					
Imbecility.....	2		1		1
Incontinence of urine.....	12		11		1
Ingrowing nail.....	1		1		
Insufficiency of ocular muscle.....	1				1
Iritis.....	1		1		
Keratitis.....	1				1
Leukoma.....	1		1		
Locomotor ataxia.....	1	1			
Lymphadenitis, chronic.....	2		2		
Malaria.....	3				3
Malformations, congenital.....	3		2		1
Mastoiditis, acute.....	1		1		
Mastoiditis, chronic.....	1		1		
Masturbation.....	1		1		
Myelitis, transverse.....	1		1		
Myocarditis, chronic.....	4		3		1
Myopia.....	20		18		2
Myositis, chronic.....	2		2		
Nausea marina.....	2		2		
Necrosis.....	1		1		
Nephritis, acute.....	3		3		
Nephritis, chronic interstitial.....	7	1	6		
Nephritis, chronic parenchymatous.....	12		10		2
Nephrolithiasis.....	1	1			
Neurasthenia.....	19		14		5
Neuritis.....	5		5		
Neuritis, multiple.....	1				1
Neuritis, optic.....	1		1		
Neuroretinitis.....	1		1		
Neurosis, intestinal.....	1		1		
Neurosis, occupational.....	1		1		
Neurosis of bladder.....	16		9		7
Neurosis, traumatic.....	2		2		
No disease.....	1		1		
Obstruction, chronic intestinal.....	1		1		
Osteoma.....	3		3		
Osteomyelitis, chronic.....	2		2		
Otitis, externa.....	2				2
Otitis, interna, chronic.....	5		3		2
Otitis, media acute.....	2		2		
Otitis, media chronic.....	76	3	59		14
Paralysis of nerve.....	3		2		1
Paralysis of ocular muscle.....	2		2		
Paralysis of vocal cords.....	1				1
Paranoia.....	1		1		
Paranoiac state.....	1				1
Periostitis, chronic.....	1		1		
Pes cavus.....	1		1		
Pes planus.....	141		69		72
Phlebitis.....	2				2
Pleurisy, chronic fibrinous.....	4		2		2
Pleurisy, suppurative.....	3		3		
Pleuritic adhesions.....	4		2		2
Pneumonia, interstitial.....	3		3		
Pneumonia, lobar.....	1		1		
Presbyopia.....	1		1		
Psychasthenia.....	10		8		2
Psychosis, epileptic.....	1				1
Psychosis (exhaustive, infective, and toxic).....	1		1		
Psychosis, intoxication.....	1		1		
Psychosis, manic depressive.....	4		3		1
Psychosis, traumatic.....	2		2		
Pterygium.....	1		1		
Pyorrhea alveolar.....	2		2		
Retinitis.....	5		5		
Rheumatic fever, acute.....	1		1		
Rheumatic fever, subacute.....	2		2		
Rheumatism, chronic articular.....	23	1	17	1	4
Rheumatism, muscular.....	4		4		
Rhinitis, atrophic.....	1		1		
Rhinitis, hypertrophic.....	3		1		2
Senility.....	1		1		
Sinusitis, ethmoidal.....	1		1		
Sinusitis, frontal.....	2		1		1
Somnambulism.....	4		2		2
Spasm habit.....	1		1		
Stuttering.....	1				1

TABLE 4.—Discharged from the service by reason of physical disability during the calendar year 1916—Continued.

Disability.	Number.	Navy.		Marine.	
		Officers.	Men.	Officers.	Men.
DISEASES—Continued.					
Syphilis.....	62		49		13
Tachycardia.....	4		1		3
Talipes.....	1		1		
Thyroiditis, acute.....	1		1		
Tonsillitis, chronic.....	1		1		
Trachoma.....	9		8		1
Tuberculosis, abdominal.....	2		2		
Tuberculosis, acute pneumonic.....	1		1		
Tuberculosis, acute pulmonary miliary.....	1		1		
Tuberculosis, chronic pulmonary.....	90	3	63	2	22
Ulcer of skin.....	3		2		1
Ulcer of stomach.....	2		1		1
Union of fracture, faulty.....	3		3		
Valvular disease, chronic cardiac.....	37	1	23		3
Varicocele.....	2		1		1
Varix.....	5		3		2
Total diseases.....	1,086	24	789	4	289
INJURIES.					
Avulsion, unqualified "H".....	2		2		
Contusion "G".....	1				1
Dislocation about wrist "L".....	1		1		
Dislocation of clavicle "L".....	1		1		
Dislocation of intra-articular cartilage of joint "L".....	1		1		
Dislocation of patella "J".....	1				1
Dislocation of patella "L".....	1				1
Dislocation of shoulder "G".....	1		1		
Dislocation of shoulder "J".....	1		1		
Foreign body traumatic "E".....	1				1
Fracture about ankle joint, simple "G".....	3		1		2
Fracture about ankle joint, simple "J".....	1	1			
Fracture about ankle joint, simple "L".....	1		1		
Fracture about wrist joint, simple "L".....	1		1		
Fracture of femur, compound "L".....	1		1		
Fracture of femur, simple "G".....	1				1
Fracture of femur, simple "I".....	1		1		
Fracture of femur, simple "L".....	1		1		
Fracture of forearm, simple "L".....	2		2		
Fracture of leg, simple "I".....	1				1
Fracture of leg, simple "J".....	1				1
Fracture of leg, simple "L".....	1		1		
Fracture of skull, compound "B".....	1				1
Fracture of skull, compound "I".....	2		2		
Fracture of skull, compound "L".....	2		1		1
Fracture of skull, simple "G".....	1		1		
Fracture of skull, simple "I".....	2		2		
Fracture of skull, simple "L".....	2	1	1		
Fracture, unqualified, compound "L".....	1		1		
Fracture, unqualified, simple "G".....	3		2		1
Fracture, unqualified, simple "L".....	3		2		1
Hematoma, traumatic "G".....	1		1		
Intracranial injury "H".....	1		1		
Rupture of globe "L".....	1		1		
Sprain of joint "J".....	2		1		1
Synovitis, traumatic "G".....	2		1		1
Wound, gunshot, abdominal viscera "E".....	3		2		1
Wound, gunshot, lower limb "K".....	4				4
Wound, gunshot, lower limb "E".....	1		1		
Wound, gunshot, lung "K".....	1				1
Wound, gunshot, upper limb "E".....	1				1
Wound, gunshot, upper limb "K".....	2		1		1
Wound, gunshot, unqualified, "K".....	1				1
Wound, lacerated, upper limb "H".....	2		1		1
Wound, lacerated, upper limb "I".....	1				1
Wound, lacerated, upper limb "L".....	1		1		
Total injuries.....	67	2	28		37
POISONS.					
Poisoning by opium, chronic "L".....	2		1		1
Poisoning, unqualified, "L".....	1		1		
Total poisons.....	3		2		1
Grand total diseases, injuries and poisons.....	1,156	26	829	4	327

TABLE 5.—Surgical operations for the calendar year 1916.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Abscess (cause, location, and operation not stated)	117										117
Abscess, abdominal, drained			1				1				
Abscess about rectum, incised	13		2	1			4		1		11
Abscess about urethra, incised (died septicæmia)		1					1				
Abscess, appendical, incised			2				2				
Abscess of axilla, incised	6						3				3
Abscess of brain, trephined (died thrombosis)		1					1				
Abscess of buttock, incised	1						1				1
Abscess of kidney, permephritic:											
Incised	3					1	2				
Nephrectomy	2			2			2				
Abscess of liver, incised (died septicæmia)	2	1		2			5				
Abscess of mammary gland, excised	1						1				
Abscess of neck, incised	1										1
Abscess of perineum, incised	2						1				1
Abscess of shoulder, excision of scapula	1						1				
Abscess of testicle, emulectomy	1										1
Abscess of thigh, incised	3					1	2				
Abscess, peritonæal, incised	2										2
Abscess, post-auricular, incised	1		1				1				1
Abscess, prostate gland, incised	1										1
Abscess, penis, incised	1										1
Abscess, subphrenic, exploration	1						1				
Adenoids, adenectomy	39						7		1		31
Adhesions of peritoneum, broken up or divided	7						7				
Amputation stump:											
Reamputation unqualified	2										2
Reamputation of humerus	1						1				
Skin graft			1								1
Aneurism, excision of radial artery	1										1
Angiomas:											
Of foot, excised	1										1
Of tongue, cauterized			1				1				
Ankylosis of joint:											
Of fingers, amputation	2										2
Of knee, multiple incisions			1				1				
Appendicitis:											
Appendectomy (died—4 peritonitis, 1 septicæmia)	477	5	9	1	16	3	435	57	13		
Exploratory incision (died peritonitis)	1	1					2				
Gastro-enterostomy	1						1				
Gastro-enterostomy	2						2				
Atrophy of testicle, transplantation	2						1				
Avulsion of fingers, amputation	2		3				2				4
Avulsion of leg, amputation	1							1			
Avulsion of toes, amputation	1						1				
Bubonocèle, excised			1				1				
Burns, multiple:											
Plastic repair			1				1				
Skin graft	1						1				
Bursitis:											
Elbow, incised	3						1				2
Foot, removed	1										1
Knee, incised	2						1				1
Toes, amputation	2						2				
Unqualified, removed or incised	6		1				2				5
Calculus in bladder, cystotomy	1		2				2	1			
Carbuncle:											
Neck, incised	3						3				
Unqualified, incised	2							1			1
Carcinoma:											
Abdominal, exploratory laparotomy				2			2				
Colon, resection of colon (died shock)		1					1				
Carcinoma, (Continued)											
Pancreas, excision				1			1				
Stomach, exploratory incision				1				1			
Unqualified, anastomosis			1				1				
Caries of leg, amputation	1						1				
Cataract, excision	1		2								3
Cellulitis:											
Axillary, incised	1										1
Fingers, incised	1										1
Foot, incised	2						1				1
Forearm, incised			1						1		

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Cellulitis—Continued.											
Leg, incised	1										
Osseous, incised	1										
Popliteal space, incised			1								
Unqualified, excision	2							1			
Cholecystitis, cholecystotomy (died abscess of liver)	9	1	3				25				
Cholelithiasis:											
Exploratory incision	3						3				
Removal of gallstones (died shock)	4	1	1	1	1		7	1			
Contracture of tendon:											
Finger amputated	1			1							
Hand, tenorrhaphy	1										
Unqualified, dissection	1		1				3				
Contusion, thumb amputated							1				
Crush of:											
Fingers, amputated	2										2
Foot, skin graft			1								1
Upper limb, repair					1		1				
Cyst of brain, excision			1								1
Cyst of kidney, nephrectomy	2						2				
Cystoma:											
Ear, excised	1										1
Knee, excised	1										1
Neck, excised	8										8
Sacro-coccygeal, excised	1						1				
Thigh, excised	1						1				
Unqualified, removal	35		2		1		4				34
Deformity of fingers, amputation	3										3
Deformity of nose, corrected	1		1				2				
Deviation of nasal septum, resection	112										112
Dilatation of stomach, exploratory laparotomy	2						2				
Dislocation of:											
Cartilage of knee, excised	13		1				11	2			1
Cartilage of elbow, excision			1				1				
Elbow, repair	1		1				2				
Shoulder, plication	1		1				1	1			
Thumb, exploratory incision					1		1				
Vertebra, osteoplasty			1				1				
Dysentery, entameble, appendicostomy	1						1				
Epididymitis:											
Epididymotomy	3						1	1			1
Incised	3						3				
Vasectomy	1						1				
Epilepsy, decompression	1						1				
Epithelioma:											
Cheek, excised	1										1
Face, excised	1										1
Lip, excised	1										1
Tongue, removed half of tongue					1		1				
Unqualified, excised	2						1				1
Exostosis, os calcis, removal	1		2								3
Fibroma:											
Eye, excised	1										1
Neck, excised	1										1
Scrotum, excised	1						1				
Unqualified, excised	6										6
Fistula:											
Fecal, scar removal	1						1				
In ano, repair	39		4	1	2	2	22	4	7		11
Of urethra, repair	1						1				
Foreign body, traumatic:											
Tibia, removed	1										1
Breast, pin removed	1										1
Unqualified, removed	3							1			3
Functional derangement of liver, exploratory incision			1				1				
Fractures:											
Ankle joint, simple, nailed			1				1				
Ankle joint, compound, repair			1	1			2				
Clavicle, simple—											
Plating	1		1				2				
Wiring	1						1				
Femur, simple—											
Osteorrhaphy			2	1			3				
Sequestrotomy				1			1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether with other.	Gas.	Other general.	Local or none.
Fractures—Continued.											
Forearm, simple, repair	4		4	1	1		9		1		
Forearm, compound, wired	1						1				
Forearm, radius, simple, plated	1			1			2				
Forearm, ulna, simple, sutured	1		1				2				
Foot, simple, curetted				1					1		
Foot, toes, simple, amputated	2										2
Hand, phalanges, simple—											
Amputation	1						1				
Repair	1										1
Humerus, simple—											
Exploratory incision			1				1				
Wire suture	1			1			2				
Leg, simple, osteoplasty			1				1				
Leg, compound—											
Exploratory incision			1			1					
Fragments removed	1		1				1				1
Leg, fibula, simple, repair	1						1				
Leg, tibia, simple, plated	1						1				
Pelvis, simple, laparotomy (died rupture of bladder and septicemia)		1					1				
Skull, simple, trephined				1		1					
Skull, compound—											
Decompression (died, 1 respiratory failure, 1 hemorrhage, and 1 cardiac failure)		3			1	1	2				1
Plastic			2				2				
Trephined			6	2		2	6				
Spine, vertebra, simple, osteoplasty			1				1				
Wrist joint, repair	2		1				3				
Unqualified—											
Bone splinter excised	2						2				
Repair	4			1			2				3
Ganglion, hand, excised	3										3
Gangrene:											
Leg, amputation	1						1				
Toes—											
Amputation	1										1
Disarticulation	1										1
Gastritis, chronic catarrhal, cholecystotomy	1						1				
Goiter, excised	9		1	2			11				1
Hammer toe, amputated	23		3				12	5			9
Hematoma, traumatic, right rectus repaired	1						1				
Hemiplegia, old, trephining			1				1				
Hemorrhoids, removal and repair	210		3		4	5	135	33	16		28
Hernia:											
Epigastric, herniotomy	3						3				
Femoral, herniotomy	1						1				
Inguinal, herniotomy (died tetanus)	374	1		2	7	1	323	38	19		3
Of muscle, repair	2						1				1
Umbilical, herniotomy	3						3				
Ventral, herniotomy	20		1		1		21	1			
Hydrocele, excision and repair	50		1		1		39	2	4		7
Hypertrophy of mammary gland, excision of breast	2					2					
Hypertrophy of turbinates, snared and resected	7										7
Hypospadias, repair	1						1				1
Incisions, miscellaneous, condition unknown	73										73
Ingrowing toenails, removed	84										84
Intracranial injury:											
Exploratory incision					1		1				
Trephined (died shock)	1	1					2				
Leukemia, exploratory incision				1			1				
Lipoma:											
Back, removed	2						1				1
Shoulder, excised	2										2
Unqualified, excised	2										2
Loose body in knee joint, removed	4						4				
Lymphadenitis:											
Cervical glands, adenectomy	2						2				
Submaxillary glands, excised	1						1				
Unqualified glands, excised and incised	141		5	2	2		62	1	13		84
Lymphomas, foot, tumor removed	1										1
Malformations, unqualified, dissection	1						1				
Mastoiditis, curetted, radical, and trephining	16		2	5	2		21	2		1	1
Meningitis, cerebral, exploratory incision (died septicemia)		1					1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether with other.	Gas.	Other general.	Local or none.
Multiple injuries, extreme, repair of kidney.....	1						1				
Myositis, lumbar, incision.....	1						1				
Necrosis:											
Fingers, amputation.....	3						1		1		1
Frontal bone, curetted.....			1								1
Hand, incised.....			2						2		
Leg, incised.....			1								1
Tibia, sequestrotomy.....	1						1				
Toes, amputation.....	2						2				
Unqualified—											
Amputation.....	2		1						2		1
Curetted.....			5				2		1		2
Nephrolithiasis, nephrectomy.....	1						1				
Obstruction, intestinal:											
Cecostomy.....	1						1				
Exploratory laparotomy.....	1		4			1	3		1		
Occlusion of urethra, urethrotomy.....	1						1	1			
Ochritis, orchidectomy.....	1						1	1			
Osteomas:											
Humerus, removal.....	1						1				
Malleolus, removal.....	1						1				
Os calcis, removal.....	2						2				
Tibia, excision.....	1						1				
Unqualified, osteotomy.....	2						1				1
Osteomyelitis, unqualified, osteotomy.....	2		2				3				1
Otitis, tympanum perforations.....	12			1					1		12
Pachymeningitis, cerebral, craniotomy.....				1			1				
Panophthalmitis, evisceration.....			1								1
Papilloma, removed.....	2										2
Paralysis of nerve:											
Eyelid, plastic.....	1							1			
Unqualified, dissected.....				1			1				
Periostitis, tibia, curetted.....			1				1				
Toe—											
Amputation.....	1										1
Curetted.....	1						1				
Peritonitis, laparotomy.....	1	1	1				2		1		
Phimosis:											
Circumcision.....	173										173
Incision for.....	8										8
Pleurisy, aspiration.....	11		7		2						20
Pleurisy, suppurative:											
Rib resection (died 2 septicemia).....	18	2	9	1	1	1	16		1		15
Thoracotomy.....	1		2				2				1
Polypus, nasal, removed.....	5						1				4
Prolapse of rectum, repair.....	1						1				
Prostatitis, prostatectomy.....	1						1				
Pterygium, excision.....	20										20
Pyelonephritis, exploratory laparotomy.....			1		1		2				
Redundant prepuce, circumcision.....	119										119
Redundant scrotum:											
Partial amputation.....	1						1				
Plastic repair.....	2				1		2				1
Rupture of bladder, exploratory laparotomy (died, 2 peritonitis).....		2				1		1			
Rupture of globe, enucleation.....	1						1				
Sarcoma, foot, removal.....			1								1
Scars:											
Appendectomy, removed.....	1										1
Facial, plastic repair.....			1								1
Foot, toes amputated.....			1								1
Unqualified, excised.....	7				1		3	2			3
Stumps:											
Bronchial, incised.....	2			1			1				2
Inguinal, excised.....	1		1						1		1
Leg, curetted.....	1								1		
Rectal, incised.....	1								1		
Unqualified, excised.....	1		2				3				
Stomatitis, frontal:											
Trephining.....	2		2			1	3				
Turbinectomy.....	1										1
Stomatitis, maxillary:											
Excavation of antrum.....	2						1				1
Incision.....	1						1				
Trephining.....			1				1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Skin graft, unqualified.....	1					1					
Sprain of joint, excision of cartilage.....	1						1				
Stricture of esophagus, gastrostomy.....			1				1				
Stricture of urethra, urethrotomy.....	1		1				2				
Synovitis:											
Hand, incised.....	1								1		
Unqualified, incised.....	1						1				
Syphilis, exploratory laparotomy.....				1			1				
Tendon adhesions, metacarpal, broken up.....			1								1
Tendons severed, exploratory incision.....	1										1
Tonsillitis, tonsillectomies and incisions.....	433										433
Tubercular peritonitis, laparotomy (died, 2 peritonitis, 2 shock).....		4	1				3	1			1
Tuberculosis, abdominal:											
Appendectomy.....				1			1				
Exploratory laparotomy (died, ulcer of intestine).....		1					1				
Tuberculosis, inguinal glands, excised.....	1					1					
Tuberculosis, ankle joint, foot amputation.....	1						1				
Tuberculosis, knee joint, leg amputation.....			1				1				
Tuberculosis, wrist joint, hand amputated.....	1							1			
Tuberculosis of joint, unqualified, incised.....			2				2				
Tuberculosis of neck, sinus excision.....	1						1				
Tuberculosis of spine, excision of lumbar sinus.....			1				1				
Tuberculosis of testicle, orchidectomy.....	2						2				
Tuberculosis of trochanter, curetted.....				1			1				
Tumor, breast, excised..... curetted.....	3						2	1			
Tumor, hand, excised.....	1										1
Ulcer of duodenum:											
Excision.....	2						1	1			
Gastroenterostomy.....	2						1	1			
Ulcer of eye, curetted.....	1										1
Ulcer of mouth, excised.....				1							1
Ulcer of rectum, exploratory incision.....	1				1	2					
Ulcer of skin, skin graft.....	1		1				2				
Ulcer of stomach:											
Enterointerostomy.....	2						2				
Excision (died hemorrhage).....	1	1	1				2				
Exploratory incision.....	1						1				
Gastroenterostomy.....	6		1				7				
Repair of perforation.....	1						1				
Union of fracture, faulty:											
Fingers, amputated.....	1										1
Toes, amputated.....	1										1
Unqualified, repair.....	2		1				3				
Varicocele, excision and ligation.....	179				2		133	18	2		28
Varix, excision and ligation.....	51		4		3		26	7			25
Wound, gunshot:											
Abdomen (died hemorrhage) exploratory laparotomy.....		1					1				
Arm—											
Bullet removed.....	1				1		1				1
Bullet removed and bone plate.....					1		1				
Brain—											
Bullet removed.....	1										1
Osteoplastic flap.....					1		1				
Fingers, plastic repair.....			1				1				
Hand—											
Bullet removed.....	1										1
Hand amputated.....	1										1
Intestines, small, laparotomy (died, shock and hemorrhage).....		1					1				
Leg, lead fragments removed.....	1						1				
Neck, bullet removed.....	1										1
Thigh—											
Amputation.....					1		1				
Bullet removed.....	2						2				
Upper limb, unqualified—											
Bullet removed.....	2							1			1
Curetted.....			1				1				
Wound, incised:											
Abdomen (died shock), exploratory laparotomy.....	1	1					1	1			
Hand, tendon sutured.....	2						1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Cellulitis—Continued.											
Leg, incised	1										1
Occiput, incised	1		1			1	1				1
Popliteal space, incised			1								
Unqualified, resection	2							1			1
Cholecystitis, cholecystotomy (died abscess of liver)	9	1	3				13				
Cholelithiasis:											
Exploratory incision	3						3				
Removal of gallstones (died shock)	4	1	1	1	1		7	1			
Contracture of tendon:											
Finger amputated	1			1							3
Hand, tenorrhaphy	1										1
Unqualified dissection	1		2				3				
Contusion, thumb amputated			1				1				
Crush of:											
Fingers, amputated	2										3
Foot, skin graft			1								1
Upper limb, repair					1		1				
Cyst of brain, excision			1								1
Cyst of kidney, nephrectomy	2						2				
Cystoma:											
Ear, excised	1										1
Knee, excised	1										1
Neck, excised	8										8
Sacro-coxygeal, excised	1						1				
Thigh, excised	1						1				
Unqualified, removal	35		2		1		4				34
Deformity of fingers, amputation	3										3
Deformity of nose, corrected	1		1				2				
Deviation of nasal septum, resection	112										112
Dilatation of stomach, exploratory laparotomy	2						2				
Dislocation of:											
Cartilage of knee, excised	13		1				11	2			1
Cartilage of elbow, excision			1								
Elbow, repair	1		1				2				
Shoulder, plication	1		1				1	1			
Thumb, exploratory incision	1				1		1				
Vertebra, osteoplasty			1				1				
Dysentery, entamebic, appendicostomy	1						1				
Epididymitis:											
Epididymotomy	3						1	1			1
Incised	3						3				
Vasectomy	1						1				
Epilepsy, decompression	1						1				
Epithelioma:											
Cheek, excised	1										1
Face, excised	1										1
Lip, excised	1										1
Tongue, removed half of tongue				1			1				
Unqualified, excised	2						1				1
Exostosis, os calcis, removal	1		2								3
Fibroma:											
Eye, excised	1										1
Neck, excised	1										1
Scrotum, excised	1						1				
Unqualified, excised	6										6
Fistula:											
Fecal, scar removal	1						1				
In ano, repair	39		4	1	2	2	22	4	7		11
Of urethra, repair	1						1				
Foreign body, traumatic:											
Tibia, removed	1										1
Breast, pin removed	1						1				
Unqualified, removed	3						1				3
Functional derangement of liver, exploratory incision			1				1				
Fractures:											
Ankle joint, simple, nailed			1				1				
Ankle joint, compound, repair			1	1			2				
Clavicle, simple—											
Plating	1		1				2				
Wiring	1						1				
Femur, simple—											
Osteorrhaphy			2	1			3				
Sequestrotomy				1			1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Fractures—Continued.											
Forearm, simple, repair	4		4	1	1		9		1		
Forearm, compound, wired	1						1				
Forearm, radius, simple, plated	1			1			2				
Forearm, ulna, simple, sutured	1		1				2				
Foot, simple, curetted				1					1		
Foot, toes, simple, amputated	2										2
Hand, phalanges, simple—											
Amputation	1						1				
Repair	1										1
Humerus, simple—											
Exploratory incision			1				1				
Wire suture	1			1			2				
Leg, simple, osteoplasty			1				1				
Leg, compound—											
Exploratory incision			1			1					
Fragments removed	1		1				1				1
Leg, fibula, simple, repair	1						1				
Leg, tibia, simple, plated	1						1				
Pelvis, simple, laparotomy (died rupture of bladder and septicæmia)		1					1				
Skull, simple, trephined				1		1					
Skull, compound—											
Decompression (died, 1 respiratory failure, 1 hemorrhage, and 1 cardiac failure)		3			1	1					1
Plastic			2				2				
Trephined			6	2		2	6				
Spine, vertebra, simple, osteoplasty			1				1				
Wrist joint, repair	2		1				3				
Unqualified—											
Bone splinter excised	2						2				
Repair	4			1			2				3
Ganglion, hand, excised	3										3
Gangrene:											
Leg, amputation	1						1				
Toes—											
Amputation	1										1
Disarticulation	1										1
Gastritis, chronic catarrhal, cholecystotomy	1										
Gonorrhea, excised	9		1	2			11				1
Hammer toe, amputated	23		3				12	5			9
Hematoma, traumatic, right rectus repaired	1						1				
Hemiplegia, old, trephining			1								
Hemorrhoids, removal and repair	210		3		4	5	135	33	16		28
Hernia:											
Epigastric, herniotomy	3						3				
Femoral, herniotomy	1						1				
Inguinal, herniotomy (died tetanus)	374	1		2	7	1	323	38	19		3
Of muscle, repair	2						1				1
Umbilical, herniotomy	3						3				
Ventral, herniotomy	20		1		1		21	1			
Hydrocele, excision and repair	50		1		1		39	2	4		7
Hypertrophy of mammary gland; excision of breast	2					2					
Hypertrophy of turbinate, snared and resected	7										7
Hypospadias, repair	1										1
Incisions, miscellaneous, condition unknown	73										73
Ingrowing toenails, removed	84										84
Intracranial injury:											
Exploratory incision					1		1				
Trephined (died shock)	1	1					2				
Leukemia, exploratory incision				1			1				
Lipoma:											
Back, removed	2						1				1
Shoulder, excised	2										2
Unqualified, excised	2										2
Loose body in knee joint, removed	4						4				
Lymphadenitis:											
Cervical glands, adenectomy	2						2				
Submaxillary glands, excised	1						1				
Unqualified glands, excised and incised	141		5	2	2		52	1	13		84
Lymphoma, foot, tumor removed	1										1
Malformations, unqualified, dissection	1						1				
Mastoiditis, curetted, radical, and trephining	16		2	5	2		21	2		1	1
Meningitis, cerebral, exploratory incision (died septicæmia)		1					1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Multiple injuries, extreme, repair of kidney	1						1				
Myositis, lumbar, incision	1						1				
Neerosis:											
Fingers, amputation	3						1		1		1
Frontal bone, curetted			1								1
Hand, incised			2						2		
Leg, incised			1								1
Tibia, sequestromy	1						1				
Toes, amputation	2						2				
Unqualified—											
Amputation	2								2		1
Curetted			5								2
Nephrolithiasis, nephrectomy	1						1				2
Obstruction, intestinal:											
Cecostomy	1						1				
Exploratory laparotomy	1		4			1	3	1			
Occlusion of urethra, urethrotomy	1						1	1			
Orethritis, orchidectomy	1							1			
Osteoma:											
Humerus, removal	1						1				
Malleolus, removal	1						1				
Os calcis, removal	2						2				
Tibia, excision	1						1				
Unqualified, osteotomy	2						1				1
Osteomyelitis, unqualified, osteotomy	2		2					3			
Otitis, tympanum perforations	12			1					1		12
Pachymeningitis, cerebral, craniotomy				1			1				
Panophthalmitis, evisceration			1								1
Papilloma, removed	2										2
Paralysis of nerve:											
Eyelid, plastic	1							1			
Unqualified, dissected				1			1				
Periostitis, tibia, curetted			1				1				
Toe—											
Amputation	1										1
Curetted	1						1				
Peritonitis, laparotomy	1	1	1				2		1		
Phimosis:											
Circumcision	173										173
Incision for	8										8
Pleurisy, aspiration	11		7		2						20
Pleurisy, suppurative:											
Rib resection (died 2 septicemia)	18	2	9	1	1	1	16		1		13
Thoracotomy	1		2				2				1
Polypus, nasal, removed	5						1				4
Prolapse of rectum, repair	1										
Prostatitis, prostatectomy	1						1				
Pterygium, excision	20										20
Pyelonephritis, exploratory laparotomy			1		1		2				
Redundant prepuce, circumcision	119										119
Redundant scrotum:											
Partial amputation	1						1				
Plastic repair	2				1		2				1
Rupture of bladder, exploratory laparotomy (died, 2 peritonitis)		2				1		1			
Rupture of globe, enucleation	1						1				
Sarcoma, foot, removal			1								1
Scars:											
Appendectomy, removed	1										1
Facial, plastic repair			1								1
Foot, toes amputated			1								1
Unqualified, excised	7			1			3	3			3
Sinus:											
Bronchial, incised	2			1			1				2
Inguinal, excised	1		1								1
Leg, curetted	1								1		
Rectal, incised	1								1		
Unqualified, excised	1		2				3				
Sinusitis, frontal:											
Trophing	2		2			1	3				
Turbinectomy	1										1
Sinusitis, maxillary:											
Excavation of antrum	2						1				1
Incision	1						1				
Trophing			1				1				

TABLE 5.—Surgical operations for the calendar year 1916—Continued.

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether with other.	Gas.	Other general.	Local or none.
Skin graft, unqualified.....	1					1					
Sprain of joint, excision of cartilage.....	1						1				
Stricture of esophagus, gastrostomy.....			1				1				
Stricture of urethra, urethrotomy.....	1		1				2				
Synovitis:											
Hand, incised.....	1								1		
Unqualified, incised.....	1						1				
Syphilis, exploratory laparotomy.....				1			1				
Tendon adhesions, metacarpal, broken up.....			1								1
Tendons severed, exploratory incision.....	1										1
Tonsillitis, tonsillectomies and incisions.....	433										433
Tubercular peritonitis, laparotomy (died, 2 peritonitis, 2 shock).....		4	1				3	1			1
Tuberculosis, abdominal:											
Appendectomy.....				1			1				
Exploratory laparotomy (died, ulcer of intestine).....		1					1				
Tuberculosis, inguinal glands, excised.....	1					1					
Tuberculosis, ankle joint, foot amputation.....	1						1				
Tuberculosis, knee joint, leg amputation.....			1				1				
Tuberculosis, wrist joint, hand amputated.....	1								1		
Tuberculosis of joint, unqualified, incised.....			2				2				
Tuberculosis of neck, sinus excision.....	1						1				
Tuberculosis of spine, excision of lumbar sinus.....			1				1				
Tuberculosis of testicle, orchidectomy.....	2						2				
Tuberculosis of trochanter, curetted.....				1			1				
Tumor, breast, excised.....	3						2	1			
Tumor, hand, excised.....	1										1
Ulcer of duodenum:											
Excision.....	2						1	1			
Gastroenterostomy.....	2						1	1			
Ulcer of eye, curetted.....	1										1
Ulcer of mouth, excised.....				1							1
Ulcer of rectum, exploratory incision.....	1				1	2					
Ulcer of skin, skin graft.....	1		1				2				
Ulcer of stomach:											
Enterogastrostomy.....	2						2				
Excision (died hemorrhage).....		1	1				2				
Exploratory incision.....	1						1				
Gastroenterostomy.....	6		1				7				
Repair of perforation.....	1						1				
Union of fracture, faulty:											
Fingers, amputated.....	1										1
Toes, amputated.....	1										1
Unqualified, repair.....	2		1				3				
Varicocele, excision and ligation.....	179				2		133	18	2		28
Varix, excision and ligation.....	51		4		3		26	7			25
Wound, gunshot:											
Abdomen (died hemorrhage) exploratory laparotomy.....		1					1				
Arm—											
Bullet removed.....	1				1		1				1
Bullet removed and bone plate.....					1		1				
Brain—											
Bullet removed.....	1										1
Osteoplastic flap.....					1		1				
Fingers, plastic repair.....			1				1				
Hand—											
Bullet removed.....	1										1
Hand amputated.....	1										1
Intestines, small, laparotomy (died, shock and hemorrhage).....		1					1				
Leg, lead fragments removed.....	1						1				
Neck, bullet removed.....	1										1
Thigh—											
Amputation.....					1		1				
Bullet removed.....	2						2				
Upper limb, unqualified—											
Bullet removed.....	2							1			1
Curetted.....			1				1				
Wound, incised:											
Abdomen (died shock), exploratory laparotomy.....	1	1					1	1			
Hand, tendon sutured.....	2						1				1

TABLE 5.—*Surgical operations for the calendar year 1916—Continued.*

Operation.	Result.					Anesthetic employed.					
	Cured.	Died.	Improved.	Unimproved.	Transferred.	Chloroform.	Ether.	Ether, with other.	Gas.	Other general.	Local or none.
Wound, incised—Continued.											
Upper limb, unqualified, amputation.....			1				1				
Unqualified, repair.....	2						1				1
Tendon sutured.....	1										1
Wound, lacerated:											
Arm, biceps sutured.....	1						1				
Eye, iridectomy.....					1						
Fingers, amputated.....	21		5		3		10		2		17
Foot, excision of bone.....	1						1				
Knee, sutured.....	1						1				
Neck—											
Repair.....			1	1	1		3				
Repair of facial nerve.....				1	1		1				
Thumb, tendons sutured.....	2							1			1
Toe, amputated.....	1										1
Upper limb, unqualified—											
Amputated.....	1						1				
Repair.....	4			1			4				1
Unqualified, sutured.....	1										1
Total operations (3,553).....	3,239	33	170	48	63	29	1,001	192	95	1	1,635

TABLE 6.—*Dental operations for the calendar year 1916.*

Operation or treatment.	Number of cases.	Operation or treatment.	Number of cases.
Fillings:		Impacted teeth:	
Amalgam, ordinary.....	14,378	Corrected.....	153
Amalgam, built on post.....	106	Extracted.....	131
Cement, permanent.....	4,148	Inlays:	
Cement, synthetic.....	2,279	Removed (gold or porcelain).....	22
Cement, temporary.....	833	Recemented (gold or porcelain).....	64
Gutta-percha, permanent.....	545	Maxilla treated:	
Gutta-percha, temporary.....	4,588	Fractured.....	26
Other than listed.....	382	Necrosed.....	41
Abcess:		Prophylaxis:	
Acute and blind, lanced.....	504	Calculus removed (sets).....	2,563
Acute and blind, root opening.....	347	Cleaned and polished (sets).....	2,021
Chronic and fistulous treated.....	254	Pulps:	
Bridge:		Exposed and extirpated.....	2,415
New.....	38	Exposed and devitalized.....	1,980
Removed.....	88	Putrescent.....	1,520
Recemented.....	133	Roots:	
Crown:		Canals filled.....	1,670
Gold, removed.....	140	Canals treated.....	6,002
Gold, recemented.....	139	Porcelain crowns (incisor).....	117
Gold, new.....	82	Porcelain crowns (bicuspid).....	53
Porcelain, new.....	48	Extracted.....	6,120
Porcelain, removed.....	43	Teeth extracted (other than roots).....	1,084
Porcelain, recemented.....	102	Plates, new.....	4
Gums treated:		Treatment (other than listed).....	408
Gingivitis.....	564	Total operations.....	64,166
Pyorrhea.....	555		
Other local inflammation.....	794		

TABLE 7.—*Recruiting statistics, Navy and Marine Corps, for the calendar year 1916.*

Character.	Navy.		Marine Corps.			Naval re-serve.	For civilian cruise.
	Original.	Re-enlistment.	Original.	Re-enlistment.	Accepted applicants.		
Total applicants.....	76,727	7,215	37,205	1,020	5,576	973	2,808
Total enlisted.....	14,727	6,606	4,888	908	4,479	864	2,237
Examined by medical officer.....	61,855	7,188	20,737	1,009	4,972	947	2,750
Rejected by medical officer.....	38,845	407	12,322	96	613	87	237
Cause of rejection by medical officer:							
Alcoholic.....	164	5	94	1	-----	-----	-----
Deformities.....	2,822	21	731	1	18	7	10
Drug addict.....	6	-----	9	-----	-----	-----	-----
Ear—							
Defective hearing.....	574	27	250	7	14	7	13
Other auditory diseases.....	439	12	113	1	43	2	5
Eye—							
Color blind.....	1,352	7	363	-----	22	2	11
Defective refraction.....	5,360	79	1,537	16	13	20	68
Other visual diseases.....	678	15	162	-----	23	2	7
Febrile conditions.....	379	1	2	-----	1	-----	-----
Flat and weak feet.....	3,534	21	1,494	2	64	3	5
Genito-urinary, nonvenereal.....	478	2	70	1	14	-----	-----
Genito-urinary, venereal.....	914	32	433	9	40	2	1
Glands enlarged.....	53	3	3	-----	1	-----	-----
Gout or tendency to.....	232	3	62	1	2	-----	-----
Growth (cysts, tumors, etc.).....	27	-----	2	-----	-----	-----	-----
Heart affections.....	1,439	16	863	5	35	5	29
Height, over.....	18	-----	18	-----	1	-----	1
Height, under.....	1,623	5	501	-----	3	-----	-----
Height and weight, under.....	907	1	14	-----	-----	-----	-----
Hemorrhoids.....	529	13	164	-----	14	-----	4
Hernia or tendency to.....	794	12	518	1	42	7	17
Intestinal parasites.....	53	-----	1	-----	-----	-----	-----
Mental disorders.....	231	2	71	-----	19	-----	1
Nasal abnormalities.....	260	2	216	-----	1	-----	-----
Nervous conditions—							
Epilepsy.....	13	-----	4	-----	2	-----	-----
Other.....	32	1	2	-----	-----	-----	-----
Poor physique.....	862	1	771	1	2	-----	6
Pyorrhea.....	888	1	8	-----	-----	-----	-----
Respiratory tract, catarrhal conditions.....							
-----	96	2	5	-----	2	-----	-----
Skin diseases.....	791	5	303	6	5	4	2
Speech defective.....	113	1	19	-----	2	3	-----
Tattooing objectionable.....	19	-----	1	-----	-----	-----	-----
Teeth defective.....	3,935	32	943	8	18	3	9
Tonsillar conditions.....	526	3	62	-----	8	-----	-----
Tuberculosis or suspects.....	657	17	252	3	30	2	10
Varicocele or varicose veins.....	2,331	14	774	5	61	3	16
Weight, over.....	23	-----	23	-----	-----	-----	-----
Weight, under.....	4,507	33	890	10	101	7	10
All other causes.....	1,186	18	974	18	12	8	12

FINANCIAL.

TABLE 8.—*Statement of total cost of maintenance and of average cost per diem for maintenance and subsistence at naval hospitals for the fiscal year 1917.*

Hospital at—	Total cost of maintenance.	Subsistence.	Maintenance.	Subsistence per diem
Annapolis, Md.....	\$54,806.12	<i>Days.</i> 35,185	\$1.557	\$0.708
Cancoso, P. I.....	70,878.35	53,611	1.322	.5616
Chelsea, Mass.....	91,561.01	74,821	1.223	.559
Great Lakes, Ill.....	71,392.62	67,085	1.0642	.5315
Guam.....	27,231.63	17,821	1.525	.765
Fort Lyon, Colo.....	165,146.76	133,150	1.2408	.54
Mare Island, Cal.....	139,027.44	148,884	.933	.48512
Narragansett Bay, R. I.....	81,897.02	82,466	.9631	.515
New York, N. Y.....	138,175.50	104,996	1.3159	.5134
Norfolk, Va.....	196,874.21	182,683	1.077	.526
Orongapo, P. I.....	29,300.50	37,703	.777	.555
Philadelphia, Pa.....	94,460.52	92,961	1.075	.50
Port Royal, S. C.....	14,503.03	19,605	.73971	.45527
Portsmouth, N. H.....	45,138.37	38,131	1.183	.656
Puget Sound, Wash.....	37,996.49	36,227	1.048	.5143
Washington, D. C.....	100,013.87	76,676	1.328	.659
Yokohama, Japan.....	6,522.55	4,435	1.47	.435

TABLE 9.—*Statement of the activities of naval medical supply depots.*

	Number of requisitions.	Value of requisitions filled.
New York, N. Y.....	1,840	\$524,663.79
Mare Island, Cal.....	382	54,786.41
Canacao, P. I.....	141	11,697.17

TABLE 10.—*Statement of the naval hospital fund.*

The condition of the fund is as follows:

Balance on hand July 1, 1916.....	\$422,527.88
Transferred to credit since July 1, 1916.....	992,309.73
Total.....	1,414,837.61
Expended since July 1, 1916.....	1,187,194.35
Balance on hand June 30, 1917.....	227,643.26

REPORT OF THE MAJOR GENERAL COMMANDANT OF THE UNITED STATES MARINE CORPS.

HEADQUARTERS UNITED STATES MARINE CORPS,
Washington, October 10, 1917.

From: The Major General Commandant.

To: The Secretary of the Navy.

Subject: Annual report of the condition and service of the United States Marine Corps.

INCREASE OF THE MARINE CORPS.

1. The authorized strength of the Marine Corps was increased by the act of August 29, 1916, from 344 officers and 9,921 enlisted men to 597 officers and 14,981 enlisted men, and the President was authorized in an emergency to further increase the corps to 693 officers and 17,400 enlisted men. One year ago its actual strength was 344 officers and 10,896 enlisted men.

2. On March 26, 1917, the President issued the following Executive order:

Executive order: By virtue of the authority vested in the President by the act approved August 29, 1916, entitled "An act making appropriations for the Naval Service for the fiscal year ending June thirtieth, nineteen hundred and seventeen, and for other purposes," it is hereby directed that the authorized enlisted strength of the Marine Corps be increased to seventeen thousand four hundred men.

WOODROW WILSON.

THE WHITE HOUSE,
March 26, 1917.

(No. 2561.)

3. The act of May 22, 1917, provided for the temporary increase of the Marine Corps, during the duration of the war, to a strength of 1,197 officers and 30,000 enlisted men.

APPOINTMENT OF OFFICERS.

4. During the 12 months that have elapsed since the submission of the last annual report 852 officers have been appointed. Of these, 91 were appointed prior to April 7, 1917, from the following sources:

a) Meritorious noncommissioned officers of the Marine Corps.....	15
(b) Former officer of the Marine Corps.....	1
(c) Graduates of distinguished military colleges.....	40
(d) Civilians qualified by competitive examination.....	28
(e) Graduates of the Naval Academy.....	7

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5. The outbreak of war made it essential that the corps should be filled, as far as practicable, with officers who had had prior military experience and training, and immediate steps were taken to

arrange for the designation and examination of Marine Corps warrant officers, noncommissioned officers, graduates of military colleges, and other civilians with military experience and training.

6. The appointments made subsequent to the declaration of war, both for the permanent service, and for the temporary increase authorized for the duration of the war, were drawn from the following sources:

(a) Graduates of the Naval Academy.....	6
(b) Former officer of the Marine Corps.....	1
(c) Former graduate of the Naval Academy.....	1
(d) Warrant officers and paymaster's clerks of the Marine Corps.....	89
(e) Meritorious noncommissioned officers.....	122
(f) Reserve officers and National Naval Volunteers.....	36
(g) Graduates of military colleges.....	284
(h) Other civilians with prior military or naval experience or training.....	136
(i) Other civilians passing the competitive examination held July 10, 1917.....	86

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(Two other candidates who took the examination on July 10 are awaiting the result of their physical examination. In case they are found to be physically qualified they will be appointed.)

7. In order to expedite the training of the new officers, advantage was taken of the law providing for a Marine Corps Reserve, and successful candidates were immediately enrolled as second lieutenants in the Reserve and ordered to Marine Corps posts for instruction pending the issuance of their commissions. Candidates designated for the July 10 examination were authorized upon designation to enroll as privates in the Marine Corps Reserve, with the understanding that upon the completion of their examination they would be ordered to the recruit depot at Paris Island, S. C., for training, pending the receipt of the report of the examining board. This policy was carried out, and the successful candidates have been commissioned second lieutenants in the Marine Corps, while the unsuccessful candidates have been given the option of continuing in the service as enlisted men or of being discharged therefrom.

8. Owing to the unusually large number of young men of excellent education and fine attainments who have enlisted in the Marine Corps since the outbreak of war, it has been decided that no further appointments of civilians to the rank of second lieutenant will be made during the continuance of the war, and that all vacancies occurring in that grade, not required for graduates of the Naval Academy, will be filled by the promotion of meritorious noncommissioned officers. This decision was promulgated to the service in the following Marine Corps order:

JUNE 4, 1917.

Marine Corps Orders, No. 25 (Series 1917). 300. (1) Owing to the fact that there are already on file so very many more applications of civilians for appointment as second lieutenants than there are vacancies to be filled, it has become necessary to discontinue the consideration of any additional applications for either regular or temporary appointments. (2) When the cases of those already designated have been settled, practically all vacancies occurring during the war will be filled by the appointment of meritorious noncommissioned officers who distinguish themselves in active service.

GEORGE BARNETT,
Major General Commandant.

INSTRUCTION OF OFFICERS.

9. The officers appointed from civil life, as soon as enrolled, were ordered to the marine barracks, Mare Island, Cal., San Diego, Cal., Paris Island, S. C., and the Marine Corps rifle range, Winthrop, Md., for instruction, pending the completion of the buildings for their use at the marine barracks, Quantico, Va. Early in July, the buildings being in readiness, the newly appointed officers were assembled at Quantico, where an officers' camp of instruction is now being held. Reports from this camp indicate that the progress of the new officers has been very satisfactory. A large number of the more advanced of these officers have already been assigned to active duty ashore and afloat. The course of instruction for the present class will be completed about the 20th instant, and a new class will be assembled immediately after that date.

RECRUITING.

10. An examination of the data given in this report shows the splendid work done by the recruiting service and the Publicity Bureau. The organization of the recruiting service was well adapted to the great recruiting campaign which became necessary after the declaration of war, and no change was made therein other than an increase of the personnel and in the number of recruiting stations—the number of recruiting divisions and districts remaining the same as before. Not only did the recruiting service succeed in obtaining sufficient men to bring the corps up to full strength in a remarkably short period of time, but what is of even greater importance, the character of the recruits joining the corps was exceptionally high.

RECRUIT DEPOTS.

11. Upon enlistment all Marine Corps recruits are transferred to recruit depots, where they undergo a course of training before being distributed to the service. Upon the outbreak of the war there were two Marine Corps recruit depots, one located at Paris Island, S. C., and the other at the navy yard, Mare Island, Cal. Owing to the rapidity with which recruiting was conducted, it became necessary in a very short time after the declaration of war to shelter and train about 6,000 recruits at Paris Island and 2,500 at Mare Island. In addition, temporary recruit depots were opened at the navy yards, Philadelphia, Pa., and Norfolk, Va., with a capacity of 2,500 for the former and 500 for the latter. The large sudden increase in the number of recruits at the recruit depots brought a great strain on their organizations, but the situation was successfully handled and the newly enlisted men were cared for and received the usual recruit training, including a complete course of instruction on the rifle range before being transferred to duty.

12. The officers and noncommissioned officers engaged in this arduous and important duty, in my opinion, deserve the highest commendation.

READINESS FOR SERVICE.

13. The additional officers and enlisted men authorized by the acts of August 29, 1916, and May 22, 1917, have been appointed and enlisted. The organization of the enlarged corps is practically complete and the entire corps is engaged in advanced training. This training is intensive in its nature and the new organizations have already attained a high state of efficiency.

14. It is believed that it would be altogether practicable to still further enlarge the Marine Corps, thereby giving its officers and enlisted men the opportunity of rendering greater service to the country. The advisability of doing so is submitted to the department for its consideration.

NEW LEGISLATION.

15. The outbreak of the war and the rapid growth of the Marine Corps have thoroughly tested the personnel legislation contained in the act of August 29, 1916. It has not only stood the test satisfactorily, but has added greatly to the efficiency of the corps. No new personnel legislation is therefore recommended at this time, except the creation of the rank of "private, first class," and the amendment of section 1570 of the Revised Statutes as mentioned below. This rank has recently been authorized for the mobile army, and as the pay of the Marine Corps is the same, grade for grade, as that of the Infantry, the privates of the corps are, as a matter of simple justice, entitled to the opportunity to obtain this advancement.

The proposed amendment to section 1570 of the Revised Statutes was recommended by the Secretary of the Navy in his letter to the chairman of the Senate Committee on Naval Affairs, dated December 15, 1916, and reads as follows:

Every seaman, landsman, or marine, who performs the duty of a fireman on board any vessel of war shall be entitled to receive, in addition to his compensation as seaman, landsman, or marine, a compensation at the rate of thirty-three cents a day for the time he is employed as fireman.

EXPEDITIONS.

16. In June last, by direction of the President, a certain portion of the Marine Corps was detached for service with the Army on the continent.

HAITI.

17. The First Provisional Brigade of Marines, in conjunction with the Haitian Constabulary, has continued its efficient service in Haiti. A state of peace has been effectively maintained, and the inhabitants of the country have been given an opportunity to develop its resources.

SANTO DOMINGO.

18. The Second Provisional Brigade of Marines has continued on duty as the military garrison of the Republic of Santo Domingo. This brigade has successfully repressed banditry and has restored that country to a state of peace and good order. In accomplishing this result it has been necessary for detachments of the brigade

to engage, from time to time, in pursuit of the various bands of outlaws which were committing depredations.

19. These operations were conducted in the most efficient and expeditious manner. All the bandit leaders have been captured or killed, and their followers dispersed, and the work of the officers and enlisted men taking part in the suppression of banditry has been commended by the brigade commander and by the military governor of Santo Domingo. The following officers and enlisted men of the Marine Corps were killed or wounded in the conduct of these operations:

Killed.

Capt. William W. Low, October 24, 1916, at Duarte, Santo Domingo.

Second Lieut. James K. Bolton, January 10, 1917, at San Pedro de Macoris, Santo Domingo.

First Sergt. Frank L. Atwood, October 24, 1916, at Duarte, Santo Domingo.

Pvt. Gus R. Olson, January 20, 1917, at San Pedro de Macoris, Santo Domingo.

Wounded.

Maj. John A. Hughes, December 3, 1916, near San Francisco de Macoris, Santo Domingo.

Capt. John R. Henley, January 10, 1917, at San Pedro de Macoris, Santo Domingo.

Gunnery Sergt. Earl W. Garvin, April 7, 1917, at Las Canitas, Santo Domingo.

Corpl. George Wilson, jr., January 20, 1917, at San Pedro de Macoris, Santo Domingo.

Pvt. Arthur W. Anderson, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Herman S. Clark, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Luther G. Gaskins, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Otto E. Hagstrom, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Robert C. McLennan, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Lloyd W. Nicholson, November 30, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Robert H. Osborn, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. Ernest V. Pockrus, April 7, 1917, at Las Canitas, Santo Domingo.

Pvt. Constant G. Small, April 7, 1917, at Las Canitas, Santo Domingo.

Pvt. Sumter Sumner, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

Pvt. William C. Twele, November 29, 1916, at San Francisco de Macoris, Santo Domingo.

20. In view of the fact that conditions in the Republic of Santo Domingo are practically the same as those heretofore existing in Haiti, the organization of a native military force, similar to the Haitian constabulary, was deemed expedient. A tentative plan for this organization, to be known as the Guardia Nacional Dominicana, proposed by the military governor of Santo Domingo, together with the recommendations of the undersigned, is now under consideration by the department. Preliminary steps toward its establishment have been taken, about 600 of the enlisted force having been recruited, and 20 officers appointed from officers and noncommissioned officers of the Marine Corps. It is expected that this organization will prove as effective in maintaining peace and good order in Santo Domingo as the Haitian constabulary has in Haiti.

CUBA.

21. During the revolution which took place in Cuba last winter it became necessary to land marines and seamen from the vessels of the fleet at various places in Oriente and Camaguey Provinces to protect American property from the depredations of the rebel bands. The marine detachments of the *Connecticut*, *South Carolina*, *Michigan*, *Machias*, *Montana*, *New York*, *Texas*, and *Olympia*, and the Forty-third, Fifty-first, and Fifty-fifth Companies of Marines, from the *New Hampshire*, *Vermont*, and the *Maine*, served ashore at different times during the period from March 1 to May 24, 1917, and the landing force was reinforced by a battalion of marines consisting of the Seventh, Seventeenth, and Twentieth Companies.

VIRGIN ISLANDS OF THE UNITED STATES.

22. Upon the transfer of the Virgin Islands by the Kingdom of Denmark to the United States, in April, 1917, a battalion of marines was assigned as the military garrison of those islands.

ADVANCED BASE FORCE.

23. The fixed defense companies of the Advanced Base Force which, at the date of my last annual report, were stationed in Haiti and Santo Domingo, having been relieved by newly organized infantry companies, have resumed their station and advanced base training at the Marine Barracks, navy yard, Philadelphia, Pa., where the troops are being exercised in the drills necessary for advanced base work, including infantry drill, heavy and light artillery, mining, signal drills of every variety, and aviation. Two regiments of Infantry for advanced base work are being trained at Quantico, Va., and the artillery battalion of the Advanced Base Force is also being trained at that place. Sixteen 8-inch howitzers are expected to be delivered early in November. Sixteen 5-inch guns of the advanced base outfit were taken for use on board merchant ships. Similar guns in size and number should be returned to the Advanced Base Force at as early a date as practicable, so that the necessary training in their use may be continued. The equipment of the Advanced Base Force is as complete as possible in every respect in accordance with the appropriations available for that purpose.

MARINE OFFICERS' SCHOOL.

24. The Marine Officers' School was reopened at Norfolk, Va., on April 10, 1917, and a class of 32 student officers was given an intensive course of instruction at that place. In July the school was removed to the Marine Barracks, Quantico, Va., where the newly appointed officers are now under instruction.

INSPECTIONS.

25. During the period covered by this report the undersigned inspected the Marine Corps expeditionary forces in Haiti and Santo Domingo, the marine barracks at Quantico, Va., and Philadelphia, Pa., and the recruit depot at Paris Island, S. C., and the officers of the Adjutant and Inspector's Department have made the usual annual inspection of nearly all the posts and organizations of the Marine Corps. Special reports of these inspections have been made, and the defects noted have been remedied as far as funds available have permitted. The reports show a satisfactory condition of the corps as to discipline and efficiency.

RIFLE PRACTICE.

QUALIFICATIONS.

26. The following table shows the number of enlisted men of the Marine Corps who have qualified as marksman or better in recent years:

	October—							June, 1917.	August, 1917.
	1910	1911	1912	1913	1914	1915	1916		
Expert riflemen.....	309	435	446	633	542	1,169	1,417	1,709	2,099
Sharpshooters.....	878	1,665	2,067	2,863	2,746	2,301	1,960	2,372	3,077
Marksmen.....	728	784	634	811	957	2,177	3,246	6,011	8,653
All grades.....	1,910	2,884	3,147	4,307	4,245	5,647	6,623	10,098	13,819
Average per cent:									
Expert riflemen.....	0.034	0.048	0.046	0.065	0.055	0.119	0.128	0.064	0.069
Sharpshooters.....	.096	.183	.221	.294	.278	.236	.176	.089	.103
Marksmen.....	.079	.087	.058	.083	.067	.220	.291	.226	.290
	.200	.318	.335	.442	.430	.575	.595	.379	.462

Since the last report of target practice the strength of the Marine Corps has been trebled, and the large increase has severely taxed the facilities for range instruction at Paris Island, S. C., Mare Island, Cal., and Winthrop, Md., where the majority of the new men received their instruction. In spite of the large number of men who were put through the course of training excellent results were obtained, the percentage of qualifications being only slightly less than that attained when the strength of the Marine Corps was less than 10,000 men.

The congestion being relieved at Paris Island, more time is being devoted to instruction practice, and a very much larger percentage of qualifications will be obtained. Rifle ranges are being constructed in Haiti and Santo Domingo, where the troops now on expeditionary duty are being put through a careful course of instruction, and it is believed that the results obtained on these ranges will bring the percentage of qualified men in the Marine Corps above the mark reached in 1916.

RANGES.

27. The Marine Corps Rifle Range at Winthrop, Md., will shortly be abandoned, and a rifle range is now being constructed at Quantico, Va., to which the range equipment from Winthrop will be transferred. A short time after Winthrop is evacuated the Quantico range will be in operation, and will accommodate the posts at Indian Head, Washington, Norfolk, Philadelphia, and some of the marine detachments from ships.

The Bay State Rifle Range at Wakefield, Mass., has been taken over by the Navy, and arrangements have been made whereby the Marines from Portsmouth, N. H., Boston, and Hingham may send men to the range. The Navy has also established camps at Virginia Beach, Va., and Charleston, S. C., where similar arrangements have been made for the accommodation of nearby posts.

COMPETITIONS.

28. Owing to war conditions no national match was held this year, nor have any matches been held under the auspices of the National Rifle Association.

ENLISTED FORCE.

29. Gains and losses in the enlisted force during the year have been as follows

Enlisted.....	16,376
Reenlisted from Marine Corps.....	1,419
Reenlisted from Army.....	236
Reenlisted from Navy.....	40
Joined from desertion.....	328
Prisoners restored.....	57
Total gain.....	18,456
Discharged.....	2,741
Died.....	60
Deserted.....	701
Retired.....	11
Prisoners sentenced to dishonorable discharge.....	219
Enlistments canceled.....	8
Total loss.....	3,740

DISTRIBUTION OF FORCE.

30. Summary of distribution of officers and enlisted men, June 30, 1917:

	Officers.	Marine gunners.	Quartermaster clerks.	Clerks, pay department.	Enlisted men.
Regular service:					
At posts within the United States	206	15	19	8	15,654
On duty at foreign stations	53				1,808
On board cruising vessels	51				1,866
On expeditionary duty	161	12	2	2	5,444
Total	471	27	21	10	24,772
Allowed by law	1,197	50	50	26	30,000
Marine Corps reserve:					
At posts within the United States	288				809
On expeditionary duty	25				95
Total	313				903
Marine Corps branch:					
At posts within the United States	31				809
On expeditionary duty	1				77
Total	32				886

DISTRIBUTION ON SEPT. 30, 1917.

Regular service:					
At posts within the United States	628		2	12	19,369
On duty at foreign stations	66				1,808
On board cruising vessels	73				2,519
On expeditionary duty	332	1		5	6,526
Total ¹	1,099	1	2	17	30,322
Marine Corps reserve:					
At posts within the United States	7				934
On board cruising vessels					5
On expeditionary duty	2				166
Total	9				1,105
Marine Corps branch:					
On duty within the United States	12				738
On duty at foreign stations					14
On expeditionary duty					83
On board cruising vessels					21
Total	12				861

¹ Since Sept. 30, 1917, 86 officers have been appointed.

RETIREMENTS, DEATHS, AND RESIGNATIONS.

31. From the time of my last report to date there have been 7 retirements, 10 deaths, and 2 resignations of officers. (The deaths include 6 officers of the retired list.)

WARRANT OFFICERS.

32. During the year there were 41 quartermaster clerks and 43 marine gunners appointed, all but 3 of whom have been commissioned temporary second lieutenants.

MEDALS OF HONOR.

33. Since the submission of the last annual report the following officers and enlisted men have been awarded medals of honor:

(General Order 244, Navy Department, Nov. 2, 1916):

First Sergt. Roswell Winans and Corpl. Joseph A. Glowin, for extraordinary heroism in the line of their profession, and their eminent and conspicuous courage in the face of the enemy in the action at Guayacanes, Santo Domingo, July 3, 1916.

(General Order 289, Navy Department, Apr. 27, 1917):

First Lieut. Ernest C. Williams, for extraordinary heroism in the line of his profession in the face of the enemy at San Francisco de Macoris, Santo Domingo, November 29, 1916.

(General Order 319, Navy Department, Aug. 25, 1917):

Lieut. Col. Smedley D. Butler, for conspicuous bravery during the attack on Fort Riviere, Haiti, November 17, 1915.

Capt. Edward A. Ostermann, for conspicuous gallantry during the engagement incident to the capture of Fort Dipitie, Haiti, October 24, 1915.

Capt. William P. Upshur, for conspicuous gallantry during the engagement incident to the capture of Fort Dipitie, Haiti, October 24, 1915.

Corpl. Samuel Gross, for coolness and bravery in entering Fort Riviere, Haiti, during the attack of November 17, 1915.

Gunnery Sergt. Daniel Daly, for conspicuous gallantry during the engagements incident to the capture of Forts Dipitie and Riviere, Haiti, in October and November, 1915.

LIFE-SAVING MEDAL.

34. Pvt. Edward H. Pawlowsky was awarded a silver life-saving medal by the Treasury Department, for gallant conduct in rescuing a woman from drowning near New Orleans, La., June 10, 1916.

CAMPAIGN BADGES.

35. Since the last report the following campaign medals and badges have been issued to officers and enlisted men of the Marine Corps: 7 West Indian campaign medals, 13 Spanish campaign badges, 30 Philippines campaign badges, 12 China campaign badges, 22 Army of Cuban Pacification badges, 17 Nicaraguan campaign badges.

The issuance of a badge for the officers and enlisted men who participated in the campaign in Haiti has been authorized by the department.

GOOD-CONDUCT MEDALS.

36. During the past year 1,008 good-conduct medals and 254 good-conduct medal bars were awarded to enlisted men of the Marine Corps.

37.

RECRUITING.

	Fiscal year ending June 30—		
	1915	1916	1917
Total number enlisted.....	4,068	3,922	17,748
(Increase in enlistments of 300.7 per cent.)			
Net desertions.....	786	577	475
Percentage of desertions to total borne on rolls.....	5.4	4	1.6
(Decrease in percentage of desertions 2.4 per cent.)			
Apprehended and surrendered from desertion.....	205	150	328
(Increase in apprehensions, etc. 118.6 per cent.)			
Dishonorably discharged, sentence of general court-martial.....	192	187	142
Reenlisted from the Marine Corps.....	520	962	1,419
Percentage reenlisting from Marine Corps.....	20.2	22	7.8
Total reenlistments, including those from Army.....	1,277	1,186	1,655
Percentage of reenlistments to total enlistments.....	31.4	30.2	9.2
Discharges by medical survey within 3 months from date of enlistment.....	23	56	51
Cost per recruit including transportation.....	\$39.93	\$55.05	\$31.17
Cost per recruit excluding transportation.....	\$26.51	\$34.01	\$9.97

There are 4 recruiting divisions, 26 recruiting districts, and 374 recruiting stations, with 26 officers and 428 enlisted men on recruiting duty.

The recruiting service has been very economically and most efficiently administered, and great credit is due to officers and enlisted men for the gratifying results obtained. The cost per recruit has been materially reduced, and the quality of the recruits has been materially improved. The percentage of men reenlisting from the Marine Corps, who were eligible to reenlist, shows a very gratifying increase, having been 46.3 per cent in 1916 and 83.4 per cent in 1917. The percentage of desertions is also gradually decreasing, having been reduced from 4 per cent in 1916 to 1.6 per cent in 1917. The system of postmaster recruiting authorized by the act of August 29, 1916, has been successful, and it is anticipated that it will eventually prove a great aid to the recruiting service. From the date of the declaration of war, April 6, 1917, to the end of the fiscal year, 12,108 men enlisted in the Marine Corps. The facilities of the Marine Corps publicity bureau were greatly expanded, and that bureau played a very large and important part in the recruiting campaign.

CANTONMENTS.

PARIS ISLAND.

38. Upon the declaration of war it became necessary to take steps to provide for the housing of the largely increased number of enlisted men. Facilities at the two recruit depots at Paris Island, S. C., and Mare Island, Cal., were sufficient for only about 1,000 and 350 men, respectively. Cantonments for 7,000 men have been constructed at Paris Island. This work included the installation of a complete new water system, involving the digging of five wells, construction of pressure tanks, mains, branches, and connections to all parts of the cantonment and quarantine station, and the installation of reservoirs, pumps, etc. A separate sewerage system for the new buildings was made necessary, owing to the inadequate facilities afforded at the station proper. Ice, power, and incinerating plants for this cantonment were provided. Mess tables and benches were furnished for all

kitchens and mess halls, clothing boxes for each barracks, and the buildings were suitably screened against flies, mosquitoes, etc. New boilers were installed in the main power plant, and a new generator, motor, and two boiler feed pumps. A building, with latrine and wash-house, was erected for use of the working force at the pumping station. The quarantine station, station proper, and the maneuver grounds were put in a sanitary condition by replacing old wood floors with cement floors, repairs to quarters, improving the messing facilities, and the installation of a 10,000-gallon pressure tank of water. Labor and material were furnished for the construction of new roads through all parts of the cantonment and the quarantine station, and extensive repairs were made to the approaches to the dock, so that materials could be expeditiously handled. Stoves for the kitchen, mess gear, cooking utensils, ice boxes, and fire protection for the new buildings have also been provided. Altogether a practically new post for 7,000 men, with all modern improvements for the health and comfort of the men, has been built, and this without any interruption in the work of the post.

QUANTICO.

39. Quantico, Va., was selected as the site for a concentration and training camp for approximately 7,000 men, and approximately 6,000 acres were leased at that place. This site provides ample facilities for a maneuver field for all troops, including a target range for infantry and field artillery. Barracks buildings have been constructed to accommodate 50 men each, and separate mess halls, kitchens, lavatories, etc., have been provided for each company. A cold-storage plant, having a capacity of 15 tons of ice daily and 15,000 cubic feet of cold storage, and a laundry capable of handling Government linen, are in process of construction. The buildings are of the simplest possible construction, but are screened and double-floored.

MARE ISLAND.

40. To meet the increase of the command at this post it became necessary to build extensions to the camp mess hall and kitchen, and to provide necessary toilets and washhouses; also to erect three temporary barracks, a quartermaster's storehouse, a post exchange and amusement building, and quarters for the sick.

DEPOT OF SUPPLIES, PHILADELPHIA.

41. This is the main depot of supplies of the Marine Corps. All articles of uniform for enlisted men, excepting caps, blankets, underwear, shoes, and rubber goods are manufactured at this depot. Besides articles of uniform, many other military supplies, such as tentage, accouterments, blanket bags, field desks, mess tables, boxes, sheets, pillowcases, garbage cans, cots, flags, camp stools, and supplies of a miscellaneous nature for field equipment, are manufactured at this depot. The trebling of the enlisted strength of the corps since the declaration of war with Germany, found this plant entirely inadequate to meet the needs of the service, and it was necessary to rent storage space elsewhere, the depot building proper now being used only for manufacturing purposes. To increase the facilities at this depot by

enlarging the plant, the sum of \$175,000 was authorized in the act of August 29, 1916, to which sum Congress authorized an additional amount of \$200,000 in the act of March 4, 1917, and in the act making the appropriation to supply urgent deficiencies, approved June 15, 1917, a further sum of \$200,000 was provided, making a total of \$575,000, with which to purchase land adjoining the depot, and erect thereon a suitable addition to the present building. Condemnation proceedings have been in course for some time under the direction of the Navy Department, with a view to securing land at the earliest practicable date, and plans and specifications for the new addition are being prepared under the direction of the Bureau of Yards and Docks. It is expected that proposals for the construction work will be issued at an early date, as it is desired to start the actual construction work as soon as possible.

DEPOT OF SUPPLIES, SAN FRANCISCO.

42. An item of \$225,000 has been included in the estimates for 1919, for the purchase of a site and erection thereon of a modern fireproof building, for use as a depot of supplies and the staff offices located in San Francisco. The building now occupied for depot purposes is owned by private parties, and an annual rental of \$10,500 is paid therefor. It would be in the interest of economy, as well as efficiency, for the Marine Corps to own its own building.

MARINE BARRACKS, SAN DIEGO, CAL.

43. The purchase of 232 acres of land, bordering on or near the bay of San Diego, Cal., to be used for advanced base, expeditionary, and aviation purposes, was consummated by the Navy Department on June 15, 1917, at a cost of \$250,000, which purchase was authorized in the naval act approved August 29, 1916. This tract contains high land and upland marsh land, the latter requiring considerable filling in before it can be used for building purposes. Five hundred acres of tide lands adjoining the 232 acre tract have been donated by the city of San Diego, Cal. It is understood that the War Department will cooperate with the Bureau of Yards and Docks in disposing of the spoil as the result of dredging in such manner as to improve the site of the Marine Corps base. Building operations will be undertaken as soon as possible. The marines stationed at San Diego are now occupying several buildings in the Exposition Grounds which were turned over for temporary use by the Exposition authorities at a nominal rental.

EAST COAST POST.

44. The attention of the department is invited to my annual report of last year, in which the necessity for the establishment of a permanent east coast post is fully set forth. The fact that during the last year the department has found it necessary to direct that buildings for navy yard purposes be constructed on the site of the marine barracks at the navy yard, New York; that the buildings equipped as quarters for marines at the naval station, New Orleans, La., be turned over to the Navy; that the marine barracks at the Naval

Academy, Annapolis, Md., be turned over to the Academy authorities for use in quartering midshipmen; and that the Marine Corps rifle range be removed from the naval reservation at Winthrop, Md. indicates conclusively that hereafter it will be impracticable to quarter or train large Marine Corps forces in any of the navy yards, and that economy, as well as efficiency, demands that a Marine Corps post on the east coast should be provided for expeditionary forces.

45. In the estimates under "Public Works" for 1919, an item for \$1,000,000 is included for the purchase of land, construction of buildings, and installation thereon of water, light, plumbing, telephone and telegraph systems, necessary grading, roads, wharves, docks, and all other essential preliminary features toward the establishment of this post. It is estimated that the total cost of the project will be \$2,500,000.

CONCLUSION.

46. In conclusion I deem it pertinent to add that the Marine Corps has met successfully the many difficult situations which have confronted it as the result of its sudden expansion. The entire Corps has been sheltered either in buildings, or under canvas, and has been clothed, equipped, trained, organized for war, and has thus far carried out every mission assigned to it in an efficient manner.

GEORGE BARNETT.

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