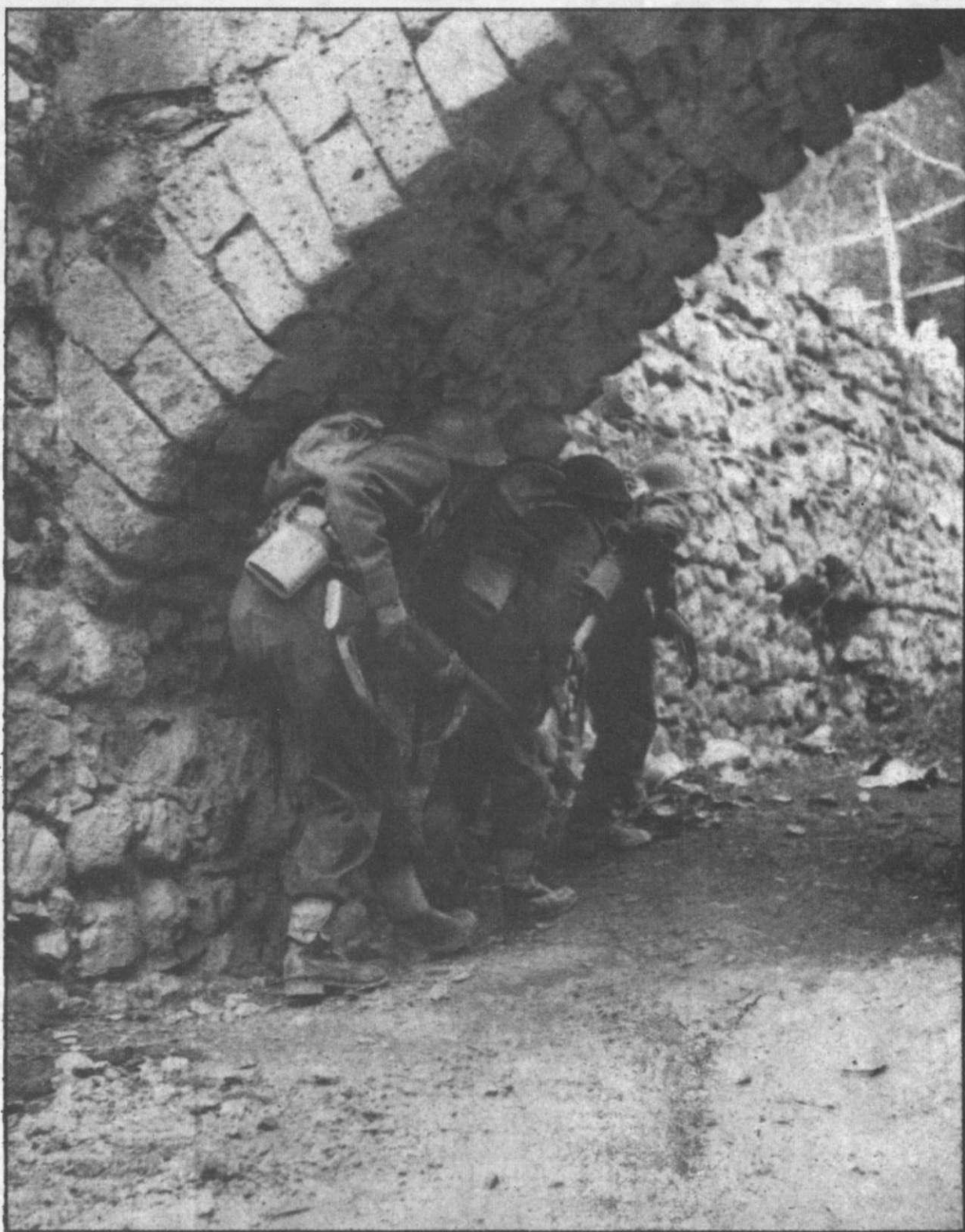


Vol 7 *The War Illustrated* N° 180

Edited by Sir John Hammerton

SIXPENCE

MAY 12, 1944



NEW ZEALAND PATROL, seeking out Nazis, probes hiding-places in the much-battered town of Cassino. Originally on the 8th Army front, it was announced on Feb. 18, 1944 that New Zealand units had been transferred to the 5th Army sector near Cassino, where they formed the spearhead of the Allied thrust into the town after it was bombed on March 15. They have also campaigned with very great distinction in Libya, Egypt, Crete, Greece and the S.W. Pacific.

Photo: British Official Crown Copyright

NO. 181 WILL BE PUBLISHED FRIDAY, MAY 26

Back to the Land Goes Our Roving Camera



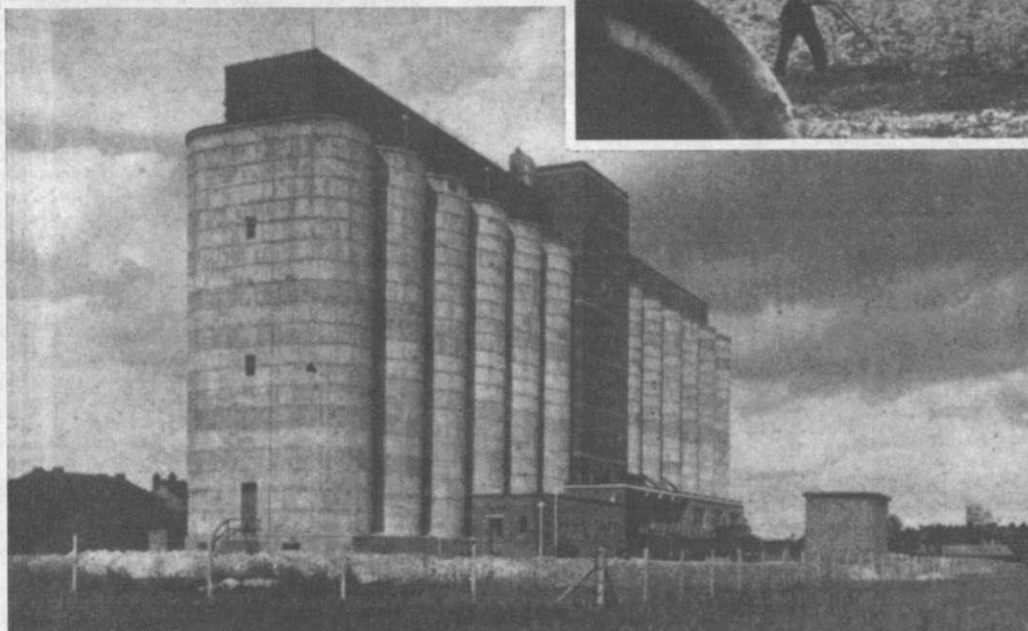
HOLIDAY-MAKERS help wartime agriculture. Hundreds of men and women, such as these threshing on a Bedfordshire farm, spend breaks from their own war job doing yet another.



WINDMILLS ARE SAVING FUEL while helping to produce the nation's bread. Many hitherto useless, although picturesque, windmills have been repaired and are again doing the task for which they were originally intended. The vanes of Saxtead Mill in Suffolk (centre, left) turn for victory now, while its owner (above) releases a sack of grain from the hoist inside the mill. Much credit for the rehabilitation of these old mills is due to the Society for the Protection of Ancient Buildings.



R.A.F. GARDENS, counterparts of civilian allotments, established on unused ground at airfields all over the country, in 1943 produced food for their own messes to the value of £285,147; the acreage under cultivation was 6,041. Both the R.A.F. and W.A.A.F. do this sparetime work—a grand contribution to Britain's agricultural effort. Above, ploughing at an R.A.F. station under the nose of a Lancaster bomber.



GRAIN STORAGE is one of the problems which harvest brings each year in Britain. To cope with it, silos, for drying and storing grain, like this one (left) have been built. The central tower houses the drying machinery which takes the moisture out of the grain before milling and reduces its bulk. Twelve 65-ft.-high bins on either side of it have a storage capacity of 5,000 tons.

Photos, British Official; Fox, Topical Press, J. Dixon-Scott
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THE BATTLE FRONTS

by Maj.-Gen. Sir Charles Gwynn, K.C.B., D.S.O.

By the end of February the Russian northern offensive had reached the limits imposed by the approach of spring and the nature of the terrain. The Germans had rallied on the line that some months ago I suggested they might withdraw to as a winter position. Meanwhile, in spite of the great successes it had achieved in liquidating the German Korsun pocket and in capturing Shepetovka on the one flank and Nikopol on the other, it seemed that the Russian southern offensive might have exhausted itself and been brought to a standstill by spring mud and difficulties of communication. The great river lines of the Bug, the Dniester and Sereth, in any case, seemed to offer the Germans great possibilities of carrying out a deliberate withdrawal if that were their intention.

They still retained their hold on the Lower Dnieper and, although it was threatened, the main lateral railway between Odessa and Von Manstein's concentration in the Vinnitsa area remained open. Moreover, Von Manstein in the latter area had first-class railway communication with Germany through Poland, and could therefore quickly receive reinforcements and be kept well supplied with munitions. This gave him undoubted offensive potentialities and great advantage over the Russians, whose immensely long lines of communication, almost entirely served by motor transport, were bound to be affected by the thaw.

In these circumstances the Germans, despite the mauling they had received, may well have thought that they had survived the worst of the Russian winter offensive without a complete disruption of their plans and might count on a respite at last. There is good reason, therefore, to believe that the resumption of the Russian southern offensive in the first week of March came as a strategic surprise of the first order. Zhukov's great drive between Tarnopol and Proskurov dislocated German strategic dispositions and threatened Manstein's powerful defensive group at Vinnitsa with the fate of Von Paulus' army at Stalingrad, cutting its communications with its base at Lvov.

It is probable that Manstein's troops had exhausted their strength in their counter-attacks to arrest Vatutin's previous drives towards Zmerinka and in their unavailing efforts to rescue the 8th Army at Korsun. When Koniev at Uman attacked the force that had attempted that rescue, German troops for the first time gave way to panic and were unable to recover sufficiently to carry out a co-ordinated withdrawal. Koniev's rapid advance across the Bug and Dniester brought him up in line with Zhukov's army to form the great Russian wedge which split the German front line into two irretrievably separated groups, crossed the Pruth and Sereth into Rumania and reached the Hungarian frontier, although Von Manstein did in the end succeed in saving the remnants of the 15 divisions in the Skala pocket.

Von Kleist's southern group was in a more precarious situation. Its communications with Germany were long and circuitous and were soon to suffer from the bombing attacks of the Allied Mediterranean Air Forces. Moreover, a considerable part of his force was composed of Rumanian troops of doubtful reliability. His army, which had clung so long to their positions in the Dnieper bend and on the Lower Dnieper, were in a great salient and had already suffered heavily from the attacks of Malinovsky's 3rd Ukrainian Army. It was now faced with the necessity of carrying out a difficult and

belated retreat in which its northern flank was threatened by the southwards advance of Koniev's left wing. Nikolayev was lost, but for a time Malinovsky was checked on the line of the Bug. Von Kleist also used his best reserves to check Koniev's advance southwards, covering the withdrawal from the Bug and preventing the junction of the two Russian armies.

MALINOVSKY was not, however, to be denied, and by the end of March he had forced the line of the Bug while Koniev, meanwhile, in spite of strong resistance, had forced Von Kleist's left back to the line Jassy, Kishinev, Tiraspol. Here it stood firm and it looked as if, with the flank protection given it, the force retreating from the Bug might rally to cover Odessa. But by a lightning stroke which captured the important railway junction of Razjelnaia, Malinovsky thrust a wedge between the two German wings and surrounded and annihilated a strong force which attempted a counterstroke. The force retreating from the Bug, disrupted and demoralized, failed to rally and the way to Odessa was opened. Whether the Germans had intended to cling



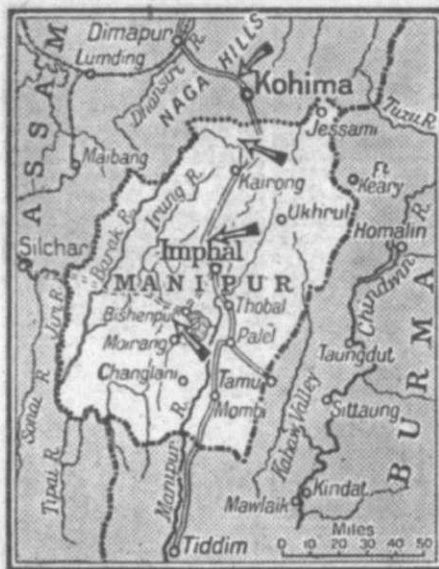
General NIKOLAI VATUTIN, late commander of the 1st Ukrainian Front, who died after a serious operation in Kiev on April 14, 1944. General Vatutin specially distinguished himself at Stalingrad, in the great Byelorod-Kursk battle in July 1943, and in the capture of Kiev on Nov. 6, 1943. His successor is Marshal Zhukov. Photo, Pictorial Press

except the south half of Bessarabia, and had penetrated into Rumania, making substantial progress towards capturing the passes of the Carpathians. Even more important, it had inflicted immense losses of men and material on the enemy. This despite the fact that seasonal conditions were unfavourable and that the enemy still possessed railway communications to facilitate retreat, and natural and fortified defensive positions.

To what can we attribute these latest amazing achievements of the Red Army, which have so far exceeded the expectations of the most optimistic commentators? Primarily, credit must be given to the astonishing endurance and high morale of the Russian soldiers, who have proved capable of such great efforts after months of intensive fighting, and to the high standards of tactical skill they have attained; secondly, to the organization which, in spite of all difficulties, never allowed the armies to run short of food and munition supplies.

But the best troops in the world could not have accomplished so much if the higher control of their efforts and strategic planning had not been bold, far-sighted and supremely well directed. How far Marshal Stalin has been responsible for the planning and strategy of the campaigns one does not know, but evidently he has exercised immense influence and must possess military acumen of the highest order. That he has been amazingly well served by his advisers and generals is undoubted, but I should be surprised if the patience displayed in Russian strategy and selection of the moment to strike should not be credited to Stalin himself. That patience, so remarkably displayed when Stalingrad seemed almost lost, is still well in evidence.

The admirable co-ordination of Russian offensives has been outstanding, and this may have in part been due to the apparent absence of jealousy or friction between Russian generals. If there has been friction nothing has been heard of it, in contrast to the many rumours which have been current of jealousies between German commanders and of friction between generals in the field and the higher command. Perhaps the policy adopted by Stalin of promptly broadcasting his appreciation of the achievements of individual bodies of troops and their commanders has had its moral effect. It curiously contrasts with our own practice which so often, for reasons of secrecy, leaves us in ignorance of the names of divisions and their commanders taking part in operations.



OUR 14th ARMY, striking hard from strongly-held positions at Dimapur (Assam) had, by April 24, 1944, completed the relief of the beleaguered British garrison of Kohima, 44 miles to the S.E. On the Imphal sector, north-east of the town itself, further advances were being made. By courtesy of The Times

to Odessa may be doubtful, but it is unbelievable that its hurried and disorderly abandonment was in accordance with plan.

These events, and in particular the loss of Odessa, may have convinced the Germans that they must attempt to evacuate the Crimea. It would seem that some preparations to do so had been belatedly made when Tolbukhin's devastating attack was launched. It had been long prepared, and its timing was perfect to take advantage of the moment when the morale of the garrison might be expected to be at its lowest, and when its hopes of either evacuation or reinforcements had been reduced to a minimum. Tolbukhin's amazingly swift and complete success recalls the cat-like strategy that brought about the Stalingrad disaster (see map in p. 778).

By the middle of April the Russian offensive had thus achieved the liberation of all Russian territory south of the Pripiet marshes,

Allied Leaders of the S.E. Asia Command



NEW LEADER OF THE CHINDITS, in succession to the late Maj-General Wingate, under whom he served, is Maj-General W. D. A. Lentaigne, D.S.O., seen (2, right) with Field Marshal Lord Wavell, during an inspection of a Gurkha regiment: Major-General Lentaigne is an expert in jungle fighting. With U.S. sharpshooters, General W. J. Stilwell, Deputy Supreme Commander S.E. Asia Command (5, seated centre), watches his American-trained Chinese troops driving Japanese across the Tanai River in North Burma. Brig-General F. Merrill cooks for himself in the jungle (1); one of the youngest U.S. Army generals, he commands an Allied column ("Merrill's Marauders") in Upper Burma.

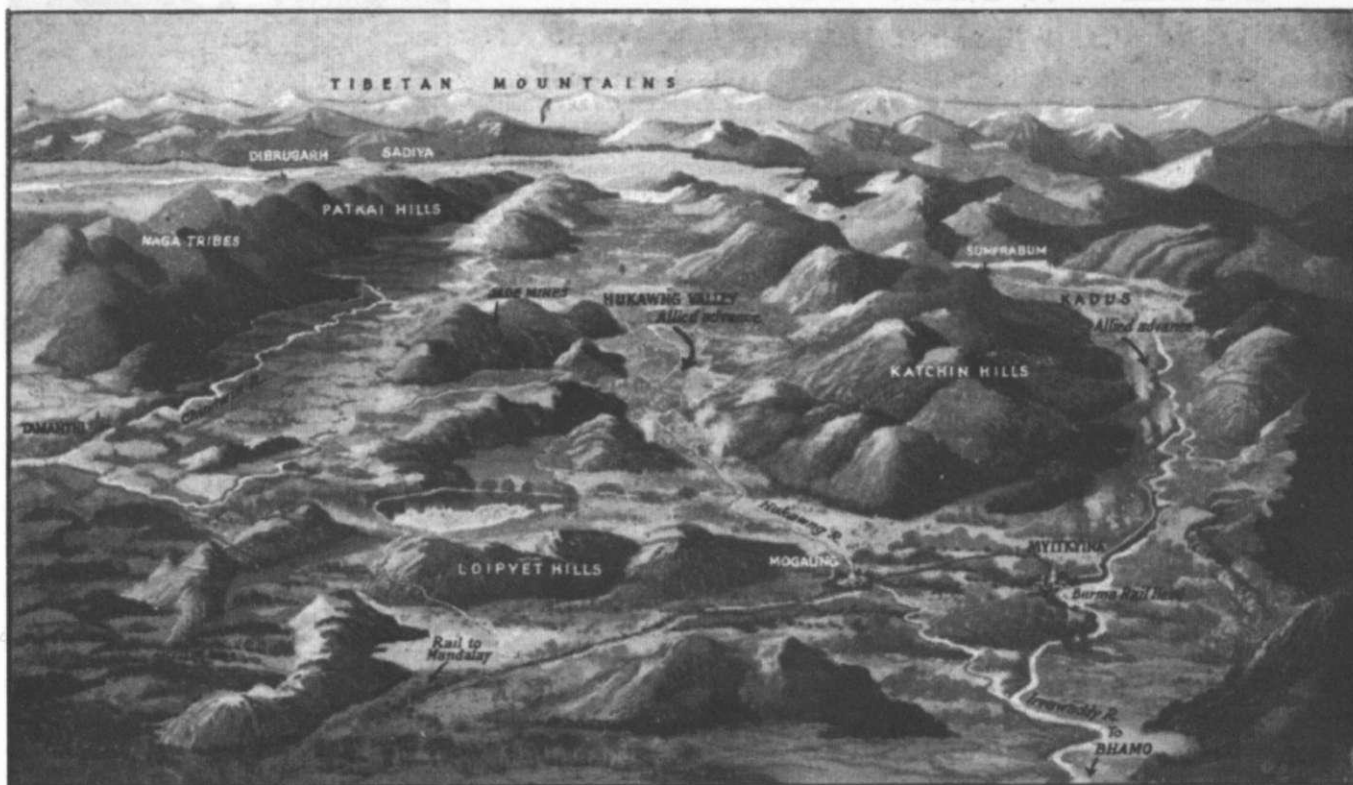
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COMMANDER OF THE 7th INDIAN DIVISION in the Arakan is Maj-General F. W. Messervy, C.B., D.S.O. (3); veteran of the African campaign, during the Japanese offensive in the Arakan in February 1944 his leadership was instrumental in saving a dangerous situation. Colonel P. G. Cochran (4), 33-year-old U.S. air ace, on March 5, 1944, led the Allied airborne force which landed behind enemy lines in North Burma; later, he commanded glider reinforcements. At bottom centre is the badge of the famous 14th Army in Burma commanded by General W. J. Slim; the letter "S" forming the hilt of the sword stands for his name and the sword's position, hilt uppermost, means offence. (See illus. 671.)

Photos, British and Indian Official, Keystone, Planet News

Move and Counter-Move on the Burma Fronts



NARROWNESS OF THE MOGAUNG VALLEY hindered the full use of General Stilwell's American and Chinese forces pushing on towards the Mandalay Railway by way of the Hukawng River in the northern section of Burma and threatening the Japanese 18th Division holding Northern Burma in the Myittha area. U.S. troops ("Merrill's Marauders," see pp. 772 and 800) were making for Mogaung itself, while another commando force of Gurkhas and British-trained Kachin tribesmen, overcoming enemy resistance, were proceeding down the Mali Valley. The activities of the British force which crossed the Chin Hills and Chindwin River (announced on March 14) are closely related to Gen. Stilwell's southward drive.



STEPS IN THE FIGHTING in the Manipur State and immediate territories linked in this particular struggle between the Allies and the Japanese are indicated in this view of the terrain, from Tiddim looking northwards to Manipur. The enemy attacks, in three or possibly four prongs, on Assam had as their objective the isolation of Imphal, capital of Manipur State and main Allied base in the region, by cutting the roads converging on the city. The Japanese forces which branched off towards the Tiddim road, where they placed road blocks, made only little progress. British forward units formed themselves into the defensive box system, used so successfully in Arakan, and held the Japanese. In the Tammu area, where the second enemy prong was operating, the Allies were gaining ground (see also map, p. 771).

Drawings by H. P. Burton and E. G. Lambert by courtesy of The Sphere

THE WAR AT SEA

by Francis E. McMurtrie

SINCE the Japanese Navy made brief incursion into the Indian Ocean in April 1942, resulting in the loss of H.M. aircraft carrier *Hermes* and the cruisers *Dorsetshire* and *Cornwall*, it has been content to confine itself to covering the route from Singapore to Rangoon and Akyab, in Burma. When Lord Louis Mountbatten transferred the headquarters of the South-East Asia Command to Ceylon, in which island the British naval base of Trincomalee is situated, the enemy should have been on the alert. Yet they were obviously taken completely by surprise when the blow fell.

A force mainly British, though it included American, Dutch and French warships, all under Admiral Sir James Somerville, Commander-in-Chief of the Eastern Fleet, proceeded to execute a lightning attack on Sabang, at the northern end of Sumatra. This port is a well-known fuelling station in peacetime, but has been used as an advanced base by the Japanese since they occupied Singapore and the Dutch Indies. On April 19 the attack was brought off exactly as planned. Flights of *Barracuda*, *Dauntless* and *Avenger* torpedo-bombers were flown off from British and U.S. aircraft carriers, covered by *Hellcat* and *Corsair* fighters. All returned undamaged except one *Barracuda*, which was slightly damaged by its own bomb burst, and an American fighter which came down in the sea. The pilot of the latter was rescued by a British submarine, a remarkable incident which has added to the keenness of Anglo-American co-operation.

DESTRUCTION done at Sabang was considerable. Two 5,000-ton Japanese supply ships, two destroyers and sundry other craft were bombed and set on fire in the harbour. The power-station, wireless and radio-location buildings, barracks and coaling wharf were all hit. Eighteen enemy aircraft were destroyed or set on fire on the ground, and the oil tanks were left ablaze with columns of smoke rising to 7,000 feet.

With this successful stroke it may be said that the offensive has now definitely passed to the Allies in the Indian Ocean, as it already had in the Pacific. Whether as a result the Japanese will consider it worth while to reinforce their South China Sea Fleet, based upon Singapore, remains to be seen. The

attack on Sabang has proved to them that sea communications with their armies in Burma can no longer be considered safe, in spite of their possession of the Andaman and Nicobar Islands, lying between Sabang and Rangoon. Though otherwise unimportant, these islands possess some useful harbours, and the time will doubtless come when an expedition for their recovery will be undertaken. That is not likely to be just yet, as the approach of the monsoon is bound to delay operations in the Bay of Bengal for a time. Nothing is known of the strength of the Eastern Fleet, but enemy accounts say that it includes battleships, aircraft carriers, cruisers, destroyers, submarines, and ancillary craft of all descriptions.

GREAT Resources of Sebastopol will be Reorganized

By the time these comments appear it is highly probable that Sebastopol will have fallen, thus completing the Soviet reconquest of the Crimea (see map in page 778). Apart from the high strategic value of this great peninsula, which projects southward a long distance towards the centre of the Black Sea, Sebastopol itself is the only first-class naval base in the south of Russia. Novorossisk, at the western end of the Caucasus range, is of only secondary importance, and Batum is a smaller place still. Odessa has always been a commercial port; and Nikolayev, though it possesses important shipbuilding yards, is too far up the estuary of the Bug to be of much value for naval purposes.

White buildings and plant may be destroyed, dry docks and basins are not so easily put out of action, and the Russians may be trusted to reorganize the resources of Sebastopol by clearing the harbour of wrecks and tidying the dockyard as one of the first tasks to be undertaken. It must be a couple of years since there was any opportunity of docking the larger ships of the Soviet Black Sea Fleet, Sebastopol being the only port with a dry dock capable of taking battleships or heavy cruisers. There was formerly a large floating dock at Nikolayev, but that is believed to have been destroyed or rendered useless.

Before the war the Black Sea Fleet comprised one old battleship of 23,256 tons, the *Pariskaya Kommuna*; the cruisers *Krasni*



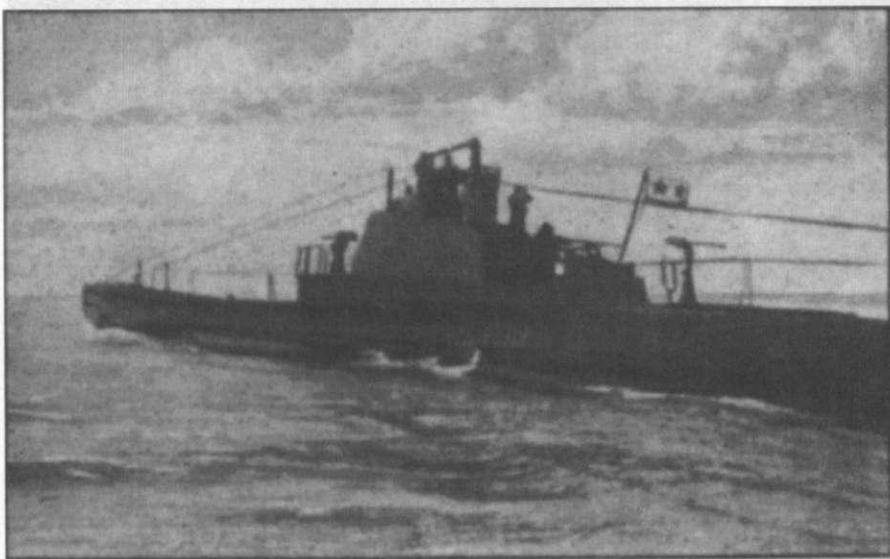
JAPANESE BASES IN SUMATRA were attacked by bombers and fighters from aircraft carriers escorted by a strong force of Allied warships on April 19, 1944. By courtesy of The Times

Kavkaz, *Chervonaya Ukraina* and *Krasni Krim*, of 8,030, 6,934 and 6,600 tons respectively; about 30 modern destroyers; four older destroyers; 40 or 50 submarines; and a considerable number of patrol vessels, motor torpedo-boats and other small craft. There is also a small seaplane carrier, converted from a merchant vessel.

Owing to her low speed—probably under 16 knots—and obsolete design and armament, the *Pariskaya Kommuna* cannot be reckoned of much fighting value, though her 12-in. guns are said to have carried out some useful coastal bombardments in support of the Red Army. The three cruisers are worth more, but the Germans claim that both the *Chervonaya Ukraina* and *Krasni Krim* were sunk during 1942. Though this may prove to be true of at least one of them, a recent message from Moscow mentioned the *Krasni Krim* as having been in action off Sebastopol last month. Two new cruisers, the *Molotov* and *Voroshilov* of 8,800 tons, are reported to have been launched at Nikolayev during 1939-40, but it is questionable whether they have been completed. They are believed to have been saved from capture when the port was evacuated, and may now be lying in Batum or Novorossisk. The hulls of a new 35,000-ton battleship, the *Krasnaya Bessarabia*, and of four destroyers and two submarines, were demolished on the slips so that they might not fall into enemy hands intact. (See illus. p. 129, Vol. 5.)

A PART from the doubtful mention of the *Krasni Krim*, little has been heard for some time of the larger Russian ships in the Black Sea. Destroyers, motor torpedo-boats, submarines and aircraft appear to have been kept busy, interfering with the escape of German troops from the Crimea. Various enemy transports and smaller craft have been sunk or damaged. The best chance of escape from Sebastopol would appear to be by small fast craft during the hours of darkness.

Enemy naval strength in the Black Sea is not great. The Rumanian Navy originally possessed four destroyers, three submarines, a minelayer or two and three motor torpedo-boats, besides sundry vessels of less importance. At least two, and possibly all, of the destroyers have been sunk; so have a couple of the motor torpedo-boats. Bulgaria has a still smaller navy, two motor torpedo-boats being the only modern units. Some Italian submarines and motor torpedo-boats which were transported overland are believed to remain in enemy hands; and there may also be a few German submarines and light craft, which proceeded down the Danube. With Sebastopol once more in Russian hands, the Black Sea Fleet could be used to disrupt communications between Rumanian and Bulgarian ports and the Bosphorus, and to support advance of the Soviet armies by bombarding enemy coast positions.



ON THE WAY BACK TO SEBASTOPOL to join other units of the Soviet Black Sea Fleet engaged in preventing enemy evacuation, is this submarine which has already sunk four loaded German transports. A radio order from Moscow called upon this Fleet to stop the Nazis attempting to escape from the Crimea (see map in p. 778).

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Photo, Planet News

Human Torpedoes Add to Royal Navy's Triumphs



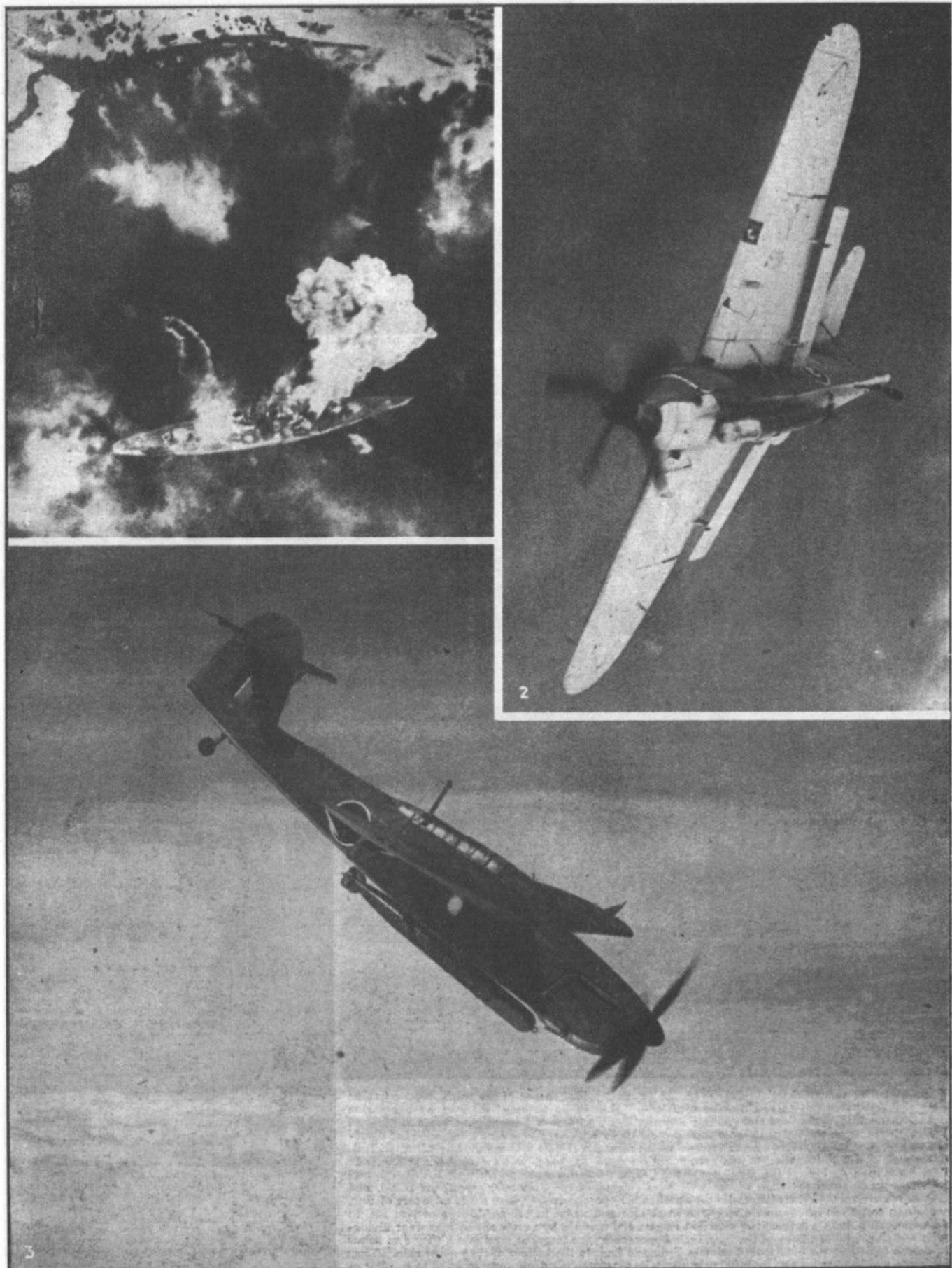
LEGENDARY DARING OF THE ROYAL NAVY was typified in one of the war's most amazing sea actions when—as can now be revealed—"Human Torpedoes," manned by Submarine Branch personnel, penetrated the strongly defended enemy harbour base at Palermo one night in January 1943, sank the Italian Regolo class cruiser *Ulpio Traiano*, and severely damaged the 8,500-ton transport *Viminale*. The human torpedo which sank the cruiser was manned by Lieut. R. T. G. Greenland, R.N.V.R. (2), who, it was announced on April 19, 1944, was awarded the D.S.O., and Ldg. Signalman A. Ferrier (5), who gained the C.G.M. Sub-Lieut. R. G. Dove, R.N.V.R. (3), and Ldg. Seaman J. Freel (4), crew of the craft which damaged the *Viminale*, gained the D.S.O. and C.G.M. respectively. With others who took part in the operations they were made prisoners of war.

Human torpedoes are approximately the same size and shape as ordinary torpedoes, 21 ins. in diameter, 18 ft. long, are driven by electric batteries and manned by a crew of two who wear diving-suits and sit astride the body of the torpedo. Approaching the target at slow speed, they dive below it, detach the explosive head from the main body and fix it to the bottom of the enemy ship. Time fuses are set, and the human torpedo, now minus its warhead, is driven away in order to be clear of the target-area before the explosion occurs. An officer in his diving-suit (1), Mr. A. V. Alexander, First Lord of the Admiralty, watches a member of the crew going aboard his craft (7). A human torpedo under way (6).

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Photos, British Official: Daily Mirror

Barracudas Caught Germany's Largest Warship—



FLEET AIR ARM BARRACUDAS—named after a vicious, predatory 5-foot fish found in the southern seas—in a brilliant surprise attack on April 3, 1944, severely damaged the German 45,000-ton Tirpitz, in Altenfjord. One of the attacking torpedo-bombers (2) soars at a steep angle, then dives targetwards from above the clouds (3); and smoke from a direct hit rises from the stricken warship (1); beyond can be seen the wake of a motor-launch departing hurriedly from her side. See also pp. 742, 777 and story in p. 794

—And Ravager's Fighters Helped to Smash Her



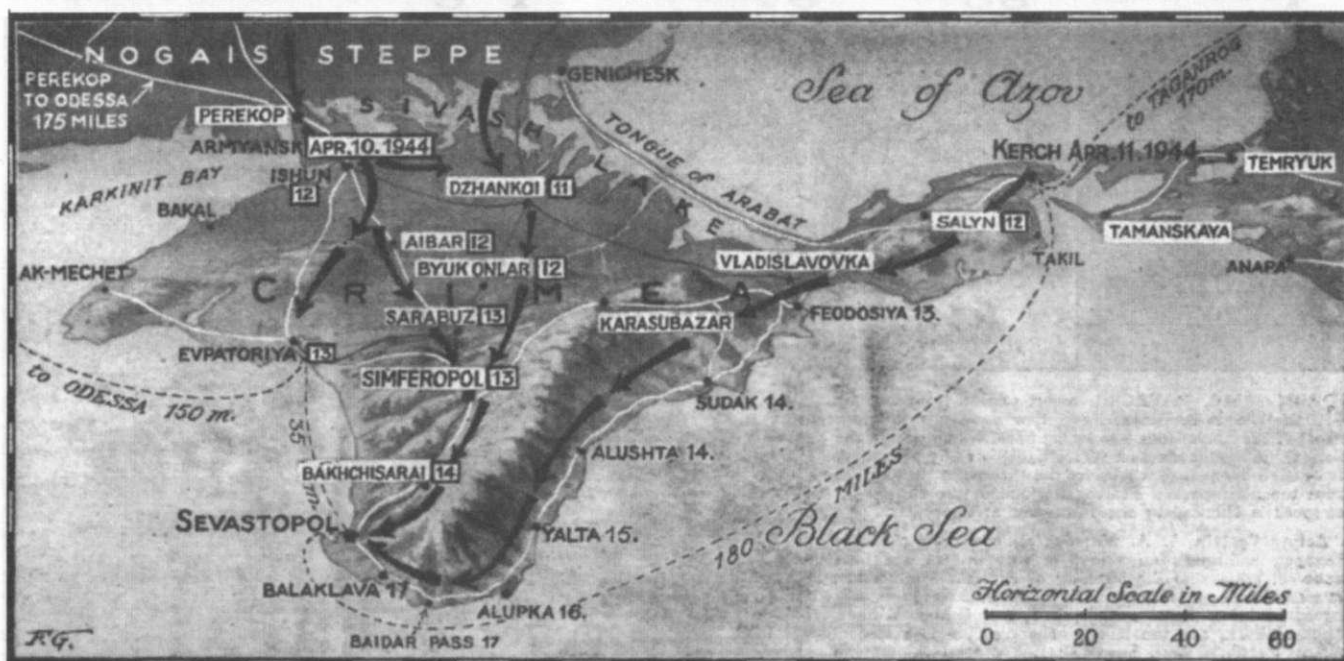
FROM H.M.S. RAVAGER, escort carrier lease-lent by the U.S. to the Royal Navy, flew some of the fighter escort of the Barracudas (see facing page) which caught the Tirpitz. A fighter takes off (5) from the carrier; returning, its mission completed, it receives the "come in" signal (3) from the flight-deck; nearing the end of the run-on (4) its speed is checked by the transverse arrestor wires.

Acting Captain A. A. Murray (1), commander of the Ravager, is himself an able flyer and was at one time technical adviser to the Ministry of Aircraft Production; he assumed his present command in December 1942, having served in many famous ships, including H.M.S. Valiant, Duke of York, and the Hood. The crest (2) is a symbol of this carrier's stern purpose; the central figure is a Red Indian mounted on a mustang and carrying a firebrand—the conventional sign of a ravager.

Photos, Planet News

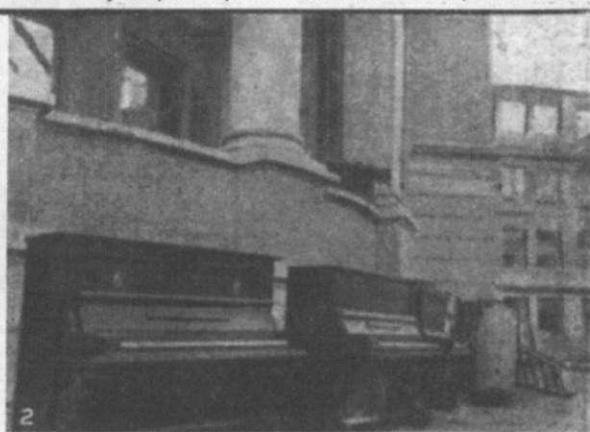


The Last Crimean Battle Draws to its Close



THRUSTS OF THE RED ARMIES in the Crimea are shown in the above map, which records the push of the 4th Ukrainian Army, commanded by General Tolbukhin, down from the Perekop Isthmus to Sevastopol and the co-ordinated drive by General Eremenko's independent Maritime Army from the Kerch peninsula, which began on April 10, 1944, round the Black Sea coast to the same goal. By April 20, massed Russian artillery and aircraft were bombarding Sevastopol, the only city on the peninsula left in German hands.

Specially drawn for THE WAR ILLUSTRATED by Felix Gordon



ODESSA, on the Black Sea coast, wrecked and ruined by the Nazis, withstood the horrors of 30 months' occupation (see facing page). One of the largest transport centres of the Soviet Union, through it flowed supplies of grain, timber, oil and coal. An important industrial city, it possessed huge flour mills, sugar refineries and shipbuilding yards. A centre of science and culture, before the war thousands of patients visited its sanatoria and rest homes; population in 1939 was 604,000.

The Germans shattered the progressive life of Odessa, but not the spirit of its people; these citizens (1) are demolishing one of the Nazi street defence works after the Red Army had arrived. The enemy seized everything of value they could lay hands on, including these pianos (2) from the Conservatory of Music, but their plans went awry, thanks to the victorious Soviet troops (3), whose welcome in Odessa streets was warm reward for valour.

U.S.S.R. Official, Pictorial Press

Odessa in the Hands of Russia Once Again



GREAT BLACK SEA PORT and naval base of Odessa fell to the Russian 3rd Ukrainian Army on April 10, 1944. For two and a half years it had been an important German base, but during the last fortnight of enemy occupation 10,000 Russian guerillas swarmed out of its 100 miles of catacombs, 80 to 100 feet below ground, to dominate the city by night. Above is seen the imposing flight of steps, long known as the Richelieu stairway, leading from the water front to the spacious boulevard 150 feet above. (See also facing page.)

PAGE 779

Photo, Planet News

What Happens when the Enemy is 'In the Bag'

A problem confronting the Allies is what to do with large numbers of the enemy when these are rounded up. They have to be sorted, fed, reclothed, given hospital treatment if necessary, transported to some place of security, and generally cared for in accordance with international law. How this works out in practice is explained by WALLACE FORD.

THREE British officers at an Italian port—and scores of others elsewhere—are preparing for one of the biggest jobs of the war: the reception and transfer of a million German prisoners. For that is the number they must expect to handle when our full-scale assault on Hitler-held Europe gets under way. As the tide of victory turns, the flood-mark of "p.o.w." inevitably becomes higher.

An expert in dealing with prisoners of war in North Africa, Major Joseph Goldware thought he was handling an immense and complex job when he was told to prepare for 10,000 prisoners. The first 100 came through with disappointing slowness. They had three guards to a prisoner and so many blankets that they could heap them on their cots like mattresses. Then, less than two months later, the great round-up started and prisoners poured in by the hundred thousand.

Anyone who lived through those amazing days will never forget the scenes on the Cape Bon Peninsula. Enemy companies, hundreds strong, stopped isolated Allied soldiers and asked to be disarmed and meekly said that they "hadn't been captured yet." Thousands sat around unfenced posts which had been hurriedly marked as reception centres. Those already in lorries shouted jokes to their stranded comrades. Prisoners had to be put in charge of prisoners. Fussy enemy officers who wanted priority of treatment sometimes made a nuisance of themselves.

WHAT happens to prisoners once they fall into Allied hands? Most people know that treatment is prescribed under international law, but very few probably realize the thoroughness and intricacy of the 97 articles of the 1929 Convention. It seems paradoxical, for instance, that the most severe disciplinary punishment for a refractory prisoner is imprisonment; yet this distinguishes between confinement in cells and the ordinary mild rigours of life in an internment camp.

Prisoners must never be insulted or ill-treated. A questioned p.o.w. is under an

obligation to tell the truth concerning his name, rank and number, if indeed he gives them. On the other hand, he need not reply, and he can try to lead an interrogator up the garden path in army matters. This may be difficult, for many interrogator-officers have been lawyers, schoolmasters or business managers in civil life and have considerable tact in handling men. Some prisoners, distrustful at first, have afterwards relented so considerably that they have wept on leaving the reception ports. One Nazi at a camp near Oran even had a wedding party recently when he was married by proxy, through the Swiss government, to his sweetheart in Germany. Another qualified by post as a German solicitor, and has now applied to study English law. Perhaps he feels, after all, that Nazi law will not be so useful in the post-war world.

THE self-reliance of p.o.w. is proverbial. Sometimes, as in invasion, the vital priorities of war supplies upon shipping space necessarily mean initial shortages of equipment for prisoners. Near Algiers, when the droves of captives swept aside all prearrangements, our prisoners made their own dishes out of gallon cans, beat out spoons on wooden moulds, set up their own tailor shops and shoe-repair shops out of salvage, made their own soap and built their own ovens for bread, and set up a complete hospital camp with a German medical staff.

Then, extending activities, they built a prison city of adobe barracks with walls 18 inches thick, a complete camp capable of housing 30,000 prisoners. Africa alone has many such camps today. Scores of others are scattered through Britain, Canada, South Africa and the United States. "We can move out 25,000 prisoners in a day," one commanding officer of a p.o.w. division told me, "and we've never lost a prisoner yet between the camps and the boats."

Attempted escapes are rare. One prisoner, a former U-boat rating, attempted a novel break when he scrambled through a port-hole while his prison-ship was going up the



BRITISH GUARD brings out a Nazi prisoner on the Anzio front. Five feet in height, 18 years old, he has been a soldier for only a few months. Now, for him, the war is over and good food and comparative comfort will be his lot as an enforced "guest" of the Allies. Photo, British Official

St. Lawrence, but he was caught at the United States border. When three others escaped from a North of England camp and built themselves a fire in a moorland cave where they hoped to spend the night, they were discovered and rounded up by three schoolboys. At one time there was an alarm that eleven had broken out of a camp in one of the north-western counties. Two were caught by a middle-aged gardener; the others were discovered hiding between the ceiling and roof of their dormitory.

Perhaps one of the most spectacular attempts of all was when 98 prisoners planned to seize a camp near Schreiber, 400 miles east of Winnipeg, and storm another camp not far away. With tools made from old tin cans they constructed a tunnel 120 feet long, from which smaller tunnels radiated to every individual hut. Deep below ground they constructed a workshop safe from the eyes of guards, where they made and collected equipment. No detail had been overlooked, yet a trivial accident at the last moment gave the whole show away. A prisoner stumbled over a pail in the darkness and the clatter was heard by a sentry.

THEN there was the amazing episode—staged before our precautionary measures were fully complete—when two escaped German airmen prisoners strolled on to an airfield and almost commandeered a plane. They told a groundsman to prepare a Miles Magister. While the petrol tanks were being filled the escapees drank tea with the station adjutant. He was suspicious that the two were not the "Dutchmen" they purported to be, and then suddenly he detected that their ersatz uniform buttons were made of silver paper.

Prisoners in Allied hands have scant cause for regrets. The rations they receive are equivalent to those of the British army; their pay is regularly made up; two or three letters and four postcards a month soften the barbed wires. Tattered and forlorn "tramps" in North Africa were given natty American uniforms; men saved from the sea are given secondhand civilian clothing. It is surprising to discover that in camps on British soil the prisoners assemble every morning to salute a large portrait of Hitler and are under the control of Nazi officers; we permit this in strict accordance with the laws protecting prisoners.



DEJECTED JAPANESE captured during the fighting for Kwajalein Island in the Pacific, which fell to U.S. troops on Feb. 5, 1944; the island is the largest in the Kwajalein Atoll, strategic heart of the Marshall Islands. Wounded prisoners received the same expert medical care and attention as the American forces, whose casualties during the battle were few. Japanese losses were very heavy. PAGE 780 Photo, Paul Pepper

'Mikes' Sound-Range for Our Gunners in Italy



THE RUMBLE OF ENEMY GUNS is picked up by concealed microphones, and graph films are made recording the firing positions. At an advanced Allied post (1) the sounds are reported by telephone. A "mike" (2) is positioned between that post and headquarters, where the reports are received by wireless (3) and recording machinery is switched on to catch the microphone-transmitted rumbles. Resulting graphs are then read (4), enabling exact positions of enemy guns to be plotted (5) for the guidance of our own artillery.

PAGE 781 *Photos, British Official*

Watch Himmler! Wiliest of Nazi Gangsters

Since Himmler came into authority as Gestapo head, police chief and leader of the S.S. he has, with one eye on the Fuehrer he is supposed to serve, steadily increased his own grasp on Nazi Germany with a ruthless cunning seldom surpassed even in Germany. His progressive seizure of the reins of control is described here by Dr. EDGAR STERN-RUBARTH.

BEHIND the dramatic events of the land, sea and air war other moves are evident which, ultimately, may prove no less momentous. Such moves started inside Germany early in Hitler's career when the powers that made him began their fight for supremacy; they were going on all through the intervening years; and the most sinister of them won the game only a few weeks ago—the fight of the Party against the traditional supreme power of the Army.

The first Nazi leader who undertook it, Captain Ernst Roehm, creator of Hitler's Brownshirt and Black Guard forces, paid for his temerity ten years ago, with his own and a thousand or so other lives, during a "purge" in which many rancours and rivalries were given vent, but by means of which the Junker generals made their fortress safe from intrusion by Party rabble for many years.

Himmler succeeded, as Chief of the Police, the Gestapo and the S.S., systematically converted into a fully armed and militarized body, blindly obedient and immunized against any kind of moral scruples. Originally trained as a civil war army, the S.S., for political as well as military reasons, had to be split, early in the war, into two distinct categories, the major one, the Waffen- (or fighting) S.S. about 40 divisions strong, being fully invested in the fighting forces, on an equal footing with the regular army.

Yet they were not entirely equal. Himmler had first choice in selecting his men, and was permitted to offer them better equipment, better pay, better food, better quarters and prospects of advancement—in future civilian life as well as in the field.

He promoted strong-arm men of the early Party days, gangsters and gaolbirds many of them, to exalted rank. He assimilated their ranks to those of the regular army, by giving them each a second, a police rank as majors, colonels, generals of police or Waffen-S.S. But as yet they still remained outsiders, not officially recognized by, and frequently at loggerheads with, the regular officers who had won their promotion by hard work and long years of service. In the fierce battles in Russia in 1943 many an S.S.-division fell victim to the caste-proud army commanders who, consciously or unconsciously, ordered them to the most dangerous sector of the line.

HIMMLER, however, kept silent, utilizing his Guards' sanguinary sacrifices for propaganda. He knew of his unbreakable hold over Hitler, for whose protection he had early been granted an entirely free hand; he even advised against drastic measures when, on an occasion late in 1943, his spies brought details of a "generals' plot" the failure of which, due to lack of response in the Allied camp, he foresaw.

But when the Junker-strategists came back into the Fuehrer's fold, when their centuries-old supreme instrument of power, the General Staff, was abolished, and the whole direction of the forces welded into the new "Wehrmachtstab" headed by Hitler's yes-men, Jodl and Zeitzler; when another Nazi, Rommel, was made Inspector-General of Defences, and

a suddenly resurrected Supreme War Lord made examples of Field Marshals von Kuechler and von Kluge, commanders respectively in North and Central Russia—as well as a number of other minor generals—Heinrich Himmler saw daylight.

Whether Hitler is aware of that sinister figure's real aims it is impossible to say; but even the most omnipotent of Caesars might well have doubts, remembering the fate of other dictators at the hands of their lieutenants. Having nominated, as his successor in case of his sudden demise, Reich

created what amounts to Foreign Legions on a gigantic scale, with so-called "Volks-deutsche"—foreigners of allegedly Germanic descent—Estonian, Latvian, Lithuanian, Dutch, Wallonian, Galician and other S.S.-divisions which he uses respectively in countries other than their own in order to save his own cut-throats.

On similar lines he is building up what he calls a Pan-European Police under S.S.-control. He multiplies the tank divisions among his own army so that already they amount to nearly one-third of the army's total; and of late he has got hold of the whole Italian Fascist forces to be reconstructed under direct German—that is, Himmler's—command.

His big stroke was the recent overpowering of his old enemies, the proud and noble army chiefs. When they ate humble pie once more with Hitler, Himmler made him sign a whole sheaf of orders. By these, officers of the Waffen-S.S. might be transferred to any army unit, automatically gaining the army rank of their S.S. appointment; the first case in point was S.S.-Obergruppenfuehrer Krueger's recent appointment as General Commanding the 1st Tank Division, succeeding the wounded General von Wietersheim. All officers' messes of army and S.S. can be used indiscriminately by officers of both forces.

S.S. officers may be placed in key positions controlling the granting of army commissions, promotion, training and so on, such as the Army Personnel Board, the National Political Educational Institutions (replacing the former Cadet Colleges, now for some time Nazified) to which Chief Himmler's right-hand man, S.S.-Obergruppenfuehrer Heissmeyer, was appointed at the beginning of 1944, as well as Military Propaganda organizations.

The whole previous basis of professional officers' selection was abolished by a new rule, under which every recruit or volunteer, irrespective of education or social standing, can apply, and if found suitable must receive officer's training and, after two courses of from four to six months each with an intervening half year's active service, is eventually granted a commission.

THERE is one order Himmler has not yet "arranged": that by which the widespread Military Intelligence organization, built up by Admiral Canaris, and frequently fought by Himmler's espionage network, is handed over to him wholesale. Apart from it he has firmly established his own gangster organizations as Germany's fourth arm. It now ranks with the Army, the Navy, and the Luftwaffe—with a claim of being "The Guards"—nearly a million of them. They owe allegiance to Adolf Hitler; but Heinrich Himmler, ex-chemist, ex-poultry farmer, torturer and executioner, who has just ordered half a million of his "friendly" smiling portraits to be displayed in offices everywhere, thus equalling Hitler's own conceit, actually commands them. Latest, and perhaps most significant, Himmler move is indirect control of home propaganda. Tacitly, or otherwise, Goebbels bends to the S.S. leader's direction.



HIMMLER WATCHES OPERATIONS—he is on Hitler's right—at recent S.S. manoeuvres; 43 years old, son of a secondary school-teacher, in 1928 Heinrich Himmler became Reich Leader of the S.S., in 1934 chief of German police and Gestapo, and in August 1943 he was appointed Minister of the Interior. Himmler's rise to power is described in this page. Photo, Keystone

Marshal Goering, Hitler was, however, more seriously concerned about his eventual succession. He decreed a Directorate of Three—Goering, Field Marshal Keitel, and either his Deputy Martin Bormann, or Heinrich Himmler, whose power, a short while ago, he had multiplied by making him Minister of the Interior. Which of these other three Himmler wishes to see eliminated, in order to inherit that third of Hitler's power which, in his crafty hands and backed by his Black Army, should soon become a one-man rule of his own, nobody could safely predict.

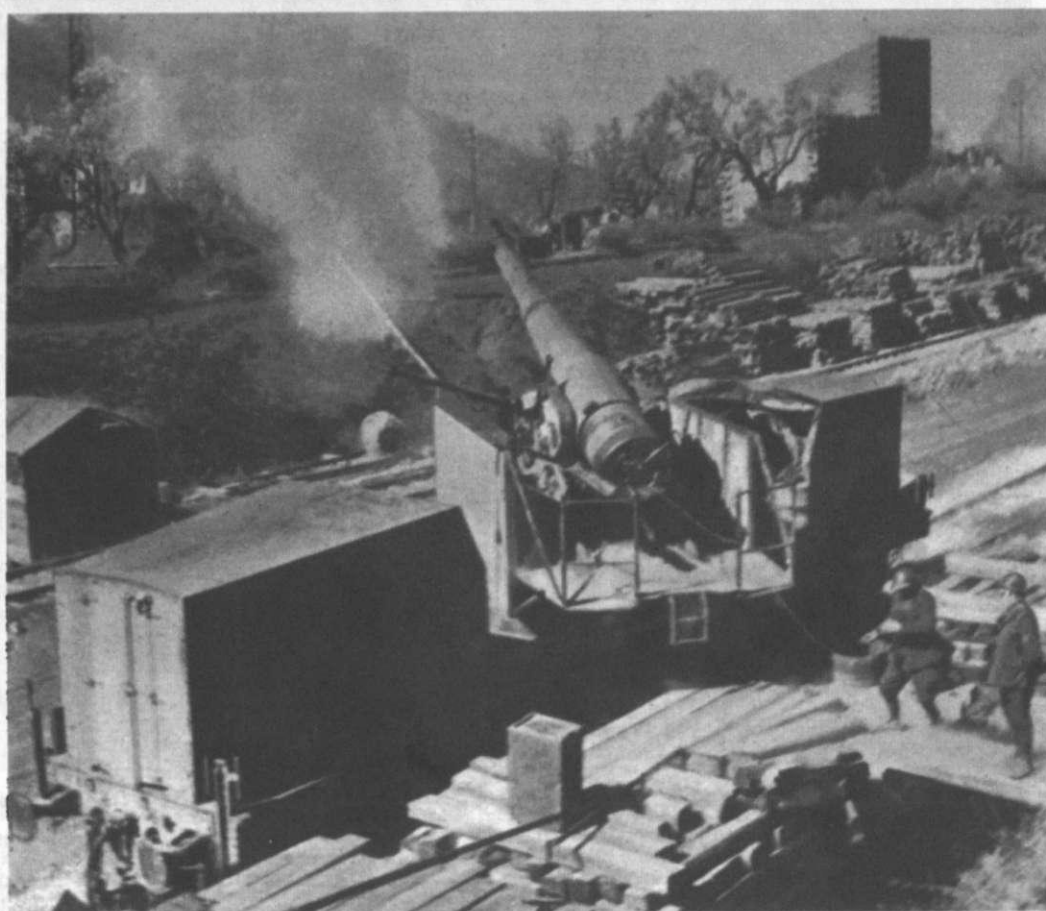
Himmler has frustrated all efforts at re-establishing the Brownshirt organization, unreliable as compared with his Black Guards. Their leader, Victor Lutze, died in an "accident," like so many obstructionist army leaders before and since: von Fritsch, Udet, von Reichenau, Jeschonnek, Moelders, von Chamier-Glyszinski and others. He has

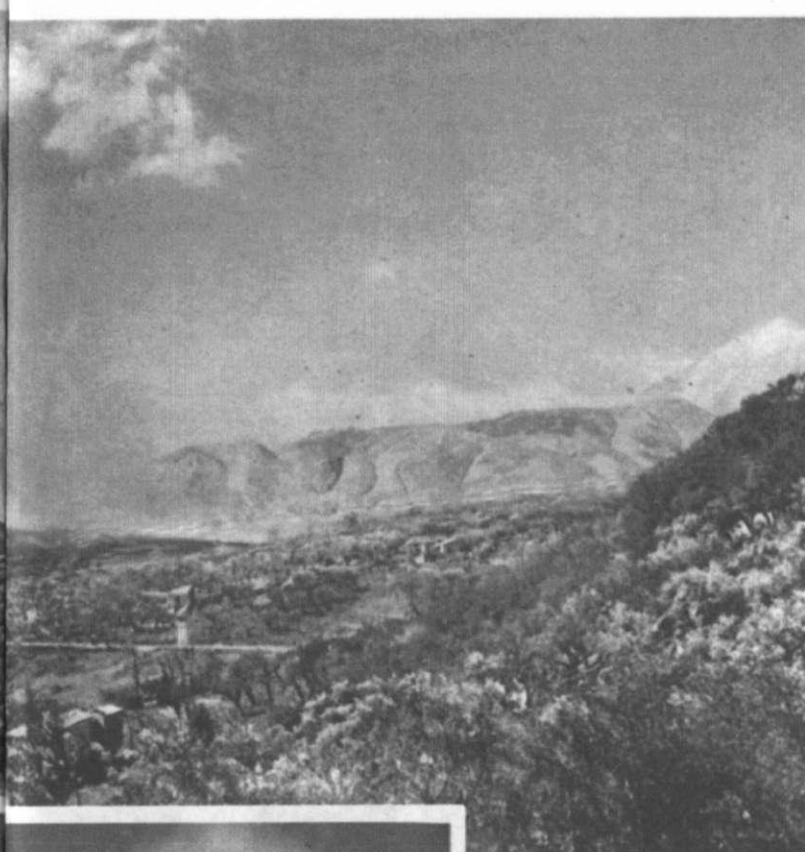
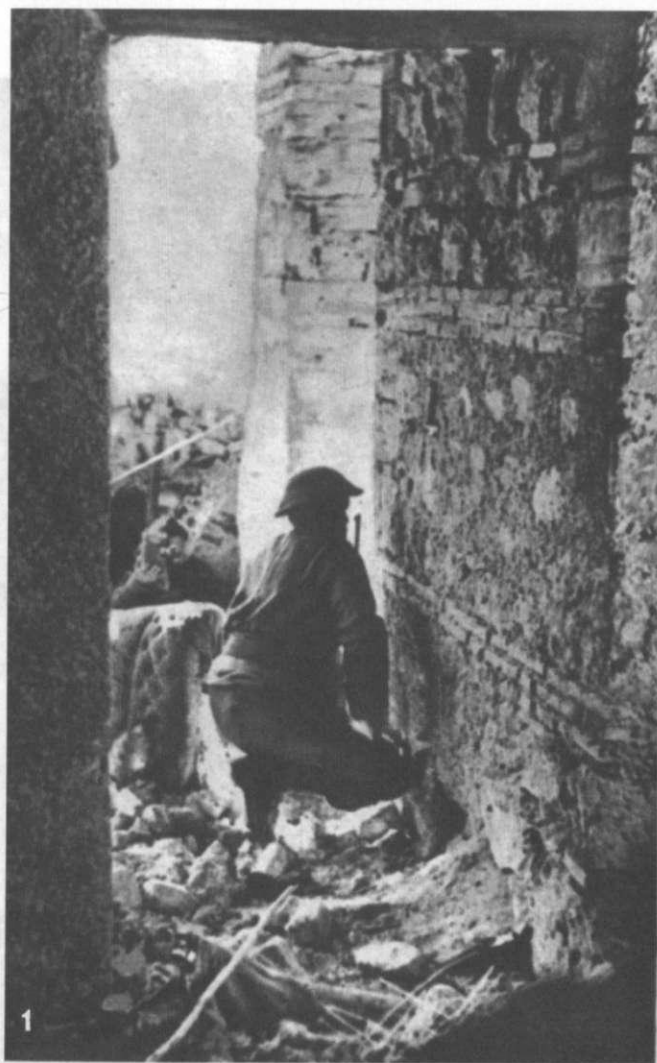


Mobility and Fire Power in Italy

Speed of movement adds enormously to artillery value. Accompanying and guarding 8th Army supply convoys are self-propelled Bofors A.A. guns. Mounted on a Morris chassis, with a 70 h.p. engine, the 40-mm. Bofors (above, camouflaged) has a speed up to 40 m.p.h. It can throw 2-lb. shells to a height of 9,000 feet at 120 per minute; the new Stiffkey Stick sight provides a simple method of assessing the difference between the point where the target is and where it will be by the time the shell has reached it. A makeshift field-kitchen provides the gunners with a meal, eaten in shifts so that the Bofors remains manned. 194-mm. railway guns recently went into action on the Cassino front; manned by Italians (right) one is lobbing shells to a distance of 10 miles.

*Photos, British Official:
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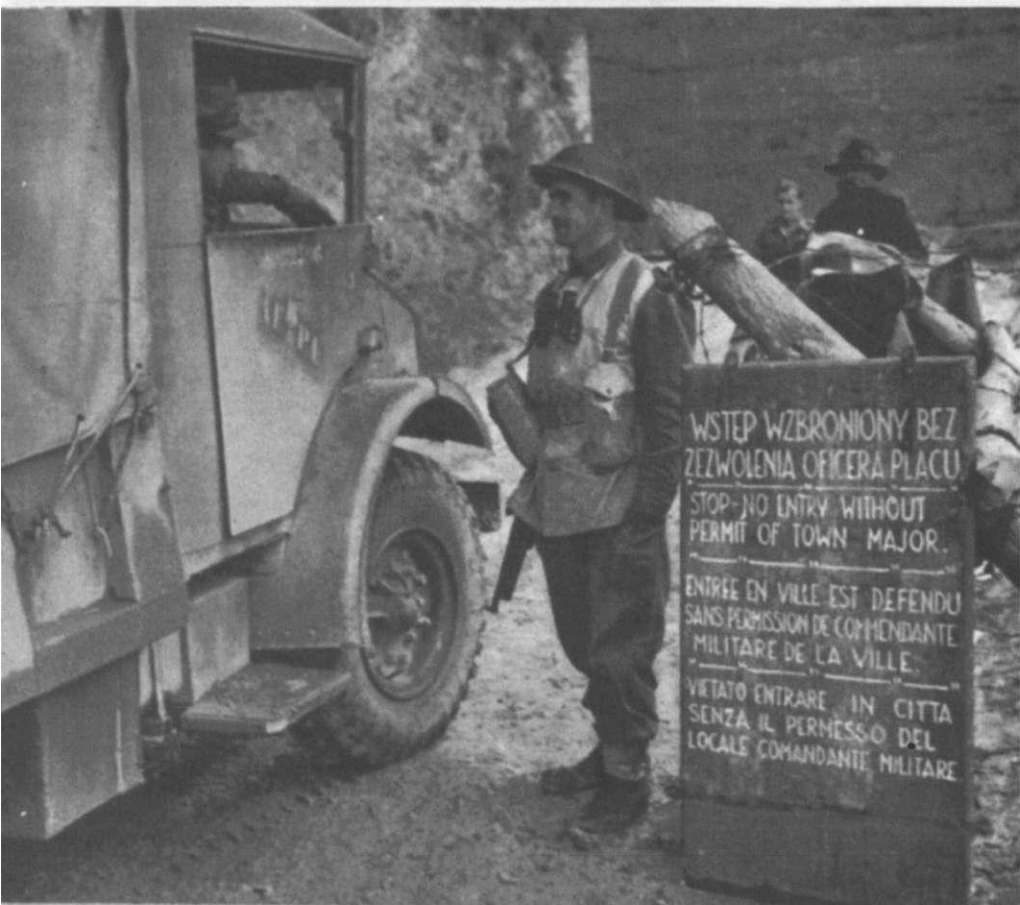
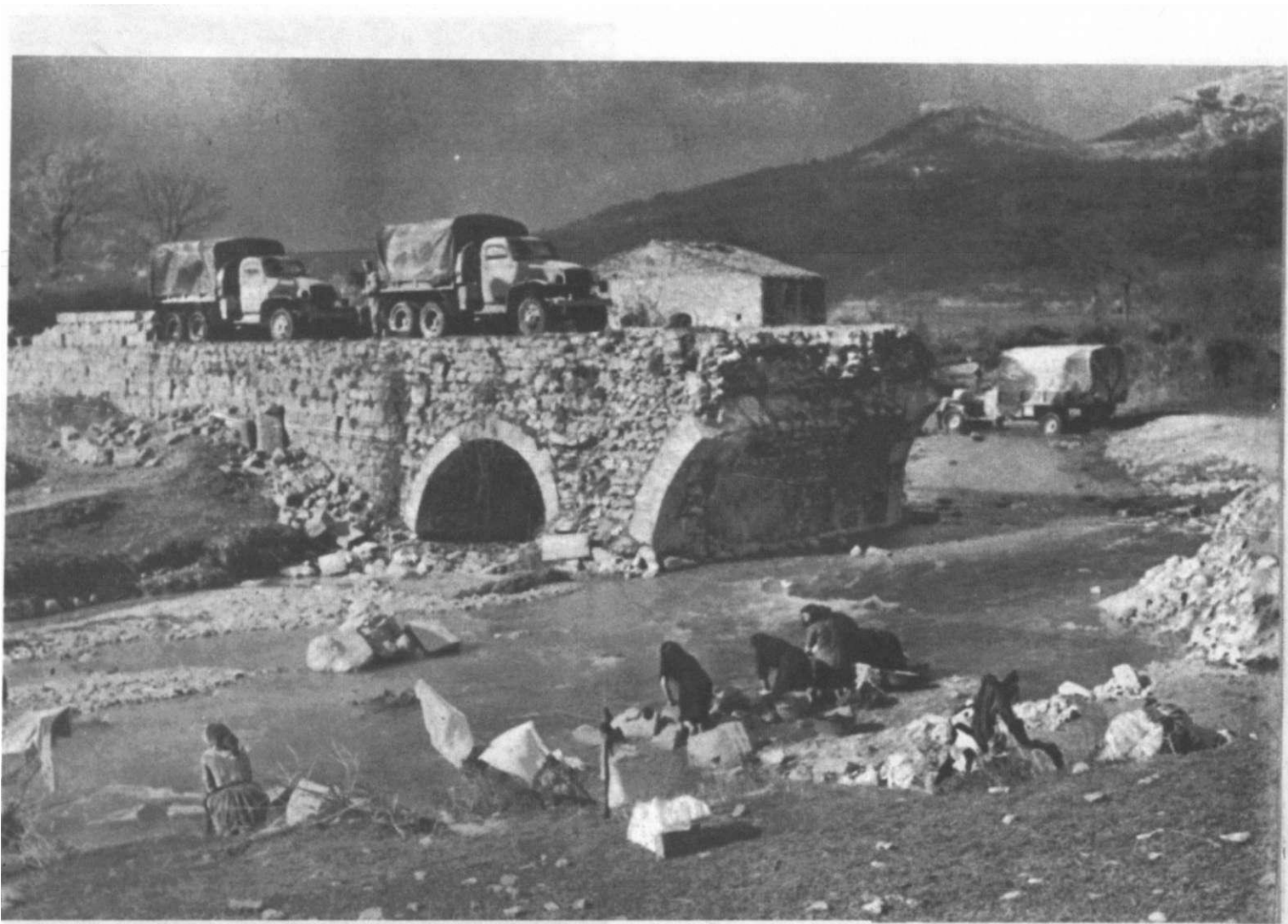
Life and Death Close Neighbours in Cassino

Constantly under shell and mortar fire the ruins of Cassino afford first-class concealment for snipers of both sides; the commander (1) of a New Zealand platoon waits for an incautious movement to provide him with a Nazi target. The panorama (2) of the Cassino front shows, in addition to Monastery Hill, Mount Trocchio (left) with the shattered town of Cervaro in the foreground. On the Anzio beach-head a stretcher case is lowered (4) into a Regimental Aid Post.

Photos, British Official: Crown Copyright

Hardship and Handicap Exploited by R.A.F.

Heavy rains in Italy have turned R.A.F. airfields into miniature lakes: a bomber crew seize the opportunity to carry out collapsible dinghy drill (3). Queen Alexandra's Imperial Military Nursing Service work in close co-operation with Allied medical officers; this Red Cross farmhouse (5) at Anzio is for abdominal wound cases. The British 4.2-in. mortar (6) manned by a crew of the Mortar Support Company—in action with the 8th and later the 5th Army—throws a 20-lb. shell.



Polish Troops Share 8th Army Honours

Fighting with the 8th Army, troops of the 2nd Polish Corps, comprising the Carpathian and Kresowa Divisions under General Anders, Polish C-in-C. in Italy, have performed good work: some of their transport is seen (above) parked at a village; in the stream, the bridge over which has been largely demolished by the enemy, Italian women are busy with the weekly wash. At a British checking point (left) on a road near the front, a warning notice is displayed in four languages—Polish, English, French and Italian.

*Photos, British Official:
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VIEWS & REVIEWS Of Vital War Books

by Hamilton Fyfe

ONE of the changes we shall have to make after this war, if we are going to be properly prepared for the next one, is a change in the way Army officers are trained. There must be something wrong with Sandhurst and Woolwich. At the former, infantry and cavalry cadets are educated; at the latter, gunners and engineers. In battle our officers have always done well, so far as courage and limited initiative can carry them. They have taken care of their men, carried out routine regimental duties with precision. Indeed, as regimental officers there has been little fault to find with them. Why, then, did Leo Amery, now Secretary of State for India, speak of "our stupid officers" during the South African War, when he was a correspondent of *The Times*? Why did all writers on the First Great War agree that the management of our share in it left so much to be desired? Why does Major Oliver Stewart, M.C., in his new book, *Air Power and the Expanding Community* (Newnes, 15s.), deplore the "failure of military thinking," which gave the Germans such a good start in this Second Great War and kept us from getting into our stride for the best part of five years?

Amery and the writers on the operations of 1914-18, and Major Stewart were all referring to the high ranking officers, the men who hold the most important posts in the Army, the men whose function it is to watch developments, to adopt new methods of warfare, to get hold of new weapons, and to keep the Army in such a condition that it would not be surpassed in fighting capacity by any in the world. Such men ought to have intellects sharpened to a fine edge, they ought to have had their imaginations cultivated from boyhood, they ought to be keen men of business—yes, I mean that—as well as students of war in all its aspects. Do Sandhurst and Woolwich produce such men? They obviously do not. Therefore they must be altered.

Let me offer two examples of the "failure of military thinking" which troubles Major Stewart. In the early thirties of this century Gen. de Gaulle, then a colonel, wrote a book about mechanized warfare, especially tanks, and about linking up operations on land with operations in the air. *The only military thinkers who paid attention to that book were Germans.*

IN the 'twenties an American Air Service general published a volume called *Winged Defense*, showing what could be and would be done in the war then impending to make Navy, Army and Air Force one service instead of three—that is to say, he pointed out the possibilities and developments that have been realized and brought into play during the past four and a half years. *The only military thinkers who digested the lessons of Gen. Mitchell's volume were—Germans.*

We are acting on those lessons now. The Germans began the war with a campaign based on them—the campaign against Poland. They planned their invasion of Norway, of France and of the Low Countries in the same way. They drove us out of Crete because they had learned those lessons we had not.

"Crete," says Major Stewart, was, "a great military experiment and a historic operation. German war

thought and war doctrine attained a peak of excellence. But the taking of Crete was a greater thing than a tribute to German military genius; it was a revelation of the indivisibility of air, land and sea power."

Following on that set-back, which the nation felt ought not to have happened, came the one real crisis through which Mr. Churchill as Prime Minister has passed. Dissatisfaction with the management of the war was very

The Failure of Military Thinking?

marked in that early summer of 1941. *The Times* and *The Daily Mail* both told the Government, the one sedately, the other bluntly, that the country would not stand any more "magnificent evacuations." *The News Chronicle* declared flatly, "Our Service chiefs have learned nothing." *The Daily Herald* warned its readers, "If we don't do better we may lose the war." All our disasters had been due to the one cause—"the failure of military thinking."

MAJOR STEWART puts it mildly when he says that in the early stages of the war, "the use of air power was imperfectly adapted to the strategical situation." Which means, in plainer language, that our military thinkers did not know how to combine air, land and sea forces. They had not learned the lesson which Gen. Mitchell's book taught. This was painfully clear when the Germans struck on the Continent. A book entitled *The Diary of a Staff Officer* complained that our bombers were used, not to harass the enemy—"the Germans are being allowed to rest at night as quietly as they would at home"—but to attack factories deep in Germany. They were not disorganizing the enemy so as to make the task of the land forces easier;

they were playing an independent game of their own.

Of the course of events down to last summer Major Stewart's book gives a brilliant summary—from his own point of view. He sketches personalities with a vivid touch. He shows Lord Beaverbrook speeding up our aircraft production in those months when it was doubtful whether we could make up our appalling deficiency in time:

He seemed to work perpetually by day and night. Distinguished members of the aircraft industry were rung up at three in the morning, forced to be perpetually available, driven to drive their work-people as they had never been driven before, caused to throw everything in for the construction of every possible aeroplane in the shortest possible time.

The small dark man with the wide mouth forced the pace because it had to be forced. He roared through the industry like a flame, burning out all red tape and entangled procedure. He kept in his office a chart and he watched it. Where previously matters were dealt with by formal procedure and the exchange of documents, now there were short, sharp telephone calls, orders that had to be obeyed instantly. The makers knew that Beaverbrook had the mandate of the people to turn out aeroplanes, whether the industry was killed in the process or not.

Stalin, the "drably-uniformed undecorated figure, with the queer reticences of expression and speech," has made many people feel he is "the strongest personality of all the war leaders." He is an enigma, "a strange enclosed figure to his friends, a dark centre of weaving will and deep forethought to his enemies." When he endured disaster he bowed to no sentimental superstitions; he stood alone and cold in the face of the ravage of his country by the enemy, but planning his moves with an inhuman (in the strict sense) exactitude and mathematical inevitability. In the darkest days he was there, saying little or nothing, but contriving to make every man and woman engaged in the war continually conscious of his strange, dark presence.

A warm tribute is paid to Sir Arthur Coningham, the "large, blunt, but thinking New Zealander," who "worked out the pattern of co-operative land-air battle in the western desert" and made victory possible.

Mixed up with Major Stewart's very able and interesting plea for better thinking about war is an odd theory of his that war is caused by the expansion of communities. He says, truly enough, that the unit of civilization has been growing in size from the days when the only grouping was that of the family. Some mysterious urge, he believes, forces human beings to herd together in larger and larger numbers. This "need for growth" produced changes in transport. Legs for locomotion gave place to horses, horses were superseded by wheeled carriages, then came railway trains, and finally aircraft. Man did not want to make these changes; they had to be made so that communities might expand. This expansion is, in his view, a law of nature and, as it leads to war, so war must continue until it stops, and then, having become "one single, comfortable, safe, peaceable community," the world will die.

THIS is really sad stuff. The reason why transport developed is that men saw opportunities for making money by, and getting fun out of, developing it. As for its being impossible for communities to remain small and harmless, look at Switzerland. The cause of expansion is no mystery; it is always to be found in the ambitions of leading men, men of great energy and unbalanced mind, who hypnotize their followers with wild, dangerous ideas, make them take up arms and so bring misery and hardship on themselves and others. That is what causes war.



GERMAN PARACHUTE TROOPS at Galatos, Crete, on May 20, 1941. This and other aspects of air power are discussed in the book here reviewed. Drawn by Capt. Peter McIntyre; by courtesy of the New Zealand Government. PAGE 787

Britain's Colonies in the War: No. 7—Ceylon



GREATEST SINGLE PRODUCER OF RUBBER for the United Nations at the present time, Ceylon became a British colony proper in 1815. Most of its 25,332 square miles are utilized in the war drive. In addition to rubber (of which in 'peacetime 600,000 acres produced 85,000 tons annually) the island's tea production is vast; the pre-war figure was 218 million lb. yearly. Coconut oil is the third great contribution, from thousands of trees. Also produced is plumbago, a mineral essential in electrical engineering. Pursuing her intensive war programme, Ceylon has, for irrigation purposes, made use of her centuries-old artificial lakes, two having been rebuilt to supply a great acreage of land. Indication that her sea bases will play a part in the fight against the Japanese was contained in the announcement on April 16, 1944, that Admiral Lord Louis Mountbatten, Supreme Allied Commander in South-East Asia, had transferred his headquarters from Delhi to Ceylon. Where once was jungle are now several airfields (above). Some of the thousands of tons of copra (coconut kernels from which oil is extracted) are being unloaded at a river jetty (below).

Photos, Canadian Official and Volkart Bros.



Native Trainees for Ranks of Fleet Air Arm



YOUNG CEYLONESE flock to join the Royal Navy's aircraft training establishment—the first of its kind in a British colony—recently set up in their island : here a squad shows keen interest in one of the planes from which they will learn maintenance and repair. Already 300 native recruits are undergoing instruction for work at Royal Naval Air Stations, and in time it is hoped trainees will replace 70 per cent of the Fleet Air Arm maintenance ratings in Ceylon, releasing these for service afloat in aircraft carriers.

PAGE 789

Photo, British Official

Highways to Speed the Day of Allied Victory

At cost of blood and sweat, often without any modern mechanical aid, new roads are being scored across the face of the wilds. Old tracks that pioneers blazed have become, or are swiftly becoming, great supply routes for impeding battle. The romance of war-road construction schemes—mightily conceived and vigorously implemented—is here outlined by HAROLD A. ALBERT.

ROADS are an integral part of the war news. Roads blocked by the Germans in Italy, tangled with the ruins of hundred-foot trees; roads laid over yesterday's battlefields by engineers of the 5th and 8th Armies; highways of invasion; roads—jaunts for tomorrow's motorists—that wriggle over the world via Alaska or Assam. The scope of some of the road-construction schemes now in progress is breath-taking. While the once-mighty Berlin-Rome autobahn crumbles beneath the blows of British bombers, and the Appian Way trembles to the thunder of battle, the Soviets open fresh links in the Stalin Highway into Turkestan, and the Royal Engineers build the new Chekka bypass in 100 days.

This latter road is among the smallest of recent road-building endeavours, yet it typifies the spirit that is now forging highways the world over. The old Lebanese coastal road, creeping around the Chekka headland, was constantly being blocked by landslides. Exigencies of military transport made a new road imperative, speed was essential in completing it before the rains, and 3,000 men from divers countries—from South Africa and India, from Poland and the U.K.—made a great common effort. They excavated 50,000 cubic metres of rock, 100,000 cubic metres of earth, built 11,000 metres of retaining wall, levelled and bitumen-surfaced a length of nearly five miles, constructed five new bridges, and finished the task dead on their 100-day schedule.

SPECTACULARLY, the first track of the new £1,000,000 road from Damascus to Medina in Saudi Arabia will span 700 miles of deserts and ultimately place Mecca on a main motoring highway from London. On the other side of the world it took the war to complete the last link of the 4,200-mile Trans-Canada Highway, especially where it was laid on foundation stilts of 100-foot depth on the northern muskeg; and now there are plans to continue the Alaska Highway itself as a Pan-American extension through Mexico, Central and South America right on to Tierra del Fuego.

A scheme is afoot, too, to shorten the present highway by 1,011 miles, by building a by-pass from Prince George, B.C., to the Arctic post of Watson Lake. The original Alcan route was pencilled east of the Rockies and Coast Mountains when the air threat of

Japanese interference with supplies travelling north was very real. Now that this peril is remote, the awkward staging and incessant battle against snow north of Edmonton become strong arguments for the by-pass.

AN interesting story lies behind the recent completion of the Huanuco-Pucallpa road in South America, which signifies the opening of a new and promising link between the Pacific and Atlantic Oceans. This is the final section of the trunk road connecting Lima, capital of Peru, with Pucallpa, a river port on a tributary of the Amazon. One of the most difficult problems to be solved in its construction was the crossing of the Blue Cordillera in the Andes; research revealed that as long ago as 1757 a missionary, Fray Abad, had crossed the mountains by a pass. This pass, named the Boqueron del Padre Abad, was rediscovered in 1937, and the way lay open to the road-builders.

The changes of war have out-dated a pre-war report of the Alliance Internationale de Tourisme, in which a highway through Africa from Cape Town to the Mediterranean was only envisaged. Today the Cape-Cairo road is a concrete fact, petrol stations are functioning in what was dense jungle, and for 7,000 miles vast areas have been opened.

Waterless and Volcanic Desert

In the Middle East area alone there are now more than 4,000 miles of new first-class roads, built mainly by the Allied armies since the commencement of the fighting. The Expeditionary Corps of the Force Publique of the Belgian Congo made the first land contact between the Congo and the Sudan across the waterless and volcanic desert. Not even a camel track marked the way and no vehicle had ever been over the ground. Covering sometimes 90 miles a day, sometimes only yards, the Belgians blazed the initial trail in 34 days, and the motor road followed.

New roads have been laid across Persia to serve as supply channels to Soviet Russia. The East Persia route was hand-made by a pick-and-shovel army of 30,000 men, women and children who had no modern machinery. Paced by British officers, they averaged three miles a day for eight months through intense winter cold—and summer temperatures that soared to 130 degrees. Another road, also based on native labour, wound to the Caucasus across seemingly impossible mountain

ranges and canyons so deep that every bridge ranked as a major engineering achievement. Such roads and the supplies they made possible have played their part in the latest triumphs of the Russian armies.

Take also the compelling spectacle of the Ledo Road, or, as it is sometimes called, Tokyo Road (see page 556) on the Northern Burma front, with its endless transport columns and its road-signs that proclaim, "This is your lifeline. Treat it right!" The Ledo Road was originally the old opium-smuggling route from China to India, infested with such evils as tigers and panthers and plague and malaria. Eventually it will reach and join the old Burma Road, and will facilitate the dispatch of much-needed supplies to China.

Sometimes troops have gone ahead to clean up Jap patrols that were menacing the road-makers, sometimes the gangs have laboured at the crests of 4,000-foot hills, and sometimes toiled through damp and malignant fever valleys. Waging constant battle against terrain, mud, rain, leeches and insect swarms, the road, kept open despite Japanese raids, has moved irresistibly forward. It is a portent of ultimate Asiatic victory.

THE famous "silk road" through Sinkiang to the Soviet Union—another possible route for supplies to China—has been newly developed during the war. For centuries this historic route (first made known to the western world by Marco Polo) was used by slow-moving caravans and pack-trains taking three months on the journey. Now, on a modernized road, motor-buses cover 2,000 miles between Chungking and Tihua, capital of Sinkiang, in three weeks. The road, which traverses the Chinese provinces of Szechuan, Shensi and Kansu and crosses the Celestial Mountains, brings nearer some remote and little-explored regions.

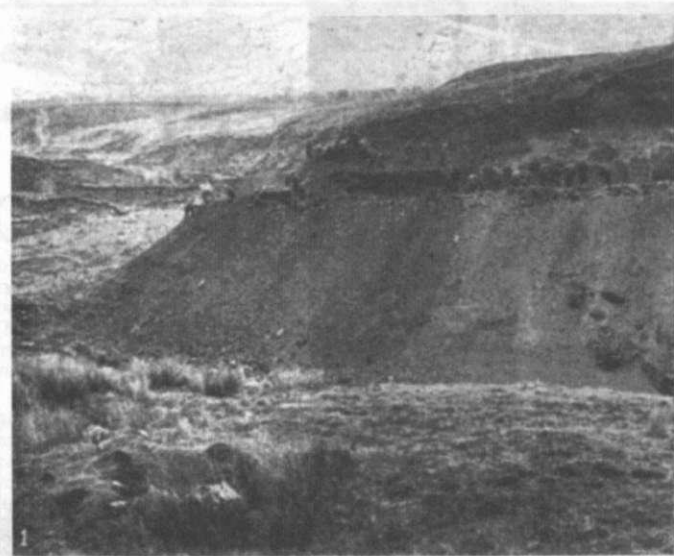
In China, too, is the 700-mile "Woman's Road," so called because it was built by 30,000 women who dug their way across the mountains between Lanchow and Chengtu and shortened another supply route for armaments to the Chinese front.

The new roads of war will be, too, highways of peacetime trade, and roads that snake today across the former wastes of five continents will be pleasure highways for motoring holidays of tomorrow.



REPAIRING AND MAKING ANZIO SUPPLY ROADS is one of the urgent tasks performed by skilled operators of the Royal Engineers of the 5th Army. The continual passing of tanks, guns and heavy transport vehicles soon wears out even the best road surfaces. On the left sappers are seen at work on a new section; the stone-crusher in the background provides the foundation material. Right, unloading tar macadam to be spread on the prepared track. See also facing page.

Military Roadmakers Surmount Grim Obstacles

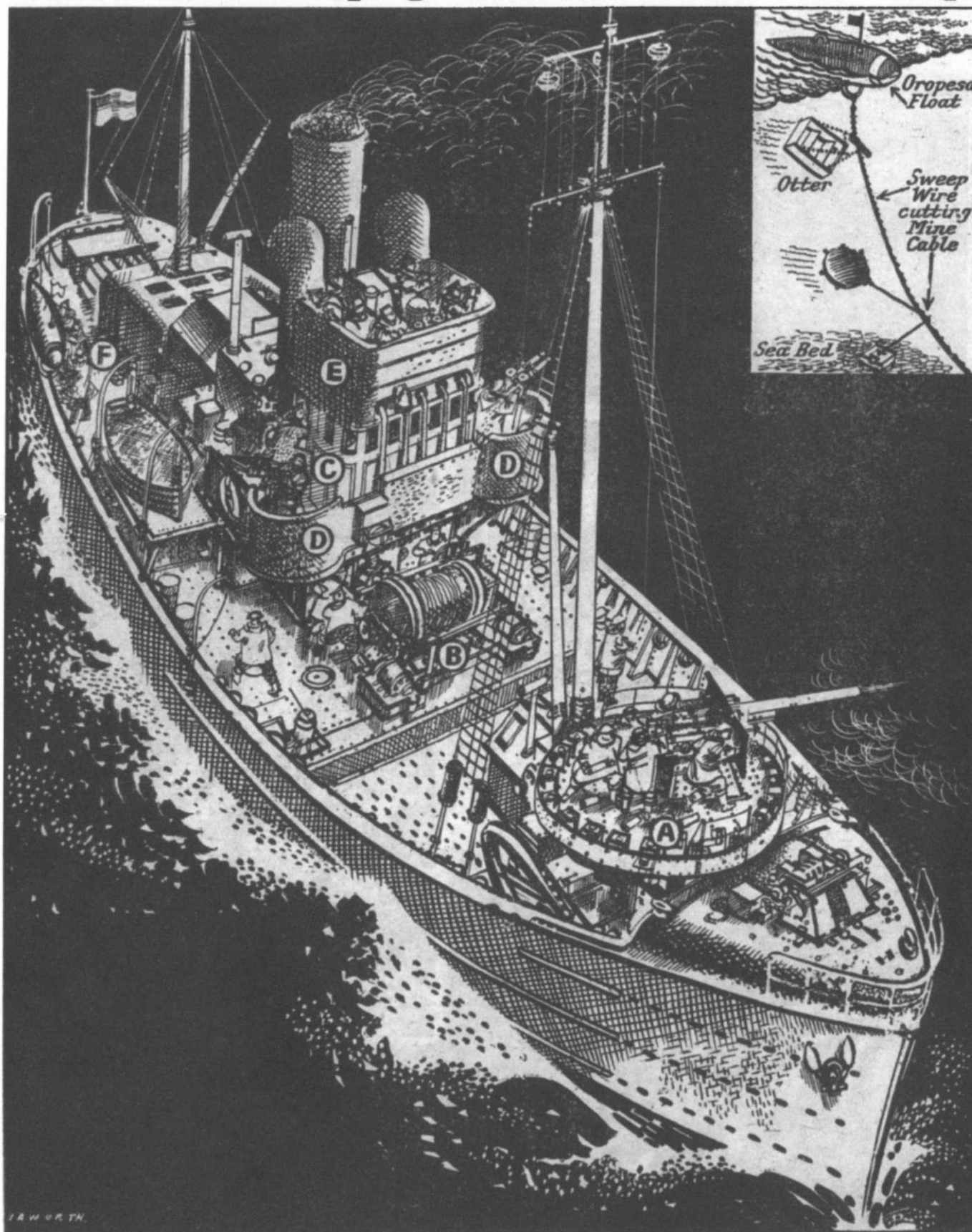


WITHOUT MECHANICAL AID Royal Engineers in Northern Ireland moved 8,000 tons of soil and rocks in eight days to make this road (1). In Persia, R.E.s push new roads along the lines of ancient native tracks; a supply truck rolls along an unfinished section (2). Gurkha troops in Burma cut a highway in a hillside (3).

Completion of the trunk road from Lima in Peru to Pucallpa, South American river port in the Amazon, opens up a new link between the Pacific and Atlantic oceans; achievements here include the crossing of the Blue Cordillera mountains in South America; labourers clear away tropical vegetation on the steep road-bank (4). Through difficult country in Syria winds this military highway (5), twisting beneath itself in a corkscrew turn.

Photos, British, Indian and Australian Official; Topical Press

How a Minesweeping Trawler Saves Our Ships



SWEEPING OUR SHIPPING LANES free from the deadly menace of enemy mines is the constant and hazardous task carried out in all weathers, and often in face of air attack, by H.M. minesweeping trawlers, of which the one seen here is typical. Various kinds of mines have to be dealt with—including the moored variety (see small diagram), which is held at a pre-determined depth under the sea's surface by a cable attached to a sinker resting on the sea bed.

The minesweeper has to cut this cable so that the mine floats to the surface, where it can be destroyed by gunfire. To sever the cable the minesweeping trawler winds out from a winch a serrated sweep

wire, to one end of which is attached the buoyant flagged Oropesa float and the Otter control, these holding the sweep wire out on the trawler's quarter at the correct distance and depth; at the inboard end of the sweep wire a box-shaped "kite" keeps it down.

The trawler's gun crew (A) fire the 12-pounder gun at mines which have just been swept to the surface. At the winch (B) engine-men control the sweep wire. The small wheelhouse (C) and look-out platforms on which are mounted twin Lewis guns (D). The skipper's bridge (E). The trawler's crew handling the Oropesa float (F).

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Specially drawn for THE WAR ILLUSTRATED by Haworth

I WAS THERE!

Eye Witness
Stories of the War

With the 'Diggers' on the Muddy Jungle Trail

Australians were the first to inflict reverses on the Japanese, and a vivid idea of the kind of life the Australian troops lead in New Guinea is gleaned from this dispatch cabled from one of their war correspondents, published here by courtesy of the B.B.C.

OUR platoon had come to a coconut plantation and halted there. It was over an hour since the men had had their last rest; they just flopped on to the soggy ground, stretched their legs, slowly loosened the packs from their shoulders. They leant back on them and then rolled and lighted cigarettes. A few of them sipped water from their bottles.

A boy beside you said: "We surprised a mob of Japs in a village yesterday—got a match?" For a few minutes he sat breathing feathers of smoke from his nostrils, then he went on: "One of them was on his bunk under a mosquito net. He fired through the net at one of our forward scouts and grazed his neck. I shot him. He was a Jap Marine—a six-footer. They're not all little devils." Then the men were climbing to their feet, wriggling their packs till they were square on their backs again. The boy beside me slung his rifle and said: "The forward scout was pretty mad at me beating him to his kill."

It didn't take long to pass through the plantation, and the platoon disappeared into the jungle again and soon were as tired as before their rest. The track wound inland. It was a green tunnel, walled in by choking undergrowth, roofed with a tangle of branches and vines, and sometimes so narrow that the leaves on either side brushed you in passing. Grey mud lapped almost to the top of your gaiters; each step sounded like a sigh. Was it hot? Arms were sheened with sweat. A thin green light washed over everything. Here and there the sunlight forced a way down through the leaves and splashed in ragged, sickly, yellow patches on the mud.

We passed dead Japanese and walked over them or around them, whichever was easier. It had been like that all day. You were one of a long line of men, trekking through a tunnel that burrowed its way under a wilderness of jungle. You had crossed six rivers—or was it seven? No matter—the first soaked you, so the rest couldn't make you any wetter. It probably washed some of the sweat from your clothes; you hadn't changed them for a week. There was no sound except that of feet in the mud.

THE boy in front changed his rifle from one shoulder to the other. You thought, "This track is the war all right!" The track ran ahead, behind, through you. You couldn't think beyond it. Your whole existence was centred on the track. Suddenly you could see in your mind hundreds of tracks, and on every one of them lines of green-clad men, humping packs and weapons and trudging stubbornly forward. The tracks twisted over mountains and razor-backs. They pushed through green and yellow mats of Kunai grass, or got lost in jungles. When the men contacted an enemy they stopped and destroyed him—he was just another more dangerous obstacle.

And then the line halted abruptly, and you almost blundered into the boy with the rifle in front of you. The track ran through a little clearing; there was a village there. The forward section fanned out and the men went swiftly from hut to hut, edging quietly up to doors and slipping quickly inside. It was only a tiny village with half-a-dozen brown huts sagging drunkenly to the ground. Right there in the centre of them a bomb had scooped a neat grey crater. A section returned.

"Only a few dead ones," the corporal said. We stumbled out again on to the other bank and plodded on, head down, along the track, while the water sucked away from your clothes and slopped about uncomfortably in your boots. A long time later the platoon reached another coconut plantation, and the boy in front said, "Bivouac here." You slung your jungle hammock between two palms, then collected the driest wood you could find, then lit a cooking-fire and hung your battered billy—made from a jam tin—over the flame. Then you mixed bully beef and biscuits with water and squatted stirring it till it was hot. A few drops of rain spattered on your head and, looking up, you saw angry clouds pushed sullenly down from the mountains. They were heavy with thunder. Near by somebody said, "More mud tomorrow!" and swore softly.



FOLLOWING THE RAMU VALLEY in New Guinea, Australian troops push on towards Madang on the coast; the valley debouches on the coast some 60 miles north of Wewak, great Japanese air base. Going to a forward post, native porters negotiate a treacherous torrent (below); at the post an Australian removes some of the clinging New Guinea mud (above) which constitutes just one of the tribulations described in the accompanying story.

Whirled Through a Storm on a Seafire's Tail

For 15 minutes a Fleet Air Arm mechanic who had been swept off the deck of an aircraft carrier clung to the tail of a Seafire as it flew through a snowstorm. Half frozen, he was still hanging to the aircraft when it landed at a nearby air station. Here he tells the story of his amazing escape.

THE aircraft carrier was operating in home waters on a cold, windy day with a snowstorm likely to break at any moment. We had headed out to sea at about 11.00 a.m. The snow had already begun to fall, and with a hurricane blowing we could hardly stand on the flight deck. The aircraft were duly ranged and placed into flying position, with the air mechanics standing by their respective kites.

I was responsible for "A" for Annie, the first plane to leave on the word "Go." This machine was piloted by Lieut. (A) David Wilkinson, son of a former Lord Mayor of London. The planes were all being run up

as the ship headed into the wind, and a terrible wind it was. "A" for Annie was running at a fast tick-over and the pilot gave the signal for two men to lie on his tail, while he revved up to full power.

This task was undertaken by another rating and myself. We both lay prone on the tail plane, he on the port side, I on the starboard side, and waited for the pilot to open up. After a while the other rating got off to warn the pilot that we were all waiting and ready.

Then the fun began! The pilot opened his throttle to full boost, and up came the tail. I knew this had happened; but still thought he was just revving up. The aircraft

I Was There!

started to move, but unfortunately I had no feeling of forward motion. The terrific slipstream, plus the hurricane, was doing its utmost to remove me from the tail. The only grip I had was where the elevator is hinged; I could just get my four fingers into this slotted portion with the left hand. So with my legs swinging in mid-air I held on.

As soon as a plane leaves the deck it drops a few feet before climbing again. When this happened I had the feeling that the tail had come back to the deck again and I was prepared to get off at any second. Then I experienced a floating sensation. I had my eyes closed, and on opening them saw to my horror that the carrier was below and astern! How the pilot ever managed to get the plane off the deck is still a mystery, but there I was—hanging on like glue. I thought my number was up, that every moment would be my last. I thought of my wife and daughter, and I prayed.

I shut my eyes and just hung on. A few minutes later I again opened my eyes and saw a cruiser astern of us. I was tempted then to let go and trust that they would pick me up. Had I done so and fallen from that height they would have picked me up dead. I learned later that on leaving the carrier the pilot was informed over the R.T., "There's a man on your tail." He replied, "Yes, I know!" After a flight of approximately 15 minutes we were over an airfield. I heard the engine slow down and prepared for a crash landing, not knowing where I was. The runway was covered with snow, so I thought he was landing in a field, and I pulled my legs up in order not to have them trapped under the fuselage.

The general opinion of the crowd watching us was that the pilot made a perfect three-point landing; personally, I felt only a slight jar and the gradual slowing up of the plane. Finally it stopped and then I collapsed. I did not remember any more until I came to inside an ambulance. On the way to hospital I was frozen stiff, but free of any pain or any feeling save that of admiration.

We Struck at and Crippled the Mighty Tirpitz

In one of the aircraft carriers from which was launched the Fleet Air Arm attack on Germany's largest warship, on April 3, 1944, was Commander Anthony Kimmins, from whose broadcast of the action the following account is condensed, by courtesy of the B.B.C. See also pp. 776-777.

THERE was little sleep in those carriers the night before the attack, for we were now in the danger period as we steamed close into enemy waters. Look-outs and guns' crews, only their eyes visible through their



SEAFIRE, fast-flying, hard-hitting Fleet Air Arm fighter, is here seen over the aircraft carrier H.M.S. Indomitable. The Seafire is armed with two 20-mm. cannon and four .303 machine-guns. See story commencing in page 793.

Photo, Chas. E. Brown

for the pilot whose skill had saved my life. I was told afterwards that the pilot removed me and placed me upon the snow, covered me with his overcoat and placed his Mac West under my head for a pillow. The hospital was prepared for my reception. A bed was ready, with electrically heated blankets and hot-water bottles, but these I could not appreciate, having lost all feeling. When I thawed out I had a strange sensation of pins and needles all over the body; I was then given a sleeping draught—and a sound sleep was very welcome! Next morning the pilot visited me in hospital. I was too full of admiration for his skill to speak. He said "Good show, jolly good show!"

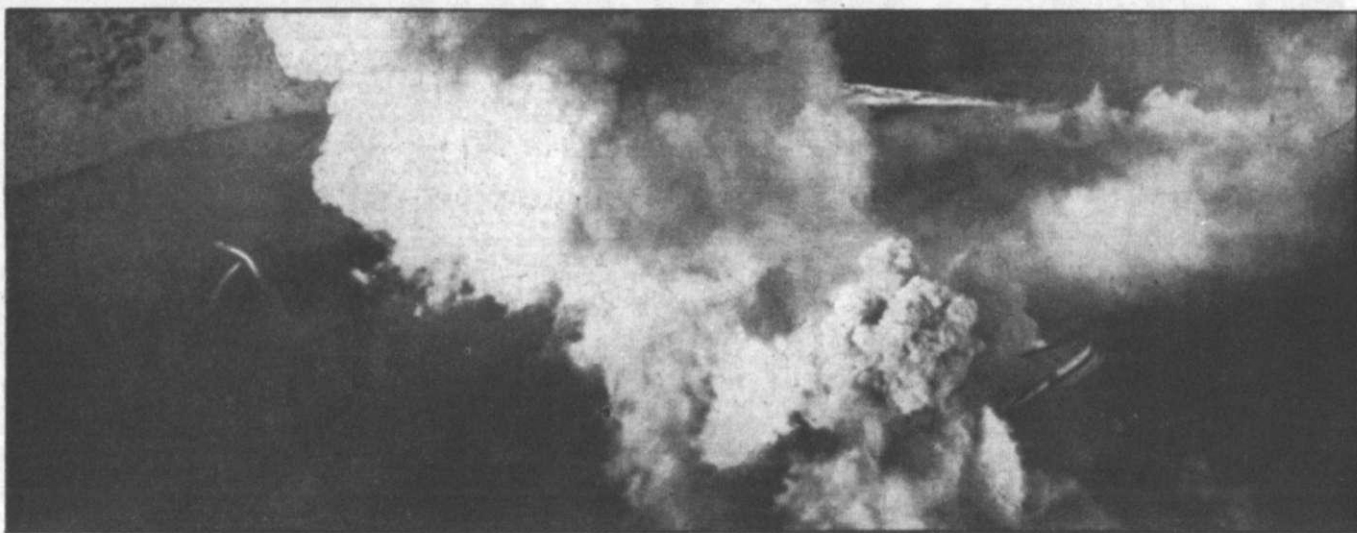
lines of Merlin-engined Fairey Barracudas—the new Fleet Air Arm torpedo-bombers which were being tried out in action for the first time. With their wings folded back over their bodies they looked rather like enormous beetles. And on the other side were the American Corsairs with their wings folded vertically and almost touching overhead at the tips. While mechanics swarmed over their aircraft making final adjustments, great yellow bombs were being wheeled down the narrow gangways, loaded up and fused.

At first light, at exactly the prearranged minute, Commander Flying shouted the welcome order "Start up!" The words were hardly out of his mouth before there was a roar of engines. By now the carriers and the escorting ships were all heeling over and swinging into wind. A final nod from the Captain, a signal from Commander Flying, the Flight Deck officer raised his green flag, the engines started to rev up, the flag dropped and the first aircraft was roaring away over the bow.

One after the other they followed in rapid succession, and near by you could see the same thing going on. More Barracudas, Seafires, Corsairs, Wildcats and Hellcats. In a few minutes the sky was full of them, and as the sun started to rise and the clouds turned pink at the edges, they formed up in their squadrons.

It wasn't long before the mountains in the coastline showed up ahead. As they gained height and crossed the coast the sun was rising to their left, shining across the snow-covered mountains, throwing shadows in the gorges and against the snow-covered trees in the valleys, and lighting up the deep blue of the calm fjord. Down to the left were two or three enemy ships, but these took no visible interest in the proceedings. Everything seemed calm and peaceful, but I'll bet that down below the wires were humming and that up at the far end of the fjord alarm bells were ringing, fat-headed Huns were falling out of bed, rubbing their eyes and cursing the British as they threw on some clothes and stumbled out to their cold action stations.

By now the strike was passing its next landmark, a huge glacier on the top of a mountain. Soon they were crossing the final ridge and sighted a flak ship on the far side of the fjord. She immediately opened up, but raggedly, and without great effect. And then, as they crossed over the final ridge, they had a thrill which none of those aircrews will ever forget. There, nestling under the sheer mountains in a fjord not much wider



ONE MORE FOR THE TIRPITZ, as a well-aimed heavy bomb bursts on the target. Attacking Barracudas (see pages 776-777) were escorted by Seafire, Wildcat, Hellcat and Corsair fighters from aircraft carriers (story above), under the command of Vice-Admiral Sir H. R. Moore, Second-in-Command of the Home Fleet; 40 tons of bombs were dropped and 16 direct hits obtained on the German battleship. For many of the aircrews it was their first operation.

PAGE 794

Photo, British Official

than the Thames at London, lay one of the largest battleships in the world—the Tirpitz. A motor-boat alongside raced off at full speed, and I don't blame him. (See illus. p. 794.)

Up till then the strike had kept dead radio silence, but now as they arrived in position everyone gave an instinctive start as a sudden rasping noise hit them in the ears. The leader had switched on. And then a shout—"All fighters anti-flak—leader over." And with that shout things really happened. Hellcats and Wildcats literally fell out of the sky. As the Barracudas hurtled down they could see the fighters strafing the surrounding gun positions and whistling across the Tirpitz, with the tracers from their bullets bouncing off her deck. Green and red tracer came shooting up, but the fighters had entirely disorganized her A.A. fire and the Barracudas were able to take perfect aim. Down they went with their eyes glued to her funnel—6,000—5,000—4,000 feet. They went down so fast that anything loose shot up to the roof of the cockpits.

Now the leader was at the right height, and he let go. The first three bombs went whistling down, exploding bang on the bridge, the nerve-centre of the ship. The other pilots—diving from either side—were close on his tail. One extra large bomb, bursting through the armour-plate amidships, went off with a terrific explosion between decks. The huge ship shuddered, her stern whipping up and down and sending waves across the fjord. It was only 60 seconds—one minute—from the first bomb to the last. There was no sign of life from the hutments close to her berth. No doubt these housed many of the repair workers. Six months' work was going west in sixty seconds.

And now, as the first strike weaved away and made off down the valleys with fires raging in the Tirpitz, and the artificial smoke cover belching out from all around her, they saw above them the second strike—which had



BEFORE THE TAKE-OFF AGAINST THE TIRPITZ, some of the aircrews are seen receiving a final briefing with the aid of a large, exactly-scaled relief map of the target area. It was due to such careful instruction methods, as well as to the faultless flying of the pilots, that carrier-borne attacking planes were able to bomb the German battleship. Photo, British Official: Crown Copyright

been ranged in the carriers the moment the first had taken off—now coming in from the sea.

This second strike had, if anything, a more difficult task than the first. Admittedly the artificial smoke and the smoke from the first strike's explosions helped to guide them to the target, but by the time they got over the whole fjord was almost completely obscured with a strong box barrage above the smoke. But luckily—at the critical moment—the smoke cleared over the Tirpitz,

and with a shout of joy they roared down, carrying out similar tactics. Again there were many hits; one heavy bomb in particular was seen to crash from the upper deck and explode with a sheet of flame that reached above the topmast. By the time the last pilot dived the A.A. fire had ceased. And so a few hectic minutes over the target, and the brilliant dash of those Fleet Air Arm crews had been the highlight in a naval operation which had left the Tirpitz crippled.

APRIL 12, Wednesday 1,684th day
Italy.—King Victor Emmanuel announced his retirement from public affairs as from the Allied entry into Rome; the Prince of Piedmont to become Lieutenant of the Realm.
Russian Front.—Tiraspol, 60 miles N.W. of Odessa, captured by Gen. Malinovsky's 3rd Ukrainian Army.

APRIL 13, Thursday 1,685th day
Mediterranean.—Gyor (Hungary) Messerschmitt factory, airfields and factories near Budapest attacked by U.S. bombers.
Russian Front.—Feodosia, Eupatoria, Vladislavovka, and Simferopol, enemy bases in the Crimea, captured by troops of the 4th Ukrainian Front and the Independent Maritime Army. Ovidiopol near Odessa, taken by 3rd Ukrainian Front troops.

Australasia.—Bogadjim, Japanese base near Madang (New Guinea), occupied by Australian troops.
Air.—Aircraft installations at Augsburg, Oberpfaffenhofen, Schweinfurt and Lechfeld attacked by over 500 escorted Fortresses and Liberators. Berlin bombed by Mosquitoes at night.

APRIL 14, Friday 1,686th day
Russian Front.—Bakhchisarai, Alushta, Saki, Karusabazar, and Sudak captured in the Crimea. Gen. Vatutin, former commander of the 1st Ukrainian Front, died at Kiev.

Sea.—Appointments announced: Vice-Admiral Sir Henry H. Harwood, K.C.B., O.B.E., to be the Flag Officer commanding Orkneys and Shetlands; Rear-Admiral H. C. Bovell, C.B.E., D.S.O., to be Admiral Superintendent, H.M. Dockyard, Rosyth.

APRIL 15, Saturday 1,687th day
Mediterranean.—Budapest and Ploesti (Romania) hit by over 500 day raiders from Italy.

Russian Front.—Tarnopol captured by troops of the 1st Ukrainian Front. Red Army within 4 miles of Sebastopol.

APRIL 16, Sunday 1,688th day
Russian Front.—Yalta, large Crimean port, occupied by Independent Maritime Army. Massed Soviet bombers raided Galatz, Rumanian oil town.

India.—Announced that Admiral Lord Louis Mountbatten, Supreme Allied

OUR DIARY OF THE WAR

Commander in S.E. Asia, had transferred his headquarters from Delhi to Ceylon.
Sea.—Loss of destroyer Laforey announced by Board of Admiralty.

APRIL 17, Monday 1,689th day
Mediterranean.—Belgrade (Yugoslavia) and Sofia (Bulgaria) raided by U.S. Liberators and Fortresses.

Russian Front.—Balaklava, in the Crimea, captured by Soviet forces.
Air.—Appointments announced: Air Vice-Marshal A. Lees to be A.O.C.-in-C. Administration, Air Command, S.E. Asia Command, and to be Air Marshal; Air Vice-Marshal R. P. Willock to be deputy head of the R.A.F. delegation in Washington; Air Vice-Marshal W. F. Dickson to be A.O.C.-in-C. Desert Air Force; Air Vice-Marshal A. Durston to be A.O.C.-in-C. a group, S.E. Asia Command; Air Commodore A. P. Davidson to be A.O.C. Iraq and Persia, and to be Air Vice-Marshal.

APRIL 18, Tuesday 1,690th day
Burma.—Appointment of Major-Gen. W. D. A. Lentaigne to command special force operating inside Burma, in succession to the late Major-Gen. Wingate, announced.

Sea.—Announced that Italian cruiser Ulpio Traiano sunk in Palermo harbour in January 1943, by "human torpedoes" of the Royal Navy.

★ Flash-backs ★

1940

April 16. Announced that British troops had landed at Namsos (Central Norway).

April 18. British landing at Aandalsnes (Norway) announced.

1941

April 13. Germans occupied Belgrade, capital of Yugoslavia.

April 15. Belfast heavily bombed.

1942

April 16. H.M. the King awarded

Air.—Oranienburg, Rathenow, and other objectives in Berlin area attacked by escorted Fortresses and Liberators. Over 1,000 night bombers dropped 4,000 tons on French rail targets at Noisy-le-Sec, Juvisy, Rouen, and Tergnier.

General.—Security measures relating to diplomatic missions in Great Britain announced; departure of official couriers, diplomatic and consular representatives and their official and domestic staffs forbidden.

APRIL 19, Wednesday 1,691st day
Russian Front.—Announced that Sebastopol shelled by Black Sea Fleet.
Burma.—Announced 14th Army attacking in Imphal and Kohima areas.

India.—Carrier-borne aircraft escorted by Allied warships attacked Japanese bases of Sabang and Lho-Nga, Sumatra.

APRIL 20, Thursday 1,692nd day
Italy.—Venice bombed for first time.
Russian Front.—Sebastopol bombed from land, sea and air.

Air.—Military installations in N. France attacked by over 750 Fortresses and Liberators.

APRIL 21, Friday 1,693rd day
Air.—Record load of 4,500 tons dropped at night on Cologne, La Chapelle (near

the George Cross to Malta, in recognition of the island's valour.
April 17. Augsburg raided in daylight by Lancasters, for which Squadron-Leader Nettleton received the Victoria Cross.

April 22. Commandos raided the French coast, near Boulogne.

1943

April 12. Sousse, port on Tunisian coast, occupied by 8th Army.

April 21. Enfidaville captured by 8th Army. Takrouna taken.

Paris), Lens (N. France), and Ottignies (near Brussels).

General.—Exports of chrome from Turkey to Germany ceased.

APRIL 22, Saturday 1,694th day
Russian Front.—Fierce enemy panzer attacks in Stanislov areas repelled by troops of 1st Ukrainian Army.

Australasia.—Allied forces landed at Aitape, Hollandia, and Tanahmura Bay (New Guinea), covered by air and naval bombardment.

Air.—Marshalling yards at Hamm attacked by 1,000 Fortresses and Liberators. Brunswick, Düsseldorf and Laon bombed at night.

APRIL 23, Sunday 1,695th day
Mediterranean.—Wiener Neustadt aircraft factories (Austria) attacked by Italian-based Fortresses and Liberators.

Russian Front.—Enemy passed to counter-attack S.W. of Narva and forced wedge in Russian lines.

Air.—Vilvorde signals depot, near Brussels, raided at night; Mannheim bombed by Mosquitoes.

APRIL 24, Monday 1,696th day
Mediterranean.—Bucharest and Ploesti rail yards (Rumania) attacked by U.S. bombers.

Burma.—Announced second glider-borne force landed in Burma as reinforcements for the late Gen. Wingate's troops. Relief of Kohima garrison completed.

Australasia.—Capture of Hollandia and Humboldt Bay area (New Guinea) announced. Airstrip at Tadjil taken. Australians captured Madang, concluding campaign in Huon Peninsula.

Air.—Factories at Friedrichshafen, and airfields at Munich, raided by nearly 2,000 American aircraft. More than 500,000 incendiaries dropped on Munich and Karlsruhe at night.

APRIL 25, Tuesday 1,697th day
Burma.—Announced that British troops advancing from Imphal had occupied Kanglatongbi, 22 miles N. of the town. Mapao Hill, N. of Imphal, captured by 14th Army.

Air.—Enemy airfields near the Franco-German border, and industrial targets inside Germany, raided by day. Mosquitoes attacked Cologne at night.

THE WAR IN THE AIR

by Capt. Norman Macmillan, M.C., A.F.C.

It looks as though, having concluded the war in North Africa, it has been possible to send reinforcements of all kinds to the South-East Asia Command under Admiral Lord Louis Mountbatten, and that the time is now imminent when actions similar to those undertaken by General MacArthur in the South-West Pacific area are to be expected in the area of the Far East which lies within the British Command of the Allied Forces.

No doubt it was their awareness of this impending situation which caused the Japanese to force a way northward from Burma into the Manipur State of India. This move was designed to complete the cordon enclosing the Japanese-seized territories lying to the east of the Indian Ocean; to form, as it were, a Japanese West Wall to defend Burma, Malaya, French Indo-China, Siam, and China, and in the last-named country to cut off, if possible, from outside aid the Chinese forces under Chiang Kai-shek and their American Allies within China.

ALLIED Bomb-Tonnage is Rising Rapidly

If this war had been fought twenty years ago this Japanese plan might have succeeded. But today air power makes the effort put forth by the yellow-skinned race of Nippon appear as that of a nation not fully comprehending the meaning of the air age into which now the world has almost fully entered. As the development of the tank swept away the kind of earthworks which were the great feature of the 1914-18 war, and made the military barrier erected to stop the forward surge of an army mainly a landmine field, so development of air power in all its current implications has affected this type of barrier and will continue increasingly so to affect it as the war goes on. The barriers which aircraft have to face are the shell-gun and the rocket-gun, and the fighter armed with guns from rifle-calibre machine-guns to 75-millimetre shell-guns, and rocket shells. (The balloon barrage is not a barrier, but an intended deterrent to certain forms of air attack.)

But all the evidence goes to show that the development of these barriers to the passage of military aircraft towards their targets is not proceeding with the same rapidity as is the striking power of the aircraft themselves. The bomb tonnage is rising rapidly; on the night following April 20, 1944, Bomber Command, employing about 1,100 aircraft, dropped some 4,500 tons over Germany and German-occupied Europe (including a greater weight on Cologne than the 1,400 tons or thereabouts that the first 1,000-bomber raiders dropped on that city in the early summer of 1942), and the power of the individual bombs dropped has risen since the beginning of the war—on our side—from 500 lb. to 12,000 lb.

These are astounding technical achievements which the Germans and Japanese have been unable so far to match. In addition, the defensive fire-power of the bombers has grown so that they are increasingly able to fight their way through the fighter barriers sent into the skies to oppose them, and in daylight the employment of long-range fighter

escorts has parried the defensive power developed hitherto. In a word, the air offensive is more powerful than the air defensive. This is not difficult to understand, because the air of itself can offer no barrier such as armies (and navies) must face on the surface; their technical equipment, and the skill and courage of the fighting airmen, alone determine the issue in air war, after the directing minds have done their best to organize the timing and direction of attacks to outwit the commanders of the enemy air defence.

So much for the tactical situation. What of

around China and Burma indicates that the directing minds of the Japanese Higher Command have failed to understand the full implications of Anglo-American air superiority.

Even if all the surface roads were to be blocked by Japanese troops the air highways into China remain open, and great quantities of war material and reinforcements can be flown into that area were it to become beleaguered. Already the Wingate airborne expedition into Northern Burma has shown what can be done in the most difficult territory in the world. That force is a threat to the enemy lines of communication. If it is reinforced with a sufficiently lively imagination it may become a striking force compelling the Japanese to withdraw from Manipur State, because they cannot supply their forward troops as efficiently as ours there can be supplied.

Meanwhile, the headquarters of the South-East Asia Command have been switched from New Delhi to lovely Kandy in Ceylon, and from that zone a seaborne air force was dispatched to attack Japanese harbours, installations, aerodromes, and ships at the northern end of Sumatra (see map in p. 774). Here we see the now familiar spectacle of a powerful fleet being employed for the sole purpose of advancing the take-off point of attack aircraft to a convenient striking range, so that the bomb weight can be increased to the maximum by reducing the fuel load required. Sumatran ports are no doubt part of the enemy supply line to Burma. But Sumatra itself may be to the South-East Asia Command what Papua was to General MacArthur's Command in the South-West Pacific. Seizure of airports in Sumatra would advance the Allied air forces a thousand miles and give them a base for close action against the Japanese in Malaya.

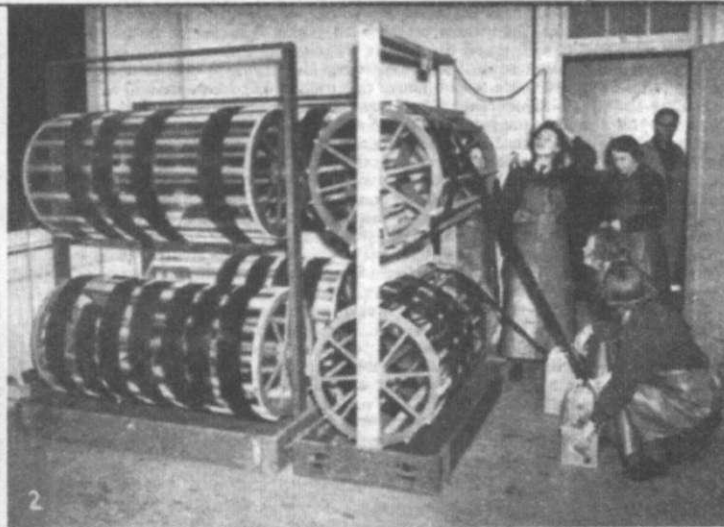
It would reduce the distance between the two Allied Commands on the Equator to 3,000 geographical miles. That would open the whole equatorial zone held by the Japanese to air attack. It would place our feet on the first pier of the island bridge to Australia. It is the most direct route to the rubber plantations. Nowhere else in that area can we advance so far in one stage. It would be both a direct attack and, to the Japanese in Burma, a flank attack upon their lines of communication. If we are strong enough to follow up with a landing on the lines of the American landing in the Solomons we shall have moved far in the war against Japan, for we shall have advanced our airfields a thousand miles. Airfields are the strategic counters in air war. Their possession, or the denial of their use, is the real pro and con of war in the air. Lack of airfields is the barrier to air operations. That is why we have had to use seaborne air forces to attack Sumatran objectives, and, thousands of miles away, the battleship Tirpitz (see pp. 776-777 and 794) lying in the landlocked fjord off the Barents Sea. But is this not an expensive way to use a striking air force? And is the necessity therefore not due to earlier inability to foresee the development of air power, with consequent failure to create the chain of properly defended air bases necessary for its employment? To that more than to any factor we owe our vast territorial losses in the Far East. To regain the ground lost we shall have to fight for land-based airfields as primary objectives throughout the whole of the Far East, as the Americans have done in some of the islands.



SPITFIRE XII is the latest version of the famous British front-line Spitfire which has eight years' magnificent performance behind it. Specially designed for low-altitude work, powered by the new Rolls-Royce Griffon engine, it breaks the long association of the Supermarine airframe with the Merlin engine. Square wings and modified tail are among several new features. Armament is two 20-mm. cannon and four .303 Browning guns. Photo, Charles E. Brown

the strategical? Because an enemy cannot raise an effective air barrier to the passage of military aircraft in time of war today the stronger power in the air can (if it is able to make good the wastage which must occur in aircraft and—unfortunately—however good the equipment and organization, in personnel) penetrate any known form of defence and cause immense damage to the opposing nation's war organization and production. But it can do more than this. It can land a force by air and maintain it by air behind the surface barriers erected by the enemy. And so the Japanese attempt to close the surface cordon

W.A.A.Fs Specialize in Aerial Photography



PHOTOGRAPHIC SECTION of the R.A.F. has attracted many W.A.A.F. members since training in this all-important work commenced in August 1941. Learning to process high-speed film, normally done in complete darkness, these girls (1) practice with "blinkers" on; others learn to reel wet aerial films on to large drying drums (2).

In the printing room they make enlargements of the films (4) for later piecing together (5). When finished these will form a detailed picture of enemy territory, which skilled interpreters will read; before the girls are allowed to touch the prints their nails must be cut short, as the tiniest scratch might mean a mis-reading.

Mobile photographic units travel the countryside to wherever rush work is to be carried out; a Belgian girl (3, centre) is one of many of the Allies learning side by side with British W.A.A.Fs.

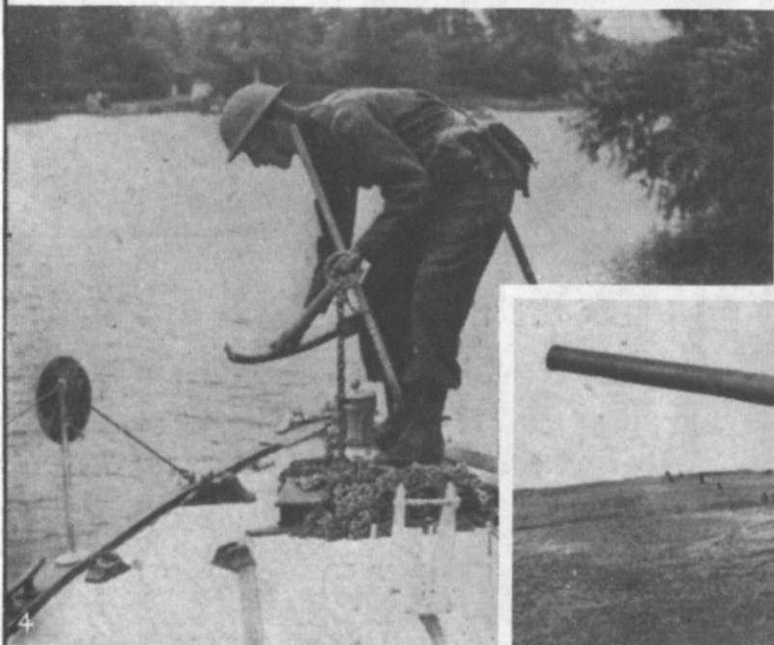
Photos. P.N.A., Daily Mirror

The Home Guard Celebrates its Fourth Year

PROGRESSIVE DEVELOPMENT has been the keynote during the fourth year of Britain's Home Guard army, which was first formed under the title of Local Defence Volunteers on May 14, 1940. Raised at a time of crisis, ill-prepared to withstand the enemy attack that was expected, except for the indomitable will of its members, today the Home Guard is a well-trained, well-equipped force which could call halt to any invader.

Among the year's achievements has been the abandoning of the last out-dated weapon and a steady increase in the supply of the latest ones. In this year, too, the Home Guard first manned our coast defence guns, and were given priority for A.A. units all over the country, including 3.7 in. batteries. At the present time there are four General Headquarters Schools and 27 travelling training wings, an increase of one in each case on the year 1942-43. Well over 200 Home Guard Motor Transport companies now exist, using some 13,000 War Department vehicles.

On June 11, 1943, it was stated that the provisions of the Army Pensions Warrant of 1943 would apply to all Home Guards and their dependents as in the case of members of the Regular Army, and on September 25, 1943, the War Office announced that Home Guards disabled in the course of their service would receive a disability pension, while they remained members of the Home Guard, equivalent to that granted to a discharged private of the Regular Army—further indications that the Home Guard is fully recognized today as on equal status with the regular armed forces.



TO THEIR ROCKET-GUNS go Home Guards at the double during a practice (1); others man a 6-in. naval gun on the South Coast (5). Learning to cook at a school field-kitchen (2). Traditional ceremony of searching the vaults under the Houses of Parliament (which custom began after the discovery of the Guy Fawkes plot in 1605) was carried out by Home Guards (3) on Nov. 24, 1943, before the reading of the King's speech. On duty afloat with the Upper Thames patrol (4).

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Photos, New York Times Photos, Topical Press, Planet News, Sport & General

WHAT a queer feeling the name of General Eisenhower must give Germans every time they read it,

or hear it on the air. It is a feeling we cannot quite understand, perhaps. Britons have now and then gone to other countries and become subjects of other States. There was, for instance, a Russian general in the last war known as Kleigels, who was said to be descended from a Scots family named Clayhills. But from no other land has there been such a flow of emigrants as that which left Germany between 1848 and 1914 for the United States. Those emigrants became American and have now sent one of their tens of millions—General Eisenhower—to command the force that is to overthrow German military might. And the reflections of any intelligent German must be all the more unpleasant by reason of the fact that the flow of emigration was not caused by overcrowding or unemployment; the exiles left Germany because they did not like the way it was governed, because they wanted liberty which they could not get at home.

THAT neutrals should want to remain neutral is intelligible enough. That they should want to carry on with their usual lines of commerce can be understood also. But that Governments which profess to regard Nazis as enemies of the human race should allow their nationals to supply these enemies with articles required for making war on the human race does seem to most people, to say the least, illogical. That Spain should send Hitler wolfram, the substance Germans need so urgently for munition-making, is only to be expected. Franco says openly that he obtained power through the help given him by Hitler, and he is grateful enough to hope that Hitler will win this war. But Turkey, which until recently let the Germans have chrome for steel-making, and Sweden, exporter of ball-bearings to the Reich, are in different case. They have never been friendly to the Nazis. They declare their sympathy with the United Nations.

WHEN you hear the figures of casualties in air-raids read out by a B.B.C. news announcer, including those "missing, believed killed," does it ever occur to you that here is a new way of escape offered to anyone who wants to cut loose from his home and his family and his occupation and start afresh? What could be easier, if a house is hit and pretty well demolished, than for a person living there and known to have been in it at the time of the raid, to slip away and leave it to be inferred that he has been killed? In Germany, I hear, such disappearances are common. I dare say it would be possible here too. But, if you try it, don't say you picked up the idea from me.

PARIS cafés without their *apéritifs* and restaurants without meat or wine, Paris *magasins de nouveautés* without any stocks, Paris taxis compelled to moderate their furious speed by shortage of petrol, the Paris *Métro* so crowded that travel on it is a danger both to limbs and lungs—that is a picture drawn by one who has managed to get out of the city and out of France. More than half the French population are suffering from semi-starvation, which causes anaemia. No one thinks much about what is to be done when the Nazis have been driven out. Everyone is too much occupied with the hour-to-hour problems of mere existence. Compared with the question of getting a meal the question of the future of France seems insignificant. That can easily be understood. Meanwhile, plans are being made in Algiers which may or may not be found acceptable by the mass of the French people when they get the chance to express their views. How civil war can be avoided

Editor's Postscript

it is hard to see. With a spirit of fierce revenge on one side and a desperate anxiety to escape retribution on the other, fighting appears to be inevitable. There are some who think a general election would settle everything. I wish I could share their belief.

A FRIEND of mine was declaiming recently about the humbug of restrictions on restaurant meals. He said it was in keeping with our national hypocrisy that we should pretend the charge was limited to five shillings when we know many places charge more than twice as much. His indignation seemed to me ill-bestowed. The object of the regulation that not more than five-shillingsworth of food shall be supplied is to keep down consumption of eatables. Generally speaking, it does that, though I do hear of cases where four meals are put down on a bill for two people and they get two lunches or two dinners each. This, however, must be rare. Not many women are as greedy as that, and very few men. With scarce exceptions nobody gets more than five-shillingsworth of food. If they choose to pay ten or twelve shillings for it, that is between them and the hotel or restaurant keeper. The extra money passing from one to the other does the public no harm. And there always will be folks who like paying more than things are worth. There always have been. In Evelyn's Diary I came across an amusing entry during the year 1654, when Oliver Cromwell ruled and places of entertainment were mostly shut. One remained open, the Mulberry Garden, on the site of what is now Buckingham Palace in London. A titled acquaintance of Evelyn's took him there and he sarcastically noted it as "the only place of refreshment about the town for persons of the best quality to be exceedingly cheated at." Such persons exist still.

ANOTHER grumbler I listened to (unwillingly) disliked the word "beach-head" which has come into use as a description of our hold on strips of the Italian coast, where by combined operations we succeeded in landing considerable forces. It is formed on the analogy of "bridge-head," which means a "fortified defence, covering the end of a bridge nearer to the enemy's position than the other end." That is to say, when you get across a bridge, driving the enemy before you, you make a semi-circular or triangular defence line to keep the enemy off

while you get more troops and supplies across the bridge. Same thing when you land on a beach. We did exactly this at

Anzio, and at Salerno. What is the use of grousing about a new expression that is very useful and that everyone who takes the slightest trouble can understand without difficulty? That is how language is formed.

I HAVE every sympathy with the aim of the National Book League, which is to induce people to read more books. This may seem to be unnecessary just now, when more reading is said to be going on than ever before. But even in wartime, and with difficulties in the way of other recreations which throw us back on reading, there must be enormous numbers of British subjects who have never read a book. The proportion is probably greater than it was before the Education Act was passed in 1870. For the like of those who then passed most of their leisure time in reading there are now so many alternative attractions—the radio, the cinema, football, hiking; and there will before long be television. Among the girls in the Services something has been done already to foster a delight in novels—with some curious results. Here is one. A young W.A.A.F. was persuaded to read *Jane Eyre*. When she took it back and was asked how she liked it, she said "I liked it all right, but it doesn't often happen, does it?" The librarian asked "What doesn't?" "Why," the W.A.A.F. answered, "girl marrying her boss, you know." That was how Charlotte Brontë's masterpiece-melodrama struck her!

IN some moods one is driven to agree with the Corporal in Priestley's play, *Desert Highway*, that "everything is for the worst in the worst of all possible worlds," to reverse the comfortable words of Dr. Pangloss in Voltaire's *Candide*. I have been thrown into such a mood by hearing that in some parts of the country men go out with guns to shoot song-birds, blackbirds in particular, in order to supply London restaurants with "game." This is utterly hateful. Nothing depresses one more in Italy than the absence of bird-song. The Italians kill their birds for food—not only now because they are half-starved, but at all times. The French "sport-man," too, takes pot-shots at any bird he sees, and sometimes hits. What would spring be here in Britain without the exquisite liquid notes of thrush and blackbird? I love the whistle of starlings, too, and the yellow-hammer's one phrase—until it becomes too monotonous. Shooting song birds should be made an offence.

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A Jungle Victor Greeted Liberated Burmese



DISTRIBUTING GIFTS TO NATIVES of a Kachin village is one of "Merrill's Marauders"—a name acquired from Brig.-General F. Merrill (see illus. p. 772), who led the first U.S. ground troops to fight as a unit in the continent of Asia; in N. Burma, these troops captured Walawbum, in the Hukawng Valley offensive, the opening of which was announced on March 6, 1944. Kachin tribesmen, British trained and equipped, are proving themselves in battle against the Japanese invaders.

Photo, Keystone

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S.S.

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