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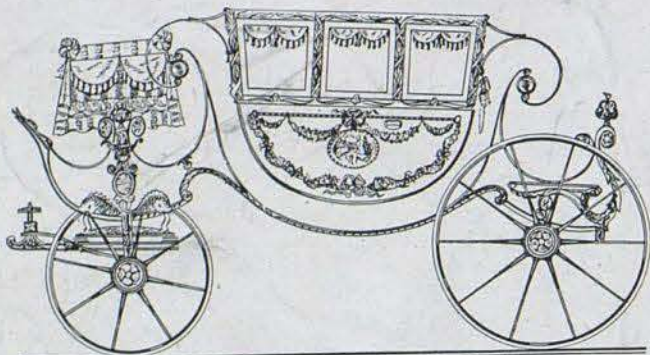


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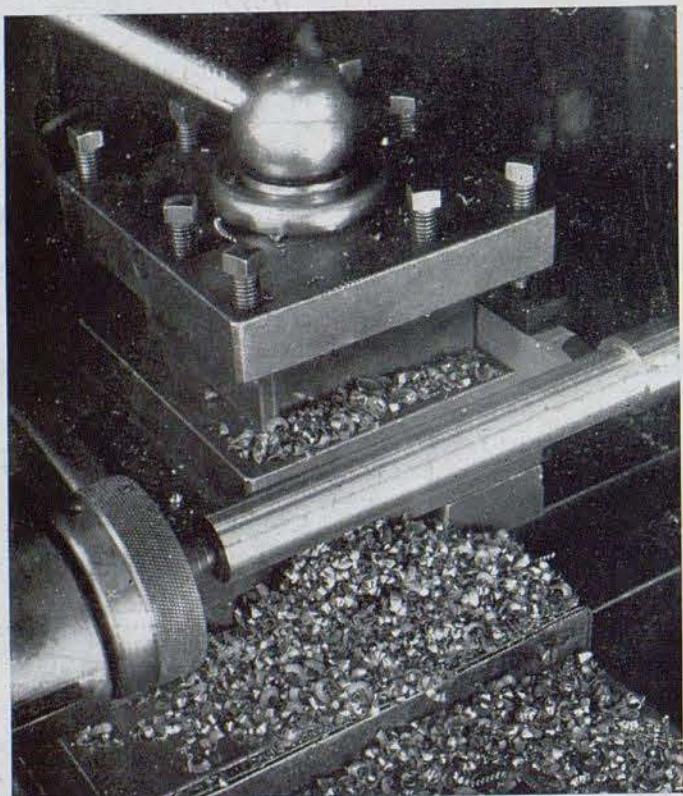
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### Gentlemen, "The King"

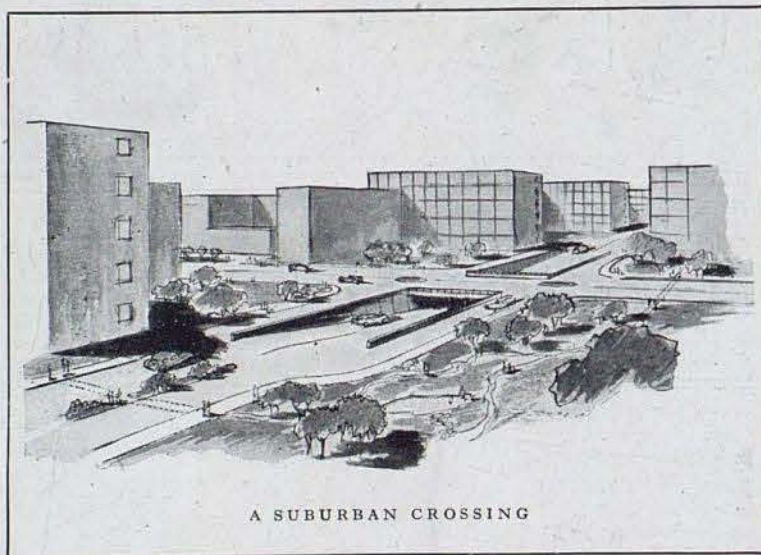
Many and varied are the traditions surrounding the drinking of the King's health in military messes. A goodly number of regiments do not toast His Majesty: others give the toast only on guest nights. So far from implying disrespect, this omission of the toast is really a mark of honour. Time was in the turbulent days when Jacobitism was still rife, when all officers were commanded to drink the King's health. But on dining in the messes of certain regiments the earlier Georges, graciously saying that the loyalty of the assembled officers was beyond question, granted the privilege of omitting the toast. Whether the toast is honoured or not, however, is no indication of past loyalty, but due rather to the accident of a casual visit from the monarch.



One of the most striking rituals is that of the Gloucester regiment—the old 28th foot. Varying the usual formula when the President rising says "Mr Vice, the King," and the Vice-President responds "Gentlemen, the King," the Vice-President replies "Mr. President, the King" and no-one else speaks. The origin of this custom goes back to the Peninsular war when at the end of the day's fighting only two officers remained alive to honour the toast.

## Schweppes<sup>★</sup> Table Waters famous since 1790

★ Temporarily giving place to the standard war-time product—but Schweppes will return with victory.



A SUBURBAN CROSSING

HERE is another sketch by Hugh Casson, A.R.I.B.A. in the series giving his rough impressions of the form some of the new traffic arrangements may take. While they are still able to meet present needs, Gowshalls will be ready to sign these new roads whatever form they may take



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# THE ILLUSTRATED LONDON NEWS

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SATURDAY, AUGUST 19, 1944.



THE MAN WHO IS LEADING THE AMERICAN FORCES IN THEIR SPECTACULAR ADVANCE—LIEUT.-GENERAL OMAR BRADLEY, IN COMMAND OF THE U.S. GROUND FORCES IN FRANCE.

Lieut.-General Bradley, commanding the victorious U.S. Ground Forces in France, was the man who, in April 1943, when things were not going so well in Tunisia, took over the U.S. Second Army Corps, put it in the forefront of the fighting,

and led it to victory. He is regarded as one of America's best infantry commanders. General Bradley taught mathematics at West Point from 1920-24. He served on the General Staff in Washington from 1938-41.

FROM A PORTRAIT BY PROFESSOR ARTHUR PAN.





By ARTHUR BRYANT.

IN 1940, it would seem, the German people had the summer of their lives. It was like 1870 over again, only far better. It was what 1914 looked like being but, thanks to the Marne, never was. For the Germans in 1940 not only longed for victory, but thoroughly enjoyed it. Judging by the films they made of their bloody triumphs of that year, they revelled in every moment of them. For the Germans are, nationally speaking, a very young people. National triumphs, even when written in other people's blood and suffering, mean a good deal to them. Especially, one might add, when written in other people's blood and suffering.

Victory in battle was, in fact, the Germans' principal way of expressing themselves nationally. It sublimated—if such a word can be used of such a thing—their inferiority complex. The Germans have not been a united people, nationally speaking, very long. As a nation they have only existed since January 1, 1871; Germany, the State, is scarcely any older than Mr. Winston Churchill. But as professional soldiers they have had a very long history. Long before they achieved political unity and nationhood, Germans were famed for earning their living by fighting, much in the same way as Italians—also late-comers to nationhood—were loosely said to earn their living by playing barrel-organs and vending ice-cream, or Jews by dealing in money and old clothes. Not, of course, all Germans or even a majority of Germans; before the nineteenth century the overwhelming majority of every people earned its keep by the most fundamental of human crafts: by tilling and cultivating the soil. Yet a large number of Germans did from age to age support themselves by the sword. It is perhaps a little hard to blame them for this; the young men of Hesse-Darmstadt took to fighting, I take it, not so much because they liked it, but because the rulers of Hesse-Darmstadt wanted money and the neighbours of Germany wanted professional soldiers to fight their battles, and were prepared to pay good cash for surplus Teuton peasants for this purpose. This country, for instance, fought most of its eighteenth-century wars with a considerable proportion of German mercenaries in the ranks of its Army. In the same way the Dutch manned their battle fleets in the seventeenth century with the surplus waterfront population of the Hanse towns.

But if the Germans did not start by liking fighting, as some enthusiasts—possibly rightly—maintain, they undoubtedly developed a taste for fighting. Because it was the professional trade of so many of them, they grew to take a pride in it and to like it, as hereditary craftsmen usually do their craft. There are plenty of accounts in the records of our campaigns in the Peninsula against Napoleonic France of ardent German professional fighting-men who enjoyed war as other men enjoy carpentry or boat-building or writing books. And to do them justice, they were very good soldiers: not quite so good, perhaps, as an English soldier at his best, for they lacked elasticity—a very fundamental quality in war. But they possessed most of the soldierly virtues—courage, endurance, tenacity, alertness and unflagging application to the details of their profession. So long as they were directed by liberal-minded statesmen in Westminster they served, doubtless, a useful enough purpose in an imperfect and evolving world.

Unfortunately the Germans conceived—not unnaturally—the ambition of fighting for their own statesmen instead of those of other nations. I recall in particular the lament of one young German officer, who served right through the Peninsula War, bewailing the fact that, while in the summer of 1814 all England around him was rejoicing at the victory he had helped to win, a countryman of a small German State like himself had no national stake in the triumph of his own and his comrades' arms. To this nostalgia

Prussia provided the answer. And the statesmen of Prussia were not animated by liberal ends. They had only one end: the glorification and enlargement of Prussia by military conquest. And they used the sentimental aspirations of the hereditary German fighting-man for this purpose. In the course of a decade of victorious battle they brought about the union of modern Germany.

Ever since 1871 the Prussian Junkers, who from time immemorial have lived by war and—

ONE HUNDRED YEARS AGO: REPRODUCTIONS AND QUOTATIONS FROM "THE ILLUSTRATED LONDON NEWS" OF AUGUST 17, 1844.



"THE BURNS FESTIVAL ON THE BANKS OF THE DOON—THE PROCESSION OF SHEPHERDS."



"BURNS'S THREE SONS—ROBERT BURNS, ESQ., THE POET'S ELDEST SON; MAJOR BURNS, THE POET'S YOUNGEST SON; AND COLONEL BURNS, THE POET'S SECOND SON."

"The various clubs, societies, and trades having formed in their appointed places, commenced their march through the town, passing over the 'Twa Brigs'—the 'auld' and the 'new' [illustrated in our last issue]; the crowd gathered as it went, 'fringing,' as it were, the formal line of dressed and decorated shepherds and artisans, who, with banners flying and music playing, seemed as if that day were in reality the happiest as well as the proudest of their lives. . . . The birthplace of Burns is distant about two miles and a half from the town. The procession marched on, without stop or stay, until this interesting place was reached. Here it paused a few minutes . . . lowering their banners, while each man doffed his cap, and bowed reverently, in the direction of the humble, but far-famed cottage."

what has gone with war—territorial increase, have striven to foster the German nostalgia for successful war. The hereditary skill in arms of the Teuton mercenary should be rewarded, it was maintained, by power, wealth and conquest for the whole Teuton race. Joy through Strength, in other words, was to be the watchword of Bismarck's Reich. In a less sophisticated, more popular, streamlined and proletarian form, it became in due course the watchword of Hitler's Third Reich.

It was unfortunate, for Germany, that an Englishman named Winston Churchill should have been born four years after Bismarck achieved his life's ideal of German unity round the Prussian Army. It was not, however, an accident, for, even if Churchill had never been born, it is almost certain that England would have thrown up some other man of eminence who would have thwarted Germany's will. For the whole conception of British life and idealism is fundamentally opposed to the conception of lawless

conquest; the British, in other words, are allergic to Joy through Strength. Sooner or later the genius of England was bound to be drawn into a struggle with a conquering, plundering German State. In 1914 her policy was directed by a Cabinet of humane, pacific and slightly sentimental Liberals with a strong bent towards internal reform. Yet when the German General Staff launched its horde of ardent, grey-coated, predatory warriors into Belgium, Mr. Asquith's Government declared war on Germany without a moment's hesitation. The entire country, though it knew it meant the extinction of every normal English happiness, enthusiastically endorsed its action.

Mr. Churchill was then a rising young politician of thirty-nine, a member of the Liberal Cabinet who a few years earlier had been a passionate exponent of economy in armaments to provide money for social reform. As a result of Germany's menacing programme of new naval construction he had recently become First Lord of the Admiralty. In the last days of July 1914 he issued orders which defeated the first of Germany's two hopes of winning a World War—through striking a crippling blow at the British Fleet. A few weeks later the second hope—of a quick German triumph on land in the West—was defeated by the victory of the French and British Armies on the Marne and the popular response to Lord Kitchener's appeal for a great British national Army to take its place in the field beside the French and Russians. Germany's defeat thereupon became certain, though it took four years of bloodshed, horror and sacrifice to bring it about. Whereupon the Germans began to yearn for a second World War, in which they could assuage the longing for victory which had been frustrated in the first. The humiliations and sufferings of the post-war period and the unemployment and misery engendered by a bankrupt economic system swiftly transformed that yearning into a crusade. Less than twenty-one years after the end of the first German attempt to conquer the world, the second began. And contrary to general belief in this country, it commanded the enthusiastic support of the great majority of the German people.

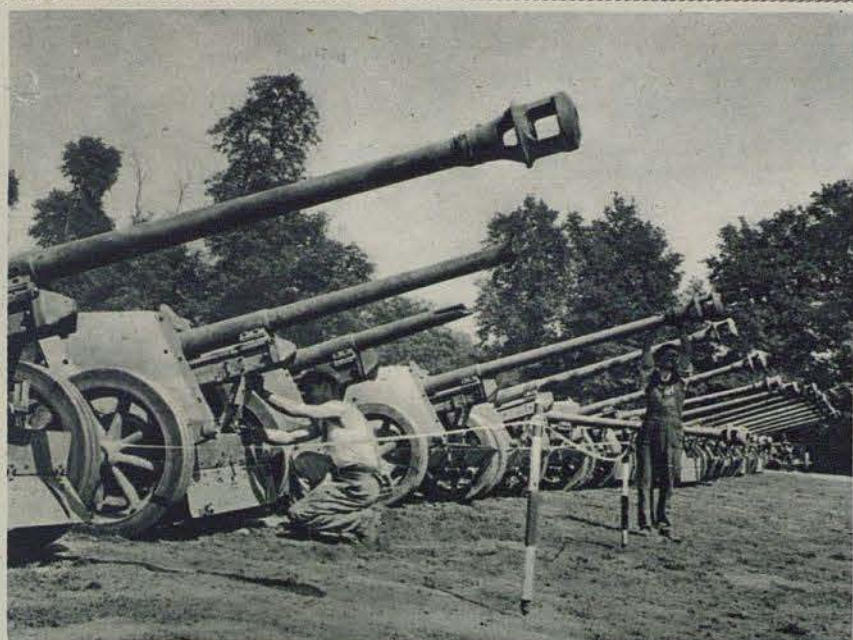
In 1939 and 1940 the Germans got what they wanted—or almost what they wanted. They conquered Czechoslovakia and Poland, Denmark, Norway, Holland, Belgium and France. They only failed to conquer Britain. For at this point they again encountered Winston Churchill and the stubborn, law-abiding, libertarian genius of the British people. But though they failed to conquer England, they were able to pinch, harass and bombard her, and that, doubtless, was temporarily a great balm to Teuton souls. In 1941 they went on to new conquests, preparatory to the final overthrow of England. They conquered Yugoslavia and Greece, and they seemed on the verge of conquering Russia. But at that point they encountered a Georgian peasant called Joseph Stalin, who embodied the historic resolution of the Russian people to resist invasion. Since then, despite the temporary victories of their Oriental allies, the German people have known nothing but misfortune in war. They are now about to experience it in its most acute and bitter form. When they have drained that acid and noxious cup to the last dregs, it may prove that the national nostalgia for successful war will have vanished too.



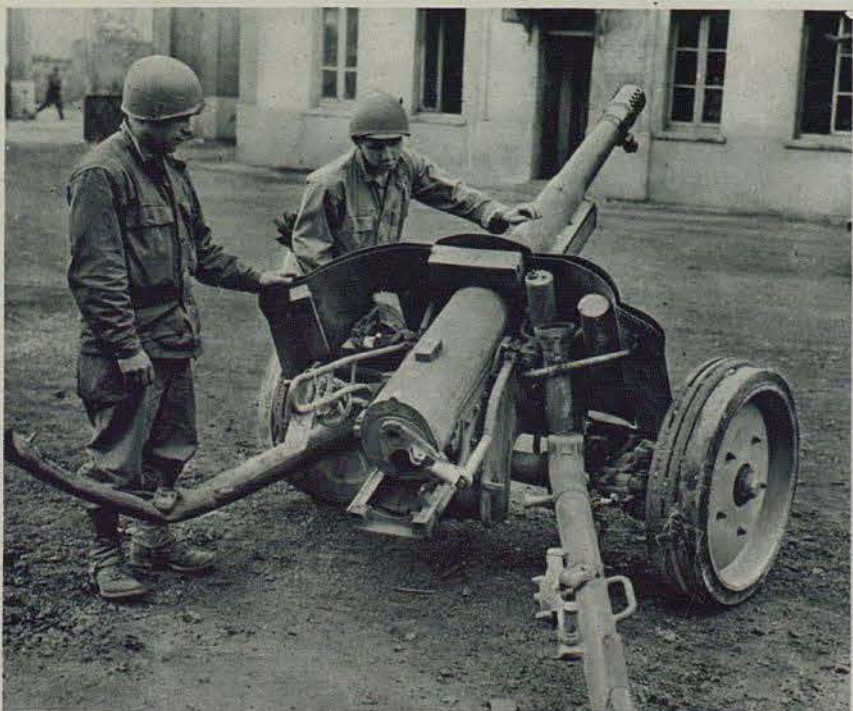
## DIFFERENT TYPES OF GERMAN WEAPONS CAPTURED IN FRANCE.



THE GERMAN V-4 ROBOT TANK. IT HAS A DRIVER FOR A CERTAIN DISTANCE BEFORE BEING DIRECTED BY WIRELESS. THIS TANK WAS CAPTURED ALMOST INTACT DURING OUR ADVANCE IN NORMANDY.



A LONG LINE OF CAPTURED GERMAN 75-MM. GUNS AT A U.S. ORDNANCE RECLAMATION DEPOT IN FRANCE. HERE BOTH ALLIED AND ENEMY WAR MATERIAL IS REPAIRED AND REISSUED TO OUR FIGHTING MEN.



A NAZI HYBRID ALSO CAPTURED BY THE ALLIES IN NORMANDY. THE GUN IS MADE UP FROM A 70-MM. FRENCH BARREL DATED 1896 AND MOUNTED ON A GERMAN ANTI-TANK CHASSIS.

The Germans in their retreat across France have had to leave a considerable quantity of war material behind them, much of it put out of action and wrecked by our bombing and shelling, but everything that is in a possible condition is salvaged and taken to Ordnance reclamation depôts behind the lines, where both Allied and enemy war material is repaired and, where serviceable, reissued to help in the great Anglo-American offensive. The V-4 robot tank—shown top left—is much larger than the pygmy tanks used so



A CAPTURED GERMAN ANTI-TANK ROCKET GUN, WITH AN AMERICAN SOLDIER HOLDING THE MISSILE. MANY RECLAIMED ENEMY WEAPONS ARE USED BY THE ALLIES IN THE FIGHTING IN FRANCE.



AN ENEMY 55-MM. ANTI-TANK GUN CAPTURED AT BANNEVILLE, WITH BRITISH SOLDIERS TRYING OUT THE MECHANISM. THIS TYPE OF GUN HAS GREAT MOBILITY AND A HIGH RATE OF FIRE.



A LONG LINE OF CAPTURED GERMAN TANKS AWAITING RESERVICING AT A U.S. ORDNANCE RECLAMATION DEPOT IN FRANCE. SOME OF OUR NOT INCONSIDERABLE BOOTY IS BEYOND REPAIR, THE REST IS MADE SERVICEABLE AND REISSUED.

unsuccessfully by the Germans in Italy, and, unlike the pygmies, it has a driver, who takes the tank as far as he can and then gets out and directs it towards its objective by wireless. Some strange and, it might be said, makeshift, enemy weapons fall into our hands, such as the hybrid shown bottom left. This is an old French gun-barrel of 1896 mounted on a German anti-tank chassis. The Nazis must be getting rather short of war weapons, judging by the amount they are losing on all fronts.



# DRAMATIC PICTURES OF CANADIAN AND BRITISH TROOPS



A PANORAMIC VIEW OF THE CANADIANS, WITH BRITISH TROOPS, ADVANCING ON FALAISE, AFTER THE GAP TORN IN THE GERMAN DEFENCE ZONE



AFTER UNPRECEDENTED PRECISION NIGHT BOMBING OF ENEMY POSITIONS BY HALIFAXES AND LANCASTERS, WHICH STARTED AT 11 P.M. ON THE 7TH, THE TROOPS WENT FORWARD. IT WAS FOLLOWED IN DAYLIGHT BY ANOTHER BLOW BY FORTRESSES OF THE U.S. EIGHTH ARMY, SHOWN ABOVE BURSTING ON ENEMY POSITIONS.

Late on August 7, a few hours after the presence of the Canadian First Army in Normandy, under Lieut.-General H. D. G. Crerar, was announced, a number of its subsidiary formations, including British troops, set out to "loosen" the Caen enemy hinge. It was a full-scale operation, which started with a surprise attack

by armour and infantry. It was an unprecedented attack—except in the Desert war—in which the tanks, guided by the flash of tracer shells from Bofors guns, were followed by specially converted armoured troop-carriers, who were able to pass through the German forward lines, untouched by small-arms fire, to debouch

# TEARING A BIG GAP IN THE GERMAN DEFENCES NEAR CAEN.



SOUTH OF CAEN ON AUGUST 8. ON THE RIGHT IS THE DEVASTATED VILLAGE OF ROQUANCOURT, WITH BOMBS AND SHELLS BURSTING BEYOND.



A DRAMATIC WAR PICTURE, SHOWING FIRES CAUSED BY BOMBING, WITH A SOLID BLACK BACKGROUND OF SMOKE, WITH TRANSPORT AND MEN TAKING COVER ON THE CAEN-FALAISE ROAD. OUR BOMBING TOOK THE ENEMY BY SURPRISE AND THE CANADIAN ARMY THEN "LOOSEMED" THE HINGE.

within a few yards of the enemy's advanced artillery positions. In under an hour they had gained 6000 yards, although smoke and minefields slowed down a part of the advance. The attack began with a furious preliminary air bombardment, before the moon was up, by 1000 Lancasters and Halifaxes, whose perfect timing

and accuracy over a narrow target nearly ahead of our advanced forces induced General Crerar to send a warm message of thanks to Air Marshal Harris. As a result the Nazis retreated, and on the 9th the Canadians were only five miles from Falaise, with a pincer movement developing between it and Le Mans.



## A SURVEY OF THE GREAT DOMINION.

"CANADA TO-DAY AND TO-MORROW." BY WILLIAM HENRY CHAMBERLIN.\*

An appreciation by SIR JOHN SQUIRE.

N.B.—The illustrations on this page are not from the book.

MR. CHAMBERLIN, who has already written books about Russia and Japan, now gives us an American citizen's views about the future of Canada. I say that because, in spite of his rapid summaries of Canadian history, the diversities of Canadian landscape, and the development of Canada's industries, it is obviously the future upon which his eye principally dwells. Here is a vast country inhabited by 11,000,000 people: some day it will be filled up (though perhaps not to the extent of the 250,000,000 of Mr. Lloyd George's dream), but how, when, and whence? Here is a country, the majority of whose inhabitants feel a strong sentimental pull towards Britain and the Empire, in which there is a large and passionate minority of French Catholics with memories of Montcalm and the Old France, and in which the economic pull is towards the United States, now obliged to frame a common defence policy with Canada as against future attacks, over or under the sea, from East and West. What is going to happen to Canada?

Things move quickly now. In such times no man can accurately predict the future. As Mr. Chamberlin himself observes: "A great war is always the precursor of great social change. Sometimes it is the herald of revolution. It is doubtful whether any of the three major upheavals of modern times, which led to the establishment of the Soviet régime in Russia, of Fascism in Italy, of National Socialism in Germany, would have occurred, at least in precisely the form which each assumed, if there had been no First World War. . . . Whatever may be said about Canada's future is necessarily provisional, subject to revision in dependence upon the course and the outcome of the war. One can only recapitulate some of the Dominion's principal problems—its double rôle as a member of the British Commonwealth and its position as a North American country, its internal racial schism, its possibilities of increasing what is now a sparse population, its prospects of agricultural and industrial development—and consider how each is likely to be affected by the war."

I am not sure about the phrase "racial schism," with our armies in Normandy and Brittany. "Religious schism" is nearer the mark, as we can see in Ireland. But the remark about our prophecies being "necessarily provisional" can be heartily endorsed. Even to-day I doubt if Mr. Chamberlin would have written all of his chapters precisely as he did write them. His book is a journalistic book; his preface is dated "June 1942." In peacetime a book about a country does not, as a rule, stale in two years. In wartime things move rapidly, and the problems of wartime publishing are a great handicap to the writer who wishes his book to be up-to-date.

For instance: what to-day is the attitude of the more ardent French-Canadians—those of them who were not merely anti-conscriptionist (which made little difference to their great contribution to the war-effort) and isolationist, but actually anti-British? Mr. Chamberlin quotes from a speech made by René Chaloult, Quebec lawyer and Member of the Provincial Legislature, who said (some time before June 1942): "I hope that after this war we shall break the Imperial ties that bind us to England. . . . I hold the most profound respect, the greatest admiration for that valiant old man who presides over the Government of France. . . . French Canadians will never consent to go under compulsion to fight against France. . . .

And our Allies, the British—where are their soldiers? We are looking for them with a magnifying-glass." Now, when there is hardly a house in Britain which is not in mourning, and when town after town in France greets us as liberators, could that man possibly say those things in precisely the same words—could anybody, in fact, who wasn't either a lunatic or a German agent? One of the results of this war may be to mitigate the friction and partly bridge the gulf between the British and the French elements in Canada. But that is only a possibility which can be cherished only as a hope: for we know not yet what feuds and misunderstandings may divide Europe,

the old illusion (shared by some even here before the war) that a quarrelsome Europe can be left to fight like cocks in a cockpit, with the rest of



MR. WILLIAM HENRY CHAMBERLIN, AUTHOR OF "CANADA TO-DAY AND TO-MORROW," THE BOOK REVIEWED ON THIS PAGE.

Mr. W. H. Chamberlin, an American, spent several months in Canada before writing his book and travelled and read widely, meeting representatives of various parties and regions and schools of thought. His aim is to make Canada better known to the United States, for, as he says: "It seems to me that there is a special need for intelligent understanding of Canada in this country [America] at the present time." Other books by Chamberlin are "Soviet Russia"; "Russia's Iron Age"; and "Japan over Asia."



IN COMMAND OF THE FIRST CANADIAN ARMY IN FRANCE—LT.-GEN. H. D. G. CRERAR, C.B., D.S.O. GENERAL CRERAR WENT TO FRANCE ON JUNE 18.

For the first time in her history, Canada has an army formation in the field, and since July 31 all Canadian troops in Normandy are under the command of the Canadian Army, with Lieut.-General Crerar as commander, having left the British Second Army, under which they had fought since D-Day. Before being appointed Commander of the First Canadian Army, General Crerar commanded the First Canadian Army Corps with the British Eighth Army in Italy. From 1940-41, he held the posts of Director of Military Operations and Intelligence, Department of National Defence; Commandant, Royal Military College, Kingston; Senior Officer, Canadian Military Headquarters, London, and Chief of the General Staff, Canada. In 1941 he became G.O.C., Second Canadian Division Overseas.

and send repercussions all over the world, when everybody's main enemy has been beaten.

There is a good deal here about Canadian isolationism before the war. Mr. Mackenzie King himself is quoted as saying in March 1939: "The idea that every twenty years this country should automatically and as a matter of course take part in a war overseas for democracy and the self-determination of other small nations, that a country which has all it can do to run itself should feel called upon to save, periodically, a continent that cannot run itself, and to these ends risk the lives of its people, risk bankruptcy and political disunion, seems to many a nightmare and sheer madness." There is implicit

the world taking no part, or at least merely making bets. Pearl Harbour and the long-distance planes and submarines have put an end to all that. Emigrants may have gone to the New World to escape the Old, but the Old has followed them. Co-operation is absolutely essential if Mr. King's "nightmare" is to be averted, and so far as the Empire is concerned, it would probably be better if (in order that neither in Canada nor here people should go on living in that dreamland of 1939) Imperial Foreign Policy were removed from the vicissitudes of local General Elections and the interests or eccentricities of party politicians, and directed by some central body sitting (as it might be) in Cape Town.

For, in essentials, Mr. Chamberlin's book leaves two questions in an Englishman's mind: how are we successfully to handle problems of Imperial Foreign Policy and Defence; and what are we to do about populating the Empire? This last does not affect Canada only, but Australia and New Zealand as well: Australia, when our backs were to the wall, was violently shocked into a realisation of the threat from the swarming Japanese. Time was when annual multitudes left these shores and begged the Don Bradmans and the Mackenzie Kings: in more recent years, says Mr. Chamberlin, Britons appear to have preferred the dole to immigration. This appears to me to be an unduly simplified statement: for there wasn't much encouragement from either end. With the old Colonies both independent and economically organised, the days were over when any adventurous or penniless person could go off and rough it in virgin lands. The Dominions did not want to have to look after strangers from the day of their landing, nor did they want lopsided emigration of persons from any hard-hit trade, untrained for anything else. I remember, twenty years ago, making a lot of speeches saying that we should "capitalise the dole"—the two spectacles of empty Dominions and British street-

corners crowded with unemployed young being sickening and maddening. I simplified the figures and said: "Suppose you call the average dole a pound a week; suppose you put interest at the high figure of 5 per cent.; even at that the capital represented is £1000 a head, and we might as well use the dole as interest on a loan, and send picked people to the Dominions with £1000 each behind them—which would be enough to provide each with a house, land, training and (possibly) a grand piano thrown in." It wasn't practical politics, I suppose. But it will have to be later, with overcrowding here and under-crowding there, and pullulating millions in other Empires jealous of our empty spaces.

\* "Canada To-day and To-morrow": A timely and accurate Survey of the great Dominion—her character, history, resources and war effort. By William Henry Chamberlin. With a Frontispiece (Robert Hale; 12s. 6d.)



# OUTSTANDING PERSONALITIES OF THE WEEK.



**LORD GOWRIE, V.C.**

Created an Earl on relinquishing the appointment of Governor-General of the Commonwealth of Australia. He won his V.C. in the Sudan, serving with Kitchener in 1898. Governor of South Australia 1928-34; and of New South Wales, 1934-35; Governor-General, 1936.



**THE HON. SIR EVELYN BARING.**

Appointed High Commissioner in South Africa, a post he will hold in conjunction with that of High Commissioner for Basutoland, Bechuanaland Protectorate and Swaziland. Entered the Indian Civil Service, 1926; Governor of Southern Rhodesia since 1942.



**AIR MARSHAL O. T. BOYD.**

Died suddenly. Born in 1889, seconded from his regiment to R.F.C., 1916. Held many air appointments; and was A.O.C. Balloon Command on its formation. Captured in 1940 when on his way to take up his post as Deputy A.O.C. Middle East. Escaped when Italy surrendered.

# PEOPLE IN THE PUBLIC EYE TO-DAY.

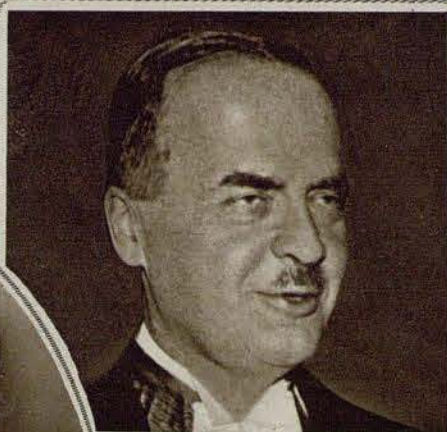


**LT-GEN. C. M. WILLOUGHBY NORRIE.**

Appointed Governor of South Australia in succession to Sir Malcolm Barclay-Harvey, and appointed a K.C.M.G. Aged fifty, he became Commander of the First Cavalry Brigade in 1936. Wounded four times, and awarded the M.C. and bar, and D.S.O. in the 1914-18 war. In this war he commanded the 30th Armoured Corps, divisions of which fought in the Western Desert.

**GROUP CAPT. J. d'A. BAKERCARR.**

The man most responsible for the development of the rocket projectile in its present form, the "Rockphoon," a devastating weapon against German armour. For 15 years a serving officer in the R.A.F., whose "Backroom boys" have worked with him in M.A.P. The experiments which led to the present development began in 1942, when he started his rocket section of Armament Development.



**MR. A. HACKZELL.**

The formation of a new Finnish Cabinet under the Premiership of Mr. Hackzell (Conservative) was recently announced in Helsinki. He was Finnish Minister to Moscow in 1922-27, and Foreign Minister from 1932-36. The aim of the new Cabinet is settlement with Russia.



**FIELD-MARSHAL VON WITZLEBEN.**

One of the eight high German officers to be hanged for plotting the death of Hitler on July 20. The death sentence was carried out two hours after the German People's Court, sitting in the Supreme Court of Berlin, had found the accused men guilty.



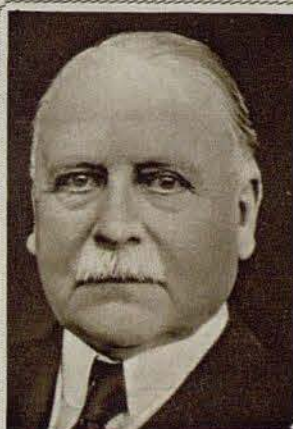
**PRIVATE GEORGE MITCHELL, THE LONDON SCOTTISH (WALTHAMSTOW), POSTHUMOUSLY AWARDED THE V.C.**

On January 23, a company of the London Scottish attacked part of Damiano Ridge. Private Mitchell charged alone up the hill through intense fire to silence an enemy machine-gun; later he rushed forward, firing his rifle from his hip, to attack another objective. As his section was reorganising, another machine-gun opened at close range, and again he charged alone, and killed the crew with rifle and bayonet. Later, a German who had surrendered, seized a rifle and shot him.



**MR. H. H. BLACKLOCK, F.R.P.S.**

Died as the result of enemy action. Mr. Blacklock was Secretary of the Royal Photographic Society and Editor of the Photographic Journal since 1921. He made a conspicuous success of his work, and the R.P.S. has lost a devoted, gifted and hard-working Editor and Secretary.



**COL. SIR HENRY LYONS, F.R.S.**

The distinguished geographer and scientist, Colonel Sir Henry Lyons, died on August 10. In 1896 he became Director-General of the Geological Survey, Egypt, and later Director of the Egyptian Survey. Appointed Director of the Science Museum, South Kensington, in 1920.

**SERGT. M. A. W. ROGERS, WILTSHIRE REGIMENT (PLAISTOW), POSTHUMOUSLY AWARDED THE V.C.**

When attacking high ground in Italy, Sergt. Rogers' platoon was checked by the enemy's wire and intense machine-gun fire; and took cover, preparatory to "gapping." He continued to advance alone, firing his Tommy-gun. He got through the wire, crossed the minefield, and destroyed two enemy machine-gun posts, drawing on himself the enemy's fire and throwing their defence into confusion. Inspired by his example, the platoon breached the wire and assaulted.



**LT-GEN. LEWIS H. BRERETON.**

Lieut-General Brereton, U.S. Army, formerly commanding the U.S. Ninth Air Force, now commands the new Airborne Army. General Brereton was ordered to Egypt from India in 1942 with all available bombers to support the British drive. His unit moved to England at the close of the North African campaign. His deputy commander is Lieut-General Browning.



**LT-GEN. F. A. M. BROWNING.**

Lt-Gen. Browning, Deputy Commander of the new Airborne Army, was Adjutant of the Royal Military College 1924-28, and commanded the 2nd Battalion, Grenadier Guards from 1936-39. General Browning was chosen for the command of the Airborne Division in 1940.



**MAJOR-GEN. RALPH ROYCE.**

Appointed Deputy C-in-C. of the Allied Expeditionary Air Force, Major-General R. Royce has served as Commander of the U.S. Army forces in the Middle East, and chief of staff of the Allied forces in the S.W. Pacific and Commander of the First U.S. Air Force.



**MAJOR-GEN. H. S. VANDERBERG.**

Major-General Vanderberg, Deputy C-in-C., A.E.A.F., has assumed command of the U.S. Ninth Air Force, relieving Lieut-General Lewis Brereton. From 1942-43, was chief of staff of the N.W. African Strategic A. F. and in 1943 he was senior member of the U.S. Military Mission to Russia.



**AIR VICE-MARSHAL W. ELLIOT.**

The Air Officer Commanding the newly formed Balkan Air Force is Air Vice-Marshal William Elliot, who has been A.O.C., R.A.F., Gibraltar, since last March. He had previously been Director of Plans since April 1942, after being engaged on special operational duties at H.Q. Fighter Command. Air Vice-Marshal A. C. Stevens succeeds Air Vice-Marshal Elliot at Gibraltar.





THE DRIVE TO FALAISE: THE CLOUDS OF SMOKE MARK GERMAN POSITIONS BEING SHELLLED AND BOMBED.

## CLOSING THE FALAISE GAP: SCENES IN FRANCE IN AN ENCIRCLING DRIVE TO



ON THE ROAD TO FALAISE: AN ALLIED TRUCK GOING UP IN SMOKE AFTER BEING HIT BY A GERMAN SHELL. WITH THE AMERICANS IN ARGENTAN, THE FALAISE GAP IS ALMOST CLOSED.



FRENCH FORCES OF THE INTERIOR AT WORK IN BRITTANY: GERMAN PRISONERS BEING BROUGHT IN, LED BY A FRENCH OFFICER WITH THE FLAG OF LORRAINE.



CANADIAN INFANTRY, FOLLOWING IN THE WAKE OF ARMOUR, PRESSING FORWARD IN THE DRIVE ALONG THE FALAISE ROAD, WITH GERMAN TANKS BLAZING IN THE BACKGROUND.



IN A VILLAGE ON THE ROAD TO FALAISE: TWO CANADIAN SOLDIERS SEARCHING OUT ENEMY SNIPERS LEFT BEHIND.



A NAZI SUPPLY LINE CUT BY ALLIED BOMBS: A RAILROAD BRIDGE IN LAVAL ON WHICH ALLIED AIRCRAFT REGISTERED A DIRECT HIT. OUR BOMBING HAS BEEN MOST ACCURATE THROUGHOUT.

THE Germans are retreating from Normandy, retreating both by day and by night through the Falaise gap: the German Seventh Army is suffering devastating blows from the Allied Air Forces operating under cloudless skies and in great strength. It is almost impossible to give any clear picture of the fight, owing to rigorous censorship, but the news is good all along the line. One of the most important consequences of the Germans' decision to withdraw without further delay is the total failure of their several attempts to break the Allied line by an armoured thrust from Mortain to Avranches. Although the enemy is retreating, it is made clear by all war correspondents that there is yet no sign of a rout, and that the Germans are fighting well in a rearguard action along the banks of the Orne south of Thury Harcourt. Nevertheless, the German Seventh

## AS THE ALLIED ARMIES WERE ADVANCING TRAP THE GERMAN 7TH ARMY.



CANADIAN ANTI-TANK GUNNERS DIGGING IN FROM A NEW POSITION DURING THE DRIVE ON FALAISE. A BLAZING ENEMY TANK CAN BE SEEN AMONG ADVANCING CANADIAN FORCES.



THESE BLAZING GERMAN TANKS (FOREGROUND) WERE CAUGHT UP IN THE SWIFT CANADIAN ADVANCE TOWARDS FALAISE.



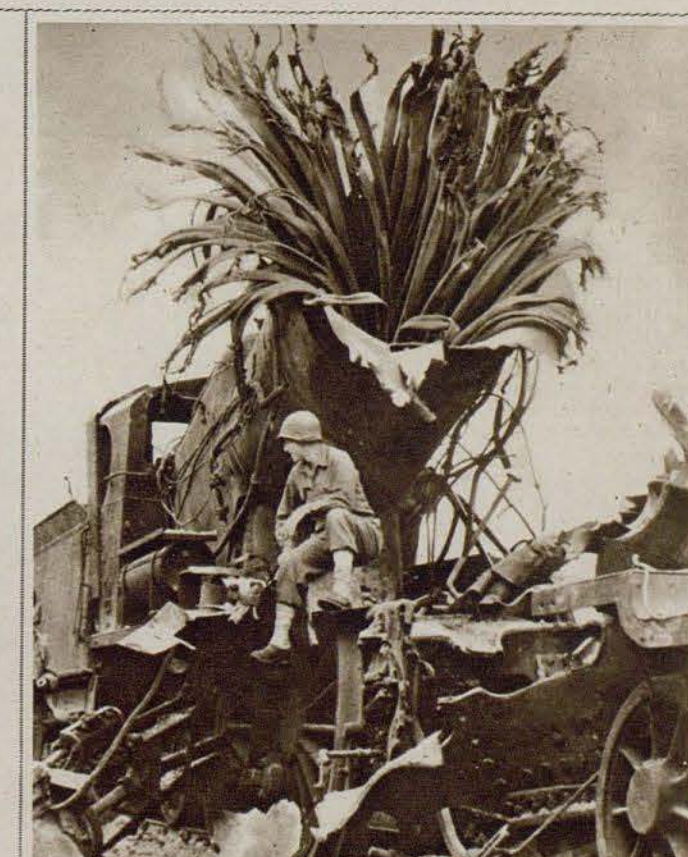
A BURNING ENEMY TANK, AND HELP FOR A CANADIAN SOLDIER ON THE ROAD TO FALAISE: THE TANK WAS PUSHED OFF THE ROAD BY OUR ARMOUR.



A FLAIL TANK AT WORK CLEARING MINES OFF A ROAD: IN THE FOREGROUND ARE ENGINEERS WAITING TO GO FORWARD.



A FURTHER EXAMPLE OF THE EFFICACY OF ALLIED BOMBING IN FRANCE: LOCOMOTIVES AND TRUCKS LYING WRECKED IN THE RAILWAY YARDS AT VIRE, AT THE BASE OF THE CHERBOURG PENINSULA.



NOT SOME EXOTIC PLANT, BUT THE INTERNAL TUBES OF A LOCOMOTIVE, HIT BY ALLIED BOMBERS AND TORN TO SHREDS.

Army's position in Normandy has never been more desperate, for it faces a very real threat of encirclement with the American armoured drive round its southern flank and the British and Canadian thrust from the north. It may well be that the next few days may decide the Normandy campaign and mark the destruction of the German Seventh Army. The scene over square miles between Mortain and Vire is one of devastation, with the roads choked with German dead, wrecked and burnt-out German vehicles, and stacks of enemy equipment. As the Allies are moving fast to close the trap between Falaise and Argentan, General Eisenhower on August 14 issued an historic order of the day, in which he called upon all the Services to bring about the final downfall of the enemy and not to let a single German escape.



THE Allied offensive in France has suddenly changed from a struggle in a narrow bridgehead to a great campaign fought over wide areas. It has many interesting features, but the two most important have recently been the drive eastward by American forces in the general direction of the Seine and the drive southward and south-eastward by the British army group from the region of Caen. The circumstances of these two movements have been very different, because the front from the sea north-east of Caen right round to the neighbourhood of Vire has been tight, with the forces on either side densely concentrated, whereas the remainder of the battle area has been fluid, with the opposing armies widely dispersed. Resistance to an attempted advance may be as strong in one area as in the other, but in that of the close fighting it will go on from one position to another, while in that of the open fighting the breach of a hostile position may be the prelude to an advance of ten, twenty or thirty miles. This main American advance has been called a drive on Paris, and the Allies would doubtless be glad to capture the French capital for various reasons. But I am convinced that this must be regarded as incidental. A capital should not be the main objective while there is a hostile army in being to be accounted for, and still less when it is not a hostile capital. If I were asked to define the Allied object at the moment, I should say it was to drive to the Seine between Paris and the mouth of the river, and in the process to envelop as large a proportion of the German Army as possible.

It appeared certain that the Allies were aiming at bringing about this envelopment in the neighbourhood of Argentan, the Americans pressing up northward through Alençon, while the British and Canadians pressed southward through Falaise. The Canadian attack towards Falaise, however, slowed up, and towards the end of last week came to a stop altogether. I then asked myself whether this attack would be renewed in greater strength or whether it was to be abandoned and the main pressure transferred eastward on the axis of the main road towards Paris, through Lisieux. But, whichever was the case, it appeared that the purpose was to drive the enemy back against the Lower Seine if he avoided envelopment earlier. There could be no question about the serious nature of such a threat from the German point of view. In such a retreat the enemy would be bound to suffer heavy losses from the air and from the pursuit on land even before the river was reached, but in crossing it he would have to face an even more difficult problem. Below Paris, as I write, there are believed to be standing only two bridges, both a little above Rouen, in addition to the pontoon bridges thrown by the enemy. It would be almost impossible to keep these pontoon bridges working if the Allies were to devote a large proportion of their bombers to preventing them from doing so. The enemy would be left with a way out through Paris, where the bridges are very numerous, but it seemed doubtful whether his main body would be able to reach the capital. Altogether, the situation was beginning to look very ugly for him, though, of course, the extent of his danger would have to be measured all the time by the speed of the Allied advance.

Meanwhile the Germans had persisted in their counter-offensive towards Avranches, through Mortain. This offensive was well placed, because Avranches constituted a bottleneck between Normandy and Brittany and, if it were closed, there would be no communication between the two provinces at a time when the Americans in Brittany would not have had the opportunity to open any of the captured ports for the supply of their armies. But it also put the German forces carrying it out into considerable danger. They were continuing to attack westward while the Americans further south were moving eastward and threatening their communications. The fighting was stiff. The Americans recovered Mortain, but could not hold it. The Germans made some further penetration in its neighbourhood. However, on Friday last Mortain was recaptured once again, and the American command appears to have taken the matter very coolly and refused even to allow it to interrupt the flow of reinforcements into Brittany. It is to be presumed that they counted upon

## THE GREAT WORLD WAR: THE OFFENSIVE AT ITS HEIGHT.

By CYRIL FALLS.

the enemy running short of fuel for his tanks, but this did not occur for some time. From the German point of view the affair may be said to have been very well managed tactically, though strategically open to criticism, because, even if it came off, it was always possible that the Germans would find the door closed behind them by the time they reached the sea.

At the same time, the Americans had completely overrun Brittany, with the exception of certain of the ports—Saint-Malo, Brest, Lorient and Saint-Nazaire—which it was found necessary to reduce by deliberate methods. Here they achieved remarkable speed, showing how thoroughly they had absorbed the lessons of mobile warfare. They took risks cheerfully, often passing through towns which were reoccupied by small bodies of the enemy as soon as their columns had gone on. They realised that the German forces in the province were weak, immobile, and of second quality, for the most part the remnants of divisions which had already sent their best troops—and probably the bulk of their transport—up to Normandy as reinforcements. They realised also that any considerable aid coming to the Germans in Brittany was an impossibility. In these circumstances armour rules the battlefields as completely as it did in 1940 and 1941, when

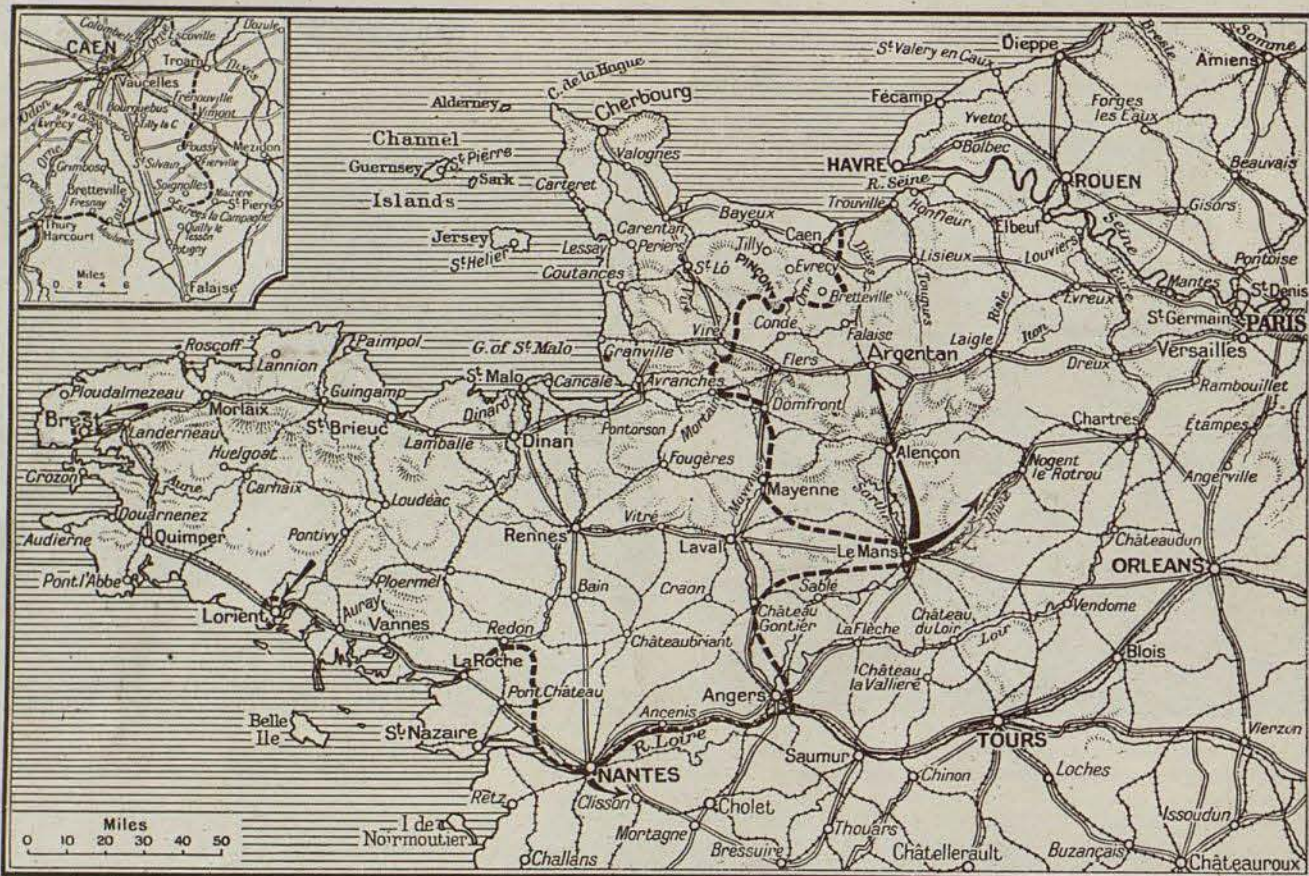
is to make us intensely desirous that our own troops and those of Canada may shortly have an opportunity of emulating them.

As this article goes to press the news is somewhat vague, because the Americans are rightly saying as little as possible about the movements of their columns since they reached Le Mans. It is from German sources that we read of the entry of American forces into Alençon. This would leave the German forces from north-west of Le Mans to south-west of Caen with only a single main road open to the east, that which runs through Argentan to Paris. And at midnight on Saturday there came from Allied sources the significant report that a force of Marauders and Havocs had been called in to attack columns believed to be moving eastward along this highway. This could only mean the beginning of a retreat, but it is somewhat puzzling in view of the fact that the Germans had only just previously brought fresh troops across the Seine and thrown them into the battle. As I read the situation now, the battle is already as good as won, but it is not yet certain whether the Germans will be trapped in any considerable numbers. If we envisage the extremes of good and bad in which this phase of the campaign may end, the worst would be a German retreat in fairly good order beyond the Seine, with a loss of another twenty or thirty thousand prisoners, while the best would be a complete collapse all along the front, with wholesale surrenders. That is not impossible, but the most likely result is something about midway between the two.

Both the Canadian troops—with whom must be included the Poles who form part of the First Canadian Army—and the British have fought with the greatest pertinacity and bravery in this battle. The creation of a big bridgehead over the Orne and the capture of Mont Pinçon were both fine feats of arms in themselves, and, but for this pressure the Canadian point towards Falaise might not have been driven as far as it has. The thrusts north-east of Vire have likewise given the Americans invaluable assistance in stemming the German counter-attack through Mortain. The Germans have fought with remarkable tactical skill and stubbornness in all this area, building up a new line of resistance with extraordinary speed whenever they are forced back, so that we have never been able to pass to the stage of exploitation and are always being compelled to mount new assaults instead. Yet it is clear from a number of reports, some of them documents captured from the enemy, that they are enduring very heavy strains, chiefly because, in the words of one of their own

divisional commanders, "the assembly of troops is spotted immediately by hostile aircraft and broken up by bombers, fighter-bombers, and artillery ranged from the air." There is thus a possibility of a sudden breakdown in the British sector as well as the American, and if it does come it is likely to have far-reaching consequences.

Looking back on the fighting since the start of this offensive, it seems to me that the chief weakness in the Allied armament has been the lack of an assault tank bigger, more thickly armoured and more powerfully gunned than the present Churchill. Such a weapon would have had two advantages in the fighting south of Caen. First, it would have brought us along more quickly and prevented the enemy's front from congealing so often. Secondly, it would have saved the armoured divisions from a great deal of rough-and-tumble fighting and left them fresher for the exploitation and pursuit, which is the proper function of a cruiser tank such as the Cromwell. As matters stand, our armoured divisions have been engaged in heavy close fighting which must have been relatively costly and fatiguing, and their first attempt to "go through on their own" was not a success. I know that if the opportunity for a rapid pursuit should present itself they will take it with both hands, but I still think it would have been more satisfactory if the heavier armour had been there to do the gruelling work of the early stages. Armoured divisions with cruiser tanks are the equivalent of cavalry, and in modern times it was always the aim to open a gap before putting the cavalry in, not calling upon it to create the gap itself.



THE BATTLE OF FRANCE: A MAP SHOWING THE ALLIED FRONT AS ON AUGUST 13, ON WHICH DATE THE AMERICANS WERE AT ALÉNÇON, AND ON THE 14TH REPORTED TO BE BEYOND ARGENTAN, LEAVING THE ENEMY ONLY A 12-MILE GAP BETWEEN THAT TOWN AND FALAISE THROUGH WHICH TO RETREAT. HIS SITUATION WAS REPORTED TO BE DESPERATE.

The phenomenal advance of General Omar Bradley and his armoured forces which had crossed the Loire into Nantes and on to Le Mans indicated the beginning of the closing of the pincers from Falaise, the hinge of the offensive. On Sunday, August 13, the Americans had advanced to Alençon and were reported as far north as Argentan, while the British and Canadians were advancing at Falaise, leaving only a gap of twelve miles through which the Germans were desperately struggling to withdraw six infantry and the remnants of six armoured divisions from General Montgomery's pincers closing upon them.

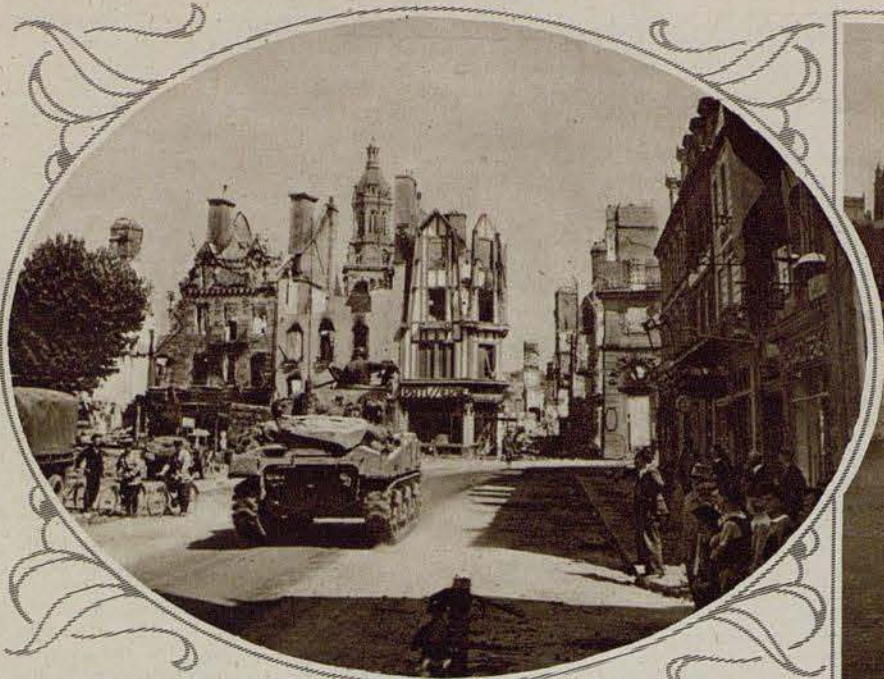
(Map Copyright by "The Times.")

the Germans were dominating the French and Russian forces, though in close fighting it has become to a great extent dominated by the gun. It is practically certain that the railways have been little damaged by the enemy, so that, when such ports as are required to supplement Cherbourg can be taken into use, communications from them can be re-established fairly quickly. As I write it is reported that the Americans have crossed the Loire at Nantes, and I have no doubt that mobile columns could penetrate southwards to almost any distance they pleased; but unless I am much mistaken this movement does not form part of the main plan.

Successful as the offensive has been, it cannot be said that it has gone entirely according to plan. In particular, the drive south from Caen towards Falaise has been checked by the enemy on at least three occasions and has been to some extent disappointing. It is all very well to say that it does not matter which ally has the spectacular part so long as the enemy is beaten; that may be true where the battle is concerned, but we cannot help taking into account the future or remembering that these events may be discussed for a generation. From that point of view it is important that the British and Canadian forces should be able to inscribe upon their annals achievements which will catch the imagination of their sons and, one may add, the sons of the defeated German soldiers. Posterity is capricious and unfair in its verdict and refuses to listen to the advocates who plead that the slogging match which helps a brilliant advance on some other part of the battlefield is as meritorious as that advance itself. In this country our admiration for the skill and dash of the American forces is profound, but one of its effects



## FAMOUS LANDMARKS IN THE GREAT DRIVE TO TRAP THE GERMAN ARMY.



ON JULY 31 U.S. TANK FORCES FOUGHT THEIR WAY INTO WAR-DAMAGED AVRANCHES AND BRITTANY: MECHANISED POWER PASSING THROUGH.



LE MANS, FROM THE RIVER SARTHE, TAKEN BY THE AMERICANS AFTER SLIGHT RESISTANCE ON AUGUST 10, A CATHEDRAL CITY WITH A POPULATION OF 85,000.

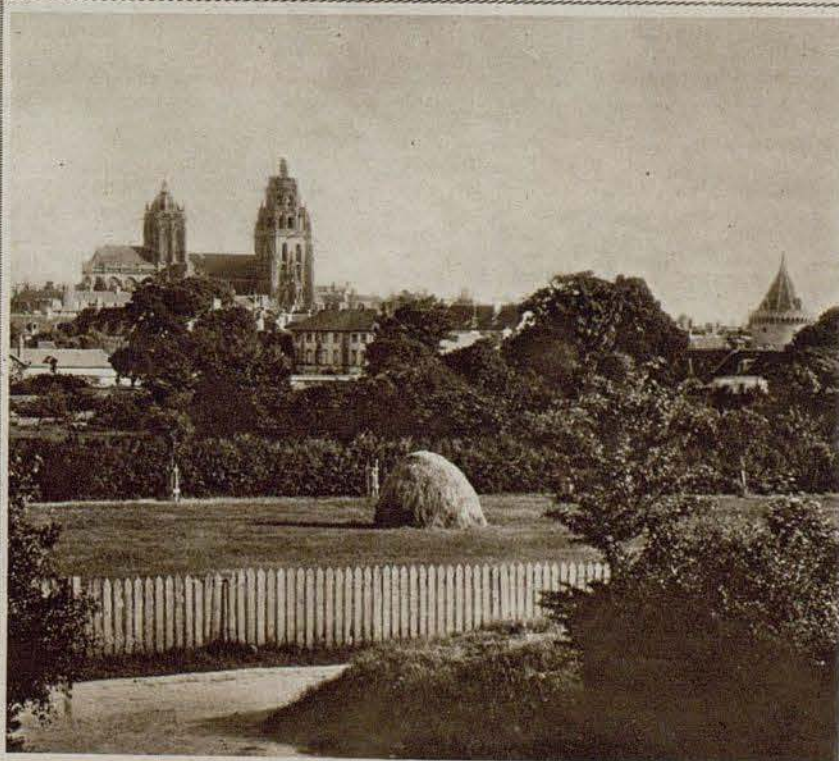


MORTAIN, A PICTURESQUE LITTLE TOWN, ON A ROCKY EMINENCE, TO WHICH VON KLUGE HELD DESPERATELY, ATTEMPTING A COUNTER-OFFENSIVE TO AVRANCHES. ON AUGUST 13, AFTER GRAVE LOSSES, INFLECTED BY ROCKET-FIRING TYPHOONS, HE RETREATED.



NANTES—A GENERAL VIEW OF THE BIG COMMERCIAL CITY AND PORT ON THE LOIRE, CAPTURED BY AMERICANS ON AUGUST 10, WITHOUT DAMAGE.

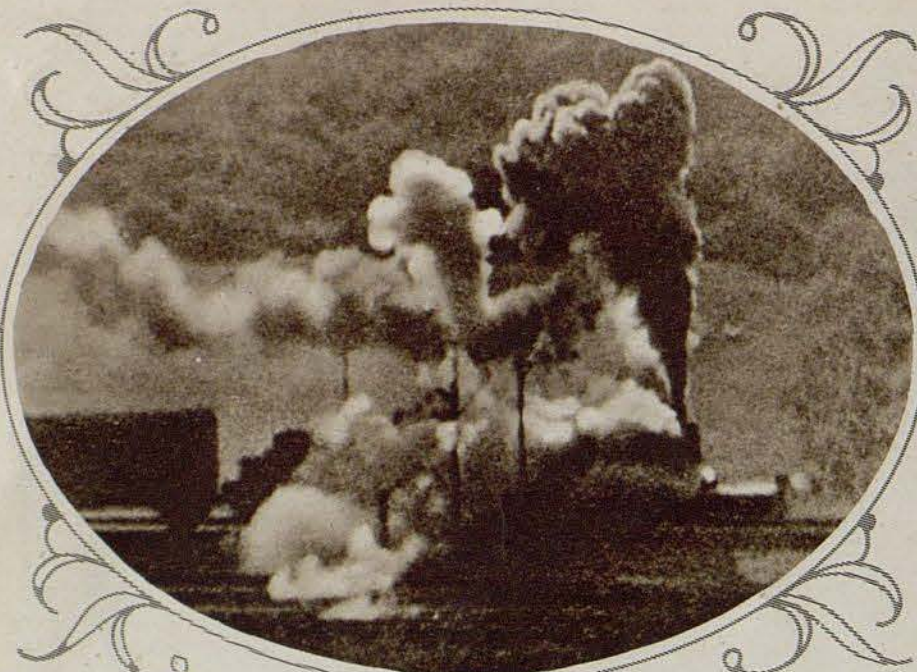
HITTING out in all directions, the American hustle of General Omar Bradley's Army marks an historical record for speed and completeness unsurpassed even in Russia's big strides. Tearing southwards on July 27 from Periers and Lessay, through Coutances, then Percy, Granville, Villedieu, and after them Avranches after severe fighting, almost before the bewildered Germans knew what was happening his powerful armoured columns swarmed into Brittany. On August 3 their spearheads were at Rennes, moving towards Brest, St. Nazaire and Lorient, while his main forces advanced to Nantes, crossing the Loire, to Anvers, and then Le Mans, leaving villages wild with excitement. At Le Mans, not a pane of glass was broken, and its German commander only escaped by the skin of his teeth. From Le Mans, the hurricane advance proceeded north to Alençon and on the 13th held Argentan, with Falaise, twelve miles beyond, the narrow gap for 100,000 retreating Germans, only remaining open, after this great encircling drive on August 14.



ARGENTAN, ON THE ORNE, SEIZED BY THE AMERICANS, AFTER TAKING ALENCON, A QUAIN OLD TOWN, FORMING THE PINNERS END FROM FALAISE, TWELVE MILES DISTANT.



## THE SYSTEMATIC PARALYSING OF GERMANY'S OIL SUPPLIES,

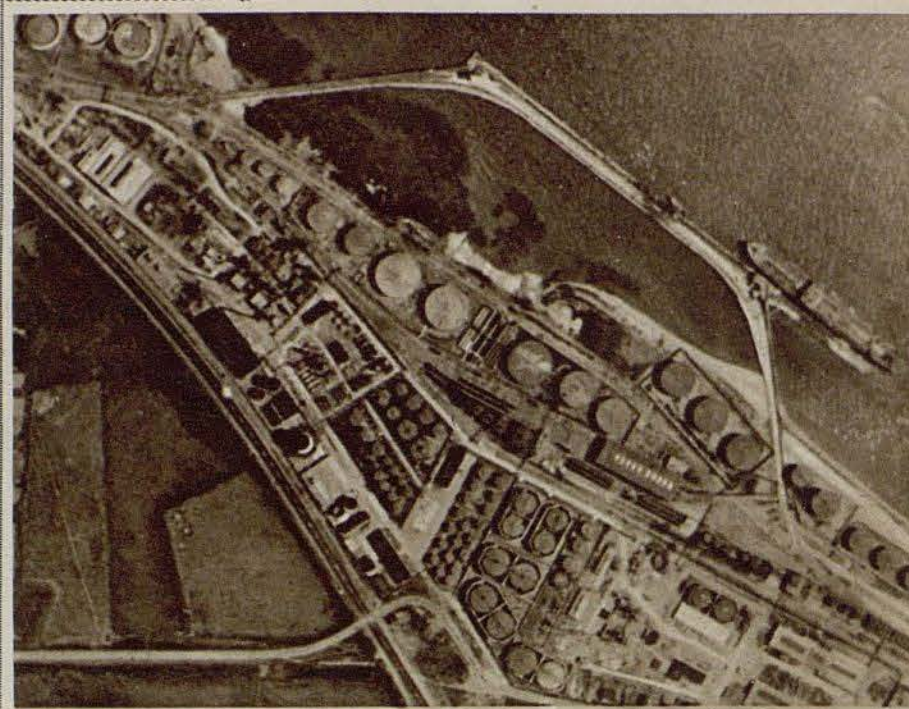


THE ALLIED AIR FORCES WHITTILING AWAY GERMANY'S RESOURCES: A BOMB HIT ON A NAZI TRAIN HAULING SUPPLIES TO ENEMY LINES OF COMMUNICATION. (By Radio.)



A SMASHING U.S. ATTACK ON THE HEINKEL AIRCRAFT PLANT AT ROSTOCK, ON AUGUST 4: HERE MASSES OF THICK, CURLING SMOKE HAVE SPOUTED AS IMMENSE COLUMNS.

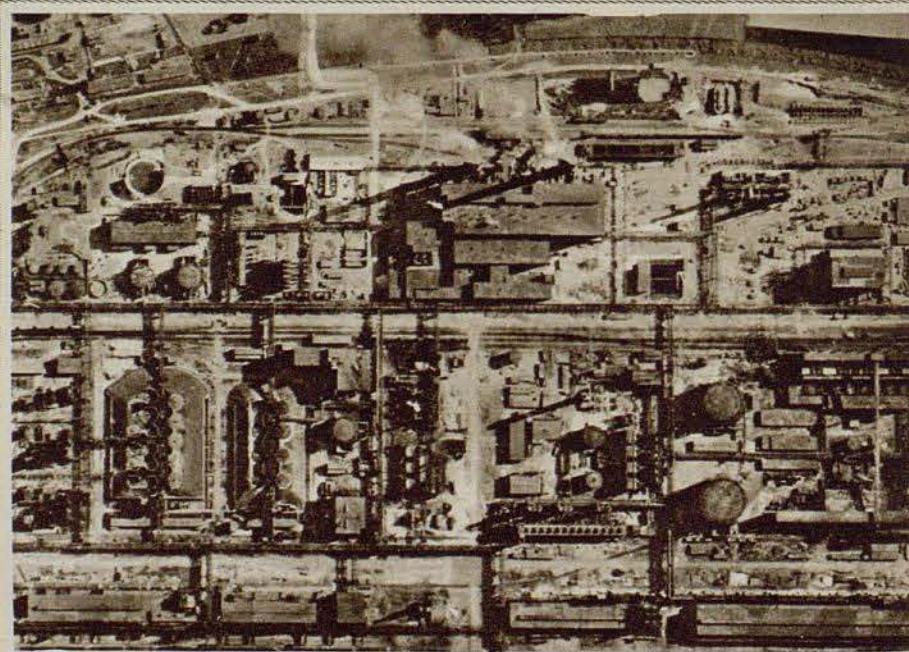
While Herr Hitler is stringing up generals in his Wehrmacht *putsch*, his armies east, west and south are being rapidly denuded of necessary supplies in every direction by the Allied Air Forces of U.S.A. and Britain. Outstanding, perhaps, is the concerted attack on his oil supplies, whether refineries or dumps, such as shown here



CONCENTRATED ATTACKS ON OIL REFINERIES: THIS IMPORTANT OIL REFINERY AT DONGES, NEAR ST. NAZAIRE, BEFORE BEING TWICE ATTACKED BY AIRCRAFT OF R.A.F. Bomber Command.



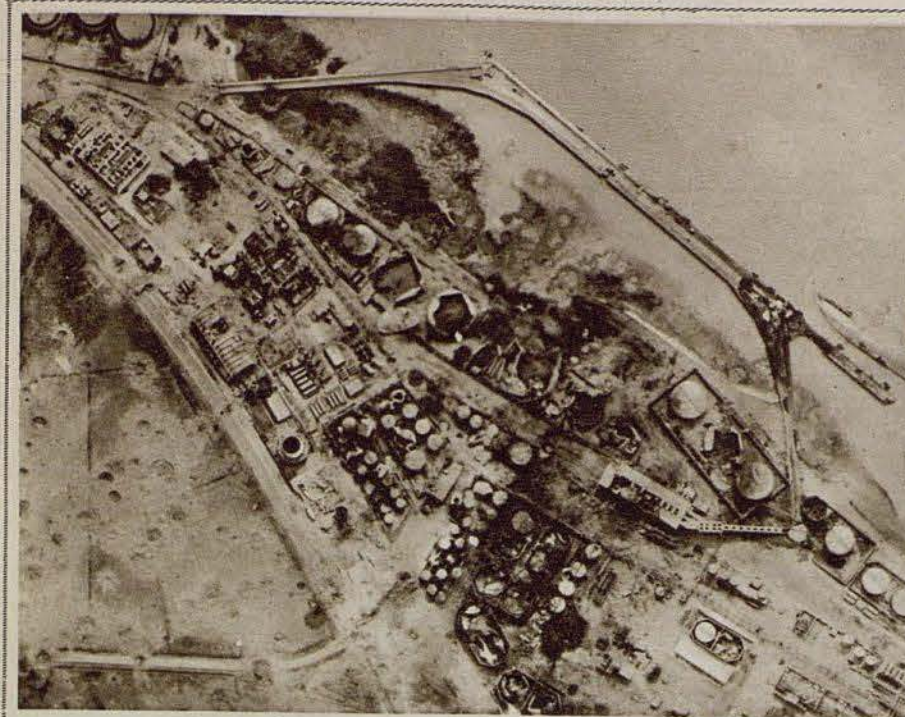
BOMBING THE LOIRE BRIDGES AND CUTTING GERMAN COMMUNICATIONS: THE TOURS LA RICHE RAILWAY BRIDGE SMASHED BY MARAUDERS ON JULY 25, IN A SECOND RAID.



THE WESSLING SYNTHETIC OIL PLANT BEFORE THE ATTACKS BETWEEN JUNE 25 AND JULY 21, INCLUDING AN R.A.F. NIGHT RAID ON JULY 18-19. ENORMOUS DAMAGE WAS DONE TO THIS IMPORTANT PLANT.

at Wessling and Donges, the former one of the greatest synthetic oil plants in Nazi territories, the other the important base of supply for the U-boat nests at St. Nazaire and Lorient. This widespread destruction is being seen now in France in the shortage of oil supplies which prevents any elasticity in the German retreat

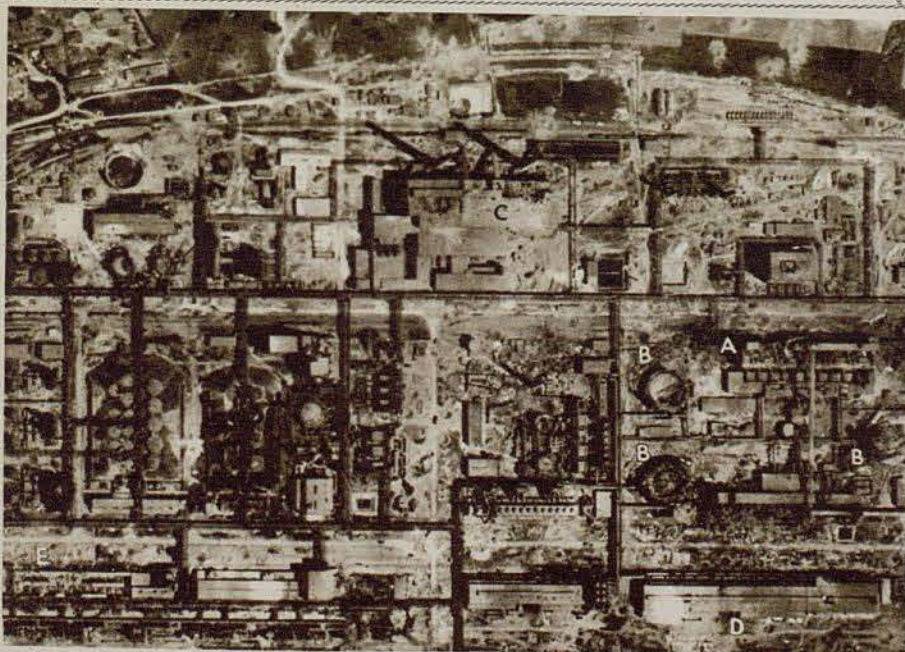
## WAR FACTORIES AND COMMUNICATIONS BY LAND AND SEA.



AFTER THE ATTACKS ON DONGES ON JULY 23-24, AND 24-25—OIL USED LARGELY BY U-BOATS—WHERE GREAT STORAGE TANKS HAVE BEEN BLOWN TO PIECES AND OTHERS PUNCTURED.

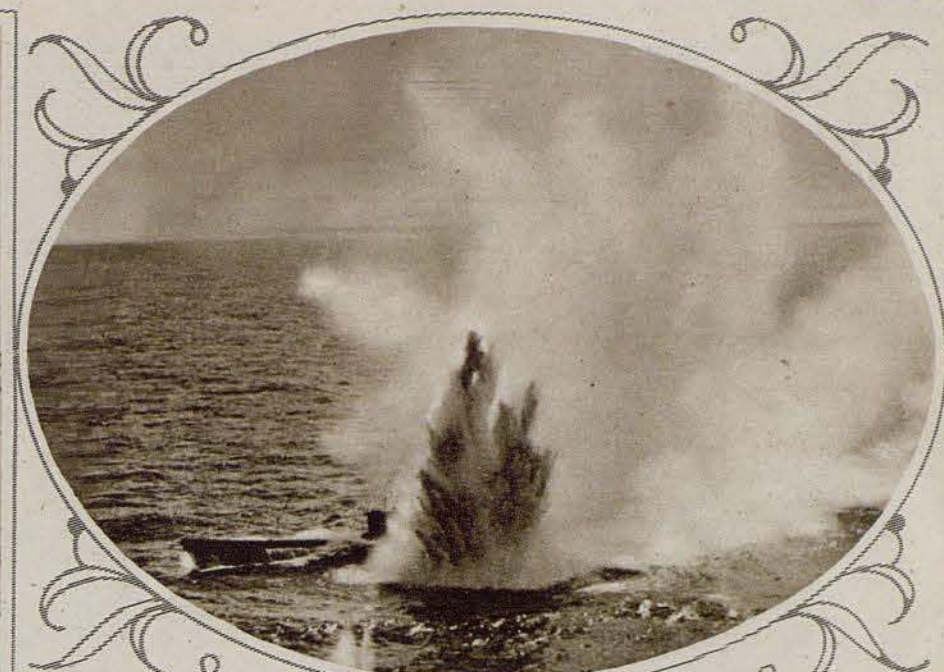


A DOUBLE ROCKET ATTACK ON THE TARGET BY R.A.F. BEAUFIGHTERS OFF THE NORWEGIAN COAST. ALREADY HIT, A FURTHER DOUBLE SALVO IS ABOUT TO FOLLOW SUIT.



THE WESSLING PLANT AFTER THE RAIDS. DETAILS SHOW, (A) WATER GAS PLANT GREATLY DAMAGED; (B) GASHOLDERS SMASHED; (C) POWER STATION DAMAGED; (D) MAIN COMPRESSOR HOUSE DAMAGED; (E) INJECTOR AND CIRCULATOR HOUSE DAMAGED.

and threatens are long a rout. Berlin's war industries have been bombed now almost to extinction, and Berlin is to-day very nearly valueless to the Germans so far as war production goes. Another target for the Strategic Air Forces are railway trains, and especially engines, of which hundreds have been destroyed, again striking very



WAR ON U-BOATS: A SUNDERLAND HAVING SIGHTED A U-BOAT HAS ATTACKED AT LOW LEVEL. A MINUTE LATER SHE SANK, LEAVING WRECKAGE AND DEAD BODIES.



BERLIN'S INDUSTRIAL AREA: THREE PLANTS, MANUFACTURING TANKS, AERO ENGINES, MACHINE TOOLS, ETC., THOROUGHLY BOMBED ON AUGUST 6, BOMBS BURSTING ON TARGETS.

vitality at enemy communications which also applies to the methodical destruction of railway bridges. At sea, too, where the enemy attempts transport, especially off Norway, his merchant ships and escort vessels are suffering heavily from rocket shells, and attacks both by air and sea, thus largely destroying communications.



# THE BATTLE OF FRANCE: R.A.F. ROCKET-FIRING TYPHOONS SMASHING A GERMAN COUNTER-OFFENSIVE NEAR MORTAIN.

Drawn by our Special Artist, G. H. DAVIS, with Official Co-operation.



ROCKET-FIRING R.A.F. TYPHOONS VERSUS ENEMY TANKS IN A THREE-DAY ASSAULT WHERE NEARLY 200 TANKS AND 300 LORRIES WERE DESTROYED: TYPHOONS (TOP RIGHT) COMING IN, (TOP LEFT) "PEELING" OFF AND DIVING TO ATTACK, (LOWER LEFT) PUTTING MOBILE A.-A. GUNS OUT OF ACTION, AND (FOREFRONT) CLIMBING AWAY AFTER ATTACK TO RE-FORM FOR FURTHER OPERATIONS.

On August 8 the Germans were preparing for the desperate counter-offensive they staged against the U.S. forces near Mortain, aiming at Avranches. Their armour lay concealed in the woods and on high-banked and high-hedged roads. The clouds were low and there was a heavy haze hiding all this enemy concentration of armour, together with transport vehicles, from the prying eyes of our aircraft. Then, quite

suddenly, the low cloud and mist began to lift and a huge array of tanks on two converging roads was spotted. Immediately every available rocket-carrying Typhoon was ordered to attack, and from then onward they came roaring down on the almost helpless confusion of vehicles below. Soon the head of each column became a mass of blazing wrecks, while other tanks and vehicles jammed them from behind, smashing

into one another, turning in concentric circles as their tracks were broken. Every few moments the Typhoons came on in pairs, discharging their rockets sometimes in twos, at others in whole volleys. "I think we caught him with his guard down," said Wing Commander Charles Green, describing the situation. The day's "bag" for his wing was thirty-eight "Flamers," fourteen "Smokers" and thirteen seriously damaged

of tanks alone. In three days, nearly 200 tanks and 300 lorries, etc., were destroyed. Our drawing shows high up (right) Typhoons coming in, others (left) "peeling off" and diving to attack out of the sun; lower (left) they are engaging and putting out of action mobile A.-A. guns by cannon fire and rockets, and in the foreground Typhoons are climbing away after delivering an attack, to re-form and return.



# RED ARMY LEADERS OUTSTANDING IN THE PRESENT AREAS IN THEIR



THE C-IN-C. OF THE FOURTH UKRAINIAN FRONT AND THE VICTOR OF BORISLAV AND DROHOBYCH, AT THE APPROACHES TO CARPATHIAN PASSES—COLONEL-GENERAL PETROV.



THE RED ARMY'S OUTSTANDING EXPERT ON ARMoured WARFARE—MARSHAL OF TANKS PAVEL ROTMISTROV (RIGHT) GIVING DIRECTIONS TO OFFICERS ON HIS STAFF ON THE EAST PRUSSIAN FRONT.

THE Red Army's advance on all sectors shows no sign of a check anywhere, and latest communiqués available speak of good progress being made in the resumed advance south of Lake Peipus and by General Yermenko's forces pushing down the Dvina Valley towards Riga. In Estonia General Govorov's forces are now in Voru, on the important highway that runs from Tortu to the Latvian border. Meanwhile General Zakharov is battling in a heavily mined region near the conflux of the Narew and Biebrza Rivers and is converging on Oso-wiec, one of the principal gates to the borders of East Prussia. North-east of Warsaw the Russians have reached the Bug at a new point, and the enemy is slowly being forced away from the approaches to Warsaw. Moscow radio has stated that in one month's

(Continued opposite,



RUSSIAN SAPPERS CONSTRUCTING A BRIDGE FROM TREE-TRUNKS WHILE TROOPS AND ARMOUR WAIT ON THE RIVER BANK IN READINESS TO CROSS. THIS PHOTOGRAPH COMES FROM THE SECOND BALTIC FRONT.



THE RED ARMY HAS LIBERATED KAUNAS (KOVNO). SOVIET SELF-PROPELLED GUNS PASSING THROUGH THE TOWN. KAUNAS IS IN LITHUANIA AND THE CAPITAL OF THE DISTRICT OF THAT NAME.



A RUSSIAN TANK MOVING FORWARD IN THE LATVIAN ADVANCE. THE GERMANS ARE BEING HURLED BACK OR ENVELOPED EVERYWHERE.

# STRUGGLE, AND BATTLE SCENES FROM CERTAIN PRESENT COMMAND.



THE C-IN-C. OF THE SECOND BALTIC FRONT, WHOSE TROOPS ARE ADVANCING ON RIGA, LATVIA—GENERAL A. I. YEREMENKO (LEFT), AT HIS FIELD HEADQUARTERS, DIRECTING AN OFFENSIVE OPERATION.



THE COMMANDER OF THE THIRD BYELO-RUSSIAN FRONT—GENERAL IVAN CHERNYAKHOVSKY SUPERVISING THE CROSSING OF A RIVER BY HIS TANKS ON THE EAST PRUSSIAN FRONT.



ON THE WAY TO RIGA: HEAVY SOVIET SELF-PROPELLED GUNS CROSSING A RIVER IN LATVIA AS THE RED ARMY RACES TOWARDS THE LATVIAN CAPITAL, CAPTURING MANY PLACES ON THE WAY.



SOVIET ARMY SIGNAL MEN RUSHING UP A TELEPHONE LINE TO FORWARD POSITIONS IN THE DVINSK AREA, LATVIA.



LVOV CELEBRATES LIBERATION: PEASANT WOMEN PRESENTING THE TRADITIONAL BREAD AND SALT TO MARSHAL OF THE SOVIET UNION KONIEV, AND N. S. KHRUSHCHEV, AFTER THE CITY'S RECAPTURE.

(Continued.) fighting, to August 10, the enemy lost 69,636 men in killed and prisoners on the Second Baltic front. More than 60,000 of this number were killed. In material the Germans lost in the same period 226 tanks and self-propelled guns, 167 aircraft, 1820 guns of various calibres, 500 mortars, 3530 machine-guns, and 2429 lorries. A large proportion of this material was captured by the Red Army and the remainder destroyed by them. Very soon, now, the first of the Allied Armies to reach Germany itself will be battling inside the Nazi stronghold, for although East Prussia is the most outlying of the German districts, it is very much an integral part of the Third Reich. When the Red Army sets foot over the border, Hitler's European fortress—impregnable, as he has so often said—will be, at any rate, dented. (Pictures by Radio.)

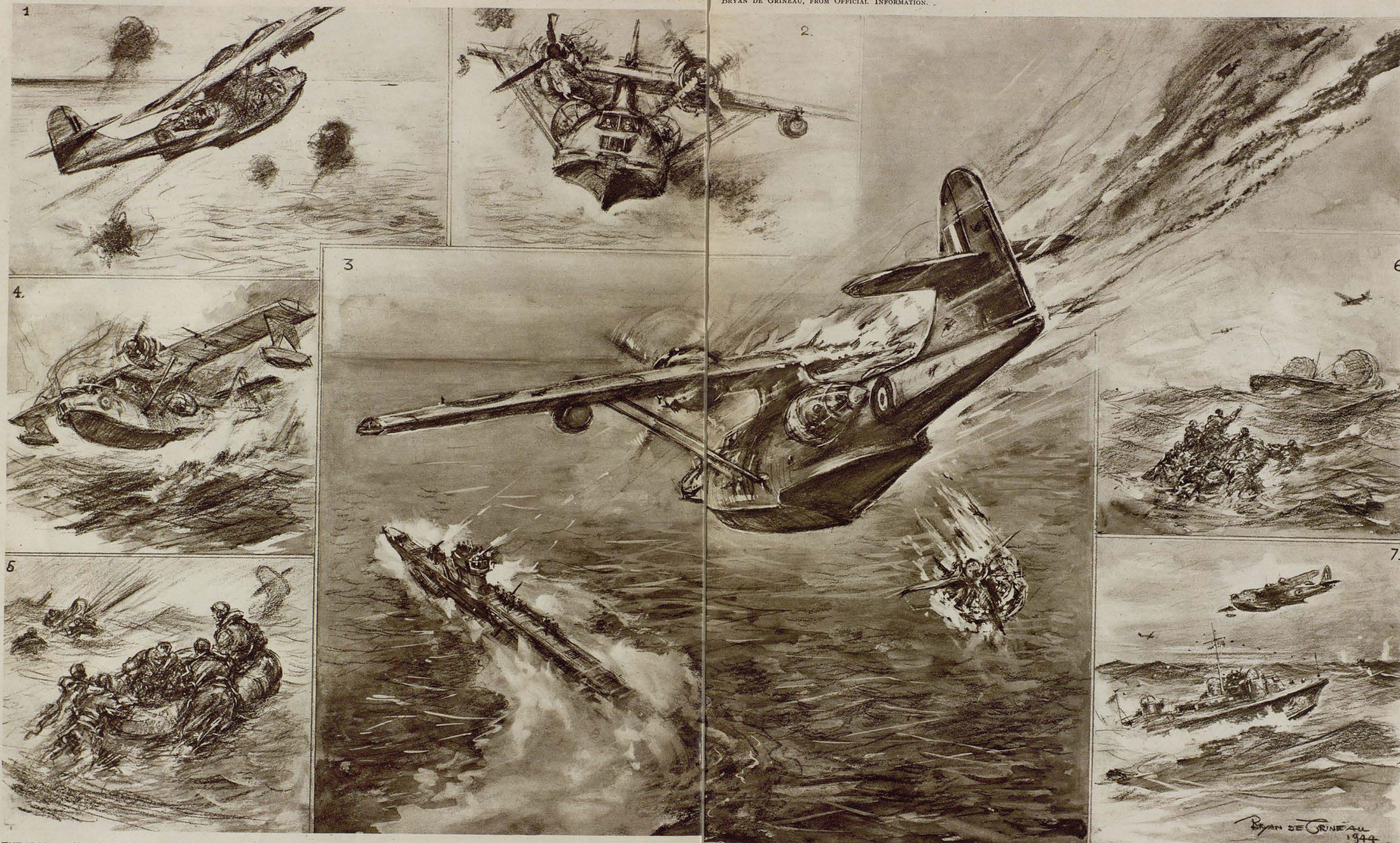


## THE HEROISM OF FLT. LT. HORNELL, THE FIRST R.C.A.F. PILOT

DRAWINGS BY OUR SPECIAL ARTIST, CAPTAIN

## TO WIN THE V.C.—A DUEL BETWEEN FLYING-BOAT AND U-BOAT.

BRYAN DE GRINEAU, FROM OFFICIAL INFORMATION.



THE GALLANT ACTION WHICH GAINED FLT. LIEUT. DAVID HORNELL A POSTHUMOUS V.C.: (1) THE PATROLLING CAMSO BEARING RELEASED RESULTING IN SINKING THE ENEMY SUBMARINE, AS THE STARBOARD ENGINE IS SHOT OUT, (4) "DITCHING" IN ICY SEAS, WITH A DROPPED DINGHY BEYOND REACH, (7) THE RESCUE

The first V.C. awarded in this war to a member of the Royal Canadian Air Force was given recently to thirty-four-year-old Flight Lieut. David E. Hornell, of Mimico, Ont., for his valour and devotion to duty. It was a posthumous award, for he became blind and died as the result of hardship and exposure endured while adrift in a dinghy near the rim of the Arctic Circle after sinking a U-boat. Our drawings, from information officially supplied, depict outstanding incidents in this epic fight to the death. After Hornell had spotted the U-boat in his

patrolling Camso (a Canadian-built Catalina flying-boat), he started to bear down on it. At four miles the U-boat opened fire, compelling him to take evasive action, bouncing airmen and equipment about in the sky like a fighter aircraft. Relentlessly, in spite of heavy flak, Hornell bore down on the enemy submarine, although the Camso was badly hit and burning. His right wing was in flames, and his starboard engine was shot clean out of the aircraft, but nevertheless he brought his craft down over the target and dropped his depth-charges. The

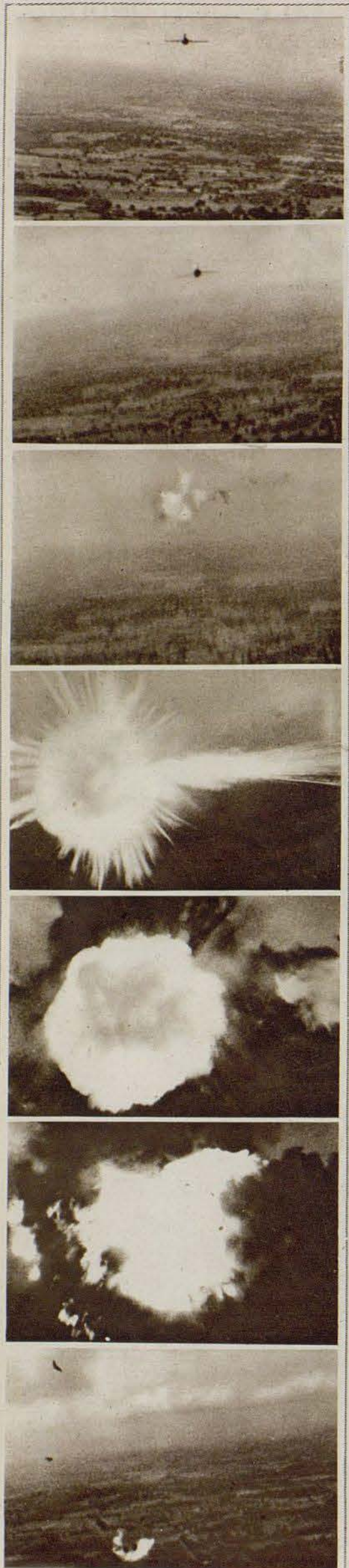
DOWN ON THE U-BOAT, DESPITE HEAVY FLAK, (2) THE PURSUIT WITH THE STARBOARD ENGINE ABLAZE, (3) DEPTH-CHARGES THE CAMSO IN HEAVY SEAS, (5) SEVEN OF THE CREW CLINGING TO ONE DINGHY, THE OTHER BURSTS, (6) 21 HOURS ADRIPT LAUNCH PICKS UP SURVIVORS—BUT FLT. LIEUT. HORNELL SUCCEMBED.

U-boat took a violent turn to port, but, having been completely straddled, sank. After this, the badly-holed flying-boat had to be "ditched," and Hornell successfully accomplished the feat in a rough sea, the two dinghies being pushed out of the gun-blisters, and while seven of the crew struggled with the port dinghy the starboard dinghy was observed with one man struggling with it. Hornell, and one of his crew, immediately swam to it, but it became over-inflated and burst. The survivors were left with one dinghy for eight men, one of whom

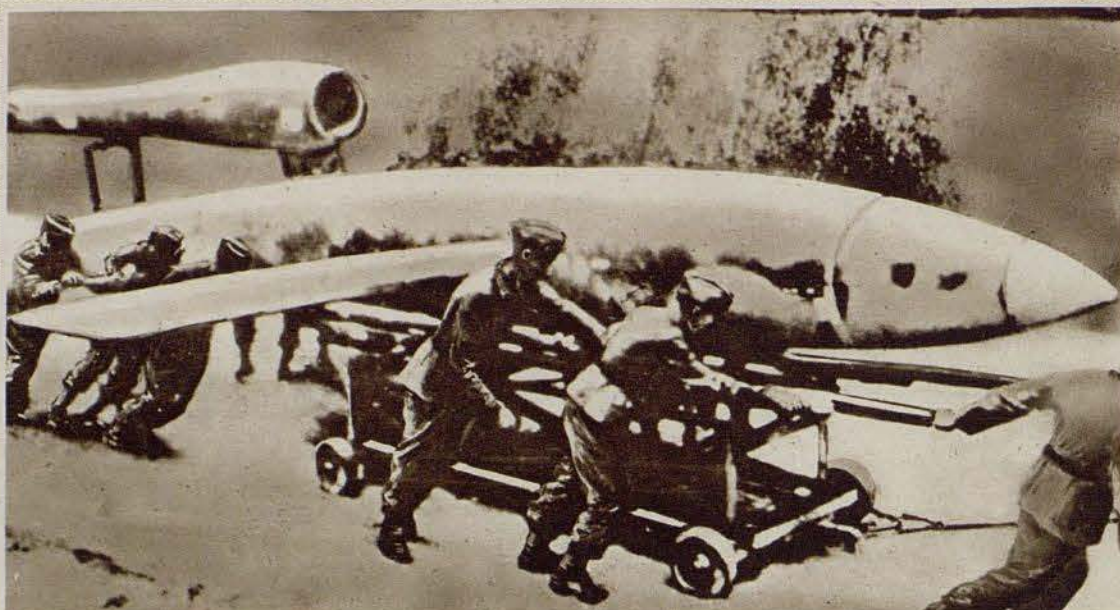
died from exposure, followed by another, but about midnight an aircraft of the Rescue Patrol found them and dropped a lifeboat by parachute. To their distress, the gale blew it from them, and prevented any aircraft from landing on the 40-ft. waves. Eventually, a Sunderland gave their position by flares to a high-speed rescue launch, and the crew were lifted aboard. For five hours every effort was made to revive Hornell, but he failed to regain consciousness. A photograph of him was published in our issue of August 5 last.



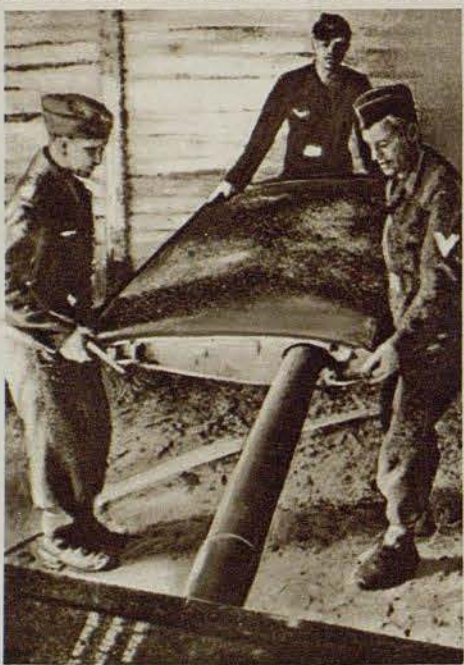
## FLYING BOMBS BEING DESTROYED; AND HOW THEY ARE LAUNCHED.



THE CAREER OF A FLYING BOMB IN SEVEN CHAPTERS: A TALE OF THE FLIGHT AND FATE OF THE GREATER PROPORTION OF THESE MONSTROSITIES, SHOWING THE HIT AND FLAME BURST.



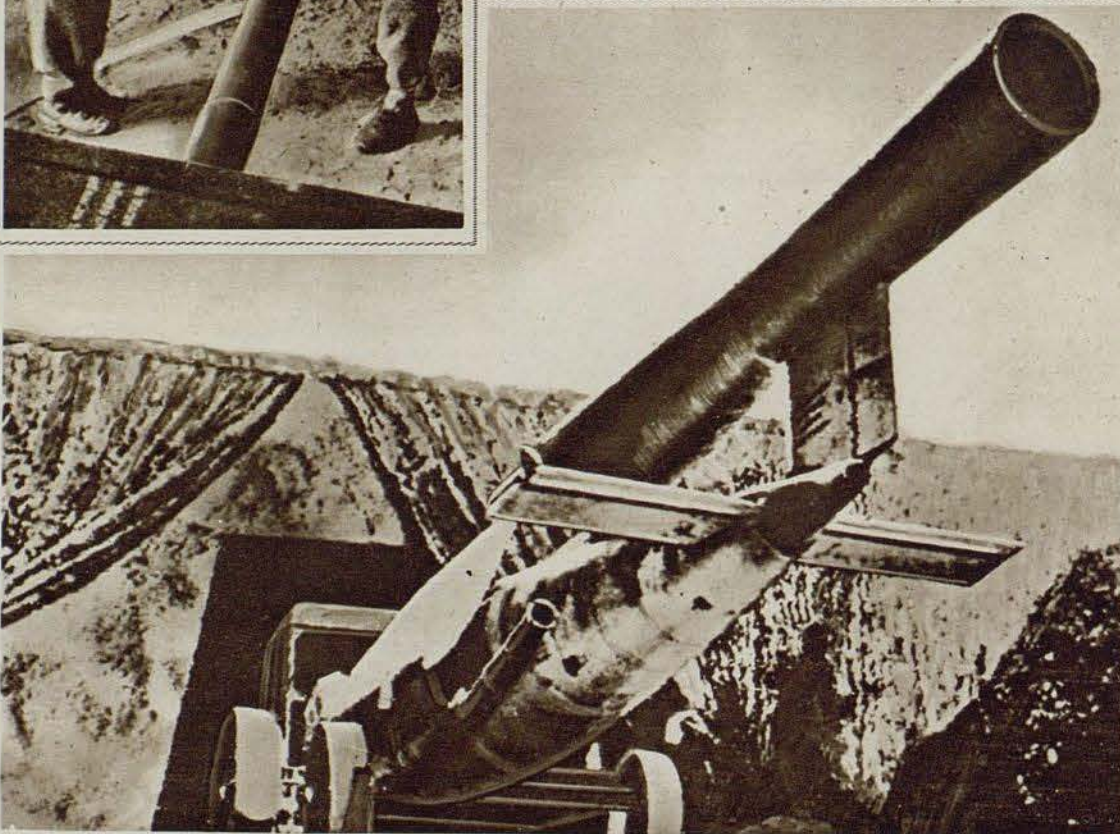
A FLYING BOMB BEING ROLLED ON ITS CARRIER. SIX MEN ARE SEEN HAULING OR PUSHING AND OTHERS ARE PULLING IT ALONG. WHEN READY AN OFFICER PASSES A BUTTON TO EXPEL IT.



(LEFT.) THREE MEN FITTING A WING ON A BOMB. THE BERLIN "ILLUSTRIERTE ZEITUNG" SAYS "THE CONSTRUCTION OF VI IS SIMPLE, LIKE EVERYTHING GREAT."



(RIGHT.) "ONE TOUCH OF THE BUTTON," SAYS THE BERLIN PROPAGANDA JOURNAL, "AND THE WINGED BOMB BEGINS ITS FLIGHT TO LONDON, STEERED PRECISELY TO ITS GOAL."



CAMOUFLAGE CURTAINS ARE DRAWN ASIDE TO LET A "DOODLE-BUG" BE ROLLED INTO A CONCRETE BUNKER FOR LAUNCHING. THE HANGAR HAS A CONCRETE ROOF 5 FT. OR MORE THICK. ALL PICTURES ARE BY RADIO.

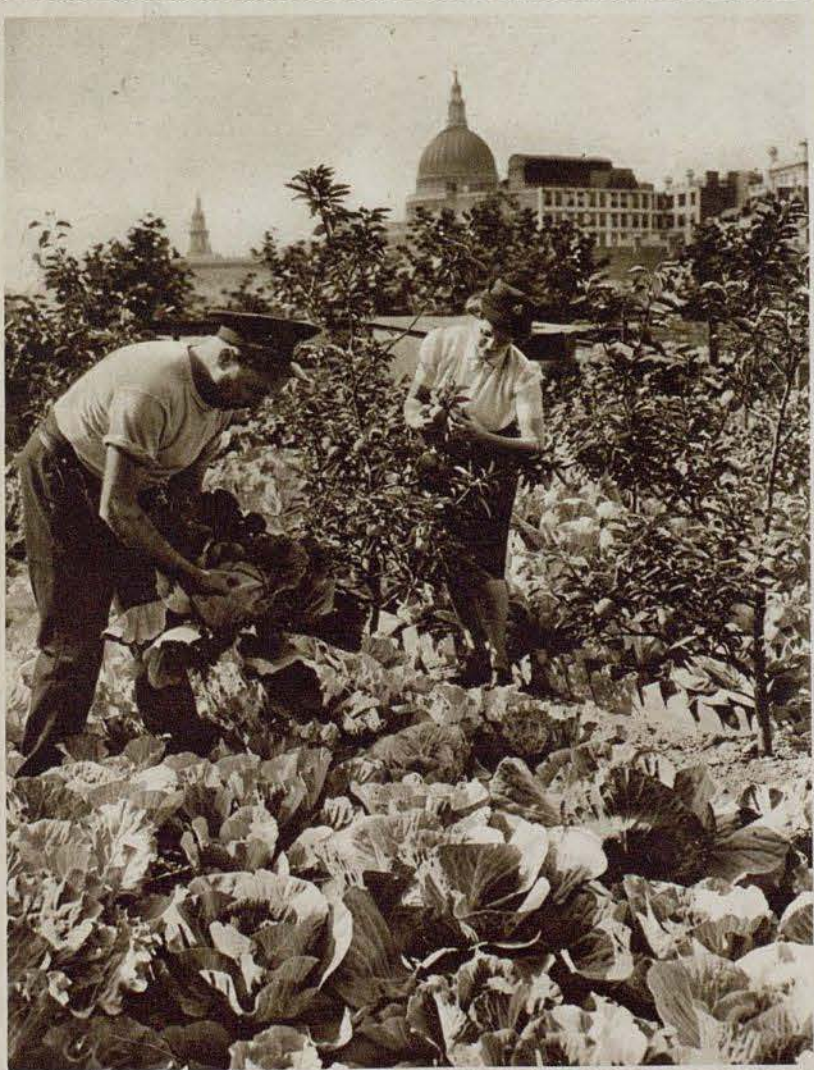
GERMAN propaganda has done its best to raise the flagging spirits of Hitler's minions by optimistic descriptions of the effect of these purely murderous weapons with no military value whatsoever. By this time a good many people have grasped the *modus operandi*, but photographs from a German source give a description. At the launching site a light crane, or derrick, lifts the bomb from its cradle and places it on the runway carrier. It seems to take about a dozen men to push the carrier into place inside the great concrete hangar from which the bomb is fired. This hangar has a concrete roof 5 ft. or more thick, and before launching the wings are fixed into position. It seems to need careful handling, for many of its sections contain strict instructions. It is said to be launched by means of a compressed-air apparatus, electrically operated by an officer who sits near the launching site and presses a button. "One touch of the button," says the Berliner "Illustrierte Zeitung," "and the winged rocket-bomb begins its flight to London, steered precisely to its goal by remote-control apparatus." We can scarcely accept the word "precisely," but it fits in with the "London in flames" propaganda of Dr. Goebbels.



# THE FIREMEN'S FARM IN THE HEART OF THE CITY OF LONDON.



A GENERAL VIEW OF THE FIREMEN'S CITY FARM, WITH TWO MEMBERS OF THE N.F.S. WORKING IN THE VEGETABLE PLOT AMONGST A FINE MIXED CROP.



A MAGNIFICENT CROP OF CABBAGES, WITH A SHOW SPECIMEN IN THE HANDS OF FIREMAN OSMAN, WHO HAS CHARGE OF THE VEGETABLE GARDEN.

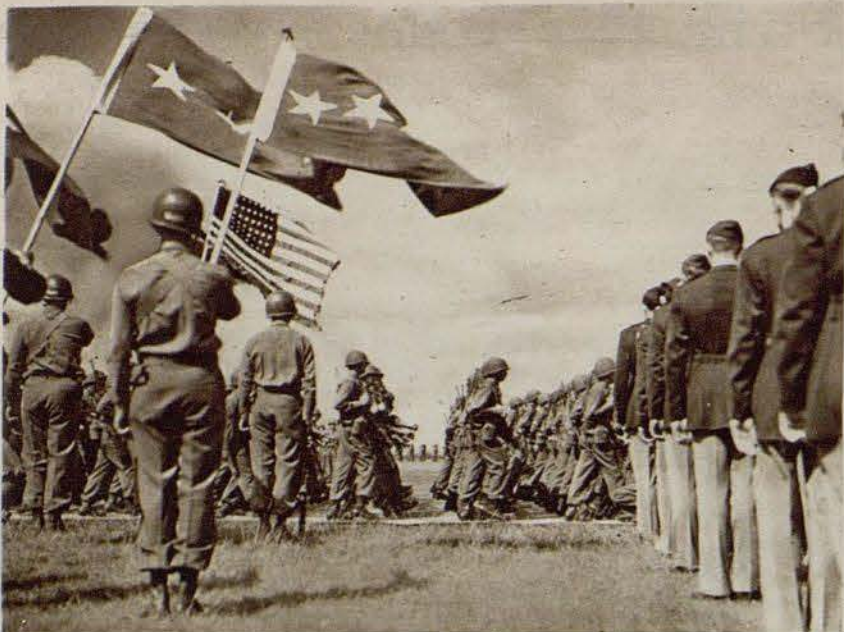


SAID TO BE THE ONLY APPLE-TREES IN THE CITY OF LONDON—SIX OF THEM GROW, AND FLOURISH, IN THE FIREMEN'S GARDEN.

Members of the fire station near St. Giles, Cripplegate, which was damaged during the 1940 air raids, have their own farm, about a quarter of an acre in extent. There they cultivate vegetables of every description, and fruit, consisting of six sturdy

apple-trees. They keep pigs and hens, too, in sties and fowl-houses made from the bricks and wood from bombed buildings and have sold their pigs at a good profit. The soil for the garden came from sandbags split by blast.





A NEW AIRBORNE ARMY IS FORMED; A JOINT ANGLO-U.S. FORCE. THE STAFF FLAGS FOLLOWING THE STARS AND STRIPES DURING THE MARCH PAST.

Supreme H.Q. announced recently the consolidation of its combined airborne forces in one command approximating to an army in size, and importance. Lieut-General Lewis H. Brereton U.S. Army, formerly commanding U.S. Ninth Air Force, commands the new organisation. Lieut-General A. M. Browning, British Army, is Deputy Commander. The object of the new organisation is to make more effective the large airborne forces now in existence.



COLONEL-GENERAL HOEPFNER, WEARING CIVILIAN CLOTHES, AWAITING HIS TRIAL BEFORE THE NAZIS' "PEOPLE'S COURT" IN BERLIN. HE WAS HANGED.

Many of the high-ranking German officers tried by the so-called Nazis' "People's Court," for their part in the attempted assassination of Hitler, have already been sentenced and executed by hanging. This radio picture shows Colonel-General Hoepfner, wearing civilian clothes and without even a coat, during his trial in Berlin. The accused are not considered worthy to appear in uniform nor are they shot, as is usual with Service men, but are hanged as common criminals.



THE EIGHTH ARMY'S ENTRANCE INTO FLORENCE: CIVILIANS CROWD ROUND BRITISH JEeps HALTED IN A SIDE STREET.

South African troops of the Eighth Army, who were supported by British Guardsmen, fought their way into the outskirts of Florence on August 4. Reconnaissance patrols found that the Germans had blown up five of the six bridges in the city across the Arno, leaving only the famous fourteenth-century Ponte Vecchio, and that was blocked by demolitions at both ends. Although the Germans had proclaimed



THE ONLY BRIDGE NOT DESTROYED IN FLORENCE; THE PONTE VECCHIO. HOUSES ON EITHER SIDE WERE DEMOLISHED TO CAUSE DELAY TO OUR ADVANCING ARMY.

Florence an open city, and the Allies have refrained from shelling enemy positions in the city, the Nazis mined both banks of the Arno and mounted machine-guns in various buildings. Since pulling out their main force, the Germans have also been shelling the southern part of the city from the commanding hills north of Florence. Many beautiful palaces have been destroyed.



ALL ORGANISED RESISTANCE AT GUAM HAS CEASED: A VIEW OF THE TOWN OF SUMAY ON THE ORTO PENINSULA, GUAM.

On August 10 Admiral Nimitz announced that all organised resistance at Guam had ceased, and American forces are now wiping out isolated groups of Japanese on the island. Our picture shows the cove (right background) where one of the original landings was made, and also the town of Sumay, on the Orto Peninsula, which was pinched off from the rest of the island during the fighting by the Americans cutting across the arm of land.



"TO THE LAST OF THE THOUSANDS": THE LAST HURRICANE PRODUCED BY THE HAWKER AIRCRAFT CO., WITH BANNERS DESCRIBING THE FIGHTER'S VARIOUS ACHIEVEMENTS.

The last Hurricane to be produced by the Hawker Aircraft Company is shown here amply decorated with banners, pennants, and so on, in honour of the many achievements of this famous type of fighter. Hurricanes played their part in the Battle of France, at Dunkirk, in the Battle of Britain, at Narvik, in Russia, Iran, Malta, Africa, and Burma, in Sicily and Italy, and now in the greatest battle of all, Europe's liberation.



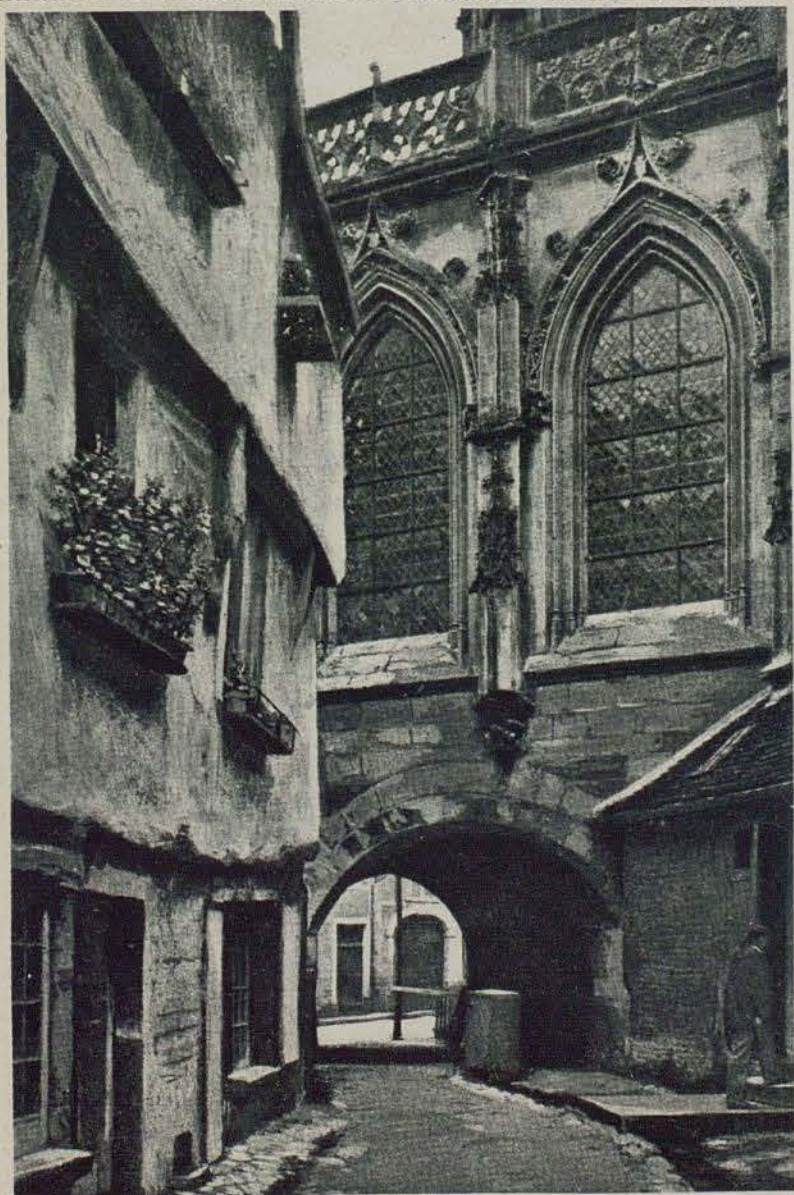
# FALAISE—THE BIRTHPLACE OF WILLIAM THE CONQUEROR.



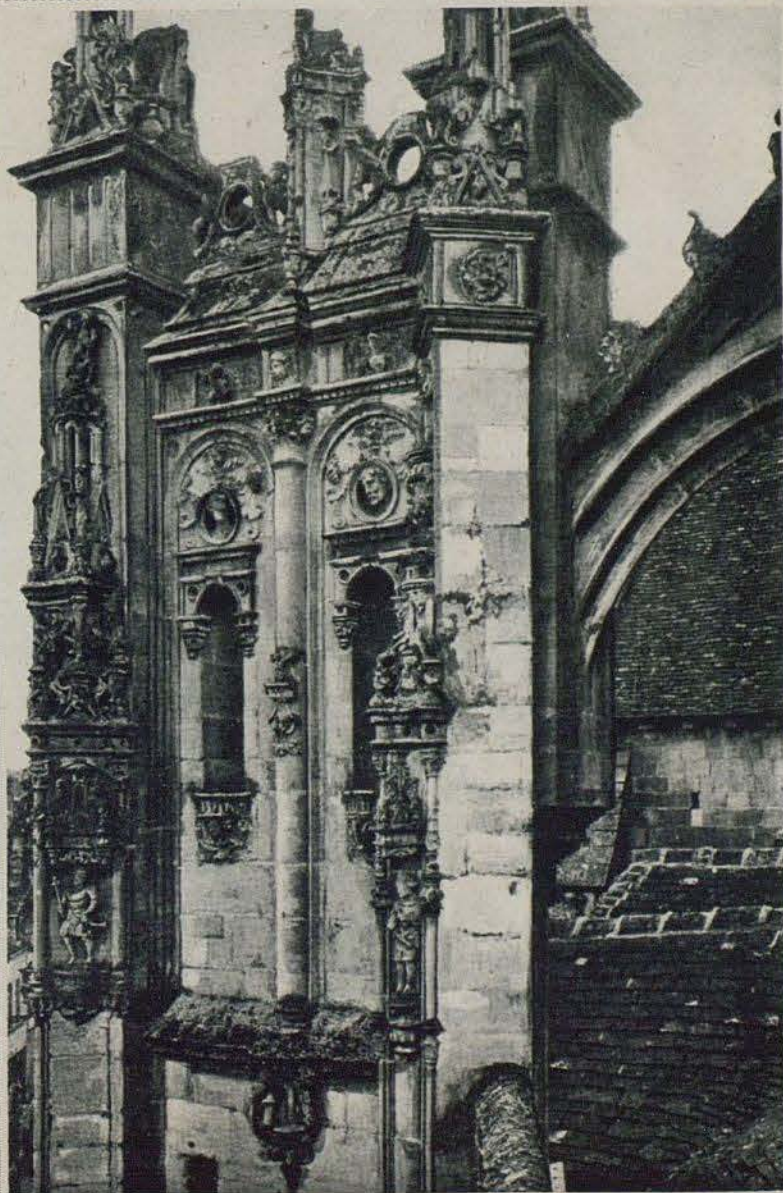
THE BIRTHPLACE OF WILLIAM THE CONQUEROR—THE CHÂTEAU DE FALAISE (XIIITH CENTURY), WITH THE ROUND TALBOT'S TOWER ADDED IN 1418-1450.



L'ÉGLISE DE GUIBRAY, FALAISE, AS SEEN FROM THE SOUTH-WEST. THIS INTERESTING CHURCH IS MAINLY OF NORMAN STRUCTURE.



L'ÉGLISE DE LA SAINTE-TRINITE (THIRTEENTH, FIFTEENTH AND SIXTEENTH CENTURIES)—THE PASSAGE UNDER THE CHOIR: THE CHOIR POSSESSES A FINE ARCADED BALUSTRADE.



L'ÉGLISE DE LA SAINTE-TRINITE—BUTTRESSES OF THE SOUTHERN FRONT. THE WESTERN FRONT CONSISTS OF AN ANCIENT TRIANGULAR PORCH CONVERTED INTO A CHAPEL.

Falaise, famous in history as the birthplace of William the Conqueror, is very much in the news as we write, for the Canadians are almost at the town itself and its fall should not be long delayed. Falaise is not a very large town, but it is important strategically and it possesses some fine churches, as well as

the famous château dating back to the twelfth century—some authorities put it as even earlier. During the Middle Ages this castle was a fortress of great strength and importance, but little beyond the outer *enceinte*, the Keep and Talbot's Tower have survived the ravages of time.



## THE KASSITE KINGS OF BABYLON: DISCOVERIES IN KURIGALZU'S CAPITAL.



A GENERAL VIEW OF THE EXCAVATIONS AT DUR KURIGALZU, TWENTY MILES WEST OF BAGHDAD, THE CAPITAL OF THE KASSITE KINGS OF BABYLONIA FROM THE FIFTEENTH CENTURY B.C.



THE ZIGGURAT, OR "STAGED TOWER," KNOWN AS AGER GUF, A FAMILIAR LAND-MARK: A VIEW TAKEN FROM AMONG THE TEMPLE BUILDINGS OF DUR KURIGALZU.



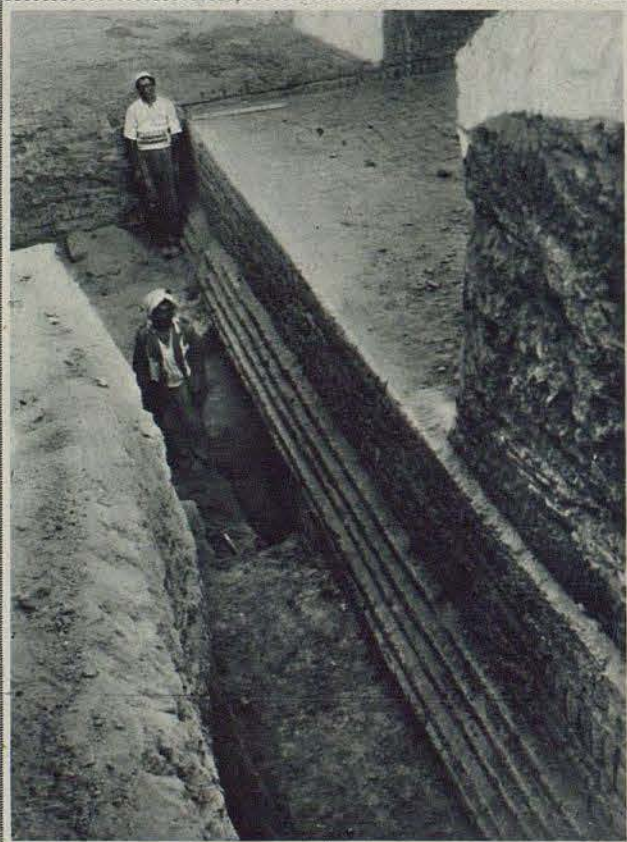
ONE END OF THE TREASURE-CHAMBER AT DUR KURIGALZU, ABOVE WHICH IS THE BRICKWORK OF A LATER PALACE OF THE KINGS.



VAULTED STORES OR WINE-CELLARS IN KURIGALZU'S PALACE. THE WALLS OF THIS PALACE AND THE TEMPLES ARE IN SOME CASES FOUR METRES IN THICKNESS.



A HEAVY BRICK PLATFORM WAS CUT AWAY, REVEALING THE TREASURE-CHAMBER BELOW. ON THE LEFT ARE FOOTHOLDS OF A SHAFT CUT BY ROBBERS OF A LATER PERIOD.



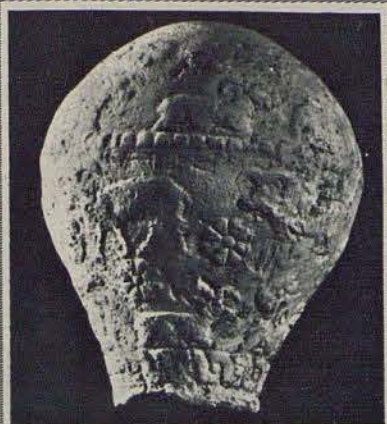
AN UNEXPLAINED PLATFORM OF BRICKWORK WHICH SEALED IN KING KURIGALZU'S TREASURE-CHAMBER, IN WHICH VESTIGES OF GOLD AND OBJETS D'ART HAVE BEEN FOUND BY THE EXCAVATORS.

The Directorate-General of Antiquities of the Government of Iraq have just completed their third season's excavating at Dur Kurigalzu, the capital city of the Kassite Kings of Babylonia from the fifteenth century onwards. Sayid Taha Bakir, M.A., Curator of the Iraq Museum and Field-Director of the excavations, has kindly forwarded to us the results of their season's work. "The city of Dur Kurigalzu," writes Mr. Bakir, "has long been identified with the vast ruin known as Ager Guf, a familiar landmark in the plain 20 miles west of Baghdad. The site had escaped the attention of archaeologists until 1942, when it was selected by us for a prolonged process of excavation. Our choice was influenced by two considerations. First, the extensive foreign relations of the Kassite Kings are

known from such documents as the famous Amarna letters. Secondly, the site was easily accessible for visitors from Baghdad. It proved a simple matter in the first season to trace the four faces of the enormous *ziggurat*, or staged tower, whose remains still stand over 200 ft. high. On the east side a triple staircase was found, leading up to it from a paved courtyard, exactly as was the case with the *ziggurat* built by the same king at Ur-of-the-Chaldees. In 1943 this pavement soon brought us to the ruins of three great temples. Their walls, in some cases four metres thick, were preserved to a sufficient height to enable us to re-roof certain rooms for exhibition purposes. Everywhere inscribed bricks gave the name and titles of the King Kurigalzu who had built them, and his name was repeated

*(Continued opposite.)*

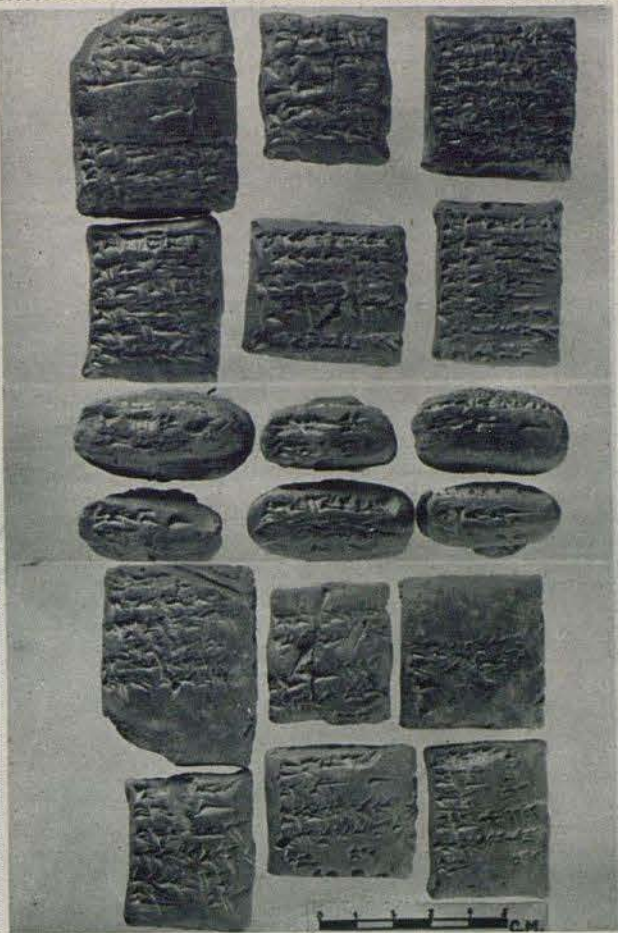
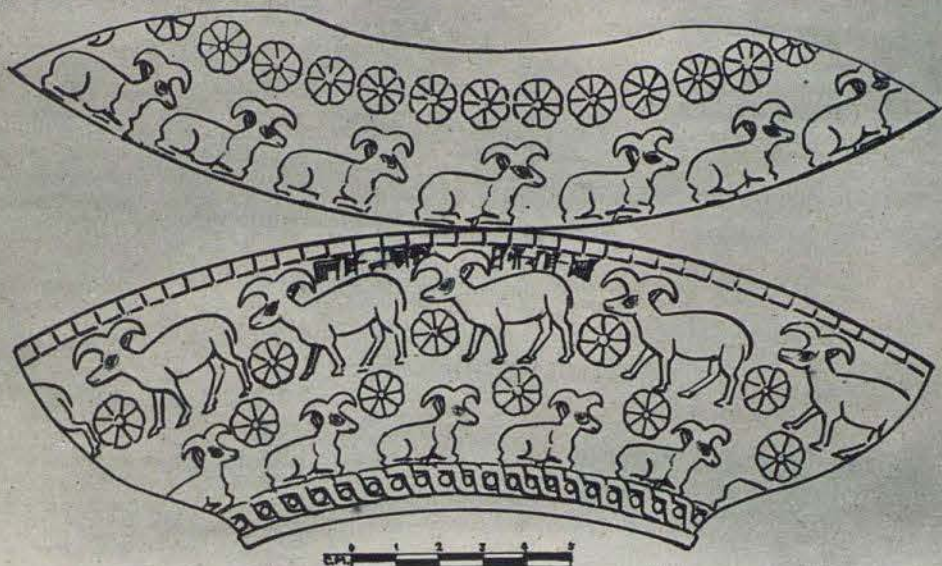




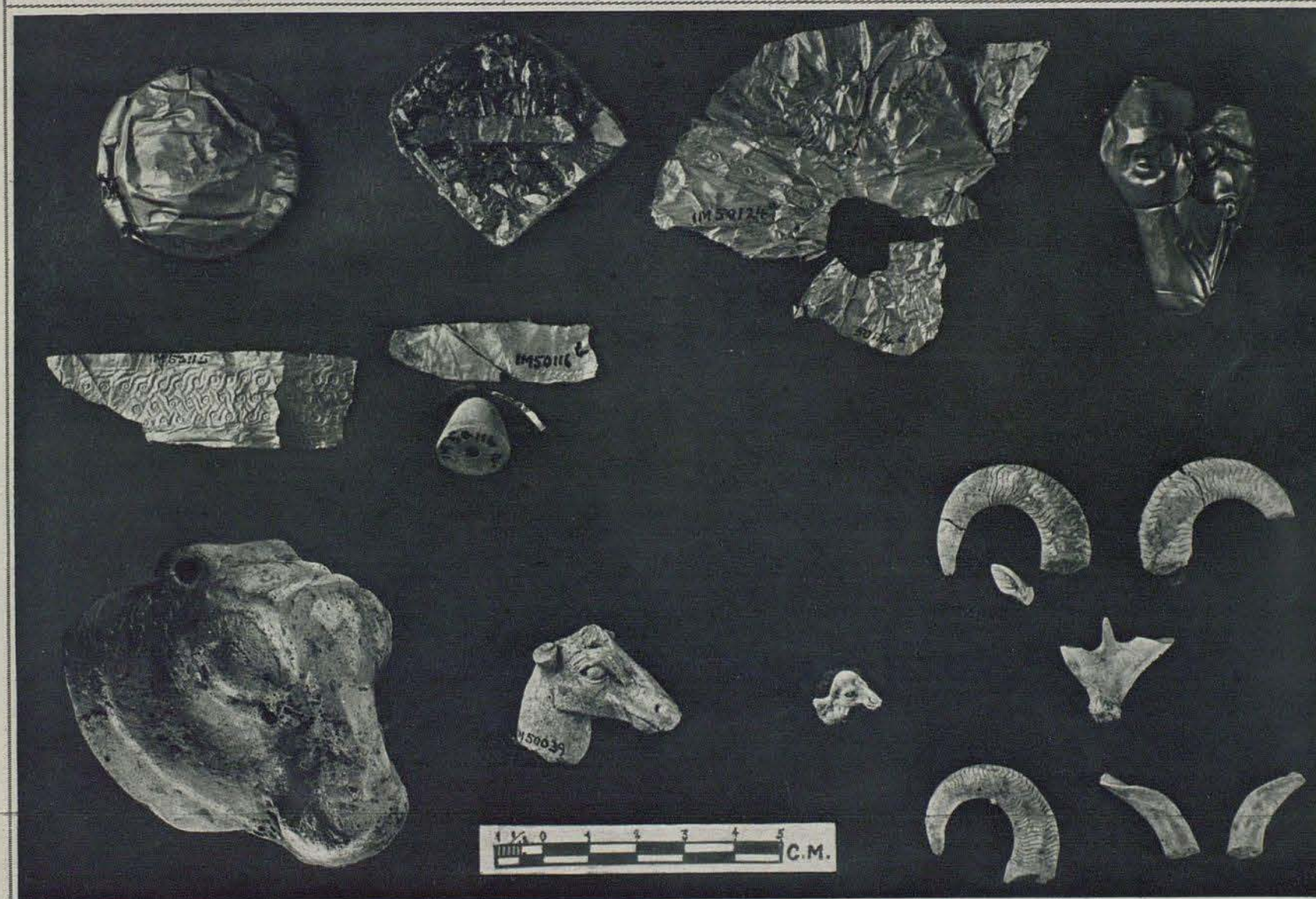
# GOLDEN FRAGMENTS, OBJETS D'ART AND CUNEIFORM TABLETS AT DUR KURIGALZU.

TREASURES OF THE 15TH CENTURY B.C.

(LEFT.) A SCULPTURED MACE-HEAD FOUND IN THE TREASURE-CHAMBER. (BELOW.) A DRAWN DESIGN OF KING KURIGALZU'S ROYAL MACE-HEAD, SHOWING HIS NAME ENGRAVED IN CUNEIFORM SUMERIAN CHARACTERS.



CLAY TABLETS AT DUR KURIGALZU, DESCRIBED AS OFFICIAL RECEIPTS RELATED TO THE REIGNS OF VARIOUS KASSITE KINGS, EACH DATED TO A DAY.



BROKEN FRAGMENTS OF GOLD AND OTHER PRECIOUS OBJECTS FOUND LITTERED ABOUT KURIGALZU'S TREASURE-CHAMBER BY ROBBERS. THE SMALLEST HEAD IS THAT OF A CAMEL, A FACT NOT SURPRISING TO THE ARCHÆOLOGISTS, AS REPRESENTATIONS ARE KNOWN IN IRAQ FROM THE FOURTH MILLENNIUM ONWARDS.

side-by-side with that of the god Enlil on a score of huge pivot stones on which the doors had swung. On two different occasions these buildings had been destroyed by fire, and the conflagrations of which we found traces could easily be linked with the destruction of the city, first by the Assyrian King Adad-Mirari I and later by Tiglathpileser I. At one point amidst the charred beams of the ceiling we found broken fragments of a more than life-size statue of the Kassite King himself, entirely covered with a record of his works, inscribed in the older Sumerian language used for such texts. Our most recent work brought us to a mound west of the ziggurat which proved to be the ruins of the royal palace. Here, repeated rebuildings and dated clay tablets found at many levels

have begun to correct the hitherto confused heredity of the Kassite Dynasty. For instance, a scribe seated at the palace gate to register the royal revenues had left copies of fifty or so official receipts, in the reigns of the two Kings Kudur-Enlil and Kashtiliash, which changes the traditional king-list by placing these two names before that of Kurigalzu III. The 'Palace of the Universe,' E-Gal-Ki-Shar-Ra, was lavishly built, with walls four metres thick and brightly-painted frescoes. Sections so far excavated include long ranges of vaulted store-houses and a treasure-chamber with a triple row of pedestal tables, around which were littered broken fragments of gold and other valuable objects, doubtless snatched from their setting by looters, who sunk a shaft into the ruins."



## THE WORLD OF SCIENCE.

### ENGINEERING THE RIVERS.

FAR from fulfilling the impression conveyed by Goldsmith's Traveller "remote unfriended solitary slow" of the "wandering Po," the river runs almost as straight as a Roman road, and is the oldest regulated river in history. Its levée system was begun 2000 years ago by (so Pliny said) the Etruscans, before the Romans succeeded to it. The incessant work on these embankments was continued by them, but fell into decay after the irruption of the barbarian Goths, and reconstruction did not begin till the Middle Ages. Since then they have been continually well-ordered and repaired, and only a few years ago new regulation of the river was taken in hand to increase the depth of the Po in its lower reaches before coming to its estuary. It can no longer spill itself in floods to fill those lagoons, on one of which Venice stands and which sponsored the fanciful name of the Seven Seas.

It is the longest river in Italy, and the Adige running parallel to it after making a right-angled turn at Verona and there preparing to leave its flashing youth behind, the two streams, with their tributaries, water the 2900 square miles of the north Italian plain. The Po is embanked on both sides along the 270 miles from Cremona, and 50 miles of this stretch is further protected by flood defences, with another 100 miles of occasional defences, and yet another 65 miles of them along its tributaries. In short, the River Po is a school, a very old school, of River Engineering, and is so regarded by countries with rivers in need of regulation in its many aspects. The Italians, who, in the day of Ancient Rome, made our Roman roads—Watling Street, the Icknield Way, the Fosse Way—are famous still as road-makers. They are also the expert river engineers, the advisory river-makers.

Many countries, from the oldest to the youngest, are in need of teaching. A river is a priceless possession, but cannot now be long left to take care of itself. It has an inborn disposition to curves, and when it has formed one, the pressure of the current on the curve's concave side enlarges it till (as maybe) the river takes a short cut through the base of the loop and forms another channel. Or a river may regulate its flow by the coarse expedient of spilling over its banks into marshes or lagoons which are its relief works. If the opportunity to spill is removed by filling up the marsh, it will try again lower down, as the Thames has demonstrated; and always it is bringing down silt to add to the river engineer's problems.

The foremost of these is the prevention of floods, which are common to all because all rivers bring down silt to raise the river; the secondary one, therefore, arises of deepening the channel. Flooding is dealt with now as the Etruscans dealt with the Po—by embankments. The Thames was first embanked in its lower reaches not by the Romans, but possibly by the Saxons and the Danes. Later embanking in our own time for 37 miles, from the Nore upwards, has deepened the channel to upwards of 30 ft. at the George V. Docks and 14 ft. at London Bridge.

Greater rivers have greater embanking. The Mississippi is bordered by a system of levées on the Po model, on so vast a scale that they protect it for 600 miles of its length. They were begun on a small scale at New Orleans 200 years ago. They now extend over an area of 250,000,000 square yards; and openings intersecting their foundations permit the flood waters to find outlets. Systems of the same purpose but of different structure have been adopted on the Rhine below Strasbourg and continuing to Bingen and Cologne; and after the Rhine has reached Holland, there to divide into the Maas, the Waal and the Yssel, on these three branches also. The Seine is embanked from Rouen to St. Sauveur, with other training works on the estuary. The Yare, the Clyde and the Tyne, each river has its own character, its particular need of reformation, and therefore its individual "training" works. Of these, the most apparent are the groynes or sills established in the river, built up by its sides to prevent scour; or thrust out at varying angles and distances from the sides into the current to divert it or to order its flow.

Among the latest of the last-named of these expedients is that which was adopted in New Zealand after consultation by Sir Francis Boys with the Italian experts of the Po. The rivers of the South Island of New Zealand are highly individual, but are alike in not suffering navigation. The Waimakariri, the "Wild Angry Water" in the Maori tongue, is typical. In the dry season it is a slender stream intersected with shallows and with expanses of silt, pebbles and general débris deposited by the river in the rains. When the warm, moist, north-west winds set in to bring the rain and melt the snows of the mountains at its source, the Waimakariri becomes a torrent, with a constant threat of overflowing into floods as it approaches Christchurch, the southern capital. Before reaching there, part of the river disappears underground, to reappear short of Christchurch as the placid Avon, while the main river empties itself into the sea some miles away.

Its spreading floods nevertheless remained a persistent threat to Christchurch, and for this reason its schooling was undertaken. The main works consist of a system of groining, with groynes built out into the stream, all pointing upstream, and in pairs. They jut out at about an angle of 45 degrees, and are sometimes staggered like a letter A with the top cut off, thus, / \, and the pairs are distributed at distances from one another of about half a mile for a considerable distance. The effect has been to induce the river to deposit its débris in still water on the shoreward side of the groynes. There it accumulates and gradually builds up its own levées behind the groynes. Thus the turbulent river becomes a regulated consenting outflow with a deepening channel: and the threat to Christchurch is removed. The groynes are massive structures of concrete deposited first in sacks and thereafter coagulating into a solid concrete wall of defence.

Of other rivers of which mention should be made, the Waal, in Holland, which was susceptible to the engineer's science because it is a slow-moving, smooth expanse of water, had its channel deepened over a distance of 53 miles from 7½ ft. to 11½ ft. by training works regulating its width, and by a system of low spur-groynes and cross-dykes to deepen the channel; and the Maas has been diverted as it neared the sea by an artificial cut at the Hook of Holland. The Clyde has been treated successfully not to prevent floods or consequent marshes, but to establish Glasgow as a port on a navigable river and as a basin into which ships of war can be launched without difficulty or risk.

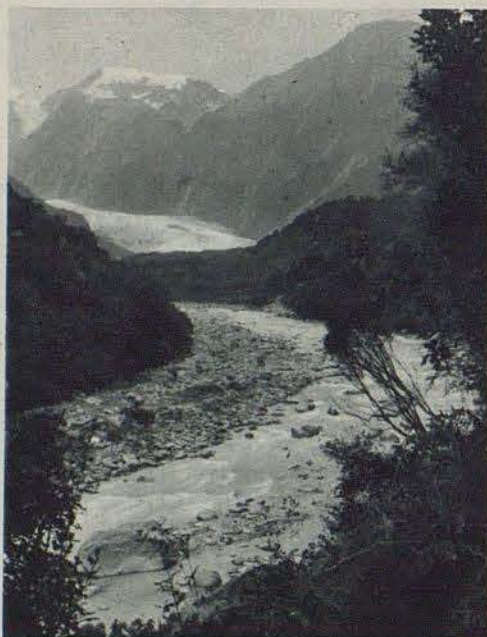
E. S. GREW.



THE EYK GROUPE ON THE LOWER REACHES OF THE WAIMAKARIRI, SOUTH ISLAND, NEW ZEALAND.

This groyne, one of a number built to control the river's flow at flood time, is shown in process of construction. The bags of concrete will coalesce into a concrete groyne jutting out from the bank at an angle of 45 degrees.

Photograph by courtesy of Sir Francis Boys.



ANOTHER RIVER IN NEW ZEALAND—NOT SUSCEPTIBLE OF REGULATION—AFTER IT EMERGES FROM THE FRANZ JOSEF GLACIER FOR A SHORT RUN TO THE SEA. IT SERVES MERELY AS AN ILLUSTRATION OF THE NATURE OF A RIVER BED.



A VIEW OF THE WAIMAKARIRI NEAR ITS SOURCE AT ARTHUR'S PASS. A GROUPE ON ITS BANK, WHERE A CURVE OCCURS, DEFENDS THE CURVE FROM FURTHER ENLARGEMENT.

Two lower photographs by courtesy of the High Commissioner for New Zealand.

## BOOKS OF THE DAY.

### FROM BEHIND THE SCENES.

AUTOBIOGRAPHY is a tricky business, as far too many books of reminiscences make plain. But when the writer does succeed, the reader has every reason to rejoice, for he finds himself not only taken behind the scenes, but also given intimate glimpses very often of the greatness of man's soul. This latter is the privilege of all who have the good fortune to get hold of Squadron-Leader William Simpson's second book, "THE WAY OF RECOVERY" (Hamish Hamilton; 7s. 6d.). He is the man who wrote "One of our Pilots is Safe," in which he told how he was shot down in France, to be dragged, "burning like a torch," from the machine and then to endure months of agony in French hospitals. In the present volume he returns to England, disfigured and mutilated almost beyond words, and is put in the hands of plastic surgeons, notably

Mr. Archibald MacIndoe, who give him a new face, including new eyelids and new nose. But, graphic and detailed though the descriptions are of operations on himself and his comrades in misfortune at the Plastic Unit, there is nothing harrowing. Moreover, they constitute but part of the book, being, as it were, the excuse to bring forward the triumph of the human spirit in the face of seemingly overwhelming adversity and suffering. Here, literally, is a man who has been tried in the fire. The dross has been burned out, the fine steel comes forth from the crucible; so that, even before the splendid British surgeons, nurses and orderlies had begun their work of physical rehabilitation (and how splendid they are Squadron-Leader Simpson makes crystal clear) he could say: "The rich experience I had gained, directly through my own suffering and vicariously through the suffering of others, had, I felt, equipped me better for life." And, towards the end, "The struggle for independence of a man who has virtually lost both hands is not bitter when the spirit is sound." The book made a very deep impression on me. I believe it will have the same effect on all who read it. And it will bring hope and comfort to all everyone who has reason to fear for their loved in the war.

It is a long step back from the men who fought the Hun in the sky above Belgium and Britain to such events as the cavalry charge in the Chardeh Valley, the Battle of Kirbekan, the Chitral and Tirah campaigns and Majuba. Squadron-Leader Simpson is still in his twenties; Sir Ian Hamilton is a nonagenarian: and the contrast in their books is not confined to incident. Style and outlook differ in no small measure. Yet as one reads the General's second volume of autobiography, "LISTENING FOR THE DRUMS" (Faber; 18s.)—the first, it may be recalled, was "When I was a Boy"—the story he has to tell is one which holds the imagination. Only twenty-five years are covered, but they were as vital to the Empire as they were eventful to the young subaltern of the 92nd Gordon Highlanders who, in the autumn of 1873, sailed in the troopship "Jumna" to Bombay on his way to Mooltan. Fortunately, many of the letters he wrote home have been preserved, otherwise it is doubtful if even the best memory could have served after all these years. To attempt to select any one of the many stories, incidents and historic events which crowd Sir Ian's pages would be invidious. It is truly amazing to recall how much history was written in the quarter of a century here dealt with. And we can see, from his own letters, too, how Winston Churchill was busy on the job, making his mark with his sword as to-day he makes it with his statesmanship.

Just about the time Sir Ian closes this volume a young journalist began watching passing events in shrewd fashion in Fleet Street. In that alone Comyns Beaumont's "A REBEL IN FLEET STREET" (Hutchinson; 16s.) makes an admirable companion to the famous General's reminiscences of the previous quarter of a century, for he carries on the story with many of the original characters; and that through a period of "historical importance probably unequalled in any era of the past." He had previously been private secretary to John G. A. Leishman, U.S. Minister to Switzerland, a post which gave him a grounding not only in international affairs, but in that study of human nature which is a main stock-in-trade of the successful journalist.

And what a gallery he amassed in his forty years. Basil Zaharoff, Clarence Hatry, Lady Houston, Lord Northcliffe, James Gordon Bennett, Horatio Bottomley, Lord Birkenhead, Marie Corelli, Lord Southwood, Gerald du Maurier, Lord Montagu of Beaulieu are but some that come readily to mind. Comyns Beaumont, however, is more than a raconteur. The very title of his book shows that. He has opinions, political, journalistic and scientific: he holds them strongly and expresses them vigorously. His rebel attitude has cost him more than one job in Fleet Street, but he can—and does—show that though his head may have been bloody, it remained unbowed. Still more, he has victories to his credit. It was he who founded the *Bystander* when still a very young man; so young, in fact, that Marie Corelli, calling upon him, exclaimed: "Are you the Editor? You look a mere boy!" Even then the "boy" had well-defined ideas, not only on journalistic but on Imperial politics, and those ideas, matured during the years of his pilgrimage through Fleet Street, are boldly voiced in this most entertaining autobiography.

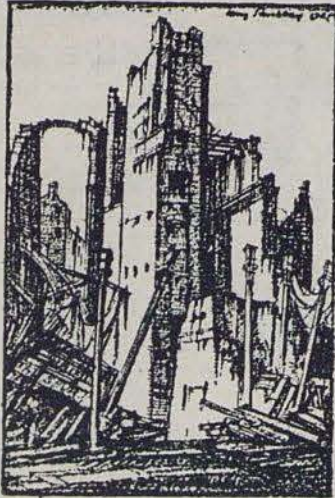
Comyns Beaumont and Sir Gervaise Rentoul had many mutual friends and acquaintances; which makes it somewhat remarkable that neither mentions the other in his book. Sir Gervaise, of course, moved largely in legal and political circles, though his passion for the theatre took him into a wider sphere still. He calls his autobiography "THIS IS MY CASE" (Hutchinson; 21s.), and he puts up a very good case indeed, despite the fact that he has to regret he never managed to keep a diary for more than a few months at a time. But one cannot be a President of the Union at Oxford, a shining light of the O.U.D.S., a Member of Parliament

for twelve years, and a Metropolitan Magistrate for about the same period without encountering unforgettable people and happenings. He is rich in his anecdote. He heard F. E. Smith at the height of his fame as advocate and politician, and I like the story of "F. E." and Judge Willis when, during an argument on a point of procedure, the Judge asked: "What do you suppose I am on the Bench for, Mr. Smith?"—"It is not for me," replied F. E. suavely, "to attempt to fathom the inscrutable workings of Providence." As a politician the author fought five hotly contested elections, so that his claim to have had "extensive and peculiar" electioneering experience is well-founded. Four full books are here, and I have had an enjoyable and instructive week reading them.

W. R. CALVERT.



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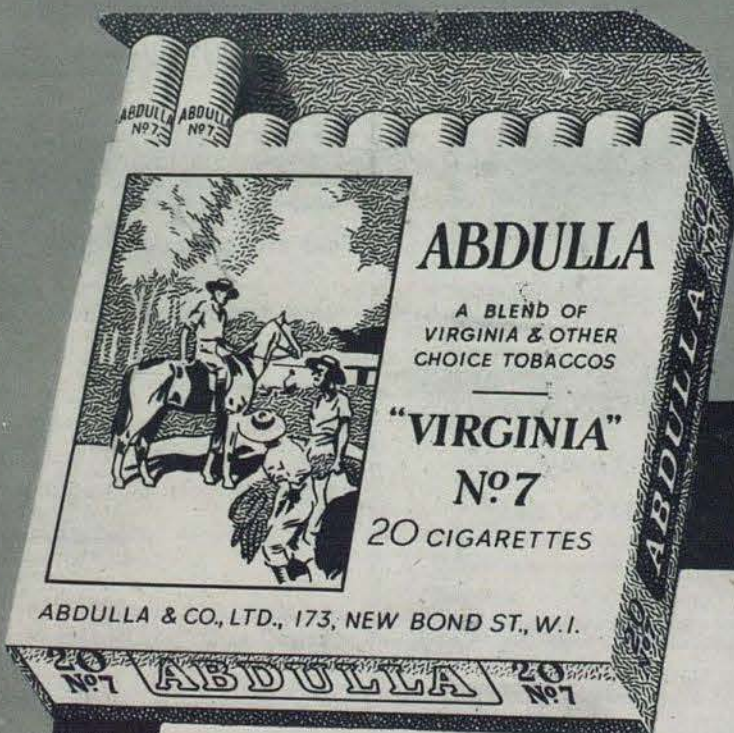
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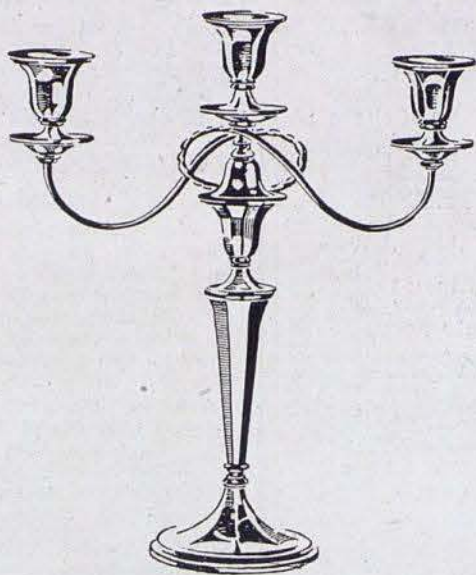
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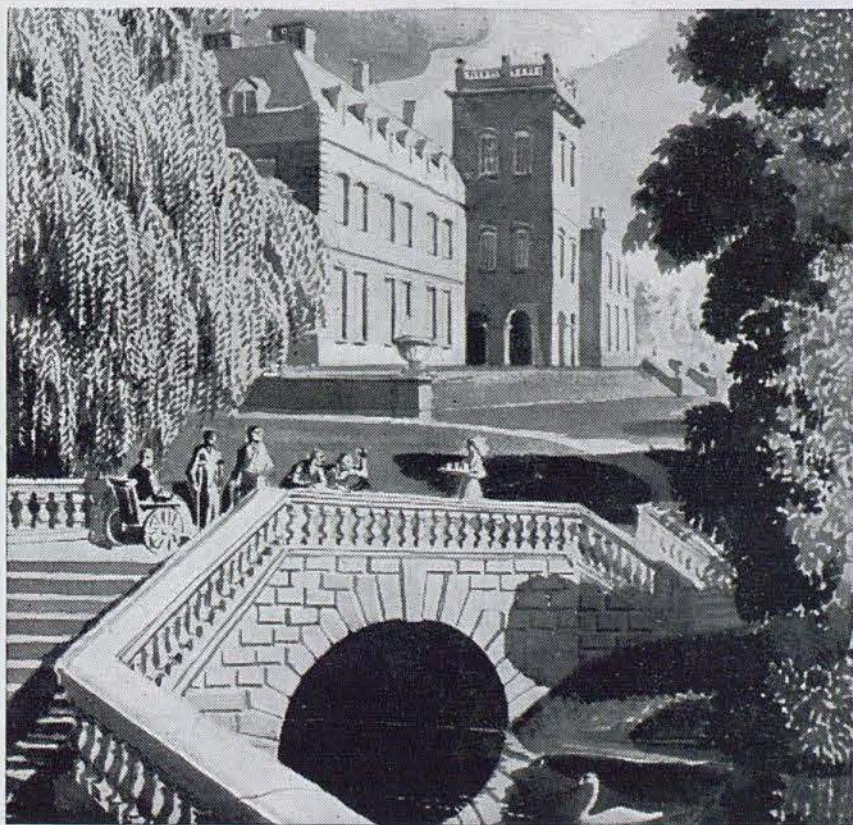


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