









The Limes

HISTORY OF THE WAR

VOL. XVIII.



1839 39

17.9.23

PRINTING HOUSE SQUARE.

PRINTED AND PUBLISHED BY "THE TIMES,"
PRINTING HOUSE SQUARE, LONDON.

D 501 15 v.18

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CHAPTER CCLXII.

CAPORETTO: ITALY'S DISASTER AND RECOVERY.

EFFECTS OF THE RUSSIAN COLLAPSE—ITALIAN DISPOSITIONS IN OCTOBER, 1917—GERMANS ON THE ITALIAN FRONT—THE ATTACK ON OCTOBER 24—OTTO VON BELOW BREAKS THROUGH AT CAPORETTO—DELAY IN ARRIVAL OF RESERVES—A COLLAPSE IN "MORAL"—DEFEAT OF THE SECOND ARMY—A GENERAL RETREAT—RETIREMENT TO THE PIAVE—ALLIED STATESMEN AT RAPALLO—FRENCH AND BRITISH FORCES ARRIVE—ATTACKS IN THE MOUNTAINS IN NOVEMBER AND DECEMBER—ITALIAN RECOVERY—THE LINE HOLDS—CAUSES OF THE DISASTER.

T is not easy to disentangle and set out in its due proportions the tale of the disaster which befell Italian arms in October and November, 1917. There will always, perhaps, be a conflict of opinion regarding the relative importance of the various factors which determined the success of the enemy. Some important points seem still obscure, and over certain of these there will probably never be general agreement. But it is possible at least to trace the broad lines of the story with sufficient accuracy, to reject certain hastily formed conclusions which obtained ready acceptance at the moment of failure, and to give explanations of what to a hasty judgment seemed almost inexplicable.

The blow fell suddenly. In August and September the great effort made by the Italian Second Army * had hit the Austrians very hard, and only a desperately gallant resistance had saved the fall of Monte San Gabriele and a further Italian advance in a very important sector of the front. There was a moment when the Austrian Army seemed fairly cornered, when it appeared to be losing the cohesion necessary to resistance. But the Italians had not the weight of men and guns that might have enabled them to deal the last

decisive blows. And the Germans realized quickly the necessity of giving support to their sorely tried allies.

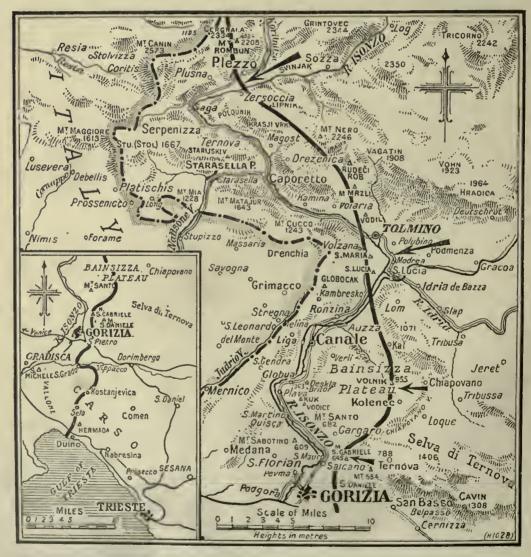
The collapse of Russia, which was to have such serious results for the Allies in the west, was brought home first, as far as military operations were concerned, to the Italian armies. It has already been explained that General Cadorna's task in the summer of 1917 was much heavier than had been forcseen in the Allied councils which laid the plans for the various campaigns. One arm of the pincers which were to have nipped Austria went out of action. Even under this handicap the Italians made notable headway during the summer, but the transfer of men and guns, and especially guns, from east to west, upset the calculations made, and as the autumn drew on it became no more a question of pursuing a victorious offensive, but of preparing to hold on to what had been gained at such great cost. It was about the middle of September that the probabilities of a strong enemy reaction began to weigh upon the Italian command. The German decision to co-operate upon the Italian Front was taken immediately after the capture of the Austrian positions upon the Bainsizza plateau, and was due mainly to the discouragement which became

cvident in the Dual Monarchy as a result of this defeat. It is very probable that the Austrians alone would hardly have attempted a big counter-stroke; that in all likelihood they would have contented themselves with stiffening, and perhaps "rectifying," the line which had come so near breaking. It may perhaps be doubted whether the moral of General Boroevic's "Isonzo Army" would have responded, without the special stimulus of German aid, to an order for an offensive on the grand scale so soon after its experiences in August and September. In any case, the German High Command eonsidered that the situation was serious, and took action accordingly.

The Italian Second Army was not well placed for a defensive fight. The position has already been explained in Chapter CCXXXIII.,

but it will be well to recapitulate and to add further details.

When the offensive of August and September, 1917, was broken off before the attempt to carry out what was to have been its crowning phase, "at two important points it had been impossible to make the effort that the situation demanded. The threat to Tohnino and its bridgehead remained a threat, and the Austrians had been able, by an immense effort, to check the movement which had for its aim the turning of their positions east of Gorizia. The fact that the Austrian line north and south of the Bainsizza still held firm detracted from the value of the Italian advance upon the plateau. Indeed, the centre of the Italian Second Army was now too far forward in relation to its wings, and the left of the centre in particular was not over well placed, assumin ;



THE ITALIAN LINE AT THE OPENING OF THE AUSTRO-GERMAN OFFENSIVE.

that a halt had to be called. The Austrians' bridgehead at Tolmino and their occupation of the Lom plateau placed the Italiaus at a disadvantage in view of the course of the Isonzo and the relative poorness of their communications. The actual line formed only a slight projection, but owing to the lie of the ground it had the disadvantages of a much deeper salient." *

This was the situation, broadly speaking, but certain further details are necessary to a proper understanding of its difficulties. The Austrian bridgehead at Tolinino, with the flanking mountain positions on the east bank of the Isonzo, was very strong. Unlike some other bridgeheads made famous by the war-St. Mihiel, for instance-but like the old Austrian bridgehead from Sabotino to Podgora, it was not a salient. Owing to the right-angled turn made by the river below Tolmino the Austrian line ran almost straight north and south from the great ridge of Rudeci Rob (6,250 feet) by Mrzli and Vodil Vrh and the heights of Santa Maria and Santa Lucia to the Lom plateau. The triangle of the bridgehead, which was filled by the Santa Maria and Santa Lucia hills, was well protected by the mountains north and south. This fact had preserved it from falling to the various attacks made by the Italians, and this faet greatly increased its value as the point of departure for an offensive, Above Tolinino the Italians held the left bank of the river as far as Plezzo, their line running by Monte Nero and north of the long Polounik ridge. The weakness of the position lay in the fact that there was little room between the line and the river, while communications were difficult owing to the steep and broken nature of the ground. This sector had long been peaceful. There had been no serious attempt to capture the Tolmino bridgehead since the autumn of 1915, while above Tolmino there had been no operations of any importance since September of that year. For two years there had been nothing but desultory artillery duels and occasional mfantry raids which caused little change in the situation and had indeed no definite aim beyond that of improving a short sector of the line and worrying the enemy. Except in the case of the Tolminc bridgehead offensive operations offered little inducement to Italian arms. An advance would have merely led into a great wilderness

of mountains, through narrow passes easily defensible, with the advantage of communications all on the side of the Austrians. And the Italian defensive line seemed amply strong. If the forward positions were not over well adapted to resist a resolute drive, the high ridges that lay on the right bank of the river furnished a second line which appeared impregnable. They were sufficiently entrenched,



GENERAL BOROEVIC,
Commanded the Austro-Hungarian Army on the
Isonzo.

and though in time of stress communications can never be easy in such a steep and rugged country there were a good number of excellent roads, most of them constructed since 1915 by the industry of the Italian troops.

It has been said above that by the middle of September General Cadorna foresaw the probability of an Austrian counter-blow, but the belief to begin with was that it would be directed against the newly-occupied positions on the Bainsizza plateau. This may have been the first idea of the enemy-there is reason to think that such a move was considered -but the fierce and prolonged Italian attacks upon Monte San Gabriele prevented an immediate reaction upon the Bainsizza, the first enemy reserves available having to be thrown in to save the fall of the bastion which protected the positions east of Gorizia. The time gained enabled a fairly strong Italian line to be established on the plateau, and, more important still, allowed a new road to be

^{*} Vol. XV., Chapter CCXXXIII., p. 429.

Krasji Vrh.



[Italian official photograph. Caporetto. Idersko. THE CAPORETTO BASIN AND THE RIVER ISONZO.

made, and old roads to be improved, between the river and the line. General Cadorna had barely satisfied hinself as to the defensive possibilities of the Bainsizza positions when it became evident that a blow was being prepared farther north, in the Tohnino-Plezzo sector, which had been quiet for so long.

By the middle of October the presence of German troops opposite the Italian Second Army was suspected. A few days later the fact was definitely ascertained. Some time previously very important movements of Austrian forces from east to west had been reported, and though contact had only been obtained with four fresh divisions by the first week in October, several others were "signalled" as being already in second line, or on their wny to the front. The Italian Command was not unduly preoccupied, though some anxiety was caused by a doubt as to the sufficient strength of the artillery, and by the fact that the heavy losses from the recent successful offensive and from sickness and the consequent filling up by new drafts had diminished for a time the value of certain units which had earned a splendid fame. The enemy guns began to show unusual activity on October 18, and places which had long been undisturbed came under registering fire. The storm broke on the night of October 23-24, when a tremendous bombardment was opened from the Plezzo valley to the northern sector of the Bainsizza. A very heavy fire was extended southward over the whole front of the Italian Second and Third Armies, but the main concentration was directed upon the lines between Plezzo and the Avscek valley.

The weather, according to previous experiences, seemed very unfavourable to offensive operations. A thick mist shrouded the mountains and filled the valleys. Little could be seen, and when the fire died down at dawn on October 24, the general feeling on the Italian side was that the attack had been delayed. The Italian Headquarters' communiqué issued on that morning, after describing the bombardment and indicating the extensive use of gas shells, which were employed by the enemy in quantity for the first time, closed with these words: "Owing to the bad weather, however, the hostile fire decreased towards dawn, together with the violent bursts of fire of our batteries," It seemed as though the enemy had been forced to grant a trucc from battle.

But the full was according to plan, in the literal sense of the phrase, not that which was hallowed by frequent use in German Where the fall of shells had eeased the Germans and Austrians, taking full advantage of the enshrouding mists, launched heavy columns against the Italian lines. The defenders wero partly off their guard, believing they had been given a respite from the terrible hail of gas shells. Before they had realized it the enemy forces were on them, and had broken through the front lines at various points. On the north of the battle front the enemy drive was held up at the defile of Saga, where the Isonzo turns at right angles round the long Polounik ridge and flows south-east to Caporetto, but farther south they were more sueeessful. They overran the Italian positions on the left bank of the Isonzo between Krasji Vrh, the eastern point of Polounik, and Vodil, north-west of Tolmino. From the gaps which they made by their first heavy drives, broken through by surprise and by weight of numbers, they turned right and left and maeline-gunned from the rear the troops who were still peering through the mist to their front, awaiting an enemy who did not appear. A great confusion naturally followed; and the bewilderment of the Italian infantry was increased by the fact that their own guns were strangely silent. The general who commanded the artillery of the Fourth Corps, which held the line from Plezzo to a point about midway between Caporetto and Tolmino, had given instructions that the return fire of the guns was to depend upon his own orders. He had not ealeulated upon the intensity of the enemy bombardment, still less upon its depth. In the actions of the previous two years the Austrians had in the main confined their artillery activity to the Italian front lines. They had paid relatively little attention to counter-battery work, or to the disturbance of communications. Now, for the first time a really deep barrage was laid down upon the Italian positions, with the result that telephonie communications between forward observing posts and the guns, and between the guns and the central command, were almost entirely put out of gear. The thick mist made matters worse. If the battery officers had seen clearly how matters were going they would doubtless have accepted the responsibility of aeting without orders. it was they only caught glimpses of the struggle in tront of them. Often they knew nothing till the enemy infantry was elose upon them.

communiqués. While the fire was continued

in certain sectors there was ealm in others.

It would be difficult to over-estimate the effect of the silence of the guns upon the infantry in the trenehes. Their trial had already been severe enough. The Fourth Corps had not taken part in any of the great battles of the previous two years. They had never experienced a really intense bombardment, and now they had been subjected to the heaviest fire yet seen on the Italian Front, and to the torture of gas, both asphyxiating and "mustard." They had been surprised, some by the first rush of overwhelming columns, some by a sudden devastating outbreak of machine-guns from behind them. And the heartening sound of their own guns was absent. A great part of the Fourth Corps



GORGE OF THE ISONZO AT CAPORETTO.

was broken in pieces. Some of the fragments fought gallantly but hopelessly. Others surrendered. Others eame back in flight. Confusion was complete.

On the right of the Fourth Corps, where a part of the Seventh Corps was in line west of Tolmino (the rest of the Corps was in reserve), and farther south, where the Twenty-seventh Corps lay on both sides of the Isonzo from in front of Santa Lueia to the north of the Avseek valley, the enemy attack was no less skilfully conducted. Pushing up from the Tolmino bridgehead in the mist, the storming

columns went through the first lines, and at various points reached the Italian guns. The situation became very critical when the heights of Globocak (2,624 feet) were stormed by a German brigade. Not only was Globocak a very important gun-position. It lies directly above Kambresko, dominating the head of the



GENERAL OTTO VON BELOW.

Commanded the Fourteenth Army of mixed
Germans and Austrians at Caporetto.

Judrio valley and the roads which lead down to the Isonzo from Kambresko. It was all important that Globoeak should be retaken immediately, and the Fifth Brigado of Bersaglieri, which had been lying in reserve under a terrible rain of gas shells, was sent forward on the difficult task. This brigade, which had distinguished itself greatly in the advance upon the Bainsizza in Augusttogether with the First Bersaglieri Brigade ithad broken elcan through the Austrian lines on the rim of the Bainsizza at Fratta and Semmer, and had not paused till it reached the heights of Ossoinca-was splendidly successful. After a fierco struggle, in which the Germans who were earried back by the first irresistible rush of the Bersaglieri, counter-attacked several times with great determination, the position was retaken and firmly held, though the Germans still clung to a ridge near by on the left front. Farther north, too, they had gained a footing in the main defensive lines in

front of Tolmino, where the hills drop steeply at the head waters of the Judrio. This was the first time that the Bersaglieri met German troops, and it is interesting to record the opinion of their chaplain, a very gallant priest who had been with the Fifth Brigade in many fights against the Austrians. He said that the Germans fought with markedly greater fury than the Austrians, that their attacks wero driven home with tremendous forceuntil it became apparent that they were held. Once this was clear they desisted with startling suddenness, where the Austrian would have gone on fighting in his slower, dogged fashion. The Fifth were more than a match for their new adversarios, and they were splendidly led by their brigadier, Major-General Boriani, a lion of a man who could have few superiors as an inspiring commander of troops. He had done groat work before, and was to do great work again.

Globocak was saved with its guns, for the moment at least, and farther south the enemy drives did not meet with any such important successes as those gained between Plezzo and Tolmino. The Italian front line gave back, as had been ordered in case of attack, on to positions prepared in the rear. On the Kal plateau the right wing of the Twenty-seventh Corps replied vigorously to the Austrian attacks and took several hundred prisoners, while several hundred more were taken on the main Bainsizza plateau.

At evening on October 24 the position was roughly as follows. On the extreme left of the Italian Front the enemy drive was still held up at the Saga defile, and the Polounik ridge was still occupied by the defenders. But east of Krasji Vrh troops of the enemy Fourteenth Army, mixed German and Austrian under General Otto von Below, had broken through the Italian lines on the left bank of the Isonzo and driven straight at Caporetto, supported by another large force, belonging to the same army, which had broken through or turned the Italian positions on Mrzli and Vodil Vrh and pressed up the Isonzo valley, isolating the Alpini in the Monte Nero region, who had held firm under a remorseless bombardment and a strong infantry attack. On the right bank of the Isonzo, advancing famwise from the Tolmino bridgehead, other divisions of General von Below's Army had reached in several places the system of ridges that runs parallel with the river. Furious fighting was

still taking place at the hamlet of Luico, south-east of Caporetto, which changed hands eight times before its heroic defenders were finally overwhelmed, very few escaping. But between Luico and Globocak the main Italian reserve positions were already in the hands of the enemy, and between Luico and Caporetto another wedge was thrust deep into the line. Monte Matajur, on the old frontier line, still opposed a formidable natural barrier to an advance towards the Natisone valley, and though the defenders of Polounik were in a clearly untenable position, the long ridge that runs from Stol (5,467 feet, south-west of Saga) to Starijski Vrh (3,263 feet, north-west of Caporetto) offered an excellent defensive line for them to fall back upon across the river. South of Tolmino, east of the Isonzo, the right wing of the Italian Twenty-seventh Corps was coming back slowly, bringing its prisoners, and giving ample time for its guns to be removed to the right bank of the river, while a similar movement was taking place on the main Bainsizza plateau. The enemy artillery fire in this sector had been terrific-eye-witnesses described the whole plateau as being "morely a landscape of flashes"--but the steadiness of the troops was unshaken. On the morning of the 25th it was clear to the Italian High Command that a serious local defeat had been sustained, and it was obvious

that the recent gains on the Bainsizza would have to be surrendered, and a return made to a line more or less resembling that won in the May offensive, but including Monte Santo, which only fell to the Italians in August. The results of the fighting north of Tolmino had been very disappointing, but there seemed no reason to those at Udine to doubt that the gap in the line could be stopped and the enemy held up in front of the strong reserve positions which faced him.

From a distance the situation looked serious, but not at all desperate, and there was encouragement in the fact that the right of the Second Army and the whole of the Third Army had made the enemy pay very dearly for his vain attempts to break their lines.

But at that moment it was not possible to judge the situation from a distance. Details were not yet to hand, and until the illustrative details reached Headquarters it was difficult to believe that the situation could not speedily be repaired by the troops which were falling back from the lost positions and by the reserves which were being rapidly pushed up. The crisis came when the troops driven back from the Caporetto-Tolmino sector got out of control and in their disordered retreat along the deep, narrow mountain glens, overwhelmed and carried away with them the reserves who were



[From a German photograph.

being hastily dispatched to the line in small detachments.

The breach was made, and it widened rapidly owing to the failure of the reserves to arrive on the scene in time, and in good order. Those who came through the broken troops retiring from the front line lost order themselves, got out of touch with the commands, and could only put up a resistance in isolated handfuls. Many of them never reached the fighting line at all, for they became infected by the state of mind of those who were pouring back down the narrow mountain roads. Somehow the word was spread (probably by enemy troops disguised in Italian uniforms, for a number of these were eaught later and shot) that the war was over, and that there was nothing to do but "go home." It was a eurious ease of collective deception, spreading among weary, dispirited men, who were completely staggered by the crushing blow which had befallen them so unexpectedly. But it must be remembered that this initial failure in moral was confined to a small number of troops, relatively speaking. The talk of widespread treachery, or general panie, was quite unjustified, though it was natural enough at the time under the shock of disaster. A certain limited number of troops failed badly at the outset under a very heavy trial; the enemy made admirable use of the advantage thus gained, and in the confusion that followed other troops failed to find their true "form." The point will be taken up later. In the meantime it is best to pursue the narrative.

The breach widened. On the extreme left the enemy renewed their drive against the Saga defile, and the defenders of this sector, whose right was now completely in the air, were forced to fall back hastily. It should be said at once that all along the front of the Fourth Corps the enemy had a very great superiority in men and guns, for the Italian Command, prepared though it was for an attack between Plezzo and Tolmino, had not realized the possibility of such a concentration as did take place. The difficulties of communication and the rugged nature of the country seemed all against the employment of really large numbers of troops and guns. But these difficulties were triumphantly surmounted by the enemy.

The breach widened. For the troops on the left were becoming disorganized in their retreat by the continuous heavy pressure of superior forces. They were almost isolated, moreover, from their corps command, which had been carried back by the break in the centre, so that the telephone system, upon which co-ordination so largely depends, had practically broken down and the mist still shrouded the battlefield. On the previous day they had experienced the shock of defeat on their own front and had heard the rumour of great disaster on their right. Defeat still pursued them, and the extent of the disaster at Caporetto was now clearer.

The breach widened. For south of Tolmino the left of the Twenty-seventh Corps was all but gone, and the right of the corps across the river was falling into confusion. On their right again the troops on the Bainsizza, carrying out a hurried retirement which had never been contemplated, by an insufficient system of roads over broken and rugged country down into the gorge of the Isonzo, were finding retreat very difficult as their flank became exposed.

On the afternoon of October 25 General Capello, who had just resumed command of the Second Army after being on sick leave, and was still seriously unwell, so much so that he was told by the Chief Medical Officer of the Army that he could not "earry on," proposed to General Cadorna an immediate retreat to the line of the Tagliamento. The suggestion eame as a thunder-elap to the Commander-in-Chief, who had been confident that the suceesses of the enemy could very well be limited by the action of the reserves in the mountainous eountry west of Caporetto and Tolmino, where trenches were prepared, and where the enemy's advance would be very difficult. General Capello's argument was that the entire left wing of his army was practically broken, that depression and disorder were rapidly spreading, and that the only remedy was to bring back the bulk of the troops with all possible speed, leaving a rearguard screen of pieked units, so as to gain time and space for reorganization. General Cadorna was only half convinced. It was natural that he could not believe in the extent of the disaster, and when General Capello had handed over his command to General Montuori, who had been his substitute during his absence on sick leave, the Commander-in-Chief determined to make another effort to stem the enemy advance by the employment of further reserves. The effort failed. It was now, in fact, all but

impossible to place reserves on the scene of action. The roads were blocked by crowds of fugitives, troops, labour battalions, and the civilian population of the valleys down to Cividale. By the afternoon of October 26 the left of the Second Army had crumbled completely, and the enemy was coming down the valleys of the Natisone and the Judrio and their affluents, and was pushing westwards from Saga into Carnia. Gallant isolated detachments were still retarding the enemy advance. The Fifth Bersaglieri clung to Globocak till their retreat was almost cut off, and they turned at bay again farther south,

same move. It could only retire by the Upper Tagliamento, now not far from the enemy force that had broken through by Saga, or into the zone of the Fourth Army, the wild, mountainous districts of Cadore and the Ampezzano. A general retreat was ordered on the evening of October 26.

It now seemed, moreover, as though the Tagliamento would no longer serve as a line upon which to stand. The fact that five of the eight army corps which made up the Second Army were either already disintegrated or seemingly in process of disintegration. coupled with the actual loss of many guns and



[Italian official photograph.

LUICO.

and backed by a group of six-inch howitzers, held up the Austrian troops coming down the Judrio for another precious half day. And there were other similar instances that lightened the gathering gloom

The Second, Sixth, and Eighth Corps, again, from the Kuk-Monte Santo region to the Vippaceo stream, were holding firmly, and the Third Army on the Carso had smashed up the Austrian attack in a manner worthy of their splendid record. But in the north the line was gone, and the cnamy was coming swiftly down upon the plain, threatening the communications of the whole Isonzo front. The Carnia force, too, was menaced by the

the probable loss of many more, appeared to impose a retreat to a shorter line. General Cadorna at once decided for the Piave. Though it implied the abandonment of Cadore and the eastern Venetian plain as well as Friuli, he estimated that he would not have sufficient troops and guns available to hold the longer line of the Tagliamento, and accepted the greater immediate sacrifice in order to lessen the danger of a greater eventual disaster. He resolved to "count out" the greater part of the Second Army for the time being, and fall back to a line that could be held by the Third and Fourth till the broken troops could be reorganized, and help could come from France and England.



The decision did not immediately commend itself to all concerned. General di Robilant, who commanded the Fourth Army, begged to be allowed to hold on in Cadore, and promised that he could maintain an independent resistance for three months, without supplies of either food or ammunition. There was a feeling, too, at the headquarters of the Third Army, which was commanded by the Duke of Aosta, that the position might be saved by a shorter retreat on their part, or even hy a swinging back of the line, with Monfalcone as a pivot. It is probable that General di Robilant could have held out very well in

Cadore for the period indicated. It is probable that the Third Army, together with the right wing of the Second, would have given a very good account of itself in the Udine plain, but the question was what would happen in between, if the Second Army should fail to rally under the pressure of the enemy? By Saturday, October 27, the whole line was in full retreat.

The position was critical indeed, for the crumbling of the line between Plezzo and Tolmino had opened a gate to the plains that lct in the enemy far to the west of the Italian troops botween Gorizia and the sea. The right of the Second Army and the whole of the Third Army would have to retire along a eomparatively narrow stretch of plain, not only pressed from behind but menaced on their flank and threatened by a dash which might reach the head of the retreating columns. The utmost speed was imperative, speed which it seemed almost impossible to attain. Without notice, and in a few days, a great army had to be snatched back through a quickly narrowing stretch of country, a task which would have ordinarily required some weeks of preparation and at the very least a fortnight for its accomplishment. Nor was this tho worst. The broken mass formed by the bulk of the Second Army and a huge crowd of eivilians, the unbroken Sixth and Eighth Corps (the Second Corps had its line of retreat blocked by the throng coming down from the north, and had to get back as best it could, no longer as a unit), and the whole of the Third Army, hampered by the eivilians of the coastal section of the plain, had to converge upon the only three permanent bridges that crossed the Lower Tagliamento, now swollen with the autumn rains. It was not to be expected that the great retreat eould be accomplished without further serious loss.

Troops of the Sixth and Eighth Corps fought gallant rearguard actions on the right bank of the Isonzo, and on the Torre, east of Udine, and so gave time for the retirement of the Third Army to develop without immediate danger from the north. On the Carso the units detailed to cover the retreat did splendid work, repulsing time after time the efforts of the enemy to eome up from the Vallone, secure San Michele and the low ridges running down to the sea, and descond upon the plain before the bulk of the Third



[French official photograph.

GENERAL DI ROBILANT Commanded the Italian Fourth Army.

Army could be got under way. Here, among . others, the Grenadiers added further to their wonderful record. From the beginning of the war the Southern Carso had been their special battlefield. Many times they had won bright laurels in offensive action or in resisting fierce counter-attacks by the enemy. Now they were faced by a harder task than they had ever known. They had to fight rearguard actions most of the way back from the scene of their former victories to the west bank of the Piave, a distance of some 60 miles. Their work in the crushing conditions of disaster was worthy of their victorious assaults. No greater praise can be given. And the comrades who were at their side in this heartbreaking duty deserved no less of their country and their country's Allies. The retreat of the Third Army, in spite of the confusion which was unavoidable, was a wonderful feat. The tribute of their leader, the Duke of Aosta, may be quoted as evidence of the men's behaviour. The Duke declared that he would "bow in salute to the humblest of his soldiers," such was his admiration of their courage. And the staff work must have been worthy of the men. Of course there was confusion and disorder. Of course there was immense less

of material, some proportion of which might conceivably have been saved if no mistakes had been made. The amazing fact remains that practically all the Army and nearly all the guns were safely removed. Some heavy guns had to be blown up in their positions on the Carso. Others, which by incredible efforts had been manhandled as far as railhead, had to be destroyed eventually owing to the impossibility of bringing them along the blocked lines or the blocked roads. But nearly all were placed in safety-by what immense, relentless toil only those who took part in the retreat, or in a similar retreat, can estimate. To retire in good order was difficult in the extreme, owing to the throng of civilian fugitives on the roads, and the fact that literally all arrangements had to be improvised. There was, moreover, some lack of motor transport. The Italian system, which, owing to its efficiency and economy, had evoked the admiration of the British military authorities who visited the Front a few weeks previously, was not well adapted for this sudden movement. For lorries were net allotted permanently to divisions, but to corps and army commands, being distributed as they were required. This system, which was economical and satisfactory



in ordinary conditions, was obviously not well suited to the desperate emergency of the moment. Yet the work of getting back tho guns and men was accomplished somehow—almost miraculously. And that much of it was done in perfect order is witnessed by the British Red Cross units with the Thirteenth Corps. These testified that they, and the Corps to which they were attached, came back punctually to time-table. Their halting places were timed and fixed, and the orders for the next move were always ready for them, and were always duly carried out. Stage by stage the retreat was accurately performed.

Farther north the task was still more difficult, owing to the greater throngs on the roads and tho threatened pressure of the enemy on the right of the retreat. The crowds of fugitives began to trend south as well as west as the pursuing Austrians and Germans came down upon the plains. The Eleventh Corps, which had held the northern sector of the Carso, had a specially hard time, and confusion was suddenly increased as they drew near the Tagliamento. For a tragic blunder had taken place at the great bridge that lies nearly due west of Udine.

The retirement of the troops along the northern part of the Friulian plain was much more complicated than that of the Third Army. The enemy came down very quickly upon the flank from the hills, driving before them masses of civilians and broken troops; and very seriously hampering the retreat of the right wing of the Second Army. A patrol actually reached Udine about mid-day on October 28, but was sent packing by the small Italian rearguard still left in the town. By that evening, however, Udine was in the hands of the enemy, who fired on the last train as it left the station. Troops were coming down from the north in force, and it was clear that they would aim at cutting off the retreating Italians at the river. The great bridge near Casarsa, the Ponte della Delizia, was mined in several places, to be blown up when the enemy should succeed in overcoming the Italian rearguard and solidly occupying the left bank of the river. It was blown up too soon. A daring body of enemy machine-gun cyclists pushed down from the north and gave rise to the alarm that the Austrians were coming in force. The officer in charge of the bridge accepted the rumour and blew up one arch of the bridge, leaving on the left bank

of the mile-wide flooded river a very large number of troops and a train of guns that extended along the main road for several miles.

The error inevitably had the most serious results. To a number of the weary, dishoartened troops, who were plodding slowly to their goal, without food and almost without ammunition, the sudden cutting off of their retreat was the last straw. As the enemy came up in greater force they surrendered. Many others pushed southward towards the Latisana bridges, where the Third Army was crossing, and increased the press and confusion there. Of these a considerable proportion, helpless for lack of food and ammunition, were eventually surrounded and captured. Many others attempted to ford the river, which was now falling rapidly, and of these a great number succeeded in reaching the other side. Among them was the bulk of the Sassari Brigade, a magnificent Sardinian unit which had done splendid work many times during the days of victory, and now proved itself under a very different trial. The brigadier* formed a small rearguard and held off the enemy while the greater number of his men succeeded in crossing the river in boats, and by the help of ropes. The rapid fall of the flood water made this possible, as the river was now approaching its normal state—a wide expanse of gravel intersected by various comparatively narrow channels

The loss of men was very serious, but the less of guns was still more important. By a wonderful effort of will and endurance Major-General Baistrocchi had succeeded in bringing back forty-six heavy batteries all the way from the Bainsizza plateau. Down the 2,000 feet fall to the Isonzo, up 2,000 feet again to the ridges east of the Judrio, down again 2,000 feet to the valley, and thence by 30 miles of thronged road along the plain to the Tagliamento, his indomitable men, inspired by their indomitable leader, had brought their guns to the verge of safety, only to find the way of retreat destroyed before them. These guns and others had to be abandoned after being rendered useless, for the roads to the south were packed with fugitives, strong forces of the enemy were now close at hand, and the infantry who might have held them off had no more ammunition.

^{*} This officer, General Tallarigo, was eventually wounded and taken prisoner, but he had saved the bulk of his brigade.

The retreat went on, but for many retreat was no longer possible.

The fall of the Tagliamento, which allowed many Italians to escape who would otherwise have been cut off, was of equal advantage to the enemy. It had been hoped that the floods would hold up the enemy to the north, where the river emerges into the plain, and a small picked force under General di Giorgio had been sent to defend this important point.



GENERAL DI GIORGIO, Commanded an Italian Force on the Tagliamento.

But, when the flood waters subsided, this force was not of sufficient strength to do more than delay the hostile advance. The first attempt of Austrian troops to secure a footing on the right bank of the river was a complete failure. They were driven back with heavy loss, near Pinzano. But the movement was only retarded. Under pressure of superior numbers, General di Giorgio's force had to fall back, fighting steadily. Although they had to retreat, they rendered splendid service by covering the line to the south from further flank attacks.

Meanwhile other covering troops east of the Tagliamento were winning a great renown by their heroic sacrifice. The Italian cavalry, which had been chafing under its long inaction, now took the chance offered by disaster. Greatly reduced in strength by the drafting of volunteers to other arms of the Service, with horses badly out of condition owing to shortage of proper fodder, the cavalry divisions of the Second and Third Armies did their work skilfully and gave their lives cheerfully. Among them the Genoa and Novara regiments may be singled out for special mention. They fought

with their machine-guns till their ammunition failed, and then eharged to death—a high example which had its effect. Of the Genoa Regiment less than the strength of a squadron cut its way through to the Tagliamento after holding up the enemy for a time that gave precious breathing space to the infantry at the river. The services and the losses of the Novara Regiment were not less great. Others who distinguished themselves among the covering troops were the Fourth Brigade of Bersaglieri and the motor-ears, equipped with machine-guns, which operated with the eavalry under the command of the Count of Turin.

By November 1 the Italian forces were west of the Tagliamento, and the retreat slowed down. There was no intention, for reasons which have already been explained, to make a long stand on the river positions. All that was hoped was to hold out for a time sufficient to allow of preparation and reorganization on the Piave line. Owing to the rapid fall of the flood waters the Tagliamento proved little of an obstaele, and its crossing by the enemy at Pinzano, on November 4, once more restored to the enemy his opportunity of hampering the retreat, or cutting off the stubborn rearguards by a downward thrust upon the Italian left. By November 5 Austrian patrols were reported in the foothills near Maniago, 12 miles west of the Tagliamento. The time given for reorganization and for putting the Piave line in a state of defence was little enough. But already the men who had come back in crowds were being marshalled in their units, and the task was going more quickly than had been anticipated. Six eorps of the Second Army had been broken in pieces, by far the greater number having lost order owing to the immense difficulties of the retreat, and not through panie or weakness in face of the enemy. It is essential to repeat and insist upon this point, for the impression prevailed widely at the time, and still persists in many quarters, that the failure in moral stigmatized in General Cadorna's communiqué of October 28 was not confined to a single sector, but ran through the greater part of the Second Army. The communiqué in question, as published in the press, ran as follows: "A violent attack and the feeble resistance of detachments of the Second Army permitted Austro-German forces to pierce our left wing on the Julian front. The valiant efforts of other troops were not successful in preventing

the enemy from penetrating into the sacred soil of our Fatherland.... The bravery displayed by our soldiers in so many memorable battles fought and won in the past two and a half years gives our Supreme Command a pledge that this time, too, the Army, to which the honour and safety of the country are entrusted, will know how to fulfil its duty."

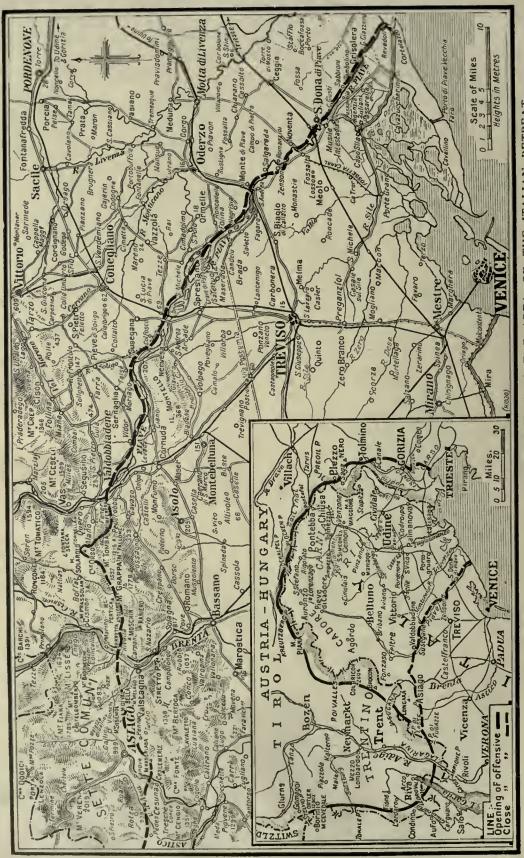
This was the published version, but the original wording was much more condennatory. And the unrevised version obtained wide currency, especially in the Allied countries. General Cadorna's object was clear enough. He wished to arouse the Army and the country to a sense of the extremely grave situation, and he wished to underline the fact that insidious propaganda had been at work among his troops. He trusted in the generous understanding of Italy's Allies, and, on the whole, it may be said that his trust was not misplaced. But his words did give a wrong impression, and led to the very common belief that the whole Second Army had failed in its duty. Some hasty critics even assumed that the - failure was more widely extended, and involved the whole Italian Army. Perhaps the conclusion was natural. The simple candour of his announcement has had no parallel in the course of the war, and as a result it was assumed that if he told this much there was far more that he withheld. Regretfully it must be admitted that his open admission was a mistake, in so far at least as the effect upon Allied opinion was concerned. In Italy, probably, the result

was good on the whole. The Army and the country were stung to a magnificent effort. No one who lived through those days, on the front or in the country, will forget the great response that was given to the test imposed. By the early days of November, when the bulk of the armies were safely west of the Tagliamento and retreating slowly to the Piave, the tide of disaster had already turned, though there were long days still of cruel anxiety and bitter sacrifice.

The losses in men and material were enormous. There is as yet no published estimate of killed and wounded, or of the stores which had to be abandoned. But more than 200,000 prisoners fell into enemy hands, and more than 2,000 guns. In regard to the prisoners, it should be said that a very large proportion consisted of non-combatant troops, chiefly labour battalions, who had been engaged in hurrying on the construction of new roads, hutments, and water-supply, which was rendered necessary by the advance upon the Bainsizza. But the number of combatants captured was very large, and very many more, who had become "disbanded," could not be reckoned upon for weeks to come. The loss of guns, stores, and equipment was no less serious, perhaps even more serious. It has been said several times in this History that Italy's weakness in guns had always been a gravo handicap to her efforts, and now she suffered a loss which seemed to render her condition desperate. Two-thirds of the guns abandoned



HAULING AN ITALIAN SIEGE GUN.



THE LIMIT OF THE AUSTRIAN ADVANCE AND (inset) THE AREA OF THE ITALIAN RETREAT.

had been rendered useless, but the others remained to be turned against her, and increase her inferiority still further. For lack of the abandoned stores and equipment her men had to go cold and hungry and short of the necessary means of defence throughout a long and critical period. Relatively little of what was destructible fell into the hands of the enemy. The work of demolition accomplished by the retiring armies was extraordinary, and furnishes another proof of the manner in which the greater part of the retreat was handled. Under the remorseless pressure of inevitable haste everything unessential in the way of orders

the heart-breaking experience of the long retreat, which had worn out their bodies as well as clouding their hearts? And if their resistance did not falter, were their numbers, and their means of defence, sufficient to cope with the oneoming enemy, inspired by successes far greater than he had dreamed? A pause would be granted, for the task of the invaders was difficult enough. If the Italians had not prepared for a retreat, the Austrians and Germans had not prepared for such a great advance. But would the pause be long enough to give adequate breathing-space to the weary men, and to provide guns and shells



NETS ACROSS THE BRENTA.

[Italian official photograph.

had to be omitted, but two clear facts stand out to the credit of many sorely-tried commands—that the bulk of the troops were snatched back into safety, and that the spoil left to the enemy was infinitely less than could have been expected in the circumstances.

For a long week the picture was one of deepest gloom, lit only by flashes of heroism. The steadily-burning flame of unwearying effort and unbroken resolution could not be seen lt was veiled from men's eyes by the gross darkness of losses suffered, and by the vast shadow of still greater disaster that threatened to follow. Would the troops "come again" after the bewildering shock of defeat, and

and wire? With all good will, could they resist?

These were the questions that knocked at the hearts of those who were aware of the situation. It seemed very doubtful whether the Piave line, and its continuation to the Brenta, where it joined the front of the First Army, could be held successfully against the drives which were sure to come when the enemy had marshalled his forces and brought up his guns to the new front. But the tide was turning. The rearguard forces continued their delaying actions with success, the Third Army was eoming back in satisfactory order, in good spirits, cager to fight again, and many

units of the Second Army were being rapidly "sorted out" and re-formed. And the Fourth Army was earrying out a wonderful retreat from its mountain fastnesses in Cadore. A glanee at the map gives an indication of the difficulties and dangers of its task. But no one who does not know the positions its soldiers left and the region they traversed ean form a just idea of their magnificent work. Their evacuation of Cadore must be taken in the most literal sense of the word, for they removed everything that was removable and destroyed the rest. More important than all else they brought away all their guns except a few old howitzers and mortars, which they destroyed, and they saved a great quantity of ammunition. Counting from the day their retreat began they had a longer way to go than the Germans and Austrians who were coming from east to west and threatening to cut them off. And there was pressure from the north to contend against as well. They were harassed along much of the way, but the covering troops did · splendid service in the mountains they knew so well. The Carnia force, a great part of which was surrounded in the ond, had fought many hopeless isolated actions in the savage regions through which they had to attempt a retirement, and the stubborn resistance of these troops, condemned almost inevitably to capture or death, delayed the pursuing enemy in his attempt to cut off the retreat of the Fourth Army, A number of these men, when the way of escape was barred, took to the hills, and handfuls of them sometimes found their way to safety, through the enemy lines, during the months that followed. The most remarkable instance, however, is that of a considerable body of men, some 1,400 in all, who, under the eommand of a Captain Arduino, maintained themselves in the Cadore mountains for a whole year, continually harassing the enemy communications. There was no adequate record of the lonely fights that took place in the Alps of Carnia and Cadore. Only a stray word brought by a straggler or a returned prisoner gave a glimpse. And aeroplanes that flew over the invaded territory sometimes brought news of a little, hopeless combat far in the rear of the enemy lines. Of these the most moving was the last news that eame of the Alpini on Monte Nero, who had been eut off on October 24 by the first onrush of the enemy. Eleven days later, when the invaders were on the point of crossing the Taglianiento, 50 miles away, Italian airmen reported that fighting on Monte Nero still went on. The food of the defenders must have been exhausted long sinee, for they had only a few days' supply, but while they could lift their rifles and work their machine-guns, they would not yield. This was the latest tidings of those men, who, beyond all succour, endured to the end. Then silence fell. But their example set many a heart on fire. They touched the highest-effort without hope. Some day perhaps a cairn shall rise to mark their last heroism. Meanwhile let such as hear their story hold them in reverent memory. For they knew despair, and seorned it.

Slowly the picture lightened. Italy's Allies had taken the speediest action, and at the earliest possible moment British and French reinforcements were dispatched to strengthen the greatly weakened armies of General Cadorna. And disaster was bringing, at last, eloser ecoperation between the Western Allies. Generals Foeh and Sir William Robertson arrived in Italy, and went to the Front at the end of October, and on November 4 Mr. Lloyd George, General Smuts, General Sir Henry Wilson, M. Painlevé and M. Franklin Bouillon arrived at Rapallo. They were met there by Generals Foch and Robertson, Signor Orlando, Baron Sonnino, General Alfieri, Italian Minister of War, General Porro, Sub-Chief of the General Staff, and M. Barrère, French Ambassador in Rome. From the discussions which took place during the next few days were born the Supreme Council of the Allies' whele forces in the West, which was to meet at Versailles, if possible onee a month, and the Versailles Military Council, which was to sit permanently. Here was a great step in advance, which at the time seemed to suffice, until further disaster in another field showed that still closer cooperation in military matters was essential to success. As a result of the discussions at Rapallo, General Cadorna was appointed Italian representative at the Versailles Military Council. General Diaz, the commander of the Twenty-Third Army Corps, succeeded him as Commander-in-Chief. General Porro relieved of his post as Sub-Chief of the Staff, and his functions were divided between General Giardino, late Minister of War, and General Badoglio, the commander of the Twenty-Seventh Corps. The three men who now took over the chargo of the Italian armies were all comparatively young. General Diaz was not

yet 56, and had begun the war as a junior major-general. General Giardino was 53, and had been a colonel in May, 1915. General Badoglio was only 46, and he had been promoted to lieutenant-colonel only three months before Italy entered the war. The appointment of younger men gave general satisfaction in Italy, where it had long been urged that the respect due to years was dangerously exaggerated, both in political and military life.

The new High Command took over its duties at a most critical moment. Allied reinforcements were on the way—some had already reached Italy—but it was obvious that

its mouth. The bridges were successfully blown up.

The Italian line now followed the Piave up from the sea to where it eomes westward from Cadore, at a point near Monte Tomatico (5,220 feet). Thence it ran westwards through wild mountains and across the Val Cismon to the Brenta valley, where it joined the old line of the First Army. But between the Brenta and the Piave this line was, inevitably, only provisional. The Fourth Army had never been rich in guns, and most of its units had been allowed to fall much below strength in order that the Second and Third Armies, which had suffered so heavily during the summer



M. Painlevé. Mr. Lloyd George. M. Barthou, General Smuts.
BRITISH AND FRENCH MINISTERS LEAVE PARIS FOR ITALY.

heavy blows would come long before they could come into action, that the duty of stopping the enemy would fall upon the weary and disheartened soldiers of Italy. By the end of the first week in November the bulk of the Italian armies were across the Piave, and the troops detailed to hold the western bank were aligned in their positions. Gallant reargnard actions were still taking place east of the river, allowing precious time for rest and organization. By November 8 the bulk of the Fourth Army had sueceeded in filling the gap between the First and Third, which had taken over two corps of the Second. On November 9 and 10 the eovering troops and rearguards fought off the enemy for the last time, disengaged themselves and eame aeross the river, from where it leaves the mountains down to

should be amply supplied with drafts. still shorter line was necessary if it was to be firmly held, and time was essential to the preparation of positions. The forward line first oeeupied was little suited to defence, open as it was to pressure both from north and east. It was, moreover, very poorly supplied with communications, while, on his side, the enemy had excellent main roads. It was elear that between Monte Tomatico and the Brenta only delaying actions could be fought. Further retreat had this advantage, too, that the enemy would find it more difficult to push home a heavy attack from the north, through the tangle of rugged mountains between the two rivers. As the Italians fell back their communications would improve, while those of the invaders would become more



GENERAL DIAZ

Commander-in-Chief of the Italian Armies,
November 1917.

complicated. On the other hand, a retreat which had this advantage, and lessened the danger from the east, gave too little depth to the mountain positions. The experience of every big offensive had shown that ground could readily be gained at the outset. But the distance to the plain was not great, and the hills fall very abruptly at the last down to the wide valley that runs from Possagno to the Piave and the flat country between Asolo and Bassano.

There was little respite granted for the preparation of a defensive line. The bulk of the Fourth Army went into position on November 8, and two days later the enemy engaged in his first tentative action on the Middle Piave. This was merely a feeler, as were various

skirmishes along the lower reaches of the river. The first important renewal of the offensive eame farther west, in the Asiagouplands. It soon became evident that the enemy would endeavour to repeat the mananivre which had served so well between Plezzo and Tolmino. His object was not to push directly from the east, but to drive down from the north and turn the new line. The Italians had already withdrawn from the farthest points reached in their counter-offensive of June, 1916, and it was obvious that under strong pressure they would have to withdraw farther still. Asiago lies in a wide basin, commanded from all sides, and the Austrians looked down upon it from north and west. The defensive line was necessarily the high ground south and east of the basin. Asiago and Gallio (abouttwo miles north-cast of Asiago) fell into enemy hands after a stubborn resistance, and though they were retaken by a brilliant counter-attack by detachments from the Pisa and Toseana Brigades and the Fifth Bersaglieri, Asiago was abandoned the following day. The enemy were in force and it was clearly necessary to take up strong defensive positions. On the night of November 11-12 the attack was extended against the Italian line running north of Gallio by Monte Longara to Monte Meletta di Gallio. The first attack failed, and a second was broken up by artillery fire before it developed, but during the following night the Italians on Monte Longara withdrew undisturbed to the eastward of the Valle di Campomulo, their line now running from Monte Sisemol, southeast of Gallio, across the Valle dei Ronchi to Monte Meletta di Gallio. Monte Meletta di Gallio was subsequently abandoned, so that the line went from Cima Meletta Davanti to Monte Fior, Monte Castelgomberto, and Monto Lisser. But Monte Lisser also was to be left behind. The advance of the Austrians down the Brenta valley, and the certainty that the final line between the Brenta and the Piave would have to be drawn well to the south, counselled evacuation. And retirement shortened the line-a necessary measure, for there was still a relative weakness in men and guns.

On November 12 the enemy succeeded in crossing the Lower Piave at Zenson, some 17 miles from the mouth of the river, and in establishing a small bridgehead in the loop formed by its curve. They were immediately counter-attacked and held up against the bank. On the following day attempts to cross between

Quero and Fener, a little above where the Piave reaches the plain, and at San Donà and Intestadura were repulsed with serious loss. Another attempt to cross higher up was stopped on the island known as Gravo di Papodopoli, where fieree fighting took place, and the troops in the Zenson loop, although they still elung to the west bank, were heavily punished by Italian counter-attacks. Near the mouth of the river Hungarian troops succeeded in penetrating some way into the marshes between the New and the Old Piave, but their advance was quickly contained. During the next few days there were several determined attempts against the river line held by tho Third Army, which was now faced by two entiro Austrian armies. At various points enemy forces succeeded in reaching the right bank under cover of the heavy November mists, but they could make no permanent impression on the defence. On November 16 an attack in force failed completely. The enemy erossed at various points above the railway bridge east of Treviso, but after stiff fighting the attacking forces were completely repulsed, after losing some 1,500 killed and the same number of prisoners. The troops of the Third Army were showing all their old qualities. untarnished by the long trial of retreat and exhaustion. It was a blow for the enemy to find that the spirit and skill of the defenders were unimpaired, and for the time his frontal attacks on the Lower Piave were relinquished. His principal effort in fact was developing in the north, along the mountain line from the Sette Comuni to the Middle Piave.

During a long fortnight the balance swayed uncortain in a desperate struggle. after a year it is impossible for an eye-witness to reeall without emotion the heroic efforts of these days when upon successful resistance there hung not only the fate of some of Italy's fairest lands and cities, but the whole question of her ability to continuo playing a principal part in the world-war. Further defeat would . not have forced hor to submission—the spirit of her people and her rulers was firm and high. But further defeat would have so weakened her military strength that the cause of the Allies would have been very gravely prejudiced. The following spring was to earry the Germans near to a erushing victory upon the French Front. If the Italian armies had been broken in November, so that Austria could have helped her Ally on a large seale in March, the

eourse of the 1918 eampaigns would ecrtainly have been changed, either in the east or in the west, perhaps in both.

Serious pressure on the mountain line began · on the night of November 13-14, when the enomy attacked from Monte Sisemol to Meletta Davanti, but on the following day the action developed more to the north, extending as far as Monte Castelgomberto. The attacks were repulsed with serious loss, but this was only the first of a long series of efforts to reach the Val Frenzela, which leads down to the Brenta valley and reaches it at Valstagna, only seven miles from the plain. Attacks between Frisoni (due east of Castelgomberto) and Cismon in the Brenta valley were broken up by artillery fire, but farther east, between the Brenta and the Piave, the Italians began to fall back towards the lines they had chosen for a definite The first of their forward positions to be given up was Monte Tomatico. The

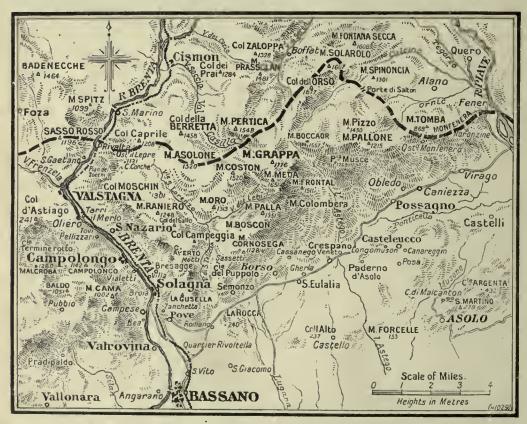


GENERAL GIARDINO,
Sub-Chief of the Staff to General Diaz, and
formerly War Minister.

enemy was beginning to push hard on the Middle Piave, near Quero, some few miles down the rivor from Monto Tomatico, and the danger of encirclement was too great. The oxtreme left of the Fourth Army hung on a day longer, throwing back the enemy from Monte Roneone, but on November 15 a withdrawal was effected to Monte Prassolan. The whole from was now on fire for a distance of 20 miles, from east of Asiago to the Piave, and for a fortnight the enemy strove in vain to find a way through the Italian defence. Ho hammered with furious persistence, first at one sector, then another, with never a pause of

any length between his strokes. Here and there the line bent, as men fell thickly under the storm of shell and in hand-to-hand fights against superior numbers. But the soldiers of Italy never flinched, and they took great toll of the attacking divisions, which had to pay very dearly for every yard they gained. Fighting was general all along the line, but at two sectors in particular the enemy launched continued attacks which were even flereer than elsewhere. These were at the extreme right and left (looking south) of the battle—against Meletta Davanti and the positions near by, and in the triangle Monte Tomba-Monte

Though the defending troops were heavily outnumbered, and worn out by continuous service in the line for weeks, they broke up every attack that was thrown against them. The Austrian forces increased continually as they were joined by troops of the Isonzo and Carso Armies, and when a division was exhausted by its vain efforts to loosen the Italian hold there was always another to take its place. For the defenders there were practically no reliefs. The same men, who were weary when the fight started, held on unshaken through the long trial. One of the Italian divisions had been given to General Boriani, late com-



THE ITALIAN FRONT BETWEEN THE BRENTA AND PIAVE.

Monfenera Monte Cornella, where mixed German and Austrian forces strove in vain to smash the hinge of the Italian line where it left the Piave and bent westward into the mountains.

For 10 days the enemy never relaxed his efforts in the Melctta-Castelgomberto region. The Italian line in this sector now formed a salient—Meletta-Fior-Castelgomberto-Tondare-car-Badenecehe, and thence south-east to the Brenta—for the Austrians had pushed forward down the valley till they were held up in the narrow glen near the village of San Marino,

mander of the Fifth Bersaglieri Brigade, and his inspiring influence helped to hold his men firm under the relentless pressure of the enemy. But most of all it was their own enduring hearts that made them stand the incredible strain. In the bitter cold they fought and slept and fought again, unwearyingly, uncomplainingly. It was their duty to gain time for the preparation of a new line farther back, and they did their duty, to their own great honour and that of their country. In vain the enemy waves dashed up and round the mountain salient. It held unbroken.

In the other critical sector the struggle was no less furious. On November 15 the enemy made a determined attempt to seize Monte Cornella (2,180 ft.), the ridge which runs northwestwards immediately above Quero. This was the first heavy blow against the Ninth Italian Corps, which held the hinge from west of Quero to below Cornuda, on the Piave, just above the Montello, which was occupied by the Eighth Corps of the Third Army (late Second Army), and for a week there was no respite for the defenders. Throughout the afternoon of November 15 and all through the next day, the Como Brigade maintained its hold, beating off eight separate attacks. But attacks to the west and south made the Cornella position untenable, and after a rest the Como Brigade was withdrawn slightly to the west. On the evening of November 17 strong enemy forces moved against the Monte Tomba-Monfenera positions, south of Quero, and a desperate struggle followed, which lasted for five days. At the same time pressure was renewed from the north, against the line running west of Monte Cornella to Monte Fontana Secea, and here also the enemy were in great force.

The attack in the south began on the evening of November 17 with an attempt to push through between the end of the Monfenera ridge and the river, and so turn the position. It failed, but during the night the enemy launched four separate attacks against the northern slopes of the ridge from the direction of Quero. These, too, failed, but the enemy persisted, and on the morning of November 18, after a short but violent artillery preparation, he attacked along the whole line from Monte Tomba to the river, and succeeded temporarily in gaining a footing on the ridge.

The story of the next five days is one of continual attack and counter-attack. Again and again the enemy gained the ridge at various points, only to be driven back. The fighting on November 20 was especially desperate. Hitherto the main attacks had been conducted by the Austrians, and the 55th Division, of 16 battalions, several of which were Bosnians, had shown the most obstinate courage. But on November 20 a German Jäger division, which included two battalions of Gardejäger, was sent in to drive the Italians from their last mountain line. The result was the same. The Germans, by splendid fighting, gained a footing on the crest, only to be driven off by a magnificent counter-attack which resulted in a number of German prisoners being taken. But once more the Italians were forced to retire below the crest towards the river. where a devastating artillery fire from the farther bank took them in the flank. One gallant group, however, held out on an advanced spur, where they could obtain some



AUSTRIAN BRIDGE ON THE OLD PIAVE.



[Italian official photograph.

PREPARATIONS FOR BARRICADING THE ROAD IN THE VAL SUGANA.

shelter, and by obstinate machine-gun fire prevented the enemy from making further progress. The crest remained, practically speaking, a no man's land. Patrols of both sides hung on here and there, watching each other and the main forces below.

November 21 was a relatively quiet day. The Italians pushed forward their line in the morning, and broke up an enemy movement by artillery fire. But on the following morning the enemy made another determined attempt to break through to the plain. This was, in faet, the critical moment, and whether the enemy realized it or not, he made a great effort, with fresh troops. The writer will always remember this day. He reached the Front a little after two o'clock in the afternoon, and found that once more the enemy had occupied a good part of the crest. The Italians were hanging on grinnly a little way down the southern slopes, and the artillery fire of both sides was intense. In every way the advantage seemed to lie with the enemy. The Italians were outgunned, and there were no reserves. During the last week the losses had been very heavy indeed, and the line was terribly thin. Unless reinforcements came it seemed impossible that resistance could continue more than a day or two. A reserve line had been dug across the Possagno valley to the hills north of Asolo, but there was no wire. Two factors lightened the gloom—one moral, one material. The spirit of the troops and of the commands was splendidly resolute, and the forward position mentioned above still held out, a thorn in the side of the enemy.

The afternoon wore on, and it became clear that for the moment the enemy effort was exhausted. There was breathing space, but a continuance of the attacks and the losses could have only one result. The strung-out line would break at last when there were too few men to hold it. A day or two more, perhaps, the dwindling numbers would suffice.

Towards four o'clock a telephone message came from the Fourth Army Headquarters announcing that a reconstituted brigade from the Second Army was being sent up with all speed. And later came the news of another brigade on the way. The general commanding the Ninth Corps, General Ruggieri Laderchi, did not wait for his reinforcements. The same evening he counter-attacked once more with his battle-worn troops, and drove the enemy off the ridge, except at one point only, where a gallant handful of men still clung to a knob of hill that had been turned into a machinegun redoubt. A few hours later the reserves arrived and the line was established.

Two days later, when the writer eame again

to this sector, the immediate danger had visibly passed. The enemy divisions had been broken by their great effort. Their losses had been enormous—the northern slopes and the erest were thick with their dead. Fresh Italian troops had gone into line, and more guns had come up. It was on this day that the remnants of the Calabria Brigade, which had faced some of the heaviest enemy onslaughts and had taken a great part in the final, successful counter-attack, came down to rest and reform. Out of the three battalions of one of its regiments there remained just over 400 men, and the other regiment had more than 50 per cent-of easualties. The survivors were completely

the eall to attack, and crowned their efforts with victory.

This was one brigade, but there were others which bear comparison both for heroism and sacrifice that were not vain. The days passed, and the enemy did not again succeed in seriously troubling the defence, though on November 25 he made one more effort to come up the eastern slopes of Monfenera from the river. This was a complete failure, and an Italian Alpine battalion took a number of prisoners in a brilliant counter-attack. Thereafter in this sector the battle died down.

Meanwhile there had been heavy fighting to the north and west, and the enemy had



[From a German photograph.

AUSTRO-HUNGARIAN CAMP BETWEEN THE BRENTA AND THE PIAVE.

worn out, red-eyed, and stumbling as they marched. But they knew what they had done and they were proud of it. Think what they had done. For 12 days they had marehod with all their impedimenta, down from the inountains they had held inviolate. Then they had turned and fought, at once, on a new, unprepared line. They had slept in the open, with only one blanket apiece. The rain had beaten on them and the frosts had chilled them. When they were not fighting they were digging, and hot food reached them once a day at most. But they never flinched. And at the end of the long strugglo that had so fearfully thinned their ranks they answered once more

gained some ground. It was on November 21 that he made his first serious push against the Italian line from Monte Fontana Secea (west of Quero) to Monte Spinoneia, about a mile in a south-easterly direction. The Italian line now formed a pronounced salient, with Monte Fontana Seeea as its apex, for the troops farther west had abandoned Monte Prassolan and taken up a line that ran from San Marino in the Brenta valley by Col della Berretta (4,779 feet) and Monte Pertiea (5,077 feet) to a point about two miles north of the summit of Monte Grappa (5,821 feet). The western side of this salient ran in a north: north-easterly direction from Monte Grappa, in a long ridge over 5,000 feet high, to Monte

Fontana Secca. The apex of the salient was only lightly held, and after repulsing the first attack against Monte Fontana Secca the defence was withdrawn to Monte Solarolo, a point on the same ridge about a mile to the southward. This ridge, with Spinoncia and the lower spurs which join the latter to Monte Pallone (west of and above Monte Tomba), still formed a long, narrow salient jutting out into enemy country, but it held firm against repeated attacks.

Throughout a week tho enemy hammered against the line from Monte Pertica to Monte Spinoneia, but he met with no permanent success. He took Spinoneia and its capture was announced in the German bulletins, but he did not announce that it was immediately retaken by an Italian counter-attack. The heaviest fighting was on November 25, when two picked divisions of mountain troops (the German Alpenkorps and a mixed Austro-German division of Kaiserjäger, Alpine troops and a Würtemburg mountain battalion), backed by the 94th Division, also specially



Utalian official photographia ALPINI RECONNOTIRING.

trained to the mountains, attacked all along the line indicated. In the western sector his attack was promptly erushed, and he suffered severely from Italian counter-attacks, the Monte Rosa Battalion of Alpini particularly distinguishing itself at Tasson (on the northern part of the Grappa massif) by practically annihilating an enemy column. Farther east, against the Italian salient, the attacks were more persistent. Pieked mountain troops advanced repeatedly, but the Italian 56th Division, which had done many fine things during the war, was as steadfast as the hills on which it stood. The enemy attacks were repulsed, and more than 200 prisoners were left in Italian hands.

There was a night's pause, and then the attacks were renewed, but this time the main effort was directed against the western half of the mountain line from Monte Perties to the Brenta. Col della Berretta came for the first time into the communiqués as the object of a very fieree attack. The enemy isolated the defenders of this point by a heavy and cleverly-placed barrage, and sent forward an entire division to overwhelm the comparatively small number of Italians in the front line. But the reserves, consisting of the Sicilia Brigade and an Alpine battalion, came through the barrage and pushed the enemy back to their starting point. Col della Berretta was saved for the time being, but the strength of the enemy was continually increasing, and Monte Pertica was lost, at least the summit of the peak. Several gallant attempts to retake it failed to establish a permanent occupation. The enemy fought with obstinate courage, and when he lost Monte Pertica, as he did two or three times, he came back till he took it again. Its possession was necessary to the earrying out of the plans he was soon to attempt. For the month which lay ahead was to see fighting even more stern and prolonged than the month which had

At the end of November the enemy artillery was already showing an even greater activity than before. His gun-power had quite obviously increased—time had been given for the transport of more heavy guns which had necessarily followed the Italian retreat at some distance. These were now in position, and tuning-up. The scene was set for a further act—the last—in the long battle. Once more the 20-mile front from Monte Sisemol to the Middle Piave

was to go on fire, but this time the eastern sector of the line, what has been described as the hinge, was less heavily attacked. The enemy had concentrated very large forces in the mountains east and west of the Brenta valley, and in the valley itself, and his plan was to smash right through to the plain, not at the hinge, where he calculated he might well be held up by a flattened defensive line coming down from Grappa to the Asolo hills, but through the mountain front at a point where success might turn the whole line on the Piave.

A great effort was prepared, Marshal Conrad von Hötzendorf commanded the Austrian armies in the Asiago uplands, while between the Brenta and the Piave Marshal Krobatin was in charge of the mixed Austrian and German forces. It appears now that General Otto von Below, who had conducted the drive between Plezzo and Tolmino, had left the front. For a time it was believed that he was in command of a reserve army lying behind and below Conegliano, which was to be thrown in to give the final blow if the initial operations should show a sufficient degree of success. However this may be, he did not, in fact, resume an active part on the front.

For a long month the Italian armies were to be subjected to the severest trial, from which they emerged triumphant. They were to lose more ground, a good many prisoners, and some guns. But they held the front unbroken, and showed always an undaunted spirit. They were right who felt at the time that the really critical days were those from November 10 to 25; and if a definite turningpoint may be fixed, the writer would choose November 22, when the last big attack on the Tomba ridge failed, and the lately broken troops of the Second Army began to come into line again. By that time numbers of new guns were on the front, and many others were on the way, and in this connexion a special tribute must be paid to the Ansaldo firm. Only a few months before the firm had been criticized for the extent of its preparations, and business men had shaken their heads over the commitments undertaken. But the firm had seen far. It was working well ahead of contract, and when the great loss in guns followed the disaster of Caporetto, it was at once able to supply some 500 guns beyond the number on which the Government had calculated. A great output resulted from the following month's work, and the warmest praise is due to the workmen of this and other firms, who made an almost incredible effort to repair the loss of guns and shells due to the great retreat. By the end of November the Italians were still greatly inferior to the enemy in artillery strength, but they had a fair weight of guns to support their gallant infantry, and a reasonable amount of shells to fire from them.

On December 2 the French and British



MARSHAL KROBATIN,

Commanded mixed German and Austrian Forces
between the Brenta and the Piave.

forces which had been hurried to Italy took their place in the line. Those British divisions under the Earl of Cavan took over the Montello sector. A similar French force occupied the Monte Tomba sector, and the sorely tried Italian Ninth Corps went into reserve for a time, before reinforcing another part of the line. One of its brigades, however-the famous Brigata Alpi, under Brigadier-General "Peppino" Garibaldi-remained in its old positions immediately north of the Montello, along the river, and was attached to the French. This brigade had not suffered like the rest of the corps, for the enemy had made no real effort against its front, and it was fitting that General Garibaldi, son of an English mother, and commander of the volunteer Garibaldian Legion which had fought for France before Italy entered the war, should

form, as it were, a link between the British and the French.

Other British and French divisions were already in Italy, but not yet ready to go into line, and General Sir Herbert Plumer had arrived to take command of the whole force. The French troops in line were commanded by General Duchesne, and General Fayolle was in supreme command. When Italy's Allies first took their places on the front, it was expected that the sectors assigned to them would be the object of a heavy enemy blow. As it turned out, no attack came against these positions. Perhaps the enemy's plan did not include such an attack, or perhaps a movement in this direction was only to follow a big success farther west, against the First and Fourth Italian Armies. That success did not come, thanks to the obstinate courage of the defenders, and the British and French forces spent a quiet

After a prolonged and intense artillery preparation, such as the Asiago uplands had never known before, Marshal Conrad launehed his attack on December 4 against the curved seven-mile front from Monte Sisemol to the east of Monte Badenecche. Heavy firing had continued for a week, every road being systematically searched, and every Italian

position relentlessly bombarded. For three-days the intensity of the fire increased gradually, very many gas shells being used, until at length, at three o'clock on the morning of December 4, drum-fire broke out along the whole line. It ceased after a couple of hours, broke out again after an hour's delay, and this-alternation of fury and lull continued till nearly mid-day. The enemy's intention was apparently to bring the Italians out of their dug-outs when the drum-fire ceased, to repel the expected infantry attacks, and eatch themagain by a sudden resumption of shellfire.

Towards mid-day two main attacks were launched, the first from the north-west, against the line Sisemol-Meletta di Gallio (the southwestern slopes of Cima Meletta Davanti), the second from the north-east, from Monte-Tondarecar to Monte Badenecche, with a special concentration against the saddle between these two peaks. The object clearly was to "pinch up" the Castelgomberto salient, whichhad defied all attempts at capture during the 10 days' struggle in November. The first attack ended in a repulse for the enemy, who were finally drivon back from the Italian positions in the late afternoon, with heavy losses in killed and wounded, leaving somehundred prisoners in the hands of the



TAPPING A FURNACE IN AN ITALIAN ARMAMENT WORKS.

In the foreground are moulds for steel ingots.

defenders. On the north-east of the salient the attack was conducted with considerably larger forces, and was successful. Some important trenches were taken early in the day, and the Italian line had to be withdrawn



(French official photograph.
GENERAL FAYOLLE,
In command of French troops in Italy.

in consequence; but the enemy pressure continued, and after a fierce and prolonged struggle both Monte Tondarecar and Monte Badenecche fell into the hands of the enemy, encircled and cut off by a well-laid scheme of attack, admirably carried out. The loss of these positions was very serious, for under the continuous attacks of the enemy the line was carried back still farther, and Monte Fior and Monte Castelgomberto were taken in the rear. By the morning of December 5 these two mountains were practically surrounded by the influx of enemy troops from the east. The Austrians also pushed down very quickly, in large numbers, towards Foza, and threatened to make a wide hole in the line. But the Italian rearguards near Foza, chiefly Alpini and Bersaglieri, fought with desperate courage, and held up the enemy successfully till the troops on Meletta Davanti could be withdrawn and a new line established farther south, covering Valstagna and the mouth of the Frenzela valley. The head of the valley, so long and obstinately defended, had to be left to the enemy at last.

The withdrawal of the troops from Meletta Davanti began on the night of December 5, and was completed by the following morning. The enemy followed hot on their track, and attempted to push down the Frenzela valley, but were quickly checked by heavy artillery fire. Another attack, however, developed in the afternoon, this time against the hills on the hither side of Asiago from Monte Kaberlaba to Monte Sisemol. The enemy seemed to be trying for a break through, and his first rush carried him well forward. His main drive, however, at the dominating position of Sisemol, was held up well into the night by the 4th Bersaglieri Brigade, who gave time for reserves to come on the scene and establish a line farther back. It was not a good line, however. The loss of the Meletta-Castelgomberto positions left the hills south of the Valle dei Ronchi



LIEUT.-GENERAL THE EARL OF
CAVAN, K.P.,
Commanded the British Troops in Italy,

open to infantry attack and artillery fire on three sides.

There followed a lull, except for a slight Austrian advance, east of Monte Sisemol, on the morning of December 7, but it was clear to all observers that the enemy was only waiting till he had brought up and emplaced the guns which had been chiefly responsible for the fall of the Castelgomberto salient. The bombardment on that occasion had been immensely destructive. It must be remembered there had been little time to prepare satisfactory dug-outs and trenches on the new part of the

line, Tondarccar and Badenocche, where the break came. And the gas shells had great effect upon men who had had little experience of gas, and were furnished with very inadequate gas-masks. (After this second experience, indeed, the comparative usclossness of the Italian gas-masks was realized, and the Army was equipped with the British mask.) The fury of the bombardment and the clouds of gas were the main causes of the large number of prisoners (close on 11,000) who were taken when the line on Badeneccho was driven in. Many more men might have got away if they had not been half-stunned and half-stupefied by the enemy fire. A similar tost would soon have to be undergone in a new salient that was in form not unlike the old, and was probably weaker.

While Marshal Conrad was preparing his new blow Marshal Krobatin struck again between the Brenta and the Piave. For 10 days he fought hard to win the approaches to the plain, and destroy the obstinate thin salient of Solarolo, which hampered his inovements both to east and west of it. He opened his attack by a push on the two wings of his front, against Col della Berretta and the Solarolo salient, and he made useful progress the first day. He gained ground in the Col della

Berretta region, and a strong German force. captured Monte Spinoncia and the head of the Calcino valley, which together formed the north-eastern outwork of the Solarolo salient. Noxt day the Italians counter-attacked near Col della Berretta, and recaptured most of their lost ground, but in the afternoon the Austrians came forward again and pressed the defenders back by sheer weight of numbers. So it went on for a week, till on December 18 the enemy, who had greatly improved their position by capturing Col Caprile on the 14th, gained tho summit of Monte Asolone, which looks down the Valle della Folicità (Vale of Happiness) to the plain. This was the term of his achievement. At great cost ho had thrust a wedge into the Italian positions, and saw his goal before him, but he could do no moro. During the last three days of the battle he was very hard put to it to keep the gains he had won, and indeed, he lost ground. In the Solarolo region he had been unable to add anything of account to his first day's gains. In spite of repeated efforts, especially on December 17, when the German Jäger division, rested and reformed, took the field once more, the Italians still held the line Col dell' Orso, Solarolo, Porte di Salton, and thence in a curve to the Tomba ridge.



FRENZELA.



BRIGADIER-GENERAL "PEPPINO" GARIBALDI (in dark cloak) WITH FRENCH OFFICERS.

General Garibaldi commanded the Alpine Brigade of the Ninth Corps in the Montello Region.

Krobatin's battle ended on December 21, by which time he had clearly lost the initiative. Conrad's new stroke was dealt after one day's interval. On the evening of December 22 he began a heavy bombardment upon the Italian salient between Sisemol and the Frenzela valley, and next day the infantry attacked. They wiped out the salient, which had been devastated by shell fire, without much difficulty, and captured both Col del Rosso and Monte Melago, with several thousand prisoners. They had gained ground on the west also, and the position looked none too favourable for the defence. But the Italian reserves, among whom the Toscana Brigade and the Fifth Bersaglieri distinguished themselves once more, counter-attacked on December 24, and retook Monte Melago and a part of Col del Rosso. Malga Costalunga, too, where the enemy had gained a footing by his advance from the west, was retaken by the defendors, and the line was re-ostablished on the reserve positions, which were, in fact, better adapted for defence. On Christmas Day the Austrians made one more effort between Col del Rosso and the Val Frenzela, but were held up immediately near Sasso. The Italians, on the

other hand, counter-attacked with great vigour, and recaptured both the whole of the Col del Rosso positions and those on Monte di Val Bella. They were unable to hold on in the wrecked trenches under a very heavy concentration of fire. But here, too, the battle ended with the Italians counter-attacking, and tho enemy hard pressed to maintain the slight advantago he had won. Next day the snow came, the snow that was at least five weeks late.

By the late eoming of winter the Austrians and Germans were very much helped in their effort to obtain a knock-out blow. The stars in their courses seemed to fight against Italy. But it was better so. For Italy was not saved by the snow, or by any good fortune, but by the heroic resistance of her sons. The late winter gave the chance to the Italian Army to remake a shaken reputation. And the chance was taken.

It must always be remembered that the advancing Germans and Austrians were fought to a standstill by Italians alone, except for the help given by a few batteries of Alliod guns and a certain number of British aeroplanes. This does not in any way detract

from the very great value of the British and French support, but the fact needs emphasis; for there was a tendency to believe that the prompt assistance given by Great Britain and Franco was mainly or even solely responsible for "saving Italy." Till the beginning of December the Italian Armies stood alone, as far as the front lines were concerned. The



ALPINI IN THE SNOW.

new front was "established" by them before the Allied troops came into line. Obviously, the confidence given by the knowledge that British and French divisions were standing on a reserve line was of the greatest value during those critical days, hut the actual fighting was done by the Italians. It was agreed very properly that the British and French troops should not be sent in to the front to stiffen it by units, as they arrived. When they began to come into Italy there were grave fears as to the feasibility of organizing an adequate resistance on the new front, and the possibilities of further retreat had to be considered. In these circumstances it was thought better than the Allied forces, as they arrived, should be aligned along the Adige, until it became clear that the sorely tried Italian Armies could play the part assigned to them. The stubborn resistance on the Piave and in the mountains, together with the speedy recovery of many of the "disbanded" troops, showed that the danger of a breakdown had passed, and at the end of the third week in November the Allied divisions began to move up towards the front. They were in line at the beginning of December, and their presence brought a great relief to the situation They were first-elass troops, at

once veteran and fresh. Their arrival enabled a corresponding number of weary Italian troops to rest and refit, and subsequently to stiffen the line farther west. But, again, after the arrival of the Allied forces the actual fighting was confined to the Italian sectors of the front, from the Asiago uplands to the Solarolo salient. The British and French were greatly disappointed at the turn of events, and they were the first to give credit to Italy for the gallant resistance which finally stemmed the advance of the enemy. They knew, of course, the value of their presence. The welcome given them was proof enough of its great moral value, and the practical assistance which they afforded, as explained above, is sufficiently obvious. It is only because the facts of the situation often seemed to be unknown or forgotten that they are specially emphasized here.

The magnificent recovery of the Italians in November and December naturally attracted far less attention than the disaster which preceded it. Coming as it did, after a long series of victorious actions, the disaster seemed so inexplicable. In the first bewilderment of the moment the simple explanation of a widespread breakdown in morat found most favour. The truth became evident later: that it was not one cause which led to the unexpected failure, but a complex of causes, Some of these, but not all, have been indicated in the course of the narrative. A short résumé of the conditions which appear to the writer to have been instrumental in bringing about the disaster, a résumé which is based upon much personal observation and eareful enquiry, may help to clear away some of the obscurity.

To take, first, the question which for a time overshadowed all others—that of the failure of certain units to do their duty in face of the enemy's initial attacks. There is no question about this failure, but it must once more be, insisted that it was confined to a small area, and to a small number of troops. Subsequently it extended, and troops lost order who had begun by showing all their old courage. What was the reason of the first breakdown, and why did the contagion spread?

The year 1917, which saw the outbreak of the Russian Revolution, the subsequent collapse of the Russian Armies, and the beginning of the final erumbling of the whole Empire, was, in fact, a critical year, as far as moral is concerned, for more than Russia. War-

weariness had naturally grown with the mere passage of time. As the prospect of early victory receded it increased still further, and until the futility of Russian dreams and Russian talk became generally evident, the possibility of "peace without victory" had its attractions for many. Several of the Socialist leaders in each of the Allied countries played the German game, wittingly or unwittingly. In Italy, in France, and in Great Britain there. was a definite growth of "Bolshevist" ideas. It has already been told how General Cadorna protested against the pacifist propaganda with which his drafts were infected before coming to the Front. It is a fact that a certain proportion of the troops from the depots were centres of infection. The infection was not widespread, and the majority of the "cases" were slight. A naturally robust constitution generally prevailed. Still, there were various minor incidents during the summer, which gave cause for uneasiness.

attack on the Chemin des Dames, is the most striking instance.

But there were other causes for disquiet. It would not be unfair to say that during the summer of 1917 some parts of the French Army passed through a moral crisis closely resembling that which was noticeable on the Italian Front. The march of events in the following year showed how splendidly the crisis was overcome in both armies. But it was Italy's misfortune to be attacked at the time of her weakness and at the place where she was weakest, while in Franco the difficult moment passed before the trial came. Nor was the path of Great Britain smooth. If the Army never showed a failure in moral there were times when parts of the country did, when strikes and general unrest indicated that all was not well. For some persistent pacifists even the cold douche of Brest-Litovsk did not suffice, though in the case of others



[Italian official photograph.

ITALIANS TAKING UP POSITIONS ON THE RIGHT BANK OF THE PIAVE.

The Malvy trial has shown that the conditions in France during the same period were no less disturbing. Just as General Cadorna protested against the policy which failed to check anti-war propaganda in Italy, so did the French High Command protest against M. Malvy's remissness in the matter of similar propaganda in France, and show how it reacted on the Army. And in France, too, there were incidents which gave cause for serious anxiety. The mutiny of May, 1917, after the comparative failure of General Nivelle's great

the German mistake in reading this lesson too soon was a useful antidote to mischievous illusions.

Propaganda did work harm among the ranks of the Italian Army, and Bolshevist arguments were aided by the implicit suggestions of the Papal Note of August, 1917, and by the interpretations attached to it by parts of the Clerical press. This question has already been deatt with in Chapter CCXXXIII., and it is unnecessary to go over old ground. One additional point, however, should be taken, in answer to those who maintain that the Papal Note had no effect upon the moral of the troops, and in support of their contention instance the victory which crowned Italian arms immediately after the publication of the Note. The troops overeame the suggestion for the moment, though some of them wero temporarily shaken. But when the heat of the successful offensive was over, and, though victory had been won, some of its hoped-for fruits were denied, the suggestion of peace began to work again. Still there is no doubt that in this matter the Red Internationalists were much more responsible than the Black.

The fact of propaganda being accepted, it remains to consider how it was that the soil, in certain cases at least, was apt for the evil seed. The explanation may be found in the fact that the trials and hardships undergone by the Italian Army and the Italian people far exceeded, in most ways at least, those experienced by Great Britain and France. It is now generally allowed that the troops were not changed often enough. Their spells in the trenches were too long, and there was not sufficient change between sector and sector, while certain units seemed to spend the greater part of their time in reserve. The evil result was two-fold. The troops who did continuous work were worn out, while those who remained in reserve became unaccustomed to war, and had little to do but wonder when the war would end. One unit would become stale while another became soft. When troops came out of line, moreover, there was nothing to amuse them and restore them. It was only during the summer of 1917 that the equivalent of Y.M.C.A. huts began to be established, and the provision of places of rest and recreation had not gone very far. There was also a great shortage of the type of "canteen" which has been worked with such wonderful effect in France—the place where the men coming up to and going from the trenehes find hot coffee or hot soup to cheer them. The necessity for these helps to the life of the soldier was only slowly understood. It must be remembered that the idea of such assistance is Anglo-Saxon. The work in France, even with the French Army, was started originally by British and Americans, though the later development was French. Italy had little assistance of the kind from her Allies. Though one English woman, Mrs. Watkins, transferred her activities

from France to Italy in September, 1915, and ran several canteens with great success, as well as urging the idea of recreation-huts, her splendid efforts and those of her little band of helpers could not pretend to cover the ground. Far too little was done to lighten the dreariness and soften the hardship of the Italian soldier's life at the front.

Another eause of depression was scarcity of food, both in the Army and in the country. The soldier's ration had to be cut down in 1917, cut down to a scale which would seem utterly insufficient to an Englishman or Frenchman. And while he had to go short of his simple little luxuries and support a reduction even of the necessaries, he was further disturbed by the news that his family at home was worse off. There was great suffering in Italy. In many places there was far more than scarcity. There was hunger.

In Sir Douglas Haig's dispatch dealing with the retreat of the Third and Fifth British Armies in March, 1918, the following passage occurs: "The strenuous efforts made by the British forces in 1917 had left the Army at a low ebb as regards training and numbers." The words apply exactly to the condition of the Italian Army after the great efforts of the summer campaign. There was this difference, however, between the two cases, that in Italy the enemy counter-stroke came within five weeks of the cessation of the second big Italian offensive, while the British armies had nearly four months' breathing space after the battle of Cambrai. Owing to the losses by death, wounds and sickness during the summer (the total easualty list approached 800,000) men), the Italian Armies had a great proportion of half-trained men in their ranks when the enemy attack was launehed. And at the critical point the Fourth Corps, though it had not suffered casualties except from sickness, was in effect a poorly trained eorps. It had become unused to active war, and the war it was suddenly to experience was very different from the war it had known.

To quote again Sir Douglas Haig's dispatch: "Great developments had taken place in the methods of conducting a defensive battle." The Italians had not been on the defensive for nearly a year and a half, and it seems clear that the Supreme Command had not fully realized the necessity of adopting new methods to meet the modern developments of the offensive. This fact may serve as a point

of departure for a discussion of the military, as distinct from the *moral*, reasons for the onemy's unlooked-for success. For it is widely held that the dispositions of the Italian Command were not well adapted to meet the offensive

In the first place, it may be said, speaking generally, that the troops were still aligned as though for a continuance of offensive operations, and not for a defensive action. That is to say, the forward lines were occupied in

the August-September offensive General Capello had had over 30 divisions in line or in reserve under his direct command. On October 24 the army consisted of eight corps, some 20 divisions. It is clear that the task of gripping and handling such a number of troops is too much for one army commander and one army staff, especially on such a wide and difficult front. On no other of the fronts was there an army approaching the size of the Second Italian Army under General Capello, and it



BRITISH TROOPS POSTED IN A WATERCOURSE ON THE ITALIAN FRONT.

force, while what would now be known as "battle positions" wore thinly held. A large proportion of the guns were still far forward, in their attacking positions, and the reserves were too few and too distant from the threatened points. It would seem as though General Cadorna had miscalculated the weight of the blow that was being prepared against the left of the Second Army. Or, perhaps, he trusted too much to the apparent strength of the positions held by the Fourth Corps. In any event, he was heavily outnumbered in the critical sector, and the dispositions of the troops did not use the natural strength of the ground to the best advantage.

Another error consisted in the unwieldy size of the Second Army. At one time during

would seem clear that the army ought to have been divided in two or three, and, if it were necessary or advisable for the direction of the whole Second Army sector to be under one commander, the difficulty might have been solved by an adoption of the German group system. The importance of the mistake was increased by the fact that the Fourth Corps sector had necessarily lain outside General Capello's attention during the summer, when he was very busily occupied in hammering the enemy farther south. He himself fell ill early in October, and was actually absent from the front till the eve of the enemy offensive, while his substitute, General Montuori, had been brought from the Asiago uplands in August to command the Second Corps on Monte Kuk and Vodice, and was unfamiliar both with the terrain and the troops of the sector.

When the blow fell, in a manner almost exactly paralleled by the first German thrust against the British Fifth Army,* and some of the troops failed, the task of the units to right and left, largely filled as they were with untried men, was very difficult indeed. But they fought gallantly, and when the retreat came it was not for lack of moral that many units lost order and cohesion, but for lack of training and experience. There were failures, too, in staff work, which inevitably increased the disorder, failures natural enough under the

* Sir Douglas Haig's dispatch, section 13.

suddenness of the shock and the intensity of the pressure.

The investigations ordered by the Italian Government resulted in General Cadorna and General Capello following General Porro into retirement. Neither could disclaim his share of responsibility for the disaster, though each might argue with some justice that he was the victim of circumstances. Each had done great work in his time for his country and for the Allied cause. It was their best consolation when they had left the commands which they had long held with honour to witness the wonderful recovery on the new line and the splendid successes of the following year.



CHAPTER CCLXIII.

THE GERMAN OFFENSIVE OF 1918. (I.)

Position in March, 1918—British Front Extended—Numbers and Training—Necessity for Defensive Works—Strength of Divisions—Plans for French Cooperation—The German Forces—British and Enemy Dispositions—German Attack Opens, March 21—Third and Fifth Army Fronts Involved—German Tactics—British Lines Pierced—Withdrawal Behind the Crozat Canal—French Support—The Canal Crossed—Fall of Le Verguier—A Further Withdrawal—Germans Break Through on the Omignon Front—Fifth Army Retires Behind the Somme—Events on Third Army Front—Paris Bombarded by Long-range Gun.

HAPTER CCLIX. dealt with the position on the Western front in the early months of 1918 and brought the narrative up to March 21, when the German offensive began. There had been little concealment on the enemy's part as to the intention to attack; indeed, it was trumpeted forth again and again. The coming offensive was to be the battle, the Kaiser's battle, the beginning of the end of the coalition against Germany. The successes in Russia had cleared the way. There only remained the annihilation of the Franco-British Armies in the West.

Great Britain was still the chief enemy. Captain Persius, the well-known German naval writer, in the Preussische Jahrbücher, February, 1918, while abandoning the notion that England could be starved out, still looked forward to the time when the submarines would so have reduced our merchant fleet as to prevent us going on with the war. Hindenburg had said in July, 1917, that the Germans would win the war if their armies could withstand attack till the submarines had done their work. In the spring of 1918 the position on land was plainly much more favourable to our enemies. As Hindenburg said, "The chain which was to stranglo us has been burst. We can turn our entire strength towards the West." The Vol. XVIII.-Part 223

defection of Russia had, indeed, freed so many more troops for use on the Western theatre of war that it was no longer a question of resisting attack till the submarines had done their job; now it was believed that Germany possessed the strength which would enable her once and for all to settle the issue of the conflict in her own favour. Ludendorff stated on March 15: "We can now think of attack. . . . We are entirely confident that the battle which is bursting forth will be successful for us." The Vossiche Zeitung on March 7 said: "England will drink the cup to the dregs; she wants a military decision. France must commit suicide to obtain this." On March 18 tho Kaiser said, "We stand at the decisive moment of the World War and at one of the greatest moments in German history. May this feeling be deeply engraved on all hearts! All who occupy leading positions are again called, on to direct their minds to the great patriotic tasks before which everything of a personal naturo must now give way and everything of a partisan nature be put aside." This utterance, which was contained in a telegram to the Rhenish Provincial Council thanking them for their splendid work during the past year, did not come up to the standard of perfervid cloquence which the world had learnt to expect from the All-Highest—and contained no allusion to God. Hindenburg, however, supplied the omission. For to a telegram from the Provincial Council of Posen congratulating him on the peace with Russia, he replied, "God willing, we shall also overcome the enemy in the West and clear the way to a general peace."

Moltko said well, when he gave utterance to his well-known remark on plans of campaign, that no plan can go farther than the first battle; what can be done afterwards depends on the



GENERAL VON LUDENDORFF,
First Quartermaster-General of the German Field
Armies. In command in the 1918 offensive.

result of the collision. So it was in this mighty cneounter; the German had a General Idea which embraced in the first instance the separation of the British and French Armies by penetrating at their point of junction; afterwards the British were to be rolled up and Paris taken. But the first step was to deal with the British forces which blocked the way; they were the Fifth Army under General Gough on the extremo right from the Oise upward as far as Gouzeaucourt and the Third Army under Byng to the north of it, and these were, therefore, the immediate objective of the German attack.

We have seen (Vol. XVII. p. 387) that the Fifth Army on our extreme right had extended its line to relieve the French Third Army and now occupied a front which extended from just north of Gouzeaucourt to a point just south of the villago of Barisis. This front measured about 42 miles. The latest addition to the front to be defended amounted altogether to 28 miles. The British Government had had the question of increasing the line held by our troops under discussion with the French authorities since September, 1917. appears to have been considerable interchango of opinion between the two parties, the upshot of which was an arrangement that Field-Marshal Haig was to take over the left portion of the line held by the French Third Army as far as Barisis, seven miles south of the Oise. The actual operation was delayed by the severe fighting in the Cambrai region during December and it was not till the end of January, 1918, that it was completed.

Early in December it had been foreseen that the great increase in the German numbers in the Western theatre of war would compel tho Allies to confine themselves to the defensivo until the arrival of the Americans in sufficient numbers should enable them to enter on a more active eampaign. The British Contmander-in-Chief, therefore, carly in December, issued orders for immediate preparation to meet the coming attack. Now it will be noticed 'that we had 28 miles of new line to deal with which required strengthening, and that our recent conquests all along the 125 miles which the British line now measured had to be put in a proper state of defence. The magnitude of the task will be best understood by a coniparison with a familiar English example; the front was 12 miles longer than the distance from London to Birmingham. Besides all this, there were, in addition, the daily repairs and improvements to be carried out. Further, as we were definitely on the defensive and knew we should be attacked in numbers considerably over those we had available, it was necessary to prepare as far as possible second and third lines, for it is only defence in depth that is of any use in modern warfare.* For the devastating power of artillery is such that a supporting

^{*} It is interesting to point out that continuous lines without rearward further defences have never been successful in war, even in the days of very inferior weapons. Marlborough carried the "Ne plus nltra" lines constructed by the French with a simple assault. The lines of Weissenburg in the Revolutionary Wars were not much more difficult to force, the lines of Düppel in 1864 offered no prolonged resistance to the Prussians. In all these cases, there was no sufficient depth. On the other hand, the triple lines of Torres Vedras offered so formidable an obstacle to the French in 1811 that they did not venture to attack them.

line must be sufficiently far back to be fairly safe from artillery fire until the assailants have brought the guns up from their original battering positions. We have seen in Chapter CCXXXI. (Vol. XV.) the depth the Germans thought necessary for a proper defensive zone. Depth was equally necessary for us in the situation in March, 1918.

The number of men Sir Dougas Haig had was insufficient for the maintenance of "the front line systems of defence and the construction of new lines on the ground recently captured from the enemy, and precluded the development of rear-line systems to any great degree."... "The early construction of these latter systems, involving the employment of every available man on the work, became a matter of vital importance."* Now it must be remembered that "in the course of the strenuous fighting in 1916 and 1917 great developments had taken place in the methods of conducting a defensive battle." The continuous and often bloody struggles of 1917

conflicting conditions which can scarcely be described as advantageous. If the men were employed in construction they were not available for instruction. It was Sir Douglas Haig's invidious task to reconcile as far as possible these opposing claims.

His difficulties were not lightened by the orders which the Army Council had found it necessary to give for the reduction of the divisions from 13 battalions to 10 battalions apiece. This alteration in strength of divisions was completed during the month of February. "Apart from the reduction in strength involved by this reorganization, the fighting efficiency of units was to some extent affected. An unfamiliar grouping of units was thereby introduced, necessitating new methods of handling of the troops and the discarding of old methods to which subordinate commanders had been accustomed." This may be characterized as a very nuld and diplomatic statement of the situation. To sum up, it was known that the enemy had very considerably increased numbers available,



DURING THE GERMAN OFFENSIVE: LONDON SCOTTISH DIGGING TRENCHES TO THE MUSIC OF THEIR PIPES.

"had left the British Army at a low ebb both as regards numbers and training. It was therefore of the first importance to fill up the ranks as rapidly as possible and provide ample facilities for training" the men in the new methods of defensive tactics. The pressing requirements of defensive works and the equally pressing need for instruction produced

while ours were diminished; we had a longer line to defend; heavy tasks of constructing new defences, which interfered with the proper training of our troops; to crown all, the organization of the infantry units was upset and the new arrangement was only in working order three weeks before the enemy attacked.

It is difficult to bring home to those unfamiliar with modern warfare the magnitude of the work needed on the British position. "Old systems had to be remodelled and new systems

^{*}The quotations, unless otherwise noted, are all from Field-Marshal Haig's dispatch of July 20, 1918, first published, after some modifications had been made in it, on October 22.

ereated. The construction of new communications and the extension of old, more especially in the area south-east of Arras, which the enemy land devastated in his retirement in the previous year, involved the making of a number of additional roads and the building of railways, both narrow and normal gauge. Work of this nature was particularly necessary on the Somme battlefield and in the area recently taken over from the French.* All available men of the fighting units with the exception of a very small proportion undergoing training, and all labour units were employed on these tasks." Time was short in view of the expected German offensive, the labour available was insufficient; but nevertheless, thanks "to the untiring energy of all ranks in the fighting units, the Transportation Service and the Labour Corps," a great part of the work was completed before the enemy began his attack.

It had, of course, been plain both to our Allies and ourselves that the closest cooperation was required to deal with the German offensive. The various problems involved had all been carefully eonsidered. "Plans drawn up in combination with the French Military Anthorities were worked out in great detail to meet the different situations which might arise on different parts of the Allied front." All the necessary arrangements which were needed for smooth and rapid execution had been carefully made. The possibility of a hostile offensive against the line of the Somme and the passage of the river had been considered and the steps necessary to counteract it had been drawn up. We shall see later on that this bore fruit in due season.

In Chapter CCLIX a full account was given of the minor operations which had marked the months of 1918 previous to the German advance. On our front during the earlier part of the winter raiding activity was deliberately cut to the lowest limit consistent with the maintenance of an adequate knowledge of the enemy's dispositions; there were far fewer raids than those undertaken by the Germans, viz., 125 as opposed to 225 in the period comprised between December and the commencement of the attack. But while the enemy succeeded in 62 cases only in obtaining any identification from our lines, we on 77 occasions were successful in obtaining prisoners or identifications. In addition to this



[Official photograph.

^{*} This portion of our new line had, of course, formerly obtained its supplies from French bases; now they had to come from ours, which involved a complete change of direction in the supply lines.



French oficial photograph.

GERMAN HEAVY ARTILLERY ("A.K.A.").

our patrols maintained a distinct superiority over those of the enemy, inflicting casualties and taking prisoners from the German patrols and also securing like advantages over his working parties.

The German forces had been continually increased since the beginning of November. In three and a half months 28 infantry divisions had been drawn from the Eastern theatre of war and six from the Italian front, and others were reported to be coming up. Altogether the enemy had now available on March 21 about 192 divisions. He too had altered the constitution of his infantry divisions by removing one infantry regiment from each, so that there were only nine regiments in the division. The divisional artillery, in addition to its original equipment of 72 guns, had been strengthened not only by the addition of guns and trench mortars specially told off to accompany the infantry attached to the battalions, but also by large numbers of heavy pieces, in some part derived from the captures made from the Russians, brought up against the front to be assaulted, with a great concentration of heavy trench mortars for more general employment.

Broadly speaking, the artillery was for action organized in two classes. First, the Artillerie

Kampf Artillerie or counter-battering artillery, usually spoken of in German orders as A.K.A. This was intended to destroy our artillery positions. Second, the Infanterie Kampf Artillerie or infantry attacking artillery (I.K.A.) the mission of which was the destruction of the British trenches and obstacles. The first named was under the Army Commander, the second, originally under the same direction, passed gradually under the command of Army Corps Commanders and Division Commanders as the situation required. The total mass of artillery employed was enormous. In the army of von Hutier alone there were about 900 guns for counterbattering, while the field artillery for the fire against our positions numbered some 1,200 pieces, with 480 heavy guns, in addition to which there was a light battery attached to every regiment and six light trench-mortars to every battalion which accompanied the infantry attack. In addition there were a large number of trench mortars, many of very heavy calibre firing shells of over 200 lb. No such mass of guns had ever been brought into action before, and the proportion was much the same along the whole line of attack. Part of the guns had been contributed by Austria. The following extract is taken from the Vienna



[Ministry of Information. LIEUT.-GENERAL SIR IVOR MAXSE, K.C.B.

Commanded the XVIII. Corps, Fifth Army.

Neue Freie Presse just before the attack opened:

"Count Czernin's statement that our Army was ready, together with that of the Germans, to defend Strassburg has already been realized. This furnishes great and ever-memorable testimony to the firmness of our alliance, which protects Europe from premeditated revolution and has prevented the partition of the Central Empires."

Sir Douglas Haig had naturally to take into consideration the various directions in which the German attack might be delivered. His views are set out as follows in his dispatch:—

"In making the necessary distribution of the forces under my command to meet the threatened German attack, the enemy's possible objectives and the relative importance of ground in the various sectors had to be taken into consideration. These objectives and their bearing on the distribution of the troops are set forth below:—

"(i) In the northern portion of the British area lie the northern Channel ports of Dunkirk, Calais, and Boulogne, the security of which necessitated the maintenance of sufficient troops in the neighbourhood. Little or no ground could be given up on this front, and therefore the necessary reserves must be kept in close proximity.



[Ministry of Information.]
LIEUT,-GENERAL SIR E. A. FANSHAWE,
K.C.B.

Commanded the V. Corps, Third Army.

"Although, as a rule, the state of the ground would preclude a general offensive in this sector early in the year, the weather had been exceptionally dry, and preparations for an attack by the enemy astride the Menin Road were known to be in an advanced state.

"(ii) In the central portion lie the northern collieries of France and certain important tactical features which cover our lateral communications.

"Here also little or no ground could be given up, except in the Lys Valley itself.

"(iii) In the southern portion of the British area, south-east of Arras, in contrast to the central and northern portions, ground could be given up under great pressure without serious consequences, the forward area of this sector consisting chiefly of a wide expanse of territory devastated by the enemy last spring in his withdrawal."

The course of events rendered it plain to the British Commander-in-Chief that the enemy was about to attack our line south of Arras.

"... An attack on this front would undoubtedly have as its object the separation of the French and British Armies and the capture of the important centre of communications of Amiens. To meet this eventuality more than half my available troops were allocated to the defence of this sector, together with the whole



[Ministry of Information.

LIEUT.-GENERAL SIR J. A. L. HALDANE, K.C.B.

Commanded the VI. Corps, Third Army.

of the cavalry. In addition. . arrangements had been made for the movement of a French force to the southern portion of the British area north of the River Oise in case of need.

"(iv) Arrangements were made in detail for the rapid transport by rail or 'bus of a force of such British divisions as could be held back in reserve to meet any emergency on any sector of the British front."

It will be seen from the following narrative that Sir Douglas Haig and his Staff had gauged accurately the German intentions. First to separate the British and French Armies and secondly to try for the northern French ports, which were so essential to our communications, and the capture of which would have given the Germans good torpedo-boat-destroyer, and also submarine, bases, close to our coasts.

Let us now examine the situation at the time the attack was about to take place in Sir Douglas Haig's own words:—

"On March 19 my Intelligence Department reported that the final stages of the enemy's preparations on the Arras-St. Quentin front were approaching completion, and that from information obtained it was probable that the actual attack would be launched on March 20 or 21. On our side our dispositions to meet the expected offensive were as complete as the time and troops available could make them.



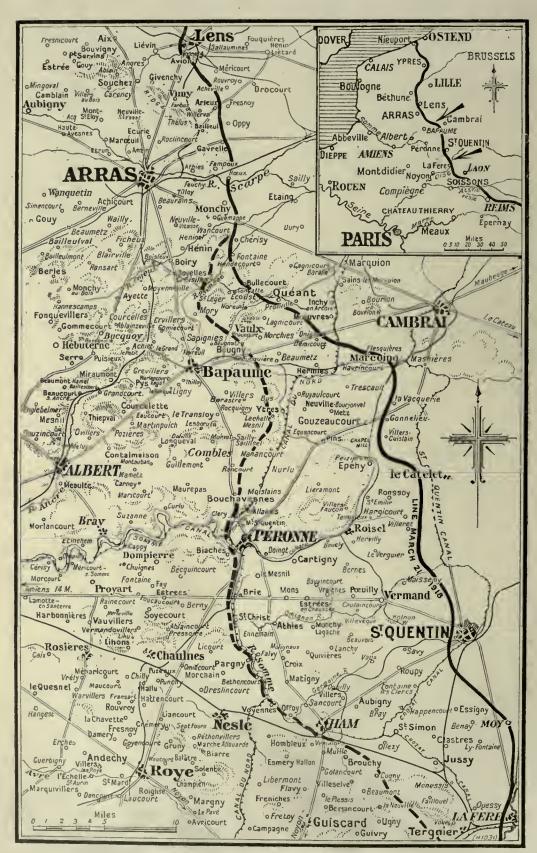
[Ministry of Information.

LIEUT,-GENERAL SIR C. FERGUSSON, BART., K.C.B.

Commanded the XVII. Corps, Third Army.

"The front of the Fifth Army, at that date commanded by General Sir H. de la P. Gough, K.C.B., K.C.V.O., extended from our junction with the French just south of Barisis to north of Gouzeaucourt, a distance of about 42 miles, and was held by the III., XVIII., XIX., and VII. Corps, commanded respectively by Lieut.-General Sir R. H. K. Butler, K.C.M.G., C.B., Lieut.-General Sir I. Maxse, K.C.B., C.V.O., D.S.O., Lieut.-General Sir H. E. Watts, K.C.B., C.M.G., and Lieut.-General Sir W. N. Congreve, V.C., K.C.B., M.V.O. Over 10 miles of this front between Amigny-Rouy and Alaincourt were protected by the marshes of the Oise River and Canal, and were therefore held more lightly than the remainder of the line. The III. Corps held from the Oise upwards; on its left was the XVIII., holding both banks of the Sommo and stretching up to the Omignon, which the XIX. Corps took charge of and the line to Ronssoy, where the VII. Corps carried on the defence to Gouzeaucourt."

The disposition made by General Gough of his force, which numbered altogether 14 infantry and three cavalry divisions, was such that he had 11 infantry divisions in front line with three in reserve, together with the three cavalry divisions. The strength available was only sufficient to allow about one division to a tength of 6,750 yards of



THE GERMAN OFFENSIVE OF MARCH 21, 1918.
Showing also approximately the line on March 23.

front, not much more than one man to every yard held.

"The Third Army, under the command of General the Hon. Sir J. H. G. Byng, K.C.B., K.C.M.G., M.V.O., held a front of about 27 miles from north of Gouzeaucourt to south of Gavrelle, with the V., IV., VI., and XVII. Corps, under the respective commands of Lieut.



LIEUT.-GENERAL SIR W. N. CONGREVE, V.C., K.C.B.

Commanded the VII. Corps, Fifth Army.

General Sir E. A. Fanshawe, K.C.B., Lieut.-General Sir G. M. Harper, K.C.B., D.S.O., Lieut.-General Sir J. A. L. Haldane, K.C.B., D.S.O., and Lieut.-General Sir C. Fergusson, Bt., K.C.B., K.C.M.G., M.V.O., D.S.O."

General Byng had a total strength of 15 infantry divisions, of which eight were in front line and seven in reserve. Each division in front line held a length of 4,700 yards.

The general arrangements for defence in the zone occupied by these two armies were, broadly speaking, the same on the other parts of the line, viz., a distribution of the troops in depth, as in the case of the whole line.

"With this object three defensive belts, sited at considerable distances from each other, had been constructed or were approaching completion in the forward area, the most advanced of which was in the nature of a lightly held outpost screen covering our main positions. On the morning of the attack the troops detailed to man these various defences were all in position.

"Behind the forward defences of the Fifth Army, and in view of the smaller resources which could be placed at the disposal of that Army, arrangements had been made for the construction of a strong and earefully sited bridgehead position covering Péronne and the crossings of the River Somme south of that town. Considerable progress had been made in the laying out of this position, though at the outbreak of the enemy's offensive its defences were incomplete."

Above the Third Army the First Army prolonged the British line to the north.

The position held by the British, coming from Lens to Fontaine across the Scarpe and Sensée, presented a considerable salient, going forward from Bullcourt to Flesquières and then trending back towards Gouzeaucourt, from which point it went down to Gonnelieu, and jutted out again towards Le Catelet, behind the St. Quentin canal, then in an irregular curve down on the west of St. Quentin to Barisis, on the south side of the Oise.

The first attack of the Germans was delivered against our line on March 21 from the Sensée to the Oise; a week later it extended to the north beyond Gavrelle. It was at the commencement divisible into two segments, the northern against the British position from the Sensée to the Bapaume and Cambrai road, the other against the southern side of the Flesquières



LIEUT,-GENERĄL SIR H. E. WATTS, K.C.B., C.M.G.

Commanded the XIX. Corps, Fifth Army.

salient and thence to St. Quentin. There was, of course, an advance between the left of the former and the right of the latter attack against the Flesquières salient, but this was not so much pressed, as the success of the two main attacks would necessarily cause the abandonment of the salient. With regard to the more southern of the two attacks, the most

dangerous was the part which was directed from St. Quentin westward. Here the Germans employed no less than 23 divisions, nearly half the force (40 divisions) which Sir Douglas Haig states were used in this portion of the operation against a total length of, roughly, 48,000 yards. Of these 40 divisions no less than 23 were used in the first days of the attack over a length of about 16,500 yards. the northern attack 18 German divisions were detailed, on a front of some 16,000 yards. Against the Flesquières salient about 6 divisions seem to have been used. The 23 divisions Hutier, the formed the Army of von XVIII., which had been specially stituted for the purpose. This army had on its right the II. Army of von dor Marwitz, and on its left the VII. under von Boehn. To the north of von der Marwitz was the XVII. Army under Otto von Below. All these troops had been fully trained, fitted with new equipment, and were in the highest state of efficiency.

These four armies numbered by the date of battle 64 divisions, of which 36 had been brought up to strengthen the ordinary garrison of the line from the Scarpe to the Oise below St. Quentin. There is good evidence to show



GENERAL OSKAR VON HUTIER.

Commanded the XVIII. German Army, specially constituted for the attack.

that some of them, about 12, came up by march route from parts of the German line close to the zone of concentration; others were brought up by rail, but had all been detrained well behind the front and moved up to their positions by road. The movement of concentration began

for the more distant units on March 13-14. All the troops marched by night and their progress was timed so that they reached their assigned positions at the front or immediately behind it during the night of March 20-21. The artillery had all been brought up gradually and before the infantry; the engineers had been sent up some weeks earlier to prepare dug-outs and shelter



GENERAL VON BOEHN. Commanded the VII. German Army.

for the infantry when they arrived. The greatest care was taken not in any way to attract the notice of the enemy to the concentration. No lights were allowed either in cantonments or bivouacs and no fires in the latter. Batteries and supply columns were carefully hidden during the day either in woods or villages. No traffic of any kind was allowed on the roads along which the columns moved. Officers and men alike were kept in complete ignorance of their destination and no letters were allowed to be sent back from the front. Lastly, aeroplanes accompanied the troops, observing in the direction of the enemy, so that in case of an aerial attack the troops could take shelter or hide themselves as much as possible.

The diary of a German officer who formed part of the XVII. Army and who was killed at Hébuterne on April 6 was published in French newspapers. He belonged to the 26th Division which, with the 26th Reserve Division and the 236th Division, formed the right flank guard of Below's Army and was called the "Mars Group." On March 13 he arrived by train with his regiment at Villors-Pommereuil at 7 p.m. An hour later he marchod to Ounaing through Thulin and Quiévrain, where he arrived at 1 a.m. on the 14th, and halted there for four

days. On the 18th he received some information as to what his division was to be attached to. Ho was told it belonged to the XVII. Army and that it formed part of the IX. Reserve Corps, but was not given the name of its commander. Further, he was informed that the German forces were divided into three armies, designated as "Michael II.," "Michael III.," and "Michael III."* who were to be sent forward against three points in the British lines. The day selected for attack (not then communicated) was to be called Michael's Day.

The general direction of the attack was to be westerly towards the seaports Boulogne and

enormous addition to the artillery. In his own division (the 26th) there were 68 batteries, *i.e.*, over 400 guns, and many hundred trench mortars of various calibres. "Our artillery is four times as numerous as the enemy's; tanks are being employed to bring up the heavy guns, *i.e.*, to tow them."

Besides the tanks captured from the British and a few taken from the French the Germans had some of their own devising. They were constructed, so far as the mode of progress was concerned, more after the French pattern than ours. There were no large "caterpillars" round the outside edges, but



[Official photograph.

BRITISH ON THE WAY TO THE FRONT.

Abbeville, the intention being to separate the British from the French, when the latter would quickly come to some agreement.

"Group Mars" was on the right of "Michael I.," which appears to have been directed against the left of the Third Army, a little to the north of Gavrelle, on the right of the First Army. "Michael III." would appear to have been the force attacking the right of the Fifth Army, and "Michael II.," in between the others, probably formed of the II. Army under Marwitz.

The same officer gives some account of the

*" Michael" is the German equivalent of "Tommy Atkins,"

under the floor there were three sets of three bogies, with small wheels on the outer edge of the tank, and the driving "caterpillars" encircled these three bogies, there being thus two independent belts for driving the tank forward. The small hood which rose above the centre of the tank covered the heads of the commander and the driver. The armament consisted of a quick-firer gun, about equivalent to a six-pounder, mounted in the front of the tank, and six machine-guns, two on either side and two at the rear. It is obvious that the caterpillar arrangement did not give the same leverage for overcoming obstacles that our

large tanks had, and the German tank would not pass over trenches or cuttings or climb banks with anything like the ease that our machine did. It was, indeed, a particularly clumsy production which had many vulnerable points, and was easily stopped by obstacles which our tanks could take in their stride. Its construction is shown in the annexed figures.

General von Hutier, who was of French descent (his grandfather is said to have been an officer in the French Army), had made a great reputation by his defeat of the Russians



LIEUT. GENERAL SIR G. M. HARPER, K.C.B.
Commanded the IV. Corps, Third Army.

at Riga in August, 1917. To him was entrusted the task of penetrating and driving back Sir Hubert Gough's force in a similar manner. The front of his attack extended from Armand down to Liez, roughly about 16,500 yards. At the commencement of March the line from the Omignon to the Oise was held by four divisions counting from the north to the south, viz., 88th and the 45th (a Reserve division) from the Omignon to St. Quentin, with the 36th and 103rd divisions from St. Quentin to the Oise. To these 19 divisions were added for the attack. The concentration was conducted with the greatest possible secrecy. Twenty-two of the divisions were on March 14 disposed as follows.* In front lino the four already enumerated. Some fivo to ten miles farther back were two others, one at

Neuvilette, another at Ribémont. Still more to the rear were six other divisions, at an average distance of 25 miles, at Wassigny, Dorengt, Vervins, Marle, Monteeau-lo-Wast and Laon. Ten divisions were about 50 miles distant in the neighbourhood of Charleroi, Maubeugo, Avesnes. Fourmies, Hirson, Rozoy-sur-Serre, Novion-Porcien. These were all brought by the methods already described, and by the morning of March 21 were in position for the advance, divided into groups as under. The northernmost was formed by the III. Army Corps under General von Lüttwitz, comprising six divisions, of which three were in front line, one south-east of Pontruet, another behind Gricourt, and a third behind Fayet. Each of these had another division in support behind it. The next was the IX. Army Corps, commanded by Goneral von Oetinger, who had three divisions, two in front line west of St. Quentin, the third in support to the north-east of that town. To the south of this army corps was the XVII. under General von Webern. This had four divisions in front, one to the south of St. Quentin, another on the road from St. Quentin to La Fère, the third at Itancourt; the remaining three were in support. Next came General von Conta with the IV. Army Corps. This had three divisions in the first line, occupying a line in front of the St. Quentin-La Fère road towards the canal joining the Oiso to the Sambre; the other division was held in reserve. In addition to the 19 divisions just enumerated there were four others forming an army reservo, one at Bohain, one at Fonsommes, one at Fontaine-Notre-Dame, and another about Origny-Sainte Benoite, making 23 in all. Later on six more divisions were brought to the battle front of the XVIII. Army.

To the south of the XVIII. Army was the VII. Army under von Boehn. Ho had two Army Corps, each of three divisions, under Scholer and Wichura respectively. From these four divisions took part in the battle under von Gayl. The remainder were watching the French lino farther to the south.

We have said that Marwitz had the II. Army north of the XVIII. It consisted of some 21 divisions formed in four Army Corps commanded, counting down from the north, by von Stübs, von Kathen, von Gontard and von Hofachker.

General von Below's XVII. Army was composed of the four Corps enumerated above under von Lüttwitz, von Octinger, von Webern

^{*} The position of the other division cannot be given.



A CAPTURED GERMAN TANK.

and von Conta, and had 22 divisions. It was north of the II. Army.

Thus the total force used against us at the beginning of the offensive, or within a short time afterwards, was 78 divisions.

The commander of the French Army, General Pétain, had, equally with Field-Marshal Haig, considered fully the question of a German attack which both alike felt sure was coming, and also considered the best means of mutual support. It was known not only that the enemy was likely to attack the point of junction of the two armies, delivering an attack especially against the British right, but it was also certain that there was a considerable massing of troops round Hirson, and this pointed to an attempt against the French centre about Reims. Two other eventualities had also to be borne in mind —an advance in the region of Verdun, where an advantage would have opened up great possibilities, or else an offensive in Alsace. Both of these, however, were somewhat less probable, because an attack against the British near St. Quentin and the French at Reims, if carried to success, would have resulted in penetration of the Allied Front on such a wide area as would have involved the most serious results, if not complete disaster.

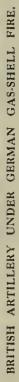
The French therefore had to be ready to meet a far more complicated situation than the



[French official photographs.

British. But they never lost sight of the imperative necessity for succouring their ally if the Germans succeeded in pushing the British Fifth Army back. They knew its situation and weakness and felt this was a very possible event. The only unforeseen point was that the enemy made the attack on the British in such overwhelming force that they were compelled to retreat early in the encounter. It had been hoped that Sir Hubert Gough would be able to hold out for some few days.

The French 6th Army was on the right of our Fifth Army, while the 3rd French Army, having handed over to the latter the line in front of St. Quentin down to Barisis, was in reserve. The 5th Corps under General Pellé was about Compiègne. The 6th Army was able





to send the 125th Division to the immediate aid of Sir Hubert Gough; General Pellé ordered up troops by motor-ear.

In addition, we may be quite sure that General Foeh, who had at this time, as the head of the Military Council at Versailles, a sort of advisory position with regard to the Allied operations, had not lost sight of the situation and its possibilities or rather probabilities. He knew that the segment of the British line in the St. Quentin neighbourhood had been held only lightly by the French troops during the winter, and that the defences there were not in any way of a formidable character and were quite unsuited to resist a concentrated and determined attack. The line south of the Omignon had only been taken over seven weeks before the German assault, and the time available had not sufficed to make it of due strength. All that could be done had been done, but the position was hampered by the devastated ground behind it. "Tho roads were in bad eondition, there was no light railway system, the broad-gauge system was deficient, and there was a serious lack of accommodation for the troops." The amount of labour at the disposal of the British Commander-in-Chief was so limited as to restrict the work to the forward defensive zones, and behind these it had been thought best to expend what labour was available on the eonstruction of a bridgehead at Péronne which would guard the passage over the Somme and facilitate manœuvring against the German's if they penetrated the more forward defences of the British line. But the numbers employed for this purpose had prevented any attempt to erect works for the defence of the River Somme itself. All this was well known to our Ally as to ourselves, and it is certain had met with due consideration.

On March 21, a little before 5 a.m., a most violent bembardment of both gas and high explosive shells was begun against the whole front held by the Third and Fifth Armies from the Searpe to the Oise. The gas shell had now completely ousted the gas cloud; it was independent of the wind and could be thrown to long ranges, and with the new mustard gas a most deadly atmosphere could be created. Moreover, great accuracy of fire was not needed. As long as the shells fell in the neighbourhood of the target the air round it would be poisoned.*

On the opening day our men in the batteries had to wear their masks for hours on end. The rain of gas-shells was particularly directed against the British battery positions so as to put out of action the gun detacliments.* With it was combined a hurricane of high explosive, and the erushing nature of the heavy fire showed how enormous was the number of guns aeeumulated to batter the front selected for attack. Nor was the fire limited to sections to be assaulted by the infantry. The lines between the Scarpe and Lens and from La Bassée to the river Lys were treated in the same fashion, as also was our line from the south of Ypres to Messines. Moreover, the ground behind our front lines, and the probable lines of approach of reinforcements, were subjected to fire. Thus St. Pol, 20 miles behind Arras, was shelled by some long-range gun; Dunkirk also was bom-Nor was the artillery fire limited to the British portion of the defences; it was equally violent against the French both to the east and west of Reims against long segments. Subsidiary attacks or, more accurately speaking, demonstrations by infantry were made at many of these points and also in the north against the whole front of the Belgian-held lines. The communications here were also brought under fire.

Against the Freneh-held lines before dawn on the 21st an intense bombardment of the line north and south-east of Reims, as well as at various points of the Champagne front, was commenced. In the latter region the Germans made several infantry attacks, which were, however, stopped, in the sector of Hurlus, about Souain, and in the direction of the St. Souplet road.

On the right bank of the Meuse the bombardment began with great violence towards dusk on the 20th, and was followed by a strong attack between the Caurières Wood and Bezonvaux. A violent hand-to-hand contest ensued, and the French drovo back the enemy from some points where he had penetrated at the first rush, and sueeeeded in capturing some prisoners.

In Lorraine also the Germans sustained a eheek near Nomeny (east of Pont-à-Mousson). The attacking detachments, which came forward about 1.30 a.m., after a lively artillery

^{*}There is no doubt that a considerable proportion of the German guns were out of repair, which resulted in loss of accuracy. This, though detrimental to the effects from the high explosive shell, did not, for the reason given, affect so much the gas shell fire.

^{*} The gas shells were of two kinds—(1) those which held absolutely poisonous gas; (2) those which produced sneezing and eye and throat discomfort only.

preparation, were repulsed by fire and sustained serious losses, without any result.

During the whole of the 21st the German artillery continued a violent fire between the Miette and the Aisne throughout the region of Reims and on the Champagne front, particularly between the region of the Heights and Ville-sur-Tourbe, to which the French batteries replied vigorously.

In the section of Hurlus the enemy made three successive attacks, which were broken by our fire or thrown back by counter-attacks. To the east of the Suippe some raiding attempts were completely defeated. Artillery fired on and dispersed German columns which were advancing in the region to the south of Monthois (northwest of Metz).

On the right bank of the Meuse and at points in the Woevre there were also intense bombardments of the French first lines.

All these affairs were but diversions intended to draw attention from the principal infantry attacks, which were thrown against the British line over a front of some 54 miles between the Sensée and Oise Rivers. It was intended to drive back our line from the Hindenburg position from Bullecourt to the south of Cambrai, and from about Ronssoy down to the Oise to enter our line and thrust it back at the La

Fère end so as to penetrate between it and the French. Our lines in front of Cambrai had always been a sore subject for the Germans, and they determined to earry on the movement which had come to an end at the beginning of January, when they failed to pinch off our salient and hoped by attacking hard on the flanks of our line about Bullecourt and Gouzeaucourt to cut off a considerable part of our troops garrisoning this portion of our line. It was part of their whole scheme of which the main objective was at first the right of the British Fifth Army, of which the enemy knew perfectly well the weakness.

The German advance was favoured by thick white fog, and smoke seems to have been employed between Lagnicourt and Gauche Wood. The infantry attacks took place at about the same time all along the line after the preliminary bombardment of guns, howitzers and trench mortars had lasted for some five hours, and by 10 o'clock were in full swing. Before the infantry started the creeping barrage was commenced; it was extremely powerful and well directed. The fog favoured the enemy enormously. It hid from our artillery and machine gunners the S.O.S. signals sent up by our outpost line, and their numbers, which made loss of direction impossible, enabled the attack-



[Official photograph.

BRITISH TROOPS MARCHING UP IN SUPPORT.



Official photograph.

BRITISH GUNS GOING FORWARD.

ing German infantry to force its way into our foremost defensive zone. "Until 1 p.m. the fog made it impossible to see more than 50 yards in any direction, and the machine-guns and forward field guns which had been disposed so as to cover this zone with their fire were robbed almost entirely of their effect. The detachments holding the outpost positions were consequently overwhelmed or surrounded, in many cases before they were able to pass back information concerning the enemy's attack."

"The attack being expected, reserves had been brought forward and battle stations manned. On all parts of the battle front garrisons of redoubts and strong points in the forward zone held out with the utmost gallantry for many hours. From some of them wireless messages were received up to a later hour in the day, giving information of much value. The losses which they were able to inflict upon the enemy were undoubtedly very great and materially delayed his advance. The prolonged defence of these different localities, under conditions which left little hope of any relief, deserves to rank among the most heroic actions in the history of the British Army."

The enemy's bombardment severed all our communications at an early hour, "and so swift was his advance under the covering

blanket of the mist that certain of our more advanced batteries found the German infantry close upon them before they had received warning from their own infantry that the expected attack had been launched. Many gallant deeds were performed by the personnel of such batteries, and on numerous occasions heavy losses were inflicted on bodies of hostile troops by guns firing over open sights at point-blank range."

The first successes of the German attack were on the left of our line and on the extreme right. With regard to the former it must be remembered that there the opposing lines were but a short distance apart, and that the tremendous hostile artillery fire had beaten down our wire entanglements and much facilitated the advance of the German infantry, which had only to push over a very short depth to be in our weakly held front line. This was quite incapable of resisting the heavy masses thrown against it. On the whole line held by the Third Army to the Sensée River from above Gouzeaucourt, where the region belonging to the Fifth Army began, there was heavy fighting. Near the Bapaume-Cambrai road, the Canal du Nord was firmly held by Major-General P. R. Robertson, C.B., with the 17th Division; but not far from here Doignies and Louverval were



[Official photograph.

MACHINE GUN CORPS IN RESERVE IN A WOOD.

taken. In Lagnicourt and to the south of it Major-General T. O. Marden, C.M.G., with the 6th Division, held on stoutly in the first line of the battle positions; but rather more to the north Bullecourt, Longatte, Ecoust St. Mein and Noreuil were overrun.

Thus, by 12 o'clock two considerable breaches had been made through the defensive line held by the Third Army.

Nor was the situation more favourable with the Fifth Army. The first indication that the German advance was developing a serious aspect was the news that at noon German infantry were entering Ronssoy. This meant that on the south side of the Flesquières salient the attack had already reached and penetrated a considerable distance into the second defensive belt which constituted our battle position.

About the same time the villages of Hargicourt and Villeret, attacked simultaneously in flank and rear, were captured. Tho attack was then pushed with great vigour, and a little later Templeux-le-Guérard, still farther back in our line, fell into German hands. This formed a serious breach on a considerable width of our first and second lines; some three miles had been taken and only the third line here held good. But, fortunately, the advance was then stopped by our troops. Moreover, on the flanks of the penetration at the north by Epéhy, at the south by Le Verguier, we still held our own. At the former point, the 2nd Division, under the command of Major-General D. G. M. Campbell, C.B., kept up its defence all day in spite of repeated attacks in great strength, and when the Germans managed to penetrate at Peizièro

at the northern end of the village, they were driven out by infantry counter-attacks, aided by some of our tanks. At Le Verguier the 24th Division stoutly resisted the enemy and kept its position intact. Generally, at both these points and in between them, our tanks rendered most valuable assistance, and largely contributed to the delay and arrest of the German progress.

The attack against the Flesquières salient was not pushed with so much vigour, the Germans apparently relying on their attacks against our line on either side, which, when successful, would enable them to pinch out our troops in it.

Towards the southern end of our line, between St. Quentin and La Fère, the Germans crossed the Oise-Sambre canal and the Oisc River and penetrated into the battle-zone between Essigny and Benay. Their advance here had been much facilitated by the fact that the long drought had rendered both these obstacles of little value, indeed the whole line of the Oise was affected, the marshes on its banks being so dried up as to allow the passage of infantry almost anywhere. At Maissemy also the fighting line was pierced, but the vigour with which the 61st Division, under Major-General C. J. Mackenzie, C.B., and the 24th, commanded by Major-General A. C. Daly, C.B., assisted by Major-General R. L. Mullens, C.B., with the 1st Cavalry Division, fought, held up the enemy from further progress.

The fighting continued in great intensity without a break throughout the whole day, without any great gains to the enemy except

in the southern end of our line, where he made considerable progress. From the Omignon nearly down to the Oiso there were, as shown above 19 divisions attacking, with 11 divisions in the front line and eight in support, while four more were in reserve at distances varying from seven to ten miles farther back. Six more divisions were also coming up, but were too distant for immediate use in the opening days of the battle. All these belonged to the XVIII. Army. South of this were three divisions of the VII. Army, which pushed up the Oise banks. The actual force, therefore, engaged in the opening movement of the great attack on the Fifth Army was 21 divisions, with five others in immediate support-i.e., 19 from the XVIII. Army, two from the VII., while four supported the former and one the latter. Of these there attacked from the Somme inclusive down to the Oise, twelveviz., von Webern six, von Conta four, von Gayl two.

Of the VII. Army there were two further divisions about St. Gobain, to whom the task was allotted of watching the French troops in line from Barisis back to Coucy, and in the event of their retreat to press on their rear.

To oppose this mass of divisions Sir Hubert

Gough had available in the southern portion of his line not more than three—i.e., the enemy was probably four times as strong as he was on this front. In front line there were the 18th Division about Quessy and the 58th below it, holding the ground to the Oise, and north of the 18th was the 36th, holding up to the Somme, with the 2nd Cavalry Division in support. Above the river were the 30th, 61st, and 24th Divisions, the latter at Le Verguier.*

The arrangements for the German attack were very complete. We will deal in detail with those made for the assault on Sir Hubert Gough, which are typical of those made use of by the whole German force. The IX Corps under General von Oetinger, was told off to attack the British from the road St. Quentin-Vermand inclusive, down to the St. Quentin-Ham road inclusive. It had three divisions in front line and one in support. To the south of this and presumably on the south of tho St.

*Sir Douglas Haig does not give the number of divisions, hut states that there was only an average of one division to 6,750 yards of front. As the line occupied hy the Fifth Army according to the same authority measured 42 miles, it follows that there were about 11 divisions for the front line of the four Army Corps. As the southern end of the line was less strongly occupied, it seems certain that this part of the line was only held by three divisions.



Official photograph.

A WIRING PARTY TAKING INSTRUCTIONS FROM THEIR OFFICER.



A REGIMENT AND ITS PET GOAT GOING UP THE LINE.

Quentin Canal and down to and including the road St. Quentin-Jussy was the XVII. Corps under General von Webern, with four divisions in front line, the left one moving down the St. Quentin-La Fère road; two other divisions were in support. Next to this came General von Conta, with the IV. Corps, moving generally in a south-easterly direction on the left of the XVIII Corps down by the west side of the Oise Canal towards the Oise River. Von Conta had three divisions in front line, one in support. Below this force came the divisions of von Gayl, four in all. It is not possible to state exactly how these were employed. Two eertainly were used to debouch somewhere about La Fère, and were in all probability those which captured Tergnier and Quessy. The others were used south of the Oise to attack our defences running down from the Oise to Barisis. The British dispatch does not make any mention of this part of the line.

The German method of attack may now be briefly described. The front of attack of a division was about 2,000 yards; each regiment had usually two battalions in front line, one in support. The former were all in several lines. The first of these was formed by men with light machine-guns, which thus formed a fairly continuous line with brief intervals. Here

it may be remarked that the machine gunners earried a special weapon, the "Parabellum" automatic pistol (shown in Fig. 1). ordinarily contained 12 rounds in the magazine in the butt; but, in addition, an extra magazine could be fitted, marked A, Fig. 3, which held 32 rounds. The bullet was a small one, the ealibre being only '28 in., but it was an efficient weapon, far in advance of the clumsy revolver which is still the British regulation weapon. It was sighted up to "800," probably paees, or about 600 yards, and could either be fired from the hand or fixed to the pouch as shown in Fig. 2, which formed a butt and permitted it to be fired from the shoulder.

Behind this front line came a line of infantry, and then more with other machine-guns. Behind this came the battalion headquarters with the light trench mortars. Sometimes these were distributed among the battalions, two to each. Farther back, generally with the supporting battalion, came the field battery attached to the regiment, which formed up action front as soon as possible and opened fire.

The orders for the employment of the Artillery were meticulous in detail. The preliminary bombardment was to last five hours. During the first two the whole of the guns and

trench mortars fired against the British batteries and trenches. At the end of this period the A.K.A. continued to deal exclusively with the gun positions, the I.K.A. with the targets laid down for it. The creeping barrage began at the time laid down for the infantry attack to begin-i.e., at zero+five hours-and was directed 330 yards in front of the British infantry line. It was automatically put forward 220 yards every four minutes. This, of course, was liable to variation, for which arrangements were made.

affected by it that they had been reduced to merc ditches rarely more than four feet deep, while the marshes were almost everywhere passable. The ground itself on the right flank of the Fifth Army was not well adapted for defence, as the canal bank afforded very little cover.

During the afternoon at the southern end of our position, as indeed along the whole line, the fighting went on with increased vigour and continued into the evening with great loss to the enemy. At Tergnier, defended by the 58th



is the pistol detached, carrying 12 cartridges in the by low-flying aeroplanes. Each division had a

group of these, known as Schlachtstaffel, i.e., battle section, the duty of which was to act with the infantry, but some little distance in advance of it, directing machine-gun fire against the British troops in the trenches and communications.

We have seen that the position on the right of the Fifth Army was most lightly held. Sir Douglas Haig said "it was not considered probable that the enemy would be able to extend the flank of his attack in any considerable strength beyond Moy," a couple of miles below Alaincourt, between which point and Amigny-Rouy he considered the Oise, with its accompanying canal and marshes, proteeted the line between the front and therefore made it easier to defend. But, as mentioned above, the value of this obstacle had been so reduced by the dry weather as almost to be non-existent; even the canalised streams were so much

"PARABELLUM" PISTOL With magazine (A) containing 32 cartridges.

Division, the Germans reached the castern outskirts by 4 p.m., and then pressed up the Crozat Canal and forced their way into Quessy. Above this point the British battle line was " held by the 18th Division, under Major-General R. P. Lee, C.B., reinforced by part of the 2nd Cavalry Division. Our troops offered a most strenuous resistance, notwithstanding the fact that the thrust of the Germans down from Benay and also up from Quessy threatened both flanks. A smartly conducted counter-attack



[Offi cial photograph.

FLOODED LANDS BY THE SOMME EARLIER IN THE WINTER.

also enabled them to drive back the enemy from Ly-Fontaine, which he had captured earlier in the day. But by the evening our troops had been forced back from Benay-Essigny and the Somme Canal to the rearmost of their fighting lines. The success of the enemy had, however, not been complete. Many of the strong points our troops had occupied in the first line they clung to, as was the case east and north-east of Essigny and other points in the front system of defences. Some of them were completely surrounded, but still the garrisons fought, and as late as 8.30 p.m. contrived still to send back wireless messages, and from many the sound of rifle-fire was heard until the middle of the night.

On the other side of the Sommo the 30th Division, under Major-General W. de L. Williams, C.M.G., D.S.O., held the British line. The German IX. Corps attacked this portion of the front, aided by tanks, some of which had been captured from us at Cambrai, but were unable to make any material progress. Repeated assaults were repelled with very heavy losses, and, after several of these, our counter-attacks were very sueeessful. The dense masses of the enemy offered excellent targets both to our infantry and artillery, and they suffered accordingly. We have already seen that before noon, higher up the line, the Germans penetrated and eaptured Templeux-le Guérard, Hargieourt, and Villeret, and had thereby made a considerable dint in our defences. But no further progress was made by them, and the 24th Division at Le Verguier held out with great tenacity, and with troops

of the 21st Division at Epéhy stopped all further progress.

North of this latter point the 9th Division, under Major-General H. H. Tudor, C.B., C.M.G., maintained the whole of its battle position and a good part of its forward positions. Its defence was not merely passive, for twice it recaptured the important point known as Chapel Hill after it had been taken by the enemy.

The Third Army had been a little more fortunate. We have seen that before noon (ante, p. 53) the Germans had made some impression on our line, taking Doignies and Louverval (on the Bapaume-Cambrai road) and had burst through our front line near Bullecourt and taken Noreuil, Longatte and Ecoust-St. Mein in our battle positions. But the 6th Division, under Major-General T. O. Marden, C.M.G., in Lagnicourt and to the south of Noreuil, still held its ground in its first-line battle positions. During the afternoon severe fighting took place round Demicourt, Doignies and north of Beaumetz-lez-Cambrai, just off the Bapaume-Cambrai road and about a mile behind Louverval. Here Major-General G. T. C. Carter-Campbell, D.S.O., was stationed with the 51st Division, and he was enabled to stop all further enemy advance. Major-General G. D. Jeffreys, C.M.G., who, with the 19th Division, stood in the line between the 51st and the 17th Divisions, ordered a counter attack to be made with two battalions and a company of tanks against the position captured by the enemy round Doignies. These troops were unable to retake the village itself, but

they drove back the Germans from part of the ground they had taken and made a few prisoners. During the afternoon Lagnicourt was lost, and further attacks were made against our line from this village up to Croisilles; Noreuil was also assaulted. At one time the encmy pushed through as far as Mory, but was driven back by a counter-attack. From about Ecoust-St. Mein, however, he was ablo to advance and reached the village of St. Leger, where the 34th Division, under Major-General C. L. Nicholson, C.B., C.M.G., was placed. He also attacked Croisilles from the south-west. But our troops drove back the attack on St. Leger and held the ground there. A little later a powerful attack was directed against our line north of Fontaine-lez-Croisilles, on the left bank of the Sensée (north-east of Bullecourt), where was the 3rd Division, under Major-General C. J. Deverell, C.B., but it was beaten off by machine-gun fire.

It must be admitted that on the first day of the battle the Germans had made considerable progress. The dint in the line from Bullecourt back to Croisilles and Lagnicourt, five miles wide, was a considerable onc, being at parts over two miles deep. Along the Bapaume-Cambrai road we had been pushed back nearly a mile. The Flesquières salient itself had not been affected, had, indeed, not been strongly attacked. But south of it a considerable gap had been made between Ronssoy and Le Verguier three miles wide, and extending back to Templeux-le-Guérard, a depth of over a mile. South of the Vermand-St. Quentin road we had held our ground; to the south again we had been forced back, but not far. Most serious of all was the fact that the southern extremity of our line about Tergnier had been practically turned and the line of the Crozat Canal thus endangered.

The situation at the southern end of the Fifth Army's line was such that Sir Hubert Gough, after consultation with Sir William Congreve, who commanded the III. Corps, which held this portion of our position, determined to withdraw the troops behind the Crozat Canal. This involved a rearward movement of the 36th Division, forming the right of the XVIII. Corps to the Somme Canal.* The 30th Division

of the same Corps was still holding its ground at Savy and Roupy. Here it had been intended by the Germans to break through to Ham on the first day of their advance, but they hardly got half way to their goal. They made good progress, but nowhere did they attain the points aimed at. Our withdrawal was safely carried out during the night and left the right of the British line somewhat bowed back but not materially injured. Most of the bridges over the Crozat and Somme Canals were destroyed, but a few only imperfectly, and still afforded some means of crossing, if only for infantry.

Although the Flesquières salient had not beendirectly pressed, still the penetration of our lines on either side made it undesirable to keep our troops in a position in which they would have been liable to be cut off. Sir Douglas Haig therefore determined to withdraw the V. Corps, which held this portion of our line and was the right-hand corps of the Third Army. The 9th Division to the right of this



THE BROKEN RAILWAY BRIDGE AT TERGNIER.

corps belonged to the Fifth Army and formed its left flank, and being somowhat compromised by the capture of Ronssoy, was also drawn back and a new line taken up across the Highland Ridgo and thence back westward along the Hindenburg Line to Havrincourt and Hermics. This movement, too, was completed without being interrupted by the enemy.

It was now clear to the British Commanderin-Chief that the large force the Germans were employing showed that the whole of their available striking force was engaged in this

^{*}The three divisions, the 36th, 18th, and 58th held the ground on the east of the Somme Canal down to Oise. The 2nd Cavalry Division was in support. The length occupied by the three infantry divisions was about 22,000 yards—i.e., a division to every 7,000 yards.

battle. The position had therefore arisen which Sir Douglas Haig had foreseen, and he at once put into execution the plans he had made for bringing up reinforcements to the threatened front by withdrawing troops which could be spared from the unthreatened parts of the British front. Altogether eight divisions were brought up in succession before the end of the month. But this, as is plain, took time, and meanwhile immediate support was earnestly desirable. This was to be obtained from the French, and plans for doing it had, as we have seen, been worked out by General Pétain.

The nearest French troops available belonged to the 125th Division, part of the French Sixth Army, which was on the right of the British Fifth Army. One of the officers concerned gave a vivid description of their entry into the battle:—

We were in reservo behind the British lines [probably behind Barisis, which was the end of our line]. There was talk of a coming German offensive, but this had been so frequently announced that it was only half believed. On the evening of the 20th cannon began to thunder out on both sides, and the following morning the battle began. We knew it must be the great coup by the violence of the air fighting.

At daybreak on the 22nd we were called together by our colonel, who, speaking with deep emotion, said:—"Mes enfants we are given a hard task to accomplish. The onrush of the enemy is formidable and threatens

to overwhelm our valiant friends. Onwards with stout hearts!" At the top of the plateau we found ourselves suddenly in the thick of the battle. The British were fighting hand to hand, their first line having been forced. It was a $mdle^{\alpha}$ in the open of the utmost ferocity, with machine-guns rattling and grenades raining. The enemy came on in massed formation.

Ah! If only our artillery had been in line what a slaughter it would have been. But at whatever cost we had to check that ourush. Our regiment deployed and gradually we mingled with the British, who were making a fierce stand. There was no word of command wanted. We simply flew to the attack. We recovered the old first positions, and the enemy were brought to a standstill.

At 4 o'clock the next morning without artillery preparation the German infantry attacked again, but were cut to pieces. Ten times their waves came on, and ten times fell back helplossly. Twice, when the fight was at its tlückest, British cavalry charged in a superb manner with the utmost contempt of death and broke up the enemy masses. At dusk the battle died down, and I left my trench to take stock of the situation when a bullet struck me. Whon I left the first line ambulance station reserves were hurrying up and the big guns were at last talking.

This, the most immediate succour available, was supplemented by some eavalry, and was of the greatest service. The French Government also ordered their First Army to be brought up and to be placed between their Third and our Fifth Army, and it was agreed between the Allied Commanders that the front occupied by the latter south of Péronne should be taken over as quickly as possible and that



BRITISH AND FRENCH WAITING TOGETHER TO GO INTO THE FIGHTING LINE.

a further strong force of French troops should be assembled on the south side of our battle front. By the 24th our Allies had attained sufficient strength to assist our forces materially, and as the immediate force with which they came in contact was our III. Army Corps, it was placed under the command of the General Officer commanding the Third French Army.

Let us now return to the British Army. On March 22, the weather was again in favour of the enemy; a thick mist covered the front and enabled him to approach fairly near without suffering from any distant fire, as it was number of their light trench mortars and machine guns, and under their protection tried to cross on rafts which had been brought up for the purpose. For a time they were held back, but their weight of numbers told, while it was impossible for us to use guns as they could not fire over the heads of our infantry against the Germans immediately attacking the eanal, our trenches to defend it being close to it. After enduring heavy losses they managed to effect a passage at Quessy, and then forced their way farther onwards towards Vouel. But Major-General



Official photograph.

REFUGEES.

impossible to hring artillery to bear on his places of assembly for the assault. But when he came within range of visibility, rifles and machine guns, with guns firing over open sights, caused very heavy losses to his troops. Still the numbers employed were so great and they were driven forward with such energy that they were able to close with our troops in their trenches.

Against the southern end of our line the attack was made with particular vigour, and the Germans succeeded in reaching the line of the Crozat Canal at Jussy and there a very severe struggle took place in defence of the crossing, which began in the morning and lasted till 1 p.m. The Germans brought up a

A. B. E. Cator, D.S.O., who commanded the 58th Division and still clung on to Tergnier, was in a good position on the flank of the German advance, and managed to hold his own against repeated attacks till the evening, when the growing strength of his opponents obliged him to withdraw. Two other crossings were effected by the Germans at La Montagne and Jussy. Here they were opposed by troops of the 18th Division and the 2nd Cavalry Division under Major-General T. T. Pitman, C.B. These attacked the assailants at both places and forced them back again.

Higher up in the line of the Fifth Army the Germans made considerable progress. Le Verguier was taken at 10 a.m. It will be remembered Templeux-le-Guérard, which represented a dint of about a mile deep in our line, had been taken on the 21st. On the early morning of the 22nd, this gap was widened by the capture of Ste. Emilie to the north and Hervilly to the south. The 1st Cavalry Division under Major-General R. L. Mullens, C.B., aided by some tanks, promptly re-took the latter villago. Assaults were also made on Roisel where Major-General N. Maleolm, D.S.O., com-



MAJOR-GENERAL A. B. E. CATOR.

Commanded the 58th Division at the Crozat

manded the 66th Division, but here the British line was held firmly, and by noon the German progress was definitely stopped. The fall of St. Emilie and shortly after of Villers-Faucon, a neighbouring and more important village, gave the enemy access to the rear of Roisel, while the possession of Ronssoy threatened the flank and rear of Epéhy. In fact, this irruption in the left centre of the Fifth Army's line was a serious blow against its extreme left, and also gave the enemy a considerable advantage against the more central portion of the line. It was plain that it would be dangerous to hang on much longer to the front held by the left of the Fifth Army.

The first troops to be withdrawn were those of the 66th Division and in the afternoon Major-General Malcolm was ordered to fall back behind the Third Defensive Line between Bernes and Bouely, which was occupied by the 50th Division temporarily commanded by Brigadier-General A. F. U. Stockley, C.M.G. The retreat was manolested. The 21st Division was also ordered to retire from Epéhy. This movenant was not carried out without opposition, as some of the German infantry had get

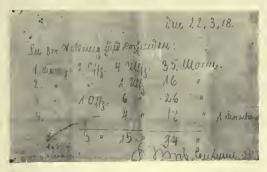
round behind the village. The retirement of the 21st Division necessarily involved a similar step for the 9th Division, which would otherwise have been left with its right flank in the air. It was therefore, later in the afternoon, ordered to fall back to the line of defence between Nurln and Equaneourt. The movement was greatly hampered by the hostile troops which had spread round to the rear, and was only effected with great difficulty.

Maissemy had, as related, been taken on the 21st, Le Verguier at 10 this morning (22nd) and subsequently our line had been forced back to the last line of defence from Bernes to Bouely which the 50th Division held. Thus a considerable breach had been made in our front defences. Although our troops were for a time able to hold out here, they began to feel the pressure which the advance of the resorve German Divisions from the west of St. Quentin exerted on their right flank. For our troops which had held the strongly defended position of Holnon Wood were now compelled to withdraw, and fell back through the 20th and 50th Divisions holding the third defensive line from Happeneourt on the Somme and the St. Quentin Canal, through Villeveque on the Omignon, to Bouely on the Cologne.

It will be remembered that the 36th Division held the line from the Somme through Roupy and Savy. There was a strong redoubt forming an important point in the front line of defences close to Fontaine-lez-Cleres on the Somme. It was garrisoned by the First Battalion Royal Inniskilling Fusiliers. All through the 21st it had held its post and on the 22nd, when the troops on the other side of the Sommo had been ordered to withdraw, it was surrounded by the enemy but still kept up its resistance, repulsing attack after attack. At 3 p.m. the officer eommanding this gallant battalion sent back a small party to give information as to its position and it sueceeded in reaching our lines. Those who remained behind earried on their bitter struggle until annihilated.

The fighting at the part of the field behind Fontaine-lez-Clercs to the third line of defence, against which the enemy pushed at many different points, was very severe. Here the 50th Division had a line of over 10,000 yards to hold and it had already suffered losses. But nevertheless it fought on gallantly and not only held off the assailants but, when the latter took Caulaineourt (a village on the north side of the Omignon), counter attacked and regained

it for a period. But as night fell it was compelled to give up the village of Poeuilly (north of Caulaincourt) and had been forced back. The Germans pressing forward on the south bank of the Omignon had made an opening between the 50th Division and the



A CAPTURED GERMAN DOCUMENT. Strength of the 1st Battalion 140th Infantry Regiment of the 4th German Division March 22, 1918.

TRANSLATION:						
There are present in line:				22	22/3/18.	
1st Company		• • •	2 Officers,	4 N.C.O.'s,	35 men.	
2nd Company		•••	• • •	1 N.C.O.,	16 men.	
3rd Company		•••	1 Officer,	6 N.C.O.'s,	26 men.	
4th Company	•••		•••	4 N.C.O.'s,	17 men.	
2 Officers 15 N C O is 04 men l'etretcher bearer						

3 Officers, 15 N.C.O.'s, 94 men, 1 stretcher bearer.
2 Officers, 5 N.C.O.'s 19 Men.
(Note.—Probably represents a draft.)
(Illegible) Lieut. d. Rss.)

file and 22 officers. At this time it did not exceed 800. 61st Division, and the 20th Division farther to the south. Through this gap the Germans poured and penetrated the third defensive zone near Vaux and Beauvois. By this time all the available troops of the Fifth Army

had been brought up into the fighting front

The official strength of a battalion was 1,000 rank and

and there were no reserves of any kind at hand except on the right near the III. Corps, where there was one French division and some French cavalry, and these were wanted badly where they stood. The only course open to Sir Hubert Gough therefore was to retiro to the bridgehead positions on the Somme. But before dealing with this retreat, it is desirable to follow the fortunes of the Third Army.

On the right and centre of the Third Army beyond the Flesquières salient, which was not put under much pressure, there had been heavy fighting without cessation. A little before noon a strong attack was delivered against Hermies from the north-west. Here the 17th Division had been stationed and repulsed the effort with heavy loss to the enemy. The attack was renewed again and again and was extended over the ground down to Bcaumetz-lez-Cambrai with considerable vigour. One attack delivered over this ground had its leading wave crushed out by our fire. A considerable gain was made by the Germans at Vraucourt south-west of Noreuil, where they succeeded in winning right through the rearmost line of the battle front and also into the village. But from the latter they were soon driven out by a counter-attack of our infantry helped by tanks. More to the north-west our line between Croisilles and Henin-sur-Cojeul was penetrated. The 34th Division kept its position in St. Leger just to the south-west of Croisilles, but in the afternoon retired to a line of entrenchment a little west of the village. More to the north the British position was held by the 3rd Division. When



AN OBSTACLE ON THE ROAD NECESSITATES TAKING TO THE PLOUGHED FIELD.



BARRICADE IN A VILLAGE.

the trenehes on its right were penetrated, it threw back the right of its line and, with the defonsive flank thus made, beat off by its fire a strong attack.

The decision to retire was a serious one but was justified by the situation. The British had been severely handled and although they had fought with the greatest bravery were so overwhelmed by superior numbers that a retreat of sufficient length to withdraw them as much as possible from further hammer strokes was an absolute necessity. Sir Hubert Gough therefore ordered the XVIII. Corps to retire by a night march behind the Somme to a position south of Voyennes, keeping in touch with the III. Corps on its right. This involved a night march of from 10 to 12 miles or farther by the XVIII. Corps, at any rate on its left. The XIX. Corps above the XVIII. and the VII. still more to the north were to secure if possible the Péronne bridgehead by occupying a line Croix Molignaux- Monchy Lagache-Vraignes -Equancourt, where the right of the III. Army now was. This also involved a night march of approximately eight miles in the case of the XIX. Corps and about five in the ease of the VII. The enemy followed up elosely on the heels of the Fifth Army, which was covered by rear-guards furnished by the 20th, 50th and 39th Divisions.* The Germans came forward

* The 39th Division was commanded by Major-General E. Feltham C.B., C.M.G.

vigorously and our men had to fight hard to hold them off.

On the south the III. Corps still clung to the Crozat Canal and was assisted by the French troops which had come to its assistance. But, as shown above, the Germans had gained a crossing at Quessy and were also well across at Tergnier. In spite of the strenuous resistance of the British and French the enemy increased his holding on the west side during the morning of March 23. Repeated counter-attacks were made against his troops as they tried to advance from Tergnier, but despite small local successes his progress was steady. Moreover, higher up at Jussy he had secured another crossing over the eanal and a little later the passage at Menessis fell into his hands. Thus by mid-day the whole British line had been forced back, fighting with desperate hardness, to the wooded ground running from Cugny southwards through Frières-Faillouel down to Noreuil. Long and resolute was the resistance of our troops, many and brilliant were the gallant counter-strokes delivered by the infantry, and our eavalry charged with reckless bravery which excited the admiration of their French comrades in arms.

When the Commander of the Fifth Army learned late in the evening of the 22nd that the Crozat line had been forced, while the Poeuilly-Vaux position, which covered the St. Quentin—Ham road had also been lost, it became evident to him it would be impossible to hold on even to

the proposed Vraignes-Monchy Lagache-Croix Molignaux line which was not sufficiently removed from the enemy to give the troops time to throw up adequate defences. The men had fought hard for two days and had a nightmarch to add to their exertions; and in the circumstances, Sir Hubert Gough did not feel justified in fighting a general engagement, when, if defeated, the consequences would have been disastrous, if not fatal, to the right of his army. He, therefore, at once issued orders for the continuation of the rearward movement to the west of the Somme. This involved further marching but was a prudent and wise resolution. It was unfortunate that it involved the abandonment of the Péronne bridgehead, but there can be no doubt it would have been very risky to have tried to make a stand there, especially as time had not allowed the completion of the works. The retreat had to be continued, although not standing at this point "shortened, the time available for clearing our troops and removable material from the east bank of the river, for completing the necessary final preparations for the destruction of the river and canal bridges, for re-forming west of the river the divisions which had suffered most in the

previous fighting, and generally for securing the adequate defence of the river line."

Before dealing further with the events of the 23rd we will turn back to the position of the Third Army. This too had been involved in the general backward movement. On the northern end the forward position immediately south of the Scarpe had to be given up and the troops retired to the hindermost line of their battle positions. The same movement was carried out in the centre. On the right the evacuation of the Flesquières salient was continued and the troops took up a line covering Metz-en-Couture and Equancourt, where they joined on to the Fifth Army. The movement on the centre and right was closely followed up by the Germans and fighting of a more or less continuous character went on throughout the whole hours of darkness, with the consequence that Mory in the early morning fell into their hands. It was an important point in the centre of our position. At the northern end of the line held by the Third Army the retirement was conducted without difficulty, the enemy not being at first aware of the movement.

March 23. During the withdrawal of the 30th and 36th Divisions, the first north of the



[Official photograph.



Somme about Savy, Roupy and Fontaine-lez-Clercs, the second on the south of the river and on the left of the 18th Division, which was still clinging to the Crozat Canal, a gap was formed in our line. This gap was promptly taken advantage of by the Germans who were following closely after our retiring troops. Ham was occupied by them early in the morning and later on other troops managed to pass over the river there and at Pithon by some bridges which had not been completely destroyed. Once these passages were secured it was not difficult for the Germans gradually to increase their forces on the south side and then press back the British until met by the 20th and 61st Divisions near Verlaines, about a mile south of Ham. Here some smart fighting occurred and oventually the enemy was brought Also on the south of the to a standstill. Somme to the east of the Ham-Noyon road heavy fighting took place between the 36th Division under Major-General O. S. W. Nugent, C.B., D.S.O. (which it will be remembered had been on the left of the 18th Division at the defence of the Crozat Canal) and the Germans at Aubigny, Brouchy and Ollezy. At this latter point the struggle was particularly sovere. But all these villages had to be given up in the course of the evening. More to the north, where we had been holding the line from Boucly down to the Omignon, the troops were enabled to cross the Somme and blow up most of the bridges without much interruption and the movement was completed by 3.15 p.in.* North of the river about Ham the situation was fairly satisfactory. To the west of Ham at Offoy and Bethencourt, where roads crossed the Somme, several attempts were made by the Germans to effect the passage. These were all driven off with heavy loss, chiefly by rifle and machine-gun fire. Similar attempts of the enemy to come down the slopes of the eastern bank from Villecourt, Aumale and Toulle, in the course of the evening, suffered very heavy losses from our artillery. More to the north the fighting had been very heavy, the Germans coming vigorously forward against our retreating troops as they withdrew to the line they were to occupy on the ridge from the north of Péronne to Nurlu and Equancourt. Between the last two places strong attacks were made in the early morning and also at Mory, which had been taken from us the previous evening, and which was within the sphere of the Third Army, as were, on the Bapaume-Cambrairoad, Le Bucquière and Beugny, which were also fiercely assaulted. At Beugny was the 9th Battalion Welsh Regiment, part of the 19th Division. This battalion stuck doggedly to the defence of its post and thereby enabled the rest of the battalions in its brigade, which were posted to the north of this village, to withdraw safely. But for this stand they would have been hopelessly compromised.

To the north of Bougny lies Vaulx-Vraucourt, a largish village. Our line at this point was manned by the 124th Brigade of the 41st Division, which was commanded by Major-General Sir S. T. B. Lawford, K.C.B. Six repeated attacks were made by the Germans, in two of which he brought up horse, foot and artillery, against our men, who however drove back all alike. But they did not give up their endeavours to force their way down towards Bapaume. After 3.30 p.m. five more attacks were made from the direction of Vaulx-Vraucourt and five others from Beaumetz-lez-Cambrai. Each and all of these were repulsed. We gained a further success when the 40th Division under Major-General J. Ponsonby, C.B., C.M.G., D.S.O., recaptured Mory and Major-General R. J. Bridgford, C.B., C.M.G., D.S.O., with the 31st Division drove off the attacks of two German divisions about St. Leger with heavy loss. On the whole, therefore, the Third Army held its own.

But at its junction with the Fifth Army things did not go so well with us. . The difficulty common to most hinge points between armies arose here. The VII. Corps forming the left of the Fifth Army had been withdrawn in accordance with the orders of the Army Commander from the ground about Equancourt -Nurlu to its third defensive to the line of the Canal du Nord north of Moislains. When the V. Corps protected by its rearguards, who were in close contact with the enemy and heavily engaged, fell back in accordance with orders to its third line of defence at Ytres in the direction of Bapaume, it was unaware that the VII Corps had already given up Nurlu. The V. Corps was forced back from Ytres to the east of Rocquigny and notwithstanding the efforts

^{*} The most eareful preparation had been made by the Royal Engineers for the destruction of the passages over all the rivers and canals comprised within the area occupied by the Fifth Army. A list had been compiled and a party told off to each bridge. But as a good many of these arrangements had been upset by the very severe artillery fire, "which blew up some of the charges and cut the electric leads to others, the destruction of the pridges was in some cases incomplete,"



[French official photograph.

HEAVY GUNS ARRIVE NEAR THE BATTLE LINE.

of all eoneerned to regain touch between the flanks of the two eorps, it was found impossible to do so. The 47th Division under Sir George Gorringe, K.C.B., K.C.M.G., D.S.O., and a brigade detached for the purpose by Major-General C. E. Pereira, C.B., C.M.G., from the 2nd Division, made many vigorous efforts to get in touch again with the VII. Corps, but all in vain.

Through the gap thus made the Germans poured in force; coming down on the flank of the VII. Corps they pushed it back, fighting sternly, to the west of Péronne and over the River Tortille to the high ground about Bouchavesnes and to the south of Sailly-Saillisel. Nor did the retreat stop here. For the Germans kept up a constant pressure on the division and, wherever their troops found a chink, there they pushed through and compelled our men to fall farther back.

Thus, at the end of the day, all along the line, we had lost ground to a considerable extent and our troops had been subjected to heavy losses, which they had borne heroically.

This date (Saturday, March 23) was marked by a new departure in warfare. Paris was startled by a heavy shell falling in the town at 7.30 a.m. It was followed by others at intervals of about 20 minutes for some few hours. The effects of the bombardment were entirely without military importance, the only results being some destruction of property and the killing and wounding of a number of harmless

eitizens, including many women and children. On the 24th, Palm Sunday, Paris was again shelled, and Good Friday was also singled out as an appropriate day for the work of destruetion. On the latter date the churches of Paris would be filled with worshippers, and there would be a grand opportunity for repeating on land the brave deed achieved in sinking the Lusitania on the sea. A church was struck, part of the roof blown in, with the result that 76 persons were killed and 90 wounded, of whom a largo proportion were women and ehildren. On March 30 the vietims numbered 8 dead and 90 wounded, but with these two exceptions the easualties were limited to quite small numbers, rarely over one, for each shell fired. At the beginning of May the bombardment eeased for a time.

It did not take long to discover where the guns were stationed, and within a few hours from the time the bombardment began it was located by French aviators behind the St. Gobain Forest, not far from La Fère.* A few days later the positions of two others were ascertained. All three gun emplacements were on the reverse slope of a wooded hill known as the Mont de Joie between the Laon-La Fère railway and the Laon-La Fère road, where they were hidden by the trees. It was an outlying spur of the hill-mass of St. Gobain. A line drawn from Fourdrain to Couvron and Aumeneourt would

^{*}In the *Illustration* of March 30—i.e., only seven days after the firing had commenced—a map was given showing where the gun emplacement was.

run through the centre of the position of the three gun-pits arranged approximately in the form of an equilateral triangle, the apex of which pointed towards Paris. They were all well under the crest line. Each instalment consisted of a concrete pit in the shape of a long and deep trench, to which a line of railway ran back to the Laon-La Fère railway line. At the front end of each a concrete platform was constructed on which the gun earriage rested. This was earefully covered by branches

French lines was about six miles; the French heavy guns were some two miles farther back. A range of eight miles is long for accurate practice, but on the fourth day (i.e., March 26) a shell fell into one of the gun cuttings and rendered the gun useless. It must be remembered that unless a shell dropped actually in the trench or on the gun it would not do much harm. Artillery fire and bombs from the air were continuously directed on the position, and it seems probable that the cessation of



[French oficial photograph

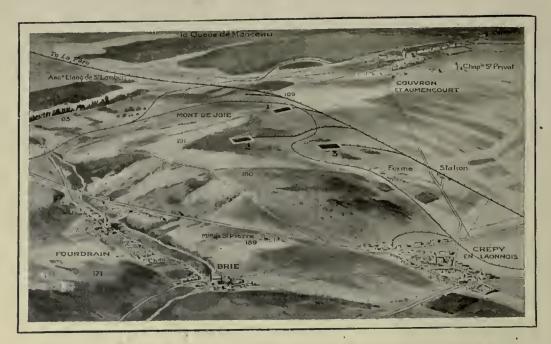
CRÈCHE IN PARIS WRECKED BY THE LONG-RANGE GERMAN GUN.

of trees which, combined with the neighbouring wood, served to protect the position as much as was possible from view. When a big gun was fired a number of 17 cm. guns in its neighbourhood were simultaneously let off so as to 'cover the sound of the larger explosion, and whenever the French aviators were scen approaching, the anti-aircraft guns were brought into action and volumes of smoke also discharged to render observation difficult. Except at the time of discharge the gun was not elevated, its long-chase being kept down to avoid detection. Accommodation for the gun crews was provided in a bomb-proof dug-out, which was connected with the gun-pit by a. deep trench.

The distance from the big guns to the

fire at the end of April was due to all the guns being put out of action.

The counter-battering had been rendered very difficult by bad weather, which made it impossible for the aeroplanes to regulate the fire of the French artillery by observation. But on April 12 a fine day facilitated matters, although the result of the French fire could not be definitely ascertained. It was not till May 3 that a very clear atmosphere allowed continuous observation. It was then seen that only one gun was in action and the concentrated fire of the French heavy guns would appear to have silenced it. From that day forward no shell fell on Paris till May 27, by which time either the gun or guns had been repaired or others had taken their place.



POSITIONS OF THE THREE LONG-RANGE GUNS WHICH BOMBARDED PARIS

It now remains to give some description of the gun and its ammunition. The débris of the exploded shells furnished evidence from which the projectile could be reconstructed. It was determined that its calibre was 210 mm. (8.28 in.) and its weight approximately 330 lb.



"BIG BERTHA'S" EMPLACEMENT.

Its form is shown in the accompanying sketch. It will be seen that it differs considerably from shells which had until recently been used. Since the war began there had been unceasing efforts to increase the range of projectiles, and one way of doing this was by making them much sharper pointed, which enables them to cleave the air more easily. To avoid inordinately increasing the weight of

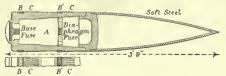
the whole projectile the front part of the shell had to be made of a lighter construction, while the strength required to resist the explosive force of the charge made it necessary to form the base in a specially strong manner. The shell therefore consisted of two separate parts, the shell proper at the rear, a long elongated eap of soft steel at the fore end. The sole function of the latter was to make the resistance of the air less, and it was sercwed on the head of the shell. It played a purely passive part, as there was no explosive charge in it. It will be noticed that the shell body is divided into two parts by a diaphragm in which were holes. This served a double purpose. When started on its eareer by the combustion of the propellant there would be a tendency for the explosive charge to set back on the base, which consolidated it and rendered it more likely to burn than explode violently. This would be to a great extent avoided by dividing it into two parts. The diaphragm also took a percussion fuse. With one also in the base a failure to explode was largely eliminated. As a practical fact all did burst.*

^{*}It has been suggested that the explosive consisted of two liquids, harmless by themselves, but explosive when mixed. Such substances are known, and were suggested many years back. If such were employed in this shell the holes in the diaphragm would probably be cleared by the shock of explosion, and then the top liquid would mingle with the bottom one, be mixed by the rotation of the projectile in its flight, and then explode when it struck its target. No unexploded shell was found, and speculation as to its explosive charge must be largely conjectural. But it is certainly curious that no trace of explosive was found on any of the fragments.

The shell also presented other peculiarities It is usual for projectiles to be given rotation by a band of copper near the base. But with this gun the projectile had grooves cut in its surface at the same pitch as the rifling.* This is shown at C in the diagram. The front copper ring was similarly grooved, the base one was not, so that when sent up the bore the lands of the rifling cut into it and the band afforded an effectual seal to prevent the exploding gases rushing over the shell-body and scoring the barrel. The object of the front upper ring is not evident. It had to be grooved because, when the gun was loaded, the grooves in tho shells had to be run up the lands to ensure them taking the rifling. If this were not done the shell would have jammed and the gun would have burst. It must have been a work of considerable time and great care to load the projectile, as it would be a very nice matter to fit the shell exactly into its position to take the grooves. The reason for this system of rotating the shell was that with the enormous velocity imparted to it the ordinary method of a copper-band might have failed. The shell would have stripped-i.e., would have been blown straight out of the gun without taking the rifling. When high velocity rifles were introduced the same defect was found with

lead bullets, and it has been the practice to cover the lead with a thin steel coating or nickel-copper sufficiently thin to take the rifling and sufficiently thick not to strip.*

To drive the shell over the 75-mile range to Paris required a very high muzzle velocity, and



Side elevation of shell

210 mm. SHELL WEIGHING 330 lbs. Fired on Paris.

A, Shell proper. B, Copper driving band. B¹, Copper band grooved to fit lands of rifling. CC, Ribs on shell to fit grooves in gun.

this rendered necessary a very large charge. The amount of propellant was certainly more than the weight of the shell, and probably exceeded it by one-third. Now a projectile moving through the air is greatly retarded by it: the power of overcoming this resistance depends on the shape of the head and on the weight behind the cross-section. The heavier the shell is for a given calibre the more easily does it overcome the resistance of the air. But the more the weight is increased the more powder is required to give it sufficient velocity, therefore the longer the gun-barrel must be to

^{*} The French use copper for their rifle projectiles.



"BIG BERTHA'S" CRADLE.

^{*} This system was not new. When rifled guns were being introduced, it was tried, but was soon abandoned.

burn it and the stronger to resist the explosion The probability is that the particular shell was chosen because it enabled these various conditions to be kept within reasonable limits But the result was to produce a weapon which fired a comparatively light shell, one, moreover, which had to be made very strong to stand the explosion of the powder charge, and which probably only had a short life. Thus it was that the shell weight was but small—viz., 330 lb., and it held but a small explosive charge—viz., 30 to 35 lb.

It is quite possible to calculate the velocity required for the range and, approximately, it may be put in the region of 4,800 ft., or a little more-i.e., nearly a mile-per second, a far higher velocity than had ever before been imparted to any projectilo.* The gun would require to be somewhere about 120 to 130 calibres long to burn the enormous amount of propellant employed. As its calibre was 210 nm., equal to 8.28 in., the approximate length of the gun would be between 80 and 90 ft., its weight would probably be 70 to 90 tons.† The fire over such a long rango eould not be very accurate; but Paris was a big target and could not well be missed.

The great reason why the very long range was attained was that its trajectory for a large portion of the shell's flight was at such a height above the earth that it passed through an atmosphere so attenuated as to afford very little retardation to it.

The Germans could not expect to do serious damage to Paris with such small shells and probably relied on the moral effect of the bombardment. In this they were grievously

The position the British Commander-in-Chief found himself in at the close of the day on March 23 was a difficult one. He had fought a good fight, but numbers had been against him. There was no question of yielding a yard of ground which could be clung to, but more troops were required to render our position secure and to bring the German inroad to a stop.

He had been in close touch with General Pétain, the Commander-in-Chief of the French armies, since the first indications of a probable attack on the British front and, as we have already seen, our Ally had made all the necessary arrangements to help in the common cause. On March 23 a meeting between the two leaders took place in the afternoon, and the arrangements already described on p. 60 were made for the succour of the Fifth Army and to meet the general situation.

Then came the question as to what British troops could be brought up to help the Third and Fifth Armies. Some might be obtained from the First and Second Armies at the more northern portions of our line. After consultation with the Commanders of these two forces. it was determined that each should contribute what divisions could be spared to form a General Reserve to the British Army for use where it might be required. The Canadian Corps formed part of this force and was intended for counter-attack in case the enemy broke through the British front. Its place of assembly was in front of Amiens.* By the end of March, eight infantry divisions had been drawn down from the northern parts of the line, and up to April 9 this number had been increased to twelve. This raised our total number of infantry to 46 divisions against the 73 which the Germans had on our front at about the same date.

mistaken. The Parisians absolutely declined to be frightened by it.

^{*} General Rohne, the well-known Prussian artillery expert, in an article published in the Vossische Zeitung about the time the bombardment commenced, gave tho muzzle at 1460 m.—i.e., about 4,800 fcet. Few guns give 3,000 feet, and most considerable less. The Spaniards before the War made one with 3,300, and a few experimental guns have exceeded this.

[†] It is practically certain that the guns were not all exactly alike; but sufficient is not known about them to speak with certainty.

^{*} No mention is made of the Fourth Army in Sir Doulgas Haig's dispatch.

CHAPTER CCLXIV.

THE GERMAN OFFENSIVE OF 1918. (II.)

GERMAN AND PRO-GERMAN COMMENT ON THE BATTLE—FRENCH ASSISTANCE—POSITION ON THE 3RD ARMY FRONT, MARCH 24—FIGHTING OVER THE SOMME BATTLEFIELD—GENERAL HUMBERT'S ARMY ARRIVES—RIGHT OF THIRD ARMY WITHDRAWN TO LINE BRAY-SUR-SOMME ALBERT—THE FRENCH FIGHTING—GERMAN ADVANCE HELD UP BY AEROPLANES—CAREY'S FORCE—THE "WHIPPET" TANKS—FORCE AT BRAYE WITHDRAWN BY MISTAKE—GENERAL FOCH IN SUPREME CONTROL—FURTHER WITHDRAWAL OF THE FIFTH ARMY—GENERAL RAWLINSON SUCCEEDS GENERAL GOUGH—FOCH'S INSTRUCTIONS TO HAIG AND FAYOLLE—FIOHTINO AT PORQUÉRICOURT—MONTDIDIER CAPTURED—FRESH ATTACK NORTH AND SOUTH OF ARRAS DEFEATED—THE GERMAN OFFENSIVE STEMMED.

N the last chapter the events of the first three days of the German offensive which opened on March 21, 1918, were described. The set-back to the British Armies, as shown in the map given at p. 44, was considerable. Let us nowlook at the German view of the operations on the three opening days of the movement. The following account is compiled from the wireless reports on March 23 and supplemented by information from different German papers of that date.

The artillery action had been lively during the night, and swelled at 4 a.m. to a continuous roar. The effect of the 5½ hours' fire was splendid, one enemy battery after another was silenced, while the effect of the English guns on the German back areas was weak,

said the Berliner Tageblatt of March 23. The German official Wireless added:

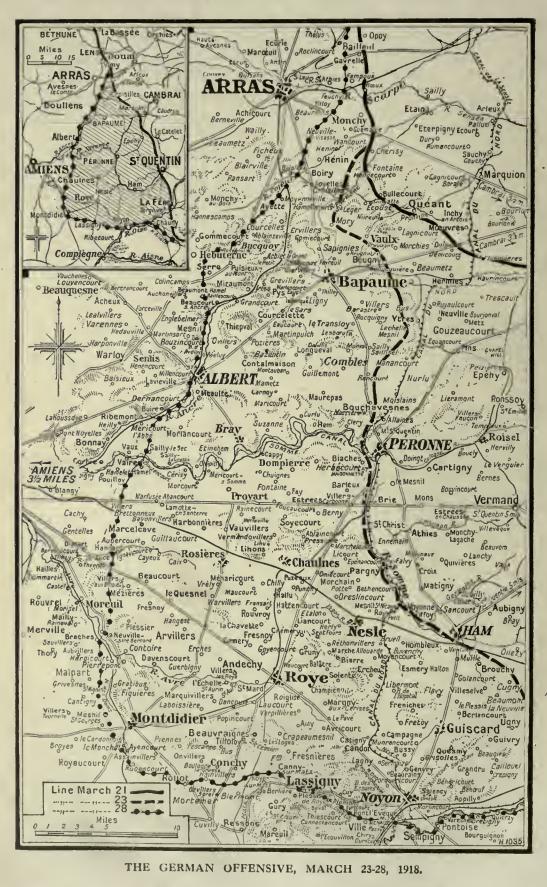
"The mine throwers (trench mortars) at 8.30 a.m. began their work, which was directed against the positions to be assaulted, and at 9.40 the infantry went forward; the first waves hardly suffered any losses, and at 11 the Hargicourt-Pontru line was reached. The air was so thick with fog, mixed with gun-smoke and exhalations of gas, that it was impossible to see ten paces ahead. The losses of the brave English, who strongly defended themselves, Vol. XVIII.—Part 224

were very heavy in killed, wounded and prisoners, while the German losses are surprisingly small. The spirit of the troops is sustained by joyful confidence of victory. The English defence increases, counter-attacks are commenced. Tanks clatter forward. The English artillery protection position is crossed at numerous points. In the Ronssoy wood alone four batteries were taken. The present German thrust has wrested from the two English Armies their strongly fortified zones and within 24 hours has taken from them 16,000 prisoners and 200 guns."

The Kreuz Zeitung of March 23 looked forward with justified confidence to the further course of the gigantic battle in the west. . . : "We are confident that these battles will lead to ultimate victory." The Vossische Zeitung said:

We have robbed our opponent of ground which for months has been prepared by him for coming battles down to the smallest detail. . . Our object is not to win ground or towns. Our battle aim is solely the destruction of enemy forces and his means for the continuance of the war. . . Where the enemy is gathered in greatest strength, an attack offers us most prospect of success. From this point of view, General Foch's Army Reserve will form our final battle aim.

Prophetic utterance! But the result was not in accordance with German aspirations.



THE GERMAN OFFENSIVE, MARCH 23-28, 1918.

The German wireless (March 24) stated:

"When the drum-fire on the morning of March 21 had poured forth its thick sheaves of shot, the barrels of the cannon were red hot.* In the battery positions the powder smoke of the shots had thickened the fog to such an extent that one could not see from one gun to another. The attacking artillery fired the number of shots planned in the thick fog, but the objectives and the time of the firing were so exactly calculated that the attack remained independent of the weather. The first English

overran the crater-field and are now storming beyond the chains of hills west of the captured villages, of which the fields and meadows have long since been transformed into desolate steppes. The English sought to make a stand in the artillery position. The ground favoured them; . . . but their artillery was too much overcome to support their infantry effectively. The German batteries, on the other hand, pressed forward. The fire continued to be directed on the crater-land, whilst the pioneers were building a road through the wilderness



GERMAN SOLDIERS LOADING A "MINE THROWER" (MINENWERFER).

position has disappeared, and in its place there extends a wide and desolate crater-field. Everywhere there are the remains of wire entanglements, broken-down shaft entrances, and destroyed blockhouses. At most places the battered-in trenches were overrun, and the survivors came rushing towards the Germans minus their weapons and with their hands in the air. At other places the English are defending themselves with great stubborness. Near Epéhy, for example, they defended the edge of the village until the evening. Farther south, however, Lempire, Ronssoy, Hargicourt, Villeret, and Pontru have been taken. The storming troops, with indescribable energy,

of mire, and on the first day of attack the artillery followed up the storming troops. At many points the artillery protecting position was broken through. Even in the declining evening the loftily situated ruins of Templeux, with the whole of the strongly constructed quarries, were taken.

"The second day also began with a thick fog. Its impenetrable veil favoured the English retirement. The German attacking artillery, which was brought forward over the crater zone, had at first small objectives. The fire of the English guns of heavy calibre barred the few crossings through the miry field. But German field batteries galloped between the towers of smoke. They were thus able closely to support the infantry attack. At 7 o'clock

^{*} This is ridiculous exaggeration. The guns could not have been loaded had this been the case.

the firing began against the second British position. Hardly an hour later the triple wire entanglements protecting it were broken through. The fog continued beyond mid-day. The infantry stormed farther into the field of mist. Afterwards, in unceasing pursuit, it followed the artillery. At mid-day companies which had pushed forward had already reached Roisel. Fighting continued desperately around the station. Numerous guns were captured here. At the same time English detachments continued to hold out on the heights south of Templeux. Their machine-gun fire struck the German advancing troops in the flanks, but not for long. Before our storming waves, advancing over the chains of hills, rises the forward. The German artillery fire had produced its effect. The strong obstacles which had been prepared during many months were destroyed. The English trenches were transformed into graves, which were full of dead. Whilst the first lines in places were only thinly occupied, the English offered a brave resistance in their second position, which was broken down in a desperate struggle. The dug-outs had to be taken in hard hand-to-hand fighting. Here the superiority of the German infantry showed itself in the best light. Unexpectedly commenced and extremely effective German artillery preparation only allowed the countereffect of the English to be brought into action gradually. The German losses were thus



A BRITISH HEAVY GUN.

English Army. Close bands of prisoners are streaming backwards. In the roads field-greys are followed by chains of reserves and columns. The enemy retreats to his third position. North of the Cologne Brook their wire entanglements were reached even before nightfall.

"Bright sunshine favoured the progress of the German offensive between the Searpe and the Oiso on the second day's fighting. On the whole front of attack the German infantry, determined upon victory, unceasingly pressed surprisingly light. In the captured second English position many closely-massed counterattacks had to be warded off, two of which, supported by tanks, took place in the evening of March 21 in the region of Doignies, after the capture of the village of Vaulx-Vraucourt. Sixteen tanks were destroyed by artillery and infantry fire and trench mortar fire. The English suffered unusually heavy losses during their fruitless counter-attacks. The booty and number of prisoners are continually increasing. A



[Official photograph.

IN MONCHY.

single German regiment captured 30 guns near Monchy. In the advance beyond the heights south of Maissemy, German storming troops encountered enemy batteries. After three of them had been blown up, an additional one was destroyed before our troops passed farther on.

"On the whole front our battle aviators participated successfully in the fighting, bombs being freely dropped on the railway stations of Chaulnes, Roye, and Noyon. Good hits on arriving trains, as well as great explosions at the station of Compiègne, were observed. Further strong explosions in the direction of Behagnies confirmed the excellent effect of our long-distance fire, which was well supported by our artillery aviators.

"The decision in the Monchy-Cambrai-St. Quentin-La Fère battle was brought about by a surprise over-running of the third position. South of Bernes, the English, on March 22, had sent forward fresh forces from Amiens into these positions. The troops had scarcely reached these positions, and their machine-guns had not been fetched forward, when they were surprised by the German attack. On the 23rd the mist lifted earlier than on the preceding days, and the English gave way over the whole front. It is true that their rearguards defended every hilly ridge, but in a short time they were driven out of every new position they took up. The superiority of the German leaders and troops made itself felt to the full. The English artillery sacrificed itself in order to cover the retreat. Their batteries moved back only a few hundred yards before the German storming waves. In raging, rapid fire they shot away their munitions, and then attempted to limber

up and to drive away. Under our shrapnel and machine-gun fire numerous batteries could not be got away, whilst others were captured with their teams. The counterattacks made by the tanks helped just as little. Gun and mine-thrower fire put most of them out of action before they had got properly working. One tank, which broke out into the German infantry line, was rendered harmless by the clever deed of a non-commissioned



[From a German photograph.
TANKS DESTROYED BY ARTILLERY FIRE.

officer, who sprang upon the tank and killed the crew by means of revolver shots fired through the air-hole in the covering of the tank.

"South of Péronne, on the Somme, we advanced. At the same time other detachments pressed forward towards Péronne and to the north of it. Here the English undertook counter-attacks from the town. Their companies, however, fled when the Germans stormed towards them. Péronne is in flames. What the French, after careful work, had built up after the evacuation of the town by the Germans

mans, the English destroyed before their retreat.* But the retreat was over-hasty, and rich booty remained behind on every hand. Automobiles with English staffs left the town shortly before the Germans arrived. Between

brought death and confusion. British airmen did not accept battle, and flew away as soon as they saw the German chaser airmen."

The Münchner Neueste Nachrichten (March 24) said



the retreating columns the tanks travelled, which no longer dared to make fresh attacks.

German battle-plane squadrons accompanied the retreat. Their machine-guns and bombs

The first violent blow in the vast and decisive battle has been struck against our most bitter and most dangerous foe on French soil. England has suffered a defeat whose magnitude and results cannot be disregarded. The English defended themselves with all the stubbornness of their race, but up to the present have been unable to bring the fight to a standstill.

WITH THE GUNS ON THE WESTERN FRONT.

^{*} This is untrue.

We are firmly assured that no power on earth can snatch victory from us.

The German wireless (March 24) stated:

"On the battlefield between the Scarpe and the Oise, within a period of three days from the 21st to the 23rd instant, the English Army suffered the greatest defeat in British history. The successes achieved in the great victory are such as have not been nearly approached by the Entente since the beginning of the battle of positions in the western theatre. The English offensive near Arras in April, 1916, was made on a front 12 miles wide; the Anglo-French attack on the Somme in July, 1916, was made on double that width; the French attacked on the Aisne in 1917 on a width of 24 miles. The English big attack, prepared for months in Flanders, never exceeded a space of 18 miles, and the whole of the territorial gains of almost half a year's fighting only amounted to 36 square miles. In the three days' battle in the west, the Germans made a territorial gain of 700 square miles."

Pro-German papers in neutral countries did not underestimate the German effort, as the following quotations show:

The morning edition of the Hague Nieuwe Courant of March 24 said:

The position of the English troops on the sector of front from St. Quentin, where they are retreating in good order over the devastated territory, appears to be extremely grave.... The latest reports from the Western front must be a mighty blow in Enleute countries to the confidence in the unshakeableness of the Entente front. The moral support which grows out of the successes hitherto achieved by the Germans should not be underestimated, and it may exercise an incalculable influence in the further course of ovents.

The military correspondent of the Basler National Zeitung (March 23) wrote:

Unless appearances are deceptive, a decision is at hand. It may be a terrible one, and may contain great dangers for neutral neighbours also; and yet it comes as a relief to a world weary of war: things are progressing. Not in the distant East with its enormous spaces, not on the mountain front with its obstacles, not between split up forces in undecisive side-shows of the theatres of war. No; in the open territory of the strongest members of the Entente, on the Continent between Paris and the Rhine, the massed forces of both enemy armies are preparing for a gigantic struggle. Wo do not wish or expect as a result of it the decision of the question "to be or not to be" of either of them.

A leading article in *Aftonbladet*, a Swedish paper, discussed the question whether the end of the war was approaching:

The first English report showed sufficiently clearly the fear which filled the English Army Command and Parliament.... It also seems certain that the Entente politicians were completely out in their calculations with regard to the strength and aims of the German attack. Perhaps we may already venture to make a

guess at the future:—It does not seem too improbable that Hindenburg will perhaps free England from all need of tonnage. If a decision is reached on the West front during the next few weeks, then the war will certainly be at an end, and it is our duty to see to it that Swedish tonnage does not fall into wrong hands, in the last few moments of the war which are lost for the Entente.

The German Great Headquarters' report of March 25, dealing with the fighting up to the 24th, stated:—

"The Crown Prince Rupprecht of Bavaria has, with the armies of Generals Otto von Below and von der Marwitz, again defcated the enemy in the tremendous struggle near Bapaume. General Kühne broke through the strong positions of the enemy to the north-east of Bapaume in bitter fighting; the troops of General Grünert and General Staabs, coming from the east and south-east, drove the encmy back via Ypres and Sailly. The stubborn enemy resistance, which had been reinforced with French forces, was broken in violent battles. Freshly brought-up troops numerous tanks threw themselves against our advancing troops along the roads leading from Bapaume to Cambrai and Péronne. They could not bring about a decision in favour of the enemy. In the evening, defeated, they streamed back again in a westerly direction.

"During the course of a night battle, Bapaume fell into the hands of the victors. Hot fighting developed for the possession of Combles and the heights situated to the west. The enemy was defeated. English cavalry attacks broke down. We are now standing to the north of the Somme, in the middle of the former Somme battlefield.

"The German Crown Prince, with the army of General von Hutier, has forced a passage across the Somme below Ham. His victorious troops have, in bitter fighting, mounted to the west of the Somme. Violent counter-attacks by English infantry and cavalry broke down with sanguinary losses. The town of Nesle was taken by storm this evening.

"Between the Somme and the Oise the troops which penetrated across the Crozat canal have, late in the evening of the 23rd, taken by storm the strongly-fortified and stubbornly-defended positions on the western bank of the canal. In hot fighting the English, French and Americans were thrown back through the pathless wooded country via La Neuville and Villequier-Aumont. The attack continued yesterday. French infantry and cavalry divisions, which were brought forward

for counter-thrust, were thrown back with sanguinary losses. In restless pursuit, General von Conta and General von Gayl pressed after the retreating enemy. Guiscard and Chauny were captured in the evening. We bombarded the fortress of Paris with long-range guns.

"The enemy casualties are unusually heavy.
The tremendous booty which fell into our



GENERAL GRÜNERT. Commanded a German Army in the Cambrai offensive.

hands since the 21st cannot yet be estimated. More than 45,000 prisoners have been ascertained, many more than 600 guns, thousands of machine-guns, tremendous quantities of munitions and implements, great stores of supplies and pieces of clothing.

"At Verdun and in Lorraine the artillery duels continue.

"From the other theatres of war there is nothing to report."

The German Great Headquarters report on the 26th was as follows:—

"In continuation of the great battle in France our troops yesterday achieved fresh successes. English divisions brought up from Flanders and Italy with the French threw themselves against our troops in desperate attacks. They were defeated. The armies of General Otto von Below and General von der Marwitz have finally maintained themselves in Ervillers after a hot and fluctuating battle, and in their advance against Achiet-le-Grand, captured the villages of Bihucourt, Biefvillers, and Grevillers. They captured Irles and Miraumont and have crossed the Anere. English troops freshly brought forward attacked violently on a wide front from the direction of Albert.

The enemy was driven back after a bitter struggle.

"We have crossed the Bapaume-Albert road, near Courcelette and Pozières. To the south of Péronne, General von Hofacker has forced a passage across the Somme, and has taken by storm the height of Maisonnette, which was so hotly contested in the Somme battle of 1916, as well as the villages of Biaches and Barleux. Strong enemy counter-attacks were themselves out before our lines.

"The army of General von Hutier, after hard fighting, drove the enemy back near Marchelepot and Hattencourt across the Péronne-Roye railway. The tenaciously-defènded Etalon was wrested from the French and English.

"French divisions brought up from Noyon were defeated at Freniches and Béthencourt. Bussy was captured.

"We are on the heights to the north of Noyon.

"Our signal service has taken a prominent share in the successes which we have achieved-Labouring untiringly they rendered possible the cooperation between the units fighting next to one another, and gave the leaders the assurance of being able to guide the battle into the desired channels.

"Railway troops, which first earried out the



GENERAL STAABS.

Commanded a German Army in the Cambrai offensive,

tremendous advance from the beginning of the fighting without any friction, and who are now coping with the traffic behind the front, are working ecaselessly on the reconstruction of the destroyed railways. "Since the beginning of the battle 93 enemy aeroplanes and six captive balloons have been brought down.

"The booty in guns has increased to 963. Over 100 tanks are lying in the captured positions.

"On the rest of the Western front tho artillery battles continued, increasing on the Lorraine front to great strength. We continued the bombardment of the fortress of Paris.

"From the other theatres of war there is nothing new to report.

FIRST QUARTERMASTER-GENERAL VON

Ludendorff."

But little comment is necessary on these statements. The official record of events able to hold out for about six days, whereas aid was urgently needed on the second day of the struggle.

The Crozat Canal had been given up, and the III British Army Corps was, as we have scen, in very weak connexion with the rest of the Fifth Army. The task which fell on the French was to oppose the German troops coming on in very superior numbers in this region. As the French troops arrived in their motor-cars and lorries they were thrown into line so as to form a connected whole with the retiring British Army. They arrived under disadvantageous circumstances, for the situation was thought so serious that the troops were pushed on almost without guns or reserve ammunition,



[French official photograph.

NESLE: THE SUGAR REFINERY.

presents them in a specially German form. but that must be expected.

Let us now turn to the French movements made to assist the Fifth Army. It may here be remarked that, as in the Battle of Loos, the present operations showed clearly how much better it is when troops of different nations are fighting side by side that they should all be under one command. Had this been the case at the right flank of the Fifth Army there can be but little doubt that there would have been French reserves immediately behind its right flank, which might well have altered the situation and at any rate would have slowed down the retreat.

We know that the possibilities of the situation had been carefully considered and that steps had been taken to reinforce Sir Hubert Gough, if necessary; but unfortunately the assumption was made that the British would have been and this did not help them in the hard fighting necessary in the critical position which had arisen.

At dawn on the 24th, the Germans had reached Bus, Lechelle and Le Mesnil-en-Arrouaise, and a little later on Saillisel, Rancourt and Clery. This made it necessary to draw back the right of the Third Army, as the Fifth had been forced back beyond the general line; Bertincourt had therefore to be abandoned. North of this point the situation was more favourable, for although Mory was taken carly in the morning after being the scene of hard fighting throughout the whole night, still the troops there practically held their old positions, the Guards 3rd and 31st Divisions* throwing back a series of strong attacks. The 17th Division repelled the hostile troops in four successive attacks east of Barastre and the 47th

^{*} Major General G. P. T. Feilding, C.B., C.M.G., D.S.O., commanded the Guards.

at Rocquigny also held the ground till the afternoon, but when the Germans forced their way round their flank between Rocquigny and Le Transloy, they were obliged to fall back. To the south of this point the enemy poured his troops rapidly through the gap which had been made in our line and cut off a part of the South African Brigade of the 9th Division near Marrières Wood, north of Cléry. They fought with the most gallant bravery until their ammunition was exhausted and only about 100 men remained unwounded, but the German



MAJOR-GENERAL G. P. T. FEILDING, C.B., C.M.G.

Commanded the Guards.

advance continued. Combles was captured and the high ground near Morval, and they pressed still onward towards Les Bœufs. This continued advance threatened to penetrate between the Third and Fifth Armies, and there was considerable danger of penetration in heavy force.

The V and IV Corps were therefore ordered to retire to the line Bazentin-Le Sars-Grovillers-Ervillers. A supreme effort was necessary to save the situation. Fortunately the leading troops of the 35th Division, under Major-General McKay Franks, C.B., were arriving at Bray-sur-Somme, and the miscellaneous troops available in the Albert area, including some who had been with the tanks and were now armed with Lewis guns, were collected together and pushed rapidly forward along the north bank of the Somme to support the VII Corps, which, it will be remembered, formed the left of the Fifth Army.

A little later in the day a portion of the 1st Cavalry Division reached Montauban. By this time the Germans were past Cléry, and were pressing hard on the 9th and 21st Divisions. The combined action of the new arrivals checked the enemy for a time. Two battalions, the 15th Cheshire Regiment and the 15th Notts and Derby Regiment, from the 35th Division, by a timely counter-attack helped to hold the enemy at bay, and a line was now taken up from the Somme at Hem past the Trones Wood to Longueval, thus barring the road to Albert.

The right and centre of the Third Army fell back during the afternoon under very difficult circumstances. By night, the V Corps, however, succeeded in reaching a line from Bazentin-High Wood-Eaucourt-l'Abbaye, Ligny-Thilloy. A few hours later the troops of the IV Corps were in position on a line west of Bapaume between La Barque and Ervillers, but the touch between the various divisions of these two corps was by no means as secure as it might have been. The fighting during the retreat had been somewhat confused and the country was difficult. On the right flank bodies of the German infantry had managed to push in across the line by which our troops intended to retreat. Here 12 machine-guns of the Machine Gun Battalion of the 63rd Division were of the greatest utility in action near Les Bœufs. They held up the enemy's advance from Morval at a most critical time, firing 25,000 rounds into the enemy's advancing masses, and by their vigorous action held back the German advance and enabled their Division to reach the position assigned to it.

On March 24 the enemy, who had, as we know, arrived at the banks of the Somme south of Péronne, made several vigorous attempts to progress to the western bank. At Pargny he successfully crossed and maintained himself on the west bank of the river, thus passing in between the 8th Division, under Major-General W. C. G. Heniker, C.B., D.S.O., and the 20th Division, but these two divisions counterattacked and drove back bodies of the enemy which had come by St. Christ and Béthencourt.

The Germans continued their pressure the whole day long against the general line of tho river and also in a westerly and south-westerly direction from Ham, to which our troops offered a determined resistance. Opposite Ham a successful counter-attack by the 1/5th (Pioneering) Battalion Duke of Cornwall's Light Infantry, which formed part of the 61st Division, vigorously delayed their advance.

In the evening, although the line of the river

north of Epenaneourt was still held by the British, the gap made at Pargny had been widened and the enemy had reached Morchain, thus forcing the 20th Division, the left flank of which was now fully exposed and which had used up all available troops in a series of welldirected counter-attacks, to retreat during the afternoon to the line of the Libermont Canal. The troops on the right of the 20th Division had already been pressed back to the same line. Between the Somme and the Oise, the enemy, under cover of a thick fog, had pressed vigorously forward in the early morning. It will be remembered that the troops on the right of the Fifth Army were a little farther east than those in the centre. The left of the 20th Division was south of Morchain, the right near Eaucourt, while the 36th Division was at Cugny, these two divisions thus holding the line of the Somme at the elbow where it began to turn eastward, before winding north-east towards St. Quentin. The pressure of the enemy on the right flank, combined with that on their left flank, compelled these troops to fall back, and they did so, first to Villeselve and subsequently to Guiscard, the 20th Division thus bending back to get touch with the remainder of its battalions on the Libermont Canal

The retreat was conducted under circumstances of great difficulty. The Germans pressed hard on their tracks. Among many gallant incidents of the movement was a brilliant charge of a British squadron belonging to the 6th Cavalry Brigade, 3rd Cavalry Division, which burst through the advancing German infantry, sabreing a large number of men and capturing over a hundred prisoners.

It was indeed a time at which well-led cavalry could do great service, and many units of both the 2nd and 3rd Cavalry Divisions (the latter being under the command of Major-General A. E. W. Harmond, D.S.O.) by timely charges greatly relaxed the pressure which the enemy was putting on our men. So excellent was the service of the mounted men seen to be that even while the battle was in progress arrangements were made to furnish a regiment of Yeomanry Cavalry, which had recently been dismounted, with horses. The experiment was a successful one, and the men on their newly provided horses fought most gallantly, and it may certainly be said that the action of the British cavalry on this oceasion stopped the Germans from penetrating through our weakly held infantry line. The country was favourable for the action of small cavalry units, for it was



Official photograph.

BRITISH FIELD GUNS ON THE WAY TO THE FRONT.

broken and wooded but with fairly good going, and this permitted the element of surprise which is of great advantage in such tactical action.

On March 23, as we have seen, the British on the right of the Fifth Army were being hardly dealt with, but fortunately the French were now coming up in considerable numbers, for General Humbert's troops and others were beginning to arrive. General Humbert commanded the Third French Army which was about Clermont when the attack began. Clermont is about 30 miles south of Montdidier. But even with this accession of force the united strength was insufficient to withstand the onslaughts of the far superior German numbers, and during the night the troops at this part of the line immediately north of the Oise were withdrawn to the ridge above Crépigny, whence they were connected on the left with the 20th Division at Guiscard and on the Libermont

General Humbert had been informed that "Supposition A" was to be carried out. This was the direct support of the right wing of the British. But on the 23rd there was no standing on the original line, for the British right had

already been forced back beyond the point at which it was hoped the united forces might have held, and it had been necessary to send in the French troops as they came up wherever they were most required to fill up gaps. The 125th Division under General Diebold, of the Sixth Army, had, as we have seen, supported directly the 58th Division, and had been compelled to fall back with it.

On the 23rd the first of General Pellé's divisions began to arrive in their automobile conveyances.* The first to turn up was the 9th Cuirassiers, acting on foot, and it was pushed into the fight most opportunely. For rushing against the Germans holding the western edge of the Frières Wood they made the enemy hesitate, though they lost heavily themselves. The 9th French Division, under General Gamelin, was sent into the fight more to the north, and joined on to the right of the British near Golancourt, thus threatening the flank of any German force moving against the British right. The line this division held was nearly 10 miles long, extending from Flavy de Meldeux to Ollezy, and was, of course, too long

* General Pellé commanded the 5th French Corps which was part of General Humbert's army.



[Official photograph.

for such a force, even aided, as it was, by some British troops. But fortunately the 10th Division followed on the heels of the 9th, and General Pellé, who had come up before this portion of the eorps which he commanded, ordered it up on the left of his troops to the line Freniehes-Bétheneourt. This support assisted not only his own 9th Division, but also those of the III. Corps falling back to the south of Golaneourt. These fresh troops helped their British comrades of the III. Corps to stem the German torrent. The manner of their introduction into the fight had not conduced to an orderly line of battle, but the principle followed had been the right one-viz., to thrust them in wherever required-and had proved of valuable assistance. In the evening, when there appears to have been a little lull in the fighting, General Pellé took steps to regularize the position of divisions.

In aecordanee with the arrangement come to between Field-Marshal Haig and General Pétain, the III. Army Corps, which had become more or less separated from the XVIII. on its left, was put under the command of General Humbert, to which Pellé's eorps belonged, from mid-day on this date. It was decided on March 23 that the French should take over the ground south of Péronne hitherto held by the Fifth Army as rapidly as their concentration of troops would permit, thus forming together a strong French force on the southern side of the Oise. General Humbert's command area now extended from Barisis to a line running from the north of the Crozat Canal to the north-east, to the south-west by Ollezy-Golaneourt-Freniches-Avrieourt and Beauvraignies. The 125th Division (from the French Sixth Army), as well as the 5th French Corps, were placed at his disposition, and these with the English troops on the spot formed a respectable sized force which was constantly being augmented by the rapidly coming up French reinforcements. The 22nd and 62nd French Divisions and the 2nd Cavalry Division fairly held their own.

It was indeed full time for further reinforcements and for putting the corps on the right of the Fifth Army under the same eommand as the Allies who had eome to their assistance as it was acting in the same area with a much larger French force. It was a forerunner of the big change and improvement which took place a few days later. It emphasized once more the necessity for unity of command. For it must be admitted that if the Fifth Army had had behind it reinforcements ready at any moment to support it, instead of having to wait nearly three days, the battle on the British right wing might have borne a very



FIELD-MARSHAL SIR DOUGLAS HAIG MEETS M. CLEMENCEAU AT THE FRONT IN FRANCE.

different eomplexion. However, the arrangement had now been made, and henceforward on our right there fought a mixed force of the two nations under one single and able eommander.

General Humbert was a man of the physical class best described as dapper, endowed with a great energy and decision of character. He had seen a good deal of active service in Tonkin, Madagasear and Moroceo. Commencing the war at the head of the Morocean Division, he had successively passed to the leadership of an Army Corps, then to that of the Third French Army.

The time at which he took the leadership of what must now be described as the Anglo-French Command on the right of the British Fifth Army was indeed a difficult one. The XVIII Corps had fallen back somewhat to the north to keep in touch with the XIX Corps and the VII Corps to its north, and thus offered a breach in our line and a favourable opportunity for the Germans to push in between the British right and the French left. For the movement of the III British Corps left open the northern side of the Oise to the Germans. Noyon, an important crossing of the Oise, had to be protected, and the only troops available on the 23rd were the widely extended 9th and



GENERAL HUMBERT.
Commanded the French Third Army.

10th French Divisions, which held the ground in front of the Caumont-Noyon range of small wooded heights. The 125th Division was still in front of Tergnier

But other reinforcements were coming up, the 2nd Cavalry Division, under General Robillot, being the first. It was sent forward to the ground between Guiscard and Nesle with the 62nd Division, under General Margot, and the 22nd, under General Capdepont. On the evening of March 23 the 22nd had scarcely come up to Roiglise, on the road from Roye to Noyon, about two miles from the former, when it was at once sent forward towards Hombleux and Rouy-le-Petit, on the west of Ham. The 62nd Division, after leaving its cars at Erchen, between Roye and Ham, marched at once towards Hombleux and Esmery-Hallon, on the left of the 10th Division. On the left of the 62nd was the 22nd Division. The 2nd Cavalry Corps had, as we know, been sent on towards the ground between Guiscard and Nesle, and its commander now took command of this group of divisions as well as his own. The left of his horsemen, with part of the 22nd Division, was feeling for the right of the Fifth Army, so as to keep in contact with it.

The night of March 24-25 was one of almost continuous fighting, especially about Sapignies and Behagnies, at which points the Germans made vigorous attempts to break through the line. This was part of the endeavour to force their way on towards Bapaume and beyond towards Hébuterne and Albert. Early on the 25th a determined attack was made on our line between Favreuil and Ervillers, but here the 42nd Division, under the command of Major-General A. Solly-Flood, C.M.G., D.S.O., drove the Germans back out of Sapignies, into which they had penetrated. To the south of the 42nd Division was the 2nd Division at Thilloy and Ligny. Attacked with great vigour, it still held its ground and drove off the German assault and, generally, it may be said that the line from Favreuil downwards was held till the middle of the day, when fresh attacks were made in great force which were successful in pushing through the right of the IV Corps, with which the divisions of the V Corps were not in immediate touch. Grévillers was reached and, to the north of it, Bihucourt, thus forcing a break in our line at this area, although to the north at Ervillers our position was not materially injured. Indeed, the village itself was held all day by the 1-10th Battalion Manchester Regiment, belonging to the 42nd Division, which beat off no less than eight determined attacks.

On the north bank of the Somme, about Hem and Trones Wood, the repeated attacks of the Gerinans were all repulsed, and in many cases followed up by counter-attacks, which succeeded in taking many prisoners. There is no doubt that in this portion of the field the enemy suffered very severely, and although the left flank of our troops here was quite without support, still they managed to hold their own all through the day.

But the gap between the IV and V Corps was destined to become wider. The troops about Montauban and Grévillers, a distance of some six-and-a-half miles, had been unable to get in complete touch with one another in the position to which they had retreated on the previous day, and the situation was therefore a precarious one of a number of units not forming a continuous line under one united control. The fighting was severe all through the morning

and afternoon of the 25th, and the 63rd Division (under Major-General C. E. Lawric, C.B.,D.S.O.) which was particularly strongly attacked, repulsed all the enemy's attempts. The want of continuity, however, weakened the British resistance, and the divisions commenced to fall back individually towards the Ancre, which added to the gap already existing between the IV and V Corps. In the afternoon, the Germans made further progress and captured Courcelettes, and then moved forward through the gap in the direction of Pys and Irles.

This movement practically turned the flank of the IV Corps and compelled the Third Army to draw back its centre to the line of the Ancre, which river had already been crossed by our troops near Beaucourt. Every endeavour was made to establish a strong line on the river, but nevertheless hostile patrols reached the right bank north of Miraumont and continued to push in between the IV and V Corps in the direction of Puisieux-au-Mont and Serre. The IV Corps therefore continued to retire during the night and the early morning of the 25th to the line Bucquoy-Ablainzeville in touch with the VI Corps about Boyelles. The divisions of the Fifth Army north of the Somme were on this date placed under the command of Sir Julian Byng. On the right the remaining divisions of the Third Army were withdrawn to the line Bray-sur-Somme—Albert, whence their line ran back along the right bank of the Ancre to the neighbourhood of Beaumont Hamel.

At this time, although the gap about Serre was serious, still on the whole the Third Army was able to hold off the Germans. They no longer came on with the same vigour, and were in all probability beginning to feel the effects of the continued offensive which they had undertaken since the 21st. Moreover, the fighting was now taking place on the old Somme battlefield, which had been completely ruined by shell-fire, and afterwards devastated when Hindenburg began his retreat in the early part of 1917. Also at this time we were getting considerable reinforcements, and it seemed probable that the line of the Ancre could be held and the enemy's advance north of the Somme stopped. On the south side of this river the position was still one to cause anxiety. We had been forced back a considerable distance, and although the French were coming up and their numbers increasing steadily, the issue was by no means clear, especially as the advance of the enemy on the north side of the



[French official photograph.

FRENCH ARTILLERY PASSING THROUGH NOYON.

Somme threatened the left flank of all tho troops south of it. We had no further British troops available to support this portion of the line, and it followed that the French must now be looked to to maintain the line of battle on the British right flank. As this made Pétain's troops the main force in this part of the field, it was plainly reasonable to put the comparatively small number of our troops under French command.

On this date, therefore, the French took over the direction of the battle to the south of

eapture of Guiscard, rendered the situation of the Allied troops at this part of the field a very dangerous one, and the position of the French and British artillery north of the Oiso Canal was dangerously threatened. It was therefore deemed expedient to withdraw both the French and British batteries to the south of the Oiso, and they were taken across at the bridge of Appily, covered by French troops aided by the dismounted men of the Canadian Cavalry Brigade. Further fighting ensued, but the enemy was for a time checked, largely by



THE PLACE DE L'HOTEL-DE-VILLE, NOYON.

The photograph was taken on the occasion of the decoration of Commandant Féquant, Commander of French Aviation Squadrons, with the Cross of the Legion of Honour by M. Poincaré.

the Somme and the general direction of the British forces employed there was given to the French Commander. It was hoped that within a short time the latter would receive such reinfercements as would enable him to stop any further German advance.

During the previous night the enemy had eaptured Guiseard and developed attacks in great strength on the pesition held by the French and British on the Caumont-Noyon Ridge. The advance of the enemy along the northern side of the Oise, combined with the

the action of the French armoured cars, which wrought great havoc on the German infantry, and, late in the afternoon, troops of the British 18th Division re-took the village of Babœuf in a brilliant charge and captured 150 prisoners. But the Germans still continued to progress south and west of Guiseard, and by night captured Noyon. This compromised the position of both the French and British troops to the cast of this town, and they fell back to the south bank of the Oise during the night. This movement was successfully accomplished.

As the French were now coming up in greater numbers, the troops of the British III Corps were gradually withdrawn in the following days and sent north to rejoin the Fifth Army.

Meanwhile on the northerly portion of the Fifth Army hard fighting had been going on from an early hour. The advance at Licourt and to the south of it widened the gaps which already existed between the XVIII and XIX Corps. The enemy also captured Nesle, and



MAJOR-GENERAL C. E. LAWRIE, C.B. Commanded the 63rd Divisisn.

both French and British troops were compelled to retreat to the high ground about Herli to the south of the Ingon river. More to the north the XIX Corps was pushed back in the direction of Chaulnes. To the south of Nesle the Germans crossed the Libermont Canal and Marchelepot was set on fire. Our troops, however, still held the line of the eanal east of Villers-Carbonnel and Barleux, but the threatening advance of the Germans from the direction of Péronne along the right bank of the Somme rendered this position untenable To have remained in it would have been to have risked a severe defeat. The British line was therefore withdrawn during the evening to a new position, Hattencourt-Estrées-Frise, the movement in the neighbourhood of Biaches being covered by a counter-attack delivered by the 39th Division.

In the gap between the XVIII and XIX Corps west of Nesle the Germans had been advancing and had reached Lianeourt Wood when the 61st Brigade of the 20th Division, which had been in connexion with the 36th Division more to the south, fortunately arrived in 'buses. Although reduced to only

450 rifles in the severe fighting which it had just come through, it put a stop to further German progress and made it possible for the remainder of the 20th Division to withdraw without hindrance through Roye on the morning of the next day.

We have seen the aid that had been rendered by the arrival of the 125th Division of the French Sixth Army and Pellé's Divisions (9th and 10th) with the 1st Cavalry Corps, the first-named on March 22, the others on the following day. On the 24th further French reinforcements came up. The first of these was the 35th Division.

General Humbert issued the following orders. General Pellé with the 5th Division was to stop the German advance no matter what might be the condition of his troops (the 10th and 9th Divisions). On their left the 1st Cavalry



MAJOR-GENERAL O. S. W. NUGENT, C.B. Commanded the 36th Division.

Division was to keep the road from Ham to Noyon at all costs, holding the slopes of the Caumont-Noyon hills from Crisolles to the Bois de la Cave. The 35th Division, which had just come up, was to take up a line from Abbécourt on the Oise to Caillouel. It was hoped that these two bodies, with the 9th and 10th Divisions in between them, would serve to stem the tide of the German advance. But unfortunately the enemy had been able to penetrate between the 9th and 1st Cavalry Divisions and

had won a footing in the Bois de la Cave. The 9th Division lost Quesmy and was obliged to retreat to its left toward Noyon, while the latter was thrust back to the Hill of Grand Ru. The 10th Division had been on the left of the 9th at the Bois de l'Hôpital (a little to the cast of Libermont). Here it was attacked by a large force of the enemy and obliged to retreat to the line Frétoy-Rimbercourtenthe Ham-Noyon road where it met the remnants of the 9th Division, which had been even more severely handled.

Further troops were urgently needed and fortunately were at hand, for the 1st Division under General Grégoire, arrived. The latter united with his men what was left of the British 18th Division, which, it will be remembered, formed part of the British III Corps and had retreated down the right bank of the Oise when forced back from the Crozat Canal, and took up a position on the Béhéricourt spur to stop the enemy movement on Noyon from the direction of Chauny. On the northern flank of this force the 10th and 9th Divisions were able to show a good countenance to tho enemy on the west of Crisolles, and, in the centre, the 1st Cavalry Division clung obstinately to the neck of Grand Ru.

On the right front of Brécard was the 125th

Division, which had been fighting since the 22nd, and with it was the 55th Division. Heavily attacked, these yielded ground and, to ensure their retreat, commenced to pass to the south bank of the Oise at Appily, carrying with them the 9th Cuirassiers from Babœuf, which was the right flank regiment of the 1st Cavalry Division. This formed another gap in the Allied line but, fortunately, it was soon closed by a counter-attack of the British which retook this important point, as already described.

But on the left the battle did not go so well. The 10th Division was obliged to fall back on Bussy and Campagne (on the Libermont Canal north of Noyon) and thus lost contact with the 62nd Division, which formed the right of General Robillot's detachment, the 1st Cavalry Division, the 22nd and 62nd Infantry Divisions. The Germans, pushing through the gap thus made, took Beaurains, Sermaize and Catigny, all on the western side of the canal. From this position they could act against the western side of Noyon and, seizing the passages there, would cut off the Allied troops about Béhéricourt. But succour was at hand, for the 35th Division was arriving, and the 144th, which was the leading regiment.



.[French official photograph.



A BIG GUN IN DIFFICULTIES.

Ufficial photograph.

sent its three battalions against the three lost villages and, after some severe fighting, retook them. There was, however, still a gap between Beaurains and Genvry which gave direct access to the rear side of Noyon, and through it came a powerful force of the enemy which carried tho little town.

This rendered it uscless to continue the struggle to the east of the town. General Pellé thereforo, while ordering the resistance in front of Noyon and by Béhéricourt to be continued for a time, ordered the troops available to take up a line from Mont Renaud over Mont Porquéricourt and a little farther beyond. Noyon itself was evacuated and the whole of the troops, covered. by rearguards, took up their new position barring the road to Montdidier. The 9th Division, which had been thrust back from Quesmy, fell back under the protection of the 57th Infantry, which took post at Porquéricourt, and, when the rest of the division had crossed the Oise, gradually retired, fighting a strenuous rearguard action in the northern outskirts of Noyon. In the meantime General Brécard's—the 1st Cavalry —Division, greatly reduced in numbers, and with the 18th British Division in a similar condition, crossed the Oise at Varesnes, the 1st Regiment of Cavalry acting as a rearguard. The river passed, the bridge was blown up.

The French V Corps was now in position from Sempigny, on the south, through Mont Renaud and the Mont de Porquéricourt, thus threatening the debouches from Noyon and barring the road to Paris and, so far as its right was concerned, was solidly placed.

But the left of General Humbert's Army was in a very different position. Early in the day it had been in position from Roye to Guiscard. As we know, the British Army had been compelled to fall back, and although the Third Army had fairly held its own, the Fifth had been unable to do so. The movements of the French had been originally designed to support the British; they had now to replace them entirely south of the Somme. Moreover, as the French reinforcements arrived it was found more and more necessary to deploy them on a position farther back than had originally been intended.

All this had considerably affected the position on the right wing, where the Germans had succeeded in passing the Somme at several points. Humbert determined to use General Robillot, with his cavalry division and the 22nd and 62nd Infantry Divisions, to stop the German progress by taking the place of the British between the Freniches-Esmery-Hallon road and the line Moyencourt-Buverchy. The German advance from Béthencourt had made

a gap in the British line between Potte and Mesnil-St. Nicasso to the north of Nesle. The 22nd Regiment was sent forward towards Nesle, while the 2nd Cuirassiers, from the cavalry division, went forward at a smart pace to the east of Chauhes to fill in some measure the vacant space between the 18th and 19th British Divisions. The fresh troops coming into the combat brought the German movement to a standstill for a time.

Important help now came up to aid the French infantry. General Pétain had appre-

south of the Somme and the continual accession of the French numbers, facilitated a change in the arrangements of the fighting front already arranged between the allied leaders. The French on the 25th definitely took, as has been seen, over the defence south of the Somme, while the British III Corps, as it was replaced by French units, was gradually withdrawn and brought up north to rejoin the Fifth Army. Henceforth the operations may be divided into two parts, those conducted by the British, and those conducted by the French. The



[Official photograph.

A TRENCH HELD JOINTLY BY FRENCH AND BRITISH TROOPS.

ciated the urgency of the situation and, accordingly, he sent up every aeroplane available to attack the advancing Germans. The number, the dash and skill of the aviators, were fully equal to the occasion. Flying low, a rain of machine bullets, a hurricane of bombs, was showered on the fee with great effect. On the fighting line, on the columns coming up behind it, the destruction fell, paralysing the movement and preventing further progress.

Fighting went on through the night of the 24th-25th, through the fog which again covered the earth, the Germans trying to press their advantage, the French and British to stop them. The retirement of the latter

necessity for the change becomes evident from what now follows in this description.

South of the Somme on the 25th the position was a dangerous one. The British troops there were worn out with their continuous fighting since March 21. Behind them were no reserves, while the French had not yet had their full strength available to support them. A conference with various Commanding Officers was held at the Headquarters of the Fifth Army, and it was determined to sweep together every available man from every available source to make a force capable of affording some support to the front line. General Grant, the Chief Engineer of the Fifth Army, got together a



[Of cial photograf h.

THE BRIGADIER-GENERAL RETURNING SALUTE OF HIS MEN GOING TO BATTLE,

miscellaneous force, including stragglers, small details, the Staff of Schools, Army Troops Companies, Tunnelling Companies, Field Survey Companies, Canadian and American Engineers, and these were placed on the lines of the old Amiens defences between Hamel-Marcelcave-Mezières. Then, as General Grant was supposed to be difficult to spare from his work as Chief Engineer, the command was taken from him and given to General Carey.

The position then on the northern part of the Fifth Army, with its thin line and poor supports, was such that Sir Hubert Gough did not think it wise to attempt to hold the Hattencourt-Frise position, on which it had originally been intended to make a stand, but ordered the divisions if they continued to be attacked in strength to fall back, offering all the resistance they could, to a line Le Quesnoy-Rosières-Proyart. Here the left would be in touch with the right of the Third Army at Brayo.

As was to be expected, on March 26 the enemy again attacked in great strength from Nesle in a westerly and south-westerly direction. His object was plainly first of all to capture Montdidier. He was perfectly well aware that the French troops were being brought up from the south, and Montdidier was an important station where these troops could detrain. He also wished to keep up the pressure to split apart the British and French Armies. With a view to pressing westward, attacks were also made about Hattencourt in the neighbourhood of St. Quentin-Amiens road and at Herbé-

court. These attacks compelled our divisions to fall back before them to the line above-mentioned, viz., Le Quesnoy-Rosières-Proyart.

The retreat was carried out slowly. The line was reached and held, and during the afternoon and evening numerous counter-attacks were



BRIGADIER-GENERAL G. G. SANDEMAN CAREY, C.B.

Commanded the miscellaneous force collected by General Grant to defend the Amiens lines.



AN ADVANCED DRESSING STATION UNDER SHELL-FIRE.

made against the advancing Germans, which drove them back. As we have already seen, the French troops to the south-west of the English were forced back beyond Roye towards the south-west, thus leaving a gap between the Third Army and our Ally's forces. The Germans at once pushed forward to penetrate through the opening thus made. The only troops available to stop it were the 36th and 30th Divisions-i.e., part of the Fifth Army, which had been withdrawn from the line of battle on the previous day to take a well-earned rest. The need was so great that they were at onee brought back to the fighting front and engaged in very heavy fighting about Andéehy and to the north of that place. The enemy managed to penetrate behind the position of the 36th Division at the first-named place, which hung on with the greatest gallantry until the afternoon of March 27, and these two divisions were largely instrumental in preventing the Germans breaking completely through between the British and French Armies.

At Le Quesnoy some 100 men, under the command of the Brigade-Major of this Brigade, Captain E. P. Combe, M.C., of the 61st Brigade, 20th Division, which had been told off to cover the withdrawal of the latter, kept off the pursuing enemy from early morning till night-

fall, when the few survivers (11 in number) managed to withdraw to the British line.

On the whole, the position to the right of our line was not so very bad. South of the Somme the British and French forces were in contact and the general line Guerbigny-Rouvroy-en-Santerre-Proyart was occupied. North of the Somme our troops continued to take up the Ancre line with very little hindranee from the Germans. But between Hamel and Puisieux there was still a gap between the V and IV Corps through which the Germans sent forward a considerable body of infantry, which sueeceded in oeeupying Colineamps with their machine-guns. But this movement was quickly brought to naught: first of all, two guns of the artillery of the 2nd Division gallantly galloped into the front and eame into action against them in the open. The range was short, the shooting efficient and the machine guns were quiekly sileneed.

A little later troops of the New Zealand Division, which was commanded by Major-General Sir A. H. Russell, K.C.B., K.C.M.G., retook the village. At the same time a brigade of the 4th Australian Division, which latter was commanded by Major-General E. Sinelair-Maelagan, C.B., D.S.O., filled up the gap between Hébuterne-Bucquoy.

It was at this part of our line that the light tanks (known as whippets) were used for the first time, and they rendered valuable service.

The "Whippet," officially known as the "Medium" tank, to distinguish it from the heavy tank which had been used in our service for over two years, was a far more mobile and lighter machine than its predecessor. It was armed only with four machine-guns, and was especially intended to act as an auxiliary to the infantry. Its armour permitted the machine guns in it to be brought up safely to quito close ranges, and so allow a powerful fire to be

brought to bear on its target. For it afforded complete protection against shrapnel bullets and rifle fire and from shell splinters, though, of course, a direct hit from a field gun high-explosive shell would put it out of action. It would also be penetrated by the large-bore anti-tank rifle employed by the Germans. But these were so few in number that they could be neglected. The Whippet was far more speedy than the ordinary tank, so much so that many stories are told of it chasing individuals, and generally behaving like a whippet dog after a rabbit.



[Officia! photograph.

The ordinary tank, known officially as the "Heavy," consisted of two classes—"male" and "female," differing only in their armament. The "male" tank was armed with two 6-pounder Hotelikiss guns and four machine-guns. The "female" had machine-guns only, six in number.*

The arrival of the fresh troops, above enumerated, steadied this portion of the line and all further attempts of the enemy to penetrate about Bucquoy and to the north were defeated. Farther south at Braye-



"MALE" TANK.

sur-Sommo an unfortunate incident occurred. The line from that place to Albert had been successfully taken on the night of March 25-26. During the morning of the 26th at Méaulte, where the 9th Division was, the Germans were beaten back, but on the right of this line at Braye-sur-Somme the local commander regarded the line then held as being merely a stage on the line of retreat to the Anere, and thus it was that on the afternoon of the 26th the rearward movement was continued, and was followed up by the enemy. The line of retreat lay over the high ground past Morlaincourt towards Bonnay. As soon as the higher command knew what had oeeurred, orders were issued to stop any further retreat, but it was impossible to counterattack to recover the old position. However, the retrograde movement was brought to an end and the right of the Third Army then rested on the Somme about Sailly-le-See, in the bend between the Ancre and the Somme. But this unhappy movement considerably affected the position of the Fifth Army south of the Somme about Proyart, where the left stood. It was now completely uncovered, for tho river and eanal were no great obstacles owing to the dryness of the season, and the crossings were only held by an improvised force of 350 men with Lewis guns and armoured ears.

March 26 saw the inauguration of a great change and a great improvement. General Foeh was placed in supreme control of the operations of the Belgian, British and French forces. Experience had clearly shown the



"FEMALE" TANK.

necessity for the step, and most omphatically the course of events at the opening of the German offensive was a very great argument in its favour.

During the night of March 26-27, the Germans eaptured Albert and also won ground in Aveluy Wood. On the next morning, attempting a further advance from Albert, the Germans



"WHIPPET" TANK.

were driven back with heavy loss. About moon many attacks were delivered against our line from Bucquoy to Hamelincourt and the villages of Ablainzeville and Ayette were eaptured. With these exceptions the enemy made no progress, the troops of the 62nd, 42nd and Guards Divisions repelling all assaults. North of the Somme, therefore, there was no material change in the line we held. Here and there small successes were gained by the enemy. In other place's he was driven back,

[•] In the Lord Mayor's Procession of November 9, 1918, three tanks, one of each kind, took part.

the net result of the fighting being that we held our own and took some prisoners and machine-guns.

Far different was the situation to the south of the Somme. There is a limit to the endurance of all troops, and the right wing of the Fifth Army had suffered severely; fighting with the greatest gallantry, it had been exposed day and night to repeated and desperate attacks by far superior numbers. The units were severely depleted, the men worn out with the strain of battle during a week of almost uninterrupted combats. They were gradually being replaced by the French, but the latter had not yet come up in sufficient numbers to take over the whole of the front south of the Somme and hold off the everadvancing Germans. The British 8th Division, which was at Rosières, repulsed a heavy attack, but to the north of this point the abandonment of Brayo had produced a very unfortunate situation. Our troops were clinging on to Proyart, but meanwhile the Germans had been able to cross the Somme at Cerisy, which completely turned the left flank of our forces.

It will be observed that when Braye was lost it gave the Germans access to the whole line of the Somme up to Sailly. The British troops were not available in sufficient numbers to hold all the crossings, and could not prevent the enemy passing over to the south bank. It was impossible to maintain our troops in so advanced a position as Proyart, for the Germans were across the river at Cerisy and Morcourt, and our men were in danger of being cut off. They were withdrawn. The Germans a little later on captured Framerville.

It will thus be seen that had we adhered to the line we had held on the previous day, our troops next to the Somme would have been cut off. No reserves were available except the small force now under General Carey, and it was quite impossible to continue the fight. A part of the British 1st Cavalry Division were hurried across the river and occupied Bouzencourt, not far from Sailly. Even with the small numbers which were available a gallant effort was made to stem the greatly superior numbers. The 8th Division was fighting at Rosières, where it maintained its ground all day, inflicting heavy losses on the assailants. Two battalions from this division made a successful counter-attack, which was executed with great dash. These



Official photograph.

were the 2nd Battalion Devon Regiment and the 22nd Battalion Durham Light Infantry. They were supported at that time by the 50th Division, then commanded by Major-General H. C. Jaekson, D.S.O., and the combined action of these troops held the enemy a little to the south-west of Proyart. The 66th D vision at Framerville restored the fight, but the general line of our main front had been forced back, so that at nightfall it ran from the north and east of Harbonnières back to Bouzencourt. South of Rosières as far as Arvillers, the 24th, 30th and 20th Divisions held their own throughout the day. Farther to the south, however, the enemy gained Davenscourt and eaptured Montdidier. will thus be seen that our position at this part of the line was a very dangerous one. It formed a salient which fell sharply back from Harbonnières to Bouzeneourt, while farther south of Arvillers the Germans had also outflanked it.

In the course of the night, March 27-28, the enemy made fresh progress southward from the Somme line between Cerisy and Moreourt, eapturing Warfusée-Abaneourt on the main road to Amiens, and Bayonvillers, just south of it. Our troops were therefore ordered to fall back to the line Vrely-Mareeleave, the line from the last place to the Somme being held by Carey's force and the British 1st Cavalry Division. These positions were taken up early in the morning of March 28. The Germans here do not appear to have followed up with the same rapidity which had characterized the early days of the offensive; doubtless they, like our men, were worn out with the strenuous exertions they had undergone. Their infantry does not appear to have made any effort against our line, but their artillery fire compelled our troops during the course of the evening to abandon Marceleave and take up a position to the west of the village. But from Guillaueourt, the enemy was coming forward, and, farther south, had entered Contoire, foreing back the French troops at Hangest-en-Santerre.

It was quite impossible to keep our troops in the very pronounced salient which was being attacked on all sides. The 61st Division made a counter-attack towards Warfusée-Abaneourt, thus threatening the German advance from the river, but they were unable to push it to any extent, and the troops fell back through the 20th Division, which was deployed on the line Mezières-Demuin.

When night eame the position held was approximately the line of the Amieus advance from Mezières to Ignaucourt and Hamel.

A change was now made in the constitution of the forces. General Gough coming from tho Fifth Army on March 28; was charged with the organization of the defence lines in the front of Amiens, it being necessary, in Sir Douglas Haig's own words, to have "An able and experienced commander and staff to direct this work and extemporize garrisons for their defence." He was replaced by General Sir H. S. Rawlinson, Bart., G.C.V.O., K.C.B., K.C.M.G., who had been the British representative on the Joint Council at Versailles, and he, assuming command of the Fourth Army, which he had so long and honourably commanded, was given the command of what English forces still remained, independent of the French, to the south of the Somme. Sir Douglas Haig does not specify what these were. It is somewhat conflicting with the statement that on the 25th "Our Allies assumed responsibility for the battle front south of the Somme, with general control of the British troops operating in that sector." But as the III. Corps "were gradually relieved by the French reinforcements and sent north to rejoin the Fifth Army," it seems that Sir Henry Rawlinson had not much of the 5th Army to command, and that the force under him was mainly, if not entirely, the Fourth Army.

When on the 25th the British troops abandoned Nesle, they had fallen back in a northwesterly direction, leaving the 22nd French Division to defend the road from Nesle to Roye. When the Germans attacked they pushed back this division, and thus definitely broke the junction with the British forces. The 10th French Division which had been at Guiscard, had been driven back to Catigny, and only held the ground there with difficulty, maintaining connexion with the 5th Division on its right, while it had lost connexion with the 62nd Division to the north-west of Guiseard, and which had been compelled to retreat from Libermont. The line then was in a somewhat confused condition, but the worst point about it was the gap between the British and the 22nd Division. General Robillot sent up from the 1st Cavalry Division the 2nd Brigade of Cuirassiers towards the brook Ingon just as the enemy approached it. The 22nd Division was by this time back at Crémery, whilst the

British who had been at Herly and Etalon proceeded back towards Le Santerre, more to the west. Then the Germans pressed onward in a south-westerly direction from Breuil to Buvenchy, and this hostile movement compelled the cavalry to retire to the line Gruny-Solente-Catigny, but not before parties of horsemen had regained touch of the British on the western side of Nesle. The retirement of the latter to Santerre, which they held, left to

General Humbert, with the force he had at his disposal, found it a very difficult task to do the two duties he was charged with—viz., keep touch and in line with the British to face the German inroad from the east, and at the same time to guard Montdidier. The troops of the First Army had not yet come up in sufficient numbers to enable him to fulfil these rival claims for defence, and it was for a time seriously considered whether the line should



[Official photograph.

TROOPS AND TANKS IN A FRENCH VILLAGE.

the Third French Army the task of covering the whole of the ground round Roye. Moreover, if this point were lost it still had to cover the ground from Lassigny to Montdidier, a difficult task, as the ground was not well suited for defence, and Montdidier itself was a very important point for the reasons already given. Montdidier was the point at which Debeney's First Army, coming up by train from Toul, would largely detrain, and the nearer to the fighting line the troops could be brought up the quicker could they be utilized in the fighting line. It was therefore very desirable to keep it. But General Pellé had been forced to fall back to the south and west of Noyon, and had been obliged to destroy by fire a large amount of stores and ammunitions which had been accumulated there and not be taken back to Clermont 30 miles from Mondidier. But the Commander-in-Chief of the French Third Army was not a man to be easily daunted. He determined to stand fast, and issued the following order to the troops under him on the evening of the 25th:-"The troops of the 5th Corps, of the 2nd Corps of cavalry, of the III. and XVIII. British Corps are defending the heart of France.* Their appreciation of the greatness of their task will teach them how to act." The situation was one of great difficulty and uncertainty. German advanced patrols were nearing Montdidier, and General Humbert knew very little

^{*} The district called by General Humbert "the heart of France" was the old Province known as the "Isle de France" which surrounded Paris, and was the centre of the "Cinq Grosses Fermes."

of the position of the Germans facing his centre or how the British troops on his left were situated.

March 26 was an anxious time; the military situation was uncertain, and was made worse by the crowds of citizens hurrying back from the regions which the German advance was threatening, but in the course of the day it became clearer. General Pétain redoubled his efforts to bring up all the reserves that could be hurried up. Fleets of wagons came gaily



GENERAL DEBENEY.
Commanded the French First Army.

on, crowded with soldiers eager to join in the fight, railway trains were bringing up the troops from the eastern frontier, the great Reserve which was accumulating on the south side of the German wedge, was now able to strengthen the battle which France and her Allies were fighting against the common enemy, and would soon be ready to counter-attack when the appropriate time should come.

On this day Fayolle, who commanded the force known as the Grand Army of Reserve received definite instructions that "he was to regard it as his chief duty to bar the road to Paris, and at the same time cover Amiens." He was also informed that "the approaches to Amiens north of the Somme would be protected by the British Armies under the command of Field-Marshal Haig, who would hold at all costs the line Bray-sur-Somme-Albert, while the Grand Army of Reserve under your orders will hold the district south of the Somme, keeping in touch with the forces under Field-Marshal Haig at Bray and with the Grand Army of the North on the Oise." The follow-

ing order was issued at the same time to the French troops:—

"The enemy is attempting by a supreme effort to overrun us. He seeks to separate us from the English to open the road to Paris He must be stopped, no matter what the cost. Root yourselves to the ground and hold on like grim death. Your comrades are now arriving, and together you will hurl yourselves on the enemy. There is a great battle before you. Soldiers of the Marne, of the Yser and of Verdun, I appeal to you; the fate of France is in the balance." And now the troops began to arrive in numbers from all quarters-from Alsace, Lorraine and Champagne. The 4th Cavalry Division, the 38th and 133rd, the 56th. the 53rd, the 36th and the 77th came up to join the French force.

It will be remembered that General Pellé with the 5th French Corps was holding the high ground to the south and east of Noyon, and with the reinforcements now arriving he felt certain that he could not be directly displaced, and that his position would tend to force up the German line of attack in a more northerly direction. This would be favourable to us, as it would compel him to attack precisely in the direction which would expose him to the concentrated forces of the Allics, with the Army of Reserve able to act against his flank and even against his rear.

Pellé's position was therefore an important one: it stopped all action to the south so long as it could be held. The Germans were undoubtedly likely to attack this force, and therefore it was desirable to make it as strong as possible. Pellé thereforc sent his 9th Division to occupy Mont de Porquéricourt, which was for the moment, in the haste of retreat, not sufficiently garrisoned. In the defensive measures the British troops near at hand took part. A Canadian Brigade was placed in the Reserve and Essarts Wood to complete the line to the 10th French Division on the height of Thiescourt and the Ruined Mill Hill. Thus General Pellé presented a connected front to the Germans. Hardly were these arrangements made than the attacks began. The fight which ensued was an arduous one. The French Commander had little or nothing in the way of supporting troops and those in line had to resist as well as they could. More to the east was a part of the French 6th Corps, which had held the French line south of Barisis. In the fighting since the 21st it had been forced back and was

thus near at hand to help General Pellé's troops It will be remembered that it had already sent the 125th Division at the commencement of the battle to help the British III Corps; it had now no superfluity of troops to detach to help the French 5th Corps, but it was able to contribute some cavalry squadrons, which proved of considerable assistance.

The Germans made a determined attack against the Porquéricourt height, and Mont St. Renaud, but, received with determination and met with local counter-attacks, they were driven off in confusion. The 10th Division was not so fortunate. It had been sorely tried in the fighting of the last few days, could not hold the hill above Lagny where it was posted, and was forced slowly back, still fighting hard till it reached the line of Plémont-Thiescourt. and here the 77th Division was brought into the line and held it firmly. It formed part of the French First Army, which was arriving from the eastern frontier.

The situation on the left of the French 3rd Corps was, however, far from satisfactory, The determined resistance on the right, where was General Pellé's Division, supported now by the oncoming troops of the First Army, had tended to drive the German columns more to the

north in their endeavours to penetrate towards Paris. Such is the value of a flank position like that held by General Pellé. This produced a bringing together of the German forces which enabled them to direct larger numbers from Roye towards Montdidier. There were no good positions in this part of the country to cover Montdidier. The Avre from Roye to where the Doms joined it at Pierrepont was of little value as an obstacle, in the upper part of its course by Roye none, and the direction of the German attack at this point tended to drive the French southwards.

It will be remembered that the French 22nd Division had been holding as well as it could a 'long-stretched-out line against the Germans. When the 56th Division arrived (it was the first to do so) from the east it had been sent up to support the 22nd. But this force had been fighting hard for the past three days against far superior forces and it had reached the end of its tether. It fell back, bringing with it the 62nd, which stood on its right. The German stroke had been delivered during the latter part of the night of March 25-26 and early morning of the 26th with such determination and in great superiority of numbers that the two divisions were forced back to the line Roye-



[Official photograph



[French official photograph.

REFUGEES.

Avricourt-Lagny, and so close was the enemy pursuit that it was impossible to take up a proper line. The 62nd Division had its left about Avricourt, the 22nd prolonging the line northwards to Roye. About 6 a.m. a strong column of Germans advanced from Margnyaux-Ceriscs on Avricourt, thus striking the 62nd Division at its point of junction with the right of the 22nd. The 62nd Division was compelled to fall back on Amy, and thence towards Fresnières. Thus the centre of tho French line was penetrated and the 22nd Division was exposed to attacks on both flanks. The attack against its left was very Roye was practically cut off, for strong. Roigliso to the south was taken. position was a scrious one, for both these divisions were so weakened that they could do little more and might, if the Germans had been able, have been practically annihilated. Fortunately, however, they too had suffered very severely from the strenuous exertions of the previous days and could not carry out such an enterprise. But still the 22nd Division fell back from Roye, leaving only a small garrison there, and took up a position from Crapeau-Mesnil to Beuvraignes, where it stood at bay, and the 1st Cavalry Division, commanded by General Rascas, came

up and filled the gap between it and the 62nd.

In the meantime, Roye was threatened from the north and south. The French 5th Cavalry Division managed to send in a few squadrons to help the troops of the 22nd Division. But their strength was totally insufficient to hold the town, which was already set in flames by the German shells, and the enemy was penetrating into the outskirts. The French troops were therefore withdrawn, the infantry falling back to join their division, the 5th Cavalry Division moving down the Avre to hold the passages at St. Aurin and l'Echelle St. Aurin.

The 22nd was still trying to hold on to its new position, but had not sufficient strength to do so, and, falling back, it again became separated from the 62nd Division. It will be remembered that General Robillot, who commanded the 1st Cavalry Division, had been given the command of these two infantry divisions, and he now made a great effort to fill the gap. He had sent the 1st Cavalry Division, under Rascas, to connect the two, and had nothing under his own hand for the moment.* He therefore got together a

^{*} General Rascas appears to have had the command of the 1st Cavalry Division, which seems to have been mounted, whereas Brécard's 1st Cavalry Division was dismounted.

miscellaneous force consisting of his own escort, a group of cyclists, and other details, and sent them up from Fresnières towards the right of the 22nd Division. They were joined by two squadrons of the 1st Cavalry Division, and this opportune arrival enabled the restoration of the general line to be more or less established from Dancourt—a point on the Roye-Fresnières road back by Fresnières to Plessies-Cacheleux. Here the 62nd had the valuable support of the left end of the line about Lassigny held by the 77th Division, which had come from the First Army, and was completely fresh and intact. The position was undoubtedly a difficult one, the road to Montdidier was almost completely

up on the right of the British Fifth Army, had arrived with little more than the arms they had in their hands, without reserve ammunition and with guns still behind, so here the Germans had to a large extent outmarched their artillery, and their reserves were largely used up. On the other hand, the French were daily getting up fresh troops from the I Corps, and already nine infantry and two cavalry divisions had arrived. The staff of the 35th Army Corps had also come up, and it was given the command of a section of ground to the west of Robillot's force (the 22nd, 62nd and 56th Divisions with the 1st Cavalry Division.) Things were taking a turn for the better.



[French official photograph.

REFUGEES ENCAMPED FOR THE NIGHT.

open to the German advance. The only favourable point to record was the continual evidence all along the fighting line that the enemy was distinctly getting exhausted

The next day, March 28, was the eighth day of battle, and on the right of the French line General Pellé still held his position from Mont Renaud to the height and wood of Plémont behind Lassigny, and in front of his left were the 22nd and 62nd Division, and the 77th at the last-named place. The 1st Cavalry Division was still engaged in its hard task of filling voids wherever it was needed. But the Germans north of this force had nothing to bar them on the road to Montdidier. But just as the first French reinforcements, which came

The position held by Pellé round Noyon and to the west was now prolonged, and he had to include Thiescourt and Le Plémont: but, on the other hand, he had an addition to his original force of the 77th, a very good and fresh body of men, posted about Lassigny. As described, he already had the 56th Division. The enemy showed signs of advancing against Lassigny, and thus renewed his effort of the previous day to cut off the 22nd and 62nd Divisions, and attacked in the direction of the 62nd Division's right, clearly aiming at intersecting the line there. General Pellé sent up all the reinforcements he could lay hands on, the two squadrons from the 1st Cavalry Division, the 319th Regiment from the 38th Division, which was just in the act of detraining.

On the right of General Pellé's line at Mont Renaud the troops held firmly and drove back no less than five attacks with heavy loss. Nor was the German advance against the line Plessier-de-Roye-Canny more successful. Those troops of the 1st Cavalry Division, however, which had on the previous day come up to the left of the 22nd Division had been forced back by superior numbers, but had been brought up at Canny, and here a line was formed extending from La Berlière on the left behind the Divette through Plémont down to the Oise.

But through the more open country to the north the tide of German success flowed on. The Germans captured Le Cessier (between Beuvraignes and Fresnières) and then Tilloloy, only eight miles from Montdidier. The 22nd Division was forced back through Bus and the wood of that name. A detachment formed of some infantry, a little cavalry, and two companies of engineers, on the left of the division, fought with the greatest tenacity for many hours against overwhelming odds. Still the Germans came on, pushing past the French troops holding them in front and passing other units behind the screen thus formed. In

succession Fescamps, Piennes and, at last, Rubescourt, on the main road running south from Montdidier, fell, and shortly after the town itself was captured.

By this time the 38th Division had just completed detraining (we have seen that already the 319th Regiment belonging to it had been sent up to Lassigny), and as fast as the regiments could move off they were sent off to reinforce the points most requiring support. The 4th Zouaves were off to the high ground at Boulogne-la-Grasse to help the 62nd Division there. Some units went to Rollot to relieve the 22nd Division, reduced to a shadow of its former strength, while others sent to Rubescourt and Ayencourt came to the right of Debeney's Army, where the 56th Division was still fighting. The Staff of the 35th Corps was given the direction of the left of Humbert's troops. and with the new forces coming up, including part of the 38th Division, was able to hold the line to the south of Montdidier and facing that town. The forward movement of the Germans had come to a pause in the field, on which it had been advancing since March 21.

The fact was that their main attack had been stayed, which induced the Germans to follow their maxim of not pressing



[Official photograph.

ROYAL HORSE ARTILLERY GUN IN ACTION.



[Official photograph.

BRITISH GUNS IN ACTION.

attack where the movement was held, but rather to seek another line. This they sought in an extension of their attack to the north.

Here it is convenient to quote Sir Douglas Haig's dispatch:—

On the morning of March 28 fighting of the utmost intensity brake out north of the Somme from Puisieux to north-east of Arras. Finding himself checked on the northern flank of his first attack, the enemy on this day made a determined effort to obtain greater freedom for the development of his offensive, and struck in great force along the valley of the Scarpe at Arras.

The development of the battle, which had been forescen as early as March 23, involved the right of the XIII. Corps, under command of Lieut.-General Sir H. de B. de Lisle, K.C.B., D.S.O., on the right of the First Army, and represented a considerable extension of the original front of attack. A German success in this sector might well have had far-roaching effects. There is little doubt that the enemy hoped to achieve great results by this new stroke, and that its failure was a sorious set-back to his plans.

After a bombardment of great violence, three fresh German divisions advanced to the assault along the north bank of the Scarpe River against the positions held by the 4th and 56th British Divisions, under the command respectively of Major-General T. G. Matheson, C.B., and Major-General F. A. Dudgeon, C.B., and were supported in their attack by the two German divisions already in line. According to captured documents, the enemy's immediato object was to gain the general line Vimy-Bailleul-St, Laurent-Blangy, when three special assault divisions were to carry the Vimy Ridge on the following day. Immediately south of the Scarpe four German divisions were engaged, to two of which were assigned the tasks of capturing Arras and the heights overlooking the town. This assault, the weight of which fell on the 3rd and 15th British Divisions, Major-General H. L. Reed, V.C., C.B., C.M.G., commanding the latter division, was supported by powerful attacks, in which 11 hostile divisions were engaged, along our whole front southwards to beyond Bucquoy. Still farther sonth, as far as Dernancourt, strong lineal attacks were delivered at different points. The methods followed by the enemy on this occasion were the same as those employed by him on March 21, but in this instance the thick fog which had played so decisive a part on that day was absent. In consequence, our artillery and machino-guns were given every opportunity to engage the German infantry both when assembling and while advancing to the attack, and the heaviest losses were inflicted on them by our fire.

Immediately prior to the assault, masses of German infantry with artillery in rear of them were observed drawn up in close formation on Greenland Hill, and were shelled by our artillery. North of the Scarpe, about Rœux, great execution was done at point-blank range by single guns, which had been placed in forward positions close up to the front line. The enemy's infantry in this sector are reported to have advanced almost shoulder to shoulder in six lines, and on the whole front our machine gunners obtained most favnurable targets.

The weight and momentum of his assault and the courage of his infantry, who sought to cut their way through our wire by hand under the fire of our machine-guns, sufficed to carry the enemy through the gaps which his bombardment had made in our outpost line. Thereafter, raked by the fire of our outposts, whose garrisons turned their machine-guns and shot at the enemy's advancing lines from flank and rear, and met by an accurate and intense fire from all arms, his troops were everywhere stopped and thrown back with the heaviest loss before our battle positions.

A second attack lannehed late in the afternoon north of the Searpe, after a further period of bombardment, was also repulsed at all points. At the end of the day our battle positions astride the Scarpe were intact on



[Australian official photograph.

AUSTRALIAN FIELD ARTILLERY TAKE COVER IN A WOOD.

the whole front of the attack, and in the evening successful coneter attacks enabled us to push out a new outpost line in front of them. Meanwhile the surviving garrisons of our original outpost line, whose most gallant resistance had played so large a part in breaking up the enemy's attack, had fought their way back through the enemy, though a party of the 2nd Battalion, Seaforth Highlanders, 4th Division, remained cut off at Rœux until successfully withdrawn during the night.

On the southern portion of his attack the enemy's repulse was, if possible, even more complete than on the new front east of Arres. Attacks on the Guards Division and on the 31st Division were defeated after all-day fighting. The 42nd Division drove off two attacks from the direction of Ablainzeville, and the 62nd Division, with an attached brigade of the 4th Australian Division, also beat off a succession of heavy attacks about Bucquoy with great loss to the encoy.

Less important attacks at different points between Hébuterne and Demancourt were in each case repulsed and led to the capture of a number of prisoners by our troops.

Here for a time we may leave the British and French forces in a position in which, to quote the words of General Foch, "the flood had been dammed."

It will now be interesting to record German and some neutral views of the fighting.

The Vice-President of the Reichstag telegraphed to the Kaiser on March 26:—

I beg to be allowed to express my warmest congratulations to your Imperial and Royal Majesty for the great victory which our troops, after careful preparation, have won during the past few days against our enemies in the West. The whole of the German people will look with the greatest confidence to the heavy decisive engagements in which we have been compelled to engage against the bitterest enemy of the Fatherland, which have succeeded far beyond all hopes and expectations, and in which the superiority of the German Army and their leaders has been shown over the hoastful enemy. Permeated by the proud feeling of the indomitable strength of our people and by everlasting gratitude towards all our death-fearless warriors and their leaders, we hope and wish that a final victory will soon be granted us.

The military correspondent of the Hague Nieuwe Courant writes in the evening edition of March 25:—

'Where are the 100,000 Americans whom Baker was going to send for the early spring of 1918? Has not the early spring come yet? In spite of the tonnage which the Entente has brutally taken from the weak neutral countries, it looks as though the 500,000 American soldiers would also be too late, as well as the 1.500,000 Americans who were to have been there in the late spring. The Americans are not in a position to render assistance. The German offensive has been launched communiqué convinces one that the German offensive will be impetuously and successfully carried through.

German wireless comment on the offensive (March $25 \cdot 28$) ran as follows:

The 26th of March, the sixth day of the great German defensive offensive, sees our armics as before marching victoriously towards the West in uninterrupted heavy battles. Strong enemy reserves, brought up from great distances, could not stop the German assault in spite of the most desparate resistance and defence. The casualties of the English and of the nations assisting them are increasing to tremendous figures. They surness every-

thing that has ever been before. Neither in Russia nor in Italy were the sacrifices so high. This fact is explained by the stubborn resistance of the British and their massed counter-attacks, supported by the French and Americans. Thereto must be added that the English infantry is suffering under the short-range fire of their own artillery. A large number of English divisions have been quite destroyed. In the meantime the English wireless has admitted the slight losses of the Germans, who are attacking steadily. On secount of the mist, which provails almost daily, they approach the English positions almost unobserved, and even the Reuter Bureau must admit the weight of the German thrust, which is not diminishing even after a week.

The report of the 26th states:

The gigantic battle continues uninterruptedly without the force of the enemy diminishing appreciably.... "The English troops are withdrawing slowly and destroy everything." The German army communique has already announced the destruction of the French territory by the English. The official English bureau now also establishes this fact. The German booty continues to increase. The number of prisoners has also increased again. The success of each day of battle is surpassed by that of the next, as the pursuit of the enemy has already commenced on a wide front....

The booty increases from day to day. Everywhere in the wilderness of the Somme one sees the remains of old and new tanks which have been shot to pieces, which are lying like antediluvian monsters in marshy grass by the craters. Near Monicourt alone one division captured six big tanks. The numerous depots of munitions, medical stores, equipments, pioneer implements, etc., cannot yet be estimated. At Pozières we took possession of a central station for general and local traffic and secured a great deal of rolling-stock, 29 field-railway engines, benzine engines, workshops, etc. The English losses are on the increase, especially in respect

of the artillery, which is smart but quite inexperienced in a war of movement. In Clery a whole regiment was smashed up and reduced to 40 guns. . . .

The English losses have been very heavy. Up to the present 40,000 uninjured prisoners have been brought in by the army of General von Hutier alone. . . .

The most serious feature of it [the position] lies in the fact that not only England's reserves in Flanders, but especially its auxiliary army on the Italian front, have been helter-skelter withdrawn and bave been thrown into the threatened Bapaume—Albert—Amiens line. These are the events which show the state of confusion which they have reached, as, with regard to Flanders and Belgium, only a few months ago the High Commander had declared that within a sbort time he would be master of the German Flanders coast and of the German U-boet bases, and that he would enter Brussels as a conqueror. And now the withdrawal of the English and French auxiliary corps from Italy, on the eve of the Austrian offensive, amounts to the abandonment of Italy by the Allies. The Italian Army and people! Even if they intend to bring the crushed Salonika army to the Italian front, it would probably arrive too late. Poor Belgium, poor Italy.

Col. Wattenwyl writes in the Züricher Post (March 26):

They must admit in England, with regard to the shelling of Paris by the German long-range guns from a distance of more than 100 kilometres, that the inviclability of English soil has now disappeared once for all, and this will be seen when the German guns have been worked out on the basis of the present successes so as to reach the Channel coast

Unfortunately for the desires of this Dutch colonel, the German guns never got anywhere near the coast.



Laustralian official photograph.

AUSTRALIANS ENTRENCHING IN RAINY WEATHER, MARCH 28.



[New Zealand official photograph.

A MINE CRATER COVERING 2,500 SQUARE YARDS.

The military correspondent of the Nieuwe. Courant writes on March 27:-

The English newspapers, in their anxiety about the course of the war events, are trying to disguise the seriousness of the situation by means of stale tales. In innocent terms they try to show their own people that the attack loses in strength with every mile of the retreat,

and that a pause must occur in order to bring torward the heavy guns. That is an old and well-known song which we have heard often before.

If these were the comments of "neutral" critics, the more jubilant utterances of the German Press are not surprising.



CHAPTER CCLXV.

THE ROYAL FAMILY AND THE WAR.

THE SOVEREIGN AND "THE FORCES OF THE CROWN"—QUEEN VICTORIA—KING EDWARD AND FOREIGN AFFAIRS—KING GEORGE IN 1914—THE KING'S DAY—VISITS TO THE FRONT—A MEMORY OF CRÉCY—THE HOUSE OF WINDSOR—ROYAL VISITS TO MUNITION WORKS AND INDUSTRIAL CENTRES—THE KING AND THE NAVY—THE PRINCE OF WALES AS A SOLDIER—THE QUEEN'S UNTIRING WORK—THE THRONE IN 1918.

HAT were the King and the Royal Family doing during the Great War? What were the relations between His Majesty and his people, his Army, and his Navy? How did he regard his duty, how did he perform it, and how were his efforts regarded at the front and in the country? How far did the young Princes do their share and the Queen and Princesses take a lead in that multifarious war-work which, in the hands of women, was one of the wonders of the country and the world?

Before speaking of King George in his relation to the Army, it will be well to look back upon some of the military and naval features of the two preceding reigns. Both were in the main periods of peace, periods indeed of profound peace as compared with the period which closed in 1815 and that which began in 1914, though Queen Victoria had to face three serious wars-Crimea, India in. 1857, and South Africa-while "little wars" against turbulent neighbours were a frequent and perhaps inseparable accident of the rapid growth of the Empire. But notwithstanding the unhappy quarrel with Russia in 1854, England and her rulers passed safely through many foreign storms and over many quicksands. The peace between us and France, Vol. XVIII.—Part 225.

our old antagonist, was never broken, though it was often strained, and we had no share either in the American Civil War or in the three wars by which Bismarek made the German Empire. Still less broken on the surface was the reign of King Edward, whom the popular voice named "Peacemaker." Soon after his accession the Boer War came to an end; and from the date of the Peace of Vereeniging (May 31, 1902) to that of the King's lamented death in 1910, England was free from war altogether.

What was the constitutional position of the Sovereign with regard to the Army and Navy during these reigns, and did it continue unchanged? The answer is indicated with sufficient accuracy in the common description of these arms as "The Forces of the Crown." It is indeed rather curious that, while we had for centuries possessed a "Royal" Navy, and while our latest armed body was, during the Great War, officially named the Royal Air Force, we had no "Royal" Army. The omission of the epithet is doubtless to be traced to faraway historical causes, and is the outcome of that jealousy of standing armies which found formal expression in the Bill of Rights (1689), and remained a characteristic of Parliament since the seventeenth century. The Bill of

Rights declared that "the raising or keeping of a standing Army within the Kingdom, unless it be by the consent of Parliament, is against the law"; in other words, Parliament must authorize the ereation of the Army which Parliament was to pay. Still, though the power of the purse always rested with Parliament, and though the organization of the Army, especially after Cardwell's reforms, ultimately depended on a Parliamentary Secretary of State, no one ever scriously disputed that the titular command belongs to the Crown. As Lord Wolseley wrote in 1887: "From time immemorial the Sovereign has been the head of our Army, and it will be a bad day for England should this ever be changed." "Command, preferment, and honour come to the Army from the Crown," says a great lawyer; and such remained the legal position. Qucen Victoria was always jealous of her military rights. She was fond of the Army. She was surrounded by officers, all of them well schooled in military ctiquette. She was fond of recalling the fact that she was a "soldier's daughter "-for the Duke of Kent had been a General and Field-Marshal, and had been in military command in Canada and at Gibraltar. Her biographer calls her love for the soldiers "a dominant sentiment."

In one matter Queen Victoria carried her regard for her Royal prerogative further than military, or indeed national, opinion justified. This was in her appointment of her cousin, the Duke of Cambridge, as Commander-in-Chief, and in her maintaining him in the post-altered, modified, and extended from time to time—for 40 years. truly scandalous state of the Army, in respect both of military equipment and of general organization, was cruelly revealed by the blunders and failures of the Crimean War; let us do justice to the memory of the Queen's husband, the Prince Consort, and freely admit that he, perhaps more than any single man, helped to bring about essential reforms. But neither then nor later did the Duke of Cambridge heartily recognize their necessity. Again, when the Volunteer movement was brought into being, Prince Albert actually drafted the "Instructions to Lords-Lieutenant," issued in May, 1859, which were the regulations on which the Volunteer force was raised and organized. The Duke of Cambridge, however, was always doubtful as to the utility of a civilian army of this type; nor, cleven years later, when in

1870-71 the spectacle of the Franco-German War stimulated Cardwell's reforms, did the Duke's antiquated principles find it easy to give way. At last, in 1895, public opinion grew too strong and too vocal, and the Duke, then 76 years old, consulted the Queen as to whether he should retire. She reluctantly, but very wisely, advised him to do so; and a Chief whose fairness, industry, and devotion to his work were universally recognized, made way for men more alive to the vital necessities of the times.

Though, as has been said, the reign of King Edward was a period of peace, it was marked by considerable efforts towards the strengthening of both the land and the sea forces. New types of ships were built-Dreadnoughts and super-Dreadnoughts, battle-cruisers and destroyers, for the torpedo was assuming the importance which the Great War so amply proved. Two great naval reviews in the Solent, one of them held in honour of the Emperor of Russia, were held by the King. and showed to all the world that the British Flect was more powerful than ever. Mr. Haldane, who, as Secretary of State for War, profited greatly by the wisdom of King Edward, brought forward and carried his scheme for the creation of a Territorial Army on a county basis. In October the King summoned the Lords-Lieutenant to Buckingham Palace, and addressed them in an animated speech, pointing out that the new Act would revive much of the importance formerly belonging to their office. The Territorial Force was intended for home defence; side by side with it there was patiently developed that Expeditionary Force of six Divisions of Regulars which, when the fated moment came, was transported to France "without a single casualty," and stemmed the first German rush. These were the Divisions of which Marshal Foch said that they were "the finest troops" that he personally had ever secn.

King Edward died on May 6, 1910, and three days later his only surviving son was proclaimed King under the title of George V. The first four years of his reign hardly concern us here, but one cannot pass them by without the reflection, quantula sapientia regitur orbis terrarum. We now know that we, our country, our Empire, nay, civilization itself, was on the slopes of a volcano; that threatening, unmistakable murmurs were clearly audible; and



FUNERAL OF QUEEN VICTORIA LEAVING WINDSOR CASTLE FOR THE ROYAL MAUSOLEUM AT FROGMORE.

yet we passed our time less in preparing for the storm than in quarrelling with one another. For those were the years of the angry disputes between Lords and Commons, first about the Parliament Bill, and then, when it became an Act, about its application to the problem of Irish Government. One result was the persuasion in the minds of the Kaiser and his Generals that eivil war in Ireland was impending, and that England would at least have her hands full if the Central Powers attacked France and Russia.

The issues of peace and war are closely related to the direction of a nation's foreign

policy, and it is necessary to refer briefly to the part taken by Queen Victoria and King Edward in regard to the foreign relations of the country. Both fully accepted the principle, which had been gaining ground ever since the fall of Napoleon, that the ideal policy for England was a policy of non-intervention, and it is to her desire of safeguarding this principle that we have to refer many of Queen



[Downey.

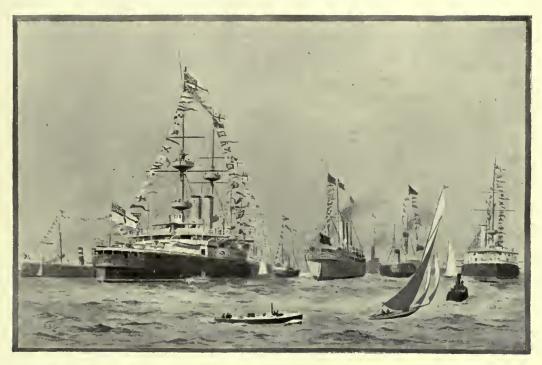
THE DUKE OF CONNAUGHT, K.G. Inspector-General of Oversea Forces, 1917.

Victoria's most definite assertions of authority. The leading case was her reluctance to be led by Lord Palmerston on what she believed to be too adventurous lines; a reluctance which led her to insist upon all the dispatches of her Foreign Ministers being submitted to her before they were sent off. Sometimes this was to the undoubted advantage of the country;

it was especially so in the case of the famous despatch to Washington on the occasion of the Trent affair, which Prince Albert, already struck by mortal illness, strengthened, rewrote in his own hand, and easily persuaded the Queen to sign. That dispatch, with its combination of firmness and sound argument, undoubtedly averted the very serious danger of war. Very often, however, the Queen was content with privately expressing her own opinions, which, at least in the first half of her reign, had what must be frankly recognized as a reactionary element; for instance, in his account of the war in Italy, between France and Austria. in 1859, Lord Malmesbury reports, "The Queen and Prince feel very strongly the defeat of the Austrians, and are anxious to take their part." The Foreign Minister, however, had no difficulty in pointing out that such a course was impossible; that not ten men in the House of Commons would vote for it; and the matter went no further. Why the Queen sympathised with Austria is obvious enough; she had an hereditary feeling for the Royal and Imperial families of Austria and Germany, and, on the other hand, she was nervous as to the intentions of Napoleon III. When we remember the anti-English agitation of the French Colonels a few months later, we must admit that Her Majesty's fears were not groundless. However, as we happily know, things changed altogether during the last thirty years of her reign, and, though on some occasions, as during the Boer War, England had to put up with abuse levied impartially by the French and German newspapers (when indeed the German situation was seriously threatening), there never was any real danger of a quarrel with France, and the conviction steadily grew on both sides that the interests of the two countries were substantially the same.

This conviction was immensely strengthened during King Edward's reign. It may be said of him that geniality was the law of his being; geniality which had not been extinguished either by the strict discipline in which he had been kept during boyhood by an admirable but too serious-minded father,* nor by his practical exclusion from political life and authority during the forty years of his rather imperious mother's widowhood. One special outcome of this genial temperament was King Edward's love for France. As Prince of Wales

^{*} See Quarterly Review, July, 1910: "The Character of King Edward VII."



KING EDWARD VII.'s "CORONATION" REVIEW AT SPITHEAD, 1902.

H.M.S. "Majestic" (on left) and other warships of the period.

he used to be called half a Parisian; he spoke French perfectly; he liked French art, French theatres, and French society; and his private visits to France were many. But when he became King, he seized the opportunity of giving a more abiding form to the "union of hearts" which he had so long privately cultivated. With the full assent of his Ministers, he planned a State visit to our Mediterranean stations, to Italy, and to France, and this he carried out in the spring of 1903. On board the Victoria and Albert he steamed to Lisbon, to Gibraltar, to Malta, and to Naples, whence he passed to Rome on a visit to King Victor Emmanuel. His reception by the people of Rome was enthusiastic, nor was their ardour lessened when King Edward, a few days later, went to the Vatican and paid a visit to the aged Pope, Leo XIII, then 92 years old.

He returned by way of Paris, where the streets were decorated in his honour and where Government and people rivalled each other in the warmth of their welcome. For some days the King was in close intercourse with President Loubet, M. Delcassé, and other political léaders; the result being not only an increase of mutual cordiality between the two peoples, but the very important Agreement which was signed, sealed, and ratified in 1904. By this were settled, on a basis of happy give-and-take, all those vexatious questions affecting Morocco,

Egypt, Newfoundland, Siam and other regions where the interests of the two countries might possibly come into collision.

The Franco-British Entente was a great work of peace, clearly directed against no Power or combination of Powers that desired peace. Even Prince Bülow, then German Imperial Chancellor, accepted it at first as such, but on second thoughts Germany recognized a fatal blow to her ambitions, because they rested essentially upon the maintenance of possible causes of dissension between Great Britain and the countries that were marked down as Germany's victims in Europe. Henceforward it suited German propaganda—and the Kaiser to identify the person of King Edward with the policy that was represented in season and out of season as an anti-German policy, a policy of "hemming Germany in." In fact, King Edward before the war was treated to a small measure of the calumnies that in the first stages of the war were heaped, with equally deliberate mendacity, upon Sir Edward Grey. Happily all such attempts to undermine the position of King Edward were defeated, and no Teutonic guile could bring a breath of suspicion upon the King's perfect observance of constitutional limits to his authority. Yet it should be recorded, and even emphasized, that King Edward, by the knowledge and judgment that he brought to bear upon the problems of foreign

policy that were gradually ripening during his reign, rendered an immense service, helped to avert many perils made in Germany for our undoing, and was indeed one of the chief architects of the great structure, founded upon unswerving patriotism that was surpassed by none of his subjects. The State papers of the time record the King's official efforts, in the communications which, always upon advice, he had with the heads of other countries, to main-



[Russell.

KING EDWARD VII. AS ADMIRAL OF THE FLEET, AND THE PRINCE OF WALES. AFTERWARDS KING GEORGE V. AS VICE-ADMIRAL.

justice and liberty, which saved the world from German aggression.

King George, between his accession in 1910 and the outbreak of war in 1914, took a less prominent share in European affairs. But he was well acquainted with the true situation, and was prepared, when the great crisis broke, to play his part wisely and well, with an

tain the peace. It fell to him, for instance, to address to the Tsar on August 1 a message urging delay and negotiation, to which the Tsar could only reply: "I would gladly have accepted your proposals had not the German Ambassador this afternoon presented a Note to my Government declaring war." In vain, it may be added, did the Kaiser's brother, Prince

Henry of Prussia, stay in England up to the last moment that his presence could be tolerated with a futile hope of exerting some sort of influence upon, or through, the British Court. Then, as afterwards, through all the vicissitudes and trials of the long struggle, the King and Queen cherished no thoughts or feelings but those which inspired the whole British people.

On the afternoon of August 4 the King held a Council and issued proclamations calling out the Army Reserve, embodying the Territorial Force, and bidding all naval officers on the Reserves and Retired List to hold themselves in readiness for active service; and on the following day he and his Naval Equerry spent several hours at the Admiralty inspecting the elaborate plans of the probable field of naval operations-naturally a work of the deepest interest to one who had been for so many years an active naval officer. Meantime, to anticipate one of the inevitable results of war, the young Prince of Wales put himself at the head of a strong committee and issued a national appeal for funds for the relief of distress. A few days later, when the Expeditionary Force was ready to depart on active service, the King sent the following message to the troops:-

"Buckingham Palace.

"You are leaving home to fight for the safety and honour of my Empire.

"Belgium, whose country we are pledged to defend, has been attacked, and France is about to be invaded by the same powerful foe.

"I have implicit confidence in you, my soldiers. Duty is your watchword, and I know your duty will be nobly done.

"I shall follow your every movement with deepest interest and mark with eager satisfaction your daily progress; indeed, your welfare will never be absent from my thoughts.

"I pray God to bless you and guard you and bring you back victorious.

GEORGE, R.I.

" "9th August, 1914."

"Your welfare will be never absent from my thoughts." These words were not a rhetorical expression: they were a promise, and it was nobly performed. Primarily addressed to the small body of soldiers which formed the advance guard of a nation in arms, they

really covered a boundless field, for it was not the first Six Divisions only, but the millions that followed them, the Fleet, the Merchant Service and fishermen, the masses of war workers of both sexes, and last but not least, the innumerable sufferers from a long war, the wounded, the sick, and the impoverished, whose "welfare was never absent from the thoughts" of the King and the Koyal Family.

For weeks before the outbreak of war the King had been deep in a mass of work. All through July, 1914, he knew, both through his own private information and through his Ministers, how critical the situation was. During those weeks he took, not without his Ministers' knowledge but very much on his own initiative, a step which some extreme party men denounced as unconstitutional. They only meant that it threatened their own pet schemes with failure. It was to summon to Buckingham Palace, on July 21, two leading men frem each of the four parties chiefly concerned—Government, Britisli Unionist, Nationalist and Ulster-and to urge upon them the necessity of at once coming to an arrangement on the Irish question. It became known, though the passage was omitted from the official report, that the King had strongly hinted at his main reason—the imminent danger of a European war. We know that unhappily no arrangement was reached. None the less the incident is a memorable one as showing the King's intense desire to present a united front to all possible enemies, and his statesmanlike sense of the true interests of the people.

It has often been said that a King of England who does his duty is bound to be the hardest worked man in his dominions. Even in peace time this is not much of an exaggeration, but let us look at King George's routine during the long years of the Great War. Even when in London his tasks and engagements completely filled the day. His Majesty began work with one of his secretaries at 9.30 a.m., but by that hour he had read the newspapers. Few sovereigns ever kept themselves in touch with public opinion through the medium of the Press more assiduously than King George; if he was travelling the papers were brought to the Royal train so that he might see them before the day's programme began. Work with the secretaries went on for an hour; and was chiefly cencerned with correspondence.

At 10.30 the first of the interviews arranged for the day was given. It was a common thing for five or six people to be received on one morning, and the audiences as a rule were anything but perfunctory. They were also extremely varied. The King always took the greatest interest in the stories of prisoners of war who escaped from captivity, and all but two of the officers who got away from enemy countries, before revolution opened the German frontier, visited the Palace. Interesting visitors to England were usually commanded to go to the Palace, and long conversations arose out of the As an example of this type of audience. interview it may be recalled that when Mr. and Mrs. Scoresby Routledge returned to England after a three years' scientific expedition in their yacht, they presented to the King and Queen Charles and Edwin Young, two Pitcairn Islanders, descendants of Midshipman Young, the sole mutineer officer of H.M.S. Bounty. His Majesty had a long conversation with the men about the conditions of their island home and its people. In October, 1918, the King received Mr. George Dobson, the Correspondent of The Times in Petrograd, who had been imprisoned and suffered great hardships at the hands of the Bolshevists. If engagements permitted, the King liked to

take a walk in the grounds of the palace at some time in the morning, but usually his interviews lasted until lunch. At luncheon a distinguished visitor was often present, so that the King might talk with him. In the afternoon on at least four days in the week His Majesty, generally accompanied by the Queen and Princess Mary, drove out to visit hospitals and to see and converse with wounded officers and men. Thousands of wounded in the hospitals in and around London had the pleasure of seeing the King in this way during the war. After tea His Majesty got through at least two hours of serious State work. The early evening was a favoured time for the reception of members of the War Cabinet. The King's daily communications with Ministers were sometimes increly matters of form, but very often they involved questions of high importance, which it might take hours to Then there was always a mass of Government documents to be read, and further work with the secretaries. The King dincd at 8.30.

While something like this was the regular agenda paper of His Majesty when at Buckingham Palace or Windsor, Investitures had to be added once or twice a week, and he had to carry out a whole second programme elsewhere.



KING GEORGE DRIVING WITH PRESIDENT POINCARE IN PARIS DURING HIS VISIT IN 1914.



CHEERING THE KING AND QUEEN AT BUCKINGHAM PALACE
On the night of the Declaration of War against Germany.

In other words, he had constantly to visit factories, hospitals, training camps, aerodromes and other scenes of the all-pervasive war activity throughout the country, and at frequent intervals to visit the Fleet in its stations off the coast and the Army at the Front.

The King's first visit to the front was paid after the war had lasted four months—months marked by the devastation of Belgium, the retreat from Mons, and the epoch-making battle of the Marne With regard to this visit we cannot do better than summarise the detailed account provided by an eye-witness,

which appeared in *The Times* on December 8, 1914. This account, indeed, is typical, for though the occasions and the places were, of course, different, the work and the daily programme were much the same in all the Royal visits. In all there were naturally the same voyage across the Channel without notice given, the same silent preparations, the same rapid motor journeys, the same eonstant talks with Generals, English and French.

His Majesty arrived on the coast on Monday, November 30, 1914, and returned on Saturday, December 5, after a week, unfortunately, of

cold and rainy weather. He was met by the Prince of Wales, who had up to that time given almost continuous service at the front. and, after visiting some of the hospitals at the base, he proceeded straight to G.H.Q., where he was received by Sir John French, then in chief command. It was arranged that on three successive days the King should make tours of inspection round the Army Corps, should converse with the Divisional Generals and the Brigadiers, and should make acquaintance with their staffs, and that the last days should be given to the examination of the Intelligence and other work done at Headquarters and to the bestowal of certain decorations. In part the inspection had to do with large masses of troops wherever they could be conveniently collected; these, as well as the smaller bodies that were gathered in villages or at the cross roads, welcomed the Royal cars in parade order, and then sent them on their way with lusty cheers, often audible to the enomy a few miles away. It is noteworthy that on the first day, with the Maharajah of Bikanir and Major-General Maharajah Sir Pratap Singh in attendance, His Majesty inspected the large and very effective Indian

contingent—those fine fighting men of whom the Germans used to say that they would never consent to fight by the side of the English and for the cause of England. Germans and English alike soon discovered that the races of India knew when they were well governed, and were not at all anxions to exchange British order either for domestic anarchy or for the tyranny of a German overlord.

The first day's inspection included also a visit to a large clearing hospital, where some of the patients were suffering from frost bite; and in the afternoon the King met President Poincaré, his Prime Minister, M. Viviani, and General Joffre, the French Commander-in-Chief, who had won undying honour by his victory on the Marne. It can well be imagined that when the King and the President drove along the line in an open motor-car they had an enthusiastic reception. That day's journey ended with the bestowal of the Grand Cross of the Bath on General Joffre. The next day, which was finer, the King made a circular journey of no less than seventy miles, visiting a cavalry corps and the 3rd Army Corps, his Majesty walking past the lines of cavalry, a magnificent and formidable body; and after-



THE KING AND QUEEN VISIT THE CANADIAN WOUNDED AT TAPLOW, AUGUST 24, 1917.

wards he had the pleasure of presenting the Médaille Militaire, granted by the French President, to several British soldiers. Before the day ended he also visited some artillery and engineer units and a detachment of the Royal Flying Corps, besides inspecting tho charcoal makers, who prepared charcoal for the braziers in the trenches. Here, too, he went through one of those large convalescent homes or resting-places for men slightly indisposed or over-done which worked wonders in the way of quickly enabling such men to return to duty fit and well. He also witnessed another excellent institution, a vast bathing establishment, where multitudes of men could pleasantly get rid of the mud of the trenches and go back freshly clothed. That day ended with the presentation of the G.C.B. to General Foch and the G.C.M.G. to seven other French

Thursday began with the investiture of Sir John French with the Order of Merit, and then followed visits to the 1st and 2nd Corps. which implied not only a long car journey but many conversations and a short address to the officers of one specially distinguished Brigade. After Iuncheon the King had a deeply interesting experience. The day was clear, and he mounted to a commanding point from which he saw the actual battle raging at no great distance. Far away to the right were Lille and Roubaix; then came a ridge where the fighting had been terrific—a ridge black with ruined villages; and to the left was Ypres, clearly visible with its roofless Halles. Then the procession turned homewards, passing for more than a mile through a double line of cavalry waving their swords and cheering. This was the last of the motor tours, and Friday was spent at General Headquarters to give His Majesty the opportunity of studying that manifold and complicated staff work which few outsiders understand and which many people failed to appreciate during the Great War. Too commonly it was said that the privates were the only people who did the real work, and that the officers, except when it eame to actual fighting, were purely ornamental. One wishes that such people could have seen what the King saw on that Friday as, with the Commander-in-Chief and the Chief of the General Staff, he passed slowly through the offices of Headquarters. First he inspected the motor cyclist dispatch riders, a branch of the Army Signal Units, and then passed

to the central office of this department. To quote the description given by The Times, "This spot is really the nerve centre of the Army in the field, for into it radiate the tentacles along which flash messages from every part of the field of operations, from the base and from England. By telegraph, air-line and cable, by wireless, by telephone and motor cyclist, does the information reach this office,



KING GEORGE AND MR. LLOYD GEORGE.

the total number of messages of all natures handled in one day averaging about three thousand, of which the majority are far longer than the average telegram of peace time. The whole building pulsated with the tick of machines of different kinds. In one room the King watched the operators busily perforating long strips of paper with the noisy 'puncher' so that the messages could be sent off by the Wheatstone high-speed apparatus. In another he saw several of these machines, which can send at any speed up to a maximum of 600 words a minute, and some duplex machines by



THE KING DECORATING LANCE-SERGEANT BROOKS WITH THE V.C. IN THE AMBULANCE TRAIN.



[Official photograph.

THE KING IN PÉRONNE.

on the famous day when he assumed the now familiar Prince of Wales' feathered crest and motto, which had belonged to the slain King John of Bohemia." But we have to look still farther back for a visit of a King and Queen of England to the battle front in war time. As Sir Herbert Maxwell pointed out in a letter to *The Times*, the latest occasion on which such an event had occurred was in the year 1304, when Queen Margaret accompanied her husband, Edward I., to the siege at Stirling Castle.

While Queen Mary made an exhaustive tour of the hospitals and other "institutions of succour" which abounded in the rear of the Armies, and once or twice motored to points overlooking the Somme battlefield, King George was with the fighting men, chiefly those of Sir Herbert Plumer's Army. Guided by that distinguished General, he explored the recently captured Messines Ridge, lunched outside a cottage which a peasant woman insisted upon still occupying, though the guns boomed around her, entered a town and examined the fine show of enemy guns just captured by the English, the Australians, and the New Zealand troops, and was heartily welcomed by the Mayor and his Council and the whole population.

On July 11, in company with Sir Henry Horne, the King visited the famous Vimy Ridge; and at another time he held a review of those tremendous new instruments of battle. the Tanks. Afterwards came a visit to the King of the Belgians, with aeroplanes for guides and guards, and to that strange, fantastic outcome of the war, a camouflage factory, where were woven "the robes of deception for the bewilderment of the Boche." Very different expericnces filled the next two days-a visit across the Ancre to the formidable Thiépval, which had cost the lives of so many Ulstermen in 1916, and which, after many vicissitudes and much more bloodshed, was now again ours; and another trip past Martinpuich and Delville Wood to that monument of German barbarism, once beautiful Péronne. "France's Day"-July 14-followed, and this the King spent in visiting a hospital, full of French wounded, at a great sea-port, and in once more telling the sufferers what admiration he felt for them, their fellows, and their country.

Immediately after his return from France the King, took a step which gave intense satisfaction not only to his armies, but to his millions of subjects throughout the Empire

At a meeting of the Privy Council, to which Dominion Ministers as well as the Duke of Connaught, the Archbishop of Canterbury, the Lord Chancellor, the Prime Minister, Lord Curzon, Lord Rosebery and others had been summoned, His Majesty signed a Proclamation announcing that for the future the Royal House and Family should be known as "of Windsor," and relinquishing and discontinuing



Official photograph. KING WITH MEN CHATTING THE GERMAN OFFEN-WOUNDED IN SIVE, 1918.

the use of all German titles. The text of the Proclamation was as follows:-

BY THE KING.

A PROCLAMATION

DECLARING THAT THE NAME OF WINDSOR IS TO BE BORNE BY HIS ROYAL HOUSE AND FAMILY AND RELINQUISHING THE USE OF ALL GERMAN TITLES AND DIGNITIES.

GEORGE R.I.

THEREAS We, having taken into consideration the Name and Title of Our Royal House and Family, have determined that henceforth Our House and Family shall bo styled and known as the House and Family of Windsor:

And whereas Wo have further determined for Ourselves and for and on behalf of Our descendants and all other the descendants of Our Grandmother Queen Victoria of blessed and glorious memory to relinquish and discontinue the use of all German Titles and Dignities:

And whereas We have declared these Our determinations in Our Privy Council:

Now, therefore, We, out of our Royal Will and Authority, do hereby declare and announce that as from the date of this Our Royal Proclamation Our House and Family shall be styled and known as the House and Family of Windsor, and that all the descendants in the male line of Our said Grandmother Queen Victoria who are subjects of these Realms, other than female descendants who may marry or may have married, shall bear the said Name of Windsor:

And do hereby further declare and announce that We for Ourselves and for and on behalf of Our descendants and all other the descendants of Our said Grandmother Queen Victoria who are subjects of these Realms, relinquish and enjoin the discontinuance of the use of the Degrees, Styles, Dignities, Titles and Honours of Dukes and Duchesses of Saxony and Princes and Princesses of Saxe-Coburg and Gotha, and all other German Degrees, Styles, Dignities, Titles, Honours and Appellations to Us or to them heretoforo belonging or appertaining.

> Given at Our Court at Buckingham Palace, this Seventeenth day of July, in the year of our Lord One thousand nine hundred and seventeen, and in. the Eighth year of Our Reign. GOD SAVE THE KING.

The choice of the name of Windsor for tho-Royal House was very popular, for Windsor, longer than any other royal residence, had been associated with the fortunes and the lives of the Kings and Queens of England. The step was more democratic than appeared on the surface, for it meant that the male descendants of the sovereign would be commoners in the third generation, with a courtesy title as the sons of dukes, and plain Mr. Windsor in the fourth generation. The Times, commenting on the King's action, said:

Cynics may regard the change as a matter of no importance, but they are mistaken. His Majesty has been better advised. It is not wisdom, but folly, to ignore the influence of sentiment on the populace. More than anything else it binds the Empire together, and the war has demonstrated the strength of the bond by proofs which no man can gainsay or belittle. The King has known well how to gratify the patriotic sentiment of all the British peoples which centres on the Crown, in this as in other things. During the earlier part of Queen Victoria's reign, after her marriage, the German element at court was a standing cause of irritation among the mass of the people of this country, as everyone who knows them is well aware. Later the feeling, once acute, abated, and during King Edward's reign it died down. It was not a personal feeling against members of the Royal Family, who were, and are, popular, but due to an instinctive dislike of Teutonism; and who shall say now that it was not justified? By his last act King George has expunged the memory of it, and therein he has done wisely.

We now come to the year 1918, crowded beyond all precedent with events of high import to the British Empire, to Europe, and to mankind. In the spring our armies had to suffer a check which, had it not been retrieved, might have led the way to a disastrous end; in August, as the fifth year of the war was just beginning, it was retrieved, and retrieved with a vengeance. March saw the worst set-back of the Allied armies; August, the new attack of the forces united under the supreme command of General Foch, carrying out with supreme success the plan of that great strategist, and driving back the enemy from point to point, from river to river, from line to line! The King was eager to share both his Army's temporary failure and its success. With even more secrecy than usual, he slipped across the Channel in the last week of March, spent two days upon

his cheering mission to Headquarters, and on his return wrote, on March 30, a letter to Field-Marshal Haig, which did much to keep up the spirits of the soldiers and the people at homo. It expressed the King's gratitude for "the skilful, unswerving manner in which the formidable attack had been, and still was, dealt with," and it proceeded:—

"Though for the moment our troops have been obliged by sheer weight of numbers to give some ground, the impression left on my mind is that no Army could be in better heart, braver, or more confident, than that which you have the honour to command.

"Anyone privileged to share these experiences would feel with mo proud of the British race and of that unconquerable spirit which will, please God, bring us through our present trials.

"We at home must insure that the man power is adequately maintained, and that our workers, men and women, will continue nobly to meet the demands for all the necessities of war. Thus may you be relieved from any anxiety as to the means by which, with the support of our faithful and brave Allies, your heroic Army shall justify that inspiring de-



Official photograph.

THE KING AT THE FRONT: RECEIVING FRENCH OFFICERS, AUGUST, 1917.

termination which I found permeated all ranks.

"Believe me, very sincerely yours,
"(Signed) George R.I."

On July 8 came the happy augury of the Royal Silver Wedding Day, marked by a great gathering in the Guildhall, and the delivery by His Majesty of a spirited and confident speech. A month later there followed the great Anglo-French attack of August 8; three days before it was delivered the King was once more in France, destined to witness the glorious opening and the unmistakable promise of success. The letter which he sent to Sir Douglas Haig just before returning is a document of much interest, showing not only the King's confidence, but the thorough way in which he turned these visits into tours of inspection of the highest value. On the one side he commended the fighting force as a whole, and expressed the "pride and veneration" which he felt towards the men on whom he had bestowed the Vietoria Crosses; on the other, he gave his high approval to Departments so various as the Forestry Department, the hospitals, those who eared for the horses and mules, the organizers of play and relaxation, and the ehaplains of all denominations. And with the fighting force he naturally grouped "the transport services by land and sea, and those vast industries in which the men and women at home maintain the supplies of food and munitions of war."

This brings us to His Majesty's action with regard to the munition works. It is a truism to say that if men are the first necessity of a modern army, food and munitions run a close race for the second place; and with regard to munitions, the way in which England met the tremendous demand will ever be rightly regarded as a source of national pride. The wonderful story of the development of the munitions industries, from the spring of 1915 onwards, has been fully told in earlier chapters.*

The King, as might have been expected, realized from early in 1915 the immense importance of munitions, and did his best by constant visits to different works to encourage both the workers and their employers. Even before the war the King and Queen had shown a desire to see for themselves the conditions and processes of some of the industries of the country, and they had gradually changed the Court idea of the purpose and programme of a

Royal visit. It is doubtful whether we shall ever return again to the stiff, solemn and eeremonial oceasions which served to bring the people and their monarch into contact in the days of Queen Victoria and even of King Edward VII. The event was usually a stone-laying eeremony or the formal opening of a public building; ponderous addresses of welcome were read and there were drives through streets carefully barricaded to keep the loyal eitizens at a proper distance. Much money, public and private, was spent on bunting, Venetian poles and triumphal arches, and, so that there might be a show, many people rode in open earriages in a procession. There was a mounted military band, a sovereign's escort of Life Guards, and a State landau drawn by six horses to earry the Royal visitors. King George and Queen Mary with their simple, democratic ways had no taste for display of this kind, and the type of royal tour they had begun to develop in the early years of their reign reduced formality and eireumstance to a minimum and brought them into really close touch with the everyday lives and toil of thousands of their subjects.

The methods and details of these visits needed little further simplification to fit them for days of war when their usefulness suddenly became of national importance. So far as experience could suggest alterations the changes took on the form of cutting red-tape, and bringing the King into personal contact with as many of the workers and their trade union leaders as possible. Some of the tours undertaken in 1917 and 1918 were delightful in their unconventional incidents and their entire freedom from stilted ceremony. The writer saw their Majesties walk along the narrow eobbled streets of a North country town with an excited eheering throng of men, women and ehildren pressing on their heels and almost jogging their elbows; pass down lanes of workpeople in factories where hundreds of hands could have touched them as they went by; and shoulder a way among a boisterously and embarrassingly loyal erowd of fish porters on the quay at Grimsby.

On April 30, 1915, the King, with Lord Kitchener, visited the Government Small Arms work at Enfield and at Waltham Abbey and spoke to several of the workmen as he went through the factories; 10 days later he was at Portsmouth Dockyard, and asked Sir Hedworth Meux to express to the Admiral-Superintendent, the heads of departments,

See especially Vol. V., Chapter XCIII., and Vol. X.,
 Chapter CLXII.

and the workmen in the dockyards his appreciation of the part which "by their devotion to duty they were taking in maintaining the strength and efficiency of His Majesty's Fleet" In this way there began a series of tours which may be said to have occupied almost the whole summer. On May 17 the King went to the Clyde, where he received with great satisfaction a resolution unanimously passed by the workmen employed by the Fairfield Shipbuilding and Engineering Company expressing their determination to put

While His Majesty's reception was everywhere cordial, the shipwrights and munition workers at Barrow were perhaps the most enthusiastic of all. In July the King went to Coventry and the Birmingham district, where he saw a variety of operations. His round included such establishments as those of the Birmingham Small Arms Co., the Wolseley Motor Co., and Kynochs, where Mr. Arthur Chamberlain showed him the making of quick-firing 18-pounder shells, the capping of cartridge cases, and the packing of cartridges. He heard with



WOMEN WORKERS' HOMAGE TO THE KING AND QUEEN ON THE OCCASION OF THEIR SILVER WEDDING, JUNE 29, 1918.

The scene in the Quadrangle at Buckingham Palace.

forth their best efforts to turn out as efficiently and rapidly as possible the Government work entrusted to them. In reply to the resolution His Majesty said that it would indeed be a happy outcome to his visit if it had in any way conduced to this expression of patriotic resolve. From the Clyde the King passed on to Tyneside, where he went over the Wallsend Slipway and Engineering Company's works, and other shipyards and armament works. The tour was then carried to Barrow, where the visit was remarkable for the long conversations between the King and the workmen, some of whom had been in the same occupation for over 40 years.

interest that the firm was employing four times as many men and women as they were 12 months previously and that the output was six times greater. There were about 8,000 workpeople on the ground during the Royal visit. At the works of the Metropolitan Carriage, Wagon and Finance Company, Saltley, the King made a short speech in which he said he had not come to criticize but to show his interest in the country's effort to meet the heavy demands for the means of carrying on the war. He fully appreciated the evident zeal and cheerfulness with which the hands were working, and he was confident that the



THE KING'S VISIT TO THE CLYDE: THE ENGINE ROOM AT MESSRS. ROWAN'S WORKS.

output would be increased and that there would be but one certain result—victory.

Very similar were His Majesty's experiences in Yorkshire at the end of September, 1915; they included visits to munition works, to hospitals, and to Leeds University, where the utility of high scientific instruction in war-time was brought home by the sight of a demonstration of the use of poison gas in warfare. At Sheffield his entertainment was varied, for at one of the great works His Majesty fired from the experimental range an armour-piereing shell against hard-faced armour, which it pierced very satisfactorily.

During 1916 the King saw little of the munition works, being doubtless well satisfied with the reports that he constantly received as to their unceasing activity. But in 1917 he was again busily inspecting factories of all kinds, both in England and Scotland. On all tours during the last two years of the war newspaper correspondents were given facilities to accompany the King, and this led to the public learning how warm was the welcome everywhere extended to His Majesty, how close the interest evinced by the King in the processes he was shown, and how wishful he was to talk with the workers at their lathes, their furnaces,

and their toil in the shipbuilding yards. Hardhanded rivetters, engineers working unheard-o hours of overtime, women shell fillers, and even grimy boys got an entirely new eoneeption of their Sovereign when he came among them. They discovered that the King was very human, eager to learn from workmen as well as from managers, eheerful and pleasant without being condeseending, and above all, that he was without a trace of the stiffness and arrogance associated with the idea of militarism. The sequence of tours began in May with a round which covered Chester, some works in Flintshire, taking in Hawarden on the way, the great shipbuilding yards at Birkenhead, a trip on the Mersey, Manehester and Liverpool, then a second visit to Barrow, and finally Carlisle and Gretna, where a great new munitions factory sprawled over land which before the war was open country. Everywhere their Majesties were deeply impressed with the extent and variety of the new organization of industries, and for the first time, perhaps, they were able to realize how remarkable a part women had come to play in war work.

At an extensive explosives factory, which in less than two years had sprung up on the borders of Wales, they saw 3,000 women and

girls engaged in the production of T.N.T. and in the conversion of cotton waste into guncotton. The welcome given to the King and Queen was spontaneous and exuberant. Hundreds of trousered young women, some in brown, with brown or scarlet caps and belts, some in cream, with white caps, some in khaki, surged blithely along in the wake of the Royal visitors as they passed through the chain of buildings, and an attempt by works officials to stem the merry rush was quite unavailing. At Gretna they found that of the 13,000 operatives and staff workers then employedthe number was afterwards increased—nearly 10,000 were women. Here again enthusiasm ran high. At Liverpool the King watched 500 women at the lathe, converting rough forgings into carefully tested shell bodies, while the Queen was visiting an explosives factory largely staffed by women. On the same day, as though to show the world-extent of the war, the King had been to the docks, visited two American armed liners and talked to the gunners gathered in the sterns of the vessels. During the visit to Barrow their Majesties noticed a change highly significant of the times we lived in: what had been two years before a private park had been covered

by a huge howitzer shop, wherein were big naval guns, turbines, heaps of shells, torpedoes, and a hundred other of the deadly instruments of modern war. From the North-west the King and Queen returned to London, and the next day they paid an impromptu visit to a fuse factory in one of the suburbs, quite newly installed, and eleverly and efficiently worked in several of its departments by women and girls.

Three weeks later their Majesties started for the north-east coast to inspect another branch of the country's industries, and more especially the shipbuilding yards. Unrestricted and ruthless submarine warfare at this period was reducing our mercantile marine to an extent the danger of which was known to the Government but which the public had scarcely grasped. The King and Queen saw something of the tireless energy, ungrudging toil, and widespread activity which was giving us new ships to set against, at any rate, a part of our losses on the seas. Chalked in large yellow letters on the partly-built hull of a cargo boat in a Wearside yard which the King visited he saw the words, "We will deliver the ships." ·The message was meant as a promise to be fulfilled.



THE KING'S VISIT TO THE CLYDE: WATCHING THE FLOW OF METAL FROM A FURNACE.

During this tour the King had an informal walk through the streets. Their Majesties had made a journey up the Tees on a steam tug, and for miles had been getting glimpses of the romance of an industrial river. They had seen smoke pouring from a hundred stacks, the fierce light of furnaees, piles of pig-iron, weather-beaten ships in dock, new ships cleanly painted, and the gannt skeletons of ships recently begun. They landed at the Stockton Corporation Quay. From the quay a street striking steeply up the hillside was packed with cheering men and women. Motorcars were awaiting the arrival of the tug, but the Royal party chose to walk to the shipbuilding yard they were to visit. tho King and Queen passed through oldfashioned thoroughfares the people gave them a rousing reception. Children in bright clean pinafores waved tiny flags and strained their voices to swell the volume of their greeting. On the pavements, in the doorways, and at upper windows women cheered heartily. Hundreds of people fell in behind the official party and cheered and cheered again as they hurried along. The incident was immensely popular. Four rivers were included

in the programme of a five days' tour-the Tees, the Wear, the Tyne and the Humber, and the work the visitors went through may be gathered by the fact that on the first day they inspected .11 busy establishments in Middlesbrough, Stockton and West Hartlepool. To anyone possessed of less mechanical knowledgo and a less retentivo memory than the King such a task would have been impossible or uscless, but His Majesty had a minute knowledge of every engine of war, and his memory for these things, like his memory for the details of battles and positions of regiments. was extraordinary. The experience on the north-east coast was practically repeated three months later, when the King paid a long visit to the Clyde and saw with much satisfaetion the great improvement that had taken place in the quantity of the ship-building work done in the Wost of Scotland. Meantime, while the King was exploring this important region, the Queen and Princess Mary went to Coventry, where the work had not been as uninterrupted as it might have been; and there saw many of the 40,000 women and girls who were employed in the aeroplane and other factories. Similarly, in October, the Royal lad es



THE ROYAL TOUR OF THE NORTH-EAST COAST.

Inspecting Munition Girls at Stockton.



THE KING AT NEWCASTLE: IN AN ARMAMENT FACTORY.

made a careful inspection of the equipment and stores at Woolwich, and of the multitude of women who sorted and stored them.

Some visits to other places during the concluding months of 1917 provided their Majesties with quite new experiences. At Bristol, for example, besides various shell factories, they went to see the buildings where "smokes" were made for the front. Half an hour was spent in an atmosphere fragrant with the scent of fine Virginia leaf, and 3,000 people wero seen at work making and packing cigarettes and pipe tobacco. In the Woodbine roomthe factory was that of Messrs. Wills-a few minutes were passed watching machines throwing out cigarettes at a speed of 10 to the second, with sharp-eyed girls standing by to detect any faulty delivery. In other long clean rooms the visitors were shown leaf tobacco pouring from shoots into cutting machines, "much as trusses of corn are devoured by threshing machines at a farm," and saw men handle the cut leaf with forks as they might pitch hay on a stack. Their Majesties were checred all through the works, and the Queen often spoke to the girls at the benches. Some miles away more hundreds of "the invading sex" were

busy working at aeroplanes, and working. uncommonly well. These also the Royal party witnessed, and then passed on to Bath, where "for the first time in 200 years, if local historians are correct, a reigning King of England drank the waters in the Grand Pump Room." It was natural that the King and Queen should first satisfy their curiosity as to the details of Bath as a water-cure; but after a short time they had to go off to the neighbouring steel foundries and rubber works-so all-pervading are the needs of war. Nor were these the last engagements of the year, for later, in November, a deeply interesting visit was paid to the National Physical Laboratory at Teddington, where Sir Richard Glazebrook showed his Majesty such processes as the minute setting of the gauges of shells and similar operations. Elsewhere a little later his Majesty went down to see a vast tent factory, tents being a prime necessity to armies like ours that were fighting all over the world in every climate; and here the King was specially interested to see the provision of a strange new device that the enemies' methods had imposed upon us—the making of gas masks for horses.

The year 1918 was also marked by a number

of tours of the same kind. At the end of February came a visit by the King to Harwich, especially to a vast number of auxiliary craft, while on the same day the Queen with the Prince of Wales and the Princess Mary explored the London doeks, chiefly to see for themselves the huge stores of grain and the processes of unloading it.

The Royal family took a deep interest in the food question which during the winter had



THE KING AT LINCOLN.

Takes a trip in a Tank.

given Lord Rhondda very acute problems to solve. Voluntary food economy was practised in the Royal household from the day when the need for it was first urged by the Food Controller, and when compulsory rationing of meat, sugar a 'd fats was introduced the King and Queen like the humblest of their subjects, had their ration eards and lived strietly within the allowance of food permitted by the eards. On several oceasions they visited towns associated with the food supplies of the country. At Reading they saw the manufacture of biseuits at Messrs. Huntley & Palmer's works and the packing and distribution of vegetable seeds by the firm of Sutton & Sons. The King, like the Queen, spent hours going round the food warehouses of the London Doeks. During a tour through Lineolnshire their Majesties went to the fish doeks at Grimsby, where they saw fish being slung in baskets from trawlers to the quay, and long lines of cod, plaice, whiting and turbot exposed for auction in the sheds. As they walked through the doeks the King and Queen were almost hemmed in by crowds of cheering fish workers, but they took

the buffeting and inconvenience with the greatest good humour. The visit to Lincolnshire was unusually interesting and varied in its programmo. In one day the Royal party walked through busy workshops noisy with the elang of hammers, and stood in the silent eloisters of Lineoln's noble cathedral; saw the shaping of machinery of war and passed through the wards of a military hospital; the King held in his hand an ancient sword giver to Lincoln by Riehard II. and later looked on inventions which three years earlier had not been thought about. Lincoln was the birthplace of the Tanks, and their Majesties saw the manufacture of these monsters and watched them manœuvre and gambol over a testing ground. The King added an unseheduled item to the programme by taking a trip inside one of the machines. The ride included a fearsome plunge into the "Hindenburg Treneh," regarded as the sternest test in the trials to which Tanks were put. It had not been intended that the trench should be negotiated with the Sovereign as passenger, but the King himself directed the course and picked out all the steepest places for inclusion in the trip.

The tour closed with a visit to a vast new aerodrome where Prince Albert was serving as a Captain in the Royal Air Force.

The next tour, which proved to be the last of its kind before the achieving of victory in the war, was to the West Riding of Yorkshire, where three busy days were divided among the group of towns where cloth is made; towns which saw in the war an almost greater transformation of their industry than befell any others throughout the country. In the days of peace the Army used less than one per cent. of the wool manufactured at Bradford, Leeds, and the neighbouring places; after three years of war the purchases of cloth by the War Office had reached the colossal figure of 1,600,000,000 pounds' weight, of the value of more than a hundred millions sterling; the eloth coming largely from this district, although of course a great deal was provided by Scotland, Ulster, and the English Midlands. Again the King and Queen found a large part of the work done by women and girls, said to amount to quite 61 per cent. of the workers; and these Yorkshire women, whose musical voices are famous, enlivened the Royal visit with songs instead of cheers. There was much talk between his Majesty and the managers about standardizing the quality of the cloth, and at

Leeds the King bought a length of standard cloth for his own use.

The intense interest which King George had always taken in the Royal Navy was based, so to speak, on natural and personal as well as on public grounds. With the Fleet he was directly associated from boyhood, and he was in the most literal sense what only two of his modern predecessors had been, a Sailor King. He entered the Navy as a lad of thirteen, and went up steadily through all ranks until, in 1907, he was made an Admiral. This would not have been possible had he been his father's eldest son, for the Heir-Apparent to the Throne must be prepared for still higher duties and trained to a practical understanding of yet wider interests. But Prince George was a second son, and it was only after the death of his brother in 1892 that he came into the line of direct succession to the Throne. Henceforth he had to prepare himself for larger responsibilities; and yet it was many years before he ceased to make long sea voyages and even to command ships. In the manœuvres of 1892 he commanded the cruiser Melampus. Six years afterwards he took the Crescent on a special cruise. Much later he hoisted his flag in the Indomitable, and took her across the Atlantic for a visit to Canada, that being the voyage during which, according to an officer's story reported in The Times of that date: "We all took a turn in the stokehole, including the Prince of Wales, who threw in six shovelfuls for luck." This anecdote illustrates what is proved by abundant evidence on all sidesthat throughout his naval career the Prince made himself and proved himself a thorough sailor, knowing his work in every detail, enjoying it, and developing more and more those qualities of good companionship for which naval men have always been remarkable.

This was an excellent training for a public position of any kind; but in a more special way the Prince's long career with the Fleet qualified him for the great position that he was destined to hold. He was to rule over the British Empire, and it is no exaggeration to say that during the thirty years that followed his entering into the Navy in 1877 he visited,



THE KING AND QUEEN AMONG THE T.N.T. WORKERS.



THE QUEEN INSPECTING A V.A.D. DETACHMENT ON THE WESTERN FRONT.

whether as a naval efficer or as a direct representative of the Crown, almost every corner of that Empire. As boys he and his brother went round the world in the Bacchante, becoming personally acquainted with the West Indies, the Australian ports, Yokohama and, on their return, the Suez Canal and the Holy Land. Many times during the next twenty years Prince George made long voyages, until, in 1902, he sailed in the Ophir on a great Imperial Mission, opening the first Parliament of the Australian Commonwealth, and passing to New Zealand, to South Africa, and to Canada and Newfoundland. When he returned home he was created Prince of Wales, and on that very evening, speaking at the Guildhall, in the name of the Empire, he addressed his country in the memorable words: "Wake up, England!" The last great voyage which he made as Prince of Wales was at the end of 1905, when he and the Princess paid a truly Imperial visit to the Indian Empire. They made the voyage in H.M.S. Renown, escorted by a squadron of eruisers, and their tour and the public work performed therein not only deeply impressed the Princes and people of India, but gave the King that exact knowledge of Indian character and of Indian problems which was of such real service to him during the Great War.

This retrospect may increase the reader's interest in the story of King George's relations with the Fleet during, and just before, the

war; but first it may be well to recall his carliest official utterance as King. He was proclaimed on May 9, 1910; next day he issued messages to the Navy, the Army and India. The first intimately concerns our subject and may here be quoted:—

"Marlborough House, Pall Mall, S.W.

"It is my earnest wish, on succeeding to the Throne, to make known to the Navy how deeply grateful I am for its faithful and distinguished services rendered to the late King, my beloved Father, who ever showed the greatest solicitude in its welfare and efficiency.

"Educated and trained in that Profession which I love so dearly, retirement from active duty has in no sense diminished my feelings of affection for it. For thirty-three years I have had the honour of serving in the Navy, and such intimate participation in its life and work enables me to know how thoroughly I can depend upon that spirit of loyalty and zealous devotion to duty of which the glorious history of our Navy is the outcome.

"That you will ever continue to be, as in the past, the foremost defender of your Country's honour, I know full well, and your fortunes will always be followed by me with deep feelings of pride and affectionate interest.

"George R.I."

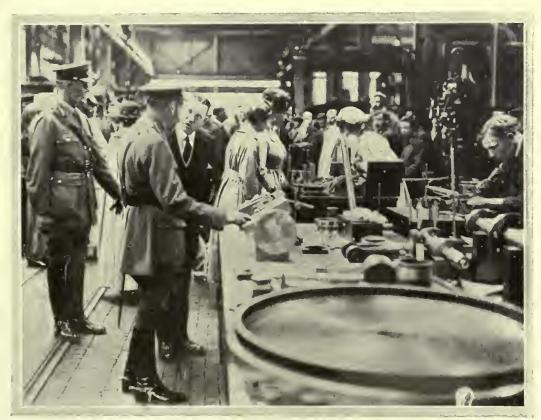
There are many demonstrations of this "pride and affectionate interest" to be

gathered from the history of the next four years; but we pass to a memorable date, just one fortnight before the declaration of war. On that day, July 20, 1914, there was to be seen at Spithead the most marvellous spectacle of naval power, organization and readiness that the eyes of men had ever beheld. It was the largest and strongest fleet that had ever been concentrated in British waters: a fleet of ships of all sizes which, having been for some days moored four deep along the Solent, steamed out to sea past the Royal yacht in a procession 22 miles long. With the ships was what was described as an "imposing array of aircraft," probably the biggest array seen up to that time. The ships steamed by at 11 knots, taking exactly two hours to pass the King; and during that time his skilled eye could see all types of battleships-King Edwards and Dreadnoughts, Bulwarks and Majestics-and some fifty cruisers, showing, like the battleships, every stage of improvement which the last few years had made; while afterwards, when the Fleet had passed, the Royal yacht moved away, taking His Majesty to inspect a crowd of destroyers at Selsey Bill. The weather.

threatening at first, had cleared and become brilliant, so that nothing interfered with a day which must have been one of pure enjoyment to the King as a sailor, and of confident satisfaction to him as head of the State.

The war broke out, and the Fleet began to work in earnest. Sections of it were in every sea; one was destined to have rude experiences—at first unhappy, because a weak squadron was met by a strong enemy force, but afterwards glorious, when the Falkland Isles wiped out the memory of Coronel—while the mass of the ships guarded our own coasts, patrolling the North Sea or waiting for the enemy to appear. The enemy appeared once in force, and the Battle of Jutland followed on May 31, 1916, with one result that was in its way decisive—that the enemy withdrew to his hiding-place, and remained there.

The bulk of our Fleet also withdrew to its bases, though a vast number of vessels, especially cruisers and destroyers, remained busily engaged on their multifarious duties. Here, however, we are only concerned with the Fleet at its bases, for it was to the bases that the King for the most part confined his visits. If our record of these is briefer and



THE KING AND QUEEN AT AN AEROPLANE FACTORY AT BEDFORD, JUNE 1918.

less detailed than that of his visits to the Army it is because, from the nature of the ease, the affairs of the Fleet in war-time were kept more secret than those of the forces on land.

Accordingly, with regard to most of the King's visits, the public knowledge had to be confined to the barest facts and to those Messages to the Admiral in Command which His Majesty was in the habit of sending on his return home. For example, early in July, 1915, the King wrote to Admiral Jellicoe to express his "delight" that he had at last been able to



THE KING INVESTING ADMIRAL PAKENHAM WITH THE K.C.B.

visit the Grand Fleet; that he had left it with feelings of pride and admiration, that he had seen the greater portion of the officers and men; and ho added: "I realize the patient and determined spirit with which you have faced long months of waiting and hoping." Very naturally and with perfect sincerity the Admiral wrote tendering his "most profound thanks" for the message, and adding: "Your Majesty's intimate knowledge of the feelings which permeate the officers and men of the Royal Navy will enable you to appreciate the depth of their devotion, loyalty, and respectful affection, which feelings your Majesty's visit has intensified." The visit in June, 1916, was even more memorable, for it followed close upon the Battle of Jutland, which gave His Majesty the opportunity of addressing representatives of units on parade in words of eongratulation and consolation.

The visit in June, 1917, was longer and perhaps more varied, and on this oceasion the Admiralty relaxed their veto on publicity so far that they allowed a "film" of the visit to

be shown in all parts of the country. The spectators were introduced into some of the less secret mysteries of the battleships, and were delighted to make acquaintance with such bearers of famous names as Admiral Beatty, Admiral Sir Hugh Evan-Thomas and Admiral Sir Doveton Sturdee, the vietor of the Falkland Islands. During the visit His Majesty had not only passed from one great ship to another, and examined the eruisers and destroyers, but he went on board the Flagship of the minesweeping fleet and made personal acquaintance with the plucky fellows who, having once been peaceable fishermen, now manned a vessel of which The Times correspondent said, in deseribing the scene: "Now she sweeps for different fish, and her trawls are wire ropes, and not nets. She sweeps for mines and gets them, and her erew are out in gales and half gales, making clear the path of the great ships and the little. Without these sweepers and the men that man them the Fleet would lose its power of movement." Everything went well, and His Majesty's telegram to Admiral Beatty, after the visit, expressed the highest As for the King's visit during satisfaction. July, 1918, the new feature was that it gave His Majesty an opportunity of seeing, to use his own words, "the splendid ships of the United States in line with our own." But besides this he was able once more to take special notice of many of the officers and men who in the spring had borne their part in the famous raid on the Mole of Zeebrugge, an exploit which, it need hardly be said, had thrilled the King as it thrilled the whole nation, and which he had recognized by messages of warm congratulation and by the bestowal of honours.

There came one more visit, on the eve of perhaps the most momentous day in naval annals. The King, with the Queen and the Prince of Wales, went to Rosyth on November 20, 1918, and reviewed the Fleet before it sailed to a rendezvous in the North Sea to receive the surrender of the finest ships of the German Navy. Previously, on the day the armistice was signed, His Majesty had sent through Sir Erie Geddes, the First Lord of the Admiralty, a stirring message of thanks to "Now that the last and most the Fleet. formidable of our enemies has acknowledged the triumph of the Allied arms on behalf of right and justice, I wish to express my praise and thankfulness to the officers, men, and hospital at Roehampton, where they were met by a guard "composed entirely of old patients who, having been fitted with artificial limbs, are now employed in the instruction of other patients." At Brighton, a few days later, Her Majesty visited the Queen Mary Workshops, where she saw a large number of men who, having lost at least one limb on service, were learning electrical engineering, motor mechanics, metal-fitting, shoe-making, tailoring and a

valescents or gave a little pleasant relief to our own officers on leave or to foreigners visiting London. They were very different from the State Balls and the Garden Parties of long ago, but perhaps they were not less enjoyable. Take, for example, their Majesties reception on February 17, 1917, of a hundred officers from over-seas, most of them convalescents from hospital, but some on short leave from the Front. In the State Ball Room



PRINCESS MARY CONGRATULATING A BADGED LAND-GIRL AT THE SENATE-HOUSE, CAMBRIDGE.

score of other trades, some of them being able to earn two, three and even four guineas a week.

Mention has been made of the Princess Mary, and this account of the Royal work for the hospitals must not close without further reference to this young lady's admirable service. All through the war she was only less busy than her mother, and eventually became fully engaged as a "V.A.D." in the Hospital for Sick Children in Great Ormond Street. It should be added that in May, 1918, she opened a new Orthopædic Hospital at Windsor.

This rapid survey may be concluded with a brief notice of some of the truly friendly entertainments with which at various times during the war the King and Queen cheered the cona stage with a cinematograph screen was erected. After the show came the more purely friendly part of the entertainment—tea in the household dining-room, served by a number of great ladies, with the King and Queen, Princess Mary, and the Duke of Connaught walking about and chatting with their guests. There were several entertainments of a similar kind, and some on a larger scale were given in the Riding School or the Quadrangle to more or less disabled soldiers; and with these may be classed the deeply interesting review, held during the summer of 1918, of the Women's Land Army.

While the final stages of the war saw a great sweeping away of the autocratic monarchies and dynasties of Europe, in the great outburst of rejoicing which filled London for a November week, no part stood out more prominently than the wonderful popularity of the King and Queen with their people. The news of the signing of the German armistice on November 11, 1918, had not been publicly known for more than a few minutes before a crowd which numbered thousands gathered in front of Buckingham Palace to cheer, and, if possible, get a glimpse of their Majesties. Several times during the day the King and Queen had to appear on the balcony of the Palace to

and some civilians. Motor-cars carried three and four times their normal number of people. Every taxi-eab had half a dozen men and girls on the roof, and soldiers tried to keep precarious places on the steps. Everybody seemed to have a flag, and some of these bore the words "Welcome Home." Australian soldiers climbed up the marble carving of the Victoria Memorial, and secured observation posts in this way high above the heads of the erowd. Admirals and generals joined the throng, which by noon had become a wonderful surging multitude, stretching far up the Mall.



THE KING AND QUEEN INSPECTING W.A.A.C. s AT ALDERSHOT.

acknowledge the enthusiastic greeting of great masses of their subjects, and also of soldiers of the United States Armies. The Times, in a description of the seene at mid-day, said that after the King had first been out on the balcony the people turned to go, but as they walked away they were met by fresh throngs, flushed with enthusiasm. Through the Green Park came a procession of munition girls in their overalls, with a tremendous Union Jack. Men with flags tied to sticks and umbrellas, women who had wreathed their hats with the national colours, Dominion soldiers, officers, and men of British regiments, troops from the United States, men of the Royal Air Force, Wrens, W.A.A.C.'s, girls from Government offices, and children poured into the wide open space before the Palace railings. Motor-lorries brought along cheering loads of passengers, some in uniform

Patriotic songs, old and new, were sung, and at short intervals soldiers led staccato calls of "We want King George." Indications that the King would again show himself came when servants from the Palace hung festoons of crimson velvet over the baleony, but the crowd had to suffer a long wait. Merry incidents enlivened the interval. A roll'eking band of subalterns, earrying flags and blowing police whistles, pushed into the massed people, cleared a circle, and romped hand-in-hand round a "Teddy bear" on wheels decorated with a flag. An American officer from the top of a taxi-cab entertained the crowd with a demonstration of college yells.

Insistently and loudly, however, the cry "We want King George" punctuated the songs and cheers and laughter. The crowd had gathered with a fixed purpose, and as the

minutes sped they became more determined to have their way. At last, a few minutes before 1 o'clock, the massed band of the Brigade of Guards came in sight playing a triumphal march. As they wheeled into position in the forecourt, the King stepped out on to the balcony. The Queen, Princess Mary, and the Duke of Connaught were again with him, and Princess Patricia also joined the group. A roar of cheering went up such as London had not heard during the period of the war, and above the upturned faces handkerchiefs fluttered, hats waved, and thousands of flags, the flags of all the Allies, flapped and shook. The strains of the National Anthem, played by the Guards, at first were scarcely heard against the cheering, but gradually the people caught the music, and with the third line of the hymn voices took up the words. Came once more "Rule Britannia," and then another tremendous note of cheering, led by the King, while the Queen waved a flag above her head. Next the band led the crowd in singing "Auld Lang Syne," and after this 10,000 people took up "Tipperary," "Keep the Home Fires Burning," and the more stately, but beautiful, "Land of Hope and Glory." "Tipperary" was accom-

panied with nervous laughter and tears. People remembered the early days of the war, and emotion gripped and almost overwhelmed many of them. The crowd showed no wish to dissolve, and men began to call for a speech. The band quietened them with "The Old Hundredth," and the crowd reverently took up the hymn. Enthusiasın quickly had its fling again. American and Belgian national airs provoked great cheers, and everybody sang the "Marseillaise." Then the King spoke. Few could hear him, but his message was well chosen. "With you," he said, "I rejoice, and thank God for the victories which the Allied Armies have won, bringing hostilities to an end and peace within sight." "Now thank we all our God" was played by the band after the King's words, and an historic scene ended with a final round of cheering, in which the musicians of the band and the King joined.

Each day during "armistice week" their Majesties drove through some part of London, and everywhere they were received with unbounded enthusiasm. The secret of the demonstration of loyalty was not to be found merely in the excitement of people intoxicated



AFTER THE ARMISTICE: KING AND QUEEN IN SOUTH LONDON, NOVEMBER 1918.

Scene in the Old Kent Road.

with the triumph of the Allies against Gorman despotism. It was rooted in sincere respect and affection for the King and Queen. The common feeling cannot be better expressed than by quoting from the speeches made in Parliament on November 18, when it was resolved that humble addresses be presented to his Majesty congratulating him on the conclusion of the Armistice and the prospect of a victorious peace. Mr. Bonar Law, who moved the address in the Commons, said:—

Europe is seething with revolution to-day. Even in those circumstances we can look forward to the future with hope, with courage, and with confidence. We have that confidence because the institutions which habit has created are with us based on the strongest of all foundations-the consent of the nation which is subjected to them. Of these institutions none is stronger or rests on more secure foundations than the Throne. The Throne is the link, as I believe, which has kept the British Empire together, which has enabled it to play a glorious part in this terrible struggle, and which will make the union closer and closer. But the Throne as an institution would have been much less strong but for the character of its occupant. Everyone connected with any Government knows, and the people know too, that from the first day of this war until this hour no man has devoted himself more wholeheartedly or more unselfishly to the great task in which as a nation we have been engaged than the King. And in that work he has been nobly helped by his Royal Consort. They have shared the sacrifices; they have rejoiced in the joys, and they have sympathized with the sorrows of their people, and at this time, when kings like shadowy phantoms are disappearing from the stage-and are disappearing so quickly that we can hardly remember their names—our Sovereign is passing daily without an escort through the streets of the centre of the Empire, and is everywhere met with tributes of respect, of devotion, and of affection. These phantom kings have fallen because they base their claim on an imaginary Divine right. Our King rests secure because the foundation of his Throne is the will of his people.

Mr. Asquith, in an equally graceful tribute, said:—

In the crash of thrones, built some of them on unrighteousness, propped up in other cases by a brittle framework of convention, the Throne of this country stands unshaken "broad-based upon the people's will." It has been reinforced to a degree which it is impossible to measure by the living example of our Sovereign and his gracious Consort, who have always felt and shown by

their life and by their conduct that they are there not to be ministered unto but to minister. Monarchies in these days are held, if they continue to be held, not by the shadowy claim of any so-called Divine right, not as has been the case with the Hapsburgs and Hohenzollerns by any powers of dividing and dominating popular forces and popular will, not by pedigree and not by tradition—they are held and can only be held by the highest form of public service, by understanding, by sympathy with the common lot, by devotion to the common will.

Earl Curzon, in the House of Lords, claimed that the King during the war had been tho symbol and the spokesman of his people in all parts of the world. By constant self-sacrifice, by inexhaustible energy, by unfailing sympathy with their people, the King and Queen had endeared themselves to millions of our race. The King received the addresses in the Royal Gallery at Westminster the following day, and in an admirable message to the Empire paid · warm tributes to the work of the Forces and of their Commanders, to the contribution of the Dominions and of India, and to the efforts of our Allies. He called for the creation of a better Britain and for the preservation of the spirit of comradeship which had been shown in the years of war.

By general consent the position of the Royal Family when the war drew to its close was stronger and better secured than that of any Royal House had ever been in Europe. Soldiers, sailors and workers gave their loyalty to the King with a deep sincerity. With a Sovereign openly sympathetic with democracy, modest in bearing, unimpeachable in his private life, generous, and devoted to the welfare of the Empire and the millions of people who lived within its borders; and with a Constitution founded on ordered freedom and maintained by a broad and untrammelled franchise, no sane reformer could hope to find gain for his cause by interfering with the Throne or the established form of Government. Great Britain had indeed good reason to be grateful to its monarch.



CHAPTER CCLXVI.

BRITISH AND ALLIED WAR FINANCE: 1916-1918.

FEATURES OF BRITISH FINANCE FROM JANUARY, 1916, TO SEPTEMBER, 1918—GROWTH OF WAR EXPENDITURE—VOTES OF CREDIT—HOW EXPENDITURE WAS FINANCED—HIGHER TAXATION IN 1916, 1917 AND 1918—METHODS OF BORROWING—CONTINUOUS SALES OF EXCHEQUER BONDS IN 1916—NO WAR LOAN FLOTATION—EXPANSION OF FLOATING DEBT—CHANGE IN METHODS OF FINANCING—FLOTATION OF 5 PER CENT. LOAN AND 4 PER CENT. "TAX-COMPOUNDED" LOAN—LAST ISSUE OF EXCHEQUER BONDS—NATIONAL WAR BONDS—SALES FROM OCTOBER, 1917, TO SEPTEMBER, 1918—BORROWINGS ABROAD—CONSCRIPTION OF SECURITIES—MOBILIZATION OF SECURITIES ENDS—United States' Financial Accommodation before April, 1917—United States' Loans to Allies—British and Allied Borrowings in South America, Switzerland, Japan and Spain—British Loans to Allies and Dominions—Colonial War Loans—French Loans in London—Growth of the British National Debt—Recoverable Expenditure—Course of Exchanges—British Overseas Trade—Alteration in System in July, 1917—Effects of War Finance—Stock Exchange Values—Expansion in Currency—Rise in the Cost of Living—Industrial Combinations—Bank Amalgamations—Financial Problems—Appointment of Committees.

ROM the beginning of 1916 down to the end of the fourth year of the war was a period long enough to witness fundamental changes both in its finance and its finances. These changes contained four features of permanent influence. The first of these features was the great growth of expenditure, which in the case of Great Britain alone ultimately reached a gross figure of approximately £7,000,000 a day-equal to the total pre-war income of the country-and led to the appointment of a Select Committee to consider ways and means of reducing it or checking its further growth. The sum of money expended in the four years of the war to August, 1918, was greater than the com bined money expenditure for all other wars in recent history. In order that the reader may more readily grasp the extent of the expenditure incurred, the following table is given Vol. XVIII.-Part 226

showing, on the authority of an American banker, the approximate costs of the world's most notable struggles of modern times:—

		£
Napoleonic Wars	 	£1,250,000,000
Crimean War	 	340,000,000
American Civil War	 	1,600,000,000
Franco-German War	 	700,000,000
South African War	 • •	250,000,000
Russo-Japanese War	 	500,000,000
The Great War (four years)	 	31,120,000,000

The last figure is equivalent to a daily expenditure of £21,450,000 for the four years of the war to August, 1918.

The second feature was the change in methods of borrowing introduced after the Lloyd George Government had succeeded the Asquith Administration; the newmethods resulted in a great saving in the cost of Government borrowing.

The third feature was the entry into the war of the United States, which gradually relieved Great Britain of the task of financing not only her own, but also her Allies' purchases abroad. The fourth feature was the great advance in the cost of living, the outcome of the creation of purchasing power resulting from war credits, combined with a diminishing supply of goods to be purchased. This creation of purchasing power, termed "inflation," was a device of finance designed to manufacture money required by Governments by a series of bookkeeping entries. All the belligerent countries resorted to this device to a greater



A BANK-NOTE FOR HALF A FARTHING.

lssued by the Commune of Weisswasser in

Ober-Lausitz, Germany.

or lesser degree. It was carried to extreme limits in Bolshevist Russia, in Austria, and Germany. Not only was money manufaetured by the Government in Germany, but eities, municipalities, companies, firms and private individuals issued their own currency. In Great Britain a substantial portion of the cost of the war was provided by the appropriation, in the form of taxation, of a portion of the current production of wealth. The rest was provided by borrowing money from members of the community. But as there were no means of compelling members of the State to lend their money, and as there was no scientific adjustment of Government receipts and disbursements of money, it happened from time to time that the State was temporarily insufficiently supplied with money to pay its bills. It was therefore compelled to "make" money, and the process had results of such farreaching importance that in the First Interim Report of the Committee on Currency and Foreign Exchanges appointed in January, 1918, it was described in detail as follows:-

Suppose, for example that in a given week the Government require £10,000,000 over and above the receipts from taxation and loans from the public. They apply for an advance from the Bank of England, which by a book entry places the amount required to the credit of Public Deposits (i.e., deposits of the Government) in the same way as any other banker credits the account of a customer when he grants him temporary

accommodation. The amount is then paid out to contractors and other Government creditors, and passes. when the cheques are cleared, to the eredit of their bankers in the books of the Bank of England-in other words, is transferred from Public to "Other" Deposits. the effect of the whole transaction thus being to increase by £10,000,000 the purchasing power in the hands of the public in the form of deposits in the Joint Stock Banks and the bankers' cash at the Bank of England by the same amount. The bankers' habilities to depositors having thus increased by £10,000,000 and their eash reserves by an equal amount, their proportion of cash to liabilities (which was normally before the war something under 20 per cent.) is improved, with the result that they are in a position to make advances to their customers to an amount equal to four or five times the sum added to their cash reserves, or, in the absence of demand for such accommodation, to increase their investments by the difference between the eash received and the proportion they require to hold against the increase of their deposit liabilities. Since the outbreak of war it is the second procedure which has in the main been followed, the surplus cash having been used to subscribe for Treacury Bills and other Government securities. The money so subscribed has again been spent by the Government and returned in the manner above described to the bankers' cash balances, the process being repeated again and again until each £10,000,000 originally advanced by the Bank of England has created new deposits representing new purchasing power to several times that amount. Before the war these processes, if continued, compelled the Bank of England . . to raise its rate of discount, but . . . the unlimited issue of Currency Notes has now removed this check upon the continued expansion of credit.

This ereation of money or purchasing power at a time when production of goods was restricted by the withdrawal of millions of men from that work and shortage of shipping space to bring goods from abroad haturally caused a marked advance in the cost of all commodities. In fact the conditions were ideal for the proof



FARTHING TOKENS OF THE BERLIN GENERAL OMNIBUS COMPANY.

of the quantitative theory of money. Money was in greater supply than goods, and the latter therefore rose in price. This provoked demands from workpeople for increased wages to enable them to meet the increased eost of living, and on one occasion—November, 1917—the Ministry of Munitions by a stroke of the pen added 12½ per cent. to the wages of millions of workpeople. Increased remuneration for labour meant larger disbursements by the Government, which in turn had to resort still more to the device of "creating" money, and so the vicious circle continued down to the end of



LONDON WAR LOAN CAMPAIGN:

The Lord Mayor listens to the band of the Coldstream Guards on the steps of the Royal Exchange.

the war. It is necessary to appreciate the importance of this factor of inflation—"creation" of money—for the growth of expenditure and all the other great problems of war finance were to a great extent to be traced to it.

The progressive rise in war expenditure can be seen at a glance from the following table showing the aggregate Votes of Credit obtained by the Government during the first four years of the war (the figures relate to the financial years ended on March 31 in each year):—

			£
1914-15 (eight months)			362,000,000
1915-16			1,420,000,000
1916-17			2,010,600,009
1917-18			2,450,000,000
1918 (April to August)	• •	• •	1,800,000,000
Total for four years	٠.	• •	£8,042,000,000

The Votes of Credit were not obtained at regular intervals, but were arranged to suit Parliamentary convenience. Consequently the amounts varied very considerably. From the beginning of 1916 down to the beginning of August, 1918, 16 Votes of Credit were asked

for, making a total of 24 from the outbreak of war, as follows:—

war, as follows:—			
FINANCIAL	YEAR	1914-15.	£
1st-August 6, 1914			100,000,000
2nd-November 15, 1914			225,000,000
3rd-March 1, 1915			37,000,000
,			
			362,000,000
19	15-16.		
4th-March 1, 1915			250,000,000
5th-June 15, 1915			250,000,000
6th—July 20, 1915			150,000,000
7th—September 15, 1915			250,000,000
8th-November 11, 1915			400,000,000
9th—February 21, 1916			120,000,000
			1,420,000,000
19	016-17.		
10th-February 21, 1916			300,000,000
11th—May 23, 1916			300,000,000
12th—July 24, 1916			450,000,000
13th-October 11, 1916			300,000,000
14th—December 14, 1916			400,000,000
15thFebruary 12, 1917			200,000,000
16th—March 15, 1917			60,000,000
			2,010,000,000
19	917-18.		
17th—February 12, 1917			350,000,000
18th-May 9, 1917			500,000,000
19th—July 24, 1917			650,000,000
20thOctober 30, 1917			400,000,000
21st—December 12, 1917			550,000,000
			2.450.000.000

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19	18-19.	
22ndMarch 7, 1918		 600,000,000
23rd -June 18, 1918		 500,000,000
24th—August I, 1948		 700,000,000
		1,800,000,000

The Vote of Credit asked for on August 1, 1918, was the largest of the 24. Out of the Votes of Credit £1,402,000.000 was advanced by Great



[Histed.

LORD CUNLIFFE.
Governor of the Bank of England, 1914-1917.

Britain to her Allies in the first four years of the war, while £208,500,000 in all was lent to the Dominions. The average expenditure in 1914-15 was £1,500,000 a day. It grew to £3,750,000 a day in 1915-16, to £6,583,000 in 1916-17, and to £6,986,000 a day in 1917-18.

Expenditure in the three financial years ended March 31, 1918, was as follows:—

Year ended Mar. 31, 1918,	Year cuded Mar. 31, 1917.	Year ended Mar. 31, 1916
4*	3	5.5
	19,783,375	20,338,257
	107,467,119	39,911,054
1		001.005
	_	694,395
	9,895,466	9,756,851
	., . ,	-,,
	1,973,697	2,787,790
2,491,969,320	2.058,993,053	1,485,670,030
-		
£2,696,221,405	2,198,112,710	1,559,158,377
	Mar. 31, 1918, £ 10,827,613 170,023,453 — 9,730,538 1,670,481 2,494,969,320	Mar. 31, 1918. Mar. 31, 1917. 2 19,827,613 19,783,375 170,023,453 107,467,119 - 9,730,538 9,895,466 1,670,481 2,493,969,320 2,058,993,053

But although expenditure increased to such

an enormous extent it was financed to a still greater degree out of revenue. That was an outstanding quality of Great Britain's financial policy, which afforded a striking contrast to the methods followed by Germany, which elected to finance practically the whole of her expenses by mortgaging her future wealth.

The rule was laid down by Mr. McKenna, and tollowed by his successor, that at the end of each Budget year there should be sufficient revenue to meet all normal expenditure and the war debt charge without new taxation or new borrowing. This standard seemed high, but it was scrupulously observed, with a large margin to spare. Thus, in the year ended March 31, 1916, expenditure amounted to £1,559,158,377, of which £336,766,824, or 21.6 per cent., was contributed by the revenue. Tax revenue amounted to £290,088,000, or 18.6 per cent. of the expenditure. In the following year expenditure rose to £2,198,112,710, of which £573,427,582 was raised from revenue, or 26.0 per cent., the amount of revenue derived from taxation being £514,105,000, or 23.3 per cent. of the expenditure. In the year ended. March 31, 1918, revenue provided £707,234,565, or 26.2 per cent. of the total expenditure, which was £2,696,221,405, tax revenue providing £613,042,000, or 22.7 per eent. A table is appended showing the items of revenue during the three years in question:-

	Year ended	Year ended	Year cnded
	Mar. 31, 1918.	Mar. 31, 1917.	Mar. 31, 1916.
	£	3	£
Customs	71.261,000	70,561,000	59,606,000
Excise	38,772,000	56,380,000	61,210,000
Estate, &c., Dutics	31,674,000	31,232,000	31,035,000
Stamps	8,300,000	7,879,000	6,764,000
Land Tax	665,000	640,000	660,000
House Duty	1,060,000	1,940,000	1,099,000
Property and In-			l é
come Tax (includ-			
ing Super-Tax)	230,509,000	205,033,000	128,320,000
Excess Profits Dn-			
ties, &c	220,214,000	133,920,000	140,000
Land Value Duties	685,000	521,000	363,000
Postal Service	25,200,000	24,350,000	24,100,000
Telegraph Ser-			
vice	3,500,000	3,350,000	3,350,000
Telephone Service	6,600,000	6,400,000	6,450,000
Crown Lands	690,000	650,000	550,000
Receipts from Sun-			
dry Loans, &c	6,056,250	8,055,817	2,131,854
Miscellaneous	52,148,315	16,516,765	9,796,970
1	707,231,565	573,427,582	336,766,824

Increased taxation was imposed in all three years, but though each successive budget pressed heavier upon the direct taxpayer, and especially those with modest incomes, there was scareely an articulate protest. This fact was a measure of the determination of the people throughout those trying years to shrink from no sacrifice that was asked of them in the task of vanquishing their enemies. No doubt, had

circumstances allowed of it, both Mr. McKenna and Mr. Bonar Law would have preferred to adopt some scientific basis for spreading equitably the burden of taxation, but that seemed impossible, and both adopted the line of least resistance—that is to say, they screwed up the old taxes, sometimes rather violently, and avoided as much as possible the imposition of new ones.

The Excess Profits Duty, first imposed in 1915 at the rate of 50 per cent., was increased



SIR BRIEN COKAYNE, K.B.E. Governor of the Bank of England, 1917-1919.

to 60 per cent. in April, 1916, and to 80 per cent. in May, 1917, but no change was made in 1918. Income tax was raised from a maximum of 3s. 6d. in the £ (on incomes over £2,500) to 5s. in the £ in April, 1916. In 1917 no change was made in the income tax; but in 1918 the maximum rate was raised to 6s. in the £, and the super-tax increased from a maximum of 3s. 6d. to 4s. 6d. in the £, the latter also being made to start on incomes of £2,500 instead of £3,000. Incomes up to £500 a year were exempted from the increases made in 1918 owing to the increased cost of living, and also because the recipients of these incomes had suffered severely from the changes made in 1915. The reduction made in September, 1915, in the limit of exemption to incomes below £130 involved a big addition to the tax-paying classes, practically every working man being rendered liable to the tax. To meet the convenience of the working classes, quarterly assessments were introduced, while owing to representations made by these classes it was arranged that in the financial year 1918–19 a differentiation should be made between the bachelor and the married man. This differentiation took the form of an abatement of income subject to the tax of £25 in respect of a wife living with her husband. The amount of the abatement did not satisfy the advocates of differentiation, but it was accepted as the sanction of their principles.

The following statement, issued officially, shows the amount of tax payable on certain incomes under the Budget for 1918-19:-

A. INCOME TAX-(Maximum 6s.),

Income.	Where In Wholly E.		Where Ir Wholly Un	
THEORIE.	Amount of Tax.	Effective Rate,	Amount of Tax.	Effective Rate.
£ 131	£ s. d. 1 0 9 3 7 6 9 0 0 14 12 6 20 5 0 25 17 6 31 10 0 39 7 6 45 0 0 67 10 0 75 0 0 94 10 0 120 0 0 135 0 0 125 0 0 25 15 0 25 17 6 26 10 0 27 0 0 28 1 5 0 28 1 5 0	8, d. 0 2 0 5 0 11 1 2 1 4 1 6 1 7 1 9 1 10 2 5 2 8 3 0 3 9	£ s. d. 1 0 0 4 10 0 12 0 0 19 10 0 27 0 0 34 10 0 42 0 0 52 10 0 60 0 0 84 7 6 93 15 0 118 2 6 150 0 0 168 15 0 187 10 0	8. d. 0 2 0 7 1 2 1 7 1 10 2 1 2 4 2 5 3 1 3 4 3 4 3 9 3 0 4 6
2,000 2,500	450 0 0 656 5 0	4 6 5 3	525 0 0 750 0 0	5 3 6 0

B. (Income-tax, 6s. Super-tax, Maximum, 4s. 6d.)

Income.	Income	e Ta	ax.	Super	Ta	x.	Income			ti	fec- ve ite.
£	£	8.	d.	£	В.	d.	£	S.	d.	8.	d.
2,750	825	0	0	4.3	15	0	968	15	0	6	- 4
3,000	900	-0	0	62	10	0	962	10	0	6	5
4,000	1,200	0	0	162	10	0	1,362	10	0	6	10
5,000	1,500	0	0	287	10	0	1,787	10	0	7	2 5
6,000	1,800	0	0	437	10	0	2,237	10	0	7	5
7,000	2,100	0	0	612	10	0	2,712	10	0	- 7	9
8,000	2,400	0	0	787	10	0	3,187	10	0	- 8	0
9,000	2,700	0	-0	987	10	0	3,687	10	0	- 8	2
10,000	3,000	0	0	1,187	10	0	4,187	10	0	8	2 4 7
11,000	3,300	0	0	1,412	10	0	4,712	10	0	8	
12,000	3,600	0	0	1,637	10	0	5,237	10	0	8	9
13,000	3,900	0	0	1,862	10	()	5,762	10	0	- 8	10
14,000	4,200	-0	0	2.087	10	0	6,287	10	0	9	0
15,000	4,500	-0.	0	2,312	10	0	6,812	10	0	9	1
20,000	6,000	0	0	3,437	10	0	9,437	10	0	9	5
25,000	7,500	0	0	4,562	10	0	12,062	10	0	9	-8
30,000	9.000	()	0	5,687	10	0	14,687	10	0	9	9
40,000	12 000	-0	0	7,937	10	0	19,937	10	0	10	0
50,000	15,000	0	0	10,187	10	0	25,187	10	0	10	1
100,000	30,000	0	0	21,437	10	0	51,437	10	0	10	3
150,000	45,000	0	0	32,687	10	0	77,687	10	0	10	4

An entertainments tax was introduced in the Budget of 1916, the tax ranging from ½d. on a 2d. ticket to 1s. on a 12s. 6d. ticket, with an extra 1s. for every 10s. over 12s. 6d. In the following year the tax was increased by about 50 per cent. Other new taxes imposed in 1916 included a customs and excise duty on matches, which was stiffened two years later. In 1918 the stamp duty on cheques was increased from 1d. to 2d., despite considerable protest from bankers that it would produce more annoyance than revenue. A still more

important change made at this period for the purpose of obtaining a larger revenue was the abolition of the penny postage on letters. The minimum charge for letter carrying was raised to 1½d., and that for post cards to 1d., the halfpenny postage also, therefore, being abolished at the same time.

It may be of interest to point out that in the three financial years ended March 31, 1918, indirect taxation—i.e., taxation on expenditure -actually produced less in the last of these years than in the first. In 1915-16 the total was 1271 millions; in 1916-17, 1343 millions; and in 1917-18, 1184 millions. On the other hand, direct taxation, which, in 1915-16, produced 1311 millions, yielded 348 millions in the following year, and 473 millions in 1917-18. These figures demonstrate the contribution to war expenditure made by the direct taxpayer, and incidentally the offectiveness of that form of taxation. In the 1918 Budget substantial additional indirect taxation was imposed, chiefly on spirits and beer, and also on tobacco. The duty on spirits was raised from 14s. 9d. per gallon to 30s., while the beer duty was raised from 25s. to 50s. per standard barrel. Tobacco duty, which was increased by 1s. 10d. per lb. in 1917, was raised from 6s. 5d. to 8s. 2d. in 1918.

The methods of financing the war followed in 1916 were severely criticized. Rates for money, and therefore for Government borrowings, were made to conform with the value of money abroad, chiefly America. The object was to attract funds to London and thereby also to correct the adverse forcign exchanges. Rates were steadily raised in pursuit of this object until the Government was actually selling twelve months' Treasury Bills at 6 per cent. discount. It was frequently pointed out by financial critics that the policy was a mistaken one, for two reasons. First, that if it were desirable to obtain the use of a few hundreds of millions of foreign money, all that was necessary was that a special rate should be paid for them, but that it was unnecessary to pay 6 per cent. for the thousands of millions of domestic money whom a much lower rate would suffice, owing to the fact that Government securities were the only funds in which money could find employment. The other defect of the policy was that under war conditions foreign exchanges were affected not only by an adverse trade balance but by foreign estimation of credit based on military success or failure, and therefore were not so susceptible to high moncy rates as they would have been



SACKS OF APPLICATIONS BY POST FOR WAR LOAN, JANUARY 1917.



EXAMINING APPLICATIONS FOR WAR' LOAN AT THE POST OFFICE SAVINGS BANK, WEST KENSINGTON, JANUARY 1917.

under peace conditions. It was not until the resignation of the Asquith Administration had taken place that official recognition was given to the soundness of these criticisms, and a different rate quoted for foreign money.

The year 1916, however, was notable in this respect that it witnessed the introduction of the continuous loan principle—viz., the daily offering of war securities instead of the flotation of fixed period subscription loans of the oldfashioned variety. As explained in Vol. VII. (Chapter CXV.) 5 per cent. Exchequer Bonds, maturing December 1, 1920, were placed on sale daily at par on December 16, 1915. At first these bonds succeeded in bringing in subscriptions of nearly £20,000,000 a week, but the amount soon declined, and on June 2 two new issues of Exchequer Bonds, bearing 5 per cent. interest, were substituted for the 1920 bonds. These new bonds were made repayable at par on October 5, 1919, or October 5, 1921. The total sales of 1920 bonds amounted to £237,829,469, and of the 1919 and 1921 bonds the amounts sold down to September, 1916, when they were withdrawn, were £34,262,604 and £62,495,527 respectively. From the time that these new bonds were put on sale down to

the time of their withdrawal they failed to bring in the amounts required. In fact, from the middle of August down to the end of September the weekly sales did not rise above £3,500,000, and fell to as low a figure as £2,300,000. The cause of the failure of this issue was really the precipitate action of the Bank of England in raising the Bank Rate on July 13 from 5 to 6 per cent. owing to a temporary "squeeze" for money in New York. As a consequence the Government had to raise its discount rate for yearling Treasury Bills to 6 per cent., and people naturally preferred to invest their money in these bills than in Exchequer Bonds yielding more than one per cent. less in interest. The monetary stringency in New York lasted only for a few days, and if the Bank of England had promptly reduced its minimum rate of discount when the reason for raising it no longer existed, there would never have been any occasion for the Government to have issued six per cent. Exchequer Bonds But the Bank of England, with more steadfastness than wisdom, adhered to its 6 per cent. rate for months. Naturally the lowering of British credit to a 6 per cent. basis caused a heavy fall in Stock Exchango securities, but

the 6 per cent. bonds were kept on sale until January, 1917, when they were withdrawn, sales meanwhile having reached a total of £160,999,700.

A new type of Treasury Bill was introduced on June 3, called War Expenditure Certificates, having a currency of two years. At first they were sold at 90 per cent., but on July 14, following the raising of the Bank Rate, the price was lowered to 89 per cent. These certificates were mostly taken by the money market, and produced £29,878,500, of which £6,317,500 was afterwards converted into the 5 and 4 per cent. War Loans. They were withdrawn

for all maturities, 3, 6, 9 and 12 months' bills; on March 24 there was a reduction to $4\frac{1}{2}$ per cent. for "Threes," and to $4\frac{3}{4}$ per cent. for "Sixes" and "Nines"; but on June 16 a uniform 5 per cent. rate for all maturities was re-established. Immediately after the raising of the Bank Rate to 6 per cent. the rate for 3 months' bills was raised to $5\frac{1}{2}$ per cent., for sixes to $5\frac{3}{4}$ per cent., and for 12 months' paper to 6 per cent., nine months' bills at the same time being abolished. These rates remained in force up to September 27, when $5\frac{1}{2}$ per cent. was fixed for all maturities, and there was no further change during the rest of the year.



A QUIET CORNER IN THE BANK OF ENGLAND: THE FOUNTAIN.

from sale at the end of 1916 and were never revived.

Owing to the monetary policy followed, the financing of war expenditure in 1916, so far as it was covered by borrowings, was to a great extent effected by adding to the floating debt, and was unnecessarily expensive. No less than £720,250,000 net was borrowed in Treasury Bills, and £84,552,000 was borrowed in the form of Ways and Means advances. Thus the amount of Treasury Bills outstanding was increased during the year from £395,565,000 to £1,115,815,000, and Ways and Means from £86,351,500 to £170,903,500. Various changes were made in the rate at which Treasury Bills were sold. At the outset the rate was 5 per cent.

A novel and important form of borrowing was resorted to in 1916, with the object of enlisting the help of the small investor. A type of security was introduced called War Savings Certificates, and these were placed on sale at post offices, banks, and through associations formed for the purpose of encouraging their sale. Later they were placed on sale at shops and stores all over the kingdom. War Savings Associations were formed in all parts, and these did a great deal of valuable work in stimulating thrift and investment in Government securities. The War Savings Certificates were issued for 15s. 6d. each, which could be paid for by instalments. They were repayable in five years from the date of purchase at £1, the increase in capital value being equivalent to a yield of £5 4s. 7d. per cent. compound interest. Provision was made for their encashment at any time, but in order to discourage their premature encashment no interest was allowed



FIVE PER CENT. WAR LOAN CERTIFI-CATE, JANUARY 1917.

in the first year. The interest on these certificates was exempted from income tax, in view of which it was laid down that they could only be held by persons whose income did not exceed £300 a year. In June, 1916, this condition was removed, and anyone was allowed to purchase them up to a maximum of 500. These eertificates, which at first used only to bring in about £900,000 a week, gradually increased in popularity when their excellence as an investment (the yield on a gross yield basis was about 7 per cent.) became more generally appreciated. As it was arranged that the Government should re-purchase them on presentation they could not depreciate in value, like other war securities.

In 1917 a radical change was effected in the methods of borrowing. The policy of maintaining money rates at a high level with tho object of controlling to some extent the exchanges, which was the dominant characteristic of the finance of 1916, was gradually reversed in 1917. The criticism of the 6 per cent. Exchequer Bond policy, which had actually caused the British Government to pay more for its borrowings than the French Government, had so gathered in volume and weight that one of the first acts of Mr. Bonar Law, when he became Chancellor of the Exchequer, was to stop the sale of the Exchequer Bonds, and to restore British eredit to a level more consistent with the facts of the economic position. He immediately decided upon a roduction of the floating debt. Sales of the

Exchequer Bends were suspended at the end of December, 1916, and on January 4 sales of Treasury Bills were suspended. Bank Rate was reduced from 6 to $5\frac{1}{2}$ per eent. on January 18, and further reduced to 5 per cent. on April 5.

On January 12, 1917, the prospectus of the third great War Loan, of the fixed subscription period type, was issued. The loan took the form of two separate issues; a loan bearing interest at 5 per cent., subject to income tax, and an "Income Tax Compounded" loan bearing interest at the rate of 4 per cent. The price of issue of the 5 per cent. loan was 95, the yield in interest alone being £5 5s. 3d. per cent. The maximum period of the loan was 30 years, the prospectus providing that "if not previously redeemed, the loan will be repaid at par on June 1, 1947." Applications for the loan had to be made in multiples of £50, instead of £100, the minimum amount of previous loans, and those paid in full at once carried a first dividend of £1 8s. 9d. per cent. payable on June 1, 1917, while those paid for by instalments carried a first dividend, payable on the same date, of 11s. 10d. per cent. In-



WAR SAVINGS CERTIFICATE.

stalments were payable as follows:—On application, £5; on March 2 and 23, £15 each time; and the remaining £60 was payable in equal sums on April 18, May 9 and 30.

The issue price of the 4 per cenu. loan was



MR. LLOYD GEORGE'S WAR LOAN SPEECH AT THE GUILDHALL, JANUARY 11, 1917.

£100 per cent., so that the yield was a straight 4 per cent. The maximum period of this issue was five years shorter than the 5 per cent. loan, the final date of redemption being October 15, 1942. In the case of both issues the Government reserved the right to redeem the loans, or either of them, at par on three months' notice after 12 years—namely, at any time on or after June 1, 1929, in the case of the 5 per cent. loan, and on or after October 15, 1929, in the case of the 4 per cent. loan. The first

dividend payment on the fully paid 4 per cent. loan was for 12s. 8d. per cent. on April 15; the first distribution of interest on the instalment allotments, which were due on the same dates as the 5 per cent. loan, was for the full six months ended October 15, 1917.

The 4 per cent, loan was an entirely new type of security, and was issued because of an insistent demand for a Government security exempt from income tax. But the loan was not a "tax-free" security at all. It was an

issue the interest on which was reduced to a figure which represented a compounding of income tax at the then maximum ratenamely, 5s. in the pound. Consequently the loan had no attractions for those persons whose income did not render them liable to the full rate of tax. Moreover, the interest on the loan was not exempt from super-tax, and for the purposes of calculating super-tax, and also for the purposes of computing total income for purposes of exemption and abatement, it had to be assumed that the 4 per cent. interest was the net income after deduction of income tax at the full normal rate of income tax prevailing. This meant that the holder of the 4 per cent. loan was placed in almost the same position as regards super-tax as the holder of the 5 per cent. loan, and in a worse position as regards exemption and abatement, for no claim to repayment of income tax was allowed in respect of the 4 per cent. loan interest. At the time of the issue the income derived from the 4 per cent. loan was, for the purpose of super-tax, reckoned as £5 6s. 8d. per cent., or 1s. 5d. per cent, more than the income on the 5 per cent. loan. When in 1918 the income tax was raised to 6s. in the £, the holders of the 4 per cent. loan, though exempt from the tax, found that for super-tax purposes their interest from the loan was reckoned as £5 14s. 6d. per cent., while that on the 5 per cent. loan remained at £5 5s. 3d. Thus considerable ingenuity was shown in devising the issue, and it was scarcely surprising to find that comparatively few people subscribed to a security which was certainly not what had been wanted, and which, on analysis, was found to be not what it seemed. Both loans were made available for the payment of death duties at the issue prices, and British Treasury Bills and War Expenditure Certificates were accepted in payment of subscriptions at discount rates of 5 and 5½ per cent. respectively.

The right of conversion into any future war loan, which was attached to the $4\frac{1}{2}$ per cent. War Loan, floated in the summer of 1915, and to subsequent issues of Exchequer Bonds, became operative in connexion with these new loans on the terms explained below; but no similar conversion option was attached to the new issues. Instead a new provision was made designed to effect the same object—namely, the protection of the loan against depreciation in the market. The Treasury undertook to set aside monthly a sum equal

to $\frac{1}{8}$ per cent. of each loan to be applied in purchase of either loan for cancellation whenever the market price fell below the issue price. Down to the end of September, 1918, a sum of £50,540,424 had been expended out of this fund, known as the "Depreciation Fund." The operation of this fund, though it contributed to the maintenance of the market, failed to prevent the 5 per cent. loan from remaining below the issue price for the greater part of the period down to the great German retreat in the autumn of 1918, and if allowance be made for the amount of accrued interest included in the price, the loan, after it was first marketed, never really rose above the issue price of 95 down to the end of the fourth year.

Conversion of the $4\frac{1}{2}$ per cent. loan, the 5 per cent. Exchequer Bonds, due October 5, 1919 and 1921, and December 1, 1920, and the 6 per cent. Exchequer Bonds due February 1, 1920, was allowed, in whole or part, into the new loan on the following basis:—

£105 5s, 3d, of £5 per cent. War Loan for each £100 converted; or

£100 0s. 0d. of £4 per cent. War Loan for each £106 converted.

The subscription list remained open until Friday, February 16, 1917, and resulted in the raising of an amount which was till then quite unprecedented. The following were the details of the subscription:—

5 per cent. Loan :-	_			£
Cash Subscription				
Bills)				966,048,000
4½ per cent. Le versions			1.005.000	1
Exchequer Bo			1,000,000	,
			2,792,000	
		-		*1,103,797,000
4 per cent. Loan:			170	
Cash Subscripti	ons (inc	luding	Treasury	
				22,658.000
41 per cent. Los	n and I	Exchequ	uer Bond	
Conversions	• • *			28,726,000

A feature of the methods adopted to increase subscriptions was the borrowing of funds from banks by customers, and also from insurance companies by loans on policies. It was arranged that accommodation for subscriptions to the loans should be given on exceptional terms. The idea was a great success and resulted in more considerable sums being invested in the loans than would otherwise have been forthcoming, for it pledged those who borrowed to

^{*}The total amount of stock converted was £1,048,612,000, but as the 5 per cent. Loan was issued at a discount the resultant figure was £1,103,797,000.

mortgage a portion of their income for one or two years to loan subscriptions.

When the prospectus was issued the amount of Treasury Bills outstanding, though below the high-water mark of £1,148,545,000 touched on December 16, 1916, was still very large, the figure being £1,093,003,000. This was gradually reduced by the War Loan subscriptions, and on April 7, 1917, the total was down to £454,478,000.

The effect of the War Loan issue was therefore mainly to reduce the floating debt to more manageable proportions, and after the issue was completed down to the beginning of October,



MR. BONAR LAW.

Chancellor of the Exchequer and Leader of the
House of Commons.

1917, the war expenditure was financed by fresh issues of Treasury Bills, by advances on the credit of Ways and Means, and by Exehequer Bond issues. Sales of Treasury Bills? suspended on January 4, 1917, were resumed on March 30, when, in order to test the market and to introduce competition, the tender system was reverted to, the amount sold in this manner amounting to £355,000,000. The first batch was for 50 millions; these bills were placed at $4\frac{3}{4}$ per cent. for three months', at $4\frac{7}{8}$ per cent. for six months', and at 5 per cent. for twelve months' bills. These rates were higher than they would have been for bills sold over the eounter, the market disliking the return to the eompetitive system. Intermediate sales at fixed prices were resorted to, with the result that the Treasury obtained better terms.

On June 19 a return was made to the system of continuous daily sales of bills at the Bank of England at fixed rates of discount, which began at $4\frac{1}{2}$ per cent. for three and six months' bills; but on July 3, as the clearing banks showed no disposition to put down their deposit rates, the rate had to be raised to $4\frac{3}{4}$ per cent. This rate was maintained until December 27, when it was lowered to 4 per cent.

On April 13, 1917, a new offer of 5 per cent. Exchequer Bonds, redeemable either in 1917 or 1922, at the option of the holder, was made at par. These bonds only produced £82,248,400, and on October 2 a new form of short-term loan was issued, called National War Bonds. This Bond was a very attractive security, and we s placed on sale daily for a period longer than any other loan. The issue was attended with unqualified success, which, however, was due as much to the propaganda campaign which was undertaken to popularize the bond as to its undoubted financial merits. Another factor which contributed powerfully to its success was the elearer recognition shown by the Treasury of the connexion between money rates in Lombard Street and the rate of interest on Government short-term securities, and the measures which it accordingly took to keep rates for short loans at a level appreciably below the yield on War Bonds.

Four different issues of National War Bonds were placed on sale at par; three 5 per cent. issues, redeemable in five, seven or ten years, at premiums of 2, 3 and 5 per cent. respectively, and a 4 per cent. tax-compounded Bond, redeemable at par in 10 years. Interest was



HUGE WAR-BOND POSTER ON THE PORTICO OF THE NATIONAL GALLERY.

payable half yearly-viz., on April 1 and October 1. The dovice of the Depreciation Fund was not applied to these bonds, but conversion rights were given to them in order to prevent market depreciation. A double conversion option was attached to all classes of bonds. Not only were holders given the right to convert into any future War Loan at par, as the equivalent of cash, but the 5 per cent. Bonds were convertible into the 5 per cent. War Loan at the issue price of 95, and the 4 per cent. Bonds convertible into the 4 per cent. War Loan at par. The yields on the 5 per cent. Bonds, allowing for the profit on redemption, were as follows: 5-year Bonds equal £5 7s, 2d. per cent., 7-year Bonds equal £5 7s. 4d. per cent., and 10-year Bonds equal £5 7s. 10d. per cent. In order to stimulate the sale of these Bonds, arrangements were made for their acceptance in payment not only of death duties, as was the ease with the 5 per cent. and 4 per cent. War Loans, but also in satisfaction of the Excess Profits Duty and Munitions Exchequer payments. In accordance with the terms of the several prospectuses, holders of the $4\frac{1}{2}$ per cent. War Loan, the 5 per cent. Exchequer Bonds due 1919, 1920 and 1921, and the 6 per cent.

Exchequer Bonds due 1920 were given the option of conversion into National War Bonds, in whole or part, at par.

Down to December 29, 1917, £208,451,000 of these Bonds were sold. In the subjcined table are shown the amount and form of the war borrowings in 1917 and 1916:—

	1917,	1916.
	£	£
5 per cent, and 4 per cent. War Loans	988,706,000	
5 per cent. Exchequer Bonds, 1922	82,248,400	
5 per cent. Exchequer Bonds, 1919	_	34,262,604
5 per cent, Exchequer Bonds, 1920 .:	_	210,629,469
5 per cent. Exchequer Bonds, 1921	_	62,495,527
6 per cent, Exchequer Bonds, 1920	_	160,909,700
War Expenditure Certificates	-	29,878,560
War Savings Certificates	63,100,000	41,500,000
Treasury Bills (net)	56,974,000*	720,250,000
Ways and Means Advances (net)	107,877,500	84,552,000
"Other Debt" (net)	650,476,342	193,465,794
National War Bonds (December 29)	196,835,000	_
National War Bonds, Post Office issue		
(December 29)	11,616,000	—'

This table shows very clearly the effect of the change in borrowing methods initiated by Mr. Bonar Law in 1917. While over 720 millions was borrowed in 1916 in Treasury Bills alone, in 1917 there was actually no borrowing on balance in this type of security, nearly 57 millions being paid off, which more than offset the increased borrowing in the form of Ways

^{*} Net amount paid off.

and Means advances. The bulk of the money required to finance the war was obtained by comparatively long-term issues, while the new policy of lowering money rates saved the country millions in interest. The rate for temporary borrowing was reduced from 6 to 4 per cent. during the year. At the end of 1917 Treasury Bills outstanding were £1,058,175,000, and of Ways and Means advances £278,781,000. At the beginning of 1918 the rate of discount at which Treasury Bills were sold was further reduced to $3\frac{1}{2}$ per cent., at which figure it remained. Bankers reduced their deposit rates



CHILDREN IN CARDIFF'S WAR SAVINGS DEMONSTRATION.

to the same figure, and in July it was arranged that bankers should fix a flat rate of 3 per cent. for interest on all deposits. This creation of a margin of about $2\frac{1}{2}$ per cent. between deposit rates and the yield on War Bonds naturally stimulated sales of the latter.

In March, 1918, an issue of "Nominative" £5 bonds was made. Their chief distinction was the facility with which they could be bought and sold again, purchase being effected by the payment of the amount in cash at once and sale by the handing over of the bond itself, no filling in of forms being required for either purpose.

On April 2, 1918, the first series of National War Bonds was withdrawn and a second series was placed on sale. Bonds of the second series were in all essential respects the same as the first series, except that the dates of maturity were six months later—namely April 1, 1923, 1925 and 1928 respectively. Following the raising of the income tax to 6s. in the pound,

however, the price of issue of the Tax-compounded Bonds was on April 22 raised from 100 to 101½ per cent. By the end of September, 1918, sales of National War Bonds had reached a total of £1,125,342,424, a figure which exceeded the cash subscriptions to the war loans floated at the beginning of 1917.

A third series of National War Bonds were placed on sale as from October 1, 1918, on the same terms, but the period of redemption was extended by five instead of six months—namely, to September 1, 1923, 1925 and 1928. The reason for this alteration was that the issue of these bonds had become of such magnitude as to make it necessary to avoid having to make a huge number of dividend payments all on one day. The interest dates on these bonds were accordingly made March 1 and September 1.

The year 1917, but more particularly 1918, witnessed a great development of propaganda methods, and this was really responsible for the record of fine achievement which those responsible for the work were able to show in tho closing period of the war. In 1917 no fewer than 746 new local War Savings Committees were set up, bringing the total up to 1,619. In 22 counties local War Savings Committees had been set up to cover the whole county. In the same period 20,929 War Savings Associations were affiliated, bringing the total number up to 37,840, with a membership of approximately 4,000,000 persons. The work of these bodies in selling Government securities had so grown that by the middle of 1918 about onequarter of sales of War Savings certificates (£1 for 15s. 6d.) were effected through the associations. Not only were these certificates sold through these associations, banks and post offices, but also through thousands of licensed tradesmen and firms, which bought the certificates outright themselves and resold them to their customers and others. The nct value of War Savings Certificates sold down to December 31, 1916, less the value of withdrawals, was £41,896,270. In 1917 the figure was increased to £63,875,084, making the total at the end of 1917 £105,771,354.

An analysis of the contributions of the small investor to State securities showed that during 1917 subscriptions of £51,354,000 were made to the Post Office issues of war securities as follows: £36,606,000 in 5 per cent. War Loan, £4,092,000 in Exchequer Bonds, £10,656,000 in National War Bonds, which together with the net value of nearly £64,000,000 from War

Savings Certificates and an increase of deposits in the Post Office Savings Bank and Trustce Savings Banks of no less than £5,683,000, provided in all £120,728,000. From the beginning of the war down to the end of 1917 the grand total contributed by the small investor was £253,166,000. The extension of individual holdings in Government securities during the war was remarkable. Before the war British Government securities were held by 345,100; at the end of 1917 the number was 16,000,000, including ten million holders of War Savings Certificates.

A great step forward in propaganda and organization was taken in 1918. Methods of publicity were revised, and the poster appeals made more personal and much more incisive. "War Bond Weeks" and "War Weapons Weeks" were instituted with extraordinary success. Cities and towns vied with one another in the amounts they could raise in specified periods, usually a week or a fortnight. "Tanks" were employed as collecting offices for subscriptions. They were established in public squares and other places where people habitually congregated, and toured the country collecting large and small sums from many towns and

villages. The employment of tanks proved a first-rate idea, for they achieved an extraordinary degree of success as financial recruiting agents. The idea of issuing "Premium Bonds," i.e., bonds bearing a low rate of interest, but carrying the chance of being drawn for repayment at a substantial premium, was canvassed for a long time, but a committee which was appointed to inquire into the suggestion reported, in January, 1918, against its adoption.

The extraordinary expansion in the cost of the war, both as regards the expenditure of money and the withdrawal of labour from productive work, rendered it increasingly necessary for the belligerents to raise loans abroad. Withdrawal of labour and the scarcity of shipping tonnage involved not only a gradual diminution in the output of goods for export wherewith to pay for imports, but also increased the quantities of goods required to be imported, and these factors, combined with the continually rising tendency of commodity prices; brought about a radical change in the position of the foreign exchanges. The position as regards the United States Exchange became critical in 1915, owing to the supply of dollars



THRIFTY SCOTTISH CHILDREN INVEST IN WAR BONDS.

Gathering in the second £5,000 from children of the Newbattle School, Midlothian, whose fathers were mostly miners.

created by exports being insufficient to pay for the enormous purchases made by Great Britain and her Allies in the United States. The Anglo-French loan of \$500,000,000 in the United States, referred to in Chapter CXV., was quickly exhausted, and the Treasury mobilization of American securities which began in January, 1916, was gradually ex-



SIR GEORGE E. MAY.

Managed the Mobilization of Securities held in

Great Britain.

tended so as to embrace practically all securities which could be sold in America, or be made available there as collateral for further loans. In 1916 the French Government also mobilized foreign securities held in France for the same purpose, but as a great deal of the French purchases abroad was financed by Great Britain, a considerable proportion of the French securities owned in France was sold in the London market.

The great increase in the wealth of the United States resulting from the enormous purchases of her goods enabled her markets to absorb without a perceptible quiver hundreds of millions of her own securities formerly held in Europe. It was failure to realize this inevitable effect of war expenditure on the finances of the United States which was responsible for the delay which occurred in 1915 in raising loans in the United States; though it was obvious that that country's

capacity to make loans abroad increased with the excess of the goods she exported over those imported.

The mobilization of securities held in Great Britain involved the setting up of a new department in the National Debt Office, called the American Dollar Securities Committee, the manager being Mr. (afterwards Sir) George E May, and the first chairman Sir Robert Chalmers The latter a few months later was succeeded by Sir William Turpin. It was a novel financial operation of the first magnitude, but it was handled with conspicuous success, and with a minimum of red tape. The Committee began its operations on January 5, 1916, first by offering daily to purchase 50 of the best known American bonds. On the first day nearly £500,000 was purchased, but this figure was afterwards considerably exceeded as the scheme became more widely advertised. In due course the Committee extended the list of securities it was prepared to purchase. A feature of the early operation of the scheme was the system of offering comprehensive sums for large blocks of securities to such institutions as insurance companies. On March 27, 1916, a scheme for the loan of suitable securities to the Treasury was inaugurated. It provided for the borrowing of securities for two years in return for a payment to the lender of 1 per cent. per annum on the face value of the securities. In order to stimulate the sale or loan to the Treasury of the securities required Mr. McKenna imposed a penal tax of 2s. in the £ on the income derived from securities such as were wanted but were not placed at the disposal of the Treasury. In August, 1916, an improved scheme was introduced for the borrowing of securities. This scheme, designated Scheme "B," was destined to supersede the earlier scheme, called Scheme "A." The main points of difference between the two schemes were the substitution of a five-year loan period for a two-year period, and the attachment to each security of a deposit value-i.e., a guaranteed rate of repayment—to the holder in case the Treasury should require to exercise the right of selling the securities. The latter feature proved very attractive, and the great majority of the "A" depositors accepted an invitation to transfer Scheme "B." On their sccurities to December 16, 1916, Scheme "A" was withdrawn, and the power of the lender to sell his securities under it was extended to Scheme

"B" in respect of all securities made subject to the penal tax, and other American securities.

A very large amount of securities was sold or lent to the Treasury, but as the war expenditure increased so the demand for dollars grew. And in January, 1917, the voluntary phase of mobilization of securities having been exhausted, compulsion was decided upon. As was the case with recruiting of men, the voluntary effort accounted for the largest proportion of the securities which were mobilized, and the conscription of securities was only resorted to because it became necessary to mobilize every

where temporary ownership only was required by the Treasury, it was arranged to pay a bonus of ½ per cent. in dividend to lenders the same as to depositors under Scheme "B." In November, 1917, a fifth order was issued requisitioning holdings of Royal Dutch Petroleum shares, whilst in March, 1918, a sixth order compelled all holders of Uruguay 3½ per cent. Bonds to lend their securities to the Government.

Under these new regulations conditions were also imposed on the manner in which foreign, colonial and Indian securities could be sold abroad, the main object aimed at being the



[Times photograph.

SIR WILLIAM TURPIN AT HIS DESK IN THE NATIONAL DEBT OFFICE.

possible holding. On January 24 new regulations (7c, 7d, 7e) were made under the Defence of the Realm Act to requisition any securities not lent to the Treasury before January 26, 1917, as and when they were included in an order issued under these regulations. Four such orders were issued involving the acquisition of some 1076 bonds and stocks in so far as they were owned by persons ordinarily resident in the United Kingdom. Compensation was paid on the basis of market values, or

remittance of the proceeds to this country in every possible case. For various reasons fresh restrictions on the sale and importation of securities were made by subsequent regulations. It was estimated that between 200 and 300 millions of securities were sold back to New York in the early part of 1915. The American Dollar Securities Committee's transactions were reckoned by trustworthy authorities to have involved the acceptance of about £600,000,000 worth of securities, of which

approximately one-third was either purchased or requisitioned, making a total in less than three years of nearly a thousand millions. Meanwhile a large number of securities were sold back to South Africa, Australia, Japan, Spain, Holland, Scandinavia, which ran into a great many millions. This operation was facilitated by the fact that a very large profit could be made on exchange by the sale of the securities abroad, but the enormous volume of the selling afforded an illustration of the manner in which the war was indirectly

in the autumn of 1916 was secured by £5,000,000 of British railway debenture stocks, in addition to dollar securities. The operations of the Committee contributed in an important degree to the maintenance of the American exchange at a remarkably uniform level—namely, 4.76½ dollars to the pound, a figure which remained constant down to the signing of the armistice in November, 1918. But so rapidly were the Committee's American securities used up that steps were actually taken to prepare for the mobilization of foreign



THE ROOM IN THE NATIONAL DEBT OFFICE IN WHICH THE PURCHASE, OF SECURITIES WAS ARRANGED.

financed by the former debtors of Great Britain and France. The great holding of forcign securities, accumulated for the most part in the nineteenth century, was of vital importance to Great Britain and France in financing, particularly in the early stages, their forcign purchases

The securities borrowed by the Treasury were used for the purpose of providing collateral for loans in the United States, of which four were issued. As showing the depth to which the mobilization reached, the second British Collateral Loan of \$300,000,000 issued

securities generally, when the United States opportunely decided to throw in her lot with the Allies, thus rendering any further general mobilization unnecessary.

Although the United States Government, very properly, lent no money whatever to any of the belligerents before the country entered into the war, the United States people rendered very considerable financial assistance to the Allies between 1914 and April 7, 1917. That assistance rendered possible the continuance of the enormous purchases which the Allies throughout that period made in the

United States. The loans were made on a strictly business basis, for they were absolutely necessary for the maintenance of American trade with the Allies. This point was vory aptly illustrated when towards the close of 1916 the U.S. Federal Reserve Board issued a warning to the reserve banks, which in effect was against the granting of banking credits to the Allies. At that time Messrs. J. P. Morgan & Co., who were the financial agents of the British Government, arranged to issue Treasury Bills to be replaced as they fell due by fresh bills. Immediately contracts for the purchase of goods in the United States had to be cancolled. In consequence the Federal Reserve Board withdrew its warning.

The following is a statement, compiled from official sources, of the loans made by the United States to the belligerents before her entry into the war.

W- C D	
To GREAT BAITAIN:	
Anglo-French 5%, due October 15, 1920	\$
(one-half)	250,000,000
United Kingdom 2-year Collateral 5%,	
due September 1, 1918	250,000,000
United Kingdom 3- and 5-year 51%, due	
November 1, 1919 and 1921	300,000,000
British Banking Credit, 5%, due June 20,	
. 1917	50,000,000
Metropolitan Water Board Loan, 6% dis-	00,000,000
count notes, due September 18, 1917.	6,400,000
Wheat Purchase Credit, due 1917	25,000,000
	40,000,000
United Kingdom 1- and 2-year Collateral	050 000 000
5½%, due February 1, 1918–19	250,000,000
	\$1,131,400,000
To France:	V-, AUA, 200,000
Anglo-French 5%, due October 15, 1920	,
(one-half)	250,000,000
American Foreign Securities, 3-year 5%	200,000,000
	04 500 000
Notes, due August 1, 1919	94,500,000
Secured Convertible Gold Notes, 2-year	100 000 000
5½%, due April 1, 1919	100.000,000
Treasury Bonds, 1-year discount	10,000,000
Commercial Credit, due 1918	50,000,000
Treasury Bonds, 5% 1-year	26,200,000
Three Credits maturing 1917	45,000,000
Two Credits	45,000,000 -
Rothschild Loan secured by Chicago,	
Milwaukee and St. Paul and Pennsyl-	
vania Bonds	30,000,000
City of Paris 6%, due October 15, 1921.	50,000,000
French Municipal 6%, due November 1,	00,000,000
1919 (Bordeaux, Lyon and Marseilles)	35,000,000
1919 (Bordeaux, Lyon and Marsones)	00,000,000
	\$735,700,000
Of the above loan to France \$86,200,0	000 was paid or
refunded before the United States en	tered the war,
leaving \$650,500,000 outstanding.	
To Russia:	
Three-year 6½% Credit, due June 18, 1919	50,000,000
N' der acceptances 59/	25,000,000
Ninety day acceptances, 5%	20,000,000
Treasury Notes, 5% 1-year, due May 1,	11 000 000
1917	11,000,000
Russo-Asiatic Bank Credit	25,000,000
Banking Credit	7,000,000
Five-year 51%, due December 1, 1921	25,000,000
Loan secured by Russian Railroad	
Securities, due 1917, estimated at	5,000,000

\$148,000,000

Of the above, \$25,000,000 was paid or refunded before the United States entered the war, leaving \$123,000,000 outstanding.

-	
To Italy:	
One-year 6% Notes, due October 15, 1917 To Germany:	\$25,000,000
TO GERMANI.	
Notes due 1916 (Paid)	10,000,000
Notes, 6%, due April 1, 1917	10,000,000
	\$20,000,000
Of the above, \$10,000,000 was paid before	the United

Of the above, \$10,000,000 was paid before the United States entered the war leaving \$10.000,000 outstanding.

TO UANADA:	
Dominion 1-year 5% Notes	25,000,000
Dominion 2-year 5% Notes, due August	
1, 1917	20,000,000
Dominion 5%, due 1921, 1926 and 1931	75,000,000
Provincial, Municipal, Corporation and	
Railroad Loans, estimated at	214,999,878

\$334,999,878

Of the above, \$25,000,000 of the Dominion of Canada matured and \$20,275,000 of the Provincial, Municipal, Corporation and Railroad Loans were estimated to have been paid or refunded before the United States entered the war, leaving \$289,724,878 outstanding.

To Newfoundland:

Three-year 5%, due July 1, 1919 . . . \$5,000,000 The total loans of the people of the United States to other belligerent governments, previous to the entry of the United States into the war, was thus \$2,401.599,878, of which \$20,000,000 was lent to the German Empire.

The entry of the United States into the war made a profound difference to the financing problems of the Allies. She placed at their disposal all the sums required at, or slightly above, the same rate of interest which the American Government itself paid for the funds. From April 6, 1917, the date of the U.S. entry into the war, the Government made advances to her Allies at the rate of about \$400,000,000 a month, but before a first allotment of \$3,000,000,000 was exhausted the U.S. Congress authorized an additional \$4,000,000,000. By the end of 1917 the United States had lent \$3,883,900,000 to the Allies—as follows:—

					8
Great Br	itain			 	1,860,000,000
France				 	1,130,000,000
Italy				 	500,000,000
Russia				 	320,000,000
Belgium				 	65,900,000
Rumania	(thro	ugh Ru	ıssia)	 	5,000,000
Serbia				 	3 000,000

\$3,883,900,000

As expenditure increased with the higher cost of commodities, so the advances increased, and it must be said that the United States Government acted on the principle not of advancing so many millions to the Allies, but of lending whatever amounts were actually required. By the end of the fourth year of the war advances made by the United States



BANK OF SPAIN, MADRID.

had reacled the grand total of \$6,492,040,000, made up as follows:—

				9
Great Brit	tain	 	 	3,345,000,000
France		 	 	1,865,000,000
Italy		 	 	760,000,000
Russia		 	 	325,000,000
Bəlgium		 	 	154,250,000
Greece		 	 	15,790,000
Cuba		 	 ٠.	15,000,000
Serbia		 	 	12,000 000

Total to July 31, 1918 .. \$6,492,040,000

Messrs. J. P. Morgan also sold British Treasury Bills in New York from time to time up to a maximum outstanding at any period of \$150,000,000. Sales began on August 22, 1917, at rates of discount ranging from 5\(\frac{1}{4}\) to 6 per cent., and were continued for more than a year.

By the beginning of August, 1918, the monthly cost of the war in the United States was put at about £300,000,000, but a large proportion of this was in the form of advances to Allies. Thus, although the United States expenditure was then £10,000,000 a day, or nearly 50 per cent. more than Great Britain's, the real figure was £2,000,000 less, this being the average daily advance. Great Britain and the United States before the war collected about £200,000,000 of revenue, and in August, 1918, were both raising about £800,000,000 each, but as the population of Great Britain was less than one-half of that of the United States, the British taxpayer was actually paying more than double as much as the American.

The war brought into operation a new type of international agreement—an agreement for a short period, usually for one year to three years—by which the belligerents undertook to purchase certain goods, or export certain goods in return for temporary financial accommodation. In addition to the loans raised in the United States, both Great Britain and France raised loans and credits of this description in South America, Holland, Switzerland and Spain. Some of these countries, owing to inexperience of international finance, or to lack of political sympathy, were rather slow to make these agreements, but the advantage to trade to be secured by them became eventually so patent that these countries ultimately made arrangements of this kind.

A considerable sum was borrowed by the Allies in Japan. In July, 1916, Japan placed at the disposal of the British Government her balances in dollars in New York up to 50 million dollars. Five months later the Japanese Government arranged to issue to the Japanese public British 6 per cent. Exchequer Bonds, having a currency of three years, the proceeds of which were converted into dollars in New York.

In March, 1917, the Japanese Government assisted the French Government by issuing in Japan French Treasury Bills up to an amount of 26 million yen, and in June, 1917, she placed 50 million yen of Exchequer Bonds in Japan on behalf of the French. Various issues of

Treasury Bills on behalf of Russia were floated in Japan during the year, but the Japanese Government took nearly all these off the money market after the Revolution, so converting them from a loan by the public to a direct loan from the Japanese Government to the Russian Government. The amount of bills thus dealt with amounted to 221 million yen. Japanese advances to the Allies down to the end of 1917 amounted to 497 million yen, as follows:--To Great Britain, 200 millions; to Russia, 221 millions; to France, 76 millions, Considerable indirect assistance was afforded by Japan. At the close of 1917 the Japanese Government had invested in British Treasury Bills in London £36,000,000, while during the war Japan redeemed to a very large extent her loans held in Great Britain and France. Down to the end of 1917 she had redeemed about £15,000.000 of Japanese bonds held in London, and £4,000,000 of Japanese securities held in France. At the beginning of 1918 Japan took £10,000,000 of British Treasury Bills at 51 per cent. discount. Early in the same year Great Britain and France arranged to purchase a very large quantity of grain in Argentina, conditional upon a credit being granted by

Argentina of £40,000,000 bearing 5 per cent. interest, and repayable in two years. It was arranged that the debt should be liquidated partly by the British and French Governments meeting the service of the various Argentine loans held in Europe. Uruguay, a few months later, arranged to give similar financial assistance to Great Britain and her Allies for the purchase of Uruguayan produce. It was for \$15,000,000, bore 5 per cent. interest, and was redeemable in gold in two years. The loan was secured by Uruguayan bonds mobilized in England for this purpose, and the proceeds were used to pay for Uruguayan products. At the same time the Bank of the Uruguayan Republic was authorized to make advances up to \$8,000,000 for the same purpose.

In April, 1918, an agreement was made with a Swiss financial group to make monthly advances regulated by the quantities of merchandise arriving in European ports for Swiss destinations. Each monthly advance was not to exceed 10 million francs, and the arrangement covered the 10 months ended January 31, 1919. The credits were secured by the deposit of collateral in the form of neutral countries' securities mobilized by



[Official photograph.

A. TANK FROM EUROPE APPEALS FOR FUNDS IN NEW YORK.

the American Dollar Securities Committee. The loans were redeemable in three years.

In April, 1918, Spanish banks, which had shown no particular desire to engage in international financial arrangements of the kind indicated, agreed to make a credit to French and United States banks of 50 million pesetas (£2,000,000), per month down to the end of 1918, this being an extension of a credit of 35 million pesetas arranged in an agreement signed on March 6 between France and Spain. The amount was extraordinarily small, but the wheels of Spanish sympathy worked

sugar were effected by the British Government, payment being made in the form of Treasury Bills.

The British Government made extensive loans to her Allies continuously during the war. From the beginning of the war down to the end of March; 1916, there had been advanced to the Allies £288,000,000 and to the Dominions £88,000,000. In the year ended March 31, 1917, the advances were £539,000,000 and £59,000,000 respectively. It had been anticipated that with the entry of the United States into the war the accommodation required



ADMIRAL SIMS (United States Navy) L'AUNCHING A MINIATURE WAR-SHIP ON ONE OF THE TRAFALGAR SQUARE FOUNTAINS

In connexion with the War Bonds Campaign.

slowly then, and though Spain received enormous amounts of gold from the Allies she made little profitable use of it. Instead of utilizing it for loans abroad, she called in her paper money and replaced it with gold coins. In September, 1918, a second credit was arranged for in Spain. It was in favour of United States banks. The initial amount was £3,000,000, to be increased to £10,000,000 by monthly instalments of £2,000,000. Interest was charged at 6½ per cent., and the loans were repayable in gold at par. Purchases of Java

from the United Kingdom would diminish, but the requirements of the financially dependent nations were on such an increasing scale that despite the considerable assistance given by the United States, there was only a small decrease in 1917 in the sums lent by Great Britain to the Allies. In the year ended March 31, 1918, Great Britain lent to her Allies £505,000,000, while the United States lent the same countries £450,000,000, making a total of £955,000,000, as compared with £540,000,000 lent by Great Britain in 1916–17.

Down to the end of March, 1918, the advances to the Dominions had been increased to £194,000,000, the addition in 1917-18 being £47,000,000. The following table shows the loans made to the Allies and Dominions in the different periods down to August 1, 1918:—

about £18,000,000. On November 27 the third loan was issued, it being in the form of 4 per cent. Rentes. The London price was fixed at £2 10s. 6d. per 100 francs nominal, being the equivalent, at the exchange of 27.40 francs per £1, to 69.20 francs, the price in

То	August 1, 1914, to March 31, 1916.	April 1, 1916, to March 31, 1917.	April 1, 1917, to March 31, 1918.	April 1, 1918, to Aug. 1, 1918.	Total, Aug. 1, 1914, to Aug. 1, 1918.
Dominions	 £ 88,000,000 288,000,000	£ 59,000,000 539,000,000	£ 47,000,000 505,000,000	£ 14,500,000 70,000,000	£ 208,500,000 1,402,000,000
Totals	 376,000,000	598,000,000	552,000,000	84,500,000	1,610,500,000

In addition to the loans made to the Allies by the Imperial Government, the French Government issued a portion of its National Defence Loans in this country. The first issue made in London was in the form of 5 per cent. Rentes, and the issue price was £3 4s. per 100 francs, nominal capital, being the equivalent at the exchange of 27.50 to 88 francs, the price at which the loan was issued in Paris. This loan, the subscription list for which was opened on November 30, 1915, was closed on



SIR VINCENT MEREDITH, President of the Bank of Montreal.

December 15, 1915, and brought in £24,000,000. On October 5, 1916, subscriptions were invited for a similar issue, the price being £3 4s. 6d. per 100 francs nominal capital, being the equivalent, at the exchange of 27.50, to 88.75 francs, the issue price in Paris. This loan resulted in subscriptions amounting to



BANK OF MONTREAL (INTERIOR).

Paris. This issue resulted in subscriptions amounting to 67,972,900 francs.

The fourth issue also took the form of 4 per cent. Rentes, but instead of the amount offered being unlimited the subscription was fixed at 520,000,000 francs nominal capital. The price of issue was £13 12s. 4d. per 500 francs nominal capital, being the approximate equivalent, at the exchange of 26 francs to the £1, of the price at which the issue was made in Paris, namely, 70.80 francs per 100 francs. The list was opened on November 12 and closed before noon on November 15. French Treasury Bills were also placed here, and Italian credit bills were for a long time a regular feature of the bill market in London.

On the introduction of the 24th Vote of Credit on August 1, 1918, Mr. Bonar Law announced that Great Britain had lent to the Allies £1,402,000,000—viz., £568,000,000 to Russia, £402,000,000 to France, £313,000,000 to Italy, and £119,000,000 to smaller States, including Belgium. Serbia, Rumania and Greece. Loans to the Dominions had, he said, reached £208,500,000.

In 1917 the British Government undertook to accept Portuguese Treasury Bills for £2,000,000 and to grant credit for all strictly war expenditure on condition that this credit was refunded two years after the war by an external loan.

In January, 1918, the British Government decided to accept a "certain moral responsibility for £17,500,000 of Russian Bills placed in London, and issued in exchange therefor 12-year exchequer Bonds carrying 3 per cent. interest, involving a loss to the holders of the bills of 20 per cent. These Bonds subsequently became known as "moral Obs."

The principle was admitted early in the war that the Dominions should as far as possible finance their own war expenditure, and as the war progressed these States financed their requirements to an increasing extent. The Canadian Government, for instance, provided credit in dollars for the Imperial Government's purchases made in Canada, while on the other hand the Imperial Government supplied the Canadian Government with sterling credits for expenditure made by them in Europe. Canada, financed to the extent of £120,000,000,



MR. C. A. B. CAMPION, London Manager, Commonwealth Bank of Australia.



[Elliott & Fry.

MR. DENISON MILLER,
Governor of the Commonwealth Eank of Australia.

out of a total of £200,000,000, contracts placed by the Imperial Munitions Board in the Dominion. This arrangement effected a great saving in exchange, for only the balance of one item over the other required to be settled to obtain a complete adjustment of the indebtedness on both sides. In the first two and a half years of the fighting war contracts placed in Canada by the Allied Governments were estimated at £200,000,000. These contracts, together with other purchases of Canadian goods, enabled Canada to raise an appreciable proportion of her war expenditure out of taxation. But as her war expenditure reached about one million dollars a day an increasing amount had to be raised by loan. And Canada's net national debt, which amounted to \$332,061,933 in August, 1914, rose to \$450,000,000 in June, 1915, to \$635,000,000 in July, 1916, \$864,000,000 in August, 1917, and \$1,191,000,000 in August, 1918.

A list is subjoined of the various war loans floated by Canada during the first four years of the war :—

or the war,				
	Amount.	Interest.	Term.	Price.
	9	0/0		0/
	25,000,000		1 year	100
1st. July 1915}	20,000,000	5	2 years	991
	00,000,000	5	10 years	97≨
	25,000,000		(5 years	99.56
	25,000,000		10 years	97.13
	25,000,000		(15 years	94.94
	000,000,000	5	15 years .	971
	50,000,000	5	20 years	95-14
	00,000,000	5	2 years	98
otti. August 1911 1	.00,000,000	U	(5 years)	
7th. November 1917	398,000,000	51	10 years	Par.
itil. Movember 1811	333,000,000	42	(20 years)	
			(mo reason)	



"SUNSET" POSTER, 10 ft. by 6 ft. 8 in., of Australian Sixth Wan Loan.

The first, third and sixth emissions were made in New York, but the others were floated in Canada by the Minister of Finance through the banks. All the loans issued in the Dominion were largely over-subscribed. Excluding bank subscriptions and conversions the applications for the November, 1915, loan, the amount of which was fixed at \$50,000,000, reached \$79,000,000. The whole amount was allotted, which together with \$21,000,000 subscribed by the banks, brought the total up to \$100,000,000. The loan, which was issued on a basis yielding 5.42 per cent., was made

convertible into future war loans at the issue price of 971. The fourth loan (the second floated in Canada) was raised in September, 1916. Subscriptions amounted to \$145,000,000 but only \$100,000,000 was allotted. This loan, which was issued on a 5.30 per cent. yield basis, was convertible into any future war loan of 20 years' currency or longer. The fifth issue (the third in Canada) in March, 1917, was even more successful, for though the authorized was \$150,000,000, or \$50,000,000 more, the subscriptions reached \$183,000,000. The number of subscribers which for the first and second was 24,862 and 34,526 respectively, rose to 40,800 for the third emission. The yield in interest was 5.40 per cent., and the loan was convertible on the same terms as the September, 1916, issue. But the seventh loan (the fourth in Canada) attained a degree of success which far outstripped previous efforts. This loan took the form of an issue of five, ten, and twenty-year bonds, all bearing 51 per cent. interest, offered at par. But the yields were 5.81 per cent. on the five-year bonds, 5.68 per cent. on the ten-year bonds and 5.61 per cent. on the twenty-year bonds. These bonds were



TANK WEEK IN SYDNEY: SIR WALTER DAVIDSON OPENING THE CAMPAIGN, APRIL 3, 1918,

In front of the Commonwealth Bank of Australia.



THE "TANK BANK" IN TRAFALGAR SQUARE.

A wounded officer buys the first Bond. convertible into future issues of similar or longer maturity. Subscriptions amounted to \$413,000.000, and the amount allotted was

\$398,000,000, although the authorized amount had been only \$150,000,000. There were no fewer than \$20,035 applications for the loan At the end of the fourth year of the war preparations were made to float a great loan of \$500,000,000, which brought the total war loans furnished by Canada up to \$1,250,000,000.

In the first four years of the war Australia raised six War Loans. From August, 1914, to June 30, 1918, her war expenditure amounted to £184,598,097, of which £159,895,938 was defrayed out of loans, and the balance of £24,702,159 was provided by revenue. In the same period the sum lent by the Imperial Government was £47,500,000. The six war loans were as follows:—

		Amount		Date of	
Da	ite.	Subscribed.	Iuterest.	Maturity.	Frice
		£	%		
1st. August	1915	13,389 440	4½ Free of	Dec. 1925	l'ar.
			Taxation.		
2nd. Januar	y 1916	21,655,680	41 Free of	Dec. 1925	Par.
			Taxation.		
3rd. August	1916	23,587,420	4½ Free of	Dec. 1925	Par.
			Taxation.		
4th. Februa	ry 1917	21,584,020	41 Free of	Dec. 1925	Par.
			Taxation.		
5th. Novem	ber 1917	21,213,780	41 Free of	Dec. 1927	Par.
			Taxation.		
			41 Free of Taxation.		
A.			Taxation.		
6th, April 1	918	42,886,960	5 Subject	Dec. 1927	Par.
			to .		
			Taxat'on.		



THE TANK IN TRAFALGAR SQUARE, Which initiated "Tank Week" in London.



A DUMMY TANK DOES DUTY IN THE SECOND INDIAN WAR LOAN CAMPAIGN IN CALCUTTA.

The number of subscribers to the first loan was 18,748, to the second 28,945, to the third 102,042, to the fourth 67,472, to the fifth 41,708, and to the sixth 212,144. The very

from War Loans £144,317,300, making a total of £149,340,547.

New Zealand raised three internal war loans in the first four years of the war as follows:—

				Amount Authorised.	Interest.	Term.	Price.	Subscribed.
August 1916 September 1917	.:	• •		£8,000,000 £12,000,000	4½%* 4½%*	14 or 25 years 21 years	Par Par	(Over) £11,000,000 (Over) £16,000,000
March 1918	• •		• • {	£9,500,000	41%*	20 years	Par	Fully subscribed

* Free of New Zealand Income Tax.

large increase in the number of subscribers to the seventh Canadian loan and the sixth Australian emission was due to the improved and more intensive character of the propaganda campaign. The flotation of the Australian war loans was placed by the Commonwealth Government in the hands of the State Bankthe only State Bank in the Empire-viz., the Commonwealth Bank of Australia. The cost of flotation was extremely low, the figure being about 4s. 6d. per cent., which included commission to stockbrokers, printing, advertising, and a charge of 2s. per cent. for flotation and for management expenses, which covered the cost of meeting all the coupons, and the repayment of principal at maturity. War Savings Certificates were also issued in Australia. The cash realized from sales of these certificates down to August 1, 1918, was £5,023,247, and

In addition, continuous sales were made of $4\frac{1}{2}$ per cent. War Certificates, which, like the $4\frac{1}{2}$ per cent. War Loans, were exempt from New Zealand income tax, and also of 5 per cent. Post Office War Inscribed Stock, the interest on which was subject to income tax, whilst further sales were effected through New Zealand Post Office Savings Bank funds. Down to September 30, 1918, the total raised in New Zealand on War Account from all sources amounted to £39,269,280, made up of:—

4% Se	curities	(Stock or	Bonds)	 	£4,713,750
410	,,	• • •	11	 	32,273,370
5%.	• •	31	12	 	2,282,160
	Total			 	£39,269,280

The net cost of raising the Public Loans did not exceed $\frac{1}{2}$ per cent.

Altogether £76,000,000 was authorized to be raised in War Loan in the first four years of

the war, as follows:—£2,000,000 in 1914, £10,000,000 in 1915, £16,000,000 in 1916, £28,000,000 in 1917, and £20,000,000 in 1918. The total war expenditure in four years was £51,400,000.

All the war loans issued were oversubscribed, and it was the practice to accept excess amounts as subscriptions to the loans, whilst by Section 40 of the Finance Act, 1917, machinery was provided for the compulsory levy of subscriptions to War Loans. These powers, afterwards modified by Section 16 of the Finance Act, 1918, were put into force, and the

India made a handsome contribution to the war. She undertook to contribute £100,000,000 to Great Britain's war expenditure. This contribution was made partly out of loans, and partly by the assumption of liability for interest on a portion of the Imperial War debt. About £35,000,000 was raised by loan in 1917–18. Meanwhile sales of Indian Treasury Bills locally, an experiment begun on October 16, 1917, enabled the Indian Government to finance an appreciable proportion of its expenditure, and to provide exchange in India for Imperial purchases there.



THE BISHOP OF LONDON APPEALS FROM A TANK IN HOLBORN.

sums, so raised were deemed to be fully authorized although they were in excess of the sums originally authorized.

In 1916 South Africa floated an internal 5 per cent, loan at par, exempt from income tax and super tax, and repayable after five years at the option of the Government, or in 20 years, if not previously redeemed. Nine millions sterling was subscribed to this loan, of which one-half represented the conversion of Treasury Bills and the other half new money Towards the end of 1917 the Union Government floated another war loan on a 5 per cent, basis, subscriptions to which reached £5,500,000.

So successful did the use of tanks prove in the loan campaign in Great Britain that they were introduced for the same purpose in all parts of the Empire, and in Allied countries, and with excellent results. The fame of these novel engines of war had spread throughout the world, and they proved an irresist ible attraction. The China and Japan War Savings Association organized "tank weeks," in Shanghai, Hankow, Kobe, Tokio, and Yokohama, from May to July, 1918, which resulted in £1,249,162 being subscribed throughout the Far East for investment in British National War Bonds. In Australia, New Zeafand and Canada tanks.

were also employed, and with conspicuous success.

The following tables show in very brief form British finance of the war from August 1, 1914, to August 3, 1918:—

August 1, 1914, to March 31, 1915. Expenditure.. £498,359,980 Revenue £171,758,744 78,390,564 Borrowings (net).. 404,991,800 Balance 2576,750,544 £576,750,544 April 1, 1915, to March 31, 1916, Expenditure . . £1,559,158,377 Revenue . . ., £336,766,824 Balance 57,875,966 Borrowings (net) .. 1,164,515,607 £1,501,282,431 £1,501.282,431 April 1, 1916, to March 31, 1917. Expenditure . £2,198,112,710 Revenue £573.427.582 Balance 860,853 Borrowings (net).. 1,625.545,981 £2,198,973,563 £2,198,973,563 April 1, 1917, to March 31, 1918 Expenditure.. £2,696,221.405 Revenue £707.234.565 5,405,829 Borrowings (net) . 1,983,581,011 Balance £2,690,815,576 £2,690,815.576 April 1, 1918, to August 3, 1918. Expenditure . . £930.118.918 Revenue £232 608 142 7,872.011 Borrowings (net).. 739,638,765 Balance £972.246.907 £972,246,907 August 1. 1914, to August 3, 1918. Expenditure.. £7,931.971,390 Revenue £2.021.795.857 8,097,631 Borrowings (net) . . 5,918,273,164 Balance £7,940,069,021

It is interesting to note here the growth in the British National Debt during the first four years of the war. This can best be done in the form of a table, as follows:—

Loans to Allies and Dominions, £ Pre-War Debt 651,000,000 March 31, 1915 1,109,000.000 52,378.000 March 31, 1916 2,140,000,000 376,000,000 March 31, 1917 3 854,000,000 974.000.000 March 31, 1918 5,850,000,000 1,526,000,000

At the end of the fourth year of the war the gross national debt was unofficially estimated at £6,629,000,000. But this figure. like those given in the table above (which were official), was no indication of the real debt, owing to the large amount of expenditure which was represented by assets in the form of loans to the Allies and Dominions and by Government ownership of enormous quantities of goods of all kinds, including foodstuffs, ships, buildings, land, factories and a host of other assets. These assets were so eonsiderable that a demand was made for a reform of presenting the national accounts so that the assets held against the State's gross liabilities should be clearly shown. This demand was acceded to, and in his Budget speech on April 23, 1918, Mr. Bonar Law set out in some detail the assets held against the liabilities, while subsequently the Select Committee on National Expenditure reported that

the War Office and the Admiralty had agreed to reform their accounts on the lines suggested, In his 1918 Budget speech Mr. Bonar Law estimated the National Debt as likely toreach a gross figure of £7,980,000,000 on March 31, 1919. Advances to the Allies were estimated to amount to £1,632,000,000, of which £816,000,000 only was taken into account,. this figure representing an allowance of 50 per eent. in respect of possible depreciation in these investments. The debt due by the Dominions he put at £244,000,000, and India's net balance of contribution at £64,000,000, making a total of £1,124,000,000 of assets. On this basis. the net National Debt would amount to-£6,856,000,000. On a very conservative valuation, Mr. Bonar Law placed the value of assets, in the shape of foodstuffs, raw materials, ete., at £672,000,000, and arrears of taxation at £500,000,000. On this basis the net National Debt on March 31, 1919 was estimated to reach £5,684,000,000.

With the eonspieuous exception of the American, which remained practically constant at \$4.76½ to the pound, after the flotation of the Anglo-French Loan, the foreign exchanges moved against the Allies with marked persistency down to the middle of the great German offensive of 1918. But when it was perceived that that ambitious blow had failed neutral's began to purchase Allied eurreneies, particularly sterling, and rates began to move definitely, and with a steadily growing momentum, in favour of the Allies. Meanwhile a elearer perception was obtained in the Allied eountries of the value of a closer co-ordination. of effort, and this found its most marked expression, apart from the stabilizing of sterling in New York, in the Italian Exchange, The value of lire depreciated very heavily after the disaster of Caporetto, as many as 45 lire being obtainable for the £1 instead of 25.221, the normal rate of exchange. This depreciation became a serious matter for Italy, and eaused the first steps to be taken in the direction of securing an inter-Allied control of the exchanges. A National Institute of Exchange was established in Italy, and in agreement with the Allies it seeured a complete monopoly of dealings in exchange. Exchange dealers here and in Allied countries agreed to act merely as agents of the Italian Institute. This measure proved very effective, and enabled Italy to reduce, in August, 1918, the rate of exchange to 30.25 to $30.37\frac{1}{2}$ lire to the pound and to

keep it at that figure down to the time of the signing of the armistice. Below are given tables showing by half-yearly periods the fluctuations in exchange from the beginning of 1916 down to the middle of 1918:—

well marked features of the year were a huge rise in imports and a substantial increase in exports. In the following tables are shown the figures for imports and exports in 1916:—

FLUCTUATIONS IN FOREIGN EXCHANGES.

	 	Method of Quoting.	Par of Exchange.	January 1, 1916.	July 1, 1916.	January 1, 1917.	1917,	January 1, 1918.	July 1, 1918,
Paris	 	Francs to £1 Dollars to £1	25.221/2 4.862/3	27·73 4·74 ¹ / ₄	28·13 ³ / ₄ 4·76 ³ / ₈	27·79 4·76³/,8	27·39 ¹ / ₂ 4·76 ³ / ₈	27·21 ³ / ₄ 4·76 ³ / ₆	27·15 ³ /4 4·76 ¹³ /4
Amsterdam	 	Florins to £1	12:10	10.83	11.481/0	11.68	11.56	10.95	9.33
Italy	 	Lire to £1	25.221/2	31.45	30.35	32.731/2	34.45	39.86	43-48
Madrid	 	Pesetas to £1	25.221/	25.05	23.47	22.25	20.321/2	19.591/4	17.34
Lisbon	 	Peuce to Escudo	531/4d."	34d.	35d,	311/2d.	31 ¹ / ₄ d.	30 ³ / ₈ d.	301/od.
Switzerland	 	Francs to £1	25.221/2	24-90	25.221/2	24.061/4	22.65	20.77	18.98
Christiania	 	Kroner to £1	18.15	17.25	16.271/2	17.10	16.15	14.40	15.111/2
Stockholm	 	Kroner to £1	18.15	17.10	16.30	16.161/2	15.58	14.081/2	13.461/2
Copenhagen	 	Kroner to £1	18-15	17.35	16.321/2	17-421/2	16.271/	15.251/2	15.331/2
Petrograd	 	Roubles to £10	94.57	159r.	1551/sr.	158r. "	2161/or.	350r	10 00 / 2
Alexandria	 	Prastres to £1	971/.	973/8	$97^{1}/_{2}$	977/16	971/2	9713/62	977/16
Bombay	 	Sterling to Rupee	1s, 4d,	1s. 41/32d.	18. 43/32d.	1s. 45/16d.	1s. 49/32d.	1s. 51/32d.	18. 61/16d.
Hong Kong	 	Sterling to Dollar		1s. 107/8d.	2s. 11/sd.	2s, 43/4d,	2s. 63/8d.	2s. 113/4d.	38. 31/4d.
Shanghal	 	Sterling to Tael		28, 61/ad.	28. 113/ad	38 61/ d	3s. 93/1d.	4s. 31/2d.	4s. 8 ¹ / ₄ d.
Singapore	 	Sterling to Dollar			2s. 4 ³ / ₃₂ d.	29, 43/16d.	28. 41/8d.	2s. 41/16d.	28. 41/16d.
Yokohama	 	Sterling to Yen	24.58d.			2s. 19/16d.	28. 15/8d.	2s. 2d.	28. 29/16d.
Buenos Aires	 	Pence to Dollar	47.58d.	491/8d.	48 ¹⁵ / ₁₆ d.	50 ⁷ / ₈ d.	501/4d.	52 ¹ / ₂ d,	51 ¹ / ₄ d.
Valparaiso	 	Pence to Peso	18d.	85/16d.	9 / 4 . 61	1111/16d.	1211/1 d.	14 ¹³ / ₈₂ d.	167/8d.
Rio de Janeiro	 	Pence to Milreis	16d.	12*/.d.	1213/32d.	123/32d.	12 ¹¹ / ₁₆ d. 13 ¹⁵ / ₁₆ d.	13 ¹³ / ₁₆ d.	$12^{23}/_{32}^{80}$
Montevideo	 	Pence to Dollar	51d.	533/4d.	53 ³ / ₁₆ d.	55d.	55d.	61 ¹ / ₂ d.	011/300.
Llma (Peru)	 	English to Peruvian £	Par.	744	43/4% dis.	51/ 0/ die	51/4% dis.	8% dis.	61 ¹ / ₂ d. 17% dis.

The official figures of Great Britain's overseas trade in 1916 did not afford a complete survey, as was usual, of the country's foreign trade. They were maimed in the interests of national safety and swollen by high prices, and therefore extreme caution is necessary in making comparisons with previous or, as will be seen later, with subsequent periods. The

Import	s in 1916.	
Class,	Amount,	Inc. or Dec.
	£	£
Food, drink, and tobacco	419,166.624	+38,292,063
Raw materials and articles		
mainly unmanufactured	336,791,740	+50,222,189
Articles wholly or mainly		
manufactured	189,194,348	+ 7,744,130
Miscellaneous	3,353,780	+ 354,760
Totals	£948.506.492	+596 613 149



THE DUKE OF PORTLAND OPENS THE TANK CAMPAIGN IN NOTTINGHAM.



PREPARING TRAFALGAR SQUARE FOR THE "FEED THE GUNS" CAMPAIGN, OCTOBER 1918.

	Ex	PORTS.							
Class.		Amount.	Inc. or Dec.						
		£	£						
Food, drink, and toba	cco	29,495,168	+ 4,413,499						
Raw materials, etc.		64,345,098	+ 11,991,058						
Articles wholly or ma	ainly								
manufactured		393,397,751	+100,470,966						
Miscellaneous		19,041,690	+ 4,535,736						
Totals		£506,279,707	+£121,411,259						
RE-EXPORTS (OF FOREIGN AND COLONIAL									
		HANDISE).							
Class.		Amount,	Inc. or Dec.						
		£	£						

2-2 52403	201012202010	
Class.	Amount.	Inc. or Dec.
	£	£
Food, drink, and tobacco	21,077,446	-1,321,250
Raw materials, etc	49,136,639	-5,451,247
Articles wholly or mainly		
manufactured	27,248,236	+5,230,806
Miscellaneous	104,353	+ 46,184
Totals	£97,566,178	-£1,495,507

In 1917, further inflation of prices was not the only disturbing factor in the trade statistics, for in that year changes were also made in the basis of the accounts. From the beginning of July, 1917, and subsequently, the accounts were made to include merchandise imported and exported in Government as well as in private ownership, except goods for the use of the Army and Navy abroad. Before that period the figures for imports included all articles of food but did not include other goods imported by the Government, and the figures for exports excluded goods taken from Government

stores and goods bought in Great Britain by the Government and shipped on board Government vessels. This alteration was necessary, for the Government had gradually assumed the position of an import and export merchant to such a degree as to render the returns more and more inadequate. But the revised figures did not include munitions and stores for the use of the Army and Navy abroad. In view of the changes made it was not surprising that the figures for 1917 established a "record."

Import	ș in 1917.			
Class.	Amount.	inc. or Dec.		
	£	£		
Food, drink, and tobacco	455,311,963	+ 36,145,339		
Raw materials and articles				
mainly unmanufactured	385,374,019	+ 48,582,279		
Articles wholly or mainly				
manufactured	218,484,514	+ 29,290,166		
Miscellaneous	6,085,911	+ 2,732,131		
_				
Totals £1	1,065,256,407	+£116,749,915		
Exp	ORTS.			
Class.	Amount. Inc. or			
	£	£		
Food, drink, and tobacco	16,377,055	-13,118,113		
Raw materials, etc	67,367,430	+ 3,022,332		
Articles wholly or mainly				
manufactured	421,596,440	+28,198,689		
Miscellaneous	19,968,066	+ 926,376		
Totals	£525.308.991	±£19.029.284		

RE-EXPORTS (FOREIGN AND COLONIAL MERCHANDISE). Class. Amount. Inc. or Dec. Food, drink, and tobacco 7,496,967 -13.580.47943,250,708 -5,885,931Raw materials, etc. Articles wholly or mainly - 8.52 L 179 18,727,057 manufactured ... 77,509 26,348 Miscellaneous -£28.013.937 Totals £69,552,241

In order to illustrate the important factor of higher prices on the trade figures, a table is subjoined showing the quantity and value of $470\frac{1}{4}$ millions in 1917, against $344\frac{1}{2}$ millions in 1916, 368 millions in 1915, $170\frac{1}{2}$ millions in 1914, and 134 millions in 1913.

From what has been said it will have been noted that the effects of the war on finance and trade grew more marked and profound as the war progressed and absorbed more and more of the world's activities. But the method of financing also had very important effects. For instance, in 1916, when (on July 3) the last of the minimum prices were abolished, 387 repre-



MR. BONAR LAW SPEAKS AT THE GUILDHALL, SEPTEMBER 30, 1918, In the "Feed the Guns" campaign.

certain principal articles dealt in in 1913 and 1917:—

IMPORTS, 1913 AND 1917.								
	Qua	atity.	Va	Value.				
	1913. Tons.	1917. Tons.	1913. £	1917.				
"Wood and								
timber	11,016,000	2,479,000	29,870,000	23,012,000				
Raw cotton	071.000	725,000	70,571,000	110,591,000				
Sheeps' wool	358,000	270,000	34,277,000	49,725,060				
Flax, hemp,								
and jute	600,000	315,000	18,368,000	25,786,000				
· Cottonseed	615,000	210,000	4 648,000	4,002,000				
Flax or linseed	650,000	205,000	7,105,000	5,508,000				
Tallow and								
stearine	101,000	32,000	3,413,000	1,981.000				
Hides	73,000	81,000	5,848,000	11,758,000				
Rubber	70,000	89,000	20,525,000	23,866,000				
Iron and Steel	2,220,000	497,000	15,232,000	10,803,000				
Machinery	104,000	72,000	7,282,000	8,863,000				
Leather	50,000	33,000	10,572,000	10,546,000				
Paper	644,000	139,000	7.674,000	4,100,000				
				-,- 30,000				

The revealed adverse balance of trade was

sentative securities depreciated in value to the extent of 149 millions, making the aggregate depreciation from the outbreak of hostilities in August, 1914, down to the elose of 1916, To a very large extent this 583 millions. depreciation was eaused by the methods of financing followed in 1915 and particularly in 1916, when all fixed interest bearing securities had to be marked down in adjustment to the rate then established for Government borrowings. This was proved by the fact that in 1917, when the high money rate policy was abandoned, there was a distinct check to depreciation, the deeline in fixed interest bearing securities being only £26,000,000, against £158,000,000 in 1916. If there had not been a

depreciation of £160,000,000 in American securities, there would actually have been an appreciation in 1917, despite the fact that war borrowings were on a larger scale in 1917 than in any of the previous years. Double quotations (buying and selling prices) were reinstated in the Stock Exchange Official List as from August 14, 1916. But members of the Stock Exchange had a very lean time down to the middle of 1918, when business, despite the ban on speculation, increased owing to buying induced by the enormous profits which were made by practically all classes of companies, owing partly to profitable war contracts, to the incidence of the excess profits duty, which put a premium on extravagance, and to the inflation of commodity prices. The profits of companies, particularly those engaged in the production of war materials, grew to an enormous extent, and it became the fashion for companies to expand their capitals by distributions of "bonus" shares, in order to make profits and dividends look less large. The increases in prices and profits, and the reduction in supplies which eaused it, led to Government control being established to an ever-increasing extent over ordinary trading; but though this control certainly put a brake on the soaring tendency



PAINTING A BIG POSTER.

of prices it did not prevent the aggregate cost of living from rising steadily or cause any sensible diminution in profits. This was because inflation of the currency was continually forcing them up. As showing the effect of control on profits through prices it may be pointed out that whereas in the year ended June 30, 1917, the



AT THE BASE OF THE NELSON COLUMN.

net profit, after deduction of debenture interest, of 918 industrial companies was £82,065,792, an increase of £11,292,089, or 16 per cent., the profits of 1,473 companies in the following year were £91,571,366, an increase of only £757,229, or 0.8 per cent. But the increase in the year ended June 30, 1918, was larger than it appeared to be, for in many cases excess profits duty for two years was charged against the profits for the year ended on that date. That profits increased enormously is shown by the expansion in excess profits duty collections and in incomes which came up for review for income tax purposes. In 1916-17 the excess profits duty vi lded £139,920,000, and in 1917-18. £220,214,000. The gross incomes increased as follows:—1904-05, £912,129,680; 1912-13, £1,167,184,229: £1,111,456,413; 1913-14, 1 9 14 - 1 5, £1,238,313,397; 1915-16, £1,662,724,028; 1916-17, £1,322,684,843; and 1917-18, £1,890,000,000.

The following tables show the movement of prices of commodities during the first four years of the war. The first table, compiled by the Board of Trade, shows the average percentage of increase from August, 1914, to August, 1918, in retail prices of the principal articles of food in the United Kingdom. It may be explained that the articles included are beef, mutton, bacon,

fish, flour, bread, tea, sugar, milk, butter, cheese, margarine, eggs and potatoes.

AVERAGE PERCENTAGE INCREASE.

. L I DIVION & DIVION BY						
Beginning	of	1914.	1915.	1916.	1917.	1918.
January		-79	18	45	87	106
February			22	47	89	108
March			24	48	92	107
April			24	49	94	106
May		-	26	55	98	107
June		_	32	59	102	108
July			32	61	104	110
August		15	34	60	102	118
September		10	35	65	106	_
- L						

October	 12	40	68	97	_
November	 13	41	78	106	_
December	 16.	44	84	105	

In the next table a comparison is made between the rise in prices of beef, bread, butter and milk in Allied, Neutral and Enemy countries (the figures were issued by the Ministry of Food):—

	July,	July,	Oct.,	July,
Country.	1914.	1917.	1917.	1918.
United Kingdom	 100	185	179	179
France	 100	170	160	203
Italy	 100	149	154	256



THE BISHOP OF KENSINGTON OPENING THE "FEED THE GUNS" CAMPAIGN IN TRAFALGAR SQUARE, OCTOBER 7, 1918.

United State	9	 100	140	148	153
Sweden		 100	160	178	268
Switzerland		 100	180	186	213
Germany		 100	181	201	249
Austria		 100	318	367	502

In both of these tables account was taken of alterations in the quantity and kind of the foods consumed owing to scarcity and other causes. Systematic control of food prices was established in the United Kingdom in July, 1917, and on the basis adopted for calculation no further advance on balance occurred within the next 12 months. It should be noted that an independent calculator, the *Economist*, recorded a general advance in prices throughout the war period. The *Economist's* Index Number, covering all essential commodities, moved as follows:—

Date.	Cereals and Meat.	Other Food Products (Tea, Sugar, etc.)	Textiles.	Minerals.	Miscellaneous (Rubber, Timber, Olls, etc.)	Total.	Percentage Change.
Basis (aver- age 1901-5) 1914.	500	300	500	400	500	2,200	100.0
Jan. 1 April 1 April 1 April 1 July 1 End July 1 End July 9 Aug. Sept. Oct. Nov. 1915. Mar. June Sept. 1916 Mar. June Sept. 1917 Mar. June Sept. 1917 June Sept. 1917 Mar. June Sept. 1917 Mar. June Sept. 1918 Light June Sept. 1918	563 560 565± 579 641 646 656± 683 714 840 818 899 949± 989 1,018 1,294 1,346 1,432± 1,221± 1,226± 1,238	355 350½ 352 369 405 400½ 407½ 414½ 428 470½ 446 503 520 536½ 553 610½ 652½ 726 686	642 626± 816 616± 626 611± 560 512 509 597 601 667 731 796± 794 937 1,12±± 1,226 1,441 1,509± 1,684± 1,777	491 493 471 464 474 478 478 478 478 478 478 47	572 567 553 588 645 657 684 ½ 686 ½ 797 769 ½ 848 ½ 913 1,015 1,073 1,112 1,283 1,278 ½ 1,348 ½ 1,348 ½	2,623 2,597 2,549 2,565 2,698 2,732 2,760 2,800 3,305 3,250 3,336 3,634 4,013 4,213 4,908 5,634 5,634 5,634 5,634 5,845	119-2 118-0 115-9 116-6 122-6 126-4 124-2 125-5 127-3 150-2 147-7 151-6 165-1 182-4 191-5 201-0 223-0 240-9 256-6 266-6
" June " Sept.	1,274 1,246½	7771 7791	1,811 <u>1</u> 1,929	8611 889	1,380± 1,394	6,105 6,238	277·5 283·5

. The *Economist* figures were a straightforward comparison of prices, without any modification in the method of calculation.

The advance is to be attributed to the increase of purchasing power that was in the hands of the public as represented by currency notes and Bank of England notes, the figures for which were as follows:—

Date.	Currency Notes Outstanding.			Bank of England Note		
Date.				Circulation.		
		£			£	
Dec. 30, 1914		38,478,164			36,139,180	
June 30, 1915		46,576,801		, ,	34,636,280	
Dec. 30, 1915		97,525,100			35,309,255	
June 30, 1916		112,349,278			35,899,230	
Dec. 30, 1916		148,770,440			39,895,160	
June 30, 1917		163,951,964			40,202,705	
Dec. 30, 1917		212,450,950			46,591,020	
June 30, 1918		256,227,516			54,902,910	

A total of £28,500,000 was accumulated in gold in the currency note redemption account, but when it had reached this figure the strong demand for gold for export made it necessary to refrain from placing more of the metal against the issue of notes, and its place was taken by Government securities, thus placing the issue to a great extent on a fiduciary basis. The Bank of England's note issue also showed a generally decreasing gold cover. On June 30, 1915, it amounted to £52,091,894; on December 30, 1915, to £51,476,407; on June 30, 1916, to £61,379,728; on December 30, 1916, to £54,957,464; on June 30, 1917, to £55,242,279; on December 30, 1917, to £59,198,840; and on June 30, 1918, to £65,333,558. The expansion in the currency was the result of the creation of credit which the financing of the war involved, but it is difficult to estimate the real expansion in the currency that occurred, because the velocity of currency is a thing difficult to gauge, but some light on this is given by the figures of the London Bankers' Clearing House, which were as follows:

	-			£
1917		 	<i>p</i> .	19,121,196,000
1916		 		15,275,046,000
1915		 ٠		13,407,725,000
1914		 	• •	14,665,048,000
1913		 		16,436,404,000
1912		 		15,961,773,000

The figure for 1917 was easily a record. It should be noted that 1912 was a year of great trade activity. Moreover, in considering the growth of currency it is necessary to bear in mind that banking deposits are potential currency. The deposits of 19 English banks increased as follows:—

				Millions.
1914			 	 747
1915			 	 944
1916			 	 987
1917			 	 1,068
1918			 	 1,349
Increase	on	1914	 	 602

Owing to the higher level of commodities, it became a general practice of those with banking accounts to keep larger amounts on deposit in order to finance their expenditure.

The most striking effect of war activity on industry was to focus attention on the advantages to be obtained by large scale working, and by cooperation instead of competition. It was so apparent that these advantages were substantial that amalgamations became very common in the manufacturing trades and other businesses, particularly in the iron, coal, steel, and engineering trades, the chemical industry,

the non-ferrous metal trades, and in the explosive trades. In order to break the prewar German control of the non-ferrous metal markets, the Non-Ferrous Mctals Industry Act was passed, which prohibited dealings in nonferrous metals without a licence. A licence was refused under this Act to a very prominent firm in London, which before the war was a connexion of the Metalgesellschaft, and this firm was compelled to go into liquidation. . A purely British concern was established to secure British control of the Empire's trade in non-ferrous metals, under the title of the British Metals Corporation. Another important development of this period was the establishment of the Imperial Mineral Resources Bureau, an official organization set up to act as a sort of Central Mines Department for the Empire. The development of the mineral resources of the United Kingdom was greatly stimulated meanwhile, as well as its smelting facilities.

The amalgamation movement in industry spread to insurance and banking. Bankers foresaw that the big units of industry would require larger banking accommodation than before the war, and all the chief banks in the kingdom proceeded to absorb one another in 1917 and 1918, until there were only five great banks left in the Metropolis out of eleven at the beginning of the war. The London and South Western was absorbed by the London and Provincial, which in turn was absorbed by Barclay's Bank. The National Provincial and the Union of London and Smith's joined forces, the London County and Westminster absorbed Parr's, and the London City and Midland acquired the London Joint Stock. A feature of the banking amalgamation movement was the tendency of the English banks to extend, for the first time, their activities to the Dominions and foreign countries, either by the acquisition of controlling interests in oversea banks, or by the conclusion of working arrangements. Lloyds Bank absorbed the Capital and Counties, and acquired control of the National Bank of Scotland and the London and River Plate Bank.

Banking practice meanwhile began to broaden

the basis of business. The suppression of the German banks in London, which was completed in 1918, caused the English banks to develop in very large measure their acceptance business, and a great expansion occurred in the development of foreign exchange. In June, 1917, as the result of recommendations made by a committee, a bank was formed with the special object of giving financial facilities to trade and industry of a kind outside the scope of ordinary deposit bank business. This bank was incorporated by Royal Charter under the title of the British Trade Corporation.

In 1917 and 1918 attention began to be drawn to the problems of reconstruction. It was perceived with increasing clearness as the war progressed that these problems would increase in intensity and complication with the prolongation of the war. The substitution during the war of Government for private control of trade and industry, the virtual suppression of competition, and the colossal magnitude of war expenditure and the financial effects of it, seemed to raise problems of great perplexity in the post-war settlement Numerous committees were apquestion. pointed to inquire into various phases of this question in 1917 and 1918. One committee was appointed in 1918 to inquire into the question of banking fusions, and as a result every fresh amalgamation had to receive the sanction of the Treasury before it could be carried into effect. Another committee was appointed to inquire into the gold question. Owing to the increased cost of producing gold, a number of low-grade mines had to be closed down, and as the production of gold began to decrease to an appreciable extent, the Government decided that an inquiry should be made as to whether it was necessary in the national interest that a price higher than the Mint price should be paid to the gold producers in order that the gold output might be maintained. From what has been written it will be seen that the fourth year of the war was completed under economic conditions much more complicated than they were at the beginning of 1916.

CHAPTER CCLXVII.

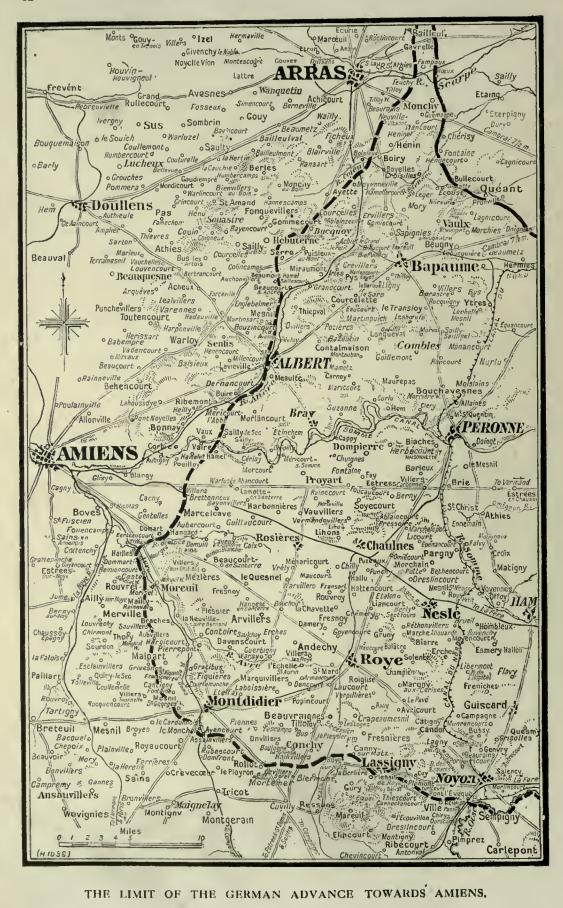
THE GERMAN OFFENSIVE OF 1918. (III.)

Position at the End of March, 1918—French Forces on the German Left Flank—German Attacks Here—The Advance towards Paris Stopped—General Debeney's Plans—Blockino the Road to Amiens—Fighting on the Avre, Luce, and Doms—Minor Actions on the British Front—End of the Battle, April 5—German and Pro-German Accounts—The Struggle in the Air—General Course of the Fighting—New German Offensive in the North: Opening of the Battle of the Lys. April 9.

N Chapter CCLXIV. we left the French on March 28 in a position which debarred the Germans from pushing south, but which did not prevent their progress in a westerly direction. The British held their ground on the line defined in the same Chapter, with the newly arriving French troops on the line of the Oise and above. But the Germans were enabled to pass by the French line and unite their efforts in the salient towards Amiens. A glance at the map given on p. 182 will, however, show that in this the front was too narrow to admit of a further violent irruptive effort until it had been widened. It was for that reason the enemy had made his advance towards Arras on March 28. But this move, as we know, had also been brought up with a round turn. Now, while it was no doubt the original German intention to devote their main efforts to penetration between the Allied. Armies, followed by action against the flank of the British, they probably always bore in mind the possibility of an advance on Paris. For a portion of their forces employed in that penetration would have sufficed to deal with the British, and the remainder, combined with the German troops coming forward from the neighbourhood of Reims, would have been available to push on the capital.

It was known to the German supreme command that, a considerable number of French troops were being concentrated south of the Oise. If, therefore, the push on Amiens was to be continued with a view to complete the penetration, and subsequently drive in the direction of Paris, it was absolutely necessary to deal with the French force now on their left flank, which was being reinforced every day. It may be well here to give the numbers of our forces as estimated by the Germans. Early in March they considered that Foch had some 60 Divisions under him in the Army of Reserve. Pétain's total force they placed at 70 Divisions. But this was distributed over a long line past Verdun. The American Army was held to be 220,000 men in five Army Corps, mostly east of La Fère. The British force was thought to consist of 50 Divisions.* We are only concerned for the moment with the Grand Army of Reserve The enemy probably would not think the whole of this would be brought up to where the

^{*} Field-Marshal Haig gives in his dispatch of July 20 Clause 69, the number of divisions used against the Germans between March 21 and April 30 as 55 of infantry and 3 of cavalry. In Clause 50, paragraph 6, he states "46 out of my total force of 58 divisions had been engaged in the southern area." It would therefore seem that the defence of the northern part of the line had been left to 12 divisions.



THE LIMIT OF THE GERMAN ADVANCE TOWARDS AMIENS,

French Third Army was engaged, but it was plain that it was in the power of the General at the head of the Allied forces to bring up a considerable addition to General Fayollc, now commanding the concentration against the Germans' left flank.

Just as they felt the need for more room on their right, as shown by their attacks to the south of Arras, so on their left, if their troops were to concentrate their efforts against Amiens, they could not do this in safety with a considerable force in contact with their left, which would be in great danger if the French could get in behind it. This argument explains why Foch felt on March 28 that the flood was stopped by south of Montdidier there was a continuous line.*

Although the Germans had been diverted in the direction of Amiens, they had not yet given up all idea of pushing back the French force on their left flank; indeed, so long as it was there, it was a danger to them.

On the 28th Plémont was attacked three times, on each occasion unsuccessfully; but it was hoped by the French leader to do something more than play merely a passive part. He hoped to attack in turn the German forces. The British had taken the offensive in the country between Rouvroy and Rosières and had driven back the Germans, and General



RAILWAY STATION, AMIENS.

the dyke he had constructed on the south of the Oise. Plainly, the next movement of the Germans must be directed to push back, or at any rate hold, the new French force, to give their troops moving forward into France more space for manœuvre and to protect their left flank.

Leaving the British Army for a time, which was fairly comfortably placed, let us see what measures the Germans took against our Ally.

The movements of the last few days had left the French in a strong position on the south of the Oise. From the south of Noyon to the south of Lassigny, from Mont Renaud to Plémont especially, they held a strong post. The higher ground about Boulogne-la-Grasse was well occupied and to the

Humbert thought this was a favourable opportunity to execute an attack against the latter. This movement was entrusted to General Robillot, and he appears to have had the 38th Division and some of the troops he had recently commanded under him. The attack at first was very successful. The 4th Zouaves carried Orvillers and Boulogne-la-Grasse. The direction of the attack was a dangerous one for the Germans, as it menaced the communications of their troops at Montdidier. They therefore gathered together the troops immediately

^{*} At this date, or a day or two later, there appear to have been 20 infantry Divisions, including one of dismounted cavalry, and three Cavalry Divisions acting under General Fayelle. The First Army Corps coming up from the neighbourhood of Toul furnished a good proportion of these Divisions; the rest came from the French Third Army and from Fayelle's reserves.

available, made a counter-attack and drove the French back to a great extent from the ground they had taken. From a material point of view therefore the gain to our Allies was not great, but in other respects it had been of considerable advantage. In the first place, it was again seen that the enemy's troops were weary of fighting, for their movements no longer displayed the vigour of the opening days of the operations; and, secondly, it showed that the French were still capable, whenever they chose, of acting on the offensive.

On March 29, the Germans again attacked, but with no greater success. Indeed, their losses were more severe than before, because by this time a considerable amount of artillery had come up to the French front, and its fire had great effect on the German infantry, which was in the open battlefield without the aid of any artificial cover. The result of this day's fighting showed clearly to General Humbert the part for him to play. As he was on the right of the French Army, it was his duty to adhere to the defensive, to ward off attacks, but also to combine with it small offensives.

March 30 was marked by a strong attack delivered against the whole of the French Third Army. Pellé's V. Corps had meanwhile

been actively engaged in improving the defences from Mont Renaud to Plémont, which now formed a very strong position. At 9 o'clock in the morning Mont Renaud was assaulted with considerable vigour. Here the line was held by troops of the 9th Division, who gave the enemy such a warm reception that they fell back in disorder, leaving the forefield of battle covered with dead, having also been obliged to yield a good many prisoners to the sharp and brilliant local attacks of the 9th Division. More to the west, General D'Ambly, with the 77th Division, held Plémont and the park of Plessis-de-Roye, where he was vigorously attacked. After a fight which fluctuated to and fro, the 97th Regiment, which held the château and park of Plessis-de-Roye, was compelled to give ground, thus uncovering the left flank of the French line at Plémont.

This position had also been attacked on its right flank, and here the 53rd Division was holding the ground; but the position was a difficult one. For the success on the left, if followed up by success on the right, which seemed possible, would compel the abandonment of Plémont, which formed a most important point in the French line here. Fortunately, however, the Germans, who had attacked the



TYPES OF FRENCH INFANTRY:

Left to right: Fusilier-Mitrailleur, Grenadier-Fusilier, Voltigeur, Grenadier-å-main, assaulting order.

97th Regiment, although far exceeding them in strength, had been received with such vigour that, although successful, they were for a time incapable of further progress.

A part of the 77th Division had been sent off more towards the west to aid the 62nd Division, then engaged about Orvillers. It appears to have been brought back for an attack on the Park of Plessis. At 4 o'clock in the afternoon the Germans sent an attack directly against Plémont, but they were met by part of the 53rd Division, which took them in flank on the right and drove them back, and then the French launched a counter-attack against the park. After the way had been well prepared by a strong concentration of artillery (for by this time the French had received considerable accession of strength in the number of their guns, which, as we know, had been at first outpaced by the infantry coming up in trains and in lorries), General D'Ambly sent his troops to the attack against the park, in which a portion of the 38th Division took part. From this came the Colonial Infantry Regiment, which furnished one battalion for the assault. It was supported by portions of the 97th and 236th Infantry Regiments, while the 56th Chasseurs made a separate attack on the right. Extremely severe fighting took place. The Germans held on doggedly, but the French would not be denied and finally cleared out their opponents, capturing 800 prisoners, besides inflicting on them very heavy casualties in killed and wounded. This relieved the pressure on Plémont and the original line held by the French remained intact up to and to the south-west of this point.

But while the battle had gone well in this part of the field, this was not the case more to the left. At 8 o'clock in the morning, after a strong artillery preparation, the Germans attacked the French line from Royc-sur-Matz to Rollot, and drove back the French troops to the borders of Rouance, Orvillers-Sorel and Biermont. General D'Ambly, as we have seen, had sent troops to support the 62nd Division at this part of the field, and a great effort was made to stay the retreating French units, everything available, including troops which had only just come up, being pushed into the fight. and a heavy artillery barrage was put down to the north of Orvillers. These combined efforts brought the German attack to a stand-

Now the 67th Division, which had just

arrived at the front, was sent forward towards Rollot. Again the combat thickened, but the Germans met with a strong resistance which compelled them to pull up, and the French recovered some of their lost ground. As night was falling, it was now determined to put off any further advance till the next day.



[French official photograph.]
GENERAL PELLÉ.
Commanded the Fifth French Corps in General
Humbert's Army.

Once more fatigue put the drag on any further German advance, and March 30 saw the termination of the attempt to push more to the south. That this had been intended was quite clear from orders which were found on one of the German officers who had fallen in the assault.

Thus the attempt to penetrate to the He de France was blocked. The road to Compiègue was barred by the position of Mont Renaud, while Plémont stood across the road which led to Senlis (the southermost point to which the German attack had reached in 1914) by Estrées-St. Denis. Meanwhile General Debeney was preventing the advance of the German against Clermont on the south, or Amiens on the north



[From a German pnotograph.

GERMAN RESERVES PASSING THROUGH ST. QUENTIN ON THE WAY TO THE FRONT.

This officer himself had arrived on the field of operations on March 24, considerably in advance of his own army, which did not arrive till some days later. He had seen the retreat under German pressure, the splitting apart of the English Fifth Army, and the desperate struggles of the French to hold back the · German flood; but, although this had been done with some sneeess, still the situation was a threatening one. There was a gap between Lassigny and Montdidier which might be widened by a further German advance up to Moreuil, which would have left Amiens almost Amiens was a most important point; here met the railways coming from the coast along which the British supplies were brought. To have lost it would have left our Army only the more northern ports to rely on for their supplies. The line of German advanco from Montdidier to Moreuil aeross the Avre threatened the further passage of the Noye, which, once crossed, would place the roads from Amiens to the south entirely in the German hands and cut two important lines of railroad. That from the east by Rosières to Amiens had already been cut. It is evident, therefore, that it was of the highest importance to stop further progress of the Germans towards the west. The gradual withdrawal of the British troops rendered it all the more necessary that the French should be in sufficient numbers to put an end to this advance. It was only possible to do this by the arrival of fresh French troops, for those under Humbert had now been fighting hard and continuously and were nearing the end of their tether.

Whilst waiting for the arrival of the troops necessary for this purpose, General Debeney, with those he had available, took up the line of the Avre from Moreuil to Roye-Guerbigny. At the former point there still remained the XVIII. British Army Corps, which thus formed the left of the new line under the orders of General Debeney.* The orders issued were that this line must be held with the utmost vigour. It was strengthened by the early arrival of the 133rd and 56th Infantry Divisions, the former commanded by General Valentin, the latter by General Demetz, and these two divisions were placed under the direction of General Dimitry, who was then commanding the 6th Corps, which, as we know, had furnished the 125th Division to aid the British Fifth Army, and part of whose troops had been pressed back by the Germans. This placed General Debeney in possession of a considerable foree.

Demetz had arrived on March 25 on the

^{*} General Debeney was an officer of considerable distinction. When commanding the 25th Division, he had stopped the German advance at Mort Homme near Verdun. In 1916 he had commanded the XXXII. Corps with great success at the battle of the Somme. In 1917 he had been given the command of the Seventh Army

railway une leading up the Noye, and had at once been pushed on towards the Avre. In accordance with the instructions which Debeney gave him at Etelfay he was also given the 5th Division of Cavalry, commanded by General Delatour, which had been employed in keeping up connexion between the road of the British above Guerbigny and the 22nd Division on the left of Humbert, which had then just retired from the Oise. The 133rd Division was instructed to hold the line of the Avre between Braches and Moreuil. It had just come from the French Army in the northern part of the Allied Line. The 4th Cavalry Division was also sent, as it came up and detrained at Moreuil, to aid this force. This body of French troops then, the 56th and 133rd Infantry Divisions and the 4th and 5th Cavalry Divisions, with some other units, stood on the line of the Avre, on the left of the southern portion of the French Army under Humbert.

On the 27th, from which day the influence of the French reinforcements first really began to be felt, the immediate necessity was the protection of Amiens, and for this there was available the British XVIII. Corps in the Santerre region, which required urgent support. For this purpose the 4th Cavalry Division and the 133rd French Division were pushed up north to support the British Corps on the line Erches-Bouchoir, thus forming a nucleus of resistance on the northern limit of the French advance towards the Somme. But this arrangement was entirely upset by the forward movement of the Germans, whose advance threatened the line of the Avre. For Erches was carried early in the morning of the 27th, and the advance made good to Saulchoy-Warsy-Guerbigny. Moreover, the British had been pushed back from Bouchoir, and the 56th Division's connexion with the British completely severed. On the French right, too, Grivillers was lost, and what of the garrison was not captured was thrust back towards Marquivillers. On both flanks, therefore, the French troops were turned.

The net result of all this was that the efforts to save Montdidier were unsuccessful, and, as has been previously related, this town fell into German hands on the 27th. There was thus left a breadth of 10 miles between British and French forces completely open to the enemy. Immediate steps were necessary to remedy this grave situation, and General Debeney telegraphed to General Fayolle, commanding the Grand Army of Reserve, and, after having

explained the general situation, asked him to send troops on lorries up to the rorth of Ployron to offer at least some resistance to the enemy's cavalry. To the north things had not been improved. The French had proposed to retake Erches, but the Germans, advancing from Armencourt, held them fast, while the loss of Montdidier, which was reached by the Germans at 6.30 p.m., thrusting back the 22nd Division, and the further retirement of the British from the north of Hangest, rendered the defence of the Avre very difficult. The German advance was conducted with great rapidity and



[Manuel.

GENERAL DIMITRY.
Commanded the Sixth French Army Corps.

largely unobserved by the French, so much so that a reconnoiting party, sent forward between Davenscourt and Saulchoy, was captured.

The result of the day's fighting was very grave. The 56th Division and the 5th Cavalry Division had been compelled to retire, tenaciously defending every foot of ground, the Artillery remaining in action till the last moment possible and then moving off only to take up a fresh position further back. But by nightfall these troops had all been forced back to the west of Montdidier and without inflicting very heavy losses on the enemy.

As we know, General Humbert's force had held on tenaciously in the position west of Noyon. Fortunately, however more and more

French troops were coming up. The 36th Division was joined on to what remained of the 56th Division and the 5th Cavalry Division, and with this support these troops were enabled to offer a bold front to the advancing Germans. A line was taken up behind the Doms stream and General Debeney instructed them to hold on at any cost. Connexion was also made with the left wing of Humbert at Domfront, at the junction of the railways coming up from Maignelay and Ployron. There was still hope of an amelioration of the situation and, failing this, General Debeney, desiring to remain immediately behind the new French defensive flank, installed his Headquarters at Breteuil. It was fairly evident that a fresh German attack would be directed against the Doms and the Avre, on the line extending from Moreuil down to Montdidier. A success here would give them access to Amiens from the south, while the fall back of the British to the Ancre would allow a further success being directed against Amiens from the north-east, and the way was fairly open to them along the Vermand-Amiens road.

General Fayolle had replied immediately to General Debeney's request and, as has been already described, two Divisions of the French Third Army had been sent up to fill the gap to the south-west of Montdidier, and thus it was that on the 28th General Foch had been able to say that the German advance had been brought to a halt by the dyke, which had been creeted against it.

But from the point of view of the Germans it must be admitted that they had reason to congratulate themselves on the progress they had made. It is true that General Humbert still held the position west of Noyon, but they had eaptured Montdidier, and further north their progress had been considerable, so that they now stood in large force threatening Amiens. For this purpose they had eoneentrated at the extremity of the salient they had ereated seven more Divisions, which had previously been employed farther to the north. This diversion was a considerable augmentation of the German force advancing in a westerly direction on the south side of the German attack.

It was evident that the immediate objective of the enemy was the important point of Amiens. For the time, therefore, his main effort would be a direct advance through the gap which had been made facing his left, and it was desirable for him to act with all speed possible. For, as the German higher command was aware, a large number of fresh French



French official photograph



FRENCH REINFORCEMENTS PASSING THROUGH MONTDIDIER BEFORE ITS
CAPTURE BY THE GERMANS.

Divisions were being brought up to the critical point and the possibility of a flank attack from the south could not be neglected.

It is interesting as a good example of how comparatively small events may give rise to important information that a French Staff officer was killed near Davenseourt, and on him were found papers which showed that the French First Army, which was thought to be about Toul, was coming up and that its head-quarters were already near Montdidier.

It is probable that the total number of Germans on the front from Montdidier to the north was over 200,000 men, a number considered sufficient to ensure success

It was no light task that Debeney had before him. With the troops that he now had got together, or which were immediately coming up and partially arrived, he had only two more divisions than those previously enumerated, and of these some were strung out on the south of Montdidier backwards, to hold the line of the Oise up to the divisions of the Fifth Army facing the Germans to the north of the French line running westwards from La Fère, and a good many of his troops had been severely handled in the hard fighting they had been undertaking during the last few days. On the

evening of the 27th the French line ran from Ayencourt north-west to Montdidier, Mesnil-St. Georges, Gratibus, Pierrepont, Contoire,



[Australian official, VILLERS-BRETONNEUX,

Hangest-en-Santerre, and Lo Quesnel, where the British line commenced, running from Beaucourt-en-Santerre to Hangard and Villers-Bretonneux.

Early in the morning a severe artillery fire was directed against the position. At 8 a.m. the



[Official photograph.

REFUGEES.

Germans advancing from the west of Montdidier earried Mesnil-St. Georges and Monchel, and German detaehments were pushing towards the east against the farm of Belle-Assise. At the other extremity of the line Hangest was taken by the enemy. At this time the 166th Division was just detraining. Without waiting to get into perfect order, the first troops availablo from it were pushed on between Coullemelle and Thory, while the Divisional Artillery was brought into action on the line Grivesnes-Coullemelle, and its fire brought the German advance westwards to a standstill. Grivesnes and Le Plessier two battalions of the division were in position. To the right of these troops the divisions on the left of the Third Army, aided by what remained of the 5th Cavalry Division, advanced against Monchel, Le Mesnil and Fontaine, drove back the Germans and eaptured some machine-guns. Thus the southern flank of the German attack was fully held and there was little doubt from the result of the fighting that the troops were very weary.

More to the north, however, the Germans gained some success. At 1 p.m. (the lateness of the hour was probably due to the late arrival of some of the troops coming down to join the Germans from the north already alluded to), a

severe attack was developed against the Allied line to the north of the Amiens-Roye road, Guillaucourt was captured and the positions to the south of it at Cayeux-en-Santerre (where there were British troops) were also taken and the line to the south between Caix and Lo Quesnel penetrated. At this point the French line was commanded by General Mesple, who had under him the 133rd Infantry Division and the 4th Cavalry Division. But no further advance was made by the enemy before nightfall.

The next day, Good Friday, March 29, was eelebrated by the bombardment of Paris, when the German shells sueeeeded in destroying a French crêche and killing a eonsiderable number of women and children, and was marked also by a violent attack against the Allied position, for the fresh German troops had now all come up. Debeney's force was also strengthened. The 163rd Division had been brought up on lorries, without its artillery, but the reinforcement of infantry thus obtained was used for the defence of Moreuil. The 29th Division had been brought up from Flanders to the south of Amiens and was ready to advance on Hangard and Domart, to the south of Villers-Bretonneux. Thus on both flanks the French were definitely stronger.

When the British had been pushed out of Cayeux they had fallen back to Demuin and the French from Le Quesnel retired to Mezières, It was in this direction that the Germans now attacked. Either they were satisfied with the progress they had made to the south, or they thought it more desirable to drive back the French from the Middle Avre about Moreuil. Their advance drove back the Allies to Avre line about La Neuville-Sire-Bernard. But this gain was considerably neutralized by the French advance on Framicourt and Courtemanche. The 56th Division, which carried out this movement, were beaten back by a counter-attack, but finally held the position they had occupied in the morning. Between this point and La Neuville-Sire-Bernard the French line was forced to retire over a few hundred yards between Pierrepont and Gratibus. On the whole, however, the day's fighting had produced no great success to the Germans. They had pushed back the French line more or less to the Avre, but they were still held there.

They had, however, by no means given up their drive to the west, and on March 30 the whole line from Montdidier up the Avre was attacked with great violence. Assaults were

delivered against Monchel, Mesnil-St. Georges, Fontaine, Grivesnes and Aubvillers. All these were repulsed, and when renewed, as they were in many instances up to seven times, they were equally unsuccessful. Still a little more to the north, the Germans gained Moreuil in the evening, but the French, in retiring from it, took up a position a little farther back behind the Avre. The same features were repeated in this day's fighting. The attacks were made with considerable vigour at the commencement, but soon died down, and it was plain that the enemy's troops were becoming weary of the struggle. The total result of this day's efforts was some cavalry successes of a local character, but nothing that was of immediate utility to the Germans for a further advance to the west.

The struggle went on during the next day with the same characteristics in the fighting. Grivesnes was taken, but the enemy was driven out by a counter-attack. Mesnil-St. Georges, which had been captured the day before, was this day retaken from the Germans. At Hangard they at first succeeded in forcing an entry, but were soon driven out of it.

For a space the attacks on the French forces now subsided. The Germans had con-



GUILLAUCOURT SET ON FIRE BY SHELLS.

centrated all that they could to the south without leaving the right of their attack too bare to be maintained, and their troops had suffered from heavy losses and from the fatigue of fighting. It was extremely doubtful if at the end of March they could have continued without intermission the strokes they had been deliver-



GENERAL SIR J. MONASH, K.C.B.
Commanded the Australian Third Division.

ing against General Debeney's army. It seems probable that over 20 divisions were used in what may be roughly described as the French lino on the Avre, and although there had been some measure of success they had not succeeded in pushing back the right flank of the French, which stopped the road to Paris, and stood as a menace on the left flank of the German columns, nor had they been able to drive back the left of the French which directly barred the road to Amiens. The continuous and wide assaults such as those of the last three days of March ceased, but local attacks, some of considerable strength and violence, continued.

Let us now return for a time to the minor actions on the British front. The problem towards the end of March was to withdraw those divisions of the British Army which had been severely handled (this specially applied to the XVIII Corps) and suffered heavy loss, and to replace them by the French troops now coming up. At the same time it was obvious that the British troops could not be taken back until their place was occupied by those of our Ally. We have seen that the right flank of the Fifth Army had been in contact with the left of the French except for occasional interruptions during the retreat. The III Army Corps, which

had been originally on the right of the Fifth Army, seems to have been drawn back before the XVIII Corps, which was left under the orders of the French Commander. For Sir Douglas Haig states that the divisions of the III Corps which had already been heavily engaged were already "on their way to reinforce our lines "i.e., this corps was coming to aid the right of the Fifth Army. So far as concerns the operations from March 29 onward, of which we have already described the French part, it may be observed that when the German attacks from Demuin southwards took place on March 29 the British, fighting with the French, were forcod back from Mezières.

On March 30, the Germans, who had occupied Moreuil Wood the previous evening, continued their attack along the line of the Luce east of Demuin and made some further progress, but a brilliant counter-attack carried out by the Canadian Cavalry broke and, supported by the Third British Cavalry Brigade, drove them back out of the Moreuil Wood, but they still clung to Demuin, which they had captured. The Luce here appears to have divided the enemy's attacks and although, as we have seen, he was successful to the south, to the north he was held up, and towards the evening the advance of the 66th Division and the 3rd Australian Division, which was commanded by Major-General Sir J. Monash, K.C.B., drove back the Germans. The fluctuations in the front which had taken place during the day had as their final result that the 20th and 50th Divisions south of the Luce made good our line there, and in the process captured a number of prisoners. Above this part of the field, hostile attacks on both sides of the Somme were also driven back with heavy loss, our troops here being composed of the 1st Cavalry Division and the 3rd Australian Division, and with them was a battalion of United States Engineers, who fought on the south of the river.

The enemy's attacks, as we have seen, were continued on March 31 and again he made some progress, but the British troops were not forced far back from the line they held. For after a continuous struggle which lasted practically the whole afternoon and evening, the 8th Division counter-attacked and drove the Germans back, well out of the Moreuil Wood. When night fell, although Moreuil itself was in the hands of the Germans, we held a line which ran from Moreuil station, which is outside of and to the north of Moreuil but on the east side

of the Avre, back through the wood to Hangard on the Luce and thence to Warfusée-Abaincourt, a village about three miles to the east of Villers-Bretonneux on the road to Vermand.

April 1 saw a still further improvement in our lines. The 8th Division again moved forward, and in conjunction with the 2nd Cavalry Division pushed the Germans back, and this led to minor but important rectifications of the line we held. The next day was a quiet onc. For the first time since the attack had begun there was no attack on the British south of the Somme.

On April 1 and 2, the Germans were again attacked by the French at Domart and, aided by some British troops, the valley which runs down to the Luce by Hourges was carried, and thus a great improvement given to the portion of the line south of the Luce.

These operations gave a definite limit to the

added: "Now it is time to act and our efforts should be directed to the resumption of the offensive on the line Demuin—Moreuil towards the Avre and Montdidier. The first phase of the great battle has ended. The second is about to commence. We have a clear objective. Let us all throw ourselves into the movement with all our might."

On April 4 the British front south of the Somme down to Hangard and the French Army on its right to the south of Montdidier were heavily attacked. The weather was lowering and misty but this was a little better than the incessant rain which had been falling since March 27. It was much as it had been on the opening days of the attack, and greatly impeded our aircraft as it then had done. The violent artillery fire, commencing at dawn, ushered in the beginning of the fight, and the German infantry came on about 7 o'clock in dense.



AMERICAN TROOPS ON THE WESTERN FRONT PASSING BRITISH TROOPS BY THE ROADSIDE.

French and British forces. They united about Moreuil, and above that the British held the line which ran up past the front of Amiens, the French holding on to all below.

General Debeney's report on April 2 was that the connexion between the French and British Armies was made and the line of the two Armies definitely established, and he formation, which offered an excellent target both to the artillery and the machine-guns. On the left of the British line our troops were obliged to fall back to the west of Hamel and Vaire Wood. The artillery of the 3rd Australian Division on the north bank of the Somme was particularly efficacious in stopping this attack, for it took in flark the right of the

Germans and inflicted on them very heavy losses, the range being short and the guns firing over open sights. But on the right the enemy was everywhere repulsed, although later in the day fresh German assaults compelled a withdrawal for a short distance in the neighbourhood of Hangard Wood. Still more to the right, before dawn, the French had, in accordance with the views just quoted of General Debeney with regard to the offensive, earried the farm of St. Aignan south-east of Grivesnes, capturing

completely successful. Grivesnes, held by the 25th Chasseurs, was attacked from the East with equal lack of success by the Prussian Guards, who also attacked Le Plessier to the south-west of Grivesnes. A second and a third attack were equally unsuccessful, 'the assault being brought to a standstill by the artillery barrage and machine-gun fire. At a quarter to 11, a fourth attack was made on the same part of the French line, but it met with a like fate to those previously undertaken. In accordance



"ASSEMBLING" A BIG GUN IN FRANCE.

LOfficial photograph.

some prisoners. After the preparatory bombardment the German attack began against this part of the French line at 7.30. The German attacks extended over the line from Hangard to the south of Grivesnes.* As against the British front, the Germans came on in dense infantry formations. The first attack was defeated after half an hour's fighting. St. Aignan was the point which was actually assaulted, and here the 67th Regiment was

* In the last paragraph but one of Clause 47 of Field-Marshal Haig's dispatch of July 20, he states that at the close of day on April 3, the British held the line from Moreuül station to Hangard and thence to Warfusée-Abaincourt. In the second paragraph of the 48th Clause of the same dispatch he states that the British joined the French at Hangard. It is therefore evident that on April 4 the British had given up the line from Moreuil to Hangard which they bad held on March 31.

with the German principle of not continuing to push an attack where it had been held, the next attempt was made much more to the north on Hill 104 at the inter section of the roads from Domart-sur-la-Luce to Maison Blanche and Moreuil to Demnin, It was an important point which dominated the country down to the Luce, and the eonquest of it was of great importance to the Germans. The attack made some progress up the slope, but did not sueceed in reaching the top of this slight elevation, and was driven back in disorder. The Germans then tried moving up the shallow valleys which led to this point, but the French and British artillery in the neighbourhood of Hangard were able to take them more or less in enfilade and quickly erushed out the advance with very heavy easualties.

Once more the point of assault was shifted and the advance was made between Morisel and Moreuil. Here the western bank of the river afforded cover both to the north-west and the south-east. The two first assaults were driven back, but the cover allowed the German troops to spread both in a northerly and southerly direction and soon Castel to the north was taken and the outskirts of Mailly-Raineval to the south were reached. Along this front the ground was held by the XXXVI Corps, which was on the left of Debeney's Army. In the centre of the French line was the IX Corps and here the German advance was quite unsuccessful, especially at the Mongival Wood where they suffered very heavy losses. The net result of the enemy's attack, executed by 14 Divisions on a front of little more than 10 miles, was practically nothing, for the slight progress which had been made in the north was of little value to them. It is true that in the centre they had won forward to some extent, but the eapture of Castel did not take them out of the river valley and at Mailly-Raineval they were still down in a gulley, from which it would have been difficult to debouch. Moreover, a

second line had been prepared during the day between Rouvrel and Coullcinelle, which was available if the front had to be given up. But General Debeney had no thought of retiring back to it at the moment. On the contrary, he thought the position to be sufficiently favourable to permit counter-attacks on the next day, April 5. The orders he issued were that the artillery was to redouble its fire. On the left General Robillot, who, it will be remembered, had commanded the 2nd Cavalry Division and had been put in charge of the troops fighting on the left of the French III Corps above Noyon, was now placed at the head of the left wing of the French Army to hold the valley of the Avre and bar the roads which led through Domart-sur-la-Luce and from Moreuil on to Amiens, keeping up communication with the British Army, The IX Corps was to counterattack straight to its front and one of its divisions, the 17th, was to pay special attention to Moreuil. The 17th Division was to advance from Rouvrel on Castel, and from Merville towards the higher ground above Morisel. The 127th, the 166th and the 59th Divisions were to move against Mailly-Raineval, while



[French official photograf h.

A MONSTER FRENCH GUN ON THE WAY TO THE FRONT.

to the south of this, the 45th Division was to attack on the line Malpart—Cantigny—i.e., in front to the east of Grivesnes.

The progress of the whole battle was favourable to the French. Troops of the IX Corps reached the outskirts of Mailly. To the south of this at Sauvillers-Mongival, with help from tanks, the long flat plateau was eaptured, thus threatening Mailly-Raineval on both sides. At Castel in the Sénécat Wood, after severe fighting, the enemy was driven back with a loss of prisoners and machine-guns. On the whole length of the battle-line of the First Army the enemy made no real progress, and at nightfall on April 5 . it was plain that the German advance had come to an end on this part of the battle-field. On the French right, where General Humbert commanded in the neighbourhood of Noyon, the line thence to the south of Montdidier was left severely alone.

The next day General Debeney issued the following order to his troops:—

Soldiers of the First Army, you have fulfilled the difficult task imposed on you. Your obstinate resistance and the vigour of your counter-attacks have broken up the rush of the invader and assured the connexion with your brave British Allies.

The great battle has begun.

At this solemn hour the whole country stands behind you and the inspiration of patriotism strengthens your will. We shall conquer.

On the same day the German attacks south of the Somme were confined to mere local efforts chiefly against Hangard, where the enemy evidently hoped to break through to aid the advance up the Domart-Amiens road. Here the fighting was severe, but gave no success to the enemy, while more to the north in the direction of Hamel his attacks were brought up by our artillery and machine-gun fire. But these attacks were subordinate to the main advance, which was now being made againstour lines on the north of the Somme along the line Dernancourt to beyond Bucquoy. With the exception of a trifling gain in this village, the movement was without result. Heavy losses were inflieted on him, and he made no progress on the road to Amiens. Indeed, at one point in the neighbourhood of Rossignol Wood, the German assault was beaten back in disorder. The 37th Division, under Major-General H. B. Williams, C.B., D.S.O., counter-attacking with great vigour, captured over 130 prisoners and considerably improved the positions we held. The fighting on April 5 practically terminated the great effort of the Germans to capture Amiens.

In spite of strong resistance, however, the Germans had made since March 21 very considerable progress. They had pushed through in strength until they were within



[Official photograph.



[Official photograph.

FRENCH SOLDIERS "DIGGING IN."

eleven miles of Amiens, but their movement to the south had been stopped. Still it must be remembered that from la Fère towards the south the situation was still not without danger, because a powerful attack from the German lines there westward would in turn threaten the flank of the French troops round about Montdidier. There had been, as already related, great artillery activity on both sides of Reims, and it was known that a considerable concentration of German troops had taken place in that neighbourhood. On the other hand, the connexion between the British and French forces had been in no wise interrupted, and the British lines of communication from Amiens to the south, so long as the enemy was kept at a fair distance from the latter, were sufficiently protected. Paris was not so near to the Germans as it had been in 1914.

It must be admitted that the situation had been saved by the advent of the French forces, which came up to the assistance of General Gough. The fact that these were not available sooner was due to two reasons. First of all, it appears to have been assumed by the Headquarters Staff of both armies that the British Fifth Army would have held out longer than it did. Both seemed to have taken an unduly

optimistic view, considering the overwhelming strength with which the Germans attacked it and the admitted fact that the Somme and the Oise were but slight obstacles. Secondly, there was the usual failure when Allied Armics act side by side, but under different commanders; each commander is more engaged in looking after his own sphere of action than regarding that of his Ally. The French Army of reserve, which the Germans estimated at 60 divisions, was primarily intended for use on the French front. Had a portion of it been nearer to the junction line of the two armies it is quite possible that the German offensive would have been pulled up much earlier than it was.

Let us now see the view taken by neutrals and also by the Germans. The neutral press, or rather, to be accurate, the pro-German neutral press, as for example the Basler Anzeiger of March 28, while explaining that possibly a pause might now take place in the operations, remarked: "Such pauses have never been occasions for laughter to the enemy. It is therefore a feeble consolation when in London and Paris they think they can observe the slowing down or cessation of the German attack."



[French Official photograph.

FRENCH TRANSPORT IN A VILLAGE NEAR LASSIGNY.

The St. Galler Tageblatt wrote:

All the pens which are writing for the Entente are endeavouring to belittle the importance of the German offensive: that is only human nature. . . . One cannot unfortunately perceive from the comments made by the Entente papers any change in the attitude maintained by them up to the present with regard to the continuation of this most horrible of all wars. A change would be greeted by all civilized mankind as a real Easter message.

The only Easter message from the Germans was the bombardment of the Paris crèche!

The comments in some of the Dutch papers are couched in similar terms. The Tyd, on March 28, wrote:

The Germans continue their attack and proceed with tremendous dash and do not give the English and French a moment's respite. Step by step the latter are being driven back uninterruptedly. Mr. Baker's 500,000 men could have worked wonders at the present moment, but they are not there. It will probably be just the same with the 1,500,000 Americans promised later on!

The Haaysche Post of March 30 is even more effusive:

With German exactitude a German offensive broke loose nlong the whole line at the very moment which had been laid down for it mnny weeks ago by the Great Headquarters. It will take the English a long time to forget this defeat, which may certainly endanger their proud Imperialism... The torpedoing of ships announced by the Germans sufficiently explains the despair of the English and the Americans because not only were ships destroyed, but valuable cargoes also... M. Glémencean, who for a time has been withholding the English Army communiqués from the French, declared only a few days ago to a representative that he was delighted with the result of the battle. This statement sounds something like madness...

It may be remarked that it was a madness shared by Marshal Foch.

The Svenska Dagbladet of March 28, states:

The descriptions of the English war correspondents which drip with blood are entirely inventions of their own and are not worthy of discussion. Contrary *o their assurances, the English Army is shaken to its foundations.

The Christiania Dagblad said on March 29:

One cannot deny that the Germans have reaped great advantages, which are probably the forerunners of others. . . . The idea of conquest with which Germany has been reproached is her guiding star. . . . The day of reckoning is nt hand. It bears the name of Lloyd George.

The German official account up to the last days of March is even more characteristic, if in a somewhat less exalted strain than the comments of the pro-Germans. It runs as follows:* "The region west of Puisieux and Albert is the centre point of the northern fields of battle. Here the English are offering a stubborn resistance in their last fortified positions which are strengthened by reserves from the adjoining northern front. Fresh British divisions are continually storming to the counter-attack, but they are decimated under the fire of the Germans, who press forward like a battering ram. The attacking spirit of the untiring German infantry is as fresh as it was on the first day in spite of the desperate enemy resistance, the confidence in victory is boundless. On the southern part of the battlefield the army of the German Crown Prince has thrown the French back beyond Montdidier, inflicting heavy losses. This army has fought its way 36 miles in seven days. Several of the divisions which had been fighting since March 21 refused to be relieved when the offer was made to them. On March 27 near Popincourt, a great many French soldiers of the 22nd Division were captured. It had been hurried up in motor cars from the neighbourhood of Paris. They were surprised by our fine German infantry, which had worked its way forward through fields covered with thistles and broom, and were taken prisoners

^{*} This account is somewhat condensed.

almost without resistance. Farther north, the Fifth French Cavalry Division, which had trotted up for 16 miles, was repulsed soon after its arrival. The feeling among the prisoners is dejected and war-weary. They complain of bad leadership."

Further comment deals with the fighting round Arras, which began on March 28: "... It was ushered in by a short but powerful fire preparation. Out of the grey morning mist shone hundreds of are lights, as if the whole of the ground was lit by electricity. At 7.30 a.m. the Germans advanced to the assault. Without loss they gained the first high ground and secured thereby a protective position for their own artillery. Then there was a strengthening of the enemy artillery fire which did not hold up the German infantry. As early as nine o'clock the first convoys of prisoners arrived at the Divisional base. They were Scots. They admitted that their troops suffered heavily under the German fire. At 12.30 p.m. a height south-east of Tilloy was taken. An hour later the same troops took the Wood of Tilloy, which was stubbornly defended by machine-gun nests between Beaurains and Tilloy. In the afternoon 2,000 prisoners were counted from all positions. The booty in war material is large. The projected objectives were everywhere attained.

The enemy's losses were heavy. The English Army, two-thirds of which were concerned in the heavy defeat, is especially affected by the. heavy losses in killed, wounded and missing officers. Also, the number of officers who have been taken prisoners is very considerable. Thus, the 31st Division lost in 1,226 prisoners 45 officers; the 59th Division, 1,396 prisoners, 51 officers; the 51st Division, 1.574 men, 46 officers; and the 6th Division, 2,730 men, 97 officers. The cnumeration of the guns captured, up to the present (1,100 have been announced) cannot yet be definitely carried out, as many German Divisions immediately use the captured guns and shells in the battle against their former possessors. England's cry for French and American help is therefore all the more comprehensible. The heaviness of their losses compels the English at some points of the front to throw into the battle Depôt and Labour troops. The English are being badly hit not only by the loss of inestimable amounts of warlike stores, but also by the loss of heavy artillery. Three of the heaviest calibre (33 c.m.) as well as a complete howitzer battery, fell undamaged into the German hands in Holnon Wood. The English were unable to blow up those valuable guns. Further numerous heavy guns were captured near Arvillers; in the Castria Wood the



[French omeial photograph.

THE CHURCH AT LASSIGNY AT THE SIDE OF THE MAIN ROAD TO NOYON.

Germans captured a dozen 24 e.m. guns. North of Anbigny the Germans found tremendous ammunition depôts, of which the motor-tractors and motor-lorries for transporting shells are now transporting German munitions on all roads. Also many field railway locomotives and lorries are being used in the service of the German Munition reinforcements. Only a completely beaten force leaves such valuable material to the enemy."

The account then dealt with the battlefield on the south of the Somme.

structive fire frustrated this attempted attack in its early stages.

"The English and French on March 30 suffered heavy losses during their fruitless and desperate counter-thrusts, as well as from the successful continuation of the German attack. The greatness of their losses in killed, wounded and missing is apparent from the fact that whole detachments had already to be disbanded and had to be used for the completion of other units. Thus, for instance, the 12th and 14th Yorkshire and Lancashire (sic) Regiments were used for the completion of



French official photograph.

A FRENCH AMMUNITION DUMP ON THE WESTERN FRONT.

"In the region of Warfusée-Abaincourt German troops brought in 500 prisoners. including a Brigade Commander and a Regimental Commander. The booty has been increased by 100 locomotives, 500 railway trucks and a further munition depôt. After the storming of Beaucourt and Mezières on March 29 the enemy by closely massed counterattacks sought to wrest from the Germans the villages between the Somme and the Avre; they completely failed, with heavy losses. At the same time the French assembled infantry and tanks west of Montdidier for a new thrust. The most effective German dethe decimated battalions of the 93rd Brigade, * The 13th Yorkshire and Laneashire and the 11th East Laneashire Regiments had to scrvc the same purpose.* The freshly brought-up English and French divisions were again defeated in the pouring rain. Even the course of the Avre and the Doms, swollen by the rain and with their banks swamped, could not stop the German infantry attacks. The Ger-

^{*} It is interesting with regard to this statement to draw attention to a photographed copy of a captured German "morning state" belonging to the 1st Battalion. 140th Infantry Regiment, of March 22-i.e., the morrow of the first day's fighting. From this it will be seen that they too had their losses. See Chapter CCLXIII p. 63.



BRITISH GUNS CAPTURED BY THE ENEMY NEAR HAM.

mans, attacking between Montdidier and Noyon, came upon divisions which had been brought up as quickly as possible, apparently from Paris, in motor-lorries. They were again driven back towards the south and south-west and had to abandon the position which they had only just taken up. During the counterattacks on March 30 the English and French repeatedly made use of tanks, which, for the most part, were destroyed on the battlefield. On March 25 the Germans captured 10 of these. The further losses of English armoured vehicles is so far not even approximately to be estimated.

"On March 30 the English attacked the line of the Avre with considerable forces. On their troops the German artillery and machine-guns fired with destructive effect. About mid-day the German troops advanced against the wired works west of Marcelcave. In spite of the strong resistance which the enemy offered in his fort-like position he was driven-back. The enemy stormed the villages of Aubvillers and Demuin."

With regard to the capture of Montdidicr, the German account of the transaction runs as follows:

"At 10 p.m. the Germans had taken Montdidier. French soldiers who had fought unsuccessfully since the beginning of the battle
were repeatedly thrown out of the stubbornly
defended trenches. The German regiments
impetuously pursued the enemy for 7½ miles
and pressed forward even beyond Montdidier.
In the end the French retreat turned into a
disorderly flight. Rifles, cartridge belts, tin
hats were found thrown away. On the highway between Roye and Montdidier there was
a large quantity of untouched artillery munitions, including a number of shells of the
heaviest calibre. The pursuit was so rapid

that the French could not prepare the little town [Montdidier] for defence. It was therefore spared German artillery fire. It was only on the eastern edge of the town that a few shells were used to break down the short resistance. But when the German artillery fired on the height east of Montdidier, the French suffered frightful losses in the flight over the stream south-west of the town. There the corpses of the French, clad in greyblue, were lying in dense masses."

In the Norddeutsche Allgemeine Zeitung of March 27 was given an interesting account of an interview accorded by Ludendorff to a newspaper correspondent with the German Army. He said: "The great_battle has been fought



HOTEL DE VILLE OF ROYE.

and a victory has been won; what it will lead to cannot yet be said." Ludendorff acknowledged the tough resistance of the British, but remarked that still greater acknowledgment was due to what the German infantry, supported by other arms, had done. "The English thought they could rely on the use of machinery. The use of tanks and the superfluous furnishing of their method of warfare. We have taken over 2,000 machine-guns." *

The various accounts of the number of guns and prisoners taken in the fighting of April 4 varies, but on the whole the enemy appears to have claimed over 1,000 guns and a large number of machine-guns and over 75,000 prisoners. Rosner, the notorious correspondent of the Berlin *Lokalanzeiger*, wrote on the 29th with regard to the German attack and the effect on the Allies:

Their position has been shaken to its deepest foundations, and under the leadership of our Emperor and his two military palladins, together with the collective strength of the German national army, which follows these leaders with enthusiasm, we are advancing to fresh blows.

Attention has often been called in these pages to the German plan of reporting every British raid, which necessarily withdrew when its werk had been accomplished, as a defeat for our men; but it was far different when the enemy undertook similar operations. The Vossische Zeitung of March 31 stated: "When patrols reconnoitre the territory and return to their troops, the Paris writers turn this into a heroic French resistance to a desperate German advance."

One of those mythical British officers that the German correspondents could always produce was declared to have said: "Our army has been completely beaten, our leadership has completely broken down. Your German infantry is the best in the world and is by far superior to our own."

There are in some of the German accounts faint hints that, notwithstanding their successes, the end was not yet reached. The German wireless of April 2 reported that "the victorious and confident feelings of the German troops had not suffered any change by reason of the bad weather, the cold and rain which set in on March 27. Against the wet and cold they were protected by the huge quantities of booty.

consisting of coats, jackets and canvas, which they had found, while the rich lets of food stuffs, which were found everywhere piled up in the British army depôts, most advantageously supplemented their own rations. These unexpectedly large supplies have enabled many of the troops to live completely on what they find, so that their own supplies can be saved for a later period."

Dr. Max Osborn wrote in the Berliner Zeitung am Mittag of April 2 explaining the reason for the pause in the operations at the beginning of April as follows:

The enemy army communiqués employ every effort to mislead the opinion of the world.... If a temporary slowing-up occurs in the great movement, the offensive is briefly declared to have failed. The German High Command does not allow its deliberate calmness to be disturbed by these onemy distortions, ... It is exactly in order to avoid the possibility of heavy losses that the German military authorities decline any kind of hurry, and we are grateful to them for that.

The Frankfurter Zeitung of April 3 stated

the reduced speed of the German operations must be ascribed to the great technical difficulties; to the necessity of assuring supplies; to the need to allow the storm troops breathing time; and undoubtedly also to the recent heavy rainfall.

It then goes on to say: "The success of the next step, if it is to succeed, will presumably be all the greater."

According to a statement in the Berliner Tageblatt of April 2, the Chief of the Austrian General Staff, Freiherr von Arz, gave out the following opinion:—

Among other things, the wound of our enemies in the west is so deep to-day that it can never heal again. I should be telling a lie if I said that the latest German successes surprised me; of these victories I was confident. The splendid leadership of the great masters of war, Hindenburg and Ludendorff, who have known their own aim, the depth and thoroughness of the German mind, and the high moral earnestness of the German soldiers were sufficient guarantee for success to the onlooker acquainted with the circumstances. The change from trench to active warfare makes the superiority of the German Army appear still more conspicuous. When the barbed-wire defences are left some miles behind, and the manœuvres take place in the open field, then the alertness and experience of the noncommissioned officers, who have been trained by years of instruction during peace, and our thoroughly trained General Staff get their reward. Millions of fighters can be raised out of the soil, but it is not so easy to obtain even a fraction of the necessary leaders of all ranks. The facts we must keep before us when judging of the position on the western front. The German company and battalion commanders are a hundred times better than the English, and in that form an important guarantee of success.

If the German accounts of the fighting in the air were to be believed, the German aviators must be credited with a long series of successes from the day the attack began; in

^{*} Harr Herman Katsch, the war correspondent of the Tägliche Rundschau, who was probably present at the interview, improved on this statement, for he said: "The army of von Hutier recorded the capture of 2,000 machine-guns on March 27 alone."

reality, from the 21st onwards there can be no doubt that, speaking in general terms, our supremacy in the air was an assured fact. At the opening and at the end of the phase with which we have just dealt, the weather was not favourable for observation, but that did not prevent our men doing a great deal of good work whenever a slight break in the weather conditions permitted it.

During the middle period of the fighting i.e., for four days between the 23rd and the 27th, the activity in the air was very great, but our men brought valuable information back as to the concentration of German troops for attack, of which one example was on March 27, when they gave distinct and valuable information of the concentration of troops for the attack which began the next day. At night on that date points known to be of value to the enemy, junctions of roads, temporary halting places, dumping grounds for food and ammunition were mereilessly dealt with. In the neighbourhood of Bapaume and the roads leading to it, so searching was the work of our aviators that the enemy was



[Official photograph.

THE END OF A GERMAN OBSERVATION BALLOON.

and especially had the attacks on the Germans behind their front been aggressive and valuable. Hundreds of our machines made flights over the territory held by the Germans far back; their lines of communication were bombed; their advancing columns subjected to machine-gun fire. Judging from the reports of prisoners, the activity of our airmen seriously interfered with the provisioning of the German troops. There had not been so much opportunity for working with the artillery because the battle-front had been constantly fluctuating, and hence there were few counter-battery observations to be made against fixed artillery points,

forced to quit the high roads and use the country lanes and often, indeed, to send his supply eolumns across the open country, where they were not so likely to be noticed. Hundreds of bombs were let go on such areas, and, as photographs subsequently taken in the daytime proved, with disastrous effect, the wreckage being plainly shown in them. The German aeroplanes attached to the divisions to give special support to them did some good work on the opening day (see Chapter CCLXIII., page 57), but since then they had not succeeded in harming us much. To begin with, they displayed a reluctance to



*[Official photograph.
A GERMAN SCOUT AEROPLANE BROUGHT DOWN OVER OUR LINES.

leave the shelter of their own lines, nor did the results of their eollisions with our men when they did display more boldness tend to hearten them. Our aviators, who were bolder, never hesitated to attack, and many instances could be quoted in which even individual machines fearlessly engaged German flight formations and inflicted heavy loss on them. Our low-flying planes rendered the greatest service, firing on rendezvous formations, dispersing infantry coming up to the front and compelling them to seatter to seek safety, then chasing them with their machine-gun fire and inflicting heavy easualties. Naturally, this aggressive action could not be done without loss, but it is perfectly certain that the easualties to the German aeroplanes were far greater than those we suffered. We can certainly say that in these operations our airmen formed part of our battle line.

The air struggle seems to have intensified in the last days of March notwithstanding the unfavourable circumstances which very often limited the activity of our airmen, especially at night.

On March 27 and 28 the French airmen renewed their attacks on the enemy. Their low-flying machines, acting in groups, sprayed with their machine-gun fire, and dropped bombs on, the enemy's troops in the front line of battle. Other groups were directed against the areas of concentration of the enemy's infantry. Many of the machines made more than one flight, some of them up to three, and altogether they dropped about 17 tons of bombs in the Noyon-Guiscard-Ham region Many were their contests with the enemy's machines, seven of which were totally destroyed and six seriously damaged; two captive balloons were also set on fire.

On March 29–30 some five tons of bombs were dropped by the French on enemy cantonments and railway stations in the neighbourhood of St. Quentin, Guiscard and Roye, and the low-flying machines again attacked with vigour, both with machine-guns and bombs, the German troops assembling for attack and dispersed them. In these operations Italian aeroplanes took an active part and earried out with great audacity many raids over the enemy's lines.

Our own men also displayed their usual ardent capacity in carrying out destruction on the enemy. On March 29, although the low clouds and rain greatly interfered with them, they did much valuable work. A strong concentration of our air force was made on the battle-front south of the Somme, as our observers had previously reported long columns of the enemy coming up from the rear. Against

these our squadrons flew, dropped many hundred bombs and fired thousands of rounds of ammunition from their machine-guns on them.

The enemy's air forces had become a little more lively and gave our men a good opportunity of dealing with them. This was especially the case with their low-flying machines. Nine of these were brought down and two others driven down out of control, while we had only two of our machines missing. During the night, over 12 tons of bombs were dropped on Bapaume and on the roads approaching it and also on the road and villages east of Arras, in which region our observers had noted the approach of considerable reinforcements. Many hits were obtained on ammunition and commissariat dumps and on the transport. The railway lines were also damaged. All this was obtained with the loss of one only of our machines.

After mid-day on March 30 a heavy rain fell, but nevertheless our pilots continued to play an important part in the battle south of the Somme, dropping their bombs and pouring machine-gun fire, up to a late hour, on the enemy's forces. They brought in important information as to the location of hostile troops and in the northern portion of the battle-front contrived to render considerable assistance

to our artillery in ranging on various targets. In the immediate area of battle, the fighting between the low-flying machines of the two opponents was much sharper than usual. Our men brought down 12 German aeroplanes, and three others were driven down out of control, in addition to which two were shot down by our anti-aircraft guns. One hostile balloon was also destroyed by our pilots and these successes were obtained with the loss of only five of our own machines.

On March 31, the visibility being good, our artillery observation aeroplanes and balloons were enabled to do valuable work. Our aeroplanc activity was mostly south of the Somme. The enemy's movements in this area were closely watched and a large number of hostile troops and transport columns were bombed and engaged with machine-gun fire. There was not very much fighting in the air. Four of our machines were missing at the end of the day, against which may be set off four which had previously been reported as missing but which now returned. Two of the German machines were shot down and one was driven to the ground out of control. Night flying was not possible till after midnight, owing to the low clouds which stopped all observation of targets, but after that hour our bombing machines did



[Official photograph.



LOW-FLYING BRITISH AEROPLANES ATTACKING GERMAN MACHINE GUNNERS.

excellent work. Twenty-four tons of bombs were dropped on the railway stations at Douai, Cambrai, Bapanme, Rosières and Thourot and on the submarine doeks at Brnges. The transport and troops moving on the roads near Bapanme and Chaulnes were also bombed and fired on with machine-guns. All this was done without any easualty to our own men.

April 1 was much more favourable to airwork, and this allowed our men to make several long distance reconnaissances and to take many photographs. The great increase in visibility enabled the guns and aeroplane observers to maintain much more complete contact than had lately been possible, and thus our artillery were able to engage with many hostile batteries. The warfare between the low-flying aeroplanes was again active. Our machines dropped over 17 tons of bombs and fired a very large amount of machine-gun ammunition

at the enemy's infantry and other ground targets

Nor were the Germans deficient in activity. On the southern portion of our front, some of their two-seater machines came down to a low height and fired on our troops with machine-guns. In the struggle which ensued, 10 hostile aeroplanes were crashed and six others were driven down out of control. We also destroyed two hostile balloons. Another German aeroplane was brought down in our lines by infantry fire. These 19 successes were purchased with a loss of 11 of our machines. During the ensuing night our aviators were extremely active bombing the enemy's railway stations and his troops in billets and bivouacs. His transport was also liberally dealt with and many tons of bombs were dropped on Cambrai railway station and on a station south-east of Douai and on the railway south of that town. All our machines returned.

There is no doubt that the successes already gained since March 21 had roused the Germans to greater efforts. The celebrated Baron von Richthofen had been called up with his "circus," and the publications of German successes began to grow. On the 2nd we were officially informed by the Germans that, the day before, 22 enemy aeroplanes and five captive balloons were shot down. Lieutenant Kroll won his 23rd aerial victory. It will be noticed that on April 1, according to our account, we only lost four machines! First Lieutenant Friecke, with Aerial Detachment No. 30, is said to have rendered extraordinary service, carrying out long distance observations from the coast south as far as the Somme.

During the month of March the record of successes on the British front showed that British airmen (including the Royal Naval Air Service) and anti-aircraft gunners accounted for 500 German machines, of which 383 were destroyed, or captured, and 207 driven down out of control. The number we lost was 155. The French report gives the number of German aeroplanes destroyed or captured up to March 30 as 115.

The results of the air-fighting were plainly in favour of the Allies.

At this point a few comments may be made on the general course of the fighting. Seventythree German Divisions had been engaged against 42 British infantry and three cavalry Divisions. In addition to these some 10 Divisions had been used by the enemy against the French, who up to the end of the month had employed a varying number up to about 20 Divisions; but it must be remembered that during the first few days of the fighting French aid was limited. On the whole it may be said, therefore, that both the British and French fought for the greater part of the time against superior numbers, and that the disparity at the commencement was very great, probably two to one. It is quite plain that this disparity had enabled the Germans to push back the Allied troops and to make a considerable drive forward up to Amiens. The extreme point of their progress was about 35 miles. and men alike had risen to the requirements of the occasion; all had fought with a desperate and dogged courage to stop the German inroad. According to the German accounts we lost 75,000 prisoners. This is undoubtedly exaggerated, but from the very nature of the fighting and the resistance our men offered it was quite



BARON VON RICHTHOFEN, The famous German Airman.

certain that prisoners must be lost. Men in the front positions nested with their machineguns in shell craters or other excavations and who fought on to the bitter end, were certain to be taken prisoners if they were not killed. Gunners who, as they frequently did, fought their guns in the open until the Germans were aethally among them were bound to lose a large proportion of their pieces. On this head it may be well to quote the impartial evidence of General von Ardenne in the Berliner Tageblatt of March 29. He explained that "the great number of English guns captured" was due to



A DAY-BOMBING SQUADRON IN FRANCE.

Mapping out a "Stunt."

the "great self-denial with which the artillery tried to cover the English retreat. It continued firing until the enemy were within case-shot range and only then thought of its own safety." Instances are not wanting in which a battery, severely handled, but aided by Lewis guns or part of the gunner personnel with rifles, stopped a German attack at the last moment. In one instance, the attack east of Arras on March 28, a six-ineh howitzer battery was heavily shelled by the German artillery. All the gun detachments had been either killed or wounded and only one gun remained undestroyed. But the four officers of the battery, who were the only ones left standing upright, continued to work these guns until two of them were killed and the other two wounded. Guns which were fought like this must inevitably be captured, as the teams, if brought up to take them away, would most certainly be shot down. This applied to field-guns and fieldhowitzers. In the case of heavy guns which eould not be so easily manœuvred, because their rate of march would be very slow, it made them still more liable to capture. The very fact, therefore, that the British did lose a large number of guns shows clearly how they fought on to the very utmost extremity. Telegraphing on March 28, M. Clemencean stated to Mr.

Lloyd George: "Never has France more admired British valour and never has she had greater confidence in the British leaders. We are calm, strong and certain of the future." M. Edouard Helsey in the *Journal* said:—

As to our British friends, we must without delay trumpet the truth so as to scatter at once the clouds with which the enemy would like to disturb our minds. All who have seen the British in the fight agree that the British soldier has fought with a courage and a strength of soul which the sorrows of the hard retreat have in no way impaired. We are told of a British General forgetting the national phlegm so far as to fight with a rifle himself. This little ineident well shows that the British withdrawal is not due to moral weakness. . . . Our General Staff trusts them as it trusts our own men.

The Italian Prime Minister, Signor Orlando, telegraphed the following message to Mr. Lloyd George:—

We have experienced anxieties similar to yours, but if in this perhaps decisive hour we can nevertheless look to the future with a stout heart and with an unshakeable confidence shared by us in common, we owe it to your Army, which on the generous soil of France, in brotherhood of arms with their soldiers of liberty, is holding out against a terrific attack by performing prodigies of bravery and determination. . . It is the worthiest expression of the noblest courage of its people opposing the brutality inflamed by violence, a courage conscious of its strength.

I trust, Mr. Prime Minister, you will find in my words not alone the warm and friendly expression of my sentiments but that of the feelings of the whole Italian people, which, united to-day more than ever with its Allies in hope and resolution and action, greets the flower of the British nation, this magnificent army of heroes, with the profoundest sympathy and the warmest admiration.

Never had British troops fought with more doggedness than they did in this retreat; fighting all day, and sometimes all the night, tried by strenuous marches so that men would walk along in a state of semi-sleep, but with no attempt to break the ranks or loose the bonds of discipline, and always ready to turn round and counter-attack their adversaries. It must be admitted that the latter also fought well, but they too suffered from the intense and continued strain of war, and at the last there was very little "go" left on either side. But it must always be remembered that up almost to the end of the month they always had the advantage of superior numbers.

The work done by the machine gumers was of a very high order, and showed that the machine-gum corps was manued by skilful and resolute men. It was to them that walargely due the defeat of many of the attacks which the Germans made against us. Fighting as they did till the last gasp, their weapons were often eaptured, but in very many cases this capture was due to the absolute destruction of the men who had worked them.

The constant shifting from position to position naturally affected the employment of trench mortars, as the best effect cannot be got from them unless they can fire against a definitely placed enemy. But they played an effective part on many occasions, especially in defending points which had been hastily prepared for defence, and this short-range artillery weapon proved, as it had many times before, a valuable auxiliary to the more powerful weapons of the artillery proper.

Allusion has been made to the action of the cavalry. On many occasions the courageous and determined charges of small bodies restored a dangerous situation and inflicted loss on the enemy. A good example of this was seen on March 31, during the fighting between Moreuil and Hangard. British cavalry in a brilliant eounter-attack took a wood which had been previously lost. Sir Douglas Haig expressed his thanks to the Cavalry Corps Commander, saying: "I congratulate you on the good work done by the cavalry during the recent operations. Convey my eongratulations especially to the 1st and 2nd Cavalry, Divisions." The days of cavalry action in small numbers were by no means past.

The tanks were of the greatest assistance to

the British in the retreat. Largely used for eounter-attacks, they on many occasions stopped the enemy's progress. Sir Douglas Haig drew special attention to the work of the Royal Engineers during the retreat. Continuously employed on the destruction of bridge and roads, and in the repair of the latter, they had done good service. They had also been constantly employed in the firing line, and had behaved with great steadfastness and courage.

So much for the losses of the British. There. can be little doubt that the losses of the Germans were infinitely greater. All estimates show that they ran from between 30 to 50 per eent. More especially were they heavy in the first few days of the fighting. A great deal of information was got from prisoners and from "states" which were captured belonging to fifteen different divisions. In the 1st Division the average strength of the company was reduced to 40 men. The 5th Division in the fighting round Ham lost 50 per cent., and more subsequently. In the 6th Division one company lost 40 per cent. In the 12th Division the 62nd Reserve Infantry lost 800 men in the fighting on the Arras-Cambrai road. The losses of the 20th Division were about 50 per cent., and in the 26th Reserve



Official photograph.

A BIG DAY-BOMBING MACHINE AND A SMALL FIGHTING SCOUT.

Division one company was annihilated. The 41st Division lost between 40 and 50 per cent. of its strength on March 21 alone. On March 28 one company of the 29th Reserve Regiment was reduced from 159 to 63. The 88th Division lost 30 per cent. of its strength on the first day, and 40 per eent, of the remainder by March 29. The 119th Division was reduced to 40 per cent. of its fighting force, and the 28th Division to 30 per cent. One of the most striking details was that of the 1st Battalion of the 140th Regiment of the 4th Division. A eaptured memorandum showed that after the first day's fighting the 1st Company had only 2 officers, 4 non-commissioned officers and 35 men left, the 2nd Company no officers, one N.C.O. and 16 men, the 3rd Company 1 officer, 6 N.C.O.'s and 26 men, the 4th Company no officers, 4 N.C.O.'s and 17 men. Thus the total left for the whole battalion was 3 officers, 15 N.C.O.'s and 94 men.

So far as the British were concerned the fighting now died down on the old front of battle, there being nothing but a few affairs of outposts.

The German advance straight on Amiens had been brought to a full-stop, or at any rate so far hindered that the chances of a further advance in that region had been very much diminished, and it now became a question as to what would be the next German move to penetrate through the British lines and continue the western irruption.

It had been known from the middle of March that troops had been concentrated in the German lines north of the La Bassée Canal, and early in April the signs of imminent attack became more and more evident. It must not be forgotten that, although the German advance towards Amiens still remained a danger, the long projection into the Allied area was also not without risk to the enemy. Its left flank, as has been before pointed out, was always open to a French counter-stroke. It is the weak point of all salients that they are open to attacks on their flanks which if successful cut off the troops in them. Doubtless the direction of the original German attack was, on the whole, the most favourable to them, but the ground they occupied at the beginning of April was not too favourable to them because the lines of communication back to the rear passed, to a large extent, through the devastated region which had been

reduced to ruin in the Hindenburg retreat. Moreover, every day gave the British additional strength because it enabled them to improve their defences. If, therefore, the line of German advance could now be carried forward outside this pronounced salient in such a way as to give greater breadth to it, it was plainly advantageous. While the French held their position on the Oise it was impossible to broaden the salient on the south, and this left the only alternative to try the enlargement of the northern side. This might mean the abandonment for a time of the advance on Paris, but the object of parting the British from the French could still be attained by a more northerly route, aiming at Hazebrouck, which would also threaten the northern French ports, important bases for the British Army.

But here it may be remarked that if the Germans meant to continue the advance it was necessary to undertake the operation as American reinforcements soon as possible. were developing, and if the break-through was to be accomplished it became a question of doing it within a comparatively short time, or else abandoning the idea. It was no longer a case, such as arose in the early days of the campaign, when the Germans could afford to retreat from the Marne to the Aisne and halt there, because as time went on the Allies were getting stronger while they, under the strain of continuous fighting, were becoming weaker. If they were compelled to retreat it would be impossible to say where the retreat might end.

The British Army had been severely strained by the fighting since March 21. It had lost heavily in men and material. To reinforce it it had been necessary to withdraw 10 divisions from the northern portion of the line to the immediate area of fighting in front of Amiens, and these divisions could only be replaced by withdrawing those of the Third and Fifth Armies that had been recently engaged in withstanding the German offensive.* These troops had been severely handled and had only just been made up to strength by newly-arrived reinforcements, which would take some time to settle down into the efficiency required of troops to be used in battle action.

Now it is true that on the northern end of the British line the ground conditions were such that active operations against it could not well be undertaken on a large scale before

^{*} See pt. 192.

May, for in what we may call the Flanders section the water-level is so close to the surface, very often being within a foot, that shell-fire and the movements of the troops soon turned it into a sea of mud. This allowed Sir Douglas Haig to leave our trenches there comparatively weakly held, and thus enabled him to reinforce, as we have seen, the troops on his right.

The enemy's attempt to force an opening in the neighbourhood of Arras, and thus enlarge his area of operations, had been stopped could be yielded up without pressing danger, because strong lines of defence were available there (it could in part be covered by inundations), but this was not the case in the centre.

The very dry spring also facilitated the enemy's most northerly attack. This was, of course, known to Sir Douglas Haig, who was also quite well aware of the preparations made by the Germans for an offensive north of La Bassée. It was much facilitated by the excellent railway system he had available,



[New Zealand official photograph.

INFANTRY CROSSING THE YPRES CANAL.

at the end of March, and it therefore became probable that he would seek to make a fresh advance more to the north with the less ambitious view of moving against the Channel ports rather than on Paris, while if successful he would still cut off a large portion of northern France and with it probably a considerable part of the British Army. Between La Basséc and Arras-i.e., in the centre of the British line-it was necessary for us to hold on grimly, because a break-through about Vimy would have been almost as bad as one at Amiens For it would have involved the separation of our forces from the French and would have cnabled the Germans to move down on Amiens and further develop their attack on Paris. Above La Bassée a certain amount of ground

which enabled him quickly to concentrate troops for the intended movement.

There was another element which required consideration. The Portuguese divisions which were in line in the neighbourhood of Bois Grenier had been continuously in the front for a long period and needed rest, and it was arranged that they should be relieved during the first week of April, and the change was to be completed by the 10th. The line from the north of this point to the Ypres-Comines Canal was now held by the 40th, 34th, 25th, 19th and 9th Divisions, which had been brought up from the right flank, where they had been severely handled and considerably shaken. Other reinforcements had also been brought up from the right and to the greatest



THE BATTLE OF THE LYS.

extent practicable without too much denuding that portion of the line where it was still necessary to maintain a strong front to stop the still possible German advance on Amiens. Sir Douglas Haig had also arranged for the abandonment of the salient position we held north of Ypres at Passchendaelc, which could be abandoned without danger to our line on account of the physical difficulties of a German advance over the limited front available for it in this direction. The dryness of the spring acted in the enemy's favour, as it enabled him to advance up the low-lying ground of the Lys valley. Thus the Portuguese 2nd Division, the first objective of the Germans, was attacked before the relief could be earried out.

On April 7 the first opening phase of the new attack commenced. During the night the whole area from Lens on the south to Armentières on the north, a distance of 20 miles, was continuously and heavily bombarded with gas shells. During the 8th, although it did not completely cease, the severity diminished. But at 4 a.m. on April 9 it was renewed in the highest intensity with both gas and high-explosivo shells. Unfortunately there was a thick mist, and when the infantry attack commenced about 7 a.m. it was impossible to

see the enemy's troops until they were close on the line of trenches. The attack was immediately directed against the left brigade of the 2nd Portuguese Division and was quickly successful. It then developed both north and south of the point at which our line had been penetrated. A little later the 40th Division reported that an attack had been developing on their front and was being held, but that to the south of their line (where the Portuguese were) the enemy had penetrated through the defence line of machine-gun posts. The atmospheric conditions very much interfered with the order of the fight, and the communications between the different divisions seem to have been somewhat interrupted. In the course of the morning, however, it was possible to form a judgment as to the actual extent of the German attack. It extended from the La Bassée Canal to Bois Grenier, a length of about 28½ miles. Here the ground was held, from the south upwards, by the 55th Division, under Major-General H. S. Jeudwine, the 2nd Portuguese and the 40th Divisions. Between 8 and 9 o'clock the front posts of the right battalion of the 40th Division were captured, and the enemy pressed his attack northwards along the Rue Petillon and the Rue de Bois. The machinegun posts put up a fine fight against vastly superior numbers and greatly delayed the enemy's advance until all but one of their machine-guns were destroyed.

But while in parts the German advance was held, in others they had succeeded in making considerable progress. Thus at 10.15 a.m., although the headquarters of the right battalion of the 40th Division was still holding out at Petillon, German troops had already pushed through to Rouge de Bout. The pressure was continued and later on the whole division, which was attacked in front and flank, was pushed back to a line at right angles to its original position, running from Bois Grenier through Fleurbaix to Sailly-sur-la-Lys, after considerable fighting, the larger part of which fell to the right brigade. Below the 40th Division the line was held by the Portuguese and to the south of them was the 55th Division. The vigour of the German attack overwhelmed the Portugueso troops and the advance was so rapid that the arrangements made for manning the second line with British troops could only be partially earried out. The 55th Division was also heavily attacked and by 10.30 a.m.

its left brigade had been forced back from its forward position to its first line of defence. The position, therefore, was that the 40th Division had been compelled to wheel backwards on its left, the 55th Division had been thrust back on its left, while in between them the Portuguese had been driven completely back. Fortunately the 55th Division was able to hold its main defensive line and also to form on its left a defensive flank, facing north between Festubert and a strong point just south of Le Touret, where it was in connexion with the 51st Division (see post), which had come up in support. The 55th Division maintained its original position, except as just described, during the whole of the day and did not confine itself merely to the defensive; for, making several counter-strokes, it captured over 750 German prisoners. The strength of this defence was due to the determined manner in which the advanced posts held to their ground. Frequently surrounded by the advancing waves of Germans, they clung tenaciously to their posts and thus prevented any considerable development of the enemy's attack on their front. An instance is recorded which exemplifies well the desperate nature of the struggle. There was a machine-gun ensconced in a "pill-box"; the Germans



LIEUT,-GENERAL SIR A. HAMILTON
GORDON, K.C B.
Commanded the IX Corps of the Second Army.



LIEUT.-GENERAL SIR R. C. B. HAKING, K.C.B.

Commanded the XI Corps of the First Army.

surrounded it and entered the rear compartment, but the team held them up with revolver fire from the inner compartment and all the time the machine-gun kept on its fire

When it became evident that a serious attack was in progress, reserve troops were sent up to support the threatened portion of the line, These were the 51st and 50th Divisions, which had recently come up from the Somme area. The line they took up was behind Richebourg-St. Vaast and Laventie, in the position previously allotted to them in the scheme of defence. To cover their advance the 1st King Edward's Horse and the 11th Cyclist Battalion were sent on alread. These two occupied Lacouture, Vielle Chapelle and Huit Maisons. Here they put up such a strenuous resistance that the 51st and the 55th Divisions were able to come into action east of the Lawe River, between Le Touret and Estaires. The 51st Division made good connexion with the 55th Division, but the 50th Division, east of Estaires, found the Germans held the right bank of the river and could not get into touch with the 40th Division. The latter continued to be heavily attacked and its right was pushed back to the Lys and obliged early in the evening to withdraw across that river at Bae St. Maur. The remainder of the

division was compelled to give up its position about Bois Grenier, but being supported by troops of the 34th Division was enabled to take up a line eovering the approaches to Erquinghem and Armentières between Fort Rompu on the Lys and the old front line northeast of Bois Grenier. Notwithstanding the severe pressure brought to bear on them by the enemy, the division held out with great eourage. Especial mention may be made of the 12th Battalion Suffolk Regiment, which held out in Fleurbaix until the evening, though heavily attacked on three sides.

Meanwhile the Germans had heavily attacked the 51st and 50th Divisions on the east of the Lawe River and gradually pushed our troops back to it, bringing their artillery up to quite close range to support the attack. In the evening the enemy managed to effect a crossing at Estaires and Pont Riqueul, but in both eases counter-attacks drove them back again and at the close of the day the crossings were still held by us as far east as Sailly-sur-la-Lys. During the night our troops were withdrawn to the left banks of the Lawe and Lys Rivers, after considerable fighting about Pont Riqueul. The bridges of both rivers were blown up, although in some instances not completely.

When the left of the 40th Division fell back the enemy had followed elosely on its heels; the bridge at Bae St. Maur had been blown up, but by means of an emergency bridge, defended by machine-guns, the troops were withdrawn. During the late afternoon and evening the Germans pressed forward and reached Croixdu-Bae. Here they were counter-attacked by a brigade of the 25th Division and compelled to fall back, but it was not possible to clear the German infantry completely out of the village and this allowed him to come on during the night and establish himself on the north bank of the river. The next day the enemy at an early hour assaulted in force the river erossings at Lestrem and Estaires, covered by a very heavy artillery fire. The river crossings were captured and the left bank reached at both places, but determined counter-attacks made by the 50th Division thrust him back again. The Germans continued to attack Estaires in great force, and very obstinate fighting took place in the village in which great numbers were lost on both sides. Here British machine-guns had been mounted in the upper floors of the houses, and caused heavy losses to the German infantry until they were knocked out by the German artillery



[Official photograph.

PORTUGUESE INFANTRY IN FRANCE.



official ph nograph

PORTUGUESE IN THE TRENCHES.

fire. During the evening it was thought better to withdraw the 50th Division to a position previously prepared north and west of the town. On the east side of Estaires hostile infantry and artillery crossed the Lys in strength and pushed back our troops to a position north of Steenwerck. Here they were supported by fresh troops coming up and held their ground.

The segment of line held by us between Frelinghien and Hill 60 had also been the subject of heavy attacks, which commenced at 5.30 in the morning. The outpost positions of the 25th and 19th Divisions in the line north of Armentières and east of Messines were thrust back, and under the cover of the mist the enemy was enabled to move along the valleys of the Warnave and Douve Rivers and reached the flank of our position in Ploegsteert Wood and Messines, and in the afternoon the attack was extended to the north of that village as far as the banks of the Ypres-Comines Canal. In the neighbourhood of the latter the Germans stormed our forward position as far as Hollebeke. pushing back our line to the Wytschacte ridge. In the afternoon Messines was retaken by the South African Brigade of the 9th Division, which during the night cleared Wytschaete of the enemy. North of Hollebeke, where our positions crossed the Ypres-Comines Canal, the line was practically untouched, and here the 9th Division succeeded in killing great numbers of the enemy.

This advance of the Germans, which practically turned Armentières on the north, threatened our position there and made it impossible to hold on, although it had not yet been frontally attacked. But there were no further reserves available to reinforce the position here and render it more secure, and it was therefore decided to withdraw to the left bank of the Lys. The movement was commenced a little after noon and was completed by 9.30 p.m. without the enemy being able to interrupt it. All the bridges over the river were destroyed.

On April 11 the Germans renewed their attacks along the whole front and made considerable progress. Between the Lawe River and Givenchy the British held out against repeated assaults; but between Locon and Estaires, where the enemy had improved his footing of the previous evening, he continued to press westwards and northwards towards Lestrem, notwithstanding the endeavours of our troops to stop him. At Estaires the



[Official photog aph.

REAL TEA FOR THE GERMAN WOUNDED.

5th Division (which it should be remembered had been employed on the Somme theatre), being threatened on their right flank by the enemy's advance south of the Lys, were compelled, after fighting hard during the morning, to fall back in the direction of Merville. In these attacks the enemy employed large forces in close formation, and the losses inflicted on them by our rifle and machine-gun fire were very severe. But our own troops were not in sufficient numbers to hold out against the Germans' continual offensive, and as they

fell back breaks were made in their front which were gradually increased during the retreat. Through these the Germans pushed bodies of their infantry forward and at 6.15 had reached Neuf Berquin. They also advanced along the north bank of the Lys Canal and entered Merville. Here no further fresh troops were available for counter-attacks, without which it was impossible to clear the town. Our troops were therefore withdrawn behind the small stream which runs just west of the town, and this was effected in good order by the evening.



CHAPTER CCLXVIII.

FROM JERUSALEM TO DAMASCUS.

SURVEY OF OPERATIONS, DECEMBER, 1917-OCTOBER, 1918—FREEING JOPPA FROM PRESSURE—FINE WORK OF SCOTTISH TROOPS—ENEMY ATTEMPT TO RETAKE JERUSALEM—CAPTURE OF JERICHO—HEAVY FIGHTING ON SHECHEM ROAD FRONT—BRITISH OFFICERS WITH THE ARABS—THE EMIR FAISAL'S DEAD SEA CAMPAIGN—CROSSING THE JORDAN—RAID ON AMMAN—IN PRAISE OF THE LONDONERS—THE ES SALT RAID; A TURKISH SUCCESS—EVENTS AT JERUSALEM—ALLENBY SENDS TROOPS TO FRANCE—REORGANIZATION OF THE FORCE—TURCO-GERMAN ATTACK ASTRIDE THE JORDAN—THE AUTUMN OFFENSIVE—MARCH OF THE ARABS FROM AKABA—DEFEAT OF THE TURKS WEST OF THE JORDAN—BRITISH AND ARABS JOIN HANDS—TURKISH ARMY EAST OF JORDAN SURRENDERS—ENEMY ROUT COMPLETE—FALL OF DAMASCUS—THE EMIR FAISAL'S ENTRY INTO THE CITY—ARAB CLAIMS.

HE first phase of General Allenby's campaign of 1917-18 in Southern Palestine, culminating in the surrender of Jerusalem, was described in Vol. XV, Chapter CCXXVI. Little more than a fortnight later the Turks made a determined attempt to recapture the city, although they, or the Germans for them, had declared that it possessed no military value. The attack, made on December 26-27 (1917), failed completely; the British lines were pushed farther north and the security of Jerusalem assured. A few days previously the enemy had been driven from the neighbourhood of Joppa (Jaffa) and the western front of Allenby's army freed from menace. The occupation of Jericho on February 21, 1918, secured the eastern flank of the army. Transport and supply difficulties rendered, however, a continuation of operations on a large scale impossible for the time. General Allenby therefore undertook a raid on the Hedjaz railway, with the object of aiding the Arab Army under the Sherif and Emir Faisal, which in the region south and east of the Dead Sea was faced by a numerically superior body of Turks.

To carry out trans-Jordan raids it was necessary first to deny to the enemy the use of the roads and tracks leading from Judea to Vol. XVIII.—Part 228

the Jordan Valley, and thus prevent the Turks east of the river being readily reinforced. On March 8-12 operations to this end were undertaken and there was very severe fighting astride the Jerusalem-Shechem and the Jericho-Beisan roads. The Turks were driven back. but this did not debar them from sending troops across the Jordan by roads still farther The Turks were from this time, March, 1918, under the supreme command of the German general, Liman von Sanders. But having secured a sufficiently wide base for action Allenby, on March 21-22, forced a crossing of the Jordan, and thereafter fairly strong columns, though weak in artillery, pushed on to Amman, a station on the Hedjaz railway, 30 miles east by north of Jericho in a straight line. Heavy rain caused delays and gave time for the enemy to bring up reinforcements, and though a certain amount of demolition was effected on the railway near Amman the raid was not as successful as had been hoped. It had nevertheless drawn Turkish troops from the south to Amman and had given the Emir Faisal the opportunity of inflicting much damage to the enemy communications with Medina. A second trans-Jordan raid was planned by the British and an advance begun on April 30, partly in reliance on the help of an Arab tribe which in the end was not able to



THE COUNTRY BETWEEN JERUSALEM AND DAMASCUS.

do anything. The troops had to be withdrawn without achieving their object; a mounted brigade which was guarding a crossing of the Jordan above Jericho was driven back (May 1) by a force of the enemy which had crossed the river the previous night, and had to abandon nine guns.

At this period, to meet the needs of the situation in France, where the great German offensive opened on March 21, General Allenby was called upon to send a very considerable part of his force to Europe, their places being taken by Indian troops—largely untried battalions. This rendered the adoption of a

Jordan were also in flight, menaced alike by the British and by the army of the Emir Faisal. The collapse of the Turks was absolute; of a fighting force of some 110,000 Turks and 15,000 Germans over 80,000 were captured and most of the remainder killed. Damascus was entered by British and Arab troops on September 30–October 1, and the rest of Syria fell without further serious opposition, the campaign practically ending with the occupation of Aleppo on October 26.

General Allenby's army—the Egyptian Expeditionary Force was its official title -had



DRAGGING FOR GERMAN MINES ON THE PALESTINE COAST.

policy of active defence necessary, and it was not until September that General Allenby resumed the offensive. The chief event of the summer was the complete defeat of a Turco-German attack on the British lines on either side of the Jordan (July 14).

It was on September 18 that General Allenby's new campaign opened. The infantry having carried by assault the encmy positions on the coast plain, cavalry and armoured cars swept round behind the Turks, who were quickly thrown, into confusion and began a disorderly retreat. Outflanked on the east from the air by squadrons of the R.A.F. and the Australian F.C., who bombed the Turks seeking to escape by the roads leading to the Jordan, the rout of the enemy was complete by the night of September 20. A day or two later all the Turkish garrisons east of the

been divided into two main striking forces, of which one under Major-General Sir E. S. Bulfin had advanced along the coast to Joppa, the other, under Major-General Sir Philip Chetwode, had advanced to Jerusalem. The mounted troops, Ycomanry, Australian Light Horse, New Zealand Mounted Rifles and Indian Cavalry were under Major-General Sir H. Chauvel. Major-General Sir L. J. Bols was chief of staff and so remained to the close of the campaign. To Sir Louis Bols's invaluable aid General Allenby bore generous testimony. In the description of the post-Jerusalem operations Chetwode's force became the XXth Corps. It included the 53rd (Welsh) Division, the 60th (London) Division (both distinguished in the fighting which began with the attack on Beersheba), the 74th and 10th Divisions. Bulfin's force became the XXIst Corps. It included the famous 52nd (Lowland) Division which had walked the whole way from Egypt to the Promised Land, and also from Gaza to Joppa, the 54th Division, and the 75th Division. To neither corps did the capture of



A BRITISH CAMP IN THE JUDEAN HILLS.

Jerusalem afford any respite from fighting; nor to General Chauvel's force, of which a considerable section was then brigaded, dismounted, with the infantry It was, indeed, not until some days after Jerusalem had fallen that the news reached some of the solitary outposts in the Judean Hills, where the weather was both wet and bitterly cold and cases of frostbite not uncommon. But the monotony of their life was soon to be broken. General Allenby's rapid advance had brought him on the coast to the mouth of the Nahr cl Auja, three miles north of Joppa, and on the cast to a line in the hills four miles east and north of Jerusalem, astride the roads leading respectively to Jericho and Shechem (Nablus). From the Nahr el Auja to the Jerusalem positions the British line covered, rather insecurely, the main Joppa-Ramleh-Jerusalem road. The force opposing General Allenby had been split into two isolated parts. One part, that which had suffered most severely in the previous operations, had halted in the

hills overlooking Joppa and Ramleh. The other part, the remains of six battered divisions, was stationed close to the British posts around Jerusalem. On the west the lines of this part of the Turkish force extended to Suffa, from which place there was a gap of several miles between it and the Turks by the coast. The country between the wings of the enemy army was rugged and roadless, deep valleys separating bare and rocky spurs. No operations were possible here until roads fit for wheeled transport had been made. The only lateral communications possible for the dismembered sections of Djemal Pasha's force lay 30 miles to the north. Yet in one respect the Turks were well situated. Both disjointed segments retained free communication with their base and their transport worked with sufficient smoothness to enable them to be quickly reinforced from Damascus. From that



PILLAR ERECTED TO COMMEMORATE THE CROSSING OF THE NAHR EL AUJA BY THE 55th BRIGADE, DECEMBER 20-21, 1917.

city a railway ran through Gilead, crossed the Jordan at the southern end of the Sea of Galilce, and was continued to Nazareth, where headquarters were situated. Going thence south-west and passing near Samaria, the railway ran parallel to the coast. Thus the

Turkish force near Joppa had a railway service to its front lines. To reinforce the Turks about Jerusalem troops were detrained at Jeba, near Samaria, whence they marched to the front by the Shechem high road. By this route General von Falkenhayn, then the German general in virtual command of the Turkish army in Syria, at once sent reinforcements, Turkish and German (and some

and XXIst Corps to carry out certain operations designed to put eight miles between the enemy and Joppa and 10 miles between the enemy and Jerusalem. The task entrusted to the XXth Corps was accomplished with complete success. Sir Edward Bulfin's chief difficulty was the crossing of the Nahr el Auja and the capture of the high ground at Sheikh Muannis and Khurhet Hadrah overlooking that



[American Colony photo.

GENERAL ALLENBY AND STAFF AT JERUSALEM.

Austrian gunners), towards Jerusalem. He believed that by a bold stroke the Holy City might be recovered, and its recapture was desired by the Germans even more eagerly than by the Turks.

Meanwhile the position of the British force was not altogether enviable. It had yet to make secure the fruits of its great advance from the Beersheba-Gaza front. "In order to provide more effectively for the security of Jerusalem and Jaffa," wrote General Allenby, "it was essential that the line should he advanced." He accordingly ordered the XXth

river. It was decided to cross the Auja by night in rafts and small boats, and by fords. The work was entrusted to the 52nd (Lowland) Division. Preparations had to be made with great secrecy, as the Turks were very much on the alert. It was impossible to reconnoitre the enemy positions by day; one night two officers swam the river near its mouth and creeping within the enemy lines ascertained the exact position, depth and width of an important ford. The difficulties of the Scots were increased by heavy rains, which had turned the approach to the river into a dangerous

mud swamp (into which some unfortunates were buried to their armpits before being rescued). With the help, however, of a Lancashire pioneer battalion tolerable tracks to the selected crossing places were made, and all being ready the night of December 20–21 was fixed for the enterprise. On the four or five preceding nights artillery and machine-gun fire was directed against the enemy at the same hour and for the same length of time, so that on the night of the operation they might think that only the usual bombardment was in progress. This ruse succeeded, for the enemy

paddled across with muffled oars. A line, was towed behind, and this being made fast on either side of the river the rafts crossed and recrossed by handage on the rope in order that no disturbance on the surface on oven such a wild night should cause an alarm.

When the bridges of rafts had been swung and anchored, blankets and carpets were laid across them to quiet the fall of marching feet. Down by the ford there was a momentary stoppage. As the river rises and falls the ford shifts, and the high level of the water had obliterated certain guide-posts. The officer commanding the leading battalion at once went into water up to his neek to search for the ford and, finding it, led his men over in column of fours, each section of fours linking arms to prevent the swirling waters from carrying them out to sea.

Orders were that, excepting the guns and machineguns making their nightly noise, not a shot was to be



MOSQUE OF OMAR, JERUSALEM.

[Official photograph.

were taken completely by surprise. The division crossed the Auja in three columns. That on the left forded the river near its mouth, at that point four feet deep, and eaptured a position over two miles to the north. The centre and right columns crossed on rafts and rushed Sheikh Muannis and Khurbet Hadrah at the point of the bayonet, without a shot being fired. Three hundred and sixteen Turks, including two battalion commanders, and 10 machine guns were captured. Mr. W. T. Massey, the Press correspondent with the Expeditionary Force, thus describes the crossing:

The three columns got to the water's edge and, working to a wonderful time-table, the first raftload of men was fired. It speaks well for the Scots' discipline that not a single round of rifte ammunition was used by them till daylight, when, as some keen marksmen tell you, they had "some grand running-man practice." The Turks were absolutely surprised. Trenches were rushed, and the best men won with cold steel. Two officers found sleeping in a boat resisted and had to be killed, and two miles behind the river in a post near the sea the Low-landers captured the whole garrison, none of whom had the smallest idea of our approach.

In one place some Turks heing attacked with the bayonet shouted an alarm, and one of the crossings was shelled, but its position was immediately changed, and the passage over the river continued uninterrupted. At daylight all the objectives had been won and the troops were well dug in.

The next day was spent in bridge-building and by dusk the whole of the Divisional Artillery of the 52nd Division was across the river, and on the 22nd the objectives assigned



ONE OF THE BRITISH AEROPLANES IN PALESTINE.

to the XXIst Corps had been gained. On the right (east) the 54th Division had some pretty fighting in the orchards which surround Mulebbis (with its Jewish colony) and captured Rantieh, thus depriving the enemy of the use of another section of the railway. On the coast the 52nd Division, advancing two miles beyond its given objectives, occupied the little port of Arsuf, famous as the scene of a great victory by the Crusaders under Richard Cœur de Lion over the army of Saladin (September 7, 1191). In these coastal operations ships of the Royal Navy under Rear-Admiral T. Jackson, C.B., rendered effective help, while airmen aided the 54th Division by machine-gunning enemy columns at short range and by dropping two and a half tons of bombs on rolling stock, transport and troops. This success of the XXIst Corps rendered Joppa and its harbour secure, and, as General Allenby wrote, "gained elbow room for the troops covering Ludd and Ramleh and the main Joppa-Jerusalem road." Moreover, positions had been secured from which an advance along the coast might be made when opportunity arose.

Meanwhile the preparations for the operations intended to give "elbow room" to the British around Jerusalem were hindered by the persistently wet weather, and at the same time signs that the enemy intended to attack began to be noticed. Christmas Day (1917), however, passed quietly, save for the usual gunfire from the neighbourhood of the Mount of Olives

and the hills on the Shechem road. Services were held in all the churches at Jerusalem and Bethlehem, the singing of the customary Christmas hymns by choirs of soldiers being a great feature. For the first time, too, the strains of "Land of My Fathers" cchoed



GENERAL ALLENBY LEAVES JERUSALEM ON HORSEBACK.

After his formal entry on foot.

through the streets of Jerusalem in Welsh. The next night the Turks attacked, before the advance planned by General Allenby had developed.

It was at 11.30 p.m. on December 26, 1917, that the Turce-Germans launched the attack. The force employed was the Third Turkish



TERRACED HILLS AND A TURKISH TRENCH NORTH OF JERUSALEM.

Corps, composed entirely of fresh troops, who, not having been in the retreat from Beersheba and Gaza, had escaped its demoralizing effects. One division had come direct from the Caucasus. The first blow was delivered against the 60th (London) Division, whose advanced posts on either side of the Jerusalem-Shechem road were driven in. By 1.30 a.m. the next morning the division was engaged along its whole front. The London Territorials were equal to their high reputation. For eight and a half hours, with scarcely a pause between the waves of attack, the Turks flung themselves against the division's lines; at one point only did they succeed in reaching the main line of defence, and then were at once driven out by the local reserves. The heaviest fighting was for possession of Tell-el-Ful, a conspicuous hill overlooking Jerusalem. Against it attacks were made by picked bodies of Germans and Turks, and were pressed with great but unavailing gallantry, the enemy casualties being severe. Meanwhile the 20th Turkish Corps, reinforced from Jericho, had attacked the 53rd Division (which, besides Welsh, contained Cheshire, Hercford, and Home Counties troops). These attacks east of Jerusalem failed. One incident on this front is specially recorded by General Allenby. "A company of Middlesex troops was surrounded by 700 Turks supported by mountain artillery. Although without artillery support it offered a most

gallant resistance, holding out until relief came on the morning of the 28th." These Middlesex men occupied Deir ibn Obeid, finding shelter in the ruins of the old monastery (deir).

As soon as the attack on the 60th Division had developed, Sir Philip Chetwode ordered a counter-attack on the enemy right (west) wing, and this was begun at 6.30 a.m. on December 27 by the 74th and 10th Divisions. These divisions included Irish troops and dismounted yeomanry. For the moment their counterattack did not affect the position around Jerusalem, where, however, there was a lull in the fighting about 8 a.m. This lull continued till just before one o'clock, when the enemy launched another attack "of unexpected strength" against the whole front. In places the Turks reached the main line of defence. but were unable to maintain their hold. At one point the Londoners, after raking the advancing waves of the enemy with their machine-guns, sprang over their breastworks and met the Turks with the bayonet. The line was everywhere restored, and the enemy fell back. It proved to be his final effort, for by now he could no longer ignore the advance of the 74th and 10th Divisions. He was obliged to divert his reserves to meet the threat to his right flank, and the danger to Jerusalem passed. The 74th and 10th Divisions had encountered a stubborn resistance, while the character of the terrain rendered all movement slow. The rough and broken ground was boulder-strewn, providing excellent positions for machine-guns; ideal country for the delaying action the enemy fought. Moreover, in places the hills rose so precipitously—the 74th Division, having started from Beth Horon Upper, was crossing the Zeitun ridge—that the only way in which the troops could get up the terraced slopes was by men standing on each other's shoulders. Behind the front lines the reserves, dragging up the guns, had a hard job; some of the guns dangled in the air while being hauled. Notwithstanding all difficulties, by nightfall the Yeomanry and Irish had gone forward over two miles, the 74th Division reaching the eastern end of the Zeitun ridge by Beitunia, which at a height of 2,670 feet overlooks the Shechem road.

Following up his advantage, Sir Edmund Allenby on December 28 ordered a general advance, and by the evening of the 30th the enemy had been driven back to a depth varying from three miles on the west to six miles on the east, with the result, as a War Office report put it, "We now have four strong positions between the enemy and Jerusalem instead of one." On the 28th the 74th Division captured Beitunia, which, as covering the Shechem road, the enemy defended with much obstinacy; further west the 10th Division,

after some wonderful hill-climbing in face of concealed machine-gun fire, captured Kefr Shiyan, on the north side of the Ain Arik valley. On the east the 53rd Division extended its line northward, thus protecting the advance of the Londoners (with whom were some Australian dismounted troops) in the centre. These met with considerable resistance at Er Ram-the Ramah of the Old Testament, a small town closely associated with the prophet Samuel, and to which the Babylonians, after their capture of Jerusalem, brought the prophet Jeremiah. Er Ram was captured, the Turks retiring to Bireh (Becroth), the Et Tahuneh ridge just north of it, and Shab Saleh, a precipitous hill 1,000 yards south of Bireh. At all these places the enemy on the 29th fought with determination, but was driven out by the 60th Division—at Shab Saleh by a fine charge in face of heavy machine-gun fire. Throughout these two days (December 28-29) the airmen gave the infantry much help. They "not only gained valuable and timely information, but repeatedly attacked the enemy's troops and transport with bombs and machine-gun fire from low altitudes."* On the 30th the

* A few armoured cars were also used. One car which, on the 27th, was ahead of the line overturned, but the crew got away with their gun, and next day the car was recovered.



AN ARMOURED CAR AT BETHLEHEM.



A WIRE-NETTING ROAD ACROSS THE DESERT.

opposition had collapsed, the British line being pushed forward in the centre to Beitan, the Arabic form of Bethel (the House of God), this being the place where Jacob had the vision of the ladder joining earth to heaven, upon which angels ascended and descended. But almost every village captured had some Biblical or Crusading connexion, and it was noted that the line now held by the British corresponded roughly with the northern limit of the Kingdom of Judah.

In this fight the total enemy casualties were put at between 4,000 and 5,000. Nearly all their wounded and many of their dead they carried away, but over 1,000 Turkish corpses were left on the field; while 750 prisoners, including 39 officers, as well as 24 machine-guns were captured. The British casualties were under 1,000 all told. Among the prisoners taken by the Irish troops were a number of Germans. They seemed amazed to find themselves opposed by white soldiers, and declared that they had been told they would only have to fight "Indians and the scum of Egypt."

There was no further fighting of importance for the next six or seven weeks, and in the early days of January, 1918, General Allenby paid a visit to Cairo, where he discussed the difficulties of supply and transport which beset him. His base was still the Suez Canal, for Joppa and the other ports in Palestine which the British held, though useful, could not give great help, owing to their limited aecommodation and exposed positions. At least 90 per cent. of everything required had to come by the railway from Kantara across the Sinai Peninsula. The continuation of this line into Palestine and the reconstruction and

adaptation of the Turkish narrow-gauge lines from Gaza northward took time. The work was taken in hand early in November, 1917, but it was not until February, 1918, that through communication between Kantara and Jerusalem was established. Equally important was the construction of roads in the hills of Judea capable of taking wheeled traffic, and the accumulation of stores and ammunition in forward areas. All this had to be done in an exceptionally wet season and mainly with imported (Egyptian) labour. The excellent service rendered by the Egyptian Labour Corps has been noted in a previous chapter, and its work in 1918 drew a well-deserved eulogy from General Allenby. Even with the difficulties indicated overcome, General Allenby was not free to continue the main campaign, that is, the conquest of Northern Palestine and an advance into Syria proper, until he had made his right flank secure. For the time that flank was "in the air." The Northern Army of the King of the Hedjaz, under the Emir and Sherif Faisal, was east of the Dead Sea, but Turkish forces lay between the Arabs and the British right wing. A Turkish "fleet" (motor launches and armed dhows) still sailed the Dead Sea, and from its shores raiding parties were sent out. The enemy likewise held the lower Jordan and Jericho, and was able by means of the Hedjaz railway to reinforce his troops there almost at will—not quite, because of the Arab raids on the line. Troops sent by the enemy to the lower Jordan detrained at Amman (Rabbath-Ammon), once a stronghold of the Ammonites and the Philadelphia of the Ptolemies, a town 30 miles in a direct line east by north of Jericho. From this place, over

the plateau of Moab by Es Salt and by the pass at Shunet Nimrin, the Turks had built a metalled road, and at Ghoraniyeh the river was crossed by a bridge built since the beginning of the war. Obviously, General Allenby's immediate task was to secure the right flank of his army by driving the enemy across the Jordan. This General Allenby determined to do.

As has been indicated, while the Jordan Valley campaign was being planned only minor enterprises were undertaken elsewhere. The air service was, however, very active, constantly bombing the enemy communications, and in January twelve enemy machines were brought down. Early in January Borton Pasha, the Governor of Jerusalem, was compelled to resign owing to ill-health; he was succeeded by Mr. Ronald Storrs, C.M.G., Oriental Secretary to the British Agency, Cairo. Mr. Storrs proved an able governor, winning the esteem of Moslem, Jew, and Christian alike. Convinced by the result of the battle of December 26-30 that the Turks were no longer to be feared, provided by the energy of the Royal Engineers with a good water supply, connected by railway with Egypt, the citizens of Jerusalem began to recover from the apathy and despair into which they had fallen. Steps were taken by the British to relieve distress, a police force was organized and the law administered with indifferent justice to all. Facilities for trade were given and enterprising firms gained much profit from the troops in occupation; not least from the thousands of soldiers who visited the Holy Places of the city. The demand for the Scriptures among officers and men was probably unexampled in the history of an army; the agent of the Bible Society in Jerusalem, a worthy American who had at great personal risk remained in the city throughout the war, sold out his whole stock within a week. As was natural, it was the historical books of the Bible that the troops mainly studied; officers holding one or other



MR. RONALD STORRS, C.M.G. British Governor of Jerusalem.

of the "fenced cities" of Judah tried to reconstruct the campaigns of Saul and David against the Philistines—and found the task difficult.

Among the outposts (wrote a correspondent) our time of waiting was varied by patrols and raids, an occupation in which the enemy also took a hand, sometimes with success. The British posts are mostly on hill-tops where a "fort" is built of great stones, or the men lodged in caves, or in ruined buildings of Crusading or still earlier times. Generally the country is bare save



THE DESERT RAILWAY.

for patches of olive trees, but in places the ground is earpeted with crocuses, jonquils and other flowers whose names I don't know, and sweet-smelling herbs. From many of the hill stations there is nothing to be seen save tumbled hills, with deep, dark, intervening ravines, except westward, where one gets a lovely view of the Mediterranean, and from here we can make out Joppa and its orange groves [at Joppa the price of oranges was about 50 a shilling). The howls of jackals make the nights hideous. The villages are very poor, as are the people, though well disposed. Many of the able-bodied men had been carried off by the Turks before we came. At Christmas it poured with rain and the wadis were in flood. It has searcely left off raining since, and it is bitterly cold. Our battery keeps the enemy busy, and from his side of the wadi he is not idle. Indeed, his shooting is too accurate to be pleasant. They say his best gunners are Austrians. the east and the Wadi el Auja* on the north."

It was not, as far as opposition from the enemy was expected, a large enterprise, but the obstacles offered by Nature were most formidable. From the hills round Jerusalem, many of them 2,000 or more feet high, to the Jordan, which lies 1,200 ft. below the sea level—a distance of 17 miles—the descent is steep, but not continuous, being interrupted by series of ridges. The banks of the chief wadis are mostly precipitous, tributary streams flow from every direction, and from a little west of



CHANGING GUARD OUTSIDE THE CHURCH OF THE HOLY SEPULCHRE.

— was here, and told us that he had been bombing boats on the Dead Sea. It seems strange, flying hundreds of feet below the level of the sea, but Palestine is a queer country.

General Allenby's plans included the gaining of sufficient elbow room west of the Jordan to allow him later on to operate east of the Jordan. To attain this object the onemy line would have to be driven back not only in the Jordan Valley itself, but on the road to Shechem. Preparations for an advance northward being still incomplete in mid-February, General Allenby decided "to earry out the advance to the Jordan as a separate enterprise, the limits of the advance being the Jordan on

Jericho the ground falls sharply in steep eliffs to the sweltering mud flats of the Jordan Valley. "On no previous oceasion," said General Allenby, "had such difficulties of ground been encountered," and he tells of a battery of field artillery taking 36 hours to cover a distance, as the crow flies, of eight miles.

For this expedition the troops employed were the 60th and 53rd Divisions and the Australian and New Zealand Mounted Division.

^{*}The Wadi el Anja should not be confounded with the Nahr el Anja, which enters the Mediterranean a little north of Joppa, and had already been crossed by the XXIst Corps. The Wadi el Anja enters the Jordan eight miles north-east of Jeriche.



Official photograph.

A CORNER OF THE MARKET-PLACE, JERICHO.

Prisoners being brought in.

The advance began on February 19. The Londoners had previously taken over the lines east of Jerusalem, and the 53rd Division was now further north. The Londoners therefore were in the centre and the 53rd Division on the left flank. The general plan was for the Londoners to advance direct to the cliffs overlooking Jericho, while the Australians and New Zealanders were to strike south to Nebi Musa, four miles from the Dead Sea, thence turning north into the Jordan Valley. The Turks, whose force opposite the 60th and 53rd Divisions numbered some 7,000 rifles, held El Muntar, Rummon, Ras el Tawil, and other commanding heights, but all these hills were captured on the 19th, Rummon by the 53rd Division. A night attack was repulsed after sharp fighting, and the advance was continued on the 20th. Another hill, Jebel Ektief (overlooking the road of the "Good Samaritan"), was climbed and stormed, and by evening the Londoners were only four miles from the cliffs above Jericho. While this direct approach to the Jordan was being made, the Australians and New Zealanders, with the H.A.C. and Territorial field batteries brigaded with them, advancing from Bethlehem, had been much hampered not only by the difficulties of the terrain, but by the enemy. The Turks held two high hills south of Nebi Musa, and as on February 20 the mounted troops, compelled to move in single file over the rough tracks, came within range they were subjected to a heavy machine-gun fire. The two hills were nevertheless taken. The New Zealand Brigade then advanced direct on Nebi Musa, but was checked at the Wadi Mukelik-the position of the only crossing having been accurately registered by the enemy's guns. Later in the day the Australian Brigade discovered a ford over the Wadi Kumran, north of Nebi Musa, and crossing it entered the Jordan Valley and moved south so as to cut off the Turks' retreat. The enemy, however, realized his danger in time, and withdrew his garrisons both from Nebi Musa and from Jericho, retiring to the Jordan bridgehead at Ghoraniyeh. At 6 a.m. on February 21 tho New Zealanders and a battalion of the Londoners occupied Nebi Musa-which, in contradiction to the Bible record, is believed by Moslems to be the burial-place of Moses, and is held by them in much veneration.* At 8.30 the same morning the Australian Mounted Brigade cantered into Jericho (Eriha), the modern and miserable village occupying neither the exact site of the city which Joshua razed to the ground nor that rebuilt in the time of Ahab, and outside whose walls Christ restored sight to blind Bartimæus.

In retiring from Nebi Musa the Turks also abandoned Rujm el Bahr, the port on the north-west shores of the Dead Sca, setting fire to their stores and repair shops, scuttling some of their boats and fleeing in the others. In the Jordan Valley the enemy drew back to the northern bank of the Wadi el Auja. The

^{*} In the May following the annual Moslem pilgrimage from Jerusalem to Nebi Musa was made with much ceremony and with the cordial help of the British authorities.

prisoners taken during the three days numbered only 146, and the enemy casualties were probably not great, but it was a fine achievement, specially noteworthy being the manner in which both the Londoners and the mounted troops got their guns into "impossible" positions.

About a fortnight later General Allenby put into execution the second part of his plan, that is, he attacked with the object of driving the enemy sufficiently far north to render it difficult for his troops west of the Jordan to interfere with operations east of the river. Two things were necessary: (1) to secure the high ground north of the Wadi el Auja covering the approaches to the Jordan by the Roman road running north from Jericho to Beisan; (2) to advance sufficiently astride the Jerusalem-Shechem road "to deny to the enemy all tracks and roads leading to the lower Jordan Valley." To onlookers, General Allenby's action appeared to be a resumption of the main advance, an attempt to force a way through the hills to Shechem, and on this assumption there was criticism of General Allenby because he did not strike north along the coast plain. It is doubtful if the enemy Higher Command was deceived. It was at this time (March,

1918) that General von Falkenhayn, who had failed to save or to retake either Baghdad or Jerusalem, was recalled and General Liman von Sanders, who had been with the Turks at Gallipoli, put in his place, and from this period Djemal Pasha, the Vali of Syria, seems to have taken no further part in the direction of military affairs. The enemy by now was fairly well dug in along the whole west-Jordan front, and he seemed confident of his ability to hold his own.

General Allenby's scheme was for Chetwode's and Bulfin's eorps to advance, from east of the Shechem road to west of the coast railway, on a 26-mile front to a depth of seven miles. In addition there was a separate and minor advance in the Jordan Valley undertaken on the night of March 8-9 by a brigade of the 60th Division. In this minor operation the Londoners "experienced some difficulty" in crossing the Wadi el Auja in the dark, and subsequently met with considerable opposition, but by 3 p.m. on the 9th had occupied the commanding hill of Abu Tellul, and later in the day by getting across the Jericho-Beisan road attained their objective. In the main theatre the fighting was of a more arduous character. The 53rd Division was on the



THE PILGRIMAGE TO NEBI MUSA.
Pilgrims from Hebron approaching the Mosque El Aksa in Jerusalem, April 26, 1918.

right, the 74th in the centre, astride the Jerusalem-Shechem road, and the 10th Division on the left. These divisions all belonged to the XXth Corps. Next to the 10th Division was the 75th Division (XXIst Corps), and still further west, in the coast region, was the 54th Division. The greater part of the ground which now became the scene of operations was, as usual, rugged and difficult. The chief features were terraced or precipitons hills, cut transversely by deep wadis, with various higher hills, all garrisoned by the enemy, dominating the few fairly decent roads and tracks. Better country for defence could not be desired.

Sir Philip Chetwode's corps moved to the assembly positions on the night of March 8, and attacked the next morning. It found the enemy ready and obstinate, especially in the region of the Shechem road. Advance along the road itself was impossible as it was fully commanded by heights on either side. Of these heights Tell Asur (3,318 feet) was the most conspicuous.* By the evening of the 9th the 53rd Division had established itself on Tell Asur. The Turks made many attempts to recover the hill, but in vain. The divisions further west made corresponding advances. All day on the 10th and far into the night the battle continued, the enemy defending each successive ridge, while on the extreme west by Nebi Saleh the 10th Division had to meet several heavy counter-attacks. Yet by the evening of the 11th, notwithstanding the natural difficulties and the stubborn opposition of the enemy, the XXth Corps had attained the objectives set it.

The capture of Tell Asur was the work of the Middlesex men of the 53rd Division. The top and southern sides of the mountain were scored with trenches, and the Turks had many machine-guns. In face of heavy fire the Middlesex troops scaled the height and ejected the enemy from the trenches on the south, leaving the crest-line between them and the Turks. Both sides started bombing with hand grenades, but after a time the British paused. This misled the Turks, who swept over the crest towards their enemy. But met by a very hot fire they hesitated and finally fell back. The Middlesex men sprang after them, secured

the crest and held it against all later attacks. Thus from the east they commanded the Shechem road, which here by a very rocky descent entered the Wadi el Haramiyeh—the Robbers' Valley. But north of Tell Asur and little inferior to it in height was Lisaneh, crowned by a ruined twelfth-century castle



GENERAL LIMAN VON SANDERS.

German Leader with the Turkish

Army.

(hence Burj el Lisaneh—the Tower of the Tongue). Here in former times a small garrison used to be maintained to defend the pass from brigands. Lisaneh was captured by the 53rd Division after a sharp tussle. Westward of the Shechem road, on the ridges north of the Wadis el Nimr and El Jib. the fighting was equally severe:

The descent of the slopes leading down to the Wadis el Nimr and El Jib and the ascent on the far side presented great difficulties (said General Allenby). The downward slopes were exceptionally steep, almost precipitous in places. It was impossible for companies and platoons to move on a wide front. The slopes were swept by machine-gun and rifle fire, and the bottom of

^{*}Tell Asur, the Baal Hazor of the Hebrews, was the scene of one of the dramatic stories in the Old Testament—the slaying of Annon by order of his half-brother Absalom, who thus sought to avenge his sister Tamar's honour.



DOLMEN AT AMMAN.

the wadis by enfilade fire. The ascent on the far side was steeply terraced. Men had alternately to hoist and pull each other up, under fire, and finally to expel the enemy from the summits in hand-to-hand fighting.

In the foothills and coast sector Sir E. S. Bulfin's corps was equally successful in its advance, the given objectives being attained by March 12. The troops engaged were mainly East Anglian, South Anglian and Indian. They secured the ridge overlooking the Wadi Ballut on the north, Ras cl Ain (an old Crusader stronghold on the coast railway), and the villages of Mejdal Yaba and El Mirr. At Benet Burri, north of the Wadi Ballut, the razor-edged crest was found to be honeycombed with caves with entrances on both sides. Difficulty was experienced here, but eventually a platoon of Ghurkas worked to the rear of the ridge and bringing a Lewis gun to bear secured the surrender of the garrison of the caves.*

In these operations, apart from the advantage reaped in the coast sector, the heights overlooking Sinjil and the comparatively low country to the north-east had fallen into British hands. The prisoners taken were few—283 in all, but the XXth Corps had "gained a line with great natural facilities for defence," and General Allenby now considered himself free to carry out certain trans-Jordan raids. That the enemy suspected his design had been shown in the abandonment of the bridgehead at the Jordan by Jericho. On March 6 the Turks had withdrawn their troops across the Jordan and on the following night they blew up the bridge at Ghoraniyeh.

Sir Edmund Allenby's object in penetrating into Eastern Palestine was to cut the Hedjaz railway at Amman and thus aid the Arab army under the Emir Faisal. The importance which attached to the success of the Arab arms was not generally appreciated in Great Britain, but was thoroughly understood in Germany and in the Near East. It was desirable that the Arabs themselves should take a large share in freeing all the Arab lands held by the Turks. In previous chapters* the story of the Arab uprising and its political significance have been told in some detail, and the Emir Faisal's advance to the Dead Sea briefly chronieled. The Emir's forces were then based on Akaba (which had been captured in July, 1917) at the head of the eastern gulf

^{*}The Indian troops were greatly disliked by the Turks. A few nights previously, after rushing a hill, a party of Indians had crept unperceived through the

enemy's rear lines, blown up an obnoxious observation post and roturned unseathed.

^{*} Vol. XVII., Chaps, CCXLVIII, and CCLVI.

of the Red Sea, and his army had come under Sir Edmund Allenby's general control. The Emir had had the advantage of the help of a few British and French officers, and some were still with him. Captain George Lloyd, M.P. (Warwickshire Yeomanry)*, after the revolt of the Grand Sherif of Mecca, had helped to organize the Hedjaz army, and he was with the Emir Faisal in the operations against the Turks from Akaba. Another British officer, who was with the Arabs from near the beginning to the end of the campaign, was Colonel T. E. Lawrence, a young Arabic scholar from Oxford who turned soldier and proved a great leader of men. Col. Lawrence, who adopted the Arab costume, acted as Staff officer to the Emir Faisal, and received high honours from King Hussein. He proved such a thorn in the side of the Turks as a raider that they put a price on his head. It was he who blew up the train in which Djemal Pasha was travelling to Jerusalem in November, 1917. Part of the Imperial Camel Corps under Lieut.'-Col. R. V. Buxton, D.S.O., in civil life a well-known City man and a director of Martin's Bank, joined Faisal during 1918. At one time, too, some Australian airmen were with the Arabs. The

* In October, 1918, Capt. Lloyd was appointed Governor of Bombay.

Emir Faisal, a man of remarkable intellectual gifts, a great warrior and a great diplomatist, had accomplished a miracle; he had won all the Beduin from Mecca to Damascus to his



CAPT. GEORGE A. LLOYD, M.P.

side, notably Sherif Nasir, a good strategist and a notable figure in the northern Hedjaz, and Sheikh Auda abu Tayi "the leading spirit of the Howeitat and the finest fighting man of the desert." Faisal's force numbered 40,000, but his regular army, drawn from the Arab

Who helped to organize the Hedjaz Army.



THE EMIR FAISAL AND THE FLAG OF THE HEDJAZ.

The Emir is the tall mounted figure on horseback seen in profile.



peasantry of Syria and Mesopotamia, was only a few thousands strong. This regular army had been formed specially to help as General Allenby's right wing and to conform to orthodox tactics. It had its first engagement about the time of the battle of Beersheba, when

five hundred men with two mountain and four machine guns, holding a selected position on the heights round Petra, the "rose-red city half as old as time," held them against four Turkish infartry battalions, a cavalry regiment, half a mounted infantry regiment, six mountain guns, four field guns, and two machine-gun companies.

This quotation is from an account written by a correspondent of *The Times* who was with the Arabs and shared in their campaigus. Writing of the formation of this regular army he says:

The abandon of the early days, when each man had his camel and his little bag of flour and his rifle, was over. The force had to be organized and become responsible. No longer could Feisul [Faisal] throw himself into the thickest of the doubtful fight and by his magnetic leadership, and still more wonderful snap-shooting, turn the day in our favour. No longer could the Sherifs in glowing robes hurtle out in front of their men in heady eamol charges and bring back spolia opima in their own hands. Even our wonderful Arab bodyguards - Central Arabia camel-men-dressed in all the colours of the rainbow, only one degree less gorgeous than their eamel-trappings, had to be sacrifieed. The Sherifian army now stood on the threshold of Syria, and its work was henceforward with the townsmen and the villagers-excellent people, but not the salt of the earth, as are the Arabs of the desert.

That "the abandon of the early days" had not quite vanished is clear from the correspondent's account of Faisal's first efforts to cooperate in the Jordan Valley and Dead Sea operations:

Feisul tried (he wrote), by means of the local tribes and peasantry, to share in the British descont to the Dead Sea and Jordan Valley. Sherif Nasir again led the forlorn hope, and again Auda abu Tayi joined us. There came also some of the Berni Sakhr clan from Moab. The force moved about the desert east of Maan, uneasily for a time, and then suddenly, in the first days of January, made an attack on the third railway station north of Maan, ealled Jauf [Jauf ed Derwish]. The Turks held the station buildings strongly, and a covering knoll above it; but Nasir had with him a little mountain gun, which knocked out the first Turkish gun, and so eneouraged the Beduin that they got on their camels and again repeated the camel charge that had won us the fight for Akaba. Bullets have little immediate effect on a camel that is going at 25 miles an hour, and before the Turks could do anything the Arabs were over the trenehes and among the station buildings. The survivors of the garrison, some 200 in number, surrendered at discretion.

From Jauf Nasir marehed to Tafilo and summoned it to surrender. The Turkish garrison of 100 laughed at us; but Auda galloped up undor their bullets to the east end of the town, where the market opens on to a little green place, and in his voice. which at its loudest earries above all the tumult of a melle, called on the dogs of villagers to hand over their Turks. All the Arab world knows Auda, and while they regard him as a most

trying friend, love him as a national monument; so without more ado they surrendered themselves and their Turkish garrison.

The defeat of the Turks in their attempt to retake Tafile has already been told (Vol. XVII., Chapter CCXLVIII.), but it came near success. "The flashes of the Turkish rifles at the crest of the great gorge in which Tafile lies were very visible, and there ensued a great panic in the town. All the women screamed



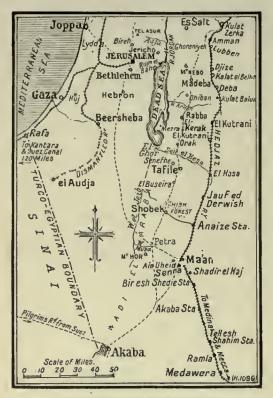
THE EMIR FAISAL.
Photographed in London in December, 1918.

with terror, and threw their household goods and children out of their houses into the streets, through which came plunging mounted Arabs, shooting busily at nothing in particular."

After their brilliant successes the Arabs were in good spirits, "and we foresaw ourselves meeting the British shortly at Jericho":

However, things went wrong. It was partly the reaction after a great effort, partly the stimulus we had given to the Turks, partly the awful weather-for just after the end of January the winter broke for good, and we had days of drenehing rain, which made the level ground one vast mud-slide, on which neither man nor camel could pass. When this cleared we had snow, and snow, and snow. The hills round Tafile are 5,000 ft. high, and open on the east to all the winds that Arabia can send, and conditions soon became impossible. Snow lay on the ground for three weeks. . . . It increased one's misery to see below one, in Wadi Arabah, the level land of the Dead Sea depression, floode'd with sunlight, and to know that down there was long grass sown with flowers, and the fresh milk and comfort of spring in the desert. The Arabs wear only a cotton shirt and a woollen cloak, winter and summer, and were altogethor unfitted for weather like this; very many of them died of the cold.

Faisal's doings had indeed "stimulated the Turks." They concentrated a considerable force, including a battalion of German infantry, at the railway stations nearest Tafile and advancing in March reoccupied Tafile, the Arabs being compelled in face of superior numbers



THE DEAD SEA REGION.

to withdraw some 15 miles to the south, to positions north of Shobek. "The situation east of the Jordan," said General Allenby, "thus presented a favourable opportunity for a raid on the enemy's communications with the Hedjaz." The raid was expected to draw the Turks from Tafile and the whole Kerak

district, and possibly to induce the enemy to weaken his garrison at Ma'an, the stronghold on the border of Arabia which was the Emir Faisal's main objective With Ma'an in Arab hands the Turks at Medina would be completely isolated

The crossing of the Jordan, the first stepin the raid on Amman, was made on March 21 (1918). It was the day the Germans opened their great offensive on the Western front, an event which soon had a marked effect on the Palestine campaign, but did not interfere with this first enterprise-since the times of the Crusades-of British troops in the Land of Moab. The force engaged was composed of the 60th (London) Division; the Australian and New Zcaland Mounted Division (still popularly though not officially known as tho-Anzac Mounted Division); an Imperial Camel Brigade; a Mounted Artillery Brigade; a heavy battery and the Light Armoured Car Brigade with the Camel Transport Corps to bring up supplies.* Near Amman the Hedjaz railway crosses a viaduct and passes through a tunnel. These were the objectives of the force. 'Viaduct and tunnel destroyed, the troops were to fall back to the Jordan Valley.

^{*} The drivers of the Camel Transport Corps were Egyptians. General Allenby wrote: "During the operations in the hills of Judea and of Moab the troops often depended for their supplies on the C.T.C. The drivers displayed steadiness under fire and devotion to duty in the face of cold and rain, which they had never experienced previously."



A TRESSEL BRIDGE BUILT BY ANZAC ENGINEERS.



JEBEL KURUNTUL, NEAR JERICHO. [Official pholograph.

The first obstacle was the Jordan itself, which in the spring is unfordable. Moreover, the exceptionally heavy rainfall had caused one of those sudden floods to which the river is liable, and just at the time fixed for the crossing it was a swollen torrent with boggy banks. The original intention was to cross at Ghoraniyeh, near the destroyed bridge, but the effort failed. Three of the strongest swimmers among the Londoners tried in vain to breast the stream, and pontoons and rafts were torn away by the swift flowing current. Four miles lower down, a little above the confluence of the river with the Dead Sea, and at the end of the Pilgrim Road to the Jordan, is Makhadet Hajlah (the Ford of the Partridges), and it was here-where the current was somewhat slower-that the crossing was effected. The waterlogged valley was tree-covered on either side, a dense undergrowth extending to the water's edge. In the darkness of the night of March 21 troops moved quietly down the Valley of Achor to the "ford" and sheltered in the undergrowth. An officer and six men, towing a rope, succeeded in swimming across and then hauled over some light rafts. The first passage was made by 1.20 a.m. on March 22, and by 7.45 the leading battalion was on the east bank. Here the ground, after a few

hundred yards, rises in tiers, and in the scrub and along the tiers considerable bodies of the enemy were posted. But so skilfully had the crossing been made that it was not until dawn that the Turks were aware of the presence of the British. From that time the troops had to be ferried over and a bridge built under a very harassing fire. Owing to this fire, and the thick scrub, only a small bridgehead could be formed-about 300 yards in length by 200 in depth. Two mountain batteries west of the Jordan helped to keep down the enemy's fire. The troops waited in a fearful moist heat (they were 1,200 feet below sea-level) for darkness to fall, when it had been resolved to widen the bridgehead.

Soon after midnight (wrote Mr. Massey) a determined, well-sustained rush was made by our troops through the thorn bushes and trees to a depth of a thousand yards, the flanks being extended till they formed a bridgehead 1,500 yards wide. Meanwhile the engineers had been constructing a steel pontoon bridge, under considerable shell and rifle fire, and we were able to get over an entire mounted regiment by dawn.

Cavalry [a New Zealand regiment] moving silently up the left bank and over the cliffs, suddenly emerged on the plain, over which they galloped towards Ghoraniyeh, riding down and capturing 70 Turks and some machineguns, and making the enemy opposite Hajlah foot it as hard as he could. As the stream became less swift bridges were built, and the Ghoraniyeh passage of the river was assured in two places.

Another excellent piece of work was down south. It was decided to threaten the Turks' flank at Hajlah, and two officers and 45 men volunteered to make a march from the Jordan's mouth straight up the left bank of the river. This little party, jocularly called "Société Anonyme Maritime," was rowed across the Dead Sea in the dark and landed east of the Jordan. They had an Arab guide with them, but he was lost in the darkness. However, the young officer pushed on and made his way towards the ford and attacked a small enemy post, taking prisoners, but, finding between him and the ford a much superior force of the enemy, he hid the party till he could effect communication with the body at Hajlah.

By 10 p.m. on the 23rd the whole of the infantry of the 60th Division and most of the mounted troops were across the Jordan. Yet much valuable time had been lost, time which enabled the enemy to bring up reinforcements to Amman. It was General Allenby's hope that the enemy would do this, but not before he had raided the railway. However, all went well at first. The Londoners, on March 24, drove the Turks from their positions at Shunet Nimrin, positions which covered the entrance to the pass leading to Es Salt. One battalion captured three guns, shooting down the teams by the fire of Lewis guns. Following hard on the heels of the enemy through the pass, then carpeted with beautiful flowers, along the wild and picturesque Wadi Shaib, a pass which might easily have been an impassable barrier, the 60th Division occupied (March 25) Es Salt, a pleasant mountain town of 15,000

inhabitants, with houses rising in terraces and abundantly supplied with water. Here were found, and rescued, several hundreds of Armenians. Here also were discovered a number of German motor lorries, and among the prisoners were members of the 703rd German Infantry Regiment. The progress of the Londoners from Es Salt to Amman, in a direct line little more than 12 miles, but 20 by the road, was painful and slow. The rain, which had ceased the day the Jordan was crossed, began again on the 27th and continued for four days. The "metalled road" was one mass of deep sticky mud; it was so soft that it was found impossible to get field guns along it, and abandoned enemy motor lorries and cars had to be destroyed as they could not be hauled out of the mud of Moab. by March 28 a brigade of the division reached the plain surrounding Amman—an oasis, strewn with the ruins of many once prosperous cities, extending two 'miles west and four miles north-west of the town. As soon as they reached the plain the Londoners went into action.

Meantime the Australian and New Zealand Mounted Division and the Imperial Camel Brigade had been crossing the mountains south of the line of the Londoners. It was anything but cavalry country, as the following extract



[Egyptian official photograph LONDON SCOTTISH MARCHING TAROUGH ES SALT.



PONTOON BRIDGE OVER THE JORDAN AT GHORANIYEH.

from General Allenby's dispatch of September 18 will show:

Early in the day [March 24] all wheeled transport had to be sent back. Even so, the tracks had been rendered so slippery by rain, which fell continuously on the 25th, that progress was slow. In many places horses had to move in single file, and had to be pulled or pushed up the slippery slopes. Naaur was reached late in the evening of March 25. The rain continued to fall on March 26. At 5 a.m. the New Zealand and Australian Brigades met at Ain es Sir. The Australians moved on to Suweileh, north of the Es Salt-Amman road, capturing 170 Turks there. Both men and horses were, however, too exhausted by their exertions to admit of more than demolition parties being sent on to the railway. On March 27 the advance was resumed. The ground favoured the enemy, the rocks and scrub on the hills affording excellent cover to his riflemen. The wadis could only be crossed at a few places, and then only in single file.

By the evening of the 27th demolition parties of New Zealanders were working south of Amman, but not at the important tunnel and viaduct. On the same day the Camel Brigade, which was in the centre, advanced direct on Amman. They met with strong opposition, and were checked 1,500 yards west of the town, while the Australians, on the left, were heavily counter-attacked. The Turkish garrison, already reinforced, numbered 4,000 rifles, and held strong positions.

On March 28, with the arrival of the Londoners a general attack was made on the enemy position. The Australians, as before,

were on the left, the brigade of the 60th Division was along the Es Salt-Amman road, with the Camel Brigade on its right. The New Zealanders attacked Hill 3,039, just south of Amman.* Fighting continued till the afternoon of the 30th. The combat, which went in favour of the Turks, is thus described by General Allenby:

Little progress was made [on March 28]. The enemy made several counter-attacks, especially against the Australians, who were forced back a short distance. On March 29 Turkish reinforcements arrived, and the counter-attacks were renewed, but without success. During the afternoon two more hattalions of the 60th Division and a battery of Royal Horse Artillery arrived after a long and arduous march.

The attack on Amman was renewed at 2 a.m. on March 30. The New Zealanders captured a portion of Hill 3,039, but were unable to drive the enemy from the northern and eastern ends. Parties of New Zealanders entered the village, but were fired on from the houses. Elsewhere the attack met with only slight success.

It was apparent that without greater artillery support further attacks could only succeed at the cost of heavy losses. Moreover, Turkish troops from Jisr ed Damieh [a bridge over the Jordan 16 miles north of the Ghoraniyeh crossing] and from the north [i.e., troops brought by rail from the Damaseus direction] had begun to make their presence felt at Es Salt. Orders were therefore issued for a withdrawal to take place during the night. This was carried out without interruption, after all the wounded had been evacuated.

All the troops engaged had done well, but the Londoners had had the hardest task and

^{*} In Palestine hills were known by their height in feet —not in metres, as in France.

won the greatest eredit. An Australian who took part in the raid wrote *:

We saw them [the Londoners] come through the mud to Amman, their packs sodden from the rain, their big boots carrying pounds of the sticky soil of Moab. Our Light Horse fellows were used up when we got to Amman and their advance across the pitilessly bare boggy slopes to the concealed Turkish positions was dangerously laboured and slow. But they had ridden to the battleground, and they went into action relatively light to the infantry. The Loudoners had come up by forced marches, extending over days and nights, across country unspeakably rough and heavy. They seemed not to have a kick remaining. But it was no time for a rost. Straight off their terrible struggle in the mud they were led on towards the enemy position, across a registered zone which the Turks had turned into a hell with artillery, machine-gun and rifle fire. We watched them go, wave after wave, now enshrouded in the smoke of the barrage, now emerging again, the thin lines still thinner, but the slow pace no slower and the direction unchanged. [It was said of the Londoners that they had a hobby of getting lost, and that the only road they knew was that which led to the enemy.] Gallant little Londoners, the great wadis swallowed them up as the roll of the machine guns . . . became more excited and sinister.

On the retreat of the British the Turks followed up, and on April 1 the rearguard was attacked by a small force, easily beaten off This was the only interference by the enemy with the retirement, although the Turkish communiqué of April 3 asserted that "reinforcements which the enemy brought up in haste were eaught under the very effective fire of our artillery, and after attacks by our cavalry were compelled to flee in disorder." By the evening of April 2 the whole force, except troops left to hold a bridgehead on the east bank, had recrossed the Jordan, bringing with them over 700 prisoners, including many Germans, as well as four guns and several machine guns taken from the Turks. With them also were some thousands of Armenians and Copts from Es Salt and other places. A third of the townsfolk of Es Salt are Christian, and the majority preferred not to stay when the British retirod.

Essad Bey, the Turkish commander, did not, however, regard the affair as ended. His first care was to reoccupy the key positions at Shunet Nimrin, where he placed a garrison of 5,000 or more men. He—or his German advisers—next undertook a rather ambitious operation designed to recover possession of the Ghoraniyeh crossing, and possibly Jericho. On April 11 simultaneous attacks were made on the Ghoraniyeh bridgehead, and, west of the Jordan, on the positions covering the Jericho-Beisan road. Pressed with considerable deter-

mination both attacks failed with heavy loss to the enemy.

West of the Jordan the enemy began about 4 a.m. shelling Musallabeh, by the Beisan road, and the line north of the Wadi el Auja. The British lines were held by the Imperial Camel Corps, who for two hours were subjected to very heavy gunfire. The Turks then advanced, but though they came on several times they were unable to reach the British positions, each successive wave being torn by cannon, machine-gun and rifle fire. Finally they gave up the attack, and were not pursued. Many dead were left in front of the Camel Corps positions. East of the Jordan, where the bridgehead was defended by a brigade of Australian Light Horse, the fighting was still more bitter. The Australians were dismounted and had dug themselves in on the mud eliffs and mounds parallel to the river, with machinegun nests and artillery support, the whole position being protected by wire The enemy, among them numbers of German infantrymen, again and again advanced, but, held up by a eoneentrated fire, failed to get within 300 yards of the wire entanglements. Outranged by the heavy artillery of the British from the west bank the foe was now caught between two fires, and could neither advance nor retire. Another brigade of Light Horse, crossing the river farther south, tried a flank attack on the assailants, who countered by throwing out machine-gun detachments, and held off the "Aussies." But under cover of night the Turks retired to Shunet Nimrin. Three hundred and sixtyseven Turkish and German dead lay unburied in front of the Australian lines, and many newly dug graves were found. The enemy taken prisoners numbered 121, a figure greater than the total British casualties in the action.

The expedition to Amman had given tho Emir Faisal his opportunity, which he had not failed to utilize, though the capture of Ma'an proved beyond his power. Tafile was reoccupied, and on April 7 Kcrak, with its memorics of Moabites and Israelites, Crusaders, and Mamelukes, was seized (see Vol. XVII., pp. 15–18). Thus the whole of the fertile region east of the Dead Sea, fell definitely into Faisal's hands—the local commander being his brother, the Emir Zeid. The main Arab force moved on towards Ma'an. The railway was cut both north and south of that place, 270 Turks and three machine guns being captured. On April 13 Senna, an enemy post two and a half

^{*} In the Kia Ora Coo-ee (June, 1918), the sprightly official magazino of the Australian and New Zealand forces in Egypt, Palestine, etc.

miles south-west of Ma'an, was captured. Four days later the Arabs raided Ma'an railway station and secured another 100 prisoners. A gallant attack was made on a Turkish position provided with concrete gun emplacements and 400 yards north of the station, but it was too strong to be carried, especially as the ammunition for the Arab artillery gave out. The Arabs then retired to Senna. Meantime another of Faisal's columns had gone farther south and destroyed over 60 miles of the railway in so thorough a fashion that at least a

First Mounted Division was being reorganized [the call to send troops to France had come] and the Londoners were not at full strength. And after the raid had started the Turks got their cavalry across the Jordan in the dark—a clever performance—and took the Australians by surprise. It is the only time in the whole campaign in which we lost guns. All the same we gave the Turks a great fright and they are very jumpy about their railway to Damascus.

General Allenby originally intended to carry out the operation in the middle of May, and a principal object was "to cut off and destroy the enemy's force at Shunet Nimrin," which since the fight of April 11 had diligently



GERMAN AND TURKISH PRISONERS.

month's hard work by large gangs of labourers would be needed to repair it. From all this it is evident that if the Amman raid had not met with the success desired, it had materially helped the Arabs. And General Allenby shortly afterwards undertook another raid, a raid in which he hoped to recapture Es Salt and to hold it until the Arabs could relieve his troops.

This second raid into Moab failed to achieve its object, but not through any lack of gallantry on the part of the force engaged.

The Turks were more enterprising and more stubborn than might have been anticipated (writes a correspondent). Then too, the affair was carried out at an awkward time and partly in reliance on help from an Arab tribe which was not given, though they were hardly to blame. Just when the raid started the strengthened its defences. But Sheikhs of the Beni Sakhr came in and said they could help provided the advance took place before May 4, by which date their supplies would be finished, and they would be obliged to disperse. They were then gathered round Madeba, east of the northern end of the Dead Sea, whence they could threaten the communications between Shunet Nimrin and Amman by the track through Ain es Sir, south of the main road by Es Salt. Sir E. Allenby therefore advanced operations by a fortnight, and they began on April 30. The plan was for the 60th Division (which was a brigade short) to advance direct to Shunet Nimrin, while mounted troops went north, and then turned east, making



[Official photograph.

AUSTRALIAN MOUNTED TROOPS IN ES SALT.

direct for Es Salt. With Es Salt occupied, and the track by Ain es Sin exposed to the attack of the Beni Sakhr, the garrison at Shunet Ninrin would be isolated. "It would be compelled to retreat in very difficult circumstances and there would be a fair chance of its being captured." Such was the plan.

In the dark hours before dawn on April 30 the Londoners climbed out of the Jordan depression, and early in the morning captured the outer works at Shunet Nimrin. The mounted troops, who had started about the same time as the Londoners, carried out the first part of their programme according to plan, and by 6 p.m. were in Es Salt, capturing 31 Germans and 317 Turks. As they began their ride the Anzaes had passed the infantry columns.

It was just after midnight (said the Australian writer already quoted). They were halted in their fours, their packs up, waiting for the order to march east across the plain to the attack on Shunet Nimrin. As our horses walked swiftly past in the darkness, regiment after regiment, and hrigade following brigade, we smothered and half choked them with the fine white clay dust of the Valley. There was no exchange of greetings. We rode by in silence. But we were thinking hard, and we thought that, although our gallop up the plain under the Turkish guns at dawn would be no joy ride, we were lucky not to be those little Cockney infantrymen. And a few hours later, as shortly before the dawn we cleared our bivouac, we heard, miles away on our right, a splutter of rifle fire, and then a wild outburst of bombing and shafts of the sound of machine-guns. The Londoners had again got home with bomb and bayonet. Marching all night, and with no artillery preparation, they had, with all their bad sense of direction, once more found "Jacko," and this time they had surprised him in his blankets. They killed 60 or 70 hefore the Turk was fully awake, and by sunrise they had sent back above 250 prisoners. And carrying their great packs and only their legs to ride upon! Then daylight exposed them, and for days they butted at successive enemy positions, flinging away their brave Cockney lives so that things might he made as easy as possible for us up at Es Salt.

The mounted troops (the Desert Mounted Corps under General Chauvel) in their ride north parallel to the Jordan soon passed the point where their friends held the opposite side of the river, and it was, therefore, necessary to guard the places where the enemy might cross to attack them in flank. Precautions had also to be taken to guard the northern front whence also the enemy might descend upon them. An Australian Light Horse Brigade was detailed for this duty. Two crossings had to be guarded, the one Jisr ed Damieh, already mentioned, the other Umm Es Shert ("Mother of the East"), between Damieh and Ghoraniyeh. The brigade took up a position astride the Damieh-Es Salt track, with patrols a little farther north along the Wadi ez Zerka (the river Jabbok), which enters the Jordan at Damieh. A detachment was also placed on high ground two miles north of Umm Es

During the night of April 30 the Third Turkish Cavalry Division and part of the 24th Division crossed the Jordan at Jisr ed Damieh unperceived, and at 7.30 a.m. (May 1) attacked the Australian Brigade. The enemy penetrated between the left of the brigade and the detachment near Umm Es Shert, and the whole brigade had to fall back. "The Horse Artillery batteries supporting this brigade, in most difficult and broken country, were obliged to abandon nine guns, which could not be 'extricated, though the detachments and horses were safely withdrawn." This bold enemy move, attributed in the Turkish communiqués to the leadership of Essad Bey, left the mounted troops at Es Salt with the track

to Umm Es Shert as their only means of communication with their base, but reinforcements sent to the detached Australian Brigade recovered the lost ground during the day, and General Allenby arranged for a combined attack on the Nimrin position—by the Londoners in front and the mounted troops at Es Salt from the north-east. This attack was to be made the next day (May 2). What happened may be told in the words of Sir E. Allenby's dispatch:

On May 2 the mounted troops in Es Salt were attacked by two Turkish battalions which had arrived from Amman accompanied by heavy guns, as well as by cavalry from the north and troops from Jisr ed Damieh. These attacks were driven off, but the force intended to attack Shunet Nimrin from the north-cast had to be weakened and was checked at El Heweij, five miles south of E: Salt. The 60th Division was also unable to make any substantial progress, in spite of determined efforts.

As the assistance of the Beni Sakhr tribe had not materialized, the Ain E; Sir track was still open to the garrison of Shunet Nimrin. Further Turkish reinforcements were known to be on their way. It was evident that the Shunet Nimrin position could not be captured without losses which I was not in a position to afford. In these circumstances I ordered the mounted troops to withdraw from E; Salt.

For the second time in five weeks the British recrossed the Jordan. Before leaving Es Salt the mounted troops destroyed the material they had captured, motor cars and lorries and 29 machine guns. The Turks followed up closely, but were held off without difficulty, and by nightfall on May 4 all the troops, save those left to guard the bridgeheads, were west of the Jordan. The "bag" of prisoners was considerable-50 officers and 892 other ranks, a good proportion being Germans. For the rest of the campaign there were no more raids over the Jordan, though the army of the Emir Faisal, which already had with it units of the Camel Corps of the Egyptian Army, was strengthened by detachments from the Imperial Camel Corps under Colonel Buxton. Faisal continued his raids on the Hedjaz railway, and during the summer of 1918, with the help of the Imperial Camel Corps, succeeded in permanently severing connexion between Ma'an and Medina. (At Medina the Turkish garrison lived almost entirely on datos.)

There had been little alteration in the positions of the opposing forces west of the Jordan in the period of the raids to Amman and Es Salt. The most notable operation was on April 9-11, when the British line was advanced in the coast sector on a 12-mile front to a maximum depth of three miles. The main attack was by West Country and Indian troops—the former captured Rafat, and Ghurkas

rushed El Kefr. The Turks had been reinforced by a division from Mesopotamia, and stiffened by a battalion of German infantry. They resisted stoutly, and on the evening of the 10th there was a strong counter-attack by a Turco-German force near the Wadi Lehham.



GENERAL SIR H. CHAUVEL. Commanded the Desert Mounted Corps.

Making their way through a grove of olivetrees the enemy penetrated the British line. A barrage was put down, reinforcements collected and the foe driven out. Other attacks were repelled after sharp hand-to-hand fighting. The enemy left over 300 dead on the field, and some Germans were among the prisoners taken.

Events of considerable and varied interest marked this period of comparative inactivity. In the latter half of March the Duke of Connaught, Grand Master of the Knights Templars and Grand Prior of the English Order of St. John of Jerusalem, game to the Holy City, and on the 19th held an investiture on Mount Zion, presenting General Allenby with the insignia of the G.C.M.G., and a Knight of Grace of the Order of St. John, and other decorations to Sir Louis Bols, Sir Philip Chetwode, Sir Edward Bulfin, Sir Henry Chauvel, and Sir Walter Campbell (Deputy Quartermaster-General) as well as medals to many officers and men. The London Irish (who had played a gallant part in the operations which led to the surrender of Jerusalem) and the Dublin Fusiliers furnished guards of honour. From their housetops the people of Jerusalem looked on at the eeremony.* Two days previously there had been another the ceremony, Dr. MacInnes, Anglican being enthroned Bishop in Jerusalem, at St. George's Church, outside the Damascus Gate, Representatives of other Protestant communities, of the Greek, Armenian, Coptic, Syriau, and Abyssinian Churches were present, as well as the Grand Rabbi and the Mufti. Rigid rules prevented the attendance of any Roman Catholic prelate, but under British protection all religions and sects worked in new found tolerance.

Shortly after these events the Zionist Commission, headed by Dr. Weizmann, arrived (April 10), and had an official and cordial welcome. There was a Jewish public holiday

* The Duke visited many parts of the front and was with the troops east of the Jordan two days after the first crossing was made.

on April 11, when on Mount Scopus-where in July the foundations of a Hebrew University were laid—Dr. Weizmann expressed the gratitude of the whole of Jewry to the British Government. Major Ormsby-Gore replied on, behalf of the Government and Major James de Rothschild spoke of "the new era of fulfilment and of hope for Jewry." An account of the work undertaken by the Zionist Commission does not fall within the scope of this chapter, but among the Jews were many whose gratitude led them to fight for the freedom of Palestine. Jewish units, recruited in England, in the United States, in Egypt, and from the Hebrew community at Joppa, were formed, and in the later phases of the campaign these "New Maccabeens" rendered good service. A fully equipped Zionist Medical Unit was also sent from America. Armenians, too, formed a battalion, which did useful work. "I am proud of the fact," wrote General Allenby to Bogos Nubar Pasha, "that your compatriots have taken an active part in the fighting."

The "comparative inactivity" which ensued after the March-April operations was not the free choice of General Allenby, although the



PRESENTATION TO THE COMMANDER-IN-CHIEF BY THE ZIONIST COMMISSION ON MAY 25, 1918.

General Allenby is seen standing prominently near the left of the photograph. On his right, behind the boy in white suit, stands Dr. Weizmann; on the General's left (the spectator's right) stand Major J. de Rothschild and the chief Rahbis.

[†] For example, at the eeremony of kindling the Holy Fire at the Church of the Holy Sepulchre the Greek and Armenian adherents had usually to be restrained from doing violence to one another by a large body of Moslem troops, but on May 4, 1918, the eeremony took place without any disturbance and without the presence of any armed guards.



DINNER TIME BEHIND THE LINES.

summer is not in Palestine the ideal campaigning season, especially in the deep gorge of the Jordan, where the heat is excessive, and dust, flies, malaria, and snakes are common plagues.* It was the situation created by the German offensive on the Western Front which disarranged the Commander-in-Chief's plans. The need for reinforcements for Europe was urgent, and General Allenby sent away the greater part of his British infantry and a considerable part of his yeomanry. The 52nd Division sailed for France in the first week of April; the 74th Division left the following week. In addition, before the end of the month nine Yeomanry regiments, five and a half siege batteries, ten British battalious, and five machine gun companies had been withdrawn from the line to be sent to Europe. In May 14 more battalions of British infantry sailed for France, while during July and the first week of August a further 10 British battalions were withdrawn. Thus while only two divisions, the 52nd and 74th, had been sent to France as complete units, all the other British Divisions had been greatly depleted. To replace his lost troops General Allenby received, first, the 3rd (Lahore) Division from Mesopotamia; second, Indian Cavalry Regiments from France (as substitutes for the

Yeomanry); third, Indian battalions direct from India. These last had not seen service during the war. They thus lacked the experience of the battalions they replaced, and as not enough Indian battalions were available six battalions were formed by withdrawing a company from 24 of the Indian battalions already in the Force. The period of reorganization was, it will be seen, spread over four months, and many of the newly arrived troops required—and received—strenuous training. The Australian and New Zealand mounted troops were the only white part of the army which was unaffected; the First Mounted Division, formerly a Yeomanry Division, was now a mixed British and Indian Division. It included Indian Lancers and the Gloucestershire Hussars, the Hertford, Lancashire, and other Yeomanry regiments. All the units named gained distinction in the advance on Damascus. General Allenby's force still remained cosmopolitan; there were with him the French and Italian detachments, the British West Indies Regiment (which gained honourable mention), Egyptian infantry, South African Field Artillery Batteries (under Colonel S. Taylor, D.S.O.), the Hong Kong-Singapore Artillery, the newly raised Jewish and Armenian contingents, and battalions of the Cape Corpsmen belonging to the coloured population of the Cape, who had already done excellent service in East Africa. But it was now very largely an Indian force.

With the dispatch of troops to France and

^{*} A highly successful campaign against malaria was waged by the medical services, but the dust was unconquerable and the heat well nigh unendurable. "The shade temperature for months," wrote one of the sufferers, "was never below 100 and frequently rose to 120."

the necessity of reorganizing his force the adoption of a policy of "active defence" became necessary. The troops, infantry and cavalry, carried out many daring raids by day as well as by night, but between May and September there were few actions of any size.* On June 8, in the coast sector, a battalion of the Black Watch and a battalion of



TURKISH DEFENCES.

the Guides captured an important observation post together with four officers and 101 men. The next incident of note, in which Irish and Indian troops cooperated, was in the centre along the Shechem road. The story may be given in General Allenby's own words:

A raid on a largor scale, carried out on August 12 by the Leinster Regiment, 54th Sikhs, and 1st Battalion 101st Grenadiers, was crowned with complete success. The objective was the enemy's defences on the El Burj-Ghurabeh ridge, north-west of Sinjil. This ridgo is some 5,000 yards in length and lies 2,000 yards in front of our line. It was held by 800 rifles and 36 machine guns. The defences consisted of strongly built sangars, protected by thick wire entanglements. The approaches to it are rocky and broken, involving a climb of 900 fcot. The position was attacked from both flanks. The enemy was surprised. His losses were heavy, and the raiders brought back 239 prisoners, including a battalion commander and 16 officers and 13 machine-guns. Great dash was shown by all the troops taking part in it.

But the most notable engagement of the summer was on July 14. Liman von Sanders was well aware that the Egyptian Expeditionary Force had lost the greater part of its British troops; he knew that reorganization must be a troublesome process; he had 15,000 German troops with him, and he may have sought, on a small scale, to circulate the achievement of the Germans in France. At any rate, on

the day before the last German offensive on the Western (or any other) front, he made his little demonstration, an attack on the British forces on either side of the Jordan. West of the river the British line formed a marked salient—the Jordan on the right, Musallabeh hill, the apex, in the centre and the slopes of Abu Tellul on the left.

It was the western side of this salient the enemy, at 3.30 a.m., attacked. The attacking force was, as to over two-thirds, German.

The enemy (wrote Sir E. Allenby) penetrated between the advanced posts and seized Abu Tellul, thus cutting off the posts farther north at El Musallabeh. At 4.30 a.m. the 1st Australian Light Horse Brigade counter-attacked. By 5 a.m. Abu Tellul had been regained. The enemy, driven against our advanced posts, which, with one oxception, had held their ground, suffored heavily. Two hundred and seventy-six Germans, including 12 officors, and 62 Turks were captured, in addition to 6 machine guns and 42 automatic rifles. One hundred wounded and many dead were left on the ground. Great credit is due to the Australians for the quickness of their counter-attack and for the determination displayed by the garrisons of the advanced posts in holding out, although surrounded.

While this fighting was in progress a Turkish force of considerable strength was observed to be concentrating to the east of the Jordan. opposite El Henu Ford, which is midway between the El Ghoraniyeh bridgehead and the Dead Sea. A cavalry brigade moved out to counterattack. Taking advantage of the ground, the cavalry arrived within charging distance before they were observed. In the charge that ensued some 90 Turks were speared, and 91, including six officers, in addition to four machine-guns, were captured. It was only by reaching ground impassable for cavalry that the remainder of the Turks effected their oscape. The Jodhpur Lancers played a distinguished part in this charge.

Ignominious failure had, attended this attack, and its result caused much friction between German and Turk, each blaming the other for leaving him in the lurch.

In the minor operations of the summer of 1918 the Indian troops were conspicuous. In the sweltering heat of the Jordan Valley, which affected them less than it did the Yeomanry, Anzaes, and Territorial Artillery also stationed there, the Indian cavalry on several occasions surprised and rode down enemy patrols and scouts, using the lance with good effect. In the hill districts, as already indicated, the Indians made themselves a terror to the Turk. One of the most daring raids was on July 13 when a party of the Guides entered the enemy trenches in the middle of the day, bringing back 15 prisoners and a machine-gun. In the same month a Pathan company of the 53rd Sikhs in a night raid killed or wounded some 100 Turks and brought in 33 prisoners and two machine-guns. the common task, if not the trivial round, of

^{*} Between the surrender of Jerusalem and May 31, 1918, the prisoners taken by the British numbered 331 officers and 6,088 other ranks.

the men in the trenches did not furnish all they asked. They did not relish sitting still for weeks to be fired at. The enemy had the exact range of the positions, and his daily bombardments were unpleasantly accurate. This good gunnery was attributed mainly to the Austrians in the Turkish ranks. Although apart from artillery fire and spasmodic air attacks the enemy, with the one exception noted, was not aggressive, there was little to indicate that his moral was markedly weakened. The débâcle which followed the initial success of General Allenby's autumn campaign was not anticipated by General Liman von Sanders, notwithstanding his subsequent assertions. But the arrogance of the Germans towards the Turks, their complete indifference as to their well-being, while securing for themselves ample rations, the best quarters, and the best transport, bred a spirit of hostility between Ottoman and Teuton, and was one of the reasons why in the end the Turks surrendered by thousands rather than fight to the last.

The enemy was expecting a new offensive by General Allenby in the autumn, and he had nearly six months in which to prepare his defences. When the attack would be made was a secret he could not guess, but as to where, the character of the terrain and the record of military history indicated that it would be along the Plain of Sharon. In this sector, therefore, the defences had been made particularly strong. The Turks appeared to have no anxiety as to their position east of the Jordan. Arab raids of late had been mainly

in the Northern Hedjaz, south of Ma'an,* and since April no British troops had left the narrow confines of the Jordan Valley. Amman, Shunet Nimrin, and other places had, it is true, been repeatedly bombed by airmen—Imperial and Australian—but air raids could be endured, and communication between Damascus and Ma'an was maintained. (Of the air raids referred to one of the most successful was on Kutrani, east of the south end of the Dead Sea, on June 16, when direct hits were made on a train full of troops, and on enemy shelters, and the station building set on fire.)

General Allenby's plans were complete in August, although some time had yet to elapse before the offensive opened. Sir Edmund Allenby attributed much of the merit of the preparations to his chief of Staff, Sir Louis Bols, but the inspiration and directing energy came from the Commander-in-Chief himself. And a distinct share in the achievement was

* During August the Emir Faisal's troops, and the Imperial Camel Corps attached to them, were very active. On the 8th Medawera, on the Hedjaz railway 65 miles south of Ma'an, was seized, 35 Turks being killed and 120 captured, together with two guns and three machine guns. It is noteworthy that the report of this raid, issued on August 14, was the first public announcement by the War Office in London that British troops were acting with the Arab forces. In July and August the Arabs farther south, under the Emirs Abdulla and Ali, had also been very enterprising. The Hedjaz Government Agency announced that in the two months ending Septembor 5 more than 300 Turks had been killed or captured, while the booty included 700 sheep destined for Medina, 80 camels and £T.5,000 in gold. Somewhat earlier (in May) the Emir Ali had rounded up and captured two large convoys east of Medina, consisting of 500 and 300 camels respectively.



AN ARMOURED CAR AMONG THE HILLS OF SAMARIA.



[Palestine official photograph

BRITISH YEOMANRY IN SYRIA.

due to the Emir Faisal, whose army was the first to move. It had by far the longest way to go, for the Arab force that marched to Damaseus started from Akaba, which was left on August 31, two and a half weeks before Allenby struck. But neither Liman von Sanders, nor Ali Verbi Pasha, the commander at Ma'an, guessed that the Arab force then moving across Edom had started to keep rendezvous with the British at Damascus. It was not until the Arabs reached the neighbourhood of Der'aa that their presence eaused any misgiving. Of their wonderful march through the heart of the desert only those who, like Colonel Lawrence, took part in it could tell—the troops went four days without passing a single watering place, and that march was followed immediately by another march of two days to the next water supply.

From Akaba the road to Damaseus by Ma'an, Amman, and Der'aa, was for the most part in enemy occupation, and as Faisal's object was to reach the Der'aa region without attracting attention he made a wide outflanking movement through the Syrian Desert. The seanty and bad water on this route would have prevented the passage of a large number of troops, but Faisal's force was small It was, however, as efficient a body as any leader could desire. There were about 500 Hedjaz Regulars, every man a proved warrior and highly disciplined, two armoured ears, four French mountain guns, a demolition party of 30 Gurkhas

and a detachment of the Egyptian Camel Corps. A few European officers with Colonel Lawrence as Chief of Staff were with Faisal. As, passing east of Ma'an, Faisal turned directly northward the tribesmen floeked to his standard, and his force grew till it was fully 10,000 strong. The Sheikha of the Ruwalla eame in with 3,000 horsemen; from the Hauran the Druse elansmen, eager to avenge unnumbered cruelties perpetrated by the hated Ottoman, joined the standard of a leader who promised them deliverance and respect for their religion,* one who was moreover an ally of the British, with whom the Druses had a traditional friendship. His was therefore a force to be reekoned with when on September 15 Faisal established himself at Umn et Taiyibe, a lavastrewn valley of the Wadi Zeidi, south-east of Der'aa. Faisal had kept to his time-table, and at once began to play havoc with the Hedjaz Railway at its most sensitive point, for Der'aa is the junction of the branch line to the Jordan and Western Palestine. By the 19th the Arabs had completely severed railway eommunication with Amman, the Palestine front, and Damascus alike—a fine achievement. Thus one part of General Allenby's plan was disclosed; the Turks hammered on the main front were not to be left an easy means of retreat eastward.

^{*} The Druse religion is a "secret faith," which in some respects approaches Christianity more nearly than Tslam.

It was while Faisal's army was engaged in severing railway communication between Damascus and Palestine that General Allenby opened his offensive. As anticipated, the principal blow was delivered in the coast sector. General Allenby's plan was as daring as it was successful. The enemy positions on the coast plain were to be assaulted by the infantry, and when a sufficient gap had been made cavalry were to pour through it, get behind the main enemy force and cut off retreat northward. East of the Jordan were the Arabs, but they could not be expected to stein the Turks should they succeed in crossing the river in strength. General Allenby, therefore, directed his right wing, stationed between the Shechem road and the Jordan, to advance and block all roads leading south-east from Samaria to the river. To prevent the Turks retreating by the route through the valley of Jezreel to the northern Jordan fords the commander-in-chief relièd on the Air Service. The airmen were to, and did, outflank the enemy in this direction. As soon as possible a mounted force was to follow up the airmen, cross the Jordan and join the Arabs near Thence British and Arabs were to advance north on Damascus. There was

still another factor to consider: the Turkish Fourth Army stationed along the Hedjaz railway from south of Ma'an to north of Amman. Against it a separate force (composed of Anzac mounted troops, the British West Indies Regiment, and a Jewish contingent) was to be sent. It was to advance from the Jordan at Ghoraniyeh by the well-trodden road to Amman, seize that place and cut off the Turks at Ma'an. Against Ma'an itself part of Faisal's army was ready to operate.

The general attack opened on the night of September 18. East of the Jerusalem-Shechem road British and Indian troops advanced and secured all the roads leading south-east from Shechem to the Jordan. The main attack, which was preceded by a short bombard. ment, was launched at 4.30 a.m. on September 19, the front assailed extending from Rafat, on the edge of the hills of Mount Ephraim, across the Plain of Sharon to the Mediterranean. The infantry, British and Indian and French, "made rapid progress, overrunning the entire hostile defensive system on this frontage by 8 a.m., and penetrating to a maximum depth of five miles before swinging eastward." Meantime the cavalry (British cavalry and Yeomanry regiments, Indian



[Official photograph.

AUSTRALIAN CAVALRY WAITING OUTSIDE SHECHEM.

cavalry and Australian Light Horse), which had been waiting their opportunity, galloped through the enemy lines, broken up for them by the infantry, and by midday had covered 19 miles, ships of the Royal giving help by shelling the coast roads. On this sector the progress of the British continued unehecked, but the right wing still met with stiff resistance in the hill country-resistance which was overcome by the evening of Septomber 20. The cavalry, crossing the Plain of Esdraelon, or Field of Armageddon-where they met with some opposition-had swept farther north, Indian Lancers and Gloucestershire Yeomanry entering Nazareth, whence General Liman von Sanders had fled in hot haste. By the noxt evening the cavalry had reached the Sea of Galilee (Lake of Tiberias) and had seized the railway and road crossings over the Jordan south of the lake.

From the moment the British cavalry got well to their rear panic had seized the Turkish hosts. With some exceptions they no longer sought to fight but simply to escape or, an alternative chosen by a large proportion, to surrender. In any case escape northwards they could not; any movement in that direction meant falling into the hands of the ubiquitous

British eavalry. Those of them who had fought stoutly on the front west of tho main Jerusalem-Shechom road tound themselves willy-nilly shepherded by the advancing infantry into the arms of the waiting eavalry. Those cast of the Jerusalem road, as well as the defeated troops in the coast sector, had but one hope left, to escape east over the Jordan. They had not reekoned with the Air Force Imperial and Australian airmen had paralysed the enemy airmen by "sitting" over their aerodroine at Jenin and bombing it so effectually that not a single Turkish-i.e., Germanmachine ventured out, and now as the Turks poured along the routes to the Jordan they wero incessantly bombed and machine-gunned, till the roads were turned into shambles. The occupation of Jisr ed Damieh on September 22 by a cavalry force, completed the discomfiture of the enemy west of the Jordan. On the 23rd the ports of Haifa and Acre were occupied, without opposition, by Yeomanry and other mounted troops.

No time was lost by General Allenby in pressing his advantage. As soon as the crossings of the Jordan south of the Sea of Galilec had been secured, the Desert Mounted Column under General Chauvel pushed forward into the



Official photograph.



[Ufficial photograph.

RESTING ON THE BANKS OF THE ABANA, WHERE THE RIVER ENTERS THE PLAIN OF DAMASCUS.

Land of Gilead, following the line of the Yarmuk Valley. It met with opposition at two points only, and on September 28 joined hands with the Emir Faisal's force in the neighbourhood of Der'aa. Farther south the British column from Ghoraniyeh had already occupied Animan and was in contact with the Turkish force from Ma'an, which, too late, was seeking to escape. And in Northern Galilee the British were hot on the heels of the enemy, who here gathered some courage and, with troops hurried from Damascus, put up a defence at Jisr Benat Yakub (the Bridge of the Daughters of Jacob), the Jordan crossing south of the Waters of Merom, traversed by the main road from Jerusalem to Damascus—the road taken by Saul of Tarsus. This crossing was forced by a brigade of Australian Light Horse on September 28, the same day which witnessed the junction of Chauvel's and Faisal's columns. From Jisr Benat Yakub, the Australians, reinforced, pushed direct towards Damascus. It became a race as to which force should get there first, for Sir Henry Chauvel and the Emir Faisal, in parallel but distinct columns, also turned their faces towards Damascus.

The remarkable achievements of Faisal's troops between September 19 and 28, together with a record of General Allenby's offensive, here

only briefly outlined, fall naturally for description with the succeeding phase of the campaign, the occupation of Beyrut, Homs, Aleppo, etc. As the surrender of Jerusalem was not the end of General Allenby's first campaign in Palestine, neither was the abandonment of Damascus by the Turks the end of his second campaign. But the occupation of Damascus, the oldest living city of the world-though it retains no monuments of great antiquitywas one of the most important landmarks of the war; it was the outward and visible sign of the downfall of Turkey, which surrendered, on terms dictated by the Allies, exactly a month after the British and Arab troops entered the city.

The Turks, who had already lost 50,000 men in prisoners and 365 guns, offered no strenuous opposition to the three columns marching on Damascus, while on September 29 the 4th Turkish Army coming from Ma'an surrendered at discretion to the British near Amman, another 10,000 men being thus added to the total of prisoners. Still another 10,000 were gathered in at the gates of Damascus on September 30, by which day the Australians from the Jisr Benat Yakub had got round to the north of the city. On the same day the Desert Column was immediately west and the

Arab force at the southern border of the city. Most of the Germans and Turks in Damascus, after a violent quarrel, in which "satisfactory, numbers on both sides lost their lives," had evacuated the place earlier in the day, taking the Aleppo road. During the night of September 30 troops of the Australian Mounted Division and the vanguard of the Emir Faisal's force both penetrated into the city, and both claimed to be the first to enter Damascus, Both were welcomed by the Damascenes, the vast majority of whom are of Arab race. The formal entry of the Allied troops was made at six o'clock in the morning of October 1, a British force and a part of the Arab army marching through the streets. Some 7,000 Turks still in Damascus, who had preferred captivity to flight, surrendered and a number of British wounded were found in hospital.

Damascus was treated by General Allenby as what it was—an Arab city which he, with Arab help, had liberated. After the formal occupation the Allied troops were withdrawn, the administration being left in the hands of the people. From a correspondent of *The Times* we get the following picture of the city immediately after its liberation:—

One of the first acts of the Arab Administration was to restore the electric lighting system in Damascus. This was in working order by the evening of October 2, although the plant had been disused for weeks under the Turks. The tramway service, stopped by the incapable Turkish Administration in 1917, was resumed on October 5. A further necessary and appropriate act was the removal, by direct order of the Arab Commander-in-Chief, of the bronze wreath which the German Emperor in 1898 had seen fit to impose upon the tomb of the knightly Saladin.

All through the afternoon of October 1 an immense number of sightseers-Druses, Beduin, and peasants from the Hauran and the neighbouring desert-came swarming into the city. In the afternoon of Scptember 30 certain unauthorized persons had endeavoured to set up a form of civil administration, and showed resentment when next morning the senior descendant, of Saladin, Shukry Pasha El Ayyubi, was appointed head of the Arab Administration of Damascus. The maliee of these people led to some disorder during the night of October 1-2, disorders made easier by the presence of strangers who had primitive ideas as to the behaviour proper when in a rich, populous eity which had just fallen before a victorious army. Consequently early in the morning of the 2nd the Arab Regulars turned out and restored order.

On October 3 the Emir Faisal made his official entry into "the splendid city which had once again passed into the power of his race."

A car had been placed at his disposal, but the wise Sherif, with a strong sense of the historical fitness of things, preferred to make his entry into Damascus much in the same way as did the Emirs of those Arabs who took Damascus in the seventeenth century, the Amorite Arabs who returned to it in the nineteenth century, the Aramean Arabs who set up their kingdom in Damascus during the fourteenth century B.C., Aretas, King of Arabia, when he occupied Damascus in 84 B.C., and Khalid Ibn Walid when he carried part of the town by storm from its Byzantine garrison A.D. 634

The Sherif, on horseback, attended by some twelve to fifteen hundred of his kinsfolk and adherents, entered Damascus at full gallop and rode furiously through the city to the accompaniment of a crackling feu de joie and shrill screams of victory—a method of procedure which undoubtedly impressed the inhabitants with the reality of his arrival far more vividly than would have an orderly procession of innumerable battalions following upon the unimpressive passage of high-powered motorears.

Later in the day Faisal gathered round him the notables of the city, and in stirring wordsdeclared his policy and his Arab faith.

I make no distinction, he said, between members of the Arab nation, of whatever ereed or religion. I am as a brother to the man who extends to me the hand of friendship, but I am impartially severe on those that revolt and disobey the orders of the Government. I shall never betray the Arabs, and I trust that the Arabic language will attain the position it deserves. It is the sufferings of the Syrian nation and the atrocities which they have suffered from the Turks which have brought about this day.

The sword of the Arabs, added the Emir, could not be sheathed until the other regions held by the Turks were freed, and, in a sentence significant of the claims of his race, he included Aleppo in "the Arabian country." Some few weeks later the Emir left Syria on a visit to France and England, his purpose being to lay the Arab claims before the Peace Conference. Before he reached Europe not only had the Holy Land been completely liberated, but the Turks had been driven from the whole of Syria and had agreed to surrender the places they still held-notably Medina-in the Arabic Vilayets. None knew better than the Emir Faisal how greatly General Allenby and his army had contributed to this triumph of the Arab cause.



CHAPTER CCLXIX.

AMERICA'S SHIPBUILDING CRUSADE.

AMERICAN MERCANTILE MARINE BEFORE THE WAR—TONNAGE DOUBLED BEFORE DECEMBER, 1918

—The Output for 1918—Number of Shipyards Increased—Creation of Emergency Fleet Corporation—Extent of Shipbuilding Programme—Cost—British and Norwegian Contracts—Requisitioning of Tonnage—Training of Unskilled Workers—Services of Lloyd's Register—American Bureau for Classification—Mr. Schwab as Director-General—Work of Mr. Piez and Dr. Eaton—Hog Island Scheme—Submarine Boat Corporation—The Harriman Fabricating Plant—Origin of Ship Fabrication—Steel Corporation's Enterprise—Yards on the Delaware—Baltimore and Boston Plants—Pacific Coast—Independence Day Launchings—The Steel Problem—New Yards in Southern California—Seattle—Wooden Shipbuilding—Ocean Vessels Built on the Lakes—The Steamer Crawl Keys—A Great Achievement.

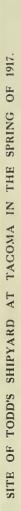
N an earlier chapter describing the first year of the United States at war (Chapter CCXLIV) a brief account was given of the beginnings of the great American war shipbuilding effort. This enterprise was so extraordinary that it merits a special description; and the present chapter, which opens with some striking statistics, includes accounts of the methods by which a great shipbuilding crusade was inaugurated and maintained at fever heat during most of 1918, and of the shipyards at the various centres.

The United States was not a maritime nation, and what she set out to do was to build a great mercantile marine within the space of a few months. On July 1, 1916, there was under the American flag a total deadweight tonnage of 2,412,000 tons, of which approximately 80 per cent. was employed in coastwise and Great Lake trade. From the beginning of August, 1917, when the first vessels were delivered to the Emergency Fleet Corporation, to the end of November, 1918, about 2,436,000 tons of steel shipping were delivered, or more Vol. XVIII.—Part 229

than the total tonnage owned in 1916, while, including wood and composite vessels, the amount completed was 2,794,000 tons. In the year ended July 1, 1915, the shipyards in the United States built 186,700 deadweight tons of steel vessels of over 1,500 tons deadweight, whereas in the month of May, 1918, the tonnage produced was greater by 53,000 tons than that built in the whole of 1915.

The production for May, 1918, was the beginning of a greatly increased output, since new yards which had been built were then coming into action, and the monthly output advanced to more than 300,000 tons in October, 1918. There was a further advance in November. For the eleven months ended November, 1918, the total number of vessels built was 495, and the carrying capacity was 2,795,000 tons. It was thus clear that the total output for 1918 would considerably exceed 3,000,000 tons deadweight. The American authorities, on the basis, presumably, that the ships were mainly designed for the carriage of cargo, were in the habit of calculating in deadweight.

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whereas the British practice was to measure in gross tonnage. Without entering into a technical explanation of the two forms of measurement, it may be assumed, for the present purpose, that gross tonnago represents about 60 per cent. of deadweight tonnage. On this basis 3,000,000 tons of deadweight tonnage, a total which was at least produced by the United States in 1918, corresponded to 1,800,000 gross tons—curiously enough the estimate of the maximum production of merchant tonnage by the United Kingdom in 1918 made by the First Lord of the Admiralty in March, 1918. This figure, for various reasons which were put forward by the authorities, was not achieved in the United Kingdom, and the United States had the distinction of easily leading tho world in the production of mcreantile tonnage. This was a truly remarkable achievement when it is remembered that the United States had little experience of shipbuilding, and had to build a great many new yards.

When the United States entered the war there were 37 steel shipyards in the country. By the summer of 1918 the number had been increased to 72, and the capacity of the old yards had been increased from 162 slipways to 195. As compared with 24 wooden shipyards in 1916, there were 80 two years later. In all, there were 162 shiphuilding plants in the United States in 1918, of which 118 were practically completed. Fifty-three new yards were constructed after the United States declared war, and there was a total of 819 slipways in the United States, of which 751 were devoted to mercantile tomage for the Emergency Fleet Corporation.

During the few years preceding the European War there had been in progress a movement for a considerable mercantile marine, but the war provided the motive for this extraordinary development of shipbuilding. To carry out the vast programme of construction the Shipping Board was authorized by Act of Parliament to create the Emergency Fleet Corporation, with a capital stock of \$50,000,000 (£10,000,000), an undortaking which was organized in April, 1917, under the Laws of the District of Columbia.

The programme provided for the building of 1,856 ships, including passenger, cargo, refrigerated and oil tank vessels, of from 5,000 to 12,000 tons deadweight, with an aggregate deadweight tonnage of 13,000,000 tons. Besides

these vessels, steel, wood and concrete tugs and barges building for, or contracted for, the Government amounted to a total deadweight tonnage of 850,000. In addition to the vessels to be built to the order of the Emergency Flect Corporation, there were 245 vessels then under construction for American and foreign owners, averaging 7,000 tons each and representing 1,715,000 tons. These, which were subsequently requisitioned by the United States

wegian owners. One or two British owners saw the possibility of securing tonnage in the United States which could not be secured at home; chief of them was Mr. Allan Hughes, whose companies were associated with the P. & O., and it was on his behalf that Mr. James Esplen, a British naval architect, visited the United States. On the formation of the Ministry of Shipping at the end of 1916 Mr. Esplen's services were requisitioned by Sir Joseph



BUSY SCENE IN A PACIFIC COAST SHIPYARD.

Government, gave a total number of 2,101 vessels, exclusive of tugs and barges, with a tonnage of 14,715,000 tons, for the Emergency Fleet Corporation. The cost of completing the programme in 1918, 1919 and 1920 was estimated at \$5,000,000,000 (£1,000,000,000). The expenditure of this vast sum was to provide a merchant fleet of 25,000,000 tons, equivalent to 15,000,000 tons gross, and almost precisely the same figure as the total amount of the world's morchant tonnage lost through enemy and marine risks during the war. It compared with 21,000,000 tons gross owned in the British Empire before the war. In the early months of the war a fine new start was given to American shipbuilding by British and NorMaclay, the Shipping Controller, and in conjunction with Mr. Ashley Sparkes, of the Cunard Line, contracts were placed for a largo number of vessels in the name of the Cunard Company, but in reality for the British Government. By an Executive order of July 11, 1917, all the steel vessels under construction of more than 2,500 tons deadweight were requisitioned, and the United States Government thereby became possessed of 413 ships in various stages of construction, representing 2,937,000 tons. These ships accounted for the great majority of the deliveries to the Emergency Fleet Corporation until the summer of 1918. The builders throughout the country freely acknowledged the great assistance and encouragement



GROUP AT THE DRIVING OF THE FIRST RIVET IN THE KEEL OF A 10,000-TON OIL TANKER, AT THE MOORE YARD, CALIFORNIA.

The river was driven by Mr. Schwab, who can be seen in the centre of the photograph with Mr. Piez and Mr. George W. Dickie, the Emergency Fleet District Representative.

they had received from these contracts, and spoke in gratifying terms of the way in which the business had been placed.

Throughout 1917 and 1918 the American firms were repeatedly urged by British statesmen to build tonnage to replace that which was being destroyed by enemy action. In the spring and summer of 1917 the crisis at sea was acute, and the efforts which the American people were making were extremely encouraging to the Allies, while the effect on the moral of the enemy peoples of the accounts of what the United States was accomplishing must have been serious. Mr. Balfour's Mission in the spring of 1917 asked for the construction of 6,000,000 tons deadweight by the end of 1918, a total which it later became clear was impracticable of achievement. There were delays and discussions in the early days during which a good deal of time was spent, and these difficulties culminated in July, 1917, in the dismissal of the two men who were then responsible for the shipbuilding programme. Mr. Edward N. Hurley was now appointed Chairman of the Shipping Board. and a fresh beginning made. To those who knew the enormons amount of spade work

which had to be done, the wonder at the end of 1918 was not that the original programme failed to be realized, but that it was possible to build half the amount. Yards were constructed out of morasses, slipways had to be built, machinery had to be supplied by firms which had never undertaken such work before, steel mills had to be adapted to the rolling of ship plates, stationary engine works to the building of marine engines, and new engine and boiler shops built, and last, but not least, men had to be taught the rudiments of shipbuilding.

On July 1, 1917, there were not quite 45,000 men in the shipyards of the country; within a year the number had been raised to 300,000, while there were 250,000 men engaged in the allied trades. The vast increment was composed of men who knew nothing of shipbuilding, and their training, facilitated though it was by the use of the most modern labour-saving devices and pneumatic tools, was one of the fine outstanding features of the shipbuilding effort. The course adopted was to train skilled mechanics to learn shipbuilding in order that they might become instructors to the "green hands" at the training schools insti-

tuted at all the important shipyards. The whole achievement of building the new yards and producing so large an amount of tonnage within so short a space of time, was only made possible by inaugurating a great crusade in which the whole nation was inspired to take a personal and direct interest in the great undertaking. This crusade received much of its driving force from the eloquence of Mr. Edward N. Hurley, the Chairman of the Shipping Board, and the vigour with which it was maintained was much increased when, through the instrumentality of Mr. Hurley and at the direct request of President Wilson, Mr. Charles M. Sehwab became, in the spring of 1918, the Director-General of the Emergency Flect Corporation.

In allotting credit for what is accomplished in a great undertaking it is easy to overlook the services of many who contributed to its success. All interested in American shipbuilding would wish the assistance given by Lloyd's Register to be acknowledged. Men highly trained in the British shipyards and then by the Register itself in the United Kingdom, were sent to the United States and established at all the leading centres. Their assistance was frankly and generously acknowledged by builders throughout the country. It was only natural that the cooperation should be close, since the British and American peoples were

fighting side by side and resources of all kinds were pooled, as in the instance of the vast amount of British tonnage diverted from every sea for the transport of the American troops. The ingenuity and adaptability of the American builders, coupled with the long experience and training of the Lloyd's surveyors, made a strong combination. On the one hand, the American builders respected the trained minds of the surveyors, and the latter admired the enthusiasm and energy of the American business men and backed it to the utmost of their ability. No British shipping authority was better liked among the American shipbuilders than Mr. James French, the Chief Surveyor of Lloyd's in the United States, who set a splendid example of happy and untiring service to the surveyors in the yards throughout the country. The value of his services was assessed when he was asked to undertake a mission on behalf of the Shipping Board to Japan, where a number of ships were building for the United States Government, work which he gladly undertook, although it meant his absence from the United States when his organizing abilities were urgently, needed. A strong and not unnatural movement was started to encourage the growth of the American Bureau for the classification of ships. Much progress was made by this body, which received every assistance from the



ELECTRIC CONVEYOR CARRYING TIMBER, GRAY'S HARBOUR MOTORSHIP CORPORATION.

Government, but naturally it had not had the experience of the older undertaking.

In the following table, which was prepared by the Statistical Division of the American Shipping Mission, is set out the number



THE HON, EDWARD N. HURLEY, Chairman of the U.S. Shipping Board.

of vessels and the quantity of tonnage completed in the period from August, 1917, to December 31, and then the numbers and totals for each month to the end of November, 1918:

Statistical Division on a telegram received from the Shipping Board. A striking fact is that in spite of a large amount of tonnage completed during the first ten months of the year there were at the end of October 5,000,000 tons deadweight, equivalent to 3,000,000 tons gross, under construction. In a prophetic speech Mr. Charles Piez stated that 8,000,000 tons deadweight should be completed during 1919.

STATEMENT OF SEAGOING STEAM MERCHANT VESSELS UNDER CONSTRUCTION FOR THE EMERGENCY FLEET CORPORATION DURINO OCTOBER, 1918.

	Number of Vessels.	Deedweight Tonnag
On stocks at beginning of month Keels laid during month Launched during month On stocks at end of month	690 141 80 751	3,469,503 687,291 400,375 3,756,419
Launched, but not completed at beginning of month Launched during month Completed during month Launched, but not completed at end of month	271 80 75	1,327,405 400,375 391,100 1,336,680
Total under construction: At beginning of month At end of month	961 1,027	4,796,908 5,093,099

The conclusion of the Armistice, to which the present chapter brings the history of the American shipbuilding crusade, naturally meant an easing of the effort, but at a conference of shipbuilders held at Washington in the middle of November and attended by the great shipping leaders it was announced that the shipbuilding programme would be continued. The programme, Mr. Howard Coonley, a Vice-President of the Emergency Fleet Corporation, announced,

Completion of Vessels, Classified by Material, for the Emergency Fleet Corporation from August, 1917.

To End of November, 1918.

\$5 Per 15				Steel.		Wood.		Composite.		. Total.	
,	Month.	•		No.	Deadweight.	No.	Deadweight.	No.	Deadweight.	No.	Deadweight
Total Aug.,	1917-Dec.	31,	1917	50	315,823	0.0				50	315,823
January, 191	8			11	88,300					11	88,300
February				16	123,042					16	123,042
March				20	161.186					20	161,186
April				31	171.413			7-1-mark		31	171,413
May				42	250,911	1	3,500			43	254,411
lune				46	276.034	5	17,665	-		51	293,699
July				441	243,016	5	17,665			45	260,681
August				1.1	260,483	19	66,665	3	11,000	66	338,148
September				16	266,705	26	91,165	3	11,500	75	369,370
Detober				47	301,178	28	100,200	2	7.500	77	408,878
November*	124		A	51	294,623	9	30,500		be-	60	325,123
l'otal Jan.,	1918-Nov.	30	1918	394	2.436.891	93	327,360	8	30,000	495	2,794 251

^{*} November returns not confirmed and the figures provisional.

The particulars of vessels building, launched, and completed during the month of October are shown in a statement based by the would keep every efficient shipyard working at any rate throughout 1919. Ships, he continued, must now be built for commercial purposes. The necessity for feeding Europo and bringing the army back to the United States created an emergency that was only a little less urgent than the emergency of war. There was no danger that the United States could build too many ships during 1919, and he thought the new vessels would be of a larger type. What was to be done with the ships after the immediate needs had been met was a question, he added, to be decided by the people and by Congress.

With the appointment of Mr. Charles M. Schwab, the steel "magnate," in the spring of 1918 to be Director-General of the Emergency Fleet Corporation, shipbuilding in the United States entered upon a new, a more vigorous, and a fascinating phase. As a great captain of industry he occupied an unique position in the country, and none was more respected. Everyone knew him to be a man with a quite extraordinary personality, who had worked his way up from the humblest position to be probably the greatest leader of industry in the United States. In the process he was known to have acquired great wealth, but that never told against him among the shipyard "boys," as he was accustomed to call his friends the manual workers. . He was the head—the controlling and magnetizing spirit -of the powerful Bethlehem Steel Corporation, which, at the time of his acceptance of a post in the Government, was dealing, for the United States and the Allied Powers, with war work representing \$600,000,000 (£120,000,000). His experience of such work in the Great War went back to the early days, when he paid hurried visits to London and carried back contracts for vast quantities of shells from the British War Office and for many submarines for the British Admiralty. In politics, in which he had for years taken no active part, he was a Republican, and when, at the direct request of President Wilson, he joined a Democratic Government, it was clear that he was animated by his strong patriotism and the irresistible call of duty. During the months in which he devoted himself to the task of increasing the rate of production of tonnage he did not spare himself, but worked, in his own characteristic way, at least as hard as any man engaged in shipbuilding; and his many friends could not be surprised when, after the conclusion of the Armistice, he considered that his task had been done, and he

desired to be relieved of his exacting Government duties. The Shipping Board were loth to lose so valuable an asset, and his resignation was tendered in December, 1918, by wireless



THE HON. CHAS. M. SCHWAB, Late Director-General of the Emergency Fleet Corporation,

telegraphy to President Wilson, who was then crossing the Atlantic on his European mission in the liner George Washington, and was regretfully accepted.

Mr. Schwab possessed exceptional powers of organization, but his greatest gift was his unfailing ability to put and keep men with whom he had anything to do in the best of tempers and induce them to do their very best work. The general verdict was that no more suitable man could have been found to direct the activities of the Emergency Fleet Corporation. "No man had ever worked for him," he was fond of saying, "but thousands had worked with him." He himself defined his functions as Director-General as being to arouse and direct a spirit of enthusiasm among the men which made for successful accomplishment, and to see to it that every ounce of material that was needed for the shipyards

was procured, whether it were steel plates, engines, boilers, or what not. It was announced that he would have full charge of the building of ships and that he would spend most of his time actually in the yards.

One of Mr. Schwab's first actions was to remove bodily the whole organization of the Emergency Fleet Corporation from Washington, where it was housed in 21 buildings scattered throughout the congested capital, to Philadelphia. At first there seemed a prospect of housing the whole office organization in one large building which had been secured in a central position; but increased accommodation soon became necessary. Within a few months the Corporation was occupying in Philadelphia three buildings, with the exception of the ground floor of each, and part of two other buildings, representing a total area of nearly 400,000 feet of floor space. But in making the change, which was practically completed within a day and a night, Mr. Schwab was known to have been actuated largely by the fact that, whereas Washington, D.C., seemed, in its sedateness, far removed from the hum

and bustle of the shipyards, Philadelphia was in the centre of a great shipbuilding zone, about four times as large as the District of Columbia, where 45 per cent of the ships for the Fleet Corporation were then being built.

Mr. Sehwab, with a fine and trusted organization at his back in the offices at Philadelphia, at once put into effect his promise to visit the shipyards, and he established the best of relationships with the workers wherever he went. Visits followed in rapid succession to the Great Lakes and the Pacific Coast, on which he was accompanied by Mr. Charles Piez, Vice-President and General Manager of the Emergency Fleet Corporation, and Dr. Charles A. Eaton, head of the National Service Section of the Shipping Board, and subsequently to the Gulf ports and the New England district. In the early days of his directorship he was present at many of the launchings on the Atlantic Coast, distributed medals for notably fine work, inspected the plants, talked with the men, and in other ways encouraged them to increase the rate of production. Everywhere he was thought of



Mr. Schwab.

LAUNCH OF A VESSEL AT SAN FRANCISCO, JULY 4, 1918.



MR. CHAS. A. PIEZ (Vice-President and General Manager of the Emergency Fleet Corporation), MR. W. H. TODD (President of the Todd Shipyards Corporation), and MR. CHAS. M. SCHWAB.

as "Charlie Schwab" and he was not infrequently addressed, to his great pleasure, by the grimy toilers on the slipways simply as "Charlie." He declared that the men who were actually building the ships deserved the credit for what was done and that he was going to see that they got it, a promise which he kept to the letter. Everywhere he went he preached intense patriotism All his appeals to the workers were based on the ground that they were fighting Germany as effectively, in their own way, as the sailors and soldiers. He gave utterance to many maxims which were described in the United States Press as "Schwabisms." In a typical speech Chicago he declared that "President Wilson tried to keep this country out of war, but the German Government's head was too thick to let the knowledge in that we'd fight like a bear cat if they didn't let us alone. We couldn't get the idea in by presenting it reasonably, so now we're driving it in with bullets and rivets." Again, "The bridge of ships we are throwing across the Atlantic will be the Bridge of Sighs for the Kaiser," and "Shoot ships at Cermany and save America." Scores of striking sayings might be recalled, if space permitted, for on his tours Mr. Schwab would make many speeches at the different yards in the course of a day, and address one or two great public meetings, invariably closing with calling for cheers for the President of the United States. He told stories which amused and cheered the

workers, while his geniality and his happy smile and laugh captivated their hearts. He was always ready to give credit, not only to the officials of the Companies and the workers in the yards, but to those with whom he was associated personally, from Mr. Hurley, the Chairman of the Shipping Board, downwards. He described his companion, Mr. Charles Piez, the General Manager of the Fleet Corporation, as "the man who really did the work." Mr. Piez, before being called to his post at the Emergency Fleet Corporation, was a Chicago engineer. He had admittedly fine business abilities and won the eonfidence of the shipbuilders by the facility with which he grasped the intricacies of shipbuilding and the kernel of the many new problems to be tackled. He was essentially a business man, but, encouraged by his great chief, made many excellent addresses to the men in the shipyards, earnestly emphasizing the need for steady work and the infinite wrong of delaying, even for a moment, on account of any petty cause, the construction of tonnage needed to win the war. Machinery, he was accustomed to insist, had been devised, and was in existence at every centre, for the hearing and settlement of any questions at issue between the officials of the companies and the shipyard workers. The officials, he would explain, were the representatives of or the stewards for tho Government, and the fixing of the rates of pay. working hours and other conditions, were all matters settled by a Board on which the various interests were represented. His intense earnestness was appreciated by the men.

The strain on the chiefs of the Emergency Fleet Corporation during these tours of the shipbuilding centres was considerable, since tho distances covered were great, and besides getting into direct touch with the workers in the yards, they were in the habit of going into important business questions with the company officials, and placing large contracts. On one occasion when Mr. Schwab was a little late for a luncheon appointment at San Franciseo, it was explained that he had waited to complete a contract with the Moore Shipbuilding Company for 10 cargo steamers of 9,400 tons deadweight, and six oil tank vessels of 10,000 tons, involving an extension of the plant. On his tours of the Great Lake and Paeifie yards Mr. Schwab was accompanied by Mr. C. W. Cuthell, the young General-Counsel of the Emergency Fleet Corporation, whose duty it was to see that the contracts entered into were legally in order. Incidentally, Mr. Cuthell took his share of speechmaking at the many meetings with the employers and the workmen. More than once, to the satisfaction of the business men, he referred to the fact that the Government had created a business corporation "to do a big job in a hurry," and had thus at one stroke, by the use of a legal device. enabled a large part of the Government red tape to be cut, and he emphasized "what a whale of a job it was to organize to build a hundred shipyards, three thousand ships, and spend \$3,800,000,000 (£760,000,000)" at the same time that they were actually building tonnage.

A leading member of Mr. Sehwab's party was Dr. Charles A. Eaton, Head of the National Service Section of the United States Shipping Board. This Section arranged for addresses by speakers, including many returned soldiers, in the shipyards, and organized meetings for the women, so that the wives and sweethearts might understand the need for steady and good work on the part of their men. Even the teachers in the schools were approached, with a view to instructing the children on the importance of the work on which their fathers were engaged, and showing them that they were doing their part in helping to beat Prussianism. A steady stream of pamphlets, booklets, circulars, and posters was issued to eneourage the "soldiers of the second line," as the workers in the American shipyards were

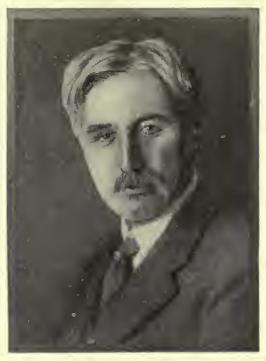


HOG ISLAND AS IT APPEARED ON SEPTEMBER 20, 1917.

termed. All these publications taught that every rivet driven in a ship was a nail driven in the coffin of Kaiserism. Dr. Eaton was born in Canada, and, before joining the Shipping Board, was Pastor of the Madison Avenue Baptist Church, New York. He was appointed to his Government post, in dramatic circumstances, at a dinner at which builders from different parts of the country had been speaking gloomily of the attitude of the shipyard workers, who were earning so much money that they were disinclined to work a full day for a full week. German propaganda had found a rich field for its subtle activities among bodies of workers of various nationalities. Dr. Eaton refused, however, to take a pessimistic view, but declared that no one had taken the trouble to tell the truth to tho men, many of whom, in the far-distant shipbuilding centres, never read the newspapers and did not know what the issues involved in the war really were. If the facts were brought home to the men, and they realized that they were actually part of the fighting army in a splendid cause, he had no fear of the result. His challenge was accepted, and he was requisitioned on the spot for Government service. The effect of Dr. Eaton's oratory, whether he was addressing a gathering of intellectuals or thousands of grimy workers, was frequently electrifying. preached everywhere a sturdy Christianity which sent the men back to their jobs with renewed energy and in better heart. He made of shipbuilding, in the crisis of the war, a religion, and was one of the most influential leaders of the shipbuilding crusade, among whom were to be numbered such men as Mr. Hurley, Mr. Sehwab, Mr. Piez, Mr. Bainbridge Colby, a Shipping Board Commissioner and one of the most brilliant orators in the United States.

The Hog Island scheme, an outstanding feature of the whole great shipbuilding enterpriso, really seemed a miracle of achievement. It attracted universal attention because of its vastness, and of the rapidity with which it was carried out. In a sentence, it represented the conversion of a mosquito-infested marsh on the Delawaro River into a city and a shipyard with 50 building ways. No shipyard with any number of building ways approaching 50 had ever been built before. The Hog Island idea indicated signally the large view with which

the people of the United States faced the problem of building slups. They were determined to build on a large scale, but if it were only because of the attention and publicity it caused to be directed to shipbuilding in the United States the scheme would have been effective. There could not have been any imagination in the



DR. CHAS. A. EATON,
Head of the National Service Section,
U.S. Shipping Board.

whole nation that was not stirred by the idea of building a shipyard with 50 ways on marshy, derelict land, since an ordinary shipvard before the war contained from three to five building berths. In reality, the Hog Island scheme provided for ten sets of five building ways. Some of these were built for permanence; others, of wood, were clearly intended to meet the unprecedented war emergency. understood that the great work had been so planned that part of the shipyard could be converted later, if desired, into a large terminal port to the lasting benefit of Philadelphia and the whole rich manufacturing district of Penn. sylvania, at whose gateway to the sea it lay. Nevertheless, the construction of ships was always the primary and immediate object. Contracts were known to have been accepted for the completion, before the end of 1919, of 180 steel steamers, of which 110 were to be of 7,500 tons deadweight each, and 70 were to be of 8,000 tons deadweight and of greater speed.



HOG ISLAND AFTER EIGHT WEEKS' WORK,

In the early autumn of 1917 Hog Island still eonsisted of waste, marshy land. A terrible winter followed, during which great hardships were suffered by the workers engaged in filling in the ground. Still, although operations were necessarily handicapped and delayed, the men kept gamely at their pioneer work. The work of redeeming the waste land and preparing it for the new city-and that was really what the scheme involved—to to be erected upon it, was started in September, 1917, and during the preceding months of the year the ravages made upon Allied and neutral shipping by enemy submarines had been very severe indeed. The attack had risen to alarming proportions in the spring and early summer. While it was being held in check, there was no sign that the menace had been mastered, so there was good reason then for the belief that the demand for tonnage in the next few years would be unlimited. Although work had only been started late in 1917, by the following June the keels of 27 large ships had been laid. On August 5, 1918, the first ship built at Hog Island, the Quistconck (the Indian name for the island used more than 200 years ago by the Indian tribes), was launched by Mrs. Woodrow Wilson, the President of the United States, all the leading

shipping officials and many important political men being present. Altogether some 70,000 persons attended the launching.

The United States Government acted as godfather to the Hog Island scheme, which. apart from its magnitude, represented a new phase in shipbuilding, since the yard, or series of yards, was intended to provide assembling plant where plates and shapes fabricated in the shops in the interior were to be put together. Somewhat similar schemes backed by the Government, although on a much smaller seale. were instituted at Newark, New Jersey, and Bristol, Pennsylvania, to which reference will be made later. The vast work of construction at Hog Island was carried out by the American International Shipbuilding Corporation, under the auspices of the United States Shipping Board, and under the direct management of Rear-Admiral Francis T. Bowles, Assistant General Manager of the Emergency Fleet Corporation. The origin of the scheme can really be traced back to 1914, when an extraordinarily strong combination, known as the American International Corporation, was formed for the express purpose of developing American cversea commerce. The Corporation was eredited with having many more millionaires on its Board of Directors than any other company



HOG ISLAND AFTER THIRTY WEEKS' WORK: THE WET DOCK BASINS.

in the world; in any case, every name on the large Board was a household word among business men in the United States, and was well known in British financial circles. The founders of this Corporation realized that to carry out their object ships were required. Consequently they purchased the Pacific Mail Steamship Company and, during 1916, bought three large steamers in Holland, which, added to the fleet, enabled the Trans-Pacific service, which had been abandoned owing to the effects of the new Seamen's Act, to be reinstated. The company also acquired a controlling interest in the important firm of W. R. Grace & Co., shipowners and merchants, and in the United Fruit Co. Further, they secured control of the New York Shipbuilding Company at Camden. New Jersey, which had one of the best equipped permanent plants in the United States, and was able to build every type of ship, from super-Dreadnought to collier. In April, 1917, when the United States declared war against Germany, the American International Corporation approached the Government and offered its services in any capacity. The suggestion was made that, as the existing shipyards of the country were already fully occupied, mainly with nava!

work, the Corporation could assist in the construction of new shipbuilding facilities.

The powerful corporation was undoubtedly well fitted to carry out the great scheme, which was compared in magnitude with the construction of the Panama Canal. It had at call all the capital that could be required, and had at its command the engineering and constructional organization of Messrs. Stone & Webster, one of the largest organizations of the kind in the United States, and known from the Atlantic to the Pacific coast. Immediately after the signing of the contract the engineers of this firm were drafted from different parts of the country and were hard at work on the marshy island. It also had at its service the expert knowledge and assistance of the officials of the New York Shipbuilding Company, which proved of immense value in the actual laying out of the yard and construction of the building ways.

Hog Island was reached from Philadelphia, and, after proceeding some distance along the fine, old broad highways of Pennsylvania, approach was made by a road two miles in length which had to be built by the engineers for the scheme. It was along this track that all material required for the construction of a

city and a huge shipyard had to be carried. The whole plant covered a total area of approximately 900 acres. For general construction purposes throughout the yard over 105,000,000 feet of lumber were needed, which represented 350 schooner loads, each of 300,000 feet. These facts were published in an article in the Philadelphia Chamber of Commerce Bulletin, contributed by Rear-Admiral Bowles, who estimated that this amount of lumber would be sufficient to build a footway a foot and a half in width around the world. There were installed in the island nearly 85,000 feet of high-pressure waterpiping, representing about 16 miles, and 120,000 feet of domestic water-piping, covering 23 miles. In the building of the slipways, fitting-out basins, and other structures approximately 145,000 piles were used.

From an enclosed glass tower on the roof of the Administration offices, a wonderful view was to be obtained of this hive of industry stretching away on all sides as far as the eye could scan. There was to be seen a large group of shops where repairs to machinery could be carried out, and any necessary corrections. made in the fabricated material. The plate and angle shop, designed for the purpose of making any such necessary alterations, was 700 feet long and 200 feet wide. Adjoining the Administration Offices was the Engineers' Building, where some 600 draughtsmen were employed on plans and drawings. From the glass observation room the tall derricks of the slipways, with the accompanying warehouses, the fitting-out basins, the vast machinery shops, could all be identified, as well as the large number of buildings where provision was made in one form or another for the accommodation of the workers. In the summer of 1918 there were being used in the island some 20,000 shovels and 10,000 picks. There were employed 70 locomotive cranes, 10 locomotives, 20 passenger cars and about 450 freight cars. It was estimated that when the plant was fully at work 10,000 pneumatic tools would be required.

Special trains were provided morning and evening to take the workers to and from Philadelphia, while, throughout the day, shuttle trains gave communication every 20 minutes with the tram-cars to and from Philadelphia. Barrack accommodation was provided in the island itself for about 6,000 men.

As already indicated, the 50 building slipways really represented 10 groups of five ways each. Each group was practically designed as a complete shipyard, with its own warehouse buildings, air-compressor, etc., although all the operations were directed by central organization. The 50 extended for a mile and a quarter along the river front, while seven outfitting piers of 1,000 feet long, each capable of berthing four vessels, extended over another mile of the river, allowing 28 vessels to be fitted out at the same time. To enable the material for the ships to be handled properly as it arrived, a system of railways was provided, aggregating some 83 miles. As the material reached the island it was taken, first, to the classifying yards and from there the heavier materials were distributed to the storage yards or direct to the ships, while the lighter material was transported to storehouses specially situated. These storehouses were divided up into small sections, with brick fire walls between so as to minimise the fire hazard. Some 20,000 separate pieces of material were required for every ship, these being manufactured by 3,500 companies in the United States and Canada. On a partly completed ship adjoining plates were to be found with the names of firms whose plants were thousands of miles apart from each other.

The feeding of the vast number of workers was a serious problem, but was tackled successfully in the big American way. The wages of the workers, as throughout the United States, were high. Restaurants, however, were built where the employees were served with tempting meals at what, even according to English ideas. were low prices. For 30 cents, which was equivalent to about 1s. 3d., the men could secure large portions of roast meat, two vegetables, sweets, and coffee. At the cafeteria, which was worked on the principle adopted in England at the National Restaurants, the plan was that of personal selection, the workers having the choice of appetising hot and cold meats, salads, vegetables, fish, and pastry. As each man completed his selection and passed the cashier with the tray loaded by himself, he paid for the cost of his meal.

The island was provided with a completely equipped hospital, with a large ward room, two smaller ward rooms, and an operating theatre. Doctors were in attendance day and night. Four motor-driven ambulances

were placed in service. For infectious cases there was a floating hospital in the river, but it was found that 90 per cent. of the cases treated by the doctors were caused by slight accidents and the men returned to work without loss of time. A dentist was available at all hours of the day and night. Naturally arrangements were made for guarding the island thoroughly. Anyone wishing to pass through any of the entrances would be challenged by one of the armed guard, of whom there were 600 on the island, Each man was sworn in as a Deputy-sheriff.

it stands. One nation indivisible, with Liberty and Justice for all." Throughout the working quarters mottoes were chalked up by the men, such as "Get on with those ships and finish the war," and "For God's sake, hurry up." At conspicuous points were posted the weekly bulletins issued by the Shipping Board, with stimulating messages and cartoons drawn by the most famous artists in the United States. Interest in the work was also maintained in a weekly issue of the Hog Island News, cleverly written and illustrated. The island had its own bank and its own post-office. Illustrating



THE SEATTLE.

A cargo steamer of 8,300 tons deadweight, built by Messrs. Skinner & Eddy, of Seattle, which helped to set the pace for rapid construction. The photograph shows her just after launching, and flying the Shipping Board flag.

The relations between these men and the workers was excellent, and any malefactors and enemy agents would be quickly and effectively dealt with. The island had its own Police Court.

The spirit of loyalty was very strong in the island. Every day at noon the Hog Island band, numbering some 45 instrumentalists, was to be heard playing in one of the restaurants. As the band played "The Star-Spangled Banner" and "My Country, 'Tis Of Thee,' every man, whether he were cook or shipyard worker, would come to attention. At 5 p.in., as the flag outside the Administration office was struck, again all came to attention. Inscribed in large letters over the Administration building was the motto, "I pledge Allegiance to my flag and to the Republic for which

the spirit prevailing, Mr. W. H. Blood, jun, one of the chief engineers, once said, in a lecture on the scheme, that the postmaster had told him he had five letters which, if delivered in time, would win the war. These were S H I P S.

A training school where "green hands" were taught the different trades of the shipworkers was one of the essential features of the scheme. In the yard was a full-sized midship section, where the newcomers who had been taught the rudiments of riveting were tested before they were definitely allowed to pass out of the training school to the slipways to work under the supervision of instructors. The usual timo occupied for a course of training in the simpler arts of shipbuilding, such as riveting and caulking, was from three to four weeks.

Some space has been devoted in this chapter to a description of the Hog Island scheme, not only because of its vastness and its own merits, but also because it contained many of the features which were to be found in the new yards established throughout the United States during 1917 and 1918. The Hog Island shipyard could not be described as a representative one-

sinee none other could compare with it in magnitude, but there were to be found in it several features common to other yards, multiplied several times. Both on the Atlantic and Pacific coasts, it was usual to find large and well-equipped plants built on land which, only a few months previously, had been marshy or actually many feet under water. The gradual



THE AGAWAM.

The first fabricated steamer to be launched by the Submarine Boat Corporation on May 30, 1918, about to move down the ways.

evolution of these schemes was traced in a series of frequent progress photographs, showing how the yards had gradually come into existence. To the layman, the work looked like wizardry. In reality, it was the result of the genius of the American constructural engineers, men who, before the war, were constructing "skyseraper" buildings, vast hotels, and the like. With the entry of the United States into the war, the demand for their services in these directions declined or ceased altogether, and they found themselves free to tackle new problems, which appealed to them all the more because they had not had any previous occasion to deal with them. The adaptable American mind preferred to face something new, rather than to go on doing things which had been done to irksome repetition by many others before, and found immense enjoyment in the task and in the accomplishment. In their work the engineers were enthusiastically supported by the workers, who, in view of the war emergency, found something much more inspiring in their labours than ordinary bread-earning.

Frequently roads had to be built to connect the new shipyards with the nearest town, and railway connexions and tram services had to be specially provided. Houses—sometimes whole towns—were built for the accommodation of the workers, while every yard of any size had its own restaurants or its cafeteria where meals were served to the men at very reasonable prices. In every yard there was an emergency hospital, for even in the most carefully-managed plants accidents would occur, although the great majority of the casualties were slight.

Again, it was common for the shipyards to have their own bands recruited from the workers themselves. Practically all the yards published their own illustrated magazines, written in a sprightly manner and describing the daily incidents of the work and recording the interesting and amusing doings of the workers. All these magazines, which were edited by the employees, breathed the spirit of loyalty and enthusiasm, and they were supported by the Emergency Fleet News, a very bright and cleverly produced illustrated weekly paper, issued by the Emergency Fleet Corporation and edited by Mr. Robert D. Heinl, an able journalist, and by weekly bulletins posted in conspicuous places throughout the plant. Hog Island, therefore, had by no means a monopoly of wonder work, and it was difficult, amid such a

profusion of examples of fine accomplishments, to single out particular plants for detailed notice.

Another new scheme which rightly attracted wide attention was that of the Submarine Boat Corporation at Newark, New Jersey, which was also backed by the Government. the case of Hog Island, the pioneer work was started in September, 1917, the site being a salt meadow, on a delta formed by the Hackensack and Passaic rivers, which had to be filled in. This new yard occupied 112 acres. Under these conditions Newark Bay, which was later easily reached from New York by rail under the Hudson river, could at first only be approached by boats; and railways, houses, slipways, derricks, and everything else had to be built. Such was the condition of the site that the pioneers were described by their friends as the "mudlarks." On the following December 20 the keel of the first steamer, christened the Agawam, an Indian name meaning "Great Salt Lake Meadows of the Altantic Coast," was laid, but during the following six weeks little work could be done, owing to the intense severity of the winter and other causes. It was thus five months later, on Commemoration Day, May 30, 1918, that the Agawam was launched in the presence of many distinguished guests, including Mr. and Mrs. Thomas A. Edison. At that time a hull was being built on each of the 28 ways which had been provided for in the scheme. Contracts were held for the completion of 150 ships, each of which was to be identical, and was to be built of material fabricated in shops which had previously been occupied with the manufacture of material designed for the construction of bridges, office buildings, etc. The principle was established at the outset that the officials of the company must approach no undertaking which was already engaged in producing ship material, the underlying idea being to "tap" entirely new sources of supply. Skilful organization was required for this work of securing the different items, as followed from the fact that approximately 27 steel mills, 56 fabricating plants, and 200 foundries, machine, pipe, joinery and equipment shops were engaged in the production of the parts required to complete the ships.

The original vessels were designed for a displacement of approximately 7,800 tons when loaded to the Plimsoll mark, and a deadweight carrying capacity of about 5,500 tons.



MR. BEVERLY L. WORDEN,
The General Manager of the Submarine Boat
Corporation.

The length of the ships was 343 feet on deck. the moulded breadth was 46 feet, and tho moulded depth of the hull, 28 fcet 6 inches. The maintained speed of the vessels at sea fully loaded was to be at least 10½ knots on a mean draught of approximately 23 feet. The main machinery consisted of a Wostinghouse stoam turbine operating at 3,600 revolutions a minuto, driving a single-screw propeller at 90 revolutions a minute through a Westinghouse balanced floating-typo reduction gear. The supply of steam to the turbino was furnished by two Babcock and Wilcox watertubo boilers, which were installed in the ships before launching. Fuel oil was to be used in the boilers for the generation of steam, the fuel being earried in compartments of the double bottom of the ship in sufficient quantity to enable the vessels to make the round to Europe and back. As the result of good organization it was found possible in the late summer of 1918 to launch two hulls a week, and the management were aiming at three a week. while difficulties which had been encountered in the securing of the machinery were being overcome satisfactorily. Ninety-five per cent. of the work in manufacturing the different parts and punching the rivet holes was done, from drawings furnished by the eompany, at shops widely separated from each other throughout the country. These drawings were made with such precision that when they were brought together they fitted exactly, and the quality of the work won the respect of the British experts who visited the plant. In the construction of each hull more than 400,000 rivets had to be driven, and by the method employed one-fourth of these rivets were driven at the distant shops.

Mr. Henry R. Carse, formerly Vice-President of the Hanover National Bank, and later President, became President of the Submarine Boat Corporation. The Vice-President was Mr. Henry R. Sutphen, who, when associated with the Electric Boat Company, had gained experience of standardization in the construetion of a largo number of submarine chasers for the British Admiralty. The General Manager was Mr. Beverley L. Worden, a very able civil engineer and president of the Lackawanna Bridgo Company, of Buffalo, and of the Worden-Allen Company, of Milwaukce. The Assistant General Manager was Mr. George T. Horton, formerly president of the Chicago Bridge and Iron Company. Associated with the company was Mr. Theodoro T. Ferris, a naval architect, who designed the ships. Naturally, in view of the fact that the great majority of the available workers were quite unskilled, a large school for the training of new men was attached to the yard.

A third assembling plant was established, with the support of the Government, at Bristol, Pennsylvania, by the Merchants' Shipbuilding Corporation. The yard, which was on the direct line between Philadelphia and New York, included 12 building ways, and involved the construction of a complete township, named Harriman, with 30 streets containing brick and wood houses for families and bachelors. The Company held contracts for the completion of 60 identical vessels, of about 9,000 tons deadweight, by early in 1920. As in the case of the other two Government schemes already described, work was started in September, 1917, and by the following summer vessels were being built on all the 12 slipways, and the housing accommodation was nearly complete. A fine example of quick construction work carried out at this

centre was the building in the yard of a reinforced concrete warehouse, with two floors, 300 feet long by 200 feet broad, within 40 days. The Chairman of the Merchants' Shipbuilding Corporation was Mr. E. Averill Harriman a son of the great railway builder, who took intenso interest in the work, and occupied a house adjoining the plant in order that he might always bo available. This yard employed plans which had been used by the Chester Shipbuilding Company, at whose yard the principle of ship fabrication was first intro-

duced in the United States. The experiment was due to the initiative of Mr. Charles P. M. Jack, a Scotsman, who realized that there were many merits in the system. He found himself able to make a number of contracts with the steel manufacturers for the delivery of the various parts, and he could then estimate very closely the cost of the completed ship. Mr. Jack was fortunate, at the outset, in enlisting the active interest in the scheme of Mr. James Farrell, president of the United States Steel Corporation.



THE AGAWAM TAKING THE WATER.

The impression made upon the Steel Corporation by this, its first participation in shipbuilding, was evidently favourable, for the Steel Corporation afterwards built a very fine assembling yard covering an area of 185 acres, at Newark, New Jersey, with 12 building ways, which was known as the plant of the Federal Company. The familiar story of redeeming waste land was repeated here, involving an expenditure of \$10,000,000 (£2,000,000). On August 1, 1917, the site was also a salt meadow, covered with a rank growth of weeds, and it was necessary to fill in an average of four feet over the whole area. The first pile was driven on August 6, 1917, and on June 19, 1918, the first ship of 30 contracted for, named the Liberty, was successfully launched. The vessel was constructed of steel rolled by the United States Steel Corporation. For the filling of the land material was obtained from dredging the outfitting basin and from the river, which was dredged for a distance of about half a mile from the plant. Altogether 750,000 eubic yards of sand, dirt, and cinders were used, and approximately 32,000 wooden

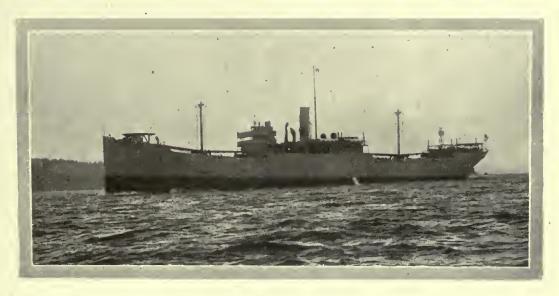
piles, from 45 to 60 feet long, were employed to support the building ways. The plate and angle shop of two storeys was 920 feet long and 180 feet wide, while the boiler and machine shops were each 500 feet long and 140 feet and 125 feet wide respectively.

These four plants were especially interesting because of the adoption of the new fabrication principle, but in many yards throughout the United States new methods of shipbuilding were put into practice and some very fine examples of rapid ship production were produced,

Thus, at Camden, N.J., on the Delaware River, close to Hog Island and Philadelphia, there was built, at the yard of the New York Shipbuilding Company, the 5,500 tons steamer Tuckahoe in "record" time. When the keel was laid on April 8, 1918, the management, by a system of schedule charts, estimated that the Tuckahoe could be built in 27 days 4 hours and 50 minutes, and they informed the officials of the Emergency Fleet Corporation that they expected to launch the vessel in that time. The workmen, catching the spirit of enthusiasm, did their utmost, with the result that the vessel



MESSRS. DUTHIE'S YARD, SEATTLE: WORKMEN ENTERING IN THEIR AUTOMOBILES.



S.S. WEST LIANGA.

Cargo Steamer built by Skinner & Eddy in 55 days, one of thirty similar vessels completed since ground was broken on February 14, 1916.

was launched on Sunday, May 5, 1918, just 27 days 3 hours and 10 minutes after the laying of the keel, or 1 hour and 40 minutes ahead of the schedule time. This really wonderful achievement drew forth a letter from President Wilson to the workmen and executive staff of the Company, in which he expressed the feeling he had that they were "all comrades in a great enterprise," and that the men had played their part "with extraordinary devotion and skill, eliciting not only my admiration but, I am sure, the admiration of all who will learn of what you have accomplished." The Tuckahoe was subsequently fitted out in 10 days, which also represented a "record," enabling her to set out on her maiden voyage, fully laden, within 37 days from the laying of the keel. The value of the performance lay chiefly in the impetus it gave to the spirit of emulation. When the programme of the Emergency Fleet Corporation was first inaugurated, from six months to a year passed between the laying of the keel and the launching. This time was gradually reduced, notably when in the spring of 1918 Messrs. Skinner and Eddy, of Seattle, launched a ship—the West Lianga within 55 working days of the keel-laying. Subsequently to the completion of the Tuckahoc, feats of record construction were accomplished on the Atlantic and Pacific coasts and on the Great Lakes, but the Tuckahoe still held the blue ribbon for rapid construction for her particular type. In June, 1918, there was launched at the fine yard of the Baltimore

Dry Dock and Shipbuilding Company, Baltimore, the refrigerated steamer South Pole, of 6,200 tons deadweight, within 40 days of the laying of the keel. This performance was achieved by 1,000 men working in two shifts of nine and eleven hours respectively.

The New York Shipbuilding Company owned one of the leading yards in existence before the war, but very great extensions were made after the autumn of 1914, and especially since the United States declared war. company possessed a most extensive and a complete plant, where all machinery for the ships, including turbines, was built. yard was in complete contrast to the fabricating plant at Hog Island, controlled by the same interests, where material was assembled into ships. In June, 1917, the number of men employed at Camden was 4,900; within twelve months this force had been increased to nearly 11,000, an indication of the development of the work. As in the case of every other yard, the bulk of the new men were unskilled and had to be taught their trades. It should be remembered, however, that the utmost use was made in all the American shipyards of pneumatic tools and laboursaving devices, enabling the amount of instruction necessary to be reduced to the minimum. The extensive use of ingenious equipment was undoubtedly responsible, to a large extent, for the success of the American shipbuilders in producing tonnage within so short a time and with so little preparation.

Another example of the redemption of land for shipyards was to be seen at Chester on the Delaware River. In August, 1916, the land on which the yard of the Sun Shipbuilding Company was to be built was absolutely undeveloped. The first piles were then driven, and at the end of the following March the keel of the first ship of 10,000 tons deadweight was laid, and on October 30, 1917, she was launched. This yard was believed to have been the first complete shipyard to have been built in the United States during the war. It included five large ways served by powerful overhead cranes on gantries, and had several extensive engine and boiler shops. The founders of the

in the fabricating yards. In the case of an ordinary large cargo carrier, such as was built by the Sun Company, from 800,000 to 900,000 rivets were required to be driven in each ship.

Fine new yards were also built at Gloncester on the Delaware River, by the Pusey and Jones Company, in which a controlling interest was acquired by Mr. Christopher Hanniveg, a Norwegian, who was reported to have made much money out of ship selling and ship building in the United States during the early years of the war. The yards at Gloucester were of the most modern character, and constituted complete plants. A feature was



FOUR WOODEN SHIPS IN COURSE OF CONSTRUCTION AT THE YARD OF THE GRAY'S MOTOR SHIP CORPORATION, ABERDEEN, WASHINGTON.

company—Messrs. J. Howard and Joseph N. Pew, jun.—were, until the war was well advanced, interested mainly in the oil trade, but after the conflagration began they realized that the need for tonnage would become acute. First, they concentrated on oil-tank steamers for their own business, but they soon turned their attention to the construction of large cargo vessels of between 10,000 and 13,000 tons deadweight. Mr. Robert Haig, who had held one of the chief positions with Lloyd's Register in the United States, was appointed Vice-Prosident of the Company. The amount of work actually done in such a yard as this was obviously very much greater than that done

the construction of vessels on even keels resting on piers built parallel to the water front. The ships were consequently launched sideways, a practice which was adopted from that always in vogue on the Great Lakes and was followed in some of the other new yards. At Gloucester, on July 4, 1918, the steamer Indianapolis, of 12,000 tons deadweight, was launched sideways, this being much the largest vessel which had, until then, been launched in this way.

Shipbuilding had long been carried out on the Delawaro River. The Harlan plant at Wilmington, a few miles from Philadelphia, originally owned by Messrs. Harlan and

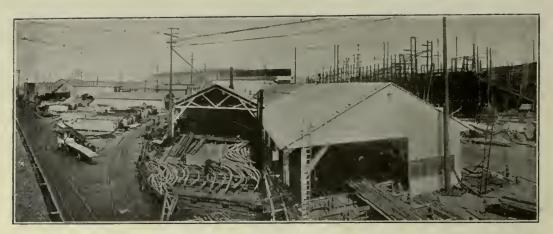


LIFTING INTO POSITION A LARGE FABRICATED SECTION OF A STEAMER.

Hollingsworth, and later controlled by the Bethlehem Shipbuilding Corporation, a subsidiary of the Bethlehem Steel Corporation, elaimed to have built in 1843 the first serew steamer in the United States. In the heart of the city of Philadelphia there had long been established the plant of the William Cramp Shipbuilding Company, which years ago built the Atlantie liners St. Louis and St. Paul, and many other well-known American vessels, such as the Atlantic liners Kroonland and Finland, and the Pacific liners Great Northern and Northern Pacific. It built a large number of destroyers and some merehant ships during the war, and earned a reputation for highclass work. In view of all its developments the Delaware became known as the "Clyde of North America."

South of Philadelphia was the fine plant of the Baltimore Dry Doek and Shipbuilding Company, at Baltimore, and at Newport News the old established yard of the Newport News Shipbuilding Company. It was at the latter city that a school was first started for the training of mechanics who were subsequently to become instructors of the unskilled men upon whom the merehant shipbuilders had to rely in the great development of building. In the Gulf ports were yards where wooden ships were being built. At New York there were several companies doing good work, notably the Newburgh Shipyards (Ine.), whose first ship, the Newburgh, was launehed on Labour Day, 1918, in the presence of Colonel Roosevelt, who seized the occasion to make a stirring patriotic speech, the Staten Island Shipbuilding Company, and the Bayles Shipyards.

North of New York, in Massaehusetts, was the old established Fore River yard, at Quiney, of the Bethlehem Shipbuilding Corporation, one of the largest complete plants in the United States, which concentrated mainly on the construction of warships. Extensive developments occurred there during the war, the labour force rising from 4,000 to 16,000 men. In addition, the Management provided 6,000 men to work the new Government. Naval Shipyard at Squantum. In its way there was 1 othing more remarkable in the United States than the Squantum plant, which was built on land that on October 6, 1917, was



THE AMES SHIPBUILDING AND

under water. It must be sufficient to record now that the "lay-out" was considered by experts to represent then the last word in shipbuilding, or, rather, ship manufacture, and to rival, or, in the opinion of some, to celipse, as an example of skilful organization, the extraordinary plant laid down by Mr. Henry Ford at Detroit for the construction of submarine chasers. The General Manager of both the large Fore River plant at Quiney and the Squantum plant was Mr. S. W. Wakeman.

While, however, much fine work was done on the Atlantie eoast and there were many remarkable individual performances, it was perhaps the Pacific coast builders who, as a body, most distinguished themselves during the strenuous summer of 1918, when all the companies were being urged to produce their utmost and so help win the war. Everywhere the Shipping Board authorities preached that a ship produced at once was worth many ships delivered a year hence, and, in delivering ships rapidly, the Pacifie eoast undoubtedly set the pace. The Western builders, both those engaged on steel and wooden vessels, earried off the majority of the pennants which were introduced by Mr. Sehwab as part of his seheme for stimulating enthusiasm and friendly rivalry. The page set by the builders on the Far West seemed at first all the more praiseworthy since the Atlantic yards were comparatively close to the great steel mills, whereas the Western yards were separated from these works by some 3,000 miles, involving a railway journey of at least a week. Yet, this apparently obvious advantage was offset, to some extent, at any rate, by the faet that the journey from the steel mills to the Atlantic coast was sometimes a broken one, the change of railway being a cause of delay, while steel earld be loaded from the Chieago and other steel districts direct to the great eities of San Francisco and Scattle.

The securing of sufficient steel was one of the ehief difficulties with which the shipyard managers had to contend, and it was not at all surprising, in view of the almost sudden and extraordinarily heavy demand for steel ship-plates from the shipyards in all parts of the country, that it should be so. Few of the steel mills had, before the great shipbuilding seheme was put in motion, been rolling ship-plates, and their machinery had, accordingly, to be adapted to the new conditions. This itself took time. Moreover, while no steel was permitted to be used in the construction of buildings, except of course for those which were considered essential by the Government authorities, the demand for steel for munitions of war was very heavy, and, further, in the summer of 1918 it was found that the railways, which were performing vital transport services, were in need of large quantities for replacing deteriorated rails. The shipyard managers attached so much importance to obtaining sufficient steel supplies that many of them arranged for their own representatives to be present at the rolling mills and do everything possible to expedite the consignment of plates and shapes to the yards, thousands of miles away, which were anxiously awaiting them.

It may be said, generally, that the actual construction of the new yards was the least of the problems of the shipbuilding officials. In some of the yards everything was available except steel and engines. Sometimes vessels on the ways would be found in an uncompleted stage with the riveting gangs idle and the managers figuratively stamping their feet with impatience because the steel was not being delivered in sufficient quantities. This was



DRY DOCK COMPANY'S YARD AT SEATTLE.

undoubtedly due, partly at least, to the tremendous pace at which the men were working. The whole of the Pacific coast seemed to be aflame with zeal, which meant that the builders were far more hungry for steel than if circumstances had permitted them to proceed with their work in a cool, leisurely way. It should be said, however, that wherever the chief officials of the Emergency Fleet Corporation went and heard that the steel was not being delivered in sufficiently large quantities to satisfy the energy of the workers they did their utmost to hasten deliveries. In certainly one case on the Pacific coast, Mr. Schwab, on hearing during his tour that the builders were waiting for steel, immediately to egraphed to the East for consignments to he forwarded at once by express train, to the immense satisfaction of all concerned in the shipyard. All the more credit was due to the Pacific coast yards because they were able, in spite of the overwhelming demand for steel, to produce so much tonnage within so short a space of time. In one instance, the officials of a company which was earning for itself a fine name for rapid production ordered hy telegram six hundred railway trucks to be bought rather than, as the alternative, allow its supplies to be delayed at the steel centres.

Climate was a strong ally of the Pacific coast builders. It has already been shown how work in the great new shipbuilding plants on the Atlantic coast was delayed by the terribly severe weather of the winter of 1918. Such conditions were unknown on the Pacific coast. There was, for example, little variation between the pleasant cool weather of summer and winter at San Francisco. The winter brought a certain amount of rain, but hardly ever in sufficient quantities to hinder work for an bour, while in the summer months rain was quite unknown.

So hard put to it were the people of San Francisco to find a cause for the usual popular grumble at the weather that they were disposed to make a victim of a "high fog," which rendered misty parts of the magnificent harbour in the early morning but, driving in from the sea, performed the most valuable service of drenching the city daily with ozone and keeping it fresh and healthy. In Southern California had weather was such a negligible factor that the only protection against the elements in some of the shipyards was a roof to the machine and boiler shops to protect the mechanics from the burning rays of the brilliant "Buildings" equipped with the latest machinery but without walls would, at first, strike the visitor as incomplete, but after he had spent a day or two in the balmy southern atmosphere they seemed the most natural thing in the world. They looked just as natural as the beautiful little homes, with gardens ablaze with luxuriant and vivid-coloured flowers, in which the workmen lived. The visitor could not fail to wonder if shipbuilding could be carried on under healthier or more congenial living conditions. There was here no cramping of buildings together, no narrow streets, no dirt, but large expanses of land bordering a blue sea, under an azure sky, on which building berths and the accompanying equipment of the most modern character had been erected, while within easy reach of the plant were the attractive houses where the families lived in comfort, little disturbed by the furious clashings of peoples in Europe, 6,000 miles away across a vast continent and ocean. It was no wonder that the authorities found the pace was always accelerated after the visits of the stirring speakers sent by the Shipping Board to emphasize the urgent need of rapid construction in view of what was happening on the oceans and the battlefields of Europe. Nor should it be forgotten that the creation of the great army of the United States and the rapid dispatch of the troops overseas during the summer and autumn months of 1918 was a most powerful incentive to maximum effort. Nothing really appealed to the shipyard workers so strongly as the thought that they were directly providing



LOWERING THE KEEL PLATE OF THE ECLIPSE AS THE DEFIANCE LEFT THE WAYS.

the means of feeding and succouring their "boys" across the sea. Tonnage was needed to feed their sons and brothers, and the knowledge that their best labour was urgently wanted to provide this tonnage set a spirit burning within them which enabled them, although far away from the turmoil, to tackle their daily task with exceptional and inspired energy and strength.

West Coast enthusiasm seemed to find its utmost expression at San Francisco on Independence Day, July 4, 1918. At Mr. Hurley's suggestion, a unique effort was made to launch the greatest possible number of ships on that day throughout the United States, the principle being that the launching of no ships should be deferred in order to make an extraordinary demonstration, but that the construction of all ships approach-

ing the launehing stage should be expedited. In all 95 ships were launched at United States ports, of which 42 were steel ships and 53 were wooden steamers. The contribution of San Franciseo to this total was 17 vessels, and no doubt it was the magnitude of this effort which determined Mr. Schwab to spend the day in that city. There was no shipbuilding centre in the United States which would not have welcomed him warmly as the visitor of honour at the proceedings, for every portwas striving its utmost to launch the greatest possible number of ships. Mr. Schwab and his party arrived at San Francisco from Chieago on July 2, and on the following day made a rapid tour of the yards in advance of the great eeremonies of July 4. Of the 17 vessels launched 14 were witnessed at close quarters by the Director-General and his party, an accomplishment which was only made possible by the liberal use of motor-cars and motor launches, since the vessels were sent intothe water at different parts of the great San. Francisco Bay and at various hours from early morning until late in the evening. Of these 17 ships, 12 were launched at the three plants of the Bethlehem Shipbuilding Corporation, known as the Potrero, Risdon and Alameda. Works. These yards were under the management of Mr. "Joe" Tynan, a man of strong personality after Mr. Schwab's own heart, whowas able to inspire everyone working with him with the utmost loyalty and enthusiasm. The patriotic decoration of the yards for the great launehing ceremony and the obvious pride of the men in what they had accomplished, were not to be forgotten by any who had experience of them. Each slipway had been gaily hung with flags by the men themselves, and in some instances large poetical inscriptions, composed by the workers, were displayed. At 10 a.m. on July 4 the steamer Defiance, of 12,000 tons deadweight, was lauched at the Alameda plant by Mrs. Schwab amid the playing of bands, the hooting and screeching of syrens, and every other sign of joyous celebration, and was followed into the water at intervals of a few minutes by the sister ships Challenger, Independence and Victorious—all good old English names. Defiance had been built within 38 calendar days, and before the launching Mr. Schwab announced to the assembled thousands that this performance had been compared by the chief of the Bureau of Naval Construction at

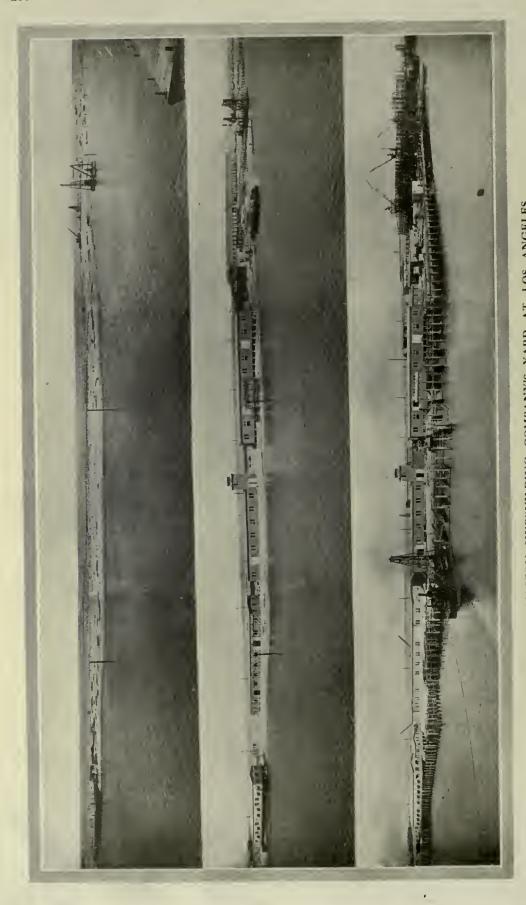


PATTERN SHOP, MOORE SHIPBUILDING COMPANY'S SHIPYARD, OAKLAND, CALIFORNIA.

Washington with the construction, already described, of the Tuckahoe, of 5,500 tons deadweight, on the Delaware river. The verdict was that, after an analysis of the two cases on the basis of the tons of steel fabricated into the ships each day, the building of the Defiance was a better performance by 30 per cent. Naturally, the only value of such a comparison lay in its contribution to the furthering of the friendly competitive spirit, and it was with this idea that the comparison was made. A specially dramatic incident in the launching at the Alameda plant was the lowering of the keel plate of a new vessel on each way before the ways had barely been vacated. As each great hull, bearing the flags of the United States and the Allied countries, with streamers flying and confetti pouring from the hawse pipes, and with its crew checring in the bows, slid smoothly into the Bay, a keel plate, draped with "Old Glory," was to be seen being lowered by a crane on to the building berth. This was no mere spectacular piece of bluff By the evening of July 4 the vertical keel of the Invincible, one of the succeeding ships, was in position, and on the following day the first rivet was driven

By July 8 all the floors had been put in position and the first plate laid on the tank top. By July 12 the frames aft and the after peak bulkhead were completed, and so on, until August 4, when the vessel was successfully launched and was succeeded in turn by another. In the result the Invincible, a cargo vessel of 12,000 tons deadweight, with a length of 457 ft. 6 in. overall, a beam of 56 feet and a depth of 38 feet, was built within 24 actual working days from the date of the keel laying. During the plating of the vessel more than 137 tons of steel were fabricated into the ship daily, and about 40,000 rivets a day were driven. With such a spirit prevailing among all ranks as caused these feats to be achieved, it was no wonder that attainments representing extraordinarily rapid work became quite common on the Pacific coast.

Not satisfied with its current programme, which provided for the construction of ships at San Francisco valued at \$350,000,000 (£70,000,000), the Bethlehem Shipbuilding Corporation was planning further developments in its plants on the Bay. Plans were prepared for the construction of a new Government yard at Alameda estimated to cost \$20,000,000



THE SOUTH WESTERN SHIPRUILDING COMPANY'S YARD AT LOS ANGELES.

The photographs show (1) the site, photographed on April 3, 1918, (2) the progress made by May 16, and (3) the plant at work in September, 1918.

(£4,000,000), to be managed by the corporation. It was expected that 30 large vessels of the transport type would at first be built at the new plant, each costing between \$3,500,000 (£700,000) and \$4,000,000 (£800,000), but after the conclusion of the armistice this scheme was dropped. Nevertheless, important though its position was in shipbuilding at the port, the corporation had by no means a monopoly of fine yards and equipment and enthusiasm. the leading yards in the United States at the time was the Moore Shipbuilding Company, of Oakland, facing the city of San Francisco, across the Bay. The plant of this company was extensively developed during 1917 and 1918. Within 10 months, 10 steel vessels, representing about 92,400 tons, were launched. Two berths were being added which would give the company a total of 10 building-ways. The contribution of this company to the celebration of July 4, 1918, was three refrigerated steamers of 9,400 tons each—viz., the Yamhill, Yaquina and Guimba. The company had previously distinguished itself by double and triple launchings. but Mr. George A. Armes, the president, subsequently pointed out that there should be a limit to the extent to which these efforts were made, and that there was a good deal to be said for launching at regular intervals. The company's programme provided for the completion of at least 30 ships a year. known to bold contracts for 52 vessels, including three cargo vessels of 3,100 tons, 36 of 9,400 tons, and 13 oil tank vessels of 10,000 tons. In 1918 Mr. Robert S. Moore, who had had a distinguished engineering career, resigned the presidency of the company and became Chairman of the Board, while his two hrothers, Andrew and Joseph A. Moore, long associated with the undertaking, which was originally known as the Moore and Scott Shipbuilding Company, continued to take an active part in the management.

An interesting new plant 16 miles south of San Francisco, with four slipways, was built by Messrs. Schaw-Batcher & Co., where vessels were being constructed on even keels to be launched sideways. In this way the steel steamer Nantahala, of 8,800 tons, was launched on July 4, this being the only launch of the kind on the Pacific coast on that day. On July 4 the steamer Major Wheeler, of 5,500 tons, the first vessel to be built by the Hanlon Dry Dock & Shipbuilding Company, was successfully launched. 'The firm bad then four

building-ways completed, and contemplated big developments. Work was proceeding on four vessels, each of 9,000 tons deadweight, at the Pacific Coast Shipbuilding Company's new yard at Suisun Bay, while dredging operations were proceeding for the construction of two new yards to be worked by the Union Construction Company and the Parr-McCormack Company. Each of these yards was to have four slipways and was to concentrate on the building of steel steamers of 9,400 tons deadweight. Ample evidence existed, therefore, that the enthusiasm of the people of San Francisco was being translated into action.



MR. J. F. DUTHIE, Head of J. F. Duthie & Co., of Seattle.

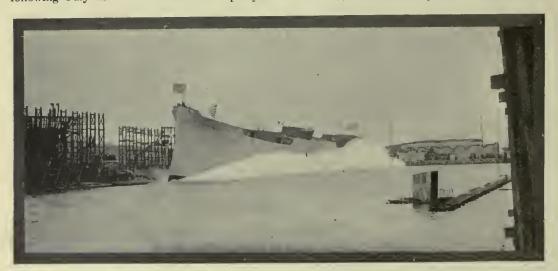
In the city of Redwood, near San Francisco, there was huilt the famous ocean-going ferro-concrete ship Faith, of 4,500 tons, whose career was followed with the deepest interest by shipping men throughout the world. She was an ungainly looking craft, but from her early voyages on the Pacific coast gave promise of being serviceable, especially during the time of emergency. The builders held contracts from the Government for the construction of eight ferro-concrete ships, of 7,500 tons deadweight, and secured authority to build a number of vessels on their own account.

In Southern California the business men of Los Angeles entered heartily into the spirit of the time. A fine yard was laid out by the South Western Shipbuilding Company at San Pedro, the works manager being Mr. David Hollywood, who had served his apprenticeship with Messrs. Harland & Wolff, at Belfast. The chief hull draughtsman and the foreman joiner also came from Messrs. Harland

& Wolff's, while the naval architect and the superintendent had worked at Messrs. Workman, Clark & Co.'s Belfast yard. It was by no means uncommon to find men occupying important positions in the American yards who had learned their business in Great Britain. This was specially true of the Pacific Coast, which claimed that its advantages of climate and living conditions drew to it and retained a fine type of worker. The South-Western yard was originally laid out with six building-ways, and two more were added later. The work of preparing the ground for the plant was started on April 3, 1918, and the first keel was laid on the following July 4. There were four slipways

arranged for the construction in the district during the ensuing eight months, of 56 ships at a cost of \$100,000,000 (£20,000,000), and that, if the facilities of the yards could be increased sufficiently, the Government was prepared to place contracts for double that amount. Still farther south, the city of San Diego, to which shipbuilding was an entirely new industry, was arranging to concentrate on the construction of concrete vessels.

Seattle, to the north of San Francisco, in the State of Washington, soon earned a remarkable reputation of its own for rapid construction. Vory great developments occurred there. In December, 1916, the city could claim three



THE LAUNCHING SIDEWAYS OF THE STEAMER NANTHALA At Messrs. Schaw-Batcher's yard at South San Francisco on Independence Day, 1918.

at the fine new yard of the Los Angeles Shipbuilding & Dry Dock Company, where the work of building the plant started in July, 1917, and four at the plant of the Long Beach Shipbuilding Company—the only shipbuilding concern in the neighbourhood in existence before the war. Then when Los Angeles decided to add shipbuilding to its other industries of fruit growing and canning, the manufacture of cinematograph pictures, and the entertainment of visitors, the shipyard was resuseitated. All the vessels to be built in the district were of 8,800 tons deadweight, and it was estimated that one ship would be delivered every three months, which meant a total output for the 12 months from the 16 building-ways of 64 ships. During the visit of the chief officials of the Emergency Fleet Corporation in July, 1918, the statement was made that contracts had been definitely steel shipbuilding plants with nine building-ways and two wooden shipbuilding plants with five building-ways, a total of five plants and 14 ways. In July, 1918, five steel shipbuilding plants were in existence, while the list of building-ways had been raised to 20. number of wooden shipyards had been increased to 13, and the five ways to 45, making a total of 18 plants and 65 ways. Six more ways for steel ships and three for wood were under construction. The number of men employed in the plants rose from 6,400 in 1916 to 31,000 in 1918, while the value of the contracts increased from \$42,000,000 (£8,400,000) to \$250,000,000 (£50,000,000) in the same period.

The leading position at Seattle, as regards size of yards and output, was held by Messrs. Skinner & Eddy. The ground of the site of their original yard was broken on February 14,



A NOTABLE GROUP AT SEATTLE.

Left to right: Mr. Eddy, Mr. David Rodgers (General Manager of the Skinner & Eddy Company), Mr. Skinner, and Captain Blaine (representative of the Shipping Board on the Pacific North-West).

1916, and between then and November, 1918, 30 steamers of 8,800 tons deadweight, and three oil-tank steamers of 10,000 tons deadweight were built and delivered. During the year ended August last 4,527 men were employed, and the average production per man was oneeighth per ton deadweight per day, or the equivalent of 39½ tons per year. The management estimated that, assuming the average number of men employed during the year ended August, 1918, in the shipyards of the United States had been 250,000, and that the production of all the yards had been at the same rate as their own, the total output of tonnage would have been 9,750,000 tons deadweight. about management deliberately set itself out to reduce the time taken for the building of the ships, and deserved very great eredit for what it did. On May 2, 1916, the first keel was laid, and on September 21, 1916, the first vessel was launched. Gradually the time taken for the building of the ships was reduced until the firm was able to state in the late summer of 1918 that the time taken to bring its last 10 ships to the launching stage had been reduced to 55 days, while the average time for fitting out had been only 22 days. These averages the company easily beat later in individual cases. As from June 1, 1918, the company took over the management of the Seattle Construction & Dry Dock Company, and on July 4 one vessel was launched, the West Gambo, from the original Skinner & Eddy plant and one from the plant of which control had been acquired. The West Gambo was quickly completed and was commissioned on July 20, or 14 working days after the launching. Another vessel launched from the Skinner & Eddy plant on July 17, the West Gotomska, was commissioned on August 10, or 20 working days after the date of launching. The company was fortunate in seeuring as manager Mr. David Rodgers, a native of Carrickfurgus, who soon acquired a reputation throughout the United States for shipyard management. He introduced on the slipways aerial conveyors, which were built of the plentiful Douglas Fir and were found very efficient for transporting material, and he also employed a number of ingenious labour-saving devices, including a new searphing machine. He received a gold watch from Mr. Schwab, "in appreciation of his services to his country," and in August, 1918, was congratulated on his success by President Wilson at the White House. The eompany's programme was to deliver 45,000 tons deadweight per slipway in 1918. During the summer months of that year it was delivering vessels to the Emergency Fleet Corporation at the rate of three every four weeks. Including the plant of the Seattle Construction & Dry Dock Company, Messrs. Skinner & Eddy had available 10 building ways and employed men.

Other important yards at Seattle were those owned by Messrs. J. F. Duthic & Co. and the Ames Shipbuilding & Dry Dock Company. Work on the sand dunes where the Duthie yard was to be erected was started on August 27, 1916, and just over a year later, on September 1, 1917, the first vessel built at the plant was launched. On January 22, 1918, she was delivered to the Emergency Fleet Corporation. After this beginning the time taken for building and delivering the ships was steadily reduced, and between January 1 and November 2, 1918, twelve vessels of 8,800 tons deadweight were completed. The yard originally had four building ways, to which three more were added, and, before the expansion, gave employment to about 5,000 men. The corpo-



PART OF THE SOUTH WESTERN SHIPBUILDING COMPANY'S YARD.

ration of J. F. Duthie & Co. was organized in October, 1911, with a capital stock of \$50,000 (£10,000), which long remained at that figure. On April 13, 1918, Mr. J. F. Duthie acquired almost completo ownership of the undertaking and full control. The firm was then known to hold contracts for 10 steamers of 8,800 tons deadweight, representing a value of approximately \$17,000,000 (£3,400,000).

The ground for the site of the Ames Ship-building & Dry Dock Company which was to own an excellent and complete shipyard, was broken on December 10, 1916. Four ways were built. The keel of the first vessel, the Westerly, was laid on March 2, 1917. The vessel was launched on November 24, 1917. and was delivered on the following February 17. Like most of the other vessels built at Seattle, she was of 8,800 tons deadweight. Hero again the time taken in construction was steadily reduced.

A magnificent new yard was built for the Todd Shipbuilding & Dry Dock Company at Tacoma. Early in March, 1917, the ground on which the yard was to be built was 20 feet under water. The layout of the plant, which

included a dry dock capable of accommodating a vessel of 12,000 tons, was admitted by experts to be admirable. At first there were four building ways, which were increased to six and subsequently to eight. The keel of the first vessel, the Tacoma, was laid on September 17, 1917; the first launching took place on March 28, 1918—only just over a year after a start had been made with redeeming the landand the first delivery on July 11, 1918. The area covered 105 acres, and an immense amount of filling work had to be done before the site was made suitable for the plant. The head of this undertaking was Mr., W. H. Todd, who was interested in a number of other concerns and especially in repairing work at New York, where his companies had earned a name for very efficient and expeditious work,

Nor could the steel shipyards of Portland, Oregon, be overlooked in any review of ship-building in the United States. Some fine feats of reclaiming land were accomplished here. In the summer of 1918 the large new plant of the G.M. Standifer Construction Company, covering 73 acres in the neigh



FOUR BUILDING BERTHS AT THE TODD PLANT AT TACOMA IN JULY, 1918.

(See the photograph of the site on p. 254.)

bouring city of Vancouver, was being built. Work started on January 21, 1918, and involved the filling up of the banks of the river to an average of 15 feet. By July, 1918, there had been erected a complete shop 400 feet long by 400 feet broad, and a storehouse 300 feet by 100 feet. The plate shop was described by British authorities as one of the finest in the world. The first hole in the keel plate of the first vessel, of 9,800 tons, to be

in July, 1916, and within two years nine steamers of 8,800 tons deadweight were delivered. The first keel was laid at the works of the Albina Engine and Machine Works on April 18, 1917, and between then and the middle of July, 1918, four ships o. 3,500 tons deadweight were launched from the four ways and were delivered. The steel shipbuilders of the Portland and Seattle districts had the advantage of being brought together for mutual



THE CRAWL KEYS: FIRST DAY AFTER THE LAYING OF THE KEEL.

built there was punched by Mr. Schwab on July 13, 1918. The same kind of work, including dredging of the river and filling in of the land, had been carried out in the case of other yards which were already at work. A fine record was achieved by the Columbia River Shipbuilding Corporation. The work of reclaiming the land was started on December 1, 1916, and on March 31 following the keel of the first ship of 8,800 tons deadweight was laid. With its three ways the company, between then and the middle of July, 1918, launched seven steamers and delivered six. Two more slipways were then being added. Again, the first keel in the new vard of the Northwest Steel Company was laid

discussion and assistance in the Association of North-western Shipbuilders, a body which was ably presided over by Mr. C. H. Hamilton.

In the production of engines and boilers much good work was done on the Pacific coast by the Williamette Iron and Steel Works at Portland, Oregon, and by the Llewellyn Ironworks at Los Angeles.

The G.M. Standifer Construction Corporation had originally concentrated on the building of wooden steamers, and it contributed as many as six wooden vessels, representing 21,000 tons, to the great launching demonstration of July 4, 1918. These vessels were the Alvonia, Montezuma, Umatilla, Belding, Mossabee, and Benzonia. The Pacific coast was, indeed, the

natural home of the wooden ship. Wooden ships were also built at the Gulf ports on the Atlantic coast, but this involved the transport of lumber across the continent from the Pacific coast. Within a few miles of the Western ports enormous supplies of fine Douglas fir were available. The annual cut of the States of Oregon and Washington alone, for all purposes, was estimated at a value of approximately Until the year \$175,000,000 (£35,000,000). 1917 the Portland (Oregon) district had built nothing larger than a small schooner type of vessel, but when, in the spring of 1917, it was thought that use should be made of the extraordinarily fine facilities available, preparations for building a larger type of vessel were made, and on May 1, 1917, the first keel was laid. By the summer of 1918 there were 14 yards in existence in the neighbourhood, and 50 vessels had been launched since the work of constructing the plants was begun in the previous year. With labour available and unlimited supplies of timber at hand very little time was expended in the construction of the yards. Most of the vessels built were known as the Ferris type, and were of 3,500 tons, with a length of 281 feet. All burned coal, were driven by reciprocating engines, and, as a general rule, were fitted with single screws. After the original idea, fostered by Mr. Denman in the early days of the United States shipbuilding effort, of employing a vast number of wooden ships in the Atlantic trade had been exploded, it was thought that the vessels would be very suitable for coasting services and relieving steel vessels for ocean trade. It was with this idea in mind that a large wooden shipbuilding programme was continued. There was difficulty in securing sufficient engines, which were supplied by, among other concerns on the Pacific coast, the Astoria Marine Ironworks and the Pacific Marine Ironworks, while other engines were brought from the east. This difficulty, no doubt, explained largely why, in one yard on the Columbia River in July, 1918, as many as 13 new wooden ships could be seen berthed or waiting to be fitted out. Eight wooden ships were being built on the ways in this yard, so, to the observer, there seemed to be wooden ships in every direction.

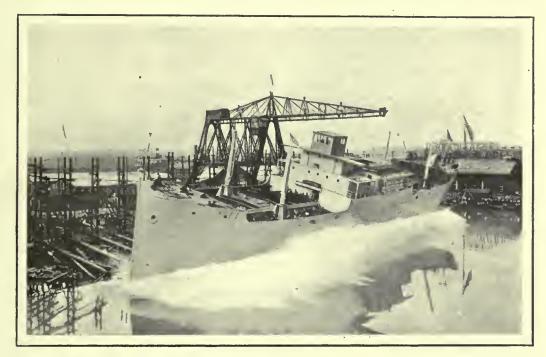
Honours for rapid production of wooden ships in the summer of 1918 were secured by the Grant Smith-Porter Shipbuilding Company, which was delivering ships complete within 92 days. Other yards producing wooden ships in the neighbourhood were the Foundation Company, engaged on work for the French Government, with 10 ways, and the Peninsula and Coast Shipbuilding Companies, each with four ways. At the Supple-Ballin Shipbuilding Corporation's yard on the Willamette River composite vessels of 4,500 tons were being built, the wood being reinforced with steel bracings.

The Seattle and Tacoma districts were also busily occupied with wooden ships. At Tacoma there were yards owned by the Foundation Company, with 10 building ways; the Tacoma Shipbuilding Company, with four ways; the Seaborne Company, with four ways; Messrs. Barbare Brothers, with two ways; and the Wright shipyards, with four ways. example of the progress made in construction, the work of building Messrs. Wright's vard was started on April 1, 1918. On May 1 following, the first ship was launched, and the second, third and fourth ships followed on June 9, July 4 and August 20, 1918. This firm secured lumber from a large mill at Ashford, 50 miles in the interior, and had contracted with this particular mill for 10,000,000 board feet. The consumption of lumber by the yards was large, for the quantity of lumber required for each ship of the Ferris type was about 1,750,000 feet.

Besides another wooden yard owned by the Grant Smith-Porter Shipbuilding Company, an exceptionally, fine wooden yard was owned by the Grays Harbour Motor Ship Corporation at Aberdeen on the Pacific coast, 140 miles south-west of Seattle. The ships built by the latter company were known as the Grays Harbour or Ward type, and were designed by Mr. M. R. Ward, the general manager of tho Corporation, a man of 28 years. There were eight ways on which vessels of 4,000 tons deadweight were built, to be fitted with two reciprocating engines, each of 700 h.p., and to be driven by twin screws. The company planned to build vessels of increased size, and of at least 5,000 tons. The president of the company, Mr. A. Schubach, expressed confidence that the company could deliver, at the current rate of construction, 30 complete ships each year.

This shipyard was unique as being the only one in the United States where the complete operation was carried through of converting huge tree trunks into finished ships. Within 15 minutes from the time that the log had been picked out of the river, down which it had been floated from the forests of the interior, the timber was cut, planed, shaped and carried by electric conveyor to its appointed place at the slipway, and was ready to be fastened into the hull. Log's measuring 120 feet long and 6 feet in diameter were drawn up out of the water on endless chains, caught up by great iron teeth, turned on to carriages and whizzed past circular saws, which stripped off pieces of various thicknesses, just as the breast of a chicken is cut by a sharp knife. Everything

enormous holds and engines aft, but the firms at the Lake ports had never built vessels for ocean service. They had been precluded from doing so by the restrictions imposed by the 25 locks of the Welland Canal and the locks of the St. Lawrence river, through which all vessels built on the Lakes must pass before they could reach the Atlantic Ocean. In 1915, however, it was realized that there would be a great demand for ocean vessels of small size, such as could safely make the journey from the Lakes to the ocean. The maximum length of these vessels was 261 feet, and the maximum



THE LAUNCH OF THE STEAMER CRAWL KEYS AT ECORSE, MIGHIGAN.

possible was operated by electrical machinery. Each little electric conveyor was capable of picking up a load of as much as 15,000 feet. The direction of every "stick" or block of timber was controlled by one man who, by pulling one of the 20 levers, switched off the piece into whichever part of the plant it was required.

The fine enterprise of the shipbuilders on the Great Lakes was one of the many distinctive features of the great American shipbuilding war effort. The traffic on the Lakes had been expanding for many years, and the shipyards on the Lakes had developed a special economical type of hull for the transport of the vast supplies of wheat and ore which were brought down by water from the centre of the Continent to the East. Some of these "Lake freighters" were of 11,000 tons deadweight, with

beam 43 feet 6 inches. The first series of vessels had a moulded depth of 20 feet, and a later series one of 24 feet 21 inches; and their dimensions gave them a deadweight carrying capacity of 3,600 tons respectively. "Longlegged ships" were being built in the summer of 1918 and expedited so as to be able to reach the coast before navigation was closed for winter, with a moulded depth of 28 feet 2 inches, and a carrying capacity of 4,100 tons. The most powerful company the Great Lakes was the American Shipbuilding Company, a consolidation which controlled the Superior Shipbuilding Company, the Chicago Shipbuilding Company, the Detroit Shipbuilding Company, the Milwaukee Dry Dock Company, the Buffalo Dry Dock Company, and also owned fine plants at

Cleveland and Lorain, Ohio. As an illustration of the growth of this concern, the parent company employed in 1915 fewer than 1,000 men, of whom 500 were employed at Lorain. In 1918 the number had risen to 19,000. In July, 1918, the company completed and delivered to the Emergency Fleet Corporation 12 ocean cargo ships of 42,600 tons deadweight, and was responsible for 663 of the number of ships built on the Great Lakes, and for $33\frac{1}{3}$ of the total number of ships built throughout the United States. Between July 22, 1918, and the end of the following October, it completed and delivered 46 oceangoing vessels, representing over 162,000 tons deadweight. The company was known to have entered into contracts with the Emergency Fleet Corporation for the construction of 176 ocean steamers. The president of the consolidation was Mr. M. E. Farr, certainly one of the most far-sighted and able builders in the United States. In the course of an important address on American shipbuilding at the National Foreign Trade Council Convention, held at Cincinnati in April, 1918, he urged that American shipbuilders must, in order to prepare for strong competition, equip their plants with the most modern tools, machinery and equipment, and create technical and operating organizations of the highest efficiency, and he carried out this policy thoroughly in the yards under his own control.

The Great Lakes Engineering Works, Detroit, Michigan, owned three plants, of which the largest was at Ecorse, near Detroit, and included eight building berths and two sectional floating dry docks. The second yard was at Ashtabula, on Lake Erie, with four ways and two fitting-out berths, while there was an extensive engine-building plant with machine works at Detroit. The company was determined to deliver 34 ships of the standard Lake type in the year ended December 31, 1918, and expected to complete 54 ships in 1919. A notable record was made in the summer of 1918. On August 15, the steamer Crawl Keys

belied her strange name, since the entire time taken for the construction and completion of the ship was only 29 days. From the time of the laying of the keel to the launching only 14 days passed. This rapid production easily made a record for the type of ship. When she left on her maiden trip, the vessel bore below the bridge a large placard with the words, "I am 29 days old-look me over." The president of this company was Mr. John R. Russel; Mr. John Ubsdell was general manager, and Mr. C. E. Baisley was superintendent of the Ecorse yard, where this remarkable ship was built. Undoubtedly the amount of fabrication done on the quay, and a fine system of organization, backed by enthusiasm, made possible the splendid feat. By the methods adopted bulkheads, large portions of deck floors, and deck houses were riveted and otherwise prepared on the quay, and were hoisted complete on to the ways by cranes.

In the Chicago district excellent work was done, in addition to that of the Chicago Shipbuilding Company, by the Manitowoc Company, the president of which was Mr. E. Gunnell, one of the pioneers of pneumatic riveting. At Buffalo some extraordinary pieces of work were carried out of cutting large Lake vessels in two, in order to enable the two halves to be towed through the Welland canal and joined together at Montreal for ocean service.

Nowhere, not even at any of the Pacific ports, was the working spirit better and the enthusiasm keener than on the Great Lakes. The company officials and the shipyard workers were convinced that they must not rest until the great cause for which the United States and the Allies were fighting together had been placed out of jeopardy. They had thoroughly developed the enthusiastic spirit which rendered practicable great achievements, and made it possible for the United States always to look back with pride to the stirring period when the great shipbuilding crusade, organized as a contribution to the fight against autocracy and militarism, was at its height.



CHAPTER CCLXX.

THE GERMAN OFFENSIVE OF 1918. (IV.)

THE LYS BATTLE-SITUATION ON APRIL 12, 1918-GERMANS ENTER BAILLEUL-BRITISH WITH-DRAW ON THE LEFT—GERMAN ACCOUNTS OF THE BATTLE—DEFENCE AND LOSS OF MOUNT KEMMEL— EXTENT OF THE NORTHERN ADVANCE—CONTINUED FIGHTING BEFORE AMIENS—INTERVENTION OF THE AMERICAN ARMY-AIR WORK-GERMAN COMMENT-THE AUSTRALIANS-" OUR BACKS TO THE WALL"-LESSONS OF THE ALLIED DEFEATS-THE SINGLE COMMAND UNDER FOCH-THE GERMANS TWICE CHECKED.

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HAPTER CCLXVII brought the narrative of the German offensive on the Lys front up to April 11, 1918, so far as the fighting at the extremity of the British right was concerned. On the south side of Armentières there had also been heavy fighting during this day, but here we were more fortunate than in the northern Timely reinforcements had been segment. received, and the 31st Division, arriving from the Somme battlefield, retook the villages of Le Verrier and La Beeque, which the Germans had captured from us earlier in the day.

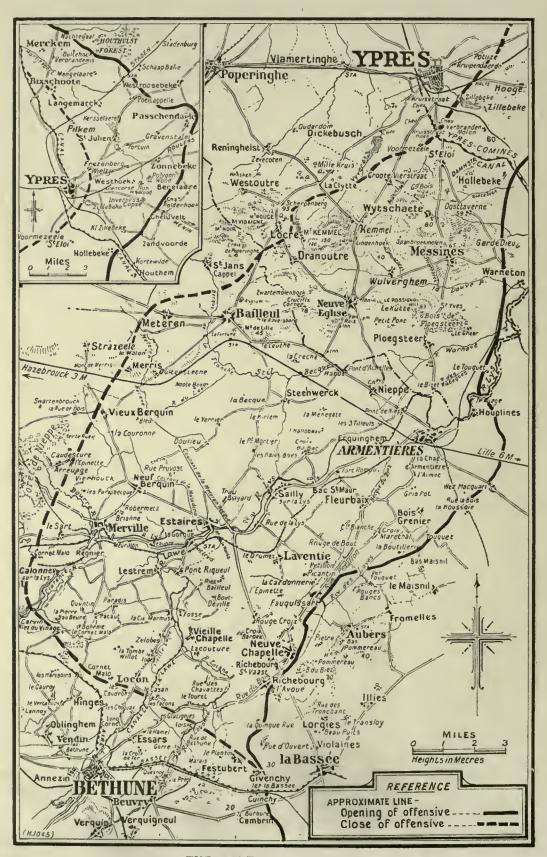
North of Armentières, the Germans continued to make vigorous attacks in the direction of Nieppe and Neuve Eglise, and in the afternoon fighting was renewed about Messines, which they carried, but were then brought to a standstill by the South African Brigade. The part of the 9th Division on the south of Hollebeke was also attacked in force, but drove back the enemy.

The 34th Division at Nieppe had repulsed all attacks during the morning, but the progress of the enemy in the Ploegsteert direction threatened its left flank, and this made it desirable to withdraw the troops. In the early part of the night, therefore, they were taken Vol. XVIII. - Part 230

back to Pont d'Achelles. This made somewhat of a break in the line, and to obviate this our troops between Pont d'Achelles and Wytsehaete, fell back to positions about 1,000 yards east of Neuve Eglise and Wulvergheni. This withdrawal involved in its turn a retirement from Hill 63 and the trenches held about Messines.

We have seen that the Germans had succeeded in penetrating our line as far as Merville, where they had been stopped by vigorous resistance on the line of the Bourre and Lawe; on the extreme right of the attacked position about Givenchy and Festubert, where the attacks had not been so vigorously pressed, our troops held their positions, and this enabled us to restore in a certain measure our line in this part of the battlefield. As troops of the 3rd, 4th, 5th, 31st, 61st and 1st Australian Divisions began to arrive, the line was to a eonsiderable extent "firmed up," although the situation was still by no means sceure.

On April 12 the Germans delivered, just before daybreak, a sudden attack on Pacaut and Riez-du-Vinage, which formed the left centre of the 51st Division, but the strenuous resistance of two batteries of the 255th Brigade Royal Field Artillery prevented the enemy from erossing the Canal. Each of these batteries as



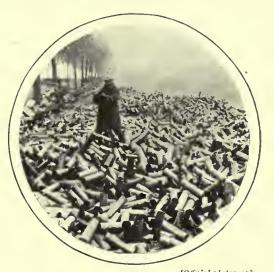
THE BATTLE OF THE LYS.

they retired left a single gun within 500 yards of the canal bank, which, aided by a party of gunners, who held the drawbridge with rifles, poured so strong a fire on the enemy as to stop his advance. On the right of the 51st Division was the 3rd Division about Locon, which inflicted heavy casualties on the enemy, but was nevertheless gradually forced back. On the left of the 51st Division, the 61st Division now came into action on the Clarence River. Both it and the 3rd Division had previously been engaged in the fighting about Arras at the end of March, where they had suffered considerably from the strain of continuous fighting; but they formed, however, so bold a front against the Germans as to stop completely their further advance. Meanwhile our position at Merville had been again attacked, but although the troops here were compelled to fall back a little in the morning hours, they subsequently held their ground.

We may say, therefore, that from La Bassée round to Merville our line was holding out fairly well, although to the north of this point this was not the case. The Germans attacked in great force on a front which extended from Estaires to Steenwerck at 8 o'clock in the morning, and by the afternoon our troops about Doulieu and La Becque were thrust back towards the north-west. Merris and Oultersteene were reached by the enemy, and thus a considerable gap was made in our line to the south of Bailleul. On the north of this gap, troops of the 25th, 34th and 49th Divisions, the last commanded by Major-General N. G. J. Cameron, C.B., C.M.G., though attacked with great vigour, held their ground to the south and south-east of Bailleul. Major-General R. J. Pinney, C.B., sent a brigade from the 33rd Division with a body of cyclists, a Pioneer battalion and every available man from schools and reinforcement camps, etc., against the advancing German troops, and these, favoured by the support of the troops on their left, counter-attacked, drove the enemy back and re-established our line early in the night.

In the morning of April 13, the Germans again attacked with great vigour. The 29th and 31st Divisions were holding a position north of Merville up to Vieux Berquin in front of the forest of Nieppe. On their left, it will be remembered that the enemy had already entered Merris and Oultersteene. The length held, some 10,000 yards, was long and the troops had been sorely tried by the severe

fighting of the previous day's. The position was very critical. The 1st Australian Division, under Major-General Sir H. B. Walker, K.C.B., D.S.O., was at this time detraining on the railway-line coming up from Hazebrouck, and it was necessary for the two divisions to hold out at any cost until the arrival of these troops to prevent a complete breach in our line, which would have allowed the enemy to move down



[Official photograph.

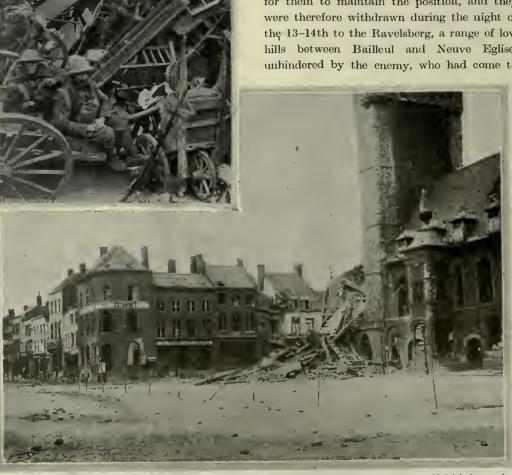
USED SHELL-CASES ON A ROADSIDE

IN FLANDERS.

on the important railway junction of Hazebrouck, from which he was less than five miles distant. Attack after attack was delivered against our troops, but all were repelled with great loss. Field-guns then were brought up to quite close ranges and concentrated against the British position. With their aid, Vieux Berquin was captured, but nevertheless our troops resisted in their various posts with great gallantry. The Germans stormed round them, attacking them in rear, but still our men fought on, and this gave time for the Australians to deploy and dig themselves in on a line just in front of the Nieppe forest to cover the advance to Hazebrouck, and although at various points the enemy succeeded in penetrating, there was no complete success on his part in driving back the general line thus held. The fighting was of the severest description, constantly at handy-strokes, but eventually the German efforts ceased, their losses having apparently oxhausted the offensive effort of their troops. On the right portion of our line the 4th Guards Brigade, holding a line of some 4,000 yards, was attacked with special vigour, but held its own with brilliant courage throughout the day. When it is remembered that the whole of the troops engaged in this heroic struggle had come up straight from the Somme battlefield, where they had been sorely tried and suffered heavy losses, and that these had been made good by fresh men with no experience of war and only half assimilated by the units into which they were drafted and, moreover, that they were attacked by vastly superior numbers, it must be admitted that the fight they put up was as gallant as any recorded in British military history.

North of the attack on Merris and Oultersteene the enemy's assaults in the direction of Neuve Eglise had not made much progress, although severe fighting had taken place in its neighbourhood during the afternoon of April 12. The struggle continued throughout the night, and by the morning of April 13 the Germans had forced their way into the village. A little before noon, a counter-attack was delivered by troops of the 33rd and 49th Divisions, which drove the enemy completely out again and captured many prisoners. Several heavy attacks were also made by the Germans about Meteren and also against La Crèche, but these were repulsed by the 33rd and 34th Divisions.

In the evening the Germans renewed their attacks against the line Neuve Eglise-La Crèche, and succeeded in forcing their way in between these two points, threatening the left of the 34th Division to the north and east of La Crèche by an outflanking movement. Although our troops held their ground here during the early part of the night, the direction of the attack was such as to render it impossible for them to maintain the position, and they were therefore withdrawn during the night of the 13–14th to the Ravelsberg, a range of low hills between Bailleul and Neuve Eglise, unhindered by the enemy, who had come to



[Official photograph

BAILLEUL.

Above: a barricade in the town.



[Official photograph.

THE RUINED CHURCH OF NEUVE EGLISE.

the cnd of his offensive spirit for the day, owing to the heavy losses he had sustained. On the left flank of these heights at Neuve Eglise continuous fighting took place throughout the whole night. Here the 33rd Division was engaged, and the 2nd Battalion Worcestershire Regiment belonging to it held firmly on to the Mairie until 2 p.m. on April 14. The tide of battle ebbed to and fro, but by midnight on this date Neuve Eglise was completely captured by the enemy. Between Neuve Eglise and Bailleul and south-east of Meteren, the German attacks were all repulsed.

On April 13 and 14 there had also been some smart fighting at a number of places between Givenchy and the Nieppe Wood, in which the Germans were uniformly unsuccessful. On our side the 4th Division on the evening of April 14 attacked and re-captured Riez-du-Vinage, and took 150 prisoners.

April 15 saw fresh heavy German attacks against Bailleul and the Ravelsberg. The strugglo was severe. The enemy captured the eastern end of the heights, but was driven out. He then renewed his attacks, and gradually worked along the ridge until, by 7 p.m., the whole of it was in his possession, and our hold on Bailleul thus became very precarious. By 9 p.m. the Germans had forced their way into the town, and thus compelled our troops to abandon this part of the field and to take up a position between Meteren and Dranoutre. It will thus be seen that the Germans had forced us to retreat over a considerable length

of country, and had, indeed, made a great breach in our lines, extending from Dranoutre round through Merris and Vieux Berquin to the west of Merville, and thence through Locon to La Bassée.

· From the time this fighting had begun Sir Douglas Haig had borne in mind the possibility of having to give up the position his left flank



[Bassano.

MAJOR-GENERAL E. P. STRICKLAND. C.B., C.M.G.

held on the heights to the north-east of Ypres. This rearward movement had been begun on the night of April 12-13, when the British positions on the Passchendaele ridge were



MAJOR-GENERAL R. J. PINNEY, C.B. Commanded the 33rd Division.

left only to be held by outposts. On the night of April 15/16 a still further retreat was accomplished, our troops retiring to positions along the line of the Steenbeek river and the Westhoek and Wytschaete ridges. Our line was thus brought considerably nearer to Ypres, and the pronounced salient hitherto occupied towards Passchendaelo was abandoned.

We have already seen the severe strain that had been put on the British Army owing to its numerical inferiority to the Germans. The heavy fighting between the Somme and the Oiso and north of the Somme to Arras had sorely tried the British troops. They had been engaged against a force which exceeded them in the proportion of 7 to 4. They had come with credit out of the battle, but with credit which had been obtained by a sad diminution of their strength, though with the satisfaction that the casualties they had inflicted on the enemy were even more severe than those they had suffered themselves. Many British divisions had taken part in both the northern and southern battles, while others had been engaged almost continually in opposing the German offensive. Sir Douglas Haig felt that help was needed, and none was forthcoming from England. He, therefore, pointed out to General Foch, the Commander-in-Chief of the Allied Forces, the urgent need of giving the British troops some relief and affording them some rest so as to bring the various units into good fighting trim again. General Foch at once complied with the British Commander's request, and French troops were moved up to the north, and by the middle of April were already in position close behind the British front in Flanders.

On April 16 a number of strong local attacks were made by the enemy on the Meteren-Wytschaete front. For the most part these were repulsed with heavy loss by the 25th, 34th, and 49th Divisions, but at the villages themselves the Germans succeeded in penetrating after a good deal of strenuous fighting of a fluctuating character. Counter-attacks



MAJOR-GENERAL SIR H. B. WALKER, K.C.B. Commanded the 1st Australian Division.

were made during the ovening by both British and French troops, but these were unable to turn the enemy out, although at Wytschaete a battalion of the 9th Division at one time reached the castern edge of the village. At night our line was established close to its western and northern boundaries.

The next day the enemy moved forward from the Bailleul-Neuve Eglise line against Kemmel Hill. This was an important position, as it gave command of view and fire over the whole of the flat country towards Poperingho and Ypres, and thus completely cut the roads leading down from the latter. The preliminary bombardment was of a very severe description, and the assault made was delivered with great intensity, while at the same time attacks were made in the Meteren and Merris direction, thus prolonging the German assaults to the left.

resulted in the Germans being defeated with heavy losses, leaving over 700 prisoners in Belgian hands, besides a field gun and 42 machine-guns.

The German version of this affair was that on April 18, Belgian troops made a dotormined attack from Merckem against the German lines, but without obtaining any noteworthy result.

The same day also saw a fresh attempt of the Germans to gain further ground on the southern flank of their main attack.



Belgian of cial

ON THE FLANDERS FRONT: BELGIANS STRENGTHENING A DAM.

The defence of the Kemmel position was in the hands of the 34th, 49th and 19th Divisions, and these completely defeated the enemy's attempts. Here and there points of our line were occupied, but counter-attacks always succeeded in re-establishing it. The left of the German attacks (Meteren-Merris) was also beaten back with heavy loss by the 33rd and 1st Australian Divisions, the result being that at the end of the day no material gain accrued to the Germans.

· At the northern end of the Allied line the Germans attempted to capture Bixschoote, and to force the Yser Canal, the line of attack being directed along the Ypres-Staden railway. The attempt was a complete failure and Givenchy was bombarded with extraordinary vigour and, after this was considered to have attained the desired effect, infantry attacked along the line from Givenchy to the west of Merville. At the former place and at Festubert our trenches were ponetrated. The struggle was intense and continued throughout the whole day, but the 1st Division, under Major-General E. P. Strickland, C.B., C.M.G., D.S.O., by vigorous counter-attacks, practically regained our original positions. Along the rest of the line attacked the Germans gained no success whatever, but were beaten back with exceedingly heavy loss at all points by the 4th and 61st Divisions.

There now came a pause in the fighting, which



[Official photograph.

SCENE ON THE FLANDERS BATTLEFIELD IN APRIL. 1918.

died down to mere local collisions, few of these being of any moment, except at Festubert, where a strong point known as Route "A" keep was taken and re-taken several times before being finally secured by us. Farther west, the 4th and 61st Divisions carried out a series of suecessful minor affairs north of the La Bassée Canal, in which some hundreds of prisoners were taken and a considerable improvement in our positions between the Lawe and the Clarence Rivers was effected. Meanwhile the French troops had been coming up and had taken over the line in the neighbourhood of

GENERAL VON QUAST.

Commanded German troops between Armentières
and La Bassée.

Meteren and Spanbroekmolen, and by the morning of April 21 had relieved our forces over the whole of the Kemmel segment.

Let us now see what the German views were with regard to the fighting just described.

The fact that the British Commander-in-Chief had been obliged to call upon the northern portion of his line to supply reinforcements to the troops fighting from Cambrai to the Oise had not escaped German observation, and it therefore seemed to afford a favourable opportunity for an attack in the direction of Armentières. The operations, from the German point of view, were divisible into three periods. The first, which began on April 9th, allowed von Quast to push forward with his army to the line Festubert-Armentières. On the next day Sixt von Armin attacked between Hollebeke and Armentières, and the following day these two armies continued the forward movement. From April 16-18 the advance of these troops was continued and had as a consequence the gradual abandonment of the forward position at Passchendaele. The direction of the German attack lay across the valley of the Lys, over the flat ground which lay south of the chalk ridge which extended from Mont des Cats to Kemmel towards Hazebrouek. The ground was exceedingly marshy in character and covered with hedges and plantations which hindered the view. It was not possible to construct such deep and strong entrenchments as had been made in more favourable ground, and the only set-off against this was that the

numerous farms and groups of buildings allowed the construction of many favourable supporting points. The river lines of the Lawe and Lys formed fairly favourable lines for the defence, some three and a half miles behind the front line of trenches. The Lawe joined the Lys at



GENERAL VON BERNHARDI.
Commanded an Army Corps.

Estaires. Behind the Lawe was the Clarence. Beyond the Lawe and the Lys the ground was first flat and then, beyond the forest of Nieppe, rose gradually until the heights to the south-east of Hazebrouck were reached. It was therefore desirable from the German point of view to push forward as rapidly as possible across tho rivers and attain the better ground. The condition had not been made more easy by the fact that heavy showers in the days that immediately preceded the attack had increased the difficulties of movement. Craters and trenches, and even the open country, were largely under water, while the few roads which lay across it had been destroyed by artillery fire. The assembly of the German troops was but little disturbed by the British, and at 4.15 on the 9th the preparatory bombardment opened, the infantry assault beginning at 8.45, under cover of thick fog. The German attack was divided up into five columns. The

southernmost of that was the weakest and was to play, chiefly, a defensive part. Of the remaining four, the right was intended to pass to the south of Armentières, and the three central columns constituted the principal attack. The German troops to the south of La Bassée, without leaving their positions, were told off to pour a lively fire against the opposing British lines, while the corps of von Kraevel attacked on the line through Givenchy, La Bassée, Festubert, and Richebourg l'Avoué.

The attack at first was very successful, and



GENERAL VON CARLOWITZ.

Commanded an Army Corps.

by 10 o'clock the English third line had been picreed. Then the difficulties of the ground began to have their influence. It was impossible to make further progress without the support of artillery, and this was almost impossible to bring up. Every crater in the ground was full of water. The roads were useless, and it required the most strenuous exertions

of men and horses to bring any guns up to the front. But the exertions of the German engineers, however, allowed seme to be brought forward, notwithstanding the British Field Artillery, which had arranged beforehand to sweep the ground with its fire.



GENERAL VON KRAEVEL. Commanded an Army Corps.

The British resistance on both flanks by Armentières and on the south bank by Givenchy and Festubert stopped the German attack, and although Richebourg l'Avoué was taken there was not much further progress on Armentières was not seriously this flank. attacked. In the centre the Germans made better progress. The British artillery does not appear to have had so much effect here, and this enabled the Germans to bring their guns and mine-throwers farther forward. The troops of General von Bernhardi stormed Richebourg St. Vaast and Lacouture, and by evening reached the neighbourhood of the Lawe. The eolumn on the right of Bernhardi, under General von Carlowitz, captured Laventie and pushed on to the Lys, where they found the passages behind Sailly and Estaires blown up. The right column, under von Stettin, taking Bois Grenier in flank, moved on Fleurbaix and then reached the Lys at Bac St. Maur.

In the meantime the British had brought up their reserves to the far side of the Lawe and the Lys to positions which were to be found behind these natural obstacles. Strong con-

centrations of machine-g ms poured their fire on the passages where the bridges had already been destreyed, and swept the opposite bank with their fire. But towards evening Hofer's Brigade managed to pass over the Lys at the lock by Bac St. Maur and threw up a protective bridge-head at Croix du Bac. During the night further passages were won east of Estaires, west of Le Marais farm, and to the south of This allowed a further Vicille Chapelle. advance of the Germans, and especially permitted the south flank of Sixt von Armin's troops to advance. The task of this portion of the more northern German Army was not so difficult as the Lys was quite close to the German trenches, either before or behind them, and was easily passed. But to the north the ground towards Messines and Wytschaete was more difficult of approach and was strongly defended. Messines was surrounded and taken and powerful counter-attacks were driven back; the



GENERAL VON EBERHARDT. Commanded the Prussian 10th Reserve Corps.

Germans were equally successful in the attacks on the wood south-west of Hollebeke, and they pushed on farther towards Wytschaete. South of this part of the field, Ploegsteert and Le Bizet (on the road from Ploegsteert Wood to Armentières) were taken, but the wood itself was successfully held, which compelled the Germans to pass by on the other side of it. Houplines, near Armentières, was taken, though the town itself was not touched, but connexion was made with the army of von Quast. On April 10

fighting was renewed, and met with opposition from the newly-arrived British reserves. Von Hofer, however, was enabled to push forward from Croix du Bac and captured Steenwerck, and thereby facilitated the passage of German troops over the Lys at Erquinghem. More to the south, in the neighbourhood of Estaires, the Germans met with strong resistance, especially by Sailly. South of Estaires the German engineers managed to throw a bridge, and the troops coming over it attacked Estaires in flank and rear, and eventually captured the village. General von Bernhardi's right flank attacked the passage over the Lawo at Le

On April 11 Wytschaete was for a time in the Germans' possession, but was eventually lost by them, though the German line was firmly established on the eastern edge of the village and moved forward about 1,100 yards to the east of Wulverghem towards the south. Between the Douve brook and the eastern edge of Ploegsteert Wood von Eberhardt followed up the retreating British, broke through with their left wing by Romarin and joined on by Pont de Nieppe the southern assaulting column. Von Stettin on April 11 had pushed his outpost line as far as La Chapelle d'Armentières, and on the night of April 11/12,



[Official photograph.

AN OUTPOST IN OUR FRONT LINES IN FLANDERS.

Gorgue, and also beat back the British counterattacks from the direction of Lestrem and Vieille Chapelle. Later in the day the Germans were able to penetrate between these two points and secure a further passage over the Lawe.

The Germans found the greatest opposition in the region of Béthune, where the British were defending the mining ground in that neighbourhood. Hero General von Kraevel's troops bravely resisted the counter-attacks of their opponents, but were obliged to content themselves with a moderate advance and a concentrated artillery fire to stop their enemy's progress.

advanced towards Houplines. Further progress was made between Armentières and The river was crossed the Lys. and Nieppe taken. Armentières itself surrounded, and the garrison after a bitter resistance surrendered in the afternoon of the 11th. In the meantime the German forces which had been pushed forward towards the north-west, after a fluctuating fight, captured the station of Steenwerck, and thus guarded the right of the movement against attack, and put them in a position to advance on the line Bailleul-Neuve Eglise and the Kemmel Heights to the north of it.



HAZEBROUCK: THE GRANDE PLACE.

As it was at the beginning of the war.

More to the south the right wing of General von Carlowitz after severe fighting, took Doulieu, while his left wing penetrated into Neuf Berquin as far as the church. General von Bernhardi, after passing the Lawe at La Gorgue, won forward to Merville, while tho left of his force took Lestrem and then Pacaut, and, wheeling to the right, moved on Merville, which was taken after a stubborn defence between 10 and 11 o'clock

The advance between Lestrem and Vicillo Chapelle led to further enemy progress towards La Tombe—Willot and Bouzeteux. VonKraevel, in spite of a very determined resistance and the repulse of many counter-attacks, evontually succeeded in capturing the village of Les Lobes.

On April 12, the Germans made but little further progress. In local fights about Wulverghem and to the north of Romarin, some advance was made on the line Bailleul-Neuve Eglise, which cleared the way for the advance on Kemmel. The right flank of von Quast's army took Les Trois Pipes, while von Carlowitz's troops after taking Doulieu pushed forward to the south of Vieux Berquin. Bernhardi improved his success of the previous day by the capture of the north portion of Calonne, while Kraevel took Cornet Materials.

In the next few days the German efforts were directed against the line Baillenl-Neuve Eglise, with a view to the capture of the Kemmel heights, which were necessary to protect the further advance westward of their troops over the lower ground.

On April 13, the left of Sixt von Armin's army, supported by the right wing of von Quast, took Neuve Eglise and the heights to the left (the Ravelsberg).

There was practically no change on April 14, but the next day further successes were gained. In the early morning Sieger's Corps, after a short artillery preparation, eaptured the trenches east of Wulverghem, and then the village itself, advanced over the Wytschaete-Wulverghem road and seized, after a handgrenade fight, three of the great craters made by the British in the previous year's fighting round Wytsehaete. Late in the afternoon troops of von Eberhardt and Marschall captured the commanding heights west of Wulverghem and east of Bailleul. Over the rest of the front the Germans contented themselves with consolidating the ground gained.

On April 13, Carlowitz took Merris, Vieux Berquin and the village of Verte Rue, and beat off several strong counter-attacks, and, following some of these up, took many prisoners.

The result of the fighting up to April 15 was that the German front had been pushed so far forward as to threaten the line from Hazebrouck to Poperinghe and Ypres. It also interrupted the roads leading from the south by Bailleul and Neuve Eglise to Ypres, and thus threatened.

directly the British lines in front of the latter point; the result was the withdrawal of the British from the Passchendaele salient. The Germans pushed forward and on the evening of April 16 occupied a line from Mangelaare-Langemarck-Zonnebeke-Veldhoek. On the same day General Sieger at 7.30 a.m. captured Wytschaete and the heights to the north-west and west of this point. General von Eberhardt advanced to the valley of the Douve and the Kemmel brooks, and Bailleul was also occupied

flooded state of the ground in places, they now drew rein before their strength was used up. Put in colloquial English, this means that for a time the German forces had shot their bolt. But the battle of Armentières, the German name for what we call the battle of the Lys, had not only won back the ground lost by the Germans in the previous year, but had also advanced far beyond what the British had then captured. Besides very heavy losses in killed and wounded, about 20,000 prisoners had been



ARTILLERY OFFICERS OBSERVING FROM KEMMEL HILL.

by Marschall's troops after its abandonment by the British. Meteren was also captured, thus widening the front which threatened an advance against the heights about Mont Kemmel, and this village was held in spite of many counter-attacks of British and French troops, supported by tanks.

In the next few days the continuous strengthening of the Allied forces became more and more evident. Especially did the increase in the number of guns of heavy calibre strengthen the effect of their artillery bombardment, while the coming up of more fresh infantry divisions made their resistance more formidable.

To sum up the German view of the situation: After nine days' continuous fighting in difficult ground, rendered more difficult by the taken, 400 guns, thousands of machine-guns and large amounts of equipment and provisions had been captured.

It will be observed that there is but little difference between the German and the British account of the nine days' battle.

It must be remembered that the German aim in this part of the field was undoubtedly to capture Hazebrouck, with a view to a further advance against the northern ports and also to cut off the northern portion of the Allied line extending to the Yser. The position of the Kemmel heights was absolutely necessary to the Germans before this advance could be carried out. Held by us it fermed an excellent artillery position which took in flank any further



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TAKING WOMEN INTO SAFETY.

German advance westward. With long range guns we could bring fire from it to bear over the ground right up to Messines, Hollebeke and Ypres, while to the south Ploogsteert Wood and Armentières were within range. Its heigh!, 300 feet above the surrounding country, gave it a wide command of view, which allowed observation well behind the German lines, and which made the local cover afforded by houses, hedges and plantations of very little use. The capture of Kemmel did away with the danger to the Germans of having their lines up to Meteren taken in reverse by artillery fire, and in turn gave them the same wide outlook and observation which it had afforded to us when we held it.

As has been seen, the first attempt to capture this 'mportant point was a failure, and for the next few days the fighting was comparatively insignificant. It was very important for von Eberhardt to gain more room to the north for his troops so that it might be possible from the north of Wytschaete to direct an attack on the Kemmel position.

On April 22, his left flank occupied the Salonne Farm south-west of Dranoutre, and the evening of the next day he attacked the Bleugelhoek Hill, an outlyer on the south-west of the Mount Kemmel ridge, which had

been occupied by the British. Counter-attachs made by French troops during the night and the following day were stopped by German fire.

On the evening of April 24, the situation was as follows: Nine divisions belonging to the corps of von Eberhardt and Siegor extended in an arc from Bleugelhoek north of Neuve Eglise past Wulverghem and Wytschaete. North of this point the German line bent backwards to the north of Hollebeke. Siegor's troops were north of Wulverghem, Eberhardt's to the south. It will thus be seen that a heavy concentric attack was intended against the Kemmel heights. The German artillery preparation had commenced on the 19th and extended on both sides of the actual point destined to be carried.

At half past three on April 25 the German artillery fire reached its fullest intensity, and at 6.45 a.m. the infantry, with their accompanying artillery, went forward to the assault. Pivoting on their left flank, so as to hold in check any attack from the direction of Bailleul, the German divisions directed their efforts with their centre and left straight up the Kemmel heights. The rest of the German force was directed against the British right, which was on the Messines-Kemmel road at a point about half way between Kemmel and

Wytschaete. Evidently the German object was to turn that flank and push in between it and the French on Kemmel.

After very severe fighting the right flank of von Eberhardt's men, which consisted of mountain troops and Bavarians, captured the forward positions held by the French and finally reached the Kemmel crest. Several of the advanced pests occupied by the French and part of the village held out till the evening, although Kemmel village itself was taken about 10 a.m. On the German right, the British line was held by the 9th Division and attached troops from the 49th Division. The fighting, which began here at 7 a.m., was very severe, and heavy losses were inflieted on the Germans by rifle and machine-gun fire at elose range, but eventually the right flank of the 9th Division was forced to fall back fighting strenuously to Vierstraat, though the wood just south of that point still held out till one o'cloek.

Later on, the German progress extended to the southernmost of the great craters exploded in the previous year on the Messines ridge and St. Eloi was taken. In the afternoon the attack was pushed on with great vigour against the ground held by the 21st Division, and by the evening the British had been gradually forced back and held a line running from Hill 60 to Voormezeele, then past the north of Vierstraat to the junction with the French about La Clytte. Sieger's Corps was now in touch with Eberhardt's troops and the German line extended over Kemmel in front of the position held by the British A considerable amount of ground had been lost, and to restore the situation reserves were rapidly hurried up.

On April 26 a large number of fresh British and French Divisions, after severe artillery preparation, made a vigorous attack from the north against the hill and village of Kemmel. The British troops employed were the 25th Division, with troops attached from the 21st and 49th Divisions, together with French troops. The French penetrated inte Kemmel village and took over 300 prisoners. According to the German account, prisoners stated that the, order had been given that Kemmel was to bo retaken no matter at what cost. The advance was at first fairly successful, but the Allied troops found themselves, after they had penetrated into the German position, struck on both flanks by heavy machine-gun fire, and they were unable to maintain the ground won.



[Official photograph.

MACHINE GUNNERS GUARDING A RIVER BANK.

Troops of Sieger's Corps counter-attacked and helped to drive back the Allies. While thus, in the centre of the German line, the Allies' counter-attack was being dealt with, the right flank of Sieger's corps pushed forward along the Ypres-Comines Canal towards the north, and reached a position between Voormezeele and the elbow of the Ypres-Comines Canal.

. The enemy renewed his attacks later in the morning, but made little progress, and then only at a few points. Troops of the 21st, 30th, 39th and 49th Divisions and the South African Brigade of the 9th Division were all engaged in severe fighting during which they made several counter-attacks, which gained some success. The centre of von Eberhardt's Corps was forced slowly back by some of these, but eventually the Germans camo on again and pressed them back. The French were able to take Locre, but, according to the German account, this was recaptured by them notwithstanding the strenuous defence made by the French garrison. At the end of the day Kemmel Hill remained in the hands of the Germans, notwithstanding the repeated efforts of the Allies to turn them out of it, and the progress that the right flank of the German attack had made to the north-west of Voormezeele rendered the position of the British left a dangerous one. Especially did it threaten the line of retreat of the troops to the cast of Ypres. It was, therefore, determined to withdraw these from their salient position, and on

the night of April 26/27 they were taken back to the line Pilckem-Wieltje to the west end of Zillebeko Lake and Voormezeele, and here they were able to make good their stand. The retreat of the British troops was observed from Kemmel Hill, and was also reported by von Böckmann's Corps, which was on the right of Sieger's. The German troops followed up on the heels of the retreating British, but no event of special moment occurred on April 28.

The next day, however, a severe bombardment of the Allied positions opened at 3.10 a.m., and two hours later a series of infantry attacks was made against the French and British positions from the west of Dranoutre to Voormezcele, but all of these were brought to a standstill. Against Locre many desperate attacks were made with a view to gaining the high ground behind it known as the Scherpenberg, the object of which was to facilitate progress westward on to Mont Rouge and Mont Vidaigne, which, with Mont Noir, formed a part of the range which commenced at Keminel. Locre itself being situated in the valley which separated these two parts. The Germans at ong time forced an entrance into Locre, and even penetrated to the crossroads between Scherpenberg and Mont Rouge, but in both instances French counter-attacks drove them back after a very severe conflict.

To the north of this part of the field, where the British held the front, the line was occupied by the 21st, 49th and 25th Divisions. These



Official thotograf h.

HOT WORK WITH A 6-INCH HOWITZER ON THE WESTERN FRONT.

were attacked with great vigour about 5 a.m. and a little later. Our fire drove them back, but after half an hour's pause the German infantry came on again in massed formation, with bayonets fixed, against the 49th Division. The fire from our troops earried devastation into their ranks, and resulted in the assailants being forced to retreat with extremely heavy losses. The 25th Division was again attacked about half-past eight without suecess, and

a further small gain was made by the enemy about Voormezeele, the general line of the Allies was firmly held, while the Germans had suffered enormous losses, which had brought them to a full stop. This same day the Germans had made another attack on the Belgian troops holding the Ypres-Staden railway, but the prompt advance of the Belgian troops not only drove back the German attack, but forced them out of the ground they had gained in their



A SOLITARY POST ON A CANAL IN NORTHERN FRANCE.

throughout the morning the German infantry came on again and again to attack this Division and also the 49th and 21st, to which wero attached troops of the 30th and 59th Divisions. In all these cases the attacks were made in dense formation, with the result that they were repulsed with heavy losses. Our artillery fought with its usual ability, and inflieted great loss on the front lines and also on the troops massed behind them. Our infantry not only punished the Germans by its accurate fire, and in more than one case went forward to meet them and drove them back with the bayonet, or at least the sight of the British troops coming on to attack with the bayonet decided the Germans to withdraw before the British cold steel reached them.

The result of the whole day was that, although

first attack. At this point the enemies' efforts were entirely fruitless.

The next day the French, by a smart counterattack early in the morning, drove the enemy out of the eastern portion of Loere, to which he had managed to cling on the 29th. According to the German accounts, the fighting round Kemmel had resulted in the capture of 8,200 prisoners, 53 guns and 233 machine-guns. They make no mention of their losses, which were undoubtedly more severe than those of the Allies. The end of the month practically terminated the German efforts of further advance on this part of the line.

We have seen that the right of the French on the left of the German advance against



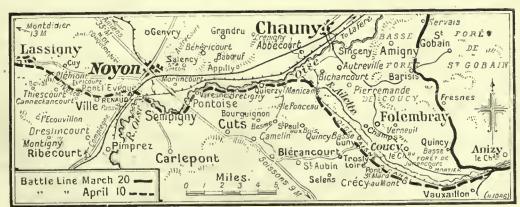
Amicns was, by its position, open to a counterattack from the German lines. Mont Renaud may be looked upon as the strongest point in the Fronch line between Montdidior and Ailette. It is situated on the north side of the Divette, which runs through a valley with steep hills on either side, to join the Oise south of Noyon, and stands as a sentinel on the right of the heights coming down to it from Le Plémont. This river line was a fairly efficient obstacle, owing to the nature of the ground, though the stream was not of much importance,. It had been greatly strengthened by the French engineers, and as long as this was held no German advance was possible past it directly to the south. The Germans held the opposite bank on the lower

slopes, which were somewhat exposed to the French fire, and from which a direct attack against them would have been very difficult. The woods behind the German trenches served to cover local movements of troops to the east or west, but were of no utility from a defensive point of view. These considerations show why at first the Germans made great efforts to capture the ground on the right bank of the Divette, and many attacks were delivered in vain about Renaud, but finding their efforts useless they pushed on ahead to Montdidier, contenting themselves merely with observing it. But as long as the French held Mont Renaud it was necessary for the Germans to watch the ground there, lest it should form a starting-point for an attack against the German communications back to La Fère. The French appear to have thoroughly appreciated the objectionable position which the very pronounced salient offered, and early in April made arrangements for withdrawal from it, though there was no intention of moving backwards unless the Germans eamo forward. The French position joined on to ours at Barisis and extended down past Freyne and Quiney to tho eanal which connected the Oise and the Aisne.

The line in question, which was occupied by part of the French Sixth Army, was a difficult one to hold, because the marshy part of the lower forest of Coucy was commanded by the high ground of St. Gobain, and it was evidently undesirable to adhere to this when a determined advance of the enemy might have interrupted the French line between Noyon and Chauny. It was, therefore, determined to retire when necessary to a line which would do away with the obtrusive salient which the French position offered at this point.

Between Chauny and La Fère, Westphalian and other troops, five divisions in all, under von Boelin, after a short but powerful artillery preparation, advanced in the carly morning of April 6. The attack was divided into two parts: the right he directed against the twin hills of Amigny and Chauny, from which a wide field of view dominates the valley of the Oise: the left against the French line in the northern part of the Coucy Wood south of Barisis. The artillery preparations had been extremely effective, and for this reason very little further resistance was offered, and the heights were captured with very slight losses. The right attack crossed the Oisc and stormed the suburbs of Chauny; it then proceeded onward and a storm of artillery preparation was directed against the village of Sinceny, which was captured in the late afternoon. This did not satisfy the troops, who pushed farther forward on the road to Pierremande, which was reached at nightfall. portion attacked the French positions in Coucy Wood and the line Bichancourt to reached. The attack was, Chauny was as in the previous operations ofadvance, covered by a very heavy fire of artillery and trench mortars, which the Germans claim inflicted heavy loss on the French, and they also claim to have taken 1,400 prisoners.

The attack was continued the next day, and the French were forced back to the western bank of the Ailette, Picrremande and Folenibray being taken. On the western side of the forest of Coucy a hillock to the north-east of Folembray was captured, and the Germans made good their advance as far as Verneuil and took some more prisoners. They made a direct attack on Coucy castle by a ravino which ran up towards it, and the French machine-guns fired into the compact mass which came up along it, and cut down the advancing Germans by hundreds. The French gradually fell back on Coucy-le-Château, and there halted to wait further developments. Seeing that a further attack was imminent on April 8, it was determined to withdraw the whole of the French forces, with the exception of a small retaining force left in the castle, to. the banks of the canal, and this was successfully accomplished, the loss being very trifling, for not a single gun or machine-gun had to be abandoned. The retaining force left in the castle fought with the utmost bravery, and were able to hold back the Germans for a considerable time. Many brave deeds were done by the French rear-guard in their retreat from the Coucy Château, among which may be specially signalled out the gallant action of an ambulance man who found himself left alone in the castle with a badly-wounded soldier unable to walk. Taking him on his back, he carried him down to the bank of the Ailette to a bridge which was partially broken down. Before he could cross he had to repair it, and, putting down his man, he hunted about for a plank to repair the gap. This found and put in place, he hoisted the man on to his back and crossed the river. He then destroyed the temporary repair, leaving



THE GERMAN ATTACK ON THE COUCY FRONT.

the bridge in a worse condition than before, carried off his comrade to the nearest dressing station, and proceeded to join his unit. For this act of courage and coolness he was given the Croix de Guerre.

The new French line now ran from Mont Renaud across the Oise and up the south bank to Quierzy, whence it went south-east on the



[Australian official photograph.]
GENERAL PERSHING IN FIELD UNIFORM.
Commander-in-Chief of the American Forces in
France.

south side of the Aisne-Oise canal and the Ailette to join on to the old line of trenches, a little south of Mortier.

On April 9, in spite of the rain which had turned the roads into rivers of mud, the canal line of Bichancourt-Beaucourt was reached by the Germans. The total number of prisoners taken was estimated by them at 2,000.

This operation on a width of six to ten miles was, the Germans claimed, almost equal to that of the first British battle of Cambrai, which gained for us in one day's fighting ground to a depth of $4\frac{1}{2}$ miles and about 2,000 prisoners. Half of the lower wood of Coucy was again in German hands. The booty, which was almost entirely of British make, was

probably what we could not take away when the French took over that portion of the front. For the French the defeat was (in German opinion) a painful one, as it pressed them still farther away from the spot where their artillery was scarching for the Paris guns (i.e., St. Gobain).

The attack on the Coucy front was not the only one made in the intervening period between April 10 and the renewal of the German endeavours to reach Amiens. On the night of April 9 a determined attempt was made on the French holding Hangard, and after a severe struggle, in which the front fluctuated backwards and forwards, the enemy was driven back. Small local attacks were also made near Castel on the Avre and to the west of Noyon, but all were defeated. Still the German Higher Command did not give up its attempt to push forward on the south of Amiens without a further effort. An intense artillery preparation began on the morning of the 11th, and after continuing some hours the enemy launched an attack against the trenches held by the British and French on the line Hangard-Hourges. The first attacks were all driven back, but the enemy piled on division after division and after a series of furious assaults which lasted all the day succeeded in penetrating into Hangard. Counter-attacks made by the French enabled them to recapture the western part of the village, where fighting went on ficrcely late into the night, but eventually the Germans were driven out. At the Hourges extremity, notwithstanding repeated attempts, the Germans made no progress, so that the net result of the fighting was a small gain, subsequently lost, and very heavy German casualties in killed and wounded.

This day, too, there was some fighting near Noyon, where the enemy threatened attack and massed troops for the purpose. These were, however, caught by the French artillery and the advance was completely stopped.

On the 16th the Germans attacked at Boyelles, between Arras and Albert. The attack was delivered in some force and with considerable pertinacity, but was held by the British troops. During the time that this fighting had been going on there had been a certain number of local actions in the Champagne and in the neighbourhood of Verdun, but not any of importance. Near Toul, on April 13, the Germans violently bombarded the line held by

the Americans, north-west of the town, on the right bank of the Meuse. After considerable artillory preparation their infantry attacked, but the Americans held their ground along nearly the whole line. At a few points the Germans managed to penetrate, but counterattacks drove them out with a loss of 64 killed and 20 wounded, while 36 were taken prisoners.

On April 10 it was officially announced that the Americans were taking part in the fighting. It had been the original intention of their Commander-in-Chief to wait until his own you that the American people will be proud to take part in this, the greatest and most striking battle of history."

Following out this idea, American troops were brought up wherever they were required; part fought with the British; part were sent down south to relieve troops of the French First Army, which had come up to the Somme; others went into Italy. This explains how it was that on April 13 Americans were fighting in the neighbourhood of Toul. In the forest of Apreniont, when the Germans made a vigorous attack on the French positions near



[French official pholograph.]
A BIG FRENCH GUN TRAINED ON "BIG BERTHA'S CRADLE."

units were sufficiently organized to onable the American Army to take the field as an entity, but circumstances did not admit of such delay. When Goneral Foeh, at the crisis of the Somme battle, was made Commander-in-Chief of the Allied forces in France, General Pershing came to him and spoke as follows: "I have come to tell you that the American people will hold it a high honour that their troops should take part in the present battle. I ask you to permit ' this in my name and in theirs. At the present moment there is only one thing to do, to fight. Infantry, artillery, aeroplanes—all that I have I put at your disposal—do what you like with them. More will come-in fact all that may be necessary. I have come expressly to tell

Warre Brulé and gained a footing in some of the advanced portions of the line, a sharp counter-attack carried out by French and American troops in combination drove them out again. On this occasion 22 prisoners, belonging to six different units, were taken by the Americans.

On April 20 another attack was delivered by the Germans against the American positions, this time against those to the west of Remières Forest, north-west of Toul; 1,200 German shock troops made the attack and after a heavy bombardment penetrated the American trenches and captured the village of Seicheprey. But a counter-attack was soon organized against it, and after severe hand-tohand fighting, in which the Germans lost very heavily, they were driven back, leaving the American positions virtually intact. Another incident of the fight was that two German aeroplanes, attempting at a low elevation to



GENERAL PERSHING'S HOUSE AT THE AMERICAN HEADQUARTERS IN FRANCE. machine-gun the American trenches, were brought down by our Ally's fire.

April 19 saw a smart piece of work done by the French in the Avre valley, 10 miles southeast of Amiens on the heights west of the Avre, where they attacked on a line from Themmes, close to where the river Luce crosses the road and railroad running from Moreuil to Amiens just before it joins the Avre, and Mailiy-Raineval five or six miles farther to the south. It was more in the nature of a sortie than a great attack, the number of troops employed being small, but they made an advance which, at its greatest depth, measured a mile, recovered useful ground, and brought back 500 prisoners.

Our aircraft had done valuable work in the fighting round Armentières in spite very often of most unfavourable weather. On April 6 our machines had watched the enemy's movements along the whole of the battle-front since dawn, and about noon reported a concentration of hostile troops south of the Somme. Notwithstanding the rain, a large force of our aeroplanes went up and dropped over 500 bombs on the enemy's assembled infantry, besides firing 15,000 rounds at them from their machine-guns. All this was naturally not done without opposition, and 13 hostile machines were brought down and 11 others driven down out of control, while two German aero-

planes were shot down by our anti-aircraft fire. On the same date the French reported that they had brought down seven German machines and two of their captive balloons, besides dropping about five tons of projectiles on the stations and cantonments in the Roye region.

Fighting in the air went on. On April 7, visibility being good, there was considerable air activity and some fighting with hostile aeroplanes. April 10 was not favourable for air work, but a certain amount of fighting took place between the low-flying aeroplanes accompanying the German attack and ours opposing them; so misty was it, that the fighting was done at an average height of 200 ft. It met, however, with considerable success, four of the enemy's machines being brought down and three others shot down by our infantry fire. Against this we had to put a loss of seven.

The next day saw a daylight raid on Luxembourg station without loss to us. Our men dropped a ton of bombs with good effect, and experienced no loss from the anti-aircraft gun fire.

April 11 saw a good deal of fighting on the battle front, in which the Germans got rather the worst of it.

The next day the weather improved, and there was great activity in the air along the whole front. Several long distance reconnaissances were made and photographs taken, and many aerial combats fought with a loss of four of our machines; 21 of the Germans were crashed, and 14 others driven down out of control. During the night a considerable amount of bombing was done.

On April 13, the weather being very favourable for flying, the war in the air increased in intensity. Large numbers of low-flying machines were employed in bombing and in sweeping with machine-gun fire roads packed with the enemy's troops. Over them 36 tons of bombs were dropped, and more than 100,000 rounds of ammunition expended.

While these attacks were being carried out, other formations flying at a greater height were engaged by the enemy's aeroplanes, which were extremely active on this part of the front; 40 hostile aviators were brought down by our men and two shot down by our anti-aircraft fire, and 20 of their machines were driven down out of control. We also destroyed three hostile observation balloons, and with a loss to ourselves of only 12 aeroplanes missing.

During the night a good deal of bombing work was done.

On the next few days the weather did not permit of much aerial work, but still our men fought against the advancing German infantry at low elevations with good success.

April 21 saw an improvement in the weather, of which our airmen took full advantage, firing many thousand rounds of machine-gun ammunition on the German infantry, and

dropping some 23 tons of bombs. The German aviators were by no means aggressive, apparently the experience of the past few days had taught them caution, but we managed to destroy 13 of their machines, and six others were driven down out of control. This with a loss of but five to ourselves. Amongst our successes was the destruction of the well-known German airman Rittmeister Baron M. von Richthofen, who was brought down and fell in



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A GIANT BRITISH BOMBING PLANE BEING TUNED UP.

our lines. He was credited by the Germans with having destroyed 80 of our machines. He was a gallant man and a chivalrous fighter. His body was interred by us with full military honours.

The examples that have been given are typical of the air fighting in the field about Armentières.

Some of the German comments on the situation are quite worthy of record as showing the varying views put forward as the fighting proceeded. According to the Norddeutsche Allgemeine Zeitung, Foch "may think that his sole duty consists in covering the capital." This was certainly not Foch's idea, but we must remember that he did not come into full command of all the Allied forces till March 26, and up to that date there was good reason for supposing that Pétain had thought the protection of Paris the most important duty he had to perform. However, from the moment that Foch came into office it was evident that he was determined to maintain an united front. and to resist to the end every German attempt to separate the French and British Armies.

Von Ardenne, in the Berliner Tageblatt of March 26, showed that he fully appreciated the possibility of the Somme battle not being the main effort of the Germans, or, rather, that it might be found more desirable to make that effort in another direction.

The principal aim of the German Command is the weakening of the enemy, and as this result can only be obtained by big battles, the German leaders will not only not avoid the latter, but will force them on. By this I do not mean to say that this aim will be carried out on the present battlefield; it may be attempted on any portion of the other fronts.

The Germans were legitimately proud of the great successes they obtained in the first days of the offensive. Said the Norddeutsche Allgemeine Zeitung:—

When we consider that we have succeeded in a single week in exchanging trench warfare, which had lasted for three years and a half, with three Armics on the defensive, into a war of movement, and try to realise the tremendous preparations, in addition to the mero moving of huge masses of troops necessary for the successful completion of our break through, we must see that it is a sheer impossibility to advance at the came rate as during the last few days, when the troops often covered 12 miles a day.

At the end of March, German opinion was "that our victorious course is not to be checked. Its objectives have been decided upon and everything has been taken into calculation." It may here be remarked that when English papers published the fact that documents had been found on German prisoners which showed that the objectives laid down at the commence-



Official photograf &

FUNERAL OF BARON VON RICHTHOFEN.



RICHTHOFEN'S WRECKED MACHINE AND HIS GUNS.

ment of the attack wero not reached, "in accordance with plan," denials at once appeared in the German Press. This seems to be somewhat contradictory to the above statement, which was made in the Frankfurter Zeitung of March 30. Still there appears to have been, notwithstanding the pæan of victory shouted so loudly, some faint glimmering of doubt as to whether the great ideas on which the advance was based would be altogether attained. At the end of the morth we are told "the conquest of Paris, with which our fireside strategists are already busying themselves, hardly plays a part in our ealculations. It is urgently necessary to utter a warning against causing unnecessary excitement at home by such fanciful suggestions." This somewhat conveys the impression that at the end of the first nine days' fighting the results did not look so promising as had been hoped when it was started.

According to Gacdke, the well-known German military critic, the beginning of the German offensive was regarded by us as evidence of the haste with which the German High Command was trying to end the war.

This only shows ignorance of the conditions necessary for military success, 'Every High Command must maintally endeavour to end the war as quickly as their strength permits. It would be a breach of their most sacred duty if they tried to do otherwise, for war is always so great an evil that it cannot be ended quickly enough. It follows, therefore, that it is necessary to attack, because the offensive alone can bring a victorious peace, independent of the will of the enemy. Trench warfaro means the indefinite prolongation of the war with all its injuries and disadvantages. This necessity was bitterly felt for years, so long as we had to divide our forces between Flast and West. With us, it was only a measure of necessity: for the British and French it was a sign of impotence. Through all these years, in countless attacks, they have rightly endeavoured to get rid of trench warfare and restore open fighting, but all their attempts broke down against the unshatterable wall of the resistance of our troops.

The delight of the Entente knew no bounds. Still, as I have already remarked, everything on earth is relative. First and last, Hindonburg always dictates the methods of fighting. The enemy has to follow his lead, presumably even when he retreats, and as long as this is the case there is no question of a standstill in any sense. The enemy is obliged to use his reserves wherever Hindenburg wishes. This is the most striking feature of the present period of the fighting-the enemy has yet attempted no strategic counter-attack. Hindenburg's first positions have hypnotised the enemy Command: all they seem capable of doing is to rush up one division after another and place them wherever the German pressuro seems greatest. Our onemy is incapable apparently, of any original thought; they adopted the ideas of Hindenburg and Ludendorff in the construction of their trench system.

The last remark was undoubtedly justified, as we had adopted the system of an outpost line occupied only by machine gunners.

Further, we are informed that the whole country as far as and oven boyond Paris consisted of lines of trenches, one behind the other, and they had used more barbed wire than in a whole year previously.



Their tactics had been founded on Hindenburg's system of elastic defence.

The Germans were quite certain there could be no question of direct concerted action on the part of the British and French forces as a result of the unity of command,

The interruption of railway traffic between Albert and Amiens had put a stop to that idea. The fronts having been divided into two separate sectors the British can only bring up troops to the northern battle area—i.e., the north side of the Avre-Somme line—and the French control the rest of France. The British, with their railway system thus awkwardly affected, are in an extremely tight corner. They can only have one aim now, to endeavour by every means at their disposal to re-establish a fresh firm line, oven if it be only thinly held, so that the German advance may be stemmed. Only in this way can catastropho be averted.

The remark of the Vossische Zeitung of April 2 is well worthy of note:

The idea of victory must be revived in us by current events. Peaco is certainly on the horizon; the ice has been broken. I write this being well aware that the city reader [i.e., the Berlin reader] has become a hardened sceptic, that his daily question is, "When shall we have peace?" Hindenburg's victory in the West has brought peace appreciably nearer. The time is now ripe for the reappearance of optimism in our capital.

General Foch's plan was very different from that which was hoped for by the Versailles Council, because now at the best the reserve army will not be able to decide the war, but only to avert catastrophe from the British Army, because Foch could choose neither the time nor the place for the offensive. At first Foch was compelled to put in his troops whorever they were wanted, but they admit he did succeed in resisting on the Upper Avre long enough for the English to place themselves in front of Amiens for the Third French Army to gain a firm footing close behind Montdidier and Noyon. On the other hand, Foch did not succeed in gaining a positive strategic success on the lines of his plan.

It may be permitted here to remark that it is always foolish to prophesy, especially in the bloody drama of war in which the psychical plays so important a part, until after the event.

The German view of the situation so far as the fighting was concerned may be taken from a report of a senior officer given in the wireless of April 11. "The difficulties of the attack lay chiefly in the condition of the country. The ground was so soaked and the newly made shell-holes filled with water as to make any advance very difficult, and the British thereforo appear to have regarded an attack in such conditions as impossible, and had therefore appreciably weakened their line here. The enemy's artillery had been silenced and the enemy's infantry positions had been shelled and were ripe for the assault. The German infantry masses pressed forward unceasingly, and simply overran the deeply fortified line of advance for five miles."

Let us now deal with the work of the Aus-

tralian divisions which were destined to play a great part in resisting the German advance from the apex of the salient which threatened Amiens.

When the German offensive commenced on March 21 the five Australian divisions were in Flanders, three being in the front line, or in close support, while the Third and Fourth were somewhat farther back.



A MACHINE-GUN POSITION.

On March 24 and 25, the 3rd and 4th Divisions were ordered to the south of Arras, where it was the original intention to use them as an immediate support, but the swift progress of the German advance caused them to be sent still more to the south, and on the 25th they were detrained at Doullens, where one brigade—the 4th Infantry Brigade—was pushed up into the front line to stop the German advance at Hébuterne, where it was employed for the next month, taking part in somewhat severe fighting. The other two brigades of the 4th Australian Division, after marching all night, reached in the early morning the ground on the Amiens side of Albert, and here they learned of the severe fighting which the Fifth Army had been exposed to and of its retreat. The two Australian brigades took up a line west of Albert and Dernancourt on the Ancre, and the 3rd Division a line from the Ancre to the Somme. Before the Australian line could be properly organized and before their guns had all arrived they were incessantly attacked by the Germans at Dernancourt and near Morlancourt, where they inflicted heavy loss on the enemy.

On March 30 the attempt to pierce the 3rd

Australian Division was defeated; but our troops holding the line from Hamel south of the Somme were driven back, and the enemy's advance on Villers-Bretonneux and Hangard was thus getting dangerously near Amiens. Meanwhile the 5th and 2nd Australian Divisions had come up and their reserve brigades were sent forward and occupied a line about a mile and a half in front of Villers-Bretonneux

On April 4-5 the Germans, as we know (Chaptor CCLXVII, p. 193), launched two converging attacks towards Amiens, that of the 4th was towards the village of Villers-Bretonneux, where they drove in the British on the north-east of the village, but the Australians in front of tho town held their ground, and the British cavalry coming up restored the situation. In the aftornoon, the Germans again drove back the right of the Australians and the troops on the right of them, but a counter-attack of two Australian battalions and one of a London regiment re-established the line in front of Villers-Bretonneux, although the Germans still held a part of their defence towards Hangard.

In the evening the 5th Australian Brigade was hurried up to support the troops in Villers-Bretonneux. The next day it was detached southwards and put in next the French at Hangard Wood. The rest of the 5th Australian

Division now came up, so that the whole lire from Albert to the French was now held by Australian troops stretched out in a thin lire without reservo.

On April 5 a fresh German attack was made with four divisions against the two brigades of the 4th Australian Division at .Dernancourt near Albert. After very severe fighting they managed to drive the enemy back and practically maintained their position. The situation here then was that the two British divisions, the Australians and the New Zealanders, now held the line from Hébuterne to Hangard, the only reserve being the 1st Australian Division which had been brought down from the north at Messines, where they handed over the line to the battle-worn troops who had been brought up from the Somme

. The situation remained much the same for the next fortnight, the only change being that the line in front of Villers-Bretonneux was handed over to the 8th British division, thus enabling the Australians to concentrate more effectively for the defence of the line held.

On April 23, four German divisions were employed against the British portion of the line, and here, for the first occasion, German and British tanks came into conflict on the



AUSTRALIAN DISPATCH RIDERS.



AUSTRALIANS IN A SUNKEN ROAD.

[Australian official photograph.

Allied front between the Somme and the Avre Valleys. The usual fog favoured the Germans, and about 6.30 a.m., after an intensive bombardment, which had begun three hours previously, the Germans advanced against the whole British front south of the Somme. German tanks broke through our line south of Villers-Bretonneux and, turning north and south, opened the way for their infantry. These came on. A severe infantry attack took place, in which great losses were inflicted on the German infantry by our infantry fire and also by our light tanks, but eventually the enemy gained possession of Villers-Bretonneux. On the edge of the wood, to the west of this place, a counter-attack by the 8th Division. stopped any further progress. To the south some of our heavy tanks drove back the German tanks, and thus stopped the infantry attacks some distance to the east of Cachy. North of Villers-Bretonneux all attacks were repulsed. During the night a brigade of the 18th Division and the 13th and 15th Brigades of the 4th and 5th Australian Divisions made a brilliant counter-attack under circumstances of great difficulty, as the whole of the plan had to be worked out in detail in so short a time.

The 13th Brigade had never been near the ground. It had to advance two miles by night in the face of many machine-gun positions and

through belts of wire and join up with the 15th Brigade in position in front of the town. This was practically accomplished before dawn, so that the Germans in Villers-Bretonneux and the woods were surrounded by our troops. Our infantry and tanks also did excellent work in gathering up the Germans. Thus, two battalions of the 8th Division, on the morning of April 24, pushed through the streets, meeting with house-to-house resistance, but, aided by tanks, they completely overcame it and the village was again in our possession.

In addition to the losses inflicted, we captured 1,000 prisoners and also the German tank, the "Elfriede," which had been abandoned, and was brought into our lines (see picture, p. 49).

From April 24, the Australians were left on the Villers-Bretonneux front extending from the Ancre across the Somme to the French position about Hangard. The Germans made no further attack against these troops, which now covered the immediate approach to Amicns. On the contrary, it was the turn of the Australians to make many useful small advances, which greatly improved our line. In succession they took from the Germans Villes, Treux, Morlaucourt, Sailly-le-See, and points in front of Villers-Bretonneux. Altogether, during the next few months before the great offensive, about fifteen smart affairs were



[Official photograph.

GOING UP TO THE FRONT.

fought in front of Amiens, and some 3,000 prisoners were taken.

The period of the war just described marks a considerable departure from the previous methods, of which the initiation was undoubtedly due to the British attack on Cambrai in the autumn of 1917. It was the first occasion on which the lengthy preliminary bombardment before the infantry attack was omitted.

Now it must be evident that a long preparatory artillery fire necessarily indicates to the enemy the point selected for the attack. No matter how much the assaulting party may endeavour to hide this by extending the area over which the shell fire is distributed, in the very nature of the case the preparation must be most intense where the actual assault is to be delivered. This accounts very largely for the feeble results of our previous offensives. The Germans know just as well as we did where the attack was to be delivered and made arrangements accordingly. In the Cambrai attack the preliminary bombardment was no indication of what was about to happen. Short and intense bombardments had often been carried out without their being followed by infantry attacks. On this occasion the wire entanglements were destroyed by our tanks, which thus prepared passages for the advance of our infantry. In the German March offensive a similar procedure was not possible, for the Germans had not got tanks in sufficient numbers for the purpose, and their own machines were extraordinarily clumsy and inefficient. They therefore relied upon an extremely heavy concentration of artillery, combined with the fire of an immenso number of tronch mortars, to cut through the wire entanglements. These preparations, which only lasted a few hours, did not give rise on our part to any largo concentration of reserves to meet them, for the best of reasons—Sir Douglas Haig had none at his disposal. It was a certainty from the first that the long-drawn-out line of the 5th Army was liable to be broken by a sudden and resolute assault. Artillery fire was, of course, met by artillery fire, and our guns were in sufficient numbers to deal to a great extent with the batteries of the Germans in known positions, but the fog which covered the ground well on to midday on the opening day of the fight prevented our artillery concentrating against the moving masses of infantry over ground on which it was impossible to see where they were, so that they thus advanced almost unscathed by shell fire.

The Germans had, as we know, introduced the use of poison gas, in spite of the prohibition of the Hague Convention: but while, in its original form, it had been useful as a defensive measure, and even to cover an offensive movement over a short space, its range had been so limited that immediately behind the fighting line it produced little or no effect. But by the use of gas shells this had been

altered. It was now possible to bombard our battery positions with lethal shells, which would at any rate hinder, if they did not destroy, the gun detachments. The combination employed was ingenious: against our battery positions 70 per cent. of the shells fired contained gas which irritated the nose and throat (tearproducing gas), 10 per cent. were poison gas pure and simple, and 20 per cent. high explosive. The idea appears to have been that the irritating shells would lead the men to remove their masks, when the poison shells would affect them. The high explosives were, of course, intended for destructive purposes pure and simple. When the bombardment of the infantry positions was undertaken, and the creeping barrage brought into play, while the poison-gas shells were kept at 10 per cent. of the number employed, the irritating shells were reduced to 30 per cent, and the high explosives increased to 60 per cent. There is no doubt that this long-range gas-bombardment was of some utility, and tended at any rate to diminish our artillery fire. But our gas-masks were efficacious and our casualties from gas were not heavy. The effect of the German gas shells was, therefore, comparatively unimportant.

. Now it must be observed that in the attack

the enemy, under modern conditions, knows the position of the opposing troops and is nearly always aware of the point at which guns are concentrated, and hence can deal with them. On the other hand the defensive, equally well informed as to the position of what may be described as the enemy's opening fire batteries, has to rely on observation during the fight for artillery fire against the ever shifting positions of the infantry advance. . We have seen that fog interfered very considerably with this. But it did more. The Germans had gathered together an immense number of mine-throwers, i.e., short-range artillery throwing shells of considerable power, and on these they relied very largely for the destruction of our wire entanglements. They knew our positions, they had arranged before where the mine-throwing weapons were to be placed, and hence the firo from them was accurate. Moreover, owing to the weather it was impossible for us to spot these positions, which were rendered invisible so long as the fog held. This short-range powerful projectile artillery, quite a modern feature in war, was on this occasion employed to a hitherto unheard-of extent. Hence it was that the British army was exposed to an extremely heavy fire, to which it could not efficiently



A DEMONSTRATION OF LIQUID FIRE AND THE MAN WHO OPERATES IT.

BRITISH "WHIPPET" TANKS AS SEEN BY A FRENCH ARTIST.

reply because it did not know exactly where it came from. This fire destroyed the obstacles covering our infantry trenches, while the curtain of fog allowed the German troops to come up to such close quarters that a short rush took, them into our trenches. This state of affairs lasted for the first two days of the attack and also at the battle of the Lys, and was one of the main causes of our defeat. Of course there was in addition the absolute insufficiency of our numbers to man the line of defence properly, while our secondary lines behind the front were not in a complete state of prepara-

The decision arrived at by the British authorities at the end of 1917, to take over part of the line held by the French, was a decision which must have been reached with reluctance. It could not be justified militarily—political exigencies apart—except upon the false assumption that the Germans would not attack, and although the intelligence afforded both by our aviators and also by our secret service showed conclusively that attack was coming nothing was done to strengthen our feeble right flank until the blow actually fell. Had there been unity of command, had



[French official photograph.

BOMBARDMENT OF A GERMAN FACTORY BY FRENCH AIRMEN.

The factory may be seen on fire. The nearest bombs appear to be falling wide of their mark, but this is an illusion due to the oblique direction of their fall.

tion, nor even if they had been were there enough troops in local reserve to garrison them. Our troops were not surprised, they knew the attack was coming. But in the circumstances it is not to be wondered at that they were defeated; the wonder is that, taking all these factors into consideration, they held out as well as they did. There is no doubt that about March 25 the situation was a critical one. But it was saved by the support given to our too weak line by the French.

the situation been regarded from the proper point of view, i.e., that the whole Allied front formed a concrete whole which could not be organized in segments without liability to a solution of continuity at the meeting points of these segments, viz., at the junction of the different nationalities holding them, so critical a position would not have arisen.

The Germans, as we have seen (Chapter CCLXIII, pp. 38 & 47), believed that if they struck at the point where the British line ceased



[Australian official photograph .

WRECKED MACHINERY IN A FACTORY IN NORTHERN FRANCE.

and the French line began they would be able to break them asunder. They knew that the position of the French Army of Reserve was such that it would take some time for it to come up in any eonsiderable strength to aid the British. It will be remembered that only the Third French Army was at first available, for the small force detached from the Sixth French Army which was on the right of the Fifth British Army at Barisis and to the south was only a very small one and quite insufficient to bring up Sir Hubert Gough's army to an equality of strength with the large German numbers opposed to him (Chapter CCLXIII, p. 55). The next reinforcements to arrive were those from the First French Army round Toul. Toul to Montdidier is a distance of about 150 miles. It was "a gamble" to oppose the Fifth British Army to attack by the very superior numbers it was quite certain would be brought against it. It was another gamble to have the reinforcements, which in all human probability would be needed, such a long way off from the point at which they would almost certainly be required. It may be urged that the first duty of the French was to protect Paris, and that it was not certain whether the Germans would attack the French from the neighbourhood of Reims or whether they would direct the assaults against

the French line between Verdun and Nancy. The latter hypothesis must be ruled out because it would have been too eccentrie to the advance on the Franco-British junction point and would have involved too large a deduction of force from what was distinctly the line from which the greatest results were to be obtained, i.e., the direction which the Germans selected. Moreover it must be remembered that this double line of attack had been effectually beaten on August 27, 1914 (see Vol. XVII, p. 208). The Germans then had not sufficient strength to earry out the offensive against the right flank of the Allies and also against their left flank; much less had they now. It would seem, therefore, to have been better to have had a considerable part of the French Reserve Army nearer to their left flank and more easily available to help the British right flank. This was not done and the British right was driven in and the flood of invasion only stopped with difficulty.

The political and personal difficulties which impeded the establishment of a single, united command have already been explained (Vol. XVII, Chapter CCLIV), and it has been seen how nothing but the menace of overwhelming disaster produced the necessary decision. But

it will be well to emphasize afresh the lessons of the great battles which have just been described.

The Supreme War Council was formed in the middle of November, 1917, "with a view to the better co-ordination of military action on the Western front." "It was to watch over the general conduct of the war... to prepare recommendations for the decision of the Governments and keep itself informed of their execution and report thereon to the respective Governments... The meetings of the Supreme War Council will take place at least once a month." But all the time "the Military Staffs and military commands of the Armics of each Power remain responsible to their respective Governments."

This represented the limit of agreement which could be reached at the date in question. But it is difficult to see how the actions of the various Allied armies could have been quickly co-ordinated by it towards the common end—the destruction of the enemy, which is the first and the last and the only object of all properly conceived and properly carried out operations of war. To use Mr. Lloyd George's own words, the Allies had passed endless resolutions but had never passed "from

rhetoric into reality, from speech into strategy." The only possible use such a council could be was denied to it—it had "no executive power." The only practical good that the Council inaugurated was the formation of a committee for the control and distribution of the Allied reserves, at the head of which General Foeh was placed. But the only common-sense solution of the problem was-complete and entire unity of command under one man. Instant and rapid decisions are necessary for suecess in war against a rational opponent. We know that when the great Duke of Marlborough was moving down to the Danube in 1704, the remarkable arrangement was made that he should command the Army one day and the Elector of Baden the next. But even two huncred years ago it was not proposed to put the command in commission between three or four generals.* We know what the result was in 1704, how Marlborough had to storm the lines of Schellenberg in the evening because he knew that if he did not the Elector would certainly not do so the next day. Had

^{*} There were Belgian, British, French, Italian, and United States troops all engaged in the Western theatre of war.



[Canadian War Records.

THE NEWSBOY IN THE TRENCHES.

A little French boy selling English papers.

ho refrained, it is doubtful if the victory of Blenheim would have been gained by him.

Tho Supreme Council was an excellent institution, which continued to perform valuable functions to the end of the war. But it could not possibly create the proper co-ordination between the French and the British, as was elearly shown when the German blow was struck. It was not until March 26, 1918, when Marshal Foch had been given supreme direction of the strategy of all the Allied Armies on the Western front, that there was breathed through the whole of the Allied forces a spirit very different from that which had hitherto existed. The new commander had one idea and one only, to ensure the mutual support between the various armies, to ensure their proper co-ordination for the one thing needful—the overthrow of the enemy.

The results were soon made evident—the German advance on Amiens was stopped. When the enemy then turned his attention to the region of the Lys, French troops were sent up there to strengthen the sorely tried British troops there. How critical the situation was at one time is shown by the British Commander-in-Chief's order to the British Army un April 11:—

"To all ranks of the British Army in France and Flanders.

"Three weeks ago to-day the enemy began his terrific attacks against us on a 50-mile front. His objects are to separate us from the French, to take the Channel Ports, and destroy the British Army.

"In spite of throwing already 106 divisions into the battle, and enduring the most reckless sacrifice of human life, he has, as yet, made little progress towards his goals. We owe this to the determined fighting and self-sacrifice of our troops.

"Words fail mo to express the admiration which I feel for the splendid resistance offered by all ranks of our Army under the most trying circumstances.

"Many amongst us now are tired. To those I would say that victory will belong to the side which holds out the longest.

"The French Army is moving rapidly and in great force to our support.

"There is no other course open to us but to fight it out. Every position must be held to the last man; there must be no retirement. With our backs to the wall, and believing in the justice of our cause, each one of us must fight on to the end.

"The safety of our homes and the freedom of mankind depend alike upon the conduct of each one of us at this critical moment."

Well did our troops fulfil their duty and hold grimly on to the ground they were defending. But it must be remembered that we had but 56 divisions in all to oppose the German host, and that without our Ally's aid the heroic resistance which stopped the northern irruption at Kemmel, as the southern had been dammed in front of Amiens, would not have been possible

The result of the fighting was to exhaust the German efforts. Superiority in numbers had not availed against the stubborn bravery of the Franco-British soldiers, the very energy of the enemy which led him to make attack after attack, each involving huge sacrifices, was to destroy the " will to victory" in his troops. His gain in territory was considerable, but although on the north and south he could look on the Promised Land of Hazebrouck and Amiens in front of him, in both directions lay the still unconquered forces which stopped all further progress. The object of war is the destruction of the opponent's military forces. The casualties the Germans had inflicted on themselves by their vigorous but vain attacks, which led to no decision, were the first step towards our final success, for the very heavy losses he had suffered he could not replace.



CHAPTER CCLXXI.

THE NAVY'S WORK IN 1918.

THE NAVY'S SHARE IN VICTORY—CHIEF EVENTS OF 1918—ADMIRALTY CHANGES—PATROL WORK—THE MEDITERRANEAN—GERMAN ATTACKS ON CONVOYS AND FISHING CRAFT—YARMOUTH BOMBARDED—THE CHANNEL BARRAGE—GERMAN RAIDS—THE NAVY'S REPLY—ZEEBRUGGE AND OSTEND, APRIL 23, 1918—FULL ACCOUNT OF THE OPERATION—OSTEND AFFAIR, MAY 9—NORTH SEA MINE BARRAGE—OUTPOST AFFAIRS—RAID ON TONDERN—COASTAL MOTOR BOATS—WONDERFUL WORK OF THE "MYSTERY SHIPS"—THE NAVY'S ACHIEVEMENT.

HE work of the British Navy during the fourth year of the Great War, ending on August 4, 1918, and in the weeks immediately following, was necessarily overshadowed by the dramatic and unprecedented events which marked the close of hostilities on November 11, 1918. This Chapter is a narrative of the occurrences in which the British seamen were engaged affoat in the twelve months which led up to that event.

It was recognized throughout the world as soon as hostilities were concluded how great a part in bringing about this end had been played by the British Navy, the bulwark which stood from the first between aggressive Germany and the cause of civilization. Some of the most enthusiastic tributes to the British Fleet's work came from the United States. America had not come into the war," said Admiral W. S. Sims on November 15, at the American Luncheon Club in London, "the Central Powers would not have won the war; the British Fleet would still have had command of the sea." On another occasion the Admiral, referring to the transport of American troops to Europe, said: "We did not do that. Great Britain did. She brought over twothirds of them and escorted a half. We escort only one-third of the merchant vessels that come over." On the day that the armistice was signed, Admiral Sims addressed a letter to Sir Rosslyn Wemyss, First Sea Lord, in Vol. XVIII.-Part 231.

which he referred to the "fact, patent to all the world, that the defeat of Germany was in large part accomplished by the power of the British Navy." Similarly, on November 25, 1918, when Admiral Mayo, commanding the American Squadron in Europe, left England on board the Mauretania, he declared: "The American Navy is very proud to have been associated with the Allies in the latter part of the war We appreciate that sea power has won the great victory, and it is impossible to pay too high a tribute to the great British Navy. It was the control of the seas which enabled this wonderful victory to be achieved."

Significant among the references of French statesmen and publicists was the message of Marshal Foch, contained in a telegram to Sir David Beatty, in reply to the latter's congratulations. "I am deeply moved," said the Marshal, "by the congratulations of the British Grand Fleet, and I send on behalf of the Allied Armies and myself our sincere thanks. I am glad to pay tribute to the brilliant exploits of the British Navy and to its valuable collaboration in the common cause, also to express to the Grand Fleet and its illustrious chief the gratitude of the armies." An indication of Italian thought was afforded by the following statement of Prince Colonna after visiting the Grand Fleet: "The sight of it (the Fleet) has given us pleasure and courage, because we know it is more than equal to any attempt the enemy might make to break out of the iron circle in which the Grand Fleet kept them for four years "

The appreciations uttered by the leaders of the British people on the historic occasion of the termination of hostilities also deserve to be, placed on record. Mr. Lloyd George,



ACTING-ADMIRAL SIR ROSSLYN E. WEMYSS, G.C.B. First Sea Lord.

speaking at Wolverhampton on November 23, 1918, said:

As to our sailors, never has the record of the British Navy been so glorious; never have its men and its leaders shown greater skill, greater resource, greater daring, greater efficiency, or higher qualities of seamanship. Never has the supremacy of our Navy been challenged so resolutely and by such insidious means. Never has its triumph been so complete. The world, and especially the freedom of the world, owes much to the Navy of Britain. The Navy of Britain saved freedom of conscience in the days of Elizabeth, when it was challenged by a great and mighty Empire. It saved it time and again when freedom was in peril in the days of Napoleon. To-day the freedom of the world owes everything to the daring, to the tenacity, and to the valour of the men of the British Navy.

Mr. Churchill, at Dundee on November 26, declared that no arguments, however specious, no appeals, however seductive, must lead us to abandon that naval supremacy on which the life of our country depends. The British Navy had preserved for the third time in history the freedom of the world against a military tyrart. "Without it, not only were we lost, all was lost, and the whole world cast back for

centuries." Mr. Churchill also affirmed that a League of Nations was no substitute for the supremacy of the British Fleet.

An interesting disclosure was made by the First Lord, Sir Eric Geddes, at the Lord Mayor's Banquet on November 9, concerning an incident which happened not a fortnight previously. The whole stage was set for a great sea battle, said the First Lord, but something went wrong. The arm which was going to try a last desperate gambling stroke was paralysed. The German Navy was ordered out and the men would not go.

Chapter CCXII contained an account of British naval operations from November, 1916, to November, 1917, and in concluding the narrative reference was made to the warning of Sir Eric Geddes on November 1, 1917, that there were great and ever greater calls upon the shipping of the world, and that to assist the Allies, all of whom required sea-borne help, the nation must be prepared strictly and



ADMIRAL MAYO.

Commanded the American Squadron in Europe.

rigorously to curtail its needs, to develop homo resources, and to conserve its present and potential maritime strength. The need for this warning was made apparent in the winter months of 1917–1918, when there were fresh evidences of German enterprise affeat as regards both submarine and other operations. There was a recrudescence of raiding, illustrated by the attack on the Scandinavian convoy—the second of its kind—on December 12, 1917, when the destroyer Partridge and four armod trawlers were sunk:

by the bombardment of Yarmouth from the sea on January 14, 1918, when three persons were killed; by the attempt to break through the barrage in the Dover Straits on February 15, when eight drifters were sunk, and a submarine bombarded Dover; and by the affair of German torpedo craft off Dunkirk on March 21, when the Botha and Morris, with some French destroyers, played a gallant part in beating off the raiders. Further afield, there was the sortie of the Goeben and Breslau from the Dardanelles on January 20, 1918.

It was, in short, a period demanding ceaseless vigilance and redoubled energy on the part of the British seamen and the authorities responsible for conducting the sea Not unnaturally, there were changes of personnel at the Admiralty, and in certain of the naval commands, but it was made clear both at the time and by later events that these did not involve any change of policy: only an infusion of new blood and war experience. A fresh impulse was thereby given to our naval strategy, particularly in the direction of speeding up and developing the anti-submarine efforts. The results of this forward movement soon became apparent in several directions.

It was pointed out in Chapter CCXII. that the changes made in the composition of the Board of Admiralty during 1917 had for their object the division and better co-ordination of the branches of strategy (operations) and supply (material and maintenance). further changes during 1918 were the outcome of the experience gained with regard to the working of this new policy. First, as regards operations, the retirement of Admiral Lord Jellicoe provided an opportunity for the appointment of a new First Sea Lord, and for new senior officers in certain high eommands, to carry out movements already planned by the War Staff. The important operations for the blocking of the German ports at Ostend and Zeebrugge, which had such far-reaching consequences, were admitted to have been decided upon and arranged for during Lord Jellicoe's tenure of the office of First Sea Lord; and earlier still, such a move had been advocated by Mr. Churchill and Lord Fisher as soon as material was available.

The honour of executing these operations fell upon Vice-Admiral Sir Roger Keyes, who was chosen to succeed Vice-Admiral Sir Reginald Bacon in command of the Dover Patrol. Sir Roger had been in charge of the Submarine Service during the first six months of war, when he saw active service in the Heligoland Bight. He then became Chief of Staff to Admiral de Robeck during the Dardanelles undertaking. Vice-Admiral Sir Reginald Bacon, who had been in command of the Dover Patrol since April, 1915, was appointed in January, 1918, to be Controller of the



VICE-ADMIRAL SIR ROGER KEYES.
In command of the Dover Patrol. Directed the operations against Zeebrugge and Ostend.

Munitions Inventions Department in succession to Colonel H. E. F. Goold-Adams. Another change connected with the strategical or operations branch was the promotion of Commodore Sir Reginald Tyrwhitt to the acting rank of Rear-Admiral. Sir Reginald had commanded the destroyer flotillas and other light forces at Harwich since the early days of the war with consummate skill and gallantry.

Turning to the material side, it was found during the year that the system of a civil Controller of the Navy, instituted when Sir Eric Geddes came to the Board in the spring of 1917, was unsatisfactory. Consequently, in March, 1918, the War Cabinet appointed Lord Pirrie to the post of Controller-General of Merchant Shipbuilding, without a seat on the Board of Admiralty, and with direct access to the Prime Minister. Being thus relieved of the responsibility for the construction of new



LIEUT.-COLONEL SIR R. HORNE, Third Civil Lord of the Admiralty.

merchant ships, it was not surprising that the Controller's Department of the Admiralty should once more be placed under the charge of a Naval officer. On June 17, 1918, a new patent provided for the appointment of Commodore C. M. de Bartolomé to the Board, and it was announced that Sir Alan Anderson, who succeeded Sir Eric Geddes as Controller, had resigned that post. Explaining the changes, Dr. Maenamara said that the production departments for warships, auxiliary craft, and naval munitions and armament generally would be placed, with their existing civilian heads, in direct touch with the new Third Sea Lord (Commodore de Bartolomé), who would resume as well the title of Controller. The question of co-ordination of labour supply as between the Admiralty Controller's department and the department of the Controller-General of Merchant Shipbuilding, as also of the priority of materials, was placed in charge of Sir Robert Horne, who joined the Board with the title of Third Civil Lord. Another interesting appointment in aecordance with the policy of separating the duties connected with maintenance and supply from the responsibility for strategy and operations was made on July 2, 1918, when Captain F. C. Dreyer, Director of Naval Ordnance, was

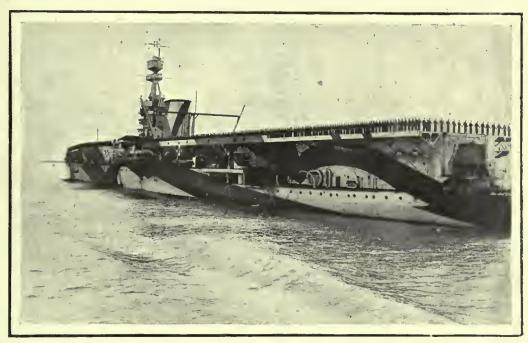
appointed to the new post of Director of Naval Artillery and Torpedoes, Naval Staff. Captain H. R. Crooke was chosen to succeed him as Director of Naval Ordnance. These reforms, the logical outcome of earlier ones, were all to have their effect and influence on the naval conduct of the war in its concluding phases, the ovents of which are chronicled in this chapter.

Although there were no fleet actions during the period under review-no dramatic encounters of the battle-squadrons-both in regard to the maintenance of the blockade and to the patrol work on the fringe of the German minefields greater stringency than ever was exercised. Arising out of the latter, several small but significant operations took place, illustrating the manner in which the closer watch and guard kept upon the exits of the German ports operated not only as a check to the submarine activity, but also as an indication to the enemy of what would happen if he ventured out in force. Examples of the British patrol work were afforded by the sweep into the Kattegat on April 15, 1918; and into the Bight of Heligoland on April 20; both of these taking place a few days before the famous operations on St. George's Day for the blocking of Ostend and Zeebrugge. The public revelation of what was going on in the North Sea was very slight, but these events clearly pointed to the more active and virile policy which was at work afloat. On June 19 there was a further sweep into the Heligoland Bight, when the British forces were engaged by German seaplanes. Exactly a month later, on July 19, there were further operations off the coast of Schleswig-Holstein, when the airship sheds at Tondern were attacked. An interesting feature of this last-named affair was the presence in the British squadron of the Furious, from the deck of which remarkable vessel the scaplanes making the raid were launched on their way. One of the last operations of the series was tho reconnaissance of the West Frisian coast on August 11, 1918. In this exploit a flotilla of eoastal motor boats was hotly attacked by German aircraft, and, although greatly outnumbered, inflicted severe casualties on the enemy, and completed the work of reconnaissance allotted to them.

In addition to their great value in curbing the German enterprises, and inflicting a check upon the submarine campaign, these activitics were also the means of putting heart into the British seamen. They demonstrated afresh that the old spirit of the Fleet was still alive and as vigorous as ever. They helped to remove the natural disappointment that, after so many weary months of waiting, the opportunities of action were denied to Sir David Beatty and his officers and men by reason of the refusal of the Germans to come out. Some idea of the extent of the British activities was given by Sir Eric Geddes on November 9, 1918, when he said that the gradual ringing in of the German force, day and night, in the Bight resulted in a loss in the first six months of 1918 of over one hundred small German surface craft. "The British

placement of 30,000 tons, and a speed of from 30 to 35 knots.

The Fleet under Admiral Sir David Beatty showed, therefore, a great preponderance relatively to the German High Seas Fleet, which, according to a Berlin official telegram on August 2, 1918, had passed under the command of Admiral von Hipper, formorly commanding the battle-cruiser squadron, on the transfer of the previous Commander-in-Chief, Admiral Reinold Scheer, to the post of Chief of the Admiralty Staff. When the surrender of the German Fleet took place after the signing of the armistice, it was shown that the



H.M.S. FURIOUS, A "HUSH" CRUISER USED AS AN AERODROME SHIP AND "DAZZLE" PAINTED.

Navy," he added, "drove its steel into the vitals of the German Navy."

All this activity was backed up by the Grand Fleet, which had been increased in strength not only by additions of British vessels, but by the co-operation of an American squadron, consisting of the battleships New York, Texas, Arkansas, Nevada, Wyoming and Florida, under the command of Rear-Admiral Hugh Rodman. Among the British vessels which joined the Fleet were the so-called "hush" cruisers, so called because of the secrecy maintained about their design and construction. There were five of these immense ships—the Renown, Repulse, Courageous, Glorious and Furious—and they were stated to be nearly 800 feet in length, with a dis-

British preponderance was even greater than was supposed to be the case in this country. According to Captain Persius, always among the most candid of German naval critics, it was the Jutland battle on May 31, 1916, which shattered all hope of a Gorman naval success. After that engagement, he declared, it was clear to any man with a knowledge of the facts that the High Seas Fleet would never again offer battle except as a measure born of desperation and despair. It was the result of that battle which forced the submarine campaign to be pushed to extremes, and it was the failure of the submarines that led to the mutiny in the Fleet. Many warships were scrapped to find material for submarine construction. condition of affairs thus depicted by the



[Official portrait by Francis Dodd.

ADMIRAL SIR DAVID BEATTY, G.C.B.

Commanded the Grand Fleet.

German writer explains the unwillingness of the German seamen to come out and give battle to the British Fleet when ordered to do so.

Very remarkable among the undertakings of the Navy during 1918 was the extension of its convoy work in regard to the transport of troops. Speaking at Leods on December 7, 1918, Mr Lloyd Goorge referred to a telegram which he sent in March of that year to President Wilson, telling him how essential it was, in view of the German offensive, that we should get American help at the speediest possible rate, inviting him to send 120,000 infantrymen and machine-gunners per month to Europe, and saying that, if he did that, we would do our best to help to carry them. The President replied next day: "Send your ships across and we will send the 120,000 men." America sent 1,900,000 men across, out of which number 1,100,000 were carried by the British Mereantile Marine. The forces required for the efficient protection of so great a number of troops necessitated the provision of additional small craft, and put a great strain upon the anti-submarine flotillas, despite the considerable assistance already given in this direction by the American Navy. The means taken for the safeguarding of both troopships and food carriers were dealt with in the chapter on "Naval Transport and Con-

voy" (CCXXXIX.). As Sir Eric Geddes explained on March 5, 1918, the extension of the convoy system to a large proportion of our overseas trade had been a real success. After the Scandinavian convoys, the principle was applied to the Atlantic and Mediterranean traffic. The proportion of losses of ships sailing in convoy was very small. On the other hand, the convoy system reduced the boats available for hunting the submarines, and thus limited to a cortain extent the offensive tactics which had been shown to be the best for dealing with the under-water craft.

A significant event in this connexion was the visit paid to the United States by the First Lord of the Admiralty. Sir Eric Geddes admitted later that his chief mission was to appeal to the American shipbuilders to increase their output of anti-submarine craft. In a statement to a representative of *The Times* on October 24, 1918, Sir Eric said that the German submarine effort was decreasing, owing to the naval measures taken against it, up to the month of May, when it became necessary to divert our hunting flotillas, both in existence and in preparation, from submarine chasing to escorting. Since then, owing to the sacrifice

of our offensive against the submarine in order that the American troops might be safely brought over, the submarine had been growing upon us, and we had therefore to lay our plans on the assumption that we had a very formidable submarine campaign to face.

The anti-submarine warfare is dealt with fully in a chapter devoted to that subject alone (CCLVII.). Here it will suffice to say that it was not so much the defensive system of convoy-valuable though that was in securing the safe passage of troops—as the constriction of submarine traffic by means of mines, and the loss to the Germans of port accommodation as a result of the naval operations at Zeebrugge and Ostend, coupled with the continuous offensive hunting of the "U"-boats, that shattered the hope of the Kaiser-expressed as recently as his visit to Kiel on September 25, 1918that the submarine weapon would turn the tide of the war in German favour. A large part in the British success was played by the use of the microphone, or listening apparatus, and the depth charge. So effective were the British offensive tactics against the submarines that the convoy system was not introduced until it bccame essential for the escort of the American



AMERICAN TROOPS FORMING UP AFTER THEIR ARRIVAL AT LIVERPOOL.



Russell, photo.

THE ALLIED NAVAL COUNCIL.

Left to right: Back row: Rear-Admiral S. R. Fremantle (Great Britain), Capt. M. C. Twining (U.S.A.), Rear-Admiral Baron M. de Lostende (France), Capt. T. E. Crease (Great Britain), Vice-Admiral W. S. Sims (U.S.A.), Vice-Admiral F. de Bon (France), Right Hon. Sir E. Geddes (Great Britain), Vice-Admiral Count Thaon di Revel (Italy), Rear-Admiral Funakoshi (Japan), Admiral Sir Rosslyn Wemyss (Great Britain).

troops. The First Lord, interviewed by the Petit Parisien on June 13, 1918, said: "We attack their submarines seventy times a week on the average." Obviously, to maintain this activity required the employment of large numbers of anti-submarine craft. In the same week, Admiral Sir Rosslyn Wemyss stated to an American correspondent that "we must fight the 'U'-beat in the narrow seas; in other werds, we must centralise, concentrating all our forces in what is really the decisive area." In the end the Admiralty accomplished the dual achievement of fighting the submarine and maintaining a huge convoy system. The success of the latter was shown by the statement on November 5, 1918, that the grand tetal of merchant ships convoyed was 85,772, of which total the losses were only 433.

The naval situation in the Mediterranean during 1918 was influenced very largely by the important decision arrived at in Paris on November 29 and 30, 1917, to create an Allied Naval Council. On introducing his first Navy Estimates in the Heuse of Cemmons on March 5, 1918, Sir Eric Geddes stated that this Council had referred the question of antisubmarine warfare in the Mediterranean to a Committee to meetat Rome. Committee," said Sir Eric, "accepted fully the anti-submarine proposals put forward by Vice-Admiral Calthorpe, the British Commanderin-Chief in the Mediterranean, and it was agreed that we should forthwith adopt and adapt to the Mediterranean the measures which had given such success in the waters around these islands, and that the main anti-submarine operations decided upon should be undertaken under Admiral Calthorpe's orders." A startling episode early on the morning of January 20, 1918, was the sortie of the Gooben and Breslau from the Dardanelles and their destruction of two British monitors off Imbros. When a few weeks later a large part of the Russian Fleet in the Black Sea fell into German hands, fears were entertained that this might portend further sallies of a similar kind, and possibly even an attempt on the part of the Turco-German seamen to join forces with the Austrian Navy in the Adriatic.

Nothing of this kind occurred, however, and eventually the command of the sea exercised by the Allied Fleets in the Mediterranean—supported and covered, of course, by the Grand Fleet in the North Sea—was destined to exert a potent and decisive influence on the war.

The collapse of Bulgaria was brought about by a military force based on Salenika, the sea communications of which were protected and kept free by the Navy. The collapse of Turkey was similarly the outcome of the brilliant victories of General Allenby's troops, in Palestine, with their left flank on the coast, covered by the Fleet. The collapse of Austria-Hungary was the inevitable sequel to the exit of these two Powers in the Middle East, and this third collapse was expedited by a series of



VICE-ADMIRAL THE HON. SIR S.A. GOUGH-CALTHORPE, K.C.B. Commanded in the Mediterranean.

brilliant strokes delivered against the Austrian ports in the Adriatic. In short, the long arm of sea power swept all before it in the Mediterranean, which in an astonishingly short space of time, from a difficult and doubtful theatre of the war, became an Allied lake.

It has already been indicated that towards the close of 1917 there was a renewal of the German sallying tactics with surface ships. The unfortunate attack upon the Scandinavian cenvoy en October 17, 1917, when the Mary Rese and Strongbow were sunk (Chapter CCXII.), was repeated on December 12, 1917, when the destroyer Partridge was sunk and the Pellew damaged. The convoy consisted of ene British and five neutral ships, and totalled about 8,000 tons of shipping. In addition to the two destroyers, there were four armed trawlers in the anti-submarine escort The Partridge sighted four enemy destroyers at 11.45 a.m., and with the Pellew engaged them while the convoy scattered in accordance with orders. An explosion occurred in the Partridge and she sank, and the Pellew was

also holed on the water-line and disabled, but not sufficiently to prevent her return to port. The Germans then sank the entire convoy and the four armed trawlers. Eighty-eight Scandinavians and 10 British survivors were rescued by four destroyers which were detached at full speed from a cruiser squadron which was hastening to the scene. Lieutenant A. A. D. Grey, a nephew of Viscount Grey, was among the survivors from the Partridge. In a statement on this incident on January 14, 1918, Sir Eric Geddes said that a Court of Inquiry appointed by Sir David Beatty had reported that the escorting vessels did their best to protect the convoy, and were fought in a



RT. HON. T. J. MACNAMARA. Financial Secretary to the Admiralty.

proper and seamanlike manner, and that the other forces which were at sea for the purpose of giving protection to the convoys which were crossing the North Sea at the time took all possible steps to come to their assistance as soon as the attack was reported to them, and to prevent the enemy's escape. The Board of Admiralty confirmed the finding of the Court, and were of opinion that the Commander-in-Chief's dispositions were the best that could have been made with the forces available at the time.

On the same morning as the convoy attack, the Germans raided fishing craft off the Tync. The steam trawlers Ranter and J. J. Smart were attacked by gunfire, the former being damaged and the latter sunk. Eight men were killed on both trawlers. In addition to the trawlers, two neutral merchant ships were sunk about the same time. They had become

separated during the previous night from a south-bound convoy, and the vessels escorting the latter were unaware of the attack owing to the distance separating them. According to the Berlin report, Captain Heinicke was in command of the German ferces, which returned without loss or damage. The episode was naturally lauded to the utmost extent in Germany. Said the naval critic of the Vossische Zeitung: "It is partially fear of German 'U'boats and partially the necessity to save fuel and lubricating materials which permits the Admiralty to send its powerful fighting ships up north only rarely. Our Black Hussars of the Sea are indeed making life a burden for John Bull!"

In addition to activity in the North Sca, the enemy was busy along the western seaboard of the British Isles at this time. In the Irish Channel the losses during December, 1917, included that of the armed boarding-steamer Stephen Furness, Lieutenant-Commander T. M. Winslow, R.D., R.N.R., which was torpedoed and sunk by a submarine on the 22nd, with the loss of six officers and 95 men, including the mercantile crew. Elsewhere, the mine sweeping sloop Arbutus, Commander C. H. Oxlade, R.D., R.N.R., foundered in very severe weather after being torpedoed, her commander, one other officer, and seven men being missing and presumed drowned. armed boarding steamer Grive, Commander S. A. Pidgeon, R.D., R.N.R., also foundered in bad weather after being torpedoed, but without loss of life. Both these casualties were announced officially on December 31. There were also mining mishaps. One such occurred in the mouth of the Mersey on December 28, 1917, and when questioned in Parliament on January 23, Dr. Macnamara stated that the steamer struck a mine which was no doubt laid on the same night a few hours previous to - the loss. Only two men were saved, out of the 43 on board, which included 16 pilots.

There were also the accidents due to the ordinary hazards of sea service under war conditions. On January 9, 1918, about 2 a.m., the destroyer Racoon, Lieutenant G L. M. Napier, R.N., in command, struck some rocks off the north coast of Ireland during a snow-storm, and subsequently foundered with all hands. Nine of the crew had been left behind at her last port of call, and these were the sole survivors. The Admiralty announced on January 12 that 17 bodies of the crew had been

picked up by patrol craft and were being buried at Rathmullen, Lough Swilly, Co. Donegal. Five more bodies had been washed ashore and were being buried locally.

Other destroyers, the names of which were

of February 8, 1918, the destroyer Boxer was sunk in the Channel as the result of a collision. One boy was missing.

Early in the New Year the Germans repeated, as it turned out for the last time, an attack



THE SINKING OF THE MARY ROSE,

not disclosed, were lost by stranding or collision during the winter. On January 28, also, in the English Channel, the torpedo gunboat Hazard was sunk as the result of a collision, three men being lost. On the night upon the east coast of England by surface craft. On the night of January 14 Yarmouth was bombarded from the sea. Fire was opened at 10.55 p.m. Four persons were killed and eight injured. The material damage done was

not serious. A florid German statement spoke of the raiders advancing to the north of the "mouth of the Thames close to the English coast," where the important port establishments were effectively shelled, over 300 rounds being discharged. To this the Admiralty replied that the actual facts were that the town of Yarmouth, situated nearly 100 miles to the north of the mouth of the Thames, was



LIEUT.-COL. F. A. BROCK, R.A.F.
Who lighted the Dover barrage and invented the "Smoke Screens" used in the attacks on Zeebrugge and Ostend.

subjected to bombardment in the pitch darkness, lasting about five minutes, when the enemy craft withdrew. Careful investigation proved that approximately fifty small shells fell in or near the town during this period, and no other shells fell on any other part of our coast during that night.

According to published information, this was the last occasion upon which any portion of Great Britain was subjected to enemy attack from the sea by ordinary warships. A submarine raid on Dover, however, occurred at about 12.10 a.m. on February 16, when fire was opened and continued for about three or four minutes. The shore batteries replied, and the enemy ceased fire after discharging about thirty rounds. Slight damage was caused to house property, and one child was killed, seven persons being also injured. This piece of impudent devilry was associated with other operations connected

with the protective barrage in the Dover Straits, referred to later. Some months afterwards, what was apparently the last incident of this kind before the conclusion of hostilities occurred when a submarine shelled St. Kilda. This island in the Outer Hebrides' according to a statement of Dr. Macnamara on October 17, 1918, was shelled by a "U"-boat, and the church and other buildings damaged—a pure act of vandalism.

It may not be amiss to summarize here the war incidents which went to make up the trying time spent by the inhabitants of Dover during the four years and three months' fighting. The town was attacked by Zeppelins, seaplanes, aeroplanes, destroyers, and submarines. The first German air bomb was dropped on the day before Christmas, 1914, at the back of St. James' Rectory. Dover had 113 warnings, and on 29 occasions bombs and shells were dropped into the town itself. The first moonlight raid occurred on January 22, 1916, when a man was killed and six people injured. The record number of bombs dropped in one night was 42, on September 24, 1917. Altogether 185 bombs dropped on the town, and 23 shells, and the material damage wrought amounted to about £30,000.

The extensive barrage which had been established in the Dover Straits had been most successful in closing this passage to the submarines wishing to interfere with the Channel traffic. The composition of this barrage was described by Vice-Admiral Sir Roger Keyes, commanding the Dover Patrol, on the occasion of the presentation to him on December 12, 1918, of the honorary freedom of the Borough of Dover. The barrage, with powerful searchlights, first consisted of an invention of Commander Brock, who fell at Zcobrugge. Later there were searchlights on board specially built ships which could ride out the heaviest gale at anchor. One line of those ships was from Folkestone to Gris Nez. and another across the Channel seven miles farther westward. In the dark interval between were scores of drifters and obsolete patrol craft, the patrol being so close that it was impossible for anything to pass through on the surface. Underneath were other antisubmarine measures. The duty of the patrol craft was to attack enemy submarines which attempted to get through on the surface, to use depth charges when they dived, and to drive them down on to the hidden perils below.

So successful were these measures, said Admiral Keyes, that by September, 1918, the enemy submarines based on the Flanders coast gave up attempting to get through the Straits of Dover, and there was the most absolute proof from enemy sources that between January and September 1 this year the Flanders flotilla lost 30 submarines. Of these 15 had been definitely identified lying under the lighted barrage patrol, and two others just outside it. There were many others, added Sir Roger, which had not yet been identified but which were known to be there.

It was on January 12, 1918, that the official announcement was made that Vice-Admiral Sir Reginald Bacon, who had commanded the Dover Patrol since April, 1915, had joined the Ministry of Munitions. It was about this time that the Germans showed a certain enterprise, as if they were ready to turn to advantage any weakening in the British methods for the defence of the Straits. On the morning of February 15, 1918, there occurred what looked like a serious attempt to break down the Allied drifter line, probably with the idea of passing submarines through into the Channel. At about 1 a.m. a raid was made by a flotilla of enemy destroyers on the patrol

forces in the Straits. The following craft in the patrol were sunk :- Trawler James Pond and Drifters Jamie Murray, Clover Bank, W. Elliott, Cosmos, Silver Queen, Veracity, and Christina Craig. The British official statement said: "After having sunk these vessels the enemy forces returned to the north before the British forces could engage them." Commenting on this episode in the House of Commons on February 20, Dr. Macnamara, speaking for the Admiralty, said that much as we might regret the measure of success which followed the enemy's flying visit, involving as it did the loss of gallant lives on board the trawler and drifters, to build upon that the contention that German raiders could operate with success in the Channel near Dover was entirely unjustified by the facts.

The affair of February 15 was one of several attempts by the Germans to raid the barrage for the purpose of enabling submarines to slip through, none of which came to anything. One attempt of the kind met with a spirited repulse from the destroyers of the Dovor Patrol. This was on March 21, also in the early morning, when a German destroyer force which had bombarded Dunkirk for ten minutes was brought to action by two British and



TRAWLER WHICH STRUCK A MINE WHILE MINE-SWEEPING.



This ship, after being abandoned by the only two survivors (Chief Engineer J. Ewing and Second Engineer A. Noble), was re-boarded by them and safely brought into port. See the illustration on page 340. THE ATTACK ON THE DOVER PATROL, FEBRUARY 15, 1918: THE VIOLET MAY ON FIRE.

three French destroyers. It was reported that two enemy destroyers and two enemy torpedo boats were believed to have been sunk, survivors being picked up from the latter. No Allied vessels were sunk, and although one British destroyer was damaged she was able to reach harbour.

About eighteen German vessels took part in this raid. According to the French official report, they were in three groups, which had been ordered to bombard respectively Dunkirk, La Panne, and Bray Dunes. The British destroyers Botha, Commander R. L. M. Redc, R.N., and Morris, Lieutenant-Commander P. R. P. Percival, with three French destroyers -the Mehl, Magon, and Bouclier-were on patrol, and, hearing gunfire, made for the flashes, led by the Botha. Star shells were fired to light up the enemy, and this was the means of stopping the bombardment. The raiders attempted to steam away, but the Allied force challenged them. The Morris cut off one large German destroyer, which she torpedoed and sank at 500 yards range. Meanwhile the Botha's main steam pipe was severed by a stray shell, causing her to lose speed, and her commander, firing both torpedoes, made for the fourth boat in the line and rammed her, cutting the enemy completely in half. Swinging round again, the Botha attempted to repeat the coup on the next astern, but the latter managed to elude her, and fell a victim to the torpedoes and guns of the French destroyers. The Morris had by this time relinquished the pursuit, and returned to the scene of action to take in tow her lame sister, the French dostroyers circling round picking up prisoners.

It was on receipt of the news of this encounter on March 21—the day on which the German military offensive was launched on the Western front—that Field-Marshal Sir Douglas Haig telegraphed to Vice-Admiral Sir Roger Keyes: "Delighted to hear of your naval success off Dunkirk last night. Heartiest congratulations to you and all who took part in it."

It was essential to put a check to these raids from the Belgian ports, a fact which had been recognized for a long time. The difficulties were great, and without the aid of a military force almost insurmountable by the Navy. After the evacuation of Antwerp on October 9, 1914, and the withdrawal of the Allied troops towards the French frontier, the enemy swept

down upon the coast and there found suitable bases from which to initiate harassing operations with his torpedo craft. During the early months of the German occupation, and when the enemy yet hoped to push on to Calais, but little was done in the way of permanent fortification on this part of the coast. That was the period when the British monitors and gunboats assisted the Allied Armies in resisting the hostile advance. When, however, it became clear that their onward movement was checked, the Germans turned their attention to the utilization of Ostend and Zeebrugge for the purpose of aggressive naval effort.

The waters opposite the Flanders shore are shallow, with shifting sand-banks and many shoals. Heavy warships of large draught are therefore unable to approach, and the channels both to Zeebrugge and Ostend are narrow and tortuous, making entrance far from easy even for small craft, and until dredging operations had been carried out the submarines based on these ports were light vessels sent overland in sections to be put together at Antwerp and then transported by canal to the sea. From Bruges there are two canals to the coast, one to Ostend and the other to Zeebrugge-the latter, the much wider and deeper straight-cut, intended for the purpose of carrying sea-borne traffic. These canals are connected by locks with the artificial harbours constructed at each port. That at Zeebrugge is partly enclosed by a long stone breakwater joined to the land by a railway viaduct, and between the ports the coast is formed by a chain of sand-dunes, which provided cover for the heavy batteries ercctcd behind them.

The enemy quickly got to work at the two ports, and especially at Zeebrugge, where military store-houses and workshops were constructed, and preparations of many kinds made for the conversion of the harbours into defended positions for submarine and destroyer operations. The docks and shipbuilding yards at Bruges were largely extended, and aerodromes erected from which raids could be made upon this country. During 1915, offensive measures were taken against the two seaports by flotillas of British monitors and other craft, and their headquarters at Bruges was bomb d by the Naval Air Service stationed at Dunkirk. In that year the enemy torpedo-craft, and especially the minelayers and other submarines, constituted a distinct menace to the traffic passing through the Straits of Dover. The Harwich and Dover Patrols, however, did excellent work, and were most vigilant in counteracting the threat of the enemy, while the aircraft inflicted a considerable amount of damage upon the works of military importance.

In the course of the following year the enemy showed much greater activity, both in the provision of batteries on the coast and in the forays made by their submarines and destroyers upon the trade on the English coast. The systematic dredging of the channels permitted the use of much more powerful destroyers and larger submarines. Mining was carried out to a very wide extent, making still more difficult the approach to the beach, and guns of large calibre and long range were mounted in the fortifications. The digue at Ostend became a fortress, and was described as a town of dug-outs, of concrete works, of gun-platforms, and of blockhouses. The Tirpitz battery near the same place was furnished with very heavy guns capable of a range of over 30,000 yards, and these guns were protected by cupolas of thick armour. Similarly, at Zeebrugge, the coast bristled with ordnance in large numbers of heavy calibre up to 15-inch. It was said that between 120 and 150 heavy pieces of artillery were mounted

among the dunes at the back of the beach. At the end of the breakwater or Mole at Zeebrugge, where there was a lighthouse with searchlight and range-finder, a battery of powerful guns, strongly protected, was placed, and on the breakwater itself, in addition to the railway terminus, there was a seaplane station, barracks for personnel, and sheds for stores and other material, with machine-gun positions for their defence. Unfortunately, while the Germans were making progress with their defensive and offensive preparations, our measures of interference with their activity were not on the same scale, nor were they pushed with the energy which had formerly been so marked. Towards the end of 1916 the raids and forays of the enemy craft working from the Belgian bases had become so frequent and were characterized by such audacity and determination as to attract general attention in England, and cause something like a feeling of apprehension in the south-eastern counties. The raids upon the Kentish coast and the attempts to pass the Dover Straits made at this time, and how they became considerably diminished after the extremely gallant and successful action in which the flotilla leaders Broke and Swift distinguished



THE TWO SURVIVORS OF THE VIOLET MAY WITH THE SHATTERED WHEEL AND BINNACLE OF THEIR SHIP.



FIRING INTO THE BATTERIES ON THE DUNES. The ship has been given a list to increase the range of her guns.

themselves, have been described in previous chapters.

It was many times urged upon the authorities that the only satisfactory method of dealing with the menace from the Flanders ports would be to destroy the ports and render them useless as lairs for the enemy craft. The tons of high explosive dropped from the air and the intermittent bombardment at long intervals of the fortifications, while these resulted in extensive damage, were insufficient and inadequate by themselves. Something on a larger scale and of a more permanent character in the way of destruction was required to be really effective. Proposals for blocking the canals had been made as early as the first months of the war, but nothing came of them. When Sir Edward Carson and Lord Jellicoe had succeeded Mr. Balfour and Sir Henry Jackson at the Admiralty in the early part of 1917 a definite plan of action for this purpose was seriously considered.

It was not until November, 1917, that the project materialized in the Plans Division of the Admiralty, at the head of which was a young flag officer named Roger Keyes. In this division a great scheme, having for its purpose the blocking of Zeebrugge, of the ship canal, and a similar undertaking at Ostend, was prepared and elaborated, and when it had obtained official sanction and encouragement, the talented and energetic Admiral under whose direction it had been drawn up was sent down

to Dover to relieve Sir Reginald Bacon in command of the patrol for the purpose of putting it into execution. The great adventure took place in the early morning of April 23, St. George's Day.

The plan as arranged was to use certain obsolete vessels filled with concrete for sealing up the two harbours, while, at the same time and with the object of diverting attention from these block-ships, an attack was made on the battery and other establishments on the Mole at Zeebrugge and the railway viaduct connecting the breakwater with the shore blown up. It was essential to success that the enterprise should be a complete surprise and that both the blocking ships and the party attacking the Mole should reach their objectives before the heavier batteries of the enemy could put them out of action. As the storming of the Mole was intended to distract the attention of the defenders, this operation was timed to begin before the blocking-ships appeared, and thus to take the first brunt of whatever artillery fire the enemy could bring to bear. In order to screen the movements of the attacking vessels, an artificial fog or smoke mist, which had already been found to work satisfactorily, was to be made by the small craft which were to accompany the larger vessels and take part in rescuing their crews. Also, as a further diversion, while these vessels were making their approach to the ports, a force of monitors

and aerial bombing machines was to set up a bombardment of the shore batteries and other positions of military importance in the vicinity of the two ports.

As already stated, the conduct of the whole business was in the hands of Vice-Admiral Koyos. Six old cruisers solected for the purpose were specially prepared for the expedition.



BRUGES DOCKS AND THE APPROACHES FROM OSTEND AND ZEEBRUGGE.

The Vindictive was to carry out the attack upon the Mole and had been supplied on the side which would be nearer the breakwater with a high falso deck, fitted with brows or gangways by which the storming and demolition parties she carried were to land. Accompanying her were two old Mersey ferry-boats, the Iris and Daffodil, also carrying part of the landing force, and the Daffodil, it was also arranged, was to push the Vindictive against the breakwater if the grappling-irons with which she was fitted failed to effect their purpose. The Vindictive was commanded by Acting-Captain A. F. B. Carpenter, R.N., the Iris by Commander Valentine Gibbs, R.N., and the Daffodil by Lieutenant H. G. Campbell, R.N. The commands of the various landing parties were distributed as follows: The Naval brigado under Acting-Captain H. C. Halahan, D.S.O., R.N., and the Royal Marines B. N. Lieutenant-Colonel Elliot, D.S.O., R.M.L.I., with Lieutenant-Commander A. L. Harrison, R.N., and Lieutenant C. C. Dickinson, R.N., in charge of the storming and demolition bodies respectively. Two submarines were detailed to blow up the viaduct; one of these was commanded by Lieutenant A. C. Newbold. R.N., and the other by Lieutenant R. D.

Sandford, R.N., and attached to these submarines was a picket-boat commanded by Lieutenant-Commander F. H. Sandford, D.S.O., R.N.

The vessels selected for blocking were, liko the Vindictive, ancient and obsolete cruisers, which before the war had been fitted out as minelayers. For their present purpose they had been stripped of everything except their engines and armament, and in addition to the concrete carried explosives to blow their hulls to pieces when they grounded. Those to bo used at Zeebrugge were the Thetis, Commander R. S. Sneyd, D.S.O., R.N., Intrepid, Lieutenant S. S. Bonham Carter, R.N., and Iphigenia, Licutenant E. W. Billyard-Loake, R.N., who at the last moment replaced Lieutenant I. B. Franks, R.N., who had to go to hospital for an operation. For the Ostend undertaking the ships chosen were the Brilliant, Commander A. E. Godsal, R.N., and Sirius, Lieutenant-Commander H. N. M. Hardy, D.S.O., R.N. A flotilla of motor vessels under the command of Cartain Ralph Collins, R.N., and Commander Hamilton Benn, M.P., R.N.V.R., with another of coastal motor-boats under Lieutenant Welman, R.N., were charged with the duty of assisting the block-ships in finding their objectives, making the smoke screens, and aiding the crews of the sunken vessels to make their escape.



THE IRIS. .
(The Daffodil was a similar boat.)

Three destroyers were also assigned duties in the attack, the North Star, Lieutenant-Commander K. C. Helyar, the Phœbe, Lieutenant-Commander H. E. Goro-Langton, R.N., and the Warwick. In the last-named Vice-Admiral Roger Keyes flew his flag, and from her he directed the whole operation. The admiral's final signal as the Vindictive advanced

to the attack was a reminder of the day, "St. George for England!" and the reply made by Captain Carpenter was, "May we give the Dragon's tail a damned good twist!"

Altogether between 70 and 80 ships and boats took part in the affair; but, in addition, the naval force at Harwich, under Rear-Admiral Sir Reginald Tyrwhitt, D.S.O., and the Grand Fleet in the North Sea, were on the alert to

the men undoubtedly had a chance of saying that they did not want to go, perhaps for family reasons; but, so far as I know, there was not a single case of a man asking to be left behind. To my knowledge, in fact, in one ship (the Intrepid), where orders had been given that certain men were to be left behind, those men in almost a mutinous spirit came up before the captain and said they absolutely refused to



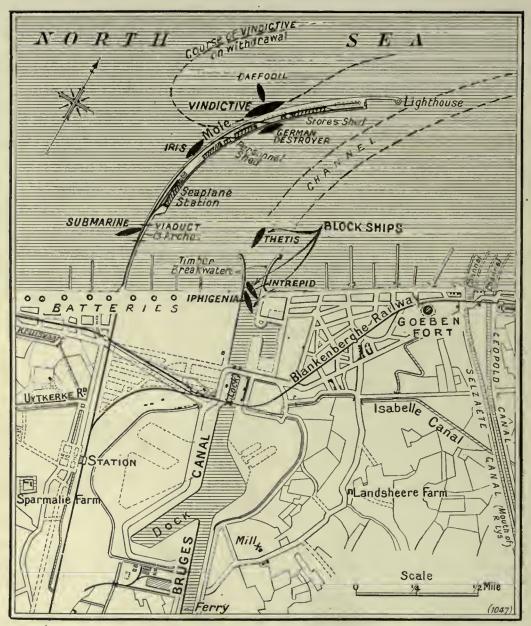
H.M.S. VINDICTIVE.
As she was when first commissioned in 1898.

prevent any attempt from the German Bight to interfere with the proceedings. A small French contingent from Dunkirk also participated.

The following graphic account of the daring exploit was given by Captain Carpenter:

"Once it had been decided to make an attack on the Mole we had to have a large number of men to carry it out, and to obtain suitable ships. So the Grand Fleet, the main naval depots, and the various Commands, such as Dover, were asked to lend a certain number of the most suitable men they had. These men were given to understand that they were going on a hazardous enterprise, so far as I know, and therefore one can say that they volunteered for it, although they were not actually told at the time what they were going to do. However, before the operation actually took place overy man had to be informed quite clearly what was expected of him, because one fully realized that every officer might be knocked out and the men would be entirely on their own. Then leave the ship. As it happened, in this particular case, owing to a slight hitch, the extra crew of this ship were not taken off. The whole of the men went into Zeebrugge Canal in the block ship, and the whole of them were saved and brought back.

"The nature of the operation was such that it required the use of a very large number of small craft, and the trip across the sea being rather over a hundred miles each way made it necessary that the weather should be fine. At the same time the wind had to be on-shore, so that we could use our smoke screens effectively. At the same time, too, the operation had to be carried out at high water, so as to allow the block ships to get in. Again, owing to the presence of a large number of German guns on the Belgian coast, it was necessary to carry out the operation at night, and it was fully realized that if it were carried out in the latter part of the night—that is to say, by the morning twilight—there was practically no chance of any ship getting away in the early



THE BLOCKING OF ZEEBRUGGE.

morning when they could be seen from the shore. It was, therefore, a rather complicated combination of conditions that we required, and during the period that we were waiting for a suitable day the disappointments were very great. Before the operation took place we had all gone over to within a few miles of our objectives and had to turn back owing to impossible weather conditions suddenly arising, and it was with very anxious hearts that we waited for suitable weather conditions to occur, realizing that every day we waited mado a greater chance for the news of the impending operation to leak out and get across to Germany and for preparations to be made over there to

defeat the operation at the outset. The chances of the vicinities of Zeebrugge and Ostend being heavily mined were considerable, and the risk of this had to be taken.

"At last the opportunity we had waited for so long arose, and everybody started off in the highest spirits and with no other thoughts than to make the very greatest success of the operation that we could possibly do. Fate was very kind to us on the whole, and everything went well, almost as per schedule. The various phases of the operation depended on accurate timing of the work of the various units. The smoke screen craft and the fast motor-boats at given intervals rushed on ahead at full

speed, laid their smoke screens, attacked enemy vessels with torpedoes, and generally cleared the way for the main force, in addition to hiding the approach of the latter from the shore batteries. Meanwhile, a heavy bombardment was being carried out by our monitors, and the sound of their firing as we approached was one of the most heartening things that I can remember. On arriving at a certain point some considerable distance from shore the forces parted, some going to Zeebrugge and some to Ostend, the idea being the forces should arrive at the two places simultaneously, so that communication from one place to the other could not be used as a warning in either case. Precisely at midnight the main force arrived at Zeebrugge and two of the block ships arrived at Ostend.

"At midnight we steamed through a very thick smoke-screen. German star shells were lighting up the whole place almost like daylight, and one had an extraordinary naked feeling when one saw how exposed we were although it was in the middle of the night. On emerging from the smoke-screen the end of the Mole, where the lighthouse is, was seen close ahead, distant about 400 yards. The ship was turned immediately to go alongside and increased to full speed so as to get there as fast as possible. We had decided not to open fire from the ship until they opened fire on us, so that we might remain unobserved to the last possible moment. A battery of five or six guns on the Mole began firing at us almost immediately from a range of about 300 yards, and every gun on the Vindictive that could bear fired at them as hard as it could.

"In less than five minutes the ship was alongside the Mole, and efforts were made to grapple the Mole so as to keep the ship in place. The Daffodil, which was keeping close astern, came up, and in the most gallant manner placed her bow against the Vindictive and pushed the Vindictive sideways until she was close alongside the Mole. There was a very heavy swell against the Mole. The ships were rolling about, and this made the work of securing to the Mole exceedingly difficult.

"When the brows were run out from the Vindictive the men at once climbed out along them. It was an extremely perilous task, in view of the fact that the end of the brows at one moment were from 8 ft. to 10 ft. above the wall and the next moment were crashing on the wall as the ship rolled. The way in

which the men got over those brows was almost superhuman. I expected every moment to see them falling off between the Mole and the ship—at least a 30 ft. drop—and being crushed by the ship against the wall. But not a man fell; their agility was wonderful. It was not a case of seamen running barefoot along the deck of a rolling ship; the men were

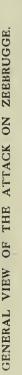


THE VINDICTIVE'S LANDING BROWS.

carrying heavy accoutrements, bombs, Lewis guns, and other articles, and their path lay along a narrow and extremely unsteady plank. They never hesitated. They went along the brows and on to the Mole with the utmost possible speed. Within a few minutes three to four hundred had been landed, and under cover of a barrage put down on the Mole by Stokes guns and howitzer fire from the ship they fought their way along.

"Comparatively few of the German guns were able to hit the hull of the ship, as it was behind the protection of the wall. Safety, in fact, depended on how near you could get to the enemy guns instead of how far away. While the hull was guarded the upper works of the ship-the funnels, masts, ventilators, and bridge-were showing above the wall, and on these a large number of German guns appeared to be concentrated. Many of our casualties were caused by splinters coming down from the upper works. If it had not been for the Daffodil continuing to push the ship in towards the wall throughout the operation none of the men who went on the Mole would ever have got back again.

"About 25 minutes after the Vindictive got alongside, the block ships were seen rounding the lighthouse, and heading for the canal



entrance. It was then realized on board the Iris, Daffodil, and Vindictive that their work had been accomplished. A quarter of an hour after the Vindictive took her position, and just before the blockers arrived, a tremendous explosion was seen at the shore end of the Mole. We then knew that our submarine had managed to get herself in between the piles of the viaduct connecting the Mole with the shore and had blown hersolf up. She carried several tons of high explosive, and the effect of her action was effectually to cut off the Mole from the land. Before the explosion the crew of the submarine, which comprised some halfdozen officers and men, got away in a very small motor-skiff, which lost its propeller and had to be pulled with paddles against a heavy tide and under machine-gun fire from a range which could be reckoned only in feet. Most of the crew were wounded, but the tiny boat was picked up by a steam pinnace.

"It is possible that the Germans who saw the submarine coming in under the play of their searchlights thought that her object was to attack the vessels within the Mole, and that she thought it feasible to get through the viaduct to do this. Their neglect to stop the submarine as she approached could only be put down to the fact that they knew she could not get through owing to the large amount of interlacing between the piles, and that they really believed they were catching her. A large number of Germans were actually on the viaduct a few feet above the submarine, and were firing at her with machine-guns. I think it can safely be said that every one of those Germans went up with the viaduct. The cheer raised by my men in the Vindictive when they saw the terrific explosion was one of the finest things I ever heard. Many of the men were severely wounded-some had three and even four wounds-but they had no thought except for the success of the operation.

"The block ships came under very heavy fire immediately they rounded the end of the Mole. Most of the fire, it appears, was concentrated on the leading ship, the Thetis. Sho ran ashore off the entrance to the canal on the edge of the channel, and was sunk as approximately as possible across the channel itself, thus forming an obstruction to the passage of the German vessels. Before going down she gave a signal to the other two block ships, which were following close behind, to inform them which side of her to pass in order

to get to the canal entrance. This cooperation between the three block ships, carried out under extremely heavy fire, was one of the finest things of the operation. The second and third ships, the Intrepid and Iphigenia, both went straight through the canal entrance until they actually reached a point some two to three hundred yards inside the shore lines, and behind some of the German batteries. It really seems very wonderful. How the crews of the two ships ever got away is almost beyond imagination

short time the ships were clear of imminent danger owing to the large amount of smoke which they had left behind them."

When the Vindictive ran alongside the Mole the landing parties were ready to swarm across the brows, but the hail of shrapnel and machinegun fire took heavy toll of the stormers. Lieutenant-Colonel B. N. Elliot, D.S.O., R.M.L.I., Major A. A. Cordner, of the Marines, and Captain H. C. Halahan, D.S.O., R.N., were killed in the ship almost immediately. Lieutenant C. E. V. Hawkings, R.N., and

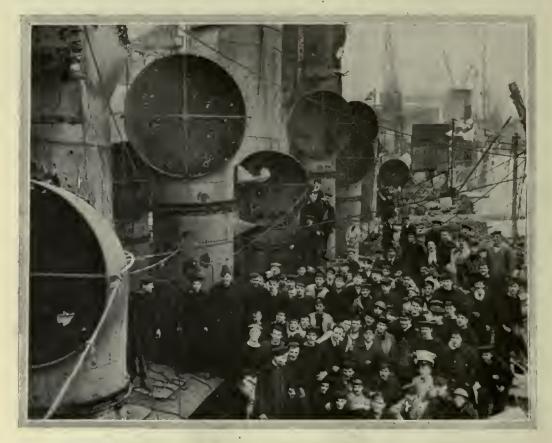


THE "SLIGHT DAMAGE" (AS REPORTED BY THE GERMANS) TO THE MOLE AND VIADUCT AT ZEEBRUGGB.

"The situation rather more than an hour after the Vindictive got alongside was this: The block ships had passed in, had come to the end of their run, and had done their work. The viaduct was blown up and the Mole had been stormed. Nothing but a useless sacrifice of life could have followed if the three boarding vessels had remained by the Mole any longer. The signal to withdraw was therefore given, and the ships got away under cover of their smoke-screens as quickly as they could. They went at full speed and were followed all the way along their course by salvos from the German guns. Shells seemed to fall all round the ships without actually hitting them. The gunners apparently had our speed but not our range, and with remarkable regularity the salvos plopped into the sea behind us. In a Lieutenant-Commander G. N. Bradford, R.N., who carried the grappling anchors ashore from the Iris, were also killed. But led by Lieutenant-Commanders A. L. Harrison and B. F. Adams, R.N., and Lieutenants C. C. Dickinson and E. L. Berthon, D.S.C., R.N., and Major B. G. Weller, D.S.C., Captain E. Bamford, Lieutenants C. R. W. Lamplough and G. Underhill, of the Royal Marines, the bluejackets and marines rushed across the gangways with undaunted gallantry and fought their way splendidly into the German defences. In a rush for a machinegun battery Lieutenant-Commander A. L. Harrison, R.N., was killed, and at the lighthouse Lieutenant-Colonel F. A. Brock, R.A.F. (Wing-Commander, R.N.), lost his life. This talented officer was the inventor of the smokescreen, which, as Sir Eric Geddes admitted,

alone made the undertaking possible. Exposed to terrific fire, there was great loss of life in the Iris, Commander V. F. Gibbs, R.N., in command of the vessel, and her navigator, Lieutenant G. Spencer, D.S.C., R.N.R., both died of their wounds. Major C. E. C. Eagles, D.S.O., and Lieutenant S. H. E. Inskip, of the Royal Marines, were also killed, and many others, but the work was carried out in perfect order and many deeds of heroism were performed in its

to the enemy and were extinguished by gun fire. As these flares were intended to show the ends of the wooden piers leading to the harbour, their absence threw the blocking ships out of their course and they were run aground and blown up outside the entrance. The crews of the ships were rescued as fearlessly as were those at Zeebrugge, by motor launches commanded by Lieutenants K. R. Hoare, D.S.C., R.N.V.R., and R. Bourke, R.N.V.R. The

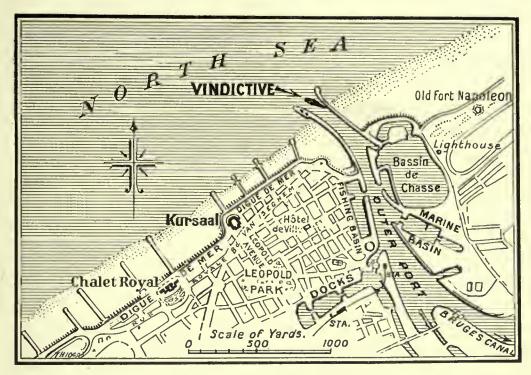


THE VINDICTIVE'S CREW ON THEIR RETURN FROM ZEEBRUGGE.

execution. The crew of the Thetis after she blew up were rescued by a motor launch under the command of Lieutenant H. A. Littleton, R.N.V.R., that of the Intrepid by another motor launch under Lieutenant P. T. Dean, R.N.V.R., and that of the Iphigenia by the same motor launch, the survivors being eventually transferred to a destroyer. The only material loss of any importance was the North Star, destroyer, sunk by gunfire, most of the crew being picked up by the Phœbe under cover of a smoke-screen.

At Ostend the operations were conducted by Commodore Hubert Lynes, R.N., and there a change of wind brought about a less satisfactory result than was achieved at Zeebrugge. The flares lit by motor launches became visible total casualties suffered in the dual enterprise amounted to 588 officers and men. Of these there were 21 officers killed and missing and 29 wounded, and 184 other ratings killed and missing and 354 wounded.

The British Navy was not a force to leave its work unfinished, and a further expedition was planned to complete the jeb at Ostend. The Vindictive was still seaworthy although badly battered, and she was prepared for the venture. Loaded with concrete and explosives she set out again on May 9 with Commodore H. Lynes as before in command of the new enterprise. Sir Roger Keyes, who had been made a K.C.B. for the earlier achievement, was again present in the Warwick. Commander A. E. Godsal,



PLAN OF OSTEND HARBOUR. Showing the position of Vindictive.

R.N., who had taken the Brilliant in, was in command of the block-ship, and Engineer Lieutenant-Commander W. A. Bury, R.N., who had taken the Vindictive into Zeebrugge on St. George's Day, remained in charge of the machinery with his assistants and some volunteers. The Germans were again surprised, and on this occasion a fortunate breeze blew away the fog that hid the entrance between the two piers and enabled the ship to steer for the opening. She was helped by a coastal motor-boat under Lieutenant W. R. Slayter, R.N.,

which burned a flare on the spot from which the Stroom Back buoy had been removed by the enemy. Two motor-boats under Lieutenants A. L. Poland, R.N., and A. Dayrell-Reed, D.S.O., R.N.R., went ahead and torpedoed the pier ends while the monitors and seaplanes bombarded the batteries on shore. The Germans replied with every gun that would bear, and under a hail of projectiles the Vindictive steamed full speed for the entrance, where another motor-boat commanded by Lieutenant G. L. Cockburn, R.N., had laid



THE VINDICTIVE IN THE POSITION ALONGSIDE THE PIER AT OSTEND

To which the Germans had removed her.

a burning light buoy. The official narrative says, then:

The guns found her at once. The after control was demolished by a shell which killed all its occupants, including Sub-Lieutenant Angus H. MacLachlan, who was in command of it. Commander Godsal ordered his officers to go with him into the couning tower. The Vindictive laid her battered nose to the eastern pier and prepared to swing her 320 feet of length across the



COMMANDER A. E. GODSAL, R.N.

Took the Vindictive into Ostend Harbour and
was killed.

channel. At that moment a shell from the shore batteries struck the conning-tower. Lieutenant Sir John Alleyne and Lieutenant V. A. C. Crutchley wore still within. Lieutenant Alleyne was stunned by the shock: Lieutenant Crutchley shouted through the slit to the Commander, and, receiving no answer-for Commander Godsal had been blown to pieces by the bursting shell -rang the port engine full speed astern, to help in swinging the ship. She was lying at an angle of about 40 degrees to the pier, and seemed to be hard and fast. Lieutenant Crutchley therefore gave the order to clear the engine-room and abandon ship. Engineer Lieutenant. Commander Bury, who was the last man to leave the engine-room, blew the main charges by the switch installed aft. Lieutenant Crutchley blew the auxiliary charges in the forward 6-inch magazine. The old ship sank about six feet and lay upon the bottom of the channel. Her work was done. . .

The losses were comparatively light, and most of these were incurred by the Vindictive's crew whon leaving the ship. In the whole operation four officers and six men were killed, five officers and 26 men wounded, and nine men missing. The survivors were taken off in a motor launch by Lieutenants R. Bourke and G. H. Drummond, R.N.V.R. The only casualty in material was the launch commanded by the latter officer, who was himself severely wounded with several of his men, while his second in command, Lieutenant Gordon Ross, R.N.V.R., and one man was killed. The badly damaged boat was sunk after the wounded had been transferred to the Warwick.

It was not claimed that the channels at Zecbrugge and Ostend were completely sealed, but for all practical purposes, as centres of torpedo craft activity, the two ports were immobilized and Bruges was deprived of its value as a torpedo base

Reference was made in an earlier chapter (CCXII., page 169) to the extensive mining undertaken by the British Navy for the purpose of limiting the channels of access to the North Sea and the Outer Oceans available for the U boats. An account of the huge minefield laid down between the Shetlands and the coast of Norway appeared in an American paper, Arms and the Man, on November 9, 1918. Using a new type of submarine mine, the United States Navy was shown to have completed, in cooperation with the British Navy, an extensive "mine barrage" in the North Sea. Tentative plans for this were submitted to Admiral Benson, Chief of the Bureau of Naval Operations, on June 12, 1917; the development of a mine peculiarly adapted for use against submarines was announced on July 18, and plans were submitted on the 30th of that month for a British-



LIEUT. V. A. C. CRUTCHLEY, V.C.*

Took control of the Vindictive after Commander

Godsal had been killed.

American joint offensive operation. These were submitted to the Admiralty through Admiral Mayo during his visit in August and September, and were accepted, in modified form. When Admiral Mayo returned, the

^{*} The portrait given in Vol. XVII, p. 421, is that of Commander Osborne, R.N., not Licut. Crutchley, as there stated.

U.S. Bureau of Ordnance was directed to proceed with the supply of the necessary mines, numbering many thousands. The work was divided among 140 principal contractors and more than 400 sub-contractors, the major portion being done by automobile manufacturers. Simultaneously, ships were converted into mine-layers, a mine-charging plant with a capacity of 1,000 mines a day was erected to load the mines, and other arrangements made, including the taking up of 20 merchantmen for the sole purpose of transporting mine material overseas. Material was first transported from America in February, 1918. A constant succession of ships was maintained in the following months, and only one vessel carrying mine material was sunk by submarine. In April, 1918, Rear-Admiral Strauss was appointed commander of the Mining Force, and the mine-layers, under Captain R. R. Belknap, reached their bases on May 26, 1918. In conjunction with the British forces, these American ships sowed vast areas with mines, making these tracts impracticable for the U boats. Exactly how many such engines were "planted" by the Allies in the North Sea was not disclosed, but it may be noted that on the cessation of hostilities every one of these machines needed to be swept up again, so that the mine-sweepers of the Navy, whose heroism and devotion to duty had been displayed so often and so conspicuously, were kept busy clearing the seas for safe traffic.

In addition to restricting the action of submarines by means of extensive minefields, there was a strengthening of the patrol both



THE RESCUE OF THE VINDICTIVE'S CREW AT OSTEND.

along the German coast and at the entrance to the Baltic. Sir Eric Geddes told the House of Commons that the North Sea was swept day and night, from north to south and from east to west, by the British Navy. In one month alone, the distance steamed in home waters by battleships, cruisers, and destroyers amounted to 1,000,000 miles. Over 3,000 patrol boats, as well as other armed vessels, were engaged in this work of watching the exits to the German ports. In such circumstances conflicts were of frequent occurrence, so much so that, as the Admiralty stated officially when exposing a Berlin report on one occasion, while they did not interfere with the maintenance and efficiency of our patrol, they were not reported.

On March 28, 1918, there was one of these patrol incidents which was typical of the kind of guerilla warfare which went on daily at this time. In the course of a sweep of the Heligoland Bight, a division of British destroyers eaptured and sank three German armed outpost trawlers. Three officers and 69 men—the entire crews of the enemy vessels—were made prisoners, and there were no casualties on our side. This capture was made in a sweep at night, during misty weather, and



REAR-ADMIRAL HUGH RODMAN.
In command of U.S. Battleships in European waters.

in a heavy sea. The enemy were completely surprised, being discovered lying at anchor in line. The British commander detailed two of his destroyers to board each of the trawlers, which proved a matter of considerable difficulty in view of the nature of the sea. As the British destroyers approached the centre trawler the latter's commander and crew abandoned their vessel, which blew up immediately afterwards as the result of explosion of bombs on board. The two other trawlers



ADMIRAL BENSON.
Chief of the U.S. Bureau of Naval Operations.

surrendered without resistance. The sea preventing the boarding party from getting on to one of the trawlers, the captain was ordered to weigh anchor and steer a certain course, which he did with some alacrity, spurred on by one of our destroyers. The weather becoming worse, the commander of the destroyers decided to take off the crews of the trawlers, which, notwithstanding the dangerous nature of the task owing to the high seas which were running, was carried out successfully by boats' crews. Later it was decided to sink the captured vessels, one being blown up by a demolition charge, and the other sunk with a few rounds of shot. The German prisoners seemed exceedingly pleased at being captured, one of them remarking that he expected to get some real food when he reached England.

A Prize Court action which arose out of this scrap was heard on July 30, 1918, when it was shown that the British destroyers engaged were the Abdiel, Legion, Telemachus, Vanquisher, Ariel, and Ferret, under the command of Captain Berwick Curtis, D.S.O., of the Abdiel. Captain Curtis stated in an affidavit that the German vessels, the Scharbcutz, Mars, and Polarstern; were each armed with a gun and further equipped with bombs, depth charges, and scarchlights. For the 72 officers

and men on board the enemy craft, Sir Samuel Evans made an award of prize bounty to the British crews of £360.

Another small outpost affair occurred on April 20. Some small enemy forces were encountered by British light squadrons operating in the Heligoland Bight, and forced to retire behind their minefields. A few shots were exchanged at extreme range, and one enemy destroyer was observed to be hit. There were no British casualties.

Five days earlier there had been a more successful venture, so far as material results were concerned, in the Kattegat. The Commander-in-Chief, Grand Fleet, undertook a sweep there on April 15, and destroyed ten German trawlers, the crews of which were saved by the British ships, without any loss to our side. The locality was reported to be north-west of Kullen Island, at the northern entrance to the Sound. An indication was thereby afforded to the general public of the vast extent of sea which our vessels were watching and patrolling.

An interesting operation, significant because of aerial co-operation, took place off the coast of Schleswig-Holstein on July 19. This was an attack upon the Zeppelin sheds at Tondern. This lair was the objective of a previous bombing expedition—on March 25, 1916 (see Chapter CLIII., page 58)—when a seaplane force delivered the attack, supported from the sea by a light cruiser and destroyer force under Commodore (afterwards Rear-Admiral Sir) R. Y. Tyrwhitt. The official announcement issued on the night of July 20 was as follows:

A detachment of the Grand Fleet operating off the Jutland coast on the morning of Friday, July 19, has now returned to the base, having carried out a bombing attack on the Zeppelin sheds at Tondern, Schleswig, by R.N.A.F. machines despatched from the vessels.

In the first flight, which was made in the early morning, all machines reached their objective and made direct hits on a large double shed, which was completely destroyed, the conflagration rising to 1,000 feet. A second flight followed the first, all machines but one reaching their objective. A large shed was observed to have a hole of considerable dimensions in the roof, from which a volume of smoke was being emitted. A second shed was hombed, and direct hits were made, but owing to fierce anti-aircraft fire and to the smoke of the first shed it was not possible to observe whether destruction of the second shed was complete.

The attacks were made from a height of 700 to 1,000 feet.

Four of our machines failed to return and information has been received that three of these machines landed in Danish territory.

All ships returned without any casualties.

Later information obtained from one of the pilots in the raid showed that a bomb was dropped on a low, flat building, which was partially underground, situated a mile to the eastward of Tondern. From the nature of the building and the violence of the explosion which followed the dropping of the bomb, it was likely that this was a magazine. There were also reports to a similar effect in the Danish journals. The Germans were apparently surprised, for one airman was reported to have



FLEXIBLE VOICE PIPES.
For communicating orders from the bridge to the gunners.

stated that no barrage was put up: in fact, not a gun was fired at the aircraft, one of which was so low down that the pilot discerned in the main street of the town a farmer's cart from which the driver waved a friendly greeting. On his visit to the Fleet during the week following this raid, the King heard full particulars of the Tondern exploit, and three of the officers—Captains Dickson, Smart. and Bernard, R.A.F.—were decorated by his Majesty.

Another little affair in which aircraft working with the Navy were conspicuous took place on August 11, 1918. On this occasion, the sea and air forces carried out a reconnaissance of the West Frisian Coast. The British were heavily attacked by German aircraft, but were handled with admirable dexterity and courage

in the face of these odds against them. A feature of the oporation was tho work of tho Coastal Motor Boats, under the command of Lieutenant-Commander A. L. H. D. Coke, R.N. Although greatly outnumbered by the aircraft which attacked them, these little craft succeeded in bringing down two enemy air machines. The severe nature of the fighting was shown by the fact that six of the motor boats failed to return. With this excoption, the British forces engaged suffered no damage or casualties. Commander Coke was awarded the D.S.O. in the London Gazette of November 29 for his gallantry, the official announcement stating that this officer "showed. great dotermination, gallantry, and courago in continuing his reconnaissanco in spite of the presence of the enemy. The Coastal Motor Boats led by Lieutenant-Commander Coke fought a very gallant action against superior odds, and continued to do so until all their ammunition was expended or their Lewis guns rendered useless by jamming." Three other officers received the D.S.C. for their exceptional work on this occasion. Germans admitted the loss of an airship (Commander Proells) and one aeroplane.

The Coastal Motor Boats (or C.M.B.'s) proved a useful and valuable addition to the Navy's auxiliaries. So, too, did the "P"-boats and the Yacht Patrol, which had many notable successes to their credit. The stirring fight of the yacht Lorna (No. 024), Lieutenant C. L. Tottenham, R.N.R., with a U-boat off Portland Bill has been related by Sir Henry Newbolt. U.B. 74, as this submarine was numbered, under the command of Ober-Leutnant Schtiendorf, was destroyed by ramming and depth charges on May 26, 1918, while in the act of attacking a couple of morchantmen, and so decisive was the result that only one German prisoner was picked up, and he died from his injuries within three

During 1918 there were no successful attempts to put a German commerce raider on to the occan trade routes. The return of the raider Wolf in February, 1918, however, from a cruiso of fifteen months' duration, created some interest. This event was announced in the following German official communiqué dated February 24:—

The auxiliary cruiser Wolf has returned home after a 15 months' cruise in the Atlantic, Indisn, and Pacific Oceans. The Kaiser has sent a telegram of welcome to the commander of the Wolf and has conferred on him

the order Pour le Mérite. A number of Iron Crosses have also been conferred on officers and crew.

The cruiser, which was commanded by Captain Nerger, inflicted the greatest damage on the enemy's shipping by the destruction of cargo space and cargo. She brought home more than 400 members of crews of sunken ships, including numerous coloured and white British soldiers. Besides several guns captured from armed steamers, the Wolf brought great quantities of valuable raw materials, such as rubber, copper, brass, zinc, cocoa beans, copra, and so forth to the value of many millions of marks.

The British cruisor Turritella, which was captured by the Wolf in February 1917, was equipped as a second auxiliary cruiser and christened the Iltis, and successfully operated in the Gulf of Aden under the command of the Wolf's first officer, Licutenant-Captain Brandes, until she was confronted by British forces, when she was sunk by her own crew, who, to the number of 27, are prisoners in British hands.

This oruse was carried out in the most difficult circumstances, with no hase and no means of communication with home, and constitutes a unique achievement.

In view of the foregoing the British Admiralty announced that it was to be presumed that 11 merchantmen—six British, three U.S.A., one Japanese and one Spanish-which had long been posted as missing, had been destroyed by the Wolf in the Indian and Pacific Oceans and their crews made prisoners. Of these vessels, the Turritella was of 5,528 tons gross. In a specch at Lübeck, Commander Witschewsky, described as first officer of the Wolf, said that she went out to sea via Iceland, and then round the Cape and into the Indian Ocean, passing close to Madagascar. In the Indian Ocean, a south-easterly course was taken for safety, and after passing round Australia, New Guinea and New Zealand, the Wolf proceeded to Bombay, Ceylon, the Indian coast, and the Rcd Sea, then to the south, round the Cape, and through the Atlantic back to Iccland, whence the ship went home along the Norwegian coast. This officer said that the first object of the cruise was mine-laying, and these machines were strewn off the Cape and about Colombo at night-time by the aid of English searchlights. One officer who was a prisoner on board her stated that she carried seven 6-inch guns, four torpedo tubes, a seaplano called the Wölfchen, bombs, hand grenades, etc. She could raise and lower her masts, and probably do the same to her funnel. A dummy funnel and false mast could also be rigged on the poop. The cruise of the Wolf certainly brought back a touch of romance, at times reminiscent of Marryat, into the story the sea war. Captain Nerger was acclaimed as a national hero throughout Germany, and within a day or two of his return was said to have received several

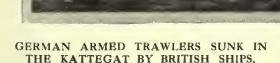
hundreds of proposals of marriage by telegraph from German women.

When, in an earlier chapter,* the various means and methods for dealing with the enemy

been awarded the Victoria Cross for such service, viz.:—

Commander Gordon Campbell, D.S.O., R.N.
Acting Lieut. W E. Sanders, R.N.R.
Lieut. R. N. Stuart, D.S.O., R.N.R.
Seaman W. Williams, R.N.R.
Lieut. C. G. Bonner, D.S.C., R.N.R.
Petty Officer E. Pitcher, R.N.
Skipper Thomas Crisp, D.S.C., R.N.R.
Lieut. H. Auten, D.S.C., R.N.R.

As a good example of the superb discipline, resourcefulness and calm courage necessary in such operations as those in which the above officers and men, and many more of their comrades, were engaged, the action of H.M.S.



submarines were described, it was only possible to mention the "Q" boats or "mystery ships." These vessels were described as follows by Sir Eric Geddes:—

"Q" ships are decoys. They may be old sailing ships lumping along in a choppy sea, obviously unarmed and an easy prey to the submarine. The ships are manned by volunteers—the very best and the very bravest that our sea service can produce—and the ships are veritable quick-change artists. In half a dozen seconds or so they are converted from apparently harmless traders to formidable men-of-war.

In a special supplement to the London Gazette on November, 20, 1918, there appeared a series of examples of actions fought by the "Q" boats. 'The supplement contained the names of no less than eight officers and men who had

Stock Force, on July 30, 1918, may be cited. This "Q" boat, commanded by Lieutenant Harold Auten, D.S.C., R.N.R., was torpedoed by an enemy submarine at 5 p.m. on that day. The torpedo struck the ship abreast No. 1 hatch, entirely wrecking the tore part of the ship, including the bridge, and wounding three ratings A shower of planks, unexploded

shells, hatches, and other debris followed the explosion, wounding the first lieutenant (Lieutenant E. J. Grey, R.N.R.) and the navigating officer (Lieutenant L. E. Workman, R.N.R.) and adding to the injuries of the foremost gun's erew and a number of other ratings. The ship settled down forward, flooding the foremost magazine and between-decks to the depth of about three feet. A "panic party,"



PRISONERS FROM THE GERMAN TRAWLERS SUNK IN THE KATTEGAT.

in charge of Lieutenant Workman, R.N.R., immediately abandoned the ship, and the wounded were removed to the lower deck, where the surgeon (Surgeon Probationer G. E. Strahan, R.N.V.R.), working up to his waist in water, attended to their injuries. The captain, two gun erews, and the engine-room staff remained at their posts,

The submarine then eame to the surface ahead of the ship half a mile distant, and remained there a quarter of an hour, apparently watching the ship for any doubtful movement. The "panic party" in the boat accordingly commenced to row back towards the ship in an endeavour to decoy the submarine within range of the hidden guns. The submarine followed, coming slowly down the port side of the Stock Force, about 300 yards away. Lieutenant Auten, however, withheld his fire until she was abean, when both of his guns

could bear. Fire was opened at 5.40 p.m.; the first shot earried away one of the periscopes, the second round hit the eonning-tower, blowing it away, and throwing the occupant high into the air. The next round struck the submarine on the water-line, tearing her open and blowing out a number of the crew.

The enemy then subsided several feet into the water and her bows rose. She thus presented a large and immobile target, into which the Stock Force poured shell after shell until the submarine sank by the stern, leaving a quantity of debris on the water During the whole of the action one man (Officers' Steward 2nd Class R. J. Starling) remained pinned down under the foremost gun after the explosion of the torpedo, and remained there cheerfully and without complaint, although the ship was apparently sinking, until the end of the action.

The Stock Force was a vessel of 360 tons, and despite the severity of the shock sustained by the officers and men when she was torpedeed, and the fact that her bows were almost obliterated, she was kept affoat by the exertions of the ship's company until 9.25 p.m. She then sank with colours flying, and the officers and men were taken off by two torpedo-boats and a trawler.

There are few more vivid and romantie stories in the record of the sea fighting of the Great War than those connected with "Q" boats. Officers and men vied with each other in designing allurements for the enemy. One man would don female attire over his uniform, and recline prominently on the poop in a deek chair; another would procure a stuffed parrot to fasten in a cage which he could take over the side as a member of the "panic party" to heighten the effect; and so on. After a while, however, it became more difficult to bait the Germans. The continued success of the "Q" boats was remarkable testimony to the iron nerve and unfailing resource of the British seaman. The submarine commander would not venture to the surface until after his torpedo had struck home; hence it resolved itself into a case of the "Q" boats going out with the deliberato intention of being torpedoed themselves, in order that, following such an attack, they might get a chance to destroy their assailant when he came above water to gloat over his supposed vietim. In its original conception, the "Q" boat idea was adopted by several classes of war vessels,

from the time of the Baralong affair in 1915 Numerous were the trawlers which put out to sea with guns concealed in all sorts of ways. But the practice of trapping submarines grew and developed until, in the final phase, it was one of extreme ingenuity and daring. All honour to the splendid seamen who prosecuted this species of sea fighting with such conspicuous skill and relentless ardour.

During the year the Admiralty revealed the fact that the British submarines which had been operating in the Baltic since 1914–15 had been destroyed, and explained the reason for this step. It was on October 15, 1914, that two boats of the E type first entered the Baltic. Ten months later two more followed them; and two more still a month afterwards. All these boats proceeded by sea—through the Skaw and the Sound; but more remarkable in its way was the dispatch of four boats of the C type to Archangel in 1916, whence they were transported overland to Kronstadt.

When the Germans approached the coast of South-West Finland, the seven British submarines remaining in Russian waters were destroyed between April 3 and 8, 1918, outside Helsingfors. Owing to the Russian disaffection

this little submarine flotilla had come to be the only force which the Germans really feared in those parts. Its escape by the Sound being cut off, there was nothing left but to destroy the boats to prevent their falling into enemy hands. The flotilla was formerly commanded by Captain Cromie, R.N., who in January, 1918, was appointed Naval Attaché at Petrograd, and who was killed in the deplorable attack on the Embassy there by the Bolshevists on August 31, 1918: In a dispatch dated May 17, 1918, the Petrograd Correspondent of The Times wrote: "During the presence of our flotilla in the Baltic it succeeded in sinking one battleship, two cruisers, four destroyers, one aeroplane carrier, four transports, one collier, and 14 merchant vessels. This entailed not less than between 2,000 and 3,000 casualties to the enemy—that is to say, 10 times the numerical strength of the flotilla." · An Allied expedition to the Murman coast was undertaken in the summer of 1918. Early in July it was announced that British and French warships were in Murman ports, and that preparations were being made for assisting the local Russian authorities to maintain their independence. On August 8 a notice issued



GUN HIDDEN WITHIN THE FORWARD HATCH OF THE SUFFOLK COAST.

A replica of the Stock Force, moored in the Thames for public inspection.

by the Press Bureau stated that "Allied forces, naval and military, with the active concurrence of the Russian population, landed at Archangel on Friday, August 2. Their arrival was greeted with general enthusiasm by the inhabitants." It was also stated that the object of the expedition was to prevent Germany from establishing on the Russian coast bases for the supply of her submarines; to keep open the road of communication between



LAUNCHING A PARAVANE.

The apparatus which protects ships from mines.

Russia and the West; and to save the remainder of the war material that the Allied ships took there for the use of the Russian Army. On September 12 the presence of American troops was disclosed. On September 16-17 a successful operation was carried out by naval and military forces on the River Dvina, which resulted in the sinking of two enemy ships, the capture of three guns, and the infliction of heavy loss. Further fighting both on the Archangel and Murmansk fronts was revealed officially on October 6.

It was not until certain honours for service on the Murman coast were conferred in tho London Gazette on December 12, 1918, that the identity of some of the British warships engaged there was made known. It was then stated that Modyugski Island, at the sea end of the channels leading to Archangel, was captured on August 1, 1918, after the batteries had been silenced by the Allied warships, and the town of Archangel was occupied next day, the Bolshevik forces being quickly and efficiently overcome and driven out of the vicinity. "Following these operations," said the London Gazette, "a River Expeditionary Force was organized with local craft, armed and manned by Allicd crews, and this expedition succeeded, in co-operation with the military forces, in clearing the River Dvina and the River Vaga of hostile craft up to the time when Allied ships had to be withdrawn to avoid the ice, several of the principal enemy vessels being destroyed." The honours conferred included some to officers serving in the light cruiser Attentive, the monitor M.25, and the gunboats Razlyff, Advokat, and Gorodok. In addition to the gunboat squadron and the motor launches, a paddle mine-sweping squadron was also mentioned.

A startling episode in the first month of the year 1918 in the Mediterranean theatre of war was the sortie of the Goeben and Breslau from the Dardanelles. For the first time since these notorious Turco-German warships fled to the Straits in the first month of the war, they emerged therefrom on January 20, 1918. To the north of Imbros, the British monitors Raglan and M.28 were attacked while at anehor, and after being struck by heavy salvoes sank before they could fire a shot in their own defence. Altering course to the southward, the enemy made off at high speed, being shadowed by the destroyers Tigress and Lizard, which had made a plucky effort to cover the monitors by forming a smoke screen, in which attempt they were subjected to a heavy fire from the Goeben. Eventually, the Breslau, when about six miles south of Kephalo, struck a mine, a large explosion being observed



H.M.S. REPULSE—ONE OF THE SO-CALLED "HUSH" BATTLE CRUISERS.

The Renown is a sister ship.

abreast her after funnel. Three more explosions quickly followed, and within 10 minutes she sank by the stern, heeling over as she went down. Soon afterwards, four enemy destroyers were seen coming out of the Dardanelles, supported by an old Turkish cruiser, but on the Tigress and Lizard promptly engaging the destroyers they hurriedly retired up the Straits, the nearest one being repeatedly hit and set on fire. Meantime, the Goeben continued on her southerly course until an attack by aircraft forced her to alter course and head for the Dardanelles. In the act of turning, however, she also struck a mine, and settled down aft with a decided list. She was able to regain the shelter of the Straits, in spite of repeated attacks from the Allied aircraft, which

obtained two direct hits when off Chanak. She was headed for the shore and beached at the extreme end of Nagara Point. For a week the battle-cruiser remained aground, during which time she was repeatedly bombed from the air, but the bad weather hampered the aerial operations considerably, and a reconnaissance carried out about midnight on January 27 revealed the fact that the vessel had been successfully refloated. Ultimately, of course, in common with other enemy warships in the Black Sea, the Goeben fell into British hands in November, 1918.

A gallant episode, which did not have the successful termination which it deserved, was the cruise of submarine E.14 up the Straits on the night of January 27 with instructions



H.M.S. COURAGEOUS.

Added to the Navy during the war. The Glorious is a sister ship.

to complete the Goeben's destruction. Under the command of Lieut.-Commander G. S. White, E.14 proceeded into the Dardanelles, but encountered considerable anti-submarine activity. According to the Turkish official account, off Kum Kale the boat was destroyed by gunfire. The other naval operations during what proved an eventful year were chiefly the work of the Allied navies in the Mediterranean, in which the British Fleet took an important share.

When, after hostilities had ceased, the British people came to review the progress of the four and a quarter years of war, the vital and fundamental nature of the work of their seamen stood more apparent than ever. It was the Navy which had made possible the triumph of the Allied cause. Speaking at Leeds on

December 7, Mr. Lloyd George said that if Germany had succeeded in her submarine campaign the Allied cause would have been hopelessly lost. The Prime Minister added:—

Then the submarine warfare, the submarine itself, was dealt with. The convoy system was set up for the first time, so as to make it difficult, and even impossible, for the submarine to attack our ships. That saved millions of tons, and thousands of gallant lives of our sailors. Then there were devices for destroying submarines. Cradually, month by month, we were chasing them with these new designs, pursuing them, hunting them through the deep, and you have no notion of the persistency, the skill, the daring, the endurance which have been put by the British sailor into the hunting of this wild animal. Hidden in the deep, night and day, sunshine and storm, up in the frozen waters of the north, in the torrid waters of the south, east, and west, ocean, gulf, stroit, and sea, through the months day by day, hour by hour, without ceasing, hunting, chasing, pursuing, fighting, and destroying, until at last this pest was got completely under. Believe me, in the whole of their glorious history the British seamen have never been greater than in the last five years.



LIEUT, COMMANDER F. H. SANDFORD, R.N. Who was responsible for the rescue of the crew of the submarine which, commanded by his brother, was used to blow up the viaduct to the Mole at Zeebrugge.

CHAPTER CCLXXII.

VICTORIA CROSSES OF THE WAR (VII.).

THE PIPES IN BATTLE—RICHARDSON FROM MANITOBA—A NEW ZEALAND ENGINEER—MORE HONOURS FOR THE LANCASHIRE FUSILIERS—"HUNTER'S POST"—MACHINE GUN EXPLOITS—"STICK IT, MEN! SHOW THEM FIGHT!"—LIEUTENANT SEWELL AND THE BURNING TANK—LIEUTENANT A. E. GABY, A.I.F.—AN R.N.V.R. AWARD—A BOMBING PARTY—PATROL AFFAIRS—CAPTAIN WEST'S AIR WORK—AWARDS AFTER THE ARMISTICE—A GROUP OF HEROES—A MACHINE-GUNNER—TANK ACHIEVEMENTS—"MASTERLY BLUFF"—INDIVIDUAL ACTS'—"MYSTERY" V.C.'S EXPLAINED—COMMANDER GORDON CAMPBELL AND HIS DEEDS—LIEUTENANT BONNER AND PETTY OFFICER PITCHER—LIEUTENANT SANDERS AND HIS TOPSAIL SCHOONER—LIEUTENANT STUART AND SEAMAN WILLIAMS IN "A BRITISH MERCHANT VESSEL"—LIEUTENANT AUTEN AND A "Q" SHIP—MAJOR BARKER'S EXTRAORDINARY AIR FIGHTS—CAPTAIN BEAUCHAMP-PROCTOR—VISCOUNT GORT—GUARDS' CROSSES—AN INDIAN HERO AT THE JORDAN—A FUSILIER IN ITALY—PERONNE AND BANCOURT—OVERSEA SOLDIERS AND TERRITORIALS—DESPERATE VILLAGE FIGHTS—A WINNER IN THE BALKANS—ACROSS THE PIAVE—NIGHT FIGHTING—PARLIAMENT FOR A RECIPIENT.

EVENTEEN Vietoria Crosses were announced in October, 1918, mostly for machine-gun, pill-box and exploits; no fewer than nine of the awards were posthumous. It seemed as if during more than four years of warfare there had been so many and varied deeds for which the Cross was given that time could bring no further change, yet, as the conflict developed and new methods of destruction were evolved, there eame opportunities for displays of heroism which had not previously existed. There was, for instance, in these fresh awards an example of valour and saerifiee which stood unparalleled, afforded by an officer of the Tank Corps who reseued from a sure and awful death the crew of a "whippet" which had been overturned and had taken fire. Tanks had definitely eome into their own, and proving, as they did, as amazing weapons of offence as aeroplanes had proved, they gave full means Vol. XVIII. -- Part 232

to daring men to earry out those enterprises whose special danger was acknowledged by the award of the Cross. There were also repetitions of the old story of simple, invineible, inspiring heroism, and amongst them was the case of a piper of the Manitoba Regiment.

The records of the Cross contained more than one particularly rousing story of the effect of pipes when played in battle; and in regimental histories there were tales of pipers who won fame in days before the Cross existed. There was the story of pipers assembling Highlanders for Waterloo with the terribly significant "Come to me, and I will give you flesh"; the storming of Dargai gave added popularity to "The Cock o' the North," and in the Great War Piper Laidlaw played his comrades up to wondrous acts and himself won the Cross for his bravery. There was now to come the piper whose act was not in any way less glorious than the achievements of his predecessors and

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whose valour was made more memorable by his death. This was Piper James Richardson, Manitoba Regiment, who showed the grit of the true fighter when, before an attack, he obtained his commanding officer's permission to play his company "over the top." The attack began. It proved a stern strain on the assailants because of very strong wire and intense fire, and not only were there heavy easualties but the formation was temporarily demoralized. Here was just such a situation

PIPER JAMES RICHARDSON, Late Manitoba Regt.

as a man of Piper Richardson's temperament would seek and seize. He strode up and down outside the wire and played his pipes "with the greatest coolness," the instantaneous effect



SERGT. T. J. HARRIS, Late Royal West Kent Regt.

being that he inspired his company with such "fury and determination" that the wire obstacle was overcome and the position was eaptured. So far the piper had done splendidly, but he was again and finally to show how cool and reekless his nature was. Riehardson had shared in some bombing operations and was detailed to take back a wounded comrade and prisoners. He began his task and proceeded about 200 yards; then, remembering that he had left his pipes behind, he deelared that he would recover them. He was urged not to do so, but he insisted on returning, and back he went. Piper Riehardson was never afterwards seen, and, after the usual lapse of time, death was presumed. It was stated, not in the official record, that his deed was performed during the Battle of the Somme and that he had been presumed dead since October 9, 1916; so that two years passed before the award of his great honour was announced.

The piper's Cross was gazetted on October 22, and at the same time awards were announced to Sergeant Thomas James Harris, M.M., late Royal West Kent Regiment (Lower Halling, Kent)*; Sergeant Samnel Forsyth, late New Zealand Engineers; Lance-Sergeant Edward Smith, D.C.M., Lancashire Fusiliers (Maryport), and Aeting-Sergeant Harold John Colley, M.M., late Lancashire Fusiliers (Smethwick). Concealed in crops and shell-holes, hostile machineguns greatly impeded an advance, and Harris,

leading his sections against one of the weapons, captured it and killed seven of the enemy. Later, on two occasions, he attacked single-handed two dangerous machine-guns, capturing



CORP. (LANCE-SERGT.) E. SMITH, Lancashire Fusiliers.

the first and killing the crew, but he was himself killed when attacking the second gun.

Sergeant Forsyth also was killed after an extraordinary exhibition of skill and courage. Through his instrumentality three machine-gun positions were rushed and the crews taken prisoner before they could inflict many casualties. Forsyth's company then came under heavy fire from several machine-guns, but by a daring reconnaissance he located two of them. The New Zealander's enterprise and determination were proved by the fact that he tried to gain support from a Tank. In doing this he was wounded, but having had the wound bandaged he again got into touch with the Tank, which he triod to manœuvre into a favourable position; but very heavy fire was encountered from machine-guns and anti-tank guns and the Tank was put out of action. Forsyth had fairly roused his men by his example and he was able to organize the Tank crew and several of his own men into a section, which he led to a position where the machineguns could be outflanked. He so far succeeded that in spite of the incessant heavy fire he forced the enemy machine-guns to retire and enabled the advance to continue. At the height of his splendid success Sergeant Forsyth was killed by a sniper

Sergeant Smith was another machine-gun hero, his first achievement being a personal rush on a machine-gun post with his rifle and bayonet. On seeing him advance the enemy scattered to throw hand-grenades at him, but the Fusilier was too swift for them, and almost without halting in his rush he shot and killed at least six of the enemy. Afterwards, on seeing another platoon in need of help, he led his men to them, took command of the situation and captured the objective. On the following day, during a counter-attack, he led a section forward and restored a portion of the line.

The fifteenth Lancashire Fusilier to win the Cross in the war, Sergeant Colley, was one of those men who had been ordered to hold on at all costs, and, in obeying, gave their lives for their country. When the enemy counter-attacked in force Colley rushed forward on his own initiative to help the forward line, rallying and controlling the men holding it. By this time the enemy were advancing quickly, and had obtained a footing in the trench. Sergeant Colley then formed a defensive flank and held it, so severe being the fighting that out of two platoons only three men remained unwounded, the sergeant being



PRIVATE (ACTING SERGT.) H. J. COLLEY, Late Lancashire Fusiliers.

dangerously wounded. His devotion to duty cost him his life, but it had prevented the enemy from breaking through and was the means of their being driven off.

Sometimes the fog of war lifted enough to show when and where particular deeds were done, and this was happily the case with a corporal of the Highland Light Infantry, David Ferguson Hunter, of Dunfermline, who was the valiant leader of a little band of soven belonging to the 1/5th Battalion of the famous regiment, which was part of the 52nd Division. Their heroism first became known through Sir Douglas Haig's dispatch on



CORPORAL DAVID F. HUNTER, Highland Light Infantry.

September 21, 1918. It was then reported that on September 17, when the Germans attacked, Hunter's position was believed to have been captured, but during the two days that the Germans occupied Mœuvres the party, though surrounded, resolutely held their position, and on the night of September 19-20, when our troops retook Mœuvres, the whole party regained their unit without loss. Such details as were published made a prompt and strong appeal to the British people; but official particulars were not known until, on October 23, it was announced that the Victoria Cross had been awarded to Hunter. The story was one of the most splendid and moving of all the noblo tales that had been told of the recipients of the Cross. The Corporal's battalion had relieved another unit in the front line, and he was detailed to take on an advanced post which was established in shell-holes close to the enemy. Relief was carried out in the darkness, and there was no opportunity of reconnoitring the adjacent ground. On the following afternoon the Germans drove back the posts on Hunter's flanks, and established posts close to and around him, thus completely isolating his command. He was exceedingly short of both rations and water, but resolved to hold on to his post to the last. On the evening of the second day he unsuccessfully tried to communicate with his company; still the undismayed and undefcated little band earried on with such resolution that frequent attacks were repelled and the position was maintained until the evening of the third day, when the garrison was relieved by a counter-attack. For more than 48 hours the eorporal had held on without food and water; and not only did he withstand constant assaults, but he also had to undergo the barrage fire of the enemy and of our own attacks, which went right across his post. That heroic stand was reminiscent of many like it in the annals of the British Army, amongst them the last stand of the 44th at Gundamuk and the defence of Rorke's Drift. No name was given to the corporal's particular locality; but perhaps it was to become known from generation to generation as Hunter's Post.

The winning of the Cross by Lieutenant David Lowe MacIntyre, of the Argyll and Sutherland Highlanders, when acting as adjutant of his battalion, was but the sequel to many previous acts of gallantry. Three days



LIEUT. D. L. MACINTYRE, Argyll and Sutherland Highlanders,

after showing special coolness in the firing-line "under most heavy shell and machine-gun fire," ho was in command of the firing line, again displaying uncommon courage. Barbed wire being encountered, he personally reconnoitred it before leading his men forward, and once, when extra strong entangloments were reached, he organized and took forward a party of men, and under heavy machine-gun fire supervised



HELD TO THE LAST.

An isolated machine-gun post in a shell-hole.

the making of saps. Later he rallied a small party when the greater part of our own line was definitely held up, and, after pushing forward through the enemy barrage in pursuit of an enemy machine-gun detachment, he ran them to earth in a pill-box, killing three and capturing an officer, 10 other ranks,



PRIVATE THOS. DINESEN, Quebec Regiment.

and five machine-guns. Then he raided three pill-boxes in this redoubt, and disposed of the occupants. While reconnoitring, after being relieved of the command of the firing-line, a machine-gun opened fire close to him, whereupon MacIntyre rushed upon it single-handed, put the team to flight, brought in the gun, and returned to the redoubt.

Three other awards accompanied that to Lieutenant MacIntyre. These were to Scrgeant Robert Spall, late Eastern Ontario Regiment; Corporal Harry Garnet Bedford Miner, late Central Ontario Regiment, and Private Thomas Dinesen, Quebec Regiment.

Corporal Miner was mortally wounded in performing the deed for which the Cross was given. Despite severe wounds, he refused to withdraw in an attack, and rushed an enemy machine-gun post single-handed, and, having killed the entire crew, he turned the weapon on the enemy. Subsequently, "with two others," he attacked another enemy machine-gun post, and put the gun out of action; then, single-handed, he rushed a hostile bombing post, bayoneting two of the garrison and putting the rest to flight. It was while doing this that the corporal was mortally wounded.

The conduct of Private Dinesen was singularly fine. He showed continuous brayery

during 10 hours of hand-to-hand fighting, which resulted in more than a mile of strongly garrisoned and stubbornly defended trenches being captured. Five times in succession he rushed forward alone and, single-handed, put hostile machine-guns out of action, accounting with bomb and bayonet for no fewer than a dozen of the enemy. These four Crosses were gazetted on October 26.

Included in seven awards announced on October 30 was Acting Licutenant-Colonel Richard Annesley West, late North Irish-Horso and Tank Corps, who had already received the D.S.O. and the M.C. His case illustrated vividly the side perils of an attack, apart from the common and expected dangers due to fire of overy sort. In a dense fog, during an attack, the infantry had lost their bearings, whereupon Colonel West immediately collected and reorganized any men he could find and led them to their objective through heavy machine-



LIEUT. C. H. SEWELL, Late Royal West Kent Regt., attached Tank Corps.

gun fire, showing the most utter disregard of danger and setting an example to which the capture of the objective was largely due. On a later occasion it was intended that a battalion of light tanks under West's command should exploit the initial infantry and heavy tank attack, and be went forward in order to-

keep in touch with the progress of the battle, and reached the front line when the enemy were delivering a local counter-attack. There was a danger of the battalion giving way, but the colonel at once rode out in front of the men, and, in spite of heavy fire from rifles and machine-guns, he rallied them. The enemy were then close upon him, but he took charge of the situation, and rode up and down in face of certain death, repeating in this respect the conduct of more than one previous recipient of the Cross. In this extremity he clearly made up his mind to encourage his men to the last, and so he cried "Stick it, men! Show them fight! And for God's sake put up a good fight!" Riddled by machine-gun

Corps. For the first time in relation to awards of the Cross details were given concerning "whippet" light tanks, and these showed that when in command of a section of the tanks in action Sewell displayed great courage and initiative in getting out of his own tank and erossing open ground under heavy shell and machine-gun fire to rescue the crew of another "whippet" of his section which had side-slipped into a large shell-hole, overturned, and taken fire. The lieutenant was called upon to deal with an extraordinary emergency, and he was fully equal to the demand. The door of the tank had become jammed against the side of the shell-hole, so that the officer and men inside were in a horrible imprisonment and



[Official photograph.

A "WHIPPET" TANK.

bullets, the gallant leader fell, but his valour had inspired the infantry to resistless efforts, and the hostile attack was defeated. Two days after the award of Colonel West's Cross was announced *The Times* stated that he was killed in action on September 2. Colonel West was a veteran soldier, though only 39 years old. He had served in the South African War, and held the Queen's Medal with seven clasps and the King's Medal with one clasp. He went to the front in 1914, and transferred to the Tank Corps in 1917, with the rank of major.

The hero of the affair of the burning "whippet" was Lieutenant Cecil Harold Sewell, Royal West Kent Regiment, attached to the Tauk menaced by a dreadful death. Without help it was impossible for them to get out of the burning tank. The task of helping was not easy, but Sewell, unaided, set to work to dig away the entrance to the door, and he succeeded and saved the prisoners' lives. While this hard work was being done, Sewell was within full view of the enemy, and under shortrange fire from machine-guns and rifle-pits, and he was in the same peril when, having saved the crew of the "whippet," he dashed across the open ground to help one of his own crew whom he had seen lying wounded behind his tank. In performing this humane and valiant act the lieutenant was hit, but he

managed to reach the tank. A few minutes later he was again hit, this time fatally, while dressing the wounded man.

Another posthumous honour was that of Lieutenant Alfred Edward Gaby, Australian Imperial Force. Here, again, was an instance of a man hurling himself at the enemy regardless of all consequences and meeting his death, not in what seemed the moment of his greatest peril, but at the hands of a sniper. The wire in front of an enemy trench had been reached, and strong opposition checked an advance, the enemy being in force only 40 yards behind the wire, and commanding the gap with machineguns and rifles. Gaby found another gap in the wire, and alone he approached the strong point while machine-guns and rifles were still being fired from it. Still alone, and running along the parapet, he emptied his revolver at point-blank range into the garrison, drove the crews from their guns and forced the surrender of 50 of the enemy, with four guns. Then he quickly reorganized his men and led



CHIEF PETTY OFFICER GEORGE PROWSE, R.N.V.R.

them on to his final objective, which he captured and consolidated. Three days later, while walking along his line of posts and encouraging his men, who were under heavy fire, Gaby was killed by a sniper.

An interesting member of the seven was Chief Petty Officer George Prowse, R.N.V.R. (Landore), whose Cross was won on land and not on the sea. "His courage was superb," said the official record and his acts quite warranted that splendid tribute. One of these was to collect available men and lead them against a strong point with so much success



SERGT. R. S. JUDSON, Auckland Regiment.

that 23 prisoners and five machine-guns were captured. Another deed was a single-handed attack on an ammunition limber which was trying to recover ammunition, this individual exploit resulting in the killing of three men and tho capture of the limber. Two days later Prowse achieved his greatest triumph when he rushed forward with a small party and took two strong machine-gun posts, killing six of the enemy and taking 13 prisoners and two machine-guns. It was a severe undertaking, and the chief petty officer was the only survivor of the band.

Another fine success was to the credit of Sergeant Reginald Stanley Judson, D.C.M., M.M., Auckland Regiment. At the head of a small bombing party he seized a machine-gun, and then, proceeding up a sap alone, he bombed three machine-gun crews before him. Jumping out of the trench he ran ahead of the enemy, and standing on the parapet ordered the party of two officers and about 10 men to surrender. By way of answer they instantly fired on him, but the determined New Zealander threw a bomb and jumped down amongst the enemy, killing two, putting the rest to flight and capturing two machine-guns.

A heavy enemy attack on a strong patrol, which was forced back in confusion, gave Private Samuel Needham, Bedfordshire Regiment (Hull), who was with it, the opportunity

to distinguish himself and afford valuable help at a critical moment. He ran back and fired rapidly at a body of the enemy at point-blank range, his action ehecking them and enabling the patrol commander to reorganize his men. In spite of many casualties the patrol got back all their wounded, "and it was due to the actions of individuals, of which this is the most outstanding, that the entire patrol was not cut off."

In another patrol affair which contained more varied incidents than was usual, Lance-Sergeant Walter Simpson, Lincolnshire Regiment (Bolton) won the Cross. A daylight patrol had been sent out to reconnoitre and gain touch with a neighbouring division. The west bank of a river was reached and a hostile machine-gun post was sighted on the east bank. The river was too deep to ford and Simpson volunteered to swim across. This was a dangerous undertaking, but the sergeant reached the other side and crept up alone in rear of the post. There he saw and shot a sentry. Another enemy, aroused and alarmed, ran out, and him also the sergeant shot; after which he turned out four more of the enemy and forced them to surrender. A crossing over the river was subsequently found and the officer and one man of his patrol joined the sergeant and reconnaissance was continued along the river bank. Some distance had been covered when machinegun and rifle fire was opened on the patrol and the officer was wounded. No cover was available, and there were most dangerous and difficult conditions and heavy fire to contend with; but the sergeant mastered them all, and in addition managed to cover the withdrawal of the wounded officer, his conduct generally greatly helping towards the success of the important and dangerous work which the patrol had been ordered to do.

At a time when almost incredible stories were being told and written of the courage and resource of British airmen the award of a Cross was made known from the Air Ministry. This was on November 8, when it was announced that in recognition of his outstanding bravery in aerial combat the Victoria Cross had been awarded to Captain Ferdinand Maurice Felix West, Royal Air Force, formerly of the Special Reserve, Royal Munster Fusiliers. Captain West, who a few weeks earlier had been awarded the Military Cross, found himself in one of those desperate situations from which there seemed no hope of escape, and from which, indeed, no

cscape was possible except by the exercise of the most uncommon skill and bravery. While fighting hostile troops at a low altitude, "far over the enemy lines," he was attacked by seven aircraft. Early in the engagement one of his legs was partially severed by an explosive bullet—a fact which showed that to the very last of their fighting the Germans maintained their inhuman practices—and he fell powerless into the controls, so that the machine became unmanageable. West, however, contrived to lift his disabled leg and to regain control of the machine. He was wounded in the other leg, but "with surpassing bravery and devotion to



THE KING DECORATING SERGT. SIMPSON (Lincoln Regiment) at Valenciennes.

duty" he so skilfully maneuvred his machine that his observer got sovoral good bursts into the enemy aeroplanes, which were driven away. In spito of being "desperately wounded" the captain brought his machine over our lines and landed safely; but he was so exhausted that he fainted. There was no quelling such a spirit, and on rogaining consciousness the officer insisted on writing his report. Captain West's Cross was the last to be announced before hostilities ceased.



BOMBING HOSTILE TRENCHES.

On November 15, 1918, four days after the armistice with Germany was signed and hostilities ceased on all fronts, 15 Victoria Crosses were announced by the War Office. This list was memorable because its publication practically came within the "after the war" period, and it was particularly interesting for the reason that there was so much variety in the branches of the Services it represented

and the ranks of the recipients, ranging, as these did, from private to colonel. Canadian regiments, which of late had been so prominent in the records of the Cross, were again well represented, and another member of the Royal Naval Volunteer Reserve won the distinction ashore, as the last recipient from that body had done. The 15 new heroes were as follows:

T.-Comdr. Daniel Marcus William Beak,

D.S.O., M.C., R.N.V.R.; Pte. Hugh McIver, M.M., late Royal Scots (Newton); Lee.-Corpl. Henry Wcale, R.W. Fusiliers (Shotton, Cheshire); Lee.-Corpl. Ernest Seaman, late



PRIVATE HUGH MCIVER, Late Royal Scots.

R. Innis. Fusiliers (Scole, Norfolk); Cpl. John McNamara, E. Surrey Regt. (Preston); Lec. Corpl. Alfred Wilcox, Oxf. and Bucks Light Infy. (Birmingham); Sergt. Laurence Calvert, M.M., King's Own Yks. Light Infy. (Conisboro'); Pte. Jack Harvey, London Regt. (Camberwell); T.-2nd Lieut. William Allison White, Machine Gun Corps; Lt.-Col. Cyrus Wesley Peck, D.S.O., Manitoba Regt.; Lee.-Corpl. William Henry Metcalf, M.M., Manitoba Regt.; Lieut. Chas. Smith Rutherford, M.C., M.M., Quebec Regt.; A/Sergt. Arthur Georgo Knight, late Alberta Regt.; Sergt. Harry John Laurent, New Zealand Rifle Brigade; and Pte. James Crichton, Auckland Regt., N.Z.F.

Commander Beak won his greatest honour as the result of repeated displays of the highest courage and the finest leadership, his outstanding achievements including the capture of four enemy positions in spite of heavy machine-gun fire and a triumphant assault on a nest of machine-guns. This latter act was accomplished by Beak with only one runner. He had been dazed by a shell fragment, the brigade commander was absent, the whole brigade was under extremely heavy gun fire, and the attack had been held up. These were obstacles which it needed tho bravest of men to overcome, and Beak conquered them, broke up the nest of guns and personally brought back nine or ten prisoners.

No statement was made as to the manner of Private Hugh MeIver's end, but he courted death repeatedly, and never more so than when, at great personal risk, he saved many lives by stopping the fire of a British tank, which was directed in error against our own troops at close range. Before performing that deed of salvation this soldier, when employed as a company runner, had shown splendid courage in carrying messages in action, and he again fully proved his valour and resourcefulness when, single-handed, he pursued an enemy



THE KING DECORATING COMMANDER BEAK, R.N.V.R., IN FRANCE.

scout into a machine-gun post, and, after killing six of the garrison, captured two machine-guns and 20 prisoners.

Corporal Weale's Cross also was the reward of an uncommon show of pluck in carrying out an order to deal with hostile machine-gun posts, which had held up an adjacent battalion. His Lewis gun having failed him, he, on his own initiative, rushed the nearest post and killed the crew; then he "went for the others, the crews of which fled on his approach, this gallant N.C.O. pursuing them." The result

of the corporal's heroism was the capture of all the machine-guns and the clearing of the way for the advance.

The gallant Inniskilling Fusilier from Norfolk, Corporal Seaman, gave his life in a desperate rush on a machine-gun position, for he was killed immediately after a gun was captured under heavy fire. He had, however, done amazingly well in previously attacking a nest of the deadly weapons. Rushing forward under heavy fire, with his Lewis gun he engaged the position single-handed, and with such success that he captured two of the guns and a dozen-prisoners and killed an officer and two men.

The Preston soldier, Corporal McNamara, was operating a telephone in ovacuated enemy trenches when he realized that a determined enemy counter-attack was gaining ground. He thereupon rushed to the nearest post, and with a revolver which he had taken from a wounded officer he severely punished the foe. Then he seized a Lewis



LANCE-CORPORAL ERNEST SEAMAN, Late Royal Inniskilling Fusiliers.

gun, and fired it till it jammed. By this time he was alone in the post; but he neither slackened nor lessened his courageous endeavour—he destroyed his telephone, and having joined the nearest post he kept up Lewis gun fire, and incidentally the spirits of his comrades, until reinforcements came and crowned the stubborn holding of the posts.

With British bombs when he had them, and German bombs when they were handy, Corporal Alfred Wilcox fought his way repeatedly to objectives on which he had set his heart. His initiative was first shown when his company was held up by closo-range, heavy and persistent gun-fire. With four good men he rushed ahead to the nearest



LANCE-CORPORAL HENRY WEALE,
Royal Welsh Fusiliers.

hostile gun, bombed it, killed the gunner and put the weapon out of action. An enemy bombing party then plucked up courage enough to fall on the five with bombs, but the corporal was equal to the oceasion, and, picking up some enemy bombs, led his party against the next gun, which at last was taken and destroyed. Wilcox was finally left with only one man, but he continued bombing and captured a third gun, after which he again bombed up the trench, and after seizing a fourth gun rejoined his platoon. The whole of his series of "" successful individual enterprises" showed "exceptional valour, judgment, and initiative," a high official tribute.

It was when severe enfilade machine-gun fire had made the success of an attack doubtful that Sergeant Calvert distinguished himself. It was teld of him that alone and single-handed he rushed forward against the gun team and bayoneted three and shot four; also that "his valour and determination in capturing single-handed two machine-guns and killing the crews thereof enabled the ultimate objective to be won."

If conrage and resource could be more fully shown than in these specific cases it was displayed by Private Jack Harvey, of the London Regiment. His work also was done in spite of that intense machine-gun fire which

characterized so many of the performances. His company was held up, whereupon he instantly dashed forward and rushed a machinegun post, shooting two of the team and bayoneting another. Then he destroyed the gun and worked his way along the enemy trench until,



CORPORAL JOHN MCNAMARA, Fast Surrey Regiment.



LANCE-CORPORAL ALFRED WILCOX, Oxford and Bucks Light Infantry.

single-handed, he rushed a hostile dug-out which contained no fewer than 37 of the enemy, all of whom he forced to surrender. By these two acts of valour Private Jack Harvey saved his company heavy losses and enabled the whole of the attacking line to advance. He was the ninth member of the London Regiment to win the Cross.

Second Lieutenant · White was the fifth member of the Machine Gun Corps to whom the Cross had been awarded, his conduct being

marked by extraordinary fearlessness and loyalty to duty. He rushed repeatedly into exceptional danger, yet came out in safety: this subaltern, indeed, was a distinguished member of that band which was described in a previous chapter as "Rushers." First, single-handed, he captured a gun which he had rushed and shot the three gunners; then with two men, he attacked another gun. The two men were immediately shot down, but the lieutenant went on alone to the gun position and bayoneted or shot the team of five and took the gun. On a third occasion, with a small party which he had collected, White rushed a position and inflicted heavy losses on the garrison, and later he caused severe casualties



SERGT, L. CALVERT, King's Own (Yorkshire Light Infantry).

amongst the enemy while consolidating the position "by the skilful use of captured enemy and his own machine-guns."

Tanks were conspicuous in the achievements which gave renown to Lieutenant-Colonel Peck and Lance-Corporal Metcalf and added to the glory which had settled upon the Manitoba Regiment. Colonel Peek was confronted with a situation which was "critical in the extreme," but he pushed forward and personally reconnoitred, under heavy machine-gun and sniping fire, across a fire-swept ground. After the reconnaissance he returned, reorganized his battalion, and put his personally-gained knowledge to good use in pushing forward and proteeting his flanks. Then, under "the most intense artillery and machine-gun fire," he went out and intercepted the tanks, and by pointing out where they were to make for he paved the way for a Canadian infantry battalion



LIEUT.-COL. C. W. PECK, Manitoba Regiment.

to push forward; subsequently giving requisite support to this battalion.

Metcalf's performance was unique: there had not been anything like it recorded in all the awards of the Cross, for, during a "hold-up," he rushed forward under intense machine-gun fire to a passing tank on the left. What followed would be incredible but for the official record—this lance-eorporal from Manitoba, "with his signal flag," actually "walked in front of the tank, directing it along the trench in a perfect hail of bullets and bombs." His astonishing audacity, his own strange way of war was, as it thoroughly deserved to be, successful, and a very critical situation was relieved at severe cost to the enemy. Metealf was afterwards wounded, but he continued to advance until he was ordered to get into a shell-hole and have his wounds dressed.

By "masterly bluff" Lieutenant Rutherford, when doing desperate work against "pill-boxes," made hauls of \$0 prisoners and some machine-guns, spread dismay and confusion amongst the enemy, and did much to press home an attack on a very strong position. Bluff had often proved of striking value when employed in minor operations and Rutherford was an excellent exponent of the policy. He was commanding an assaulting party when he found himself a considerable distance ahead of his men. At the same moment he saw a strong and fully-armed party of the enemy

outside a "pill-box" ahead of him. Now came an incident which repeated the dangerously polite spirit of the "Gentlemen of the Guards, fire first!" The licutenant beckoned to "them"—presumably the Germans—with his revolver to come to him, and the Germans, not to be outdone, for once, in courtesy, "waved to him to come to them." The embarrassing situation was relieved by the officer boldly going to the Germans; but it became intensified when he told them that they were prisoners. Even simple Germans, who had been taught to believe unquestioningly many things that they were told, declined to credit this astounding declaration. The enemy officer disputed the "fact" and asked Rutherford to enter the "pill-box." A Canadian was not likely to be caught in such an obvious trap and Rutherford "discreetly declined" the invitation. "By masterly bluff," however, he managed to persuade the Germans that they were surrounded, and the whole party of 45, including



LIEUT. C. S. RUTHERFORD, Quebec Regiment.

two officers, with three machine-guns, surrendered to him. Having bagged the German officer, Lieutenant Rutherford further employed his wiles to the extent of inducing the captive



LANCE-CORPORAL W. H. METCALF, Manitoba Regiment,

to stop the fire of a hostile machine-gun close by, after which the victor was smart enough to hasten the advance of his men to his support. Subsequently attacking another "pill-box" with a Lewis gun section, the lieutenant took 35 more prisoners, with machine-guns.

Sergeant Knight, before he was fatally wounded, showed extraordinary courage as an individual fighter. A bombing section which



ACTING SERGT. A. G. KNIGHT, Late Alberta Regiment.

he was leading being held up, he dashed forward alone, and after bayoneting several machinegunners and trench-mortar crews he forced the rest to retire in confusion; then, bringing forward a Lowis gun, he inflicted many casualtios on the retreating enemy. His platoon went in pursuit and the sergeant, sceing about 30 of the enemy go into a deep tunnel leading off the trench, again dashed forward alone and killed an officer and two non-commissioned officers and made 20 prisoners; after which, once more single-handed, he routed another hostile party.

Sergeant Laurent was the hero of a "daring adventure" which, at a cost of only four casualties to his party of 12, resulted, after a severe hand-to-hand fight, in 30 of the enemy being killed and the surrender of one officor and 111 other ranks. This remarkable achievement was due to the skill and enterprise of the sergeant and the bravery and devotion of his mere handful of men in hurling itself



PRIVATE JACK HARVEY,

London Regiment,

Presented with a purse of money by the Mayor of

Camberwell,

against an enemy support line which was very strongly held.

The New Zealander, Private Crichton, completed this list of the fine 15. His was a wonderful and varied record, all the more notable because his valour and devotion were shown when he was suffering from a painful wound in the foot. His determined spirit kept him with the advancing troops, despite difficult canal and river obstacles; he carried a mossage which involved swimming a river and a fire-swept area, a later and greater deed being the saving of a bridge which had been mined. This perilous task Private Crichton undertook on his own initiative, and under close fire from machine-guns and snipers he removed the

charges and returned with the fuses and detonators.

With the eessation of hostilities came a great and sudden lifting of the fog of war, and one immediate and welcome revelation was tho publication from the Admiralty of the accounts of the actions for which eight "Mystery" V.C.'s had been awarded. From time to time the bare announcement had been made of the Cross for services in action with enemy submarines, but excepting the ease of Skipper Thomas Crisp no details whatever had been issued; now, however, the full stories of the deeds were given-so full, indeed, were they that this batch of eight stood in a class entirely by itself; there was nothing in the previous announcements of Cross achievements to compare with it. Each story was a marvel in itself and a glorious and lasting tribute to the officers and men of the British Navy. The names of these eight recipients had already become famous, the most prominent amongst them being Commander Gordon Campbell, D.S.O., R.N. Bearing him gallant company were Lieutenant W. E. Sanders, R.N.R.; Lieutenant R. N. Stuart, D.S.O., R.N.R.; Seaman Williams, R.N.R.; Lieutenant C. G. Bonner, D.S.C., R.N.R.; Petty Officer



PRIVATE JAS. CRICHTON, Auckland Regiment, N.Z.F.

E. Pitcher; Skipper Crisp, D.S.C., R.N.R.; and Lieutenant H. Auten, D.S.C., R.N.R.

Commander Campbell, before the action in which he went he Cross, had distinguished himself in several exploits with German submarines. On March 22, 1916, when in command of H.M.S. Farnborough, he sank one of

these vessels, and was afterwards awarded the D.S.O. On February 17, 1917, he was in command of H.M.S. Q5 when she was struck abreast of No. 3 hold by a torpedo. This was the beginning of a fight which was officially recorded as "the supreme test of naval discipline." "Panic parties" figured largely in



SERGT. H. J. LAURENT, New Zealand Rifle Brigade.

these particular achievements, and now, when action stations were sounded, this emergency body abandoned ship. The engineer officer reported that the engine-room was flooding, and he was ordered to remain at his post as long as possible, "which he and his staff, several of whom were severely wounded, most gallantly did." At a distance of only 200 yards the submarine was observed on the starboard quarter, the proceedings being watched through the periscope. The German ran past the Q5 so closely that the whole of the hull of the submarine was visible beneath At last the U boat emerged the surface. about 300 yards on the port bow and went down the port side of the ship, which was doubtless looked upon as doemed prey. Diseipline on board the "mystery" ship had indeed roached perfection, for fire was withheld until all guns could bear at point blank range. Then fire was opened with staggering effect. The first shot beheaded the German eaptain as he was elimbing out of his conning tower, and the submarino sank with the conning tower open and the erew pouring out. One officer and one man were rescued on the surface and made prisoner, after which the boats were recalled, and all hands did their best to keep their ship afloat. It was not until

the fate of the submarine was assured that a wireless call for help was made, but two hours passed before a destroyer and a sloop arrived and took Q 5 in tow. On the following evening she was safely beached. The chief engineer and the engine-room watch remained at their posts to keep the dynamo working until they were driven out by the water. Then they remained concealed on top of the cylinders. The guns' crews had to remain concealed in their gun houses for nearly half an hour, while the ship slowly sank lower in the water.

ship gun," at the same time reducing speed so that the enemy could overtake her. "For the benefit of the submarine"—and this sentence conveyed a world of revelation concerning many naval happenings—wireless signals were sent out: "Help! Come quickly. Submarine chasing and shelling me." Doubtless vastly encouraged by this apparent helplessness of his opponent the German set furiously to work to bring about an ending quickly. So terrific became the contest that the Dunraven was being heavily shelled, and was on fire aft.



A "Q" SHIP,

Having a concealed gun in the collapsible boat between funnel and mast.

Such was the first remarkable and truly moving revelation of one of the "mysteries" of the Cross. Again, as Captain Gordon Campbell, commanding H.M.S. Dunraven, the central hero of that famous act controlled some desperate naval operations which gave the Cross to Lieutenant Bonner and Petty Officer Pitcher. On August 8, 1917, the Dunraven, an armed British merchant ship to all appearances, sighted an enemy submarine on the horizon. Maintaining her rôle she continued her zig-zag course, whereupon the U boat closed, remaining submerged to within 5,000 yards; then, rising to the surface, she opened fire. The courage and resource of the Dunraven's company was shown by the fact that she returned the German fire with "her merchantThe ship was now stopped, and the "panic party abandoned her." Meanwhile the submarine closed to 400 yards distant, and she had the advantage of being partly obscured by dense clouds of smoke which were issuing from the stern of the Dunrayen.

Now came an exhibition of that wonderful and inflexible bravery which had characterized so many previous naval achievements in the war. Captain Campbell knew that the after magazine must inevitably explode if he waited, and, further, that a gun and gun's crew lay concealed over the magazine; yet he resolved to reserve his fire until the submarine had passed clear of the protecting smoke. A moment later, however, there was a heavy explosion aft, which blew the gun and gun's



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crew into the air, and accidentally started the fire-gongs at the remaining gun-positions. Screens were immediately dropped and fire was opened from the only gun that would bear; but the submarine, "apparently frightened by the explosion," was already submerging. The situation had become intensely critical—the Dunraven seemed doomed. The captain realized that a torpedo must inevitably follow, and he did all he could to be ready for the blow. He ordered the surgeon to remove all wounded and conceal them in cabins, and hoses were turned on to the poop, "which was a mass of flames."

It was an appalling extremity, but undaunted and determined that "nothing should interrupt the final phase of the action," Captain Gordon Campbell, V.C., sent out a signal warning men-of-war to divert all traffic below the horizon. Twenty minutes passed before the anticipated blow was struck; then a torpedo struck the Dunraven abaft the engine-room, proof of the deliberation and careful calculation of the underwater Germans. The result of this fresh and shattering onslaught was the sending away of an additional "panic party," leaving the Dunraven to all outward appearances completely abandoned, with the White ensign flying and the guns unmasked. For 50 minutes afterwards the ship was examined by the submarine's people through the periscope, and what they saw must have heartened them in their belief that she was irrevocably doomed, for the fire on the poop continued to blaze furiously, and boxes of cordite exploded every few minutes.

In this inferno Captain Campbell and the handful of officers and men who remained on board lay hidden. After that stealthy watch of nearly an hour the submarine rose to the surface astern of the burning Dunraven. No guns could be brought to bear, and for 20 minutes she shelled the ship closely. After that fierce onslaught the German craft again submerged and passed the ship 150 yards off, again examining her through the periscope. Captain Campbell unsuccessfully fired two of his torpedoes, the enemy immediately submerging. Urgent calls for help were now sent out; but meanwhile Captain Campbell arranged for a third "panic party" to jump overboard if necessary and leave one gun's crew on board the Dunraven for a last attempt to destroy the Germans if they again attacked; but almost immediately British and American

destroyers reached the scene, the wounded were transferred, boats were recalled and the fire was extinguished. Although her stern was awash she was taken in tow, but the weather grew worse, and early next morning she sank, with colours flying.

Singularly enough the official record of this glorious deed mentioned only Captain Campbell's name; but the award was headed with the names of Lieutenant Bonner and Petty Officer Pitcher, so that while the Dunraven was fought by a V.C. hero she gave, before



PETTY OFFICER E. PITCHER.

she sank with flying colours, two more members to the famous roll.

Lieutenant Sanders distinguished himself greatly when in command of H.M.S. Prize, "a topsail schooner of 200 tons." On April 30, 1917, he sighted an enemy submarine, which opened fire at three miles range and approached slowly astern. The Trawler Section was concerned in this affair, and it was in charge of Skipper William Henry Brewer, R.N.R., that the "panic party" immediately abandoned ship. The schooner's head was put into the wind, and the guns' crews concealed themselves by lying face downward on the deck, The Germans continued deliberately shelling the vessel, severely damaging her and wounding a number of men. The submarine continued to approach for 20 minutes, firing as she came, finally drawing out on to the schooner's quarter 70 yards away, apparently satisfied that no one was left on board. Instantly the White Ensign was hoisted, the screens dropped. and all guns opened fire. A shell struck the foremost gun of the submarine, "blowing it to atoms and annihilating the crew." That



H.M.S. SUFFOLK COAST, SISTER SHIP OF THE STOCK FORCE.

fine shot was followed by another which demolished the conning-tower, and simultaneously a Lewis gum "raked the survivors off the submarine's deek."

Vengeance had fallen swiftly and completely on the German submarine, for she sank four minutes after the action began. The slinking craft went down in clouds of smoke, and through rents in her hull the glare of an internal fire was visible. The submarine's captain, a warrant officer and a man were picked up and brought on board the Prize—a rescue which Germans would doubtless have left unattempted. The schooner herself was sinking fast, but eaptors and prisoners managed to plug the shot holes and keep the water under with the pumps. Land was 120 miles distant, and though there seemed little chance of reaching it the Prize set sail and got within five miles of the shore, a motor launch picking her up and towing her in. This gallant little ship, with Sanders still in command, was lost a few months afterwards, presumably in action with one or more enemy submarines, and all hands went with her.

Lieutenant Stuart and Seaman Williams were gazetted in connexion with some splendid work done on June 7, 1917, by H.M.S. Pargust while disguised as a "British merchant vessel, with a dummy gun mounted aft." This was one of the "decoy" stories of which there were many rumours and strange tales during the war, and it was one which illustrated the possibilities

of officers and men who have perfect faith in their captain. In this instance, again, no mention was made of either Stuart or Williams in the record, the only name referred to being that of Lieutenant F. R. Hereford, D.S.C., R.N.R.

In misty weather, with a fresh breeze and a ehoppy sea, the Pargust was torpedoed at very elose range, her boiler-room, engine-room and No. 5 hold being immediately flooded and the starboard lifeboat blown to pieces. Under Hereford's command a "panic party" abandoned ship. As the last boat shoved off the submarine's periscope was seen about 400 yards away, close before the port beam. The enemy then submerged and the periscope reappeared directly astern, passing to the starboard quarter and then round to the port beam, where it turned again towards the Pargust, breaking surface about 50 yards away. The lifeboat then pursued a policy of lure and began to pull round the stern, the submarine following elosely, and training a maxim on to the boat. Hereford, courageously disregarding the cross-fire from ship and submarine, continued to decoy the enemy to within 50 yards of the Pargust, which then opened fire with all her guns. The U boat, "with oil squirting from her side and the erew pouring out of her conning tower, steamed slowly across the bows with a heavy list,"

There was now a repetition of that German trickery which had been, so greatly practised,

often with success to the enemy, but this time followed by swift and merited punishment. The Germans held up their hands to indicate surrender and fire ceased immediately; but, instead of yielding, the submarine moved off at a growing speed, apparently trying to escape in the mist. Fire, however, was re-opened with such telling effect by the Pargust that the U boat sank, one man clinging to the bow as she went down. After a hard pull to windward the boats managed to save an officer and a man. Shortly afterwards the "British merchant vessel" was towed back to port by American destroyers and a British sloop which had arrived.

In this Admiralty list the story of Skipper Crisp was retold in a briefer form than at the time of the announcement of the award of his Cross in the *London Gazette* of November 2, 1917.

The action for which Lieutenant Harold Auten gained the Cross was "cited as one of the finest examples of coolness, discipline and good organization in the history of 'Q' ships'"; and indeed it would be impossible to imagine anything more splendid in every way than the display of valour, determination and resource by Auten and the officers and men who bore

him company. The story has already been told in Chapter CCLXXI.

These marvellous tales of the sea gave the public at least some idea of the stern intensity of the warfare between the German submarines and "mystery" and other ships of the British Navy, and they did much to arouse the interest with which large bodies of visitors inspected "Q" ships and surrendered submarines which were on view in the Thames and elsewhere.

The Times Special Correspondent at the War Correspondents' Headquarters sent on November 6 a story of amazing fighting against very great odds by "a certain major" of the Royal Air Force. Two days later Canadian Headquarters announced that the airman was a Canadian, Major William George Barker, D.S.O., M.C., and that he had come oversea with a New Brunswick unit. "It was surely as gallant and amazing a feat as was ever achieved," wrote The Times correspondent, and there could be no doubt, from the details he gave, that the officer's valour would be rewarded with the highest of honours. On November 30 the Air Ministry announced the award of the Cross to Major Barker and



LIEUT.-COMMANDER HAROLD AUTEN IN THE HIDDEN HATCHWAY LEADING TO THE BRIDGE OF THE STOCK FORCE.

to Captain Andrew Weatherby Beauchamp-Proetor, D.S.O., M.C., D.F.C., "in recognition of bravery of the highest possible order." The major's previous record was shown clearly enough by the fact that he had two bars to his



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MAJOR W. G. BARKER, R.A.F.

Military Cross and a bar to his D.S.O., and the captain, too, had fully proved his mettle as an air fighter.

Again official records threw light on the astounding deeds of British aviators, and made it easy to understand the spirit which had won for them overwhelming victories and had made the very sight and mention of them dreaded by the Germans. Barker's great work was done on October 27, 1918, and was marked by almost unparalleled sustained feroeity of eombat. In the morning of that day he saw an enemy two-seater over the Forêt de Mormal, and this he attacked so successfully that after a short burst it broke up in the air. Simultaneously a Fokker biplane attacked tho major. He was wounded in the right thigh, but managed to shoot the Fokker down in flames. The fight had attracted other Germans, and from all directions Barker was attacked by a large formation. He was again wounded, this time in the left thigh, severely, but he drove down two of the assailants in a spin Losing consciousness for a time the Canadian's machine fell out of control; but he recovered

before reaching the ground, and found that he was being once more heavily attacked by a large formation.

Grenville, in his fight off the Azores—the one and the fifty-three—singled out his targets from the clustering Spaniards; so Major Barker, erippled though he was in body, choose one particular German machine, and deliberately charging this he drove it down in flames. During this fight his left elbow was shattered, and again the valiant airman fainted, yet he came round before it was too late and saw that he was still being attacked, and diving on the nearest machine he shot it down in flames—a marvellous achievement for a man whose arm was shattered and both legs badly wounded.

Exhaustion now forced Major Barker to dive out of the fight to regain our lines; but the maddened Germans were not disposed to permit escape to one who had so heavily punished them, and another formation strove to cut him off. The effort was unsuccessful, and after a



CAPT. A. W. BEAUCHAMP-PROCTOR, R.A.F.

hard fight Barker broke up this formation and reached our lines, but crashed on landing.

In this single-handed furious fight with vastly superior forces Major Barker destroyed four German machines, three of them in flames, and brought his total successes up to 50 enemy machines destroyed.



AN ENEMY OBSERVATION BALLOON BROUGHT DOWN IN FLAMES.

Captain Beauchamp-Proctor bore Major Barker splendid company, for in two months-August 8 to October 8, 1918—he was couqueror in 26 decisive combats, destroying 12 kite balloons and 10 aircraft, and driving down four other aircraft completely out of control, while between October 1-5 he destroyed two scouts, burnt three kite balloons, and drove down one scout completely out of control. Those performances seemed to be merely by way of an appetiser, for in all he was victor over 54 foes-he destroyed 22 encmy machines and 16 kite balloons, and drove down 16 aircraft completely out of control. His acts varied from "a general engagement with about 28 machines" to burning a hostile balloon, while he also did splendid work in attacking enemy troops on the ground and in reconnaissance during the withdrawal following on the battle of St. Quentin on March 21, 1918, and in the victorious advance of our Armies which began on August 8. His uncommon enterprise and energy were checked only by a painfully wounded arm, caused by machine-gun fire, on October 8, while flying home at a low artitude, after destroying a German two-scater near Maretz, but the captain held on and fanded safely at his aerodrome, being admitted to hespital after making his report. It had become almost a point of honour with British airmen who had come to grief to use such strength and energy as was left to them in "making their reports."

The first peer to win the Cross in the war-Lieutenant-Colonel Viscount Gort, D.S.O., M.V.O., M.C., 1st Battalion Grenadier Guardsheaded a list of seven new Victoria Crosses which the War Office announced on November 27, 1918. His honour was awarded in connexion with the attack of the Guards Division on September 27, 1918, across the Canal du Nord, near Flesquières, and it was accompanied by the award of the Cross to Captain Cyril Hubert Frisby, Coldstream Guards (S.R.), attached 1st Battalion, and posthumously to Lance-Corporal Thomas Norman Jackson, 1st Battalion Coldstream Guards (Swinton), both also for the affair of the canal.

· When Viscount Gort won his Cross he commanded the 1st Grenadiers, the leading battalion of the 3rd Guards Brigade, and he consistently displayed that courage, devotion, and fine leadership which had characterized innumer-

able actions in which the Guards had shared since the memorable early days in the fiercely contested streets of Landrecies. These operations at the Canal du Nord were of the severest nature, and called for the highest skill and endurance from the Guards.

Viscount Gort led his Grenadiers to the "forming-up" ground, and there, as previously, they were under heavy artillery and machinegun fire. Under these intense discharges he was wounded, but, entirely disregarding this, he set to work to master what, at best, was but an unpromising situation. the object of making a flanking attack, he directed a platoon to go down a sunken road, while he himself, under "terrific fire," went across open ground to get the help of a Tank. This powerful ally he personally led and directed to the utmost advantage. "While thus fearlessly exposing himself," Viscount Gort was again wounded, this time severely, by a shell. He suffered from considerable loss of blood, and was forced for some time to lie on a stretcher, but he insisted on getting up and personally directing the further attack, providing a magnificent example of devotion to duty and inspiration to all ranks. Filled with fresh courage and determination by this leadership, all ranks exerted themselves to the utmost, with the splendid result that more than 200 prisoners were eaptured, with two batteries of field guns and numerous machine-guns. Then Lieutenant-Colonel Viscount Gort set about organizing the defence of the captured position, and held on until he collapsed, but it was not until he had seen the "success signal" go up on the final objective that he consented to leave the field. The battalion's successful advance was mainly due to the "valour, devotion, and leadership of this very gallant officer '

Captain Frisby and Corporal Jackson were together in the desperate affair which won for them the Cross. The officer was in command of a company detailed to capture the canal crossing on the Demicourt-Graincourt road. When the canal was reached the leading platoon eame under annihilating machine-gun fire from a strong post under the old iron bridge on the far side of the canal, and in spite of reinforcing waves the platoon was unable to advance. Seeing that unless this machine-gun post was captured the whole of the advance in this area would fail, Captain Frisby determined on taking what he might well have

looked upon as the measure of a forlorn hope. Calling for volunteers to follow him he dashed forward, with three other ranks, the first to offer being the gallant Jackson, who was a young non-commissioned officer, and had shown a glorious spirit of bravery and duty over since the battle opened.



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LIEUT.-COL. VISCOUNT GORT, 1st Battn. Grenadier Guards.

These four Coldstream Guardsmen climbed down into the canal under an intense point-blank machine-gun fire, and by their dash, recklessness and resolution captured the post, with a dozen men and two machine-guns. In this swift, successful enterprise Captain Frisby was wounded in the leg by a bayonet, but he remained at duty and, having restored the situation, enabled the attacking companies to advance. After reaching and consolidating his objective he gave timely support to the company on his right, which had lost all its officers and sergeants—an illustration of the fury of the fight—organized its defences and beat off a heavy hostile attack.

Like his officer, Corporal Jackson continued the famous work of that great Guards' day at the Canal Du Nord. Later in the morning he was the first to jump into a German trench which his platoon had to clear, "and after doing further excellent work he was unfortunately killed." Throughout the whole day until he fell, it was recorded of him that he showed the greatest valour and devotion to duty.

The River Jordan was the scene of the resourceful exploit which won the posthumous



CAPT. C. H. FRISBY, Coldstream Guards.

honour of the Cross for Ressaidar Badlu Singh, 14th Lancers, attached to the 29th Lancers, Indian Army. His was a simple story of heroism and self-sacrifice. On the morning of September 23, 1918, his squadron charged a strong enemy position on the west bank of the Jordan, between the river and Kh. es Samariveh village. The squadron, on nearing the position, was suffering easualties from a small hill on the left front which was occupied by 200 infantry with machine-guns. Unhesitatingly Ressaidar Badlu Singh collected six other ranks and charged and eaptured the position, and so saved the squadron from very heavy casualties. When taking one of the machine-guns single-handed, on the very top of the hill, he was mortally wounded, but before he died all the machine-guns and infantry had surrendered to him. This brilliant Lancer was the sixteenth member of the Indian Forces and Indian Medical Service to be awarded the Victoria Cross during the war.

It was in Italy, near Casa Van, on October 28, 1918, that Private Wilfred Wood, 10th Battalion Northumberland Fusiliers (Stockport), distinguished himself in a remarkable manner when acting on his own initiative. A unit on the right flank had been held up by hostile machine-guns and snipers, whereupon Wood worked forward with his Lewis gun, enfiladed the hostile nest and caused no fewer than 140 of the enemy to surrender. advance continued till point-blank fire was opened by a hidden machine-gun, but without the slightest hesitation Wood charged the weapon, at the same time firing his Lewis gun from the hip. He killed the machine-gun crew and then, without further orders, pushed on and enfiladed a ditch from which there was an even greater haul than before, for three officers and 160 men subsequently surrendered from it. Wood's work was done in the face of intense rifle and machine-gun fire.

The other two Crosses were awarded to Lieutenant William Donovan Joynt, 8th Battalion Australian Imperial Forces, and Sergeant John Gilroy Grant, 1st Battalion Wellington Regiment, New Zealand Forces. Joynt distinguished himself in the attack on



PRIVATE (LANCE-CORP.) T. N. JACKSON, Late 1st Battn. Coldstream Guards.

Herleville Wood, near Chuignes, Péronne, on Angust 23, 1918, his outstanding achievement being to inspire and lead "a magnificent frontal bayonet attack" on the wood. "The enemy were staggered by this sudden onslaught, and a very critical situation was saved." Later Lieutenant Joynt, with a small party of volunteers, had some severe hand-to-hand fighting and "turned a stubborn defence into

an abject surrender." He continued to do magnificent work until he was badly wounded by a shell.

During the whole of the operation near Bancourt, on September 1, 1918, Sergeant Grant showed remarkable coolness, determination, and courage, qualities which he had displayed during the two previous days. The high ground to the east of Bancourt was being attacked, and Grant, in command of a platoon, reached the crest, to find that further advance was seriously opposed by a line of five enemy machine-gun posts. Undeterred by point-blank fire the platoon dashed on, and when only 20 yards from the posts the sergeant, closely followed by a comrade, rushed forward ahead of his platoon, entered the centre post, demoralized the garrison, and enabled his



LIEUT.-COL. B. W. VANN, Notts and Derby Regiment.

men to "mop up the position." In the same way he then rushed the post on the left, and these initial successes were quickly followed by the clearing and occupation of the remaining posts. The operations of the platoon stood finely out in the admirable work which was done by the leading waves of the battalion which carried out the attack on the high ground.

The last phase of the war had been reached, and the heroic endurance and inflexible tenacity of the British fighting man in this closing seene were shown by the War Office announcement on December 14, 1918, of the award of no fewer than 32 Victoria Crosses, this heavy list being, on December 26, augmented by 12.



PRIVATE WILFRED WOOD,
Northumberland Fusiliers.

A striking feature of the lists was the inclusion of a large number of overseas soldiers and members of the Territorial Force, though it had become almost unnecessary to differentiate the units of the vast British Army, for all the combatants were on practically the same level, and the old distinction between Regular and Territorial had almost passed away.

The list of 32 contained 16 awards to overseas soldiers and seven to Territorials, and in the dozen awards there were five members of the Australian Imperial Force and one Territorial.

Analysis of these combined totals of 44 awards indicated clearly defined areas of combat and limited periods of time—intensely interesting inferences which had become possible through the resumption of the practice of mentioning places and dates in the official records. The details of the deeds were proof conclusive of the stern call which had been made upon the courage and fidelity of all ranks and the unhesitating response which had met the call.

The Territorials had won fame at a very early period of the war; now there was added to their illustrious roll the following eight officers, non-commissioned officers and men, of whose Crosses no fewer than four were posthumous, the names of the gallant dead being given first:—

Lieut.-Colonel B. W. Vann, M.C., 1/8th Bn.,

attd. 1/6th Bn., Notts and Derby Regt. (T.F.); Lieut. D. S. McGregor, 6th Bn. R. Scots (T.F.), and 29th Bn. M.G.C.; Sec. Lieut. F. E. Young, 1st Bn. Herts Regt. (T.F.); and Sergt. L. McGuffie, 1/5th Bn. K.O.S.B. (T.F.) (Wigtown).

The other four Territorials were :-

Lieut. J. C. Barrett, 1/5th Bn. Leic. Regt. (T.F.); Sec. Lieut. J. P. Huffam, 5th Bn. W. Rid. Regt. (T.F.), attd. 2nd Bn.; Sergt. W. H. Johnson, 1/5th Bn. Notts and Derby Regt.

ing the entire situation, for the men were so thoroughly heartened by his example that the line swept forward. At a later stage this officer, single-handed, rushed a field gun and knocked out three of the detachment, and his conduct generally contributed in no small degree to the day's success. After a consistent show of courage Lieut-Colonel Vann was killed near Ramicourt on October 3, 1918, when leading his battalion in attack.

Unusual features marked the performances



[From a German drawing.

A GERMAN FIELD GUN IN ACTION.

(T.F.) (Worksop); and Pte. H. Tandey, D.C.M., M.M., 5th Bn.W. Rid. Regt. (T.F.) (Leamington).

The region of the Canal du Nord, which had become historic, was that in which Lieutenant-Colonel Vann displayed fine leadership and a courage which no dangers lessened. During the attack at Bellenglise and Lehaucourt on September 29, 1918, he most skilfully led his battalion across the canal, through a very thick fog and under heavy fire from field and machine-guns. When the high ground above Bellenglise was reached the whole attack was held up "by fire of all descriptions" from the front and right flank, and the situation became one of uncommon danger. Vann realized that everything depended on the advance going forward with the barrage, and rushing up to the firing-line he led the firing-line forward with the utmost gallantry, his prompt action and absolute contempt of danger changof the machine-gunner, Lieut. McGregor, near Hoogmolen on October 22, 1918. He was commanding a machine-gun section, which in attack was subjected to intense enfilade machine-gun fire from Hill 66 on the right flank. Fearlessly going forward the lieutenant located the German weapons, and saw that it was impossible to get his own guns carried forward either by pack or by hand without great delay, as the ground was "absolutely bare and fire-swept." Showing that care for his men which was one of the splendid characteristics of the British officer, he ordered them to follow by a more covered route, while he himself mounted the limber and galloped forward for about 600 yards to cover, the fire being so intense that the driver, horses and limber were all hit. McGregor, however, got his guns into action, and by engaging the Germans and subduing their fire enabled the advance to be resumed. He had for the time escaped many perils, and for another hour he continued to expose himself, so that he could direct and control the fire of his guns; then he was killed.

When last seen Second Lieutenant Young was fighting hand-to-hand against a considerable number of the enemy. Already he had maintained this desperate and unequal combat for four hours, on September 18, 1918, south-east of Havrincourt, during a German counter-attack. Despite "an extremely intense enemy barrage he visited all posts, warned the garrisons, and encouraged the men." Early in the attack Young rescued two of his men who had been made prisoners and he bombed and silenced a German machine-gun. The Germans surrounded him, but he not only fought his way back to the main barricade but also drove out a hostile party who were assembling there. By his further exertions, before he was last seen, this gallant subaltern maintained a line of great tactical value.

Piccadilly Farm, near Wytschaete, was on September 28, 1918, the objective of Sergeant McGuffie, who showed high courage in entering, single-handed, several German dug-outs and taking many prisoners. He was an expert



LIEUT. D. S. MCGREGOR, Royal Scots and M.G. Corps.



SECOND LIEUT. F. E. YOUNG, Herts Regiment.

in this special form of warfare, for during later operations he "dealt similarly with dug-out after dug-out," and forced an officer and 25 other ranks to surrender. More than this he chased and brought back several Germans who were "slipping away," and he, too, like Lieutenant Young, rescued some British soldiers who were being led off as prisoners. McGuffie was subsequently killed by a shell.

Throughout the whole of the fighting from August 29 to September 1, 1918, Second Lieutenant Huffam showed the courage which marked him for the Cross, the finest of his displays being on August 31, 1918, when, with three men, he rushed and put out of action a German machine-gun post. His own post being then heavily attacked he withdrew, but fighting, and carrying back a wounded comrade. On the night of the same day, at St. Servin's Farm, with only two men, he rushed a hostile machine-gun, capturing eight prisoners and enabling the advance to continue.

The "most exceptional gallantry and devotion to duty" were shown by Sergeant Johnson at Ramicourt on October 3, 1918. The sergeant, single-handed, charged a nest of German machine-guns at very close range, having worked his way forward under very heavy fire. He bayoncted several gunners and captured two machine-guns. He was severely wounded by a bomb during this attack, but



CORPORAL (ACTING SERGT.) L.
MCGUFFIE,
Late King's Own Scottish Borderers.

continued to lead his men forward. The line being once more held up by machine-guns shortly afterwards, Johnson again rushed forward and single-handed attacked the post. "With wonderful courage he bombed the garrison, put the guns out of action, and captured the teams."

In spite of repeated wounds Lieutenant Barrett fought on during the attack on Pontruet on September 24, 1918. Darkness and smoke barrage caused a considerable number of men to lose direction, and the lieutenant found himself advancing against a trench of great strength-Forgan's Trench-which contained numerous machine-guns. Collecting all available men he charged the nearest group of the weapons, being wounded in this undertaking; yet he gained Forgan's Trench, and so successfully attacked the garrison that he inflicted many casualties and personally disposed of two machine-guns. Lieutenant Barrett was again severely wounded, but he managed to climb out of the trench and fix his position and locate the enemy. He was exhausted by his wounds, but so far mastered his sufferings as to give detailed orders to his men to cut their way back to the battalion, and this they did. Barrett, refusing help for himself, was wounded for the third time, so seriously that he could not move, and he had to be carried out. He had endured long and bravely, and had done that which alone made it possible for any of his party to get away alive from Forgan's Trench.

Tandey. of the "Havercake Lads," was another illustration of the spirit which impelled



SERGT. W. H. JOHNSON, Notts and Derby Regiment.

a British fighter to hold on in spite of wounds and to refuse to "give in," as his comrades of the old 33rd would have said, to any opponent, German or otherwise. His exploit was equal to the deeds of any Yorkshireman in action, the scene of it being Marcoing, the date September 28, 1918. During the advance on the village his piatoon was held up by machinegun fire, whereupon Private Tandey immediately crawled forward, and having located the hostile weapon knocked it out with a Lewis gun exteam. On reaching the crossings he



SECOND LIEUT. JAS. P. HUFFAM, West Riding Regiment.

restored the plank bridge, working under a hail of bullets, the accompushment by him of this perilous task enabling the first crossing to be made at this vital spot. Tandey had done well so far, but he was to do even better later in the evening, during an attack. With eight comrades he was surrounded by an overwhelming number of Germans. The position seemed hopeless, but the undaunted private led a bayonet charge through them, and fought so fiercely and so well that 37 of the enemy were driven into the hands of the rest of his company During these furious and exhausting operations Tandey was twice wounded.

In the long list of 32 recipients there were, as it was inevitable that there should be, cases of individual heroism and dovotion which stood out from even their own exalted setting, and amongst these instances was the noble self-sacrifice of Private Frank Lester, 10th Battalion Laneashire Fusiliers, who came



LIEUT. J. C. BARRETT, Leicester Regiment.

from Irby, near Birkenhead. His achievement threw light on the desperate nature of much of the fighting which fell to the lot of the British soldier when working in small parties.

During the clearing of the village of Neuvilly on October 12, 1918, an officer had with him a party of about seven men, including Lester, who was the first to enter a house by the back door as some Germans were trying to get out by the front door. Two of these Germans wore shot by Lester as they attempted to escape. A minute later the back door was blocked by a fall of masoury and the party were trapped, for the only exit into the village



PRIVATE FRANK LESTER, Lancashire Fusiliers.

street was under point blank fire, the street being also swept by elose-range machine-gun fire. Another party in a house across the street were suffering severely at the hands of an enemy sniper.

. This situation was as desperate and hopeless as it was possible to imagine, and Lester could not be under the slightest illusion as to the result of the determination which flashed into his mind. The party opposite was faced with the alternative of crossing the fire-swept street or remaining in the house and being shot one by one. With Private Frank Lester to decide was to act, and having exclaimed, "I'll settle him!" he dashed into the street and shot the sniper at close quarters; but the instant he did so he himself fell, mortally wounded. "To save their lives he saerifieed his own."

Many of these village fights were Landrecies over again, and they were strongly reminiscent of the desperate street encounters of 1870 between small bands of French and Germans, which the pictures of de Neuvillo and other artists had made familiar.

A case to bear company with Lester's was that of Lance-Sergeant Harry Blanshard Wood, M.M., 2nd Battalion Scots Guards (Bristol),

at the village of St. Python, France, on October 13, 1918. Here, again, the streets, in a desperately opposed advance, were raked by machine-gun fire. Wood's platoon sergeant was killed, and command of the leading platoon fell to the Guardsman, who had a chance of distinction which was enough to satisfy the utmost yearning for a rare opportunity. The company's task was clear, and was as difficult as it was obvious. The western side of the village had to be freed and the crossing of the River Selle secured; but before this could be done the bridge, which had been ruined, had to be gained, and it happened that the space in front of the bridge was commanded by German snipers.

A man of infinite resource and pluck was needed to master such an unpromising problem, and in Sergeant Wood the man was on the spot. "A large brick" was available, and seizing this Wood "boldly carried" it out into the open space, lay down behind it, and fired continually at the snipers, ordering his men to work across, while he covered them by his fire. Wood himself was under heavy and well-aimed fire while his order was being carried out, but the whole of his party reached the objective point. Wood luckily survived his desperate situation, and later in the day he further distinguished himself by driving off repeated German counter-attacks against his position.

Jumeaux (Balkans) was the place named in connexion with the acts for which the Cross was awarded to Lieutenant-Colonel Daniel Burges, D.S.O., Gloucestershire Regiment, commanding the 7th (S.) Battalion of the South Wales Borderers. In the operations of September 18, 1918, he made so successful a reconnaisance of the enemy's first-line trenehes that he was able to take his battalion to the assembly point without casualties, after which he very skilfully maintained direction, though "every known landmark was completely obscured by smoke and dust." The battalion, when still some distance from its objective, had to endure very severe machine-gun fire, which caused many casualties amongst company Lieutenant-Colonel Burges was by this time wounded, but he disregarded both his own condition and his personal safety, and kept moving to and fro through his command. encouraging his men and helping them to maintain formation and direction. At last, through "a decimating fire," as they neared the enemy's position, he led them forward

until he was again hit, twice, and fell unconscious.

Another member of the old 24th Regiment who received the Cross was Company-Sergeant-Major John Henry Williams, D.C.M., M.M., 10th Battalion South Wales Borderers (Cwm, Mon.), who did splendid single-handed work on the night of October 7–8, 1918, during the attack on Villers Outreaux. His case emphasised the peril which so often confronted British soldiers in dealing with German treachery, while it illustrated the swift vengeanee which followed such displays by the unscrupulous enemy. Williams saw that his



LIEUT.-COL. D. BURGES, Gloucestershire Regiment.

company was suffering heavy casualties from an enemy machine-gun, and so he ordered as Lewis gun to engage the weapon. Advancing under heavy fire to the flank of the German post, he rushed it, alone, with the brilliant result that he captured 15 of the foe. The prisoners saw that the sergeant-major was alone, and they turned on him, one of them seizing his rifle. Williams, however, was too quick and too courageous for them, and having broken away from his assailant, he bayoneted five of the Germans, and the rest, cowed by their conqueror, again surrendered.

During the operations across the Piave on October 27, 1918, Sergeant William McNally, 8th (S.) Battalion Yorkshire Regiment (Murton Colliery, Co. Durham) performed "innumerable acts of gallantry"; amongst the

specific deeds recorded of him being a singlehanded rush to some buildings from the vicinity of which came heavy machine-gun fire. A single-handed onslaught by the sergeant resulted in the killing of the team and the capture of the gun. On October 29, at Vazzola,



SERGT. WM. MC NALLY, Yorkshire Regiment.

his company, which had crossed the river Monticano, came under heavy fire from machineguns and rifles. Immediately directing his platoon's fire against the danger point, the sergeant crept to the rear of the enemy position, and to this he gave the treatment that he had dealt to the hostile post two days previously—he rushed it, killed or put to flight the garrison and seized a machine-gun, while he ended the day's fine work by frustrating an attack, severely punishing the enemy, and generally distinguishing himself in the unpromising environment of a newly captured ditch.

It had not seldom happened that the recipient of a Cross had lost his life soon after winning his honour, and this was the fate of Lance-Scrgeant Thomas Neelcy, M.M., 8th Battalion Royal Lancaster Regiment (Liverpool), who was killed three days after showing great valour at Flesquières on September 27, 1918. Nėcley's exhibition was essentially that of a man who was completely imbucd with the true fighting spirit and sought and took every opportunity of easing it. He hurled himself, with equal contempt of death and danger, against maclune-gun positions and concrete strong points, capturing guns, killing men and clearing up positions. Mostly he fought singlehanded, sometimes he worked with two or three men, but it was his own overmastering power which made it be said of him that he was largely instrumental in enabling his company to advance 3,000 yards along the Hindenburg support line

Another village fight gave the Cross to a gunner-Lieutenant Robert Vaughan Gorle, "A" Battery, 50th Brigade, R.F.A. On October 1, 1918, during the attack on Ledeghem, he was in command of an 18-pr. gun working in close conjunction with infantry. On four separate occasions he brought his gun into action in the most exposed positions and disposed of hostile machine-guns by firing over open sights under direct machine-gun fire at 500 to 600 yards range. Later, when the infantry were wavering and being driven back by intense fire Gorle galloped his gun in front of the leading infantry and twice knocked out the machine-guns which were causing the trouble.

Night fighting of the most desperate character gave Lieutenant Donald John Dean, 8th Battalion Royal West Kent Regiment, his opportunity to win the Cross. During the period September 24 to 26, when he and his



CO.-SERGT.-MAJOR J. H. WILLIAMS, South Wales Borderers.

platoon held an advance post which had been established in a newly captured enemy trench north-west of Lens, the Germans made the most resolute efforts to oust them. The defence in itself was a fine display of gallantry and leadership, the more so because the post, when taken over on the night of the 24th, was ill-prepared for defence. Soon after the occupation the Germans made their first attempt, and failed. Consolidation was continued under heavy machine-gun fire. Soon after midnight

another determined attack was made by the Germans, but again they were driven off, and throughout the night, until about six o'clock in the morning, Lieutenant Dean and his brave band worked unceasingly.

tion was continued. This work was carried on under heavy fire, which culminated in intense artillery fire on the morning of the 26th. Again the enemy desperately attacked, but the post was held against all comers, and



Official photograph.

OUTPOSTS.

The Germans had pulled themselves together, and now, supported with heavy shell and trench mortar fire, they made a fresh and fiercer onslaught; but for the third time they were hurled back, with severe loss, by the British subaltern and his men. During the whole of the 25th, through the night, consolida-

finally the Germans were repulsed with heavy loss. In all, the post was attacked five times, thrice heavily, and no better proof of the resolute courage of the defenders could be given than the fact that each attack completely failed.

Working with another hero whose name,

unfortunately, was not given, Lanee-Corporal George Onions, 1st Battalion Devonshire Regiment, of Sale. Cheshire, "averted what might have been a very dangerous situation." On August 22, 1918, when south of Achiet-le-Petit, he was sent out with one man to get touch with the battalion on the right flank, and he saw, that the Germans were advancing in large numbers "to attack the positions gained on the previous day." The corporal and his comrade realized the opportunity and they placed themselves on the flank of the advancing enemy. When the target was most favourable they opened rapid fire, carrying out in this respect that fire discipline to which so much of British triumph had been due in more than four years of war. When the Germans were about 100 yards away from the two men the line wavered and some hands were seen to be thrown up. Onions then rushed forward and with his eomrade's help took about 200 of the enemy prisoners and "marched them back to his company commander." This act was to be added to the list of extraordinary individual exploits, and though in the official story only



LANCE-CORPORAL GEO. ONIONS, Devonshire Regiment.

the name of the lance-corporal was given there could be no doubt that the name of the comrade would be proudly added to the regimental roll of the "Bloody Eleventh."

These 44 awards (the remainder will be dealt with later) were made public about the date of the general election of 1918, when there was returned to Parliament Lieutenant-Commander P. T. Dean, 40 years of age, slate merchant and cotton spinner, and member of the Blackburn Town Council, who in July, 1916,

became an officer in the Royal Naval Reserve and for his valour in the Zeebrugge affair in April was awarded the Victoria Cross.

The following is a list of the 59 recipients of the Victoria Cross who have been dealt with in this number, excluding the eight "Mystery" V.C.'s, whose names have appeared in previous lists:

BARKER, Capt. (Act. Major) W. G., D.S.O., M.C., No. 201 Sqn., R.A.F.



LIEUT. D. J. DEAN, West Kent Regiment.

BARRETT, Lieut. J. C., 1/5th Battalion, Leicestershire Regt. (T.F.).

BEAK, Temp. Comdr. D. M. W., D.S.O., M.C. R.N.V.R.

Beauchamp-Proctor, Lieut. (Act. Capt.) A. W., D.S.O., M.C., D.F.C., No. 84 Sqn., R.A.F.

Burges, Major (Temp. Lieut.-Colonel) D., D.S.O., Glouc. Regt., commanding 7th (S.) Bn. S. W. Bord.

Calvert, Sergt. L., M.M., King's Own (Y.L.I.) (Conisboro').

Colley, Pte. (Act. Sergt.) H. J., M.M., late Lancs. Fusiliers (Smethwick).

CRICHTON, Pte. Jas., Auekland Regt., N.Z.F.

DEAN, Temp. Lieut. D. J., 8th Bn. R West Kent Regt.

DINESEN, Pte. Thomas, Quebec Regt.

FORSYTH, Sergt. S., late N.Z. Engineers.

Frisby, Lieut. (Act. Capt.) C. H., C. Gds. (S.R.), attd. 1st Bn.

GABY, Lieut. A. E., late A.I.F.

Gorle, Temp. Lieut. R. V., "A" Bty., 50th Bde., R.F.A.

GORT (J. S. S. P. Vereker), Viscount, D.S.O., M.V.O., M.C., Capt. and Bt. Major (Act. Lieut.-Colonel), 1st Bn. G. Gds.

Grant, Sergt. J. G., 1st Bn. Wellington Regt., N.Z.F.

Harris, Sergt. T. J., M.M., late R. W. Kent Regt. (Lower Halling, Kent).

HARVEY, Pte. Jack, London Regt. (Camberwell). HUFFAM, 2nd Lieut. J. P., 5th Bn. W. Rid. R. '(T.F.), attd. 2nd Bn.

HUNTER, Cpl. D. F., 1/5th Bu. Highland Light Inf. (Dunfermline).

Jackson, Pte. (Lee.-Corpl.) T. N., late 1st Bn. C. Gds. (Swinton).

Johnson, Sergt. W. H., 1/5th Bn. Notts & Derby Regt. (T.F.) (Worksop).

JOYNT, Lieut. W. D., 8th Bn. A.I.F.

Judson, Sergt. R. S., D.C.M., M.M., Auckland Rgt., N.Z.F.

Knight, Act. Sergt. A. G., late Alberta Regt

LAURENT, Sergt. H. J., N.Z. Rifle Bde.

LESTER, Pte. F., late 10th Bn. Lancs Fus. (Irby, nr. Birkenhead).

MacIntyre, Lieut. D. L., Arg. & S.H.

McGregor, Lieut. D. S., late 6th Bn. R. Scots (T.F.) and 29th Bn. M.G.C.

McGuffie, Cpl. (Act. Sergt) L., late 1/5th Bu. K.O.S.B. (T.F.) (Wigtown).

McIver, Pte. H., M.M., late R. Scots (Newton).
McNamara, Cpl. J., E. Surrey Regt. (Preston).
McNally, Sergt. Win., M.M., 8th (S.) Bn.
Yks. R. (Murton Colliery, co. Durham).

METCALF, Lee.-Cpl. W. H., M.M., Manitoba Regt.

MINER, Cpl. H. G. B., late Central Ontario Regt.

NEEDHAM, Pte. S., Bedfordshire Regt. (Hull). NEELEY, Cpl. (Lce.-Sergt.) T., M.M., 8th Bn. R. Lancs. Regt. (Liverpool).

Onions, Lee.-Cpl. G., 1st Bn. Devonshire Regt. (Sale, Cheshire).

Реск, Lieut.-Colonel C. W., D.S.O., Manitoba Regt.

Prowse, Chief Petty Officer G., R.N.V.R. (Landore).

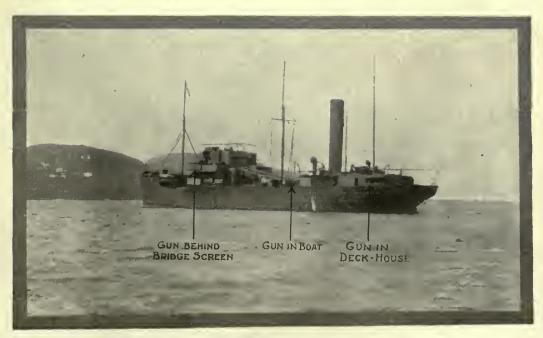
Richardson, Pte. (Piper) James, late Manitoba Regt.

RUTHERFORD, Lieut. C. S., M.C., M.M., Quebec Regt.

SEAMAN, Lce.-Cpl. E., late R. In. Fus. (Schole, Norfolk).

Sewell, Lieut. C. H., late R. W. Kent. Regt., attd. Tank Corps.

SIMPSON, Cpl. (Lce.-Sergt.) W., Lines. Regt. (Bolton).



SINGH, RESSAIDAR BADLU, late 14th Lcrs., attd. 29th Lcrs., Ind. A.

SMITH, Cpl. (Lce.-Sergt.) E., D.C.M., Lancs. Fus. (Maryport).

SPALL, Sergt. R., late Eastern Ontario Regt.

TANDEY, Pte. H., D.C.M., M.M., 5th Bn. W. Rid. Regt. (T.F.) (Leamington).

Vann, Capt. (Aet. Lieut.-Colonel) B. W., M.C., late 1/8th Bn., attd. 1/6th Bn., Notts and Derby Regt. (T.F.).

WEALE, Lee.-Cpl. H., R.W. Fus. (Shotton, Cheshire)

West, Capt. (Aet. Lieut.-Colonel) R. A., D.S.O., M.C., late North Irish Horse (Cav. S.R.) and Tank Corps. West, Lieut. (Act. Capt.) F. M. F., M.C., R.A.F. (formerly of the Special Reserve, R. Munster Fus.).

Wilcox, Lee.-Cpl. Alfred, Oxf. & Bucks Light Inf. (Birmingham).

White, Temp. 2nd Licut. W. A., Machine-Gum Corps.

WILLIAMS, C.-S.-M. J. H., D.C.M., M.M., 10th Bn. S. Wales Borderers (Cwm, Mon.).

Wood, Cpl. (Lee.-Sergt.) H. B., M.M., 2nd Bn. Seots Gds. (Bristol).

Wood, Pte. W., 10th Bn. Northumberland Fus. (Stockport).

Young, 2nd Lieut. F. E., late 1st Bn. Herts Regt. (T.F.).



CHAPTER CCLXXIII.

THE GERMAN OFFENSIVE OF 1918 (V.)

REINFORCEMENTS FROM ENGLAND—TROOPS RECALLED FROM OTHER THEATRES OF WAR—BRITISH REORGANIZATION—MINOR ACTIONS IN MAY, 1918, ON SOMME AND LYS FRONTS—GERMAN ATTACK ON THE CHEMIN-DES-DAMES, MAY 27—FORCES ENGAGED—THE BRITISH IXTH CORPS—THE AISNE REACHED—ENEMY ACROSS THE VESLE—Soissons and Fère-en-Tardenois Taken—Germans again on the Marne—The Offensive Checked—German Attack in the Matz Valley, June 9—Enemy Progress and Check—Americans at Cantigny—Air Fighting in May.

T the beginning of May, 1918, the British Armies fighting in France were much reduced in strength owing to the severe losses which had been inflicted on them by the very superior numbers the Germans had employed in the fighting which occurred from March 21 onward. From March 25 the home authorities did their best to strengthen them by sending out as rapidly as possible reinforcements from England, and also by recalling considerable bodies of troops from other theatres of war. But with regard to the first, as the men were largely untrained, or, at any rate, not up to the standard of the troops already engaged, it took some little time for them to assimilate the spirit of the units in which they were absorbed and to complete their training and equipment. As to the troops from other theatres of war, much time was occupied in bringing them to France. Those which had to be brought by ship through the Mediterranean had to be carefully convoyed, and, moreover, it took many days to bring them down to the ports of embarkation and ship them for transit.

Some idea of the extent to which our fighting numbers had been affected may be obtained Vol. XVIII.—Part 233.

from the fact, stated by Sir Douglas Haig in his dispatch of December 21, that "at the beginning of May no less than eight divisions had been reduced to cadres, and were temporarily written off altogether as fighting units." Two other divisions "were holding positions in the lines with reduced cadres, which it was not yet possible to bring up to establishment."

A certain amount of give and take had occurred between the French Army and our own. French troops, as we have already seen, had been brought up in no unsparing numbers to stop the German advance on Amiens, and had also been used to support the left of the British line in the neighbourhood of Kemmel and to strengthen the Flanders front.

Five British divisions, on the other hand, had been transferred at the end of April and early in May to join the French Sixth Army and take the place of some French divisions which had been concentrated behind Amiens. All this left only 45 British infantry divisions, and most of these were below strength, some of them considerably so, for operations on the front held by the armies under Sir Douglas Haig's command. It did not improve the

situation that fully three-fourths of these 45 divisions had been engaged in opposing one or both of the recent German offensives. All were war-worn, and needed rest and the infusion of new blood to bring them up to really first-rate fighting trim.

It is quite true that the French had been as heavily engaged in the fighting as had the British, and it had been necessary to bring up a considerable proportion of Foch's reserves to stabilize the position about Amiens and about Ypres. The American Army, although it was beginning to increase in numbers, was not available in sufficient force to replace the lack of troops with the Allies. On the other hand, it must be remembered that the German losses had also been extremely heavy. How heavy it is impossible accurately to estimate, but events showed that the troops in contact with the Allies between the Oisc and Ypres were exhausted by the continuous strain of their efforts, and had lost the power for a time of further attack. Time was needed to reorganize them and to strengthen them with the reserves; but it was also known that the enemy had supports up to 75 divisions still available on the Western front. It is not to be doubted that he knew approximately, at any rate, what the situation was with both the British and French Armies By his

operations in March and April he had attained positions of considerable offensive strategic power, and these he was improving daily. He had pushed through the whole of our original lines of organized defence, and was within a short distance of the two important railway centres of Amiens and Hazebrouck, which, with that of Béthune, were under the effective fire of the enemy's guns. These also threatened the important railway centre at "The depth to which the enemy had penetrated in the Somme and Lys valleys had interrupted important natural lines of railway and created a position of extreme gravity with regard to the maintenance of eoinmunications in northern France." This rendered it necessary for the Allies to enter on a large programme of railway construction so as to provide three separate routes for north and south traffic independent of Amiens. The work thus necessitated included the doubling of existing tracks, and sometimes it was necessary to quadruple them; altogether some 200 miles of broad gauge track was laid down during the period or comparative inactivity from April to July.

The severe disruption of the defensive lines involved the construction of others farther back. This was a very pressing need, and, combined with the railroad constructions both



[French official photograph.

AFRICAN TROOPS UNLOADING GIRDERS IN BELGIUM,



CHINESE LABOURERS DOUBLING A RAILWAY LINE.

broad and narrow gauge, and the making or improvement of many miles of roads, called for the employment on a very large scale of both skilled and unskilled labour. The total length of new trench works constructed was over 5,000 miles, not far short of the distance from England to the Cape, and all the time the equally pressing need of reorganizing our fighting troops and bringing them up to strength had to be continued. It was a task requiring vast energies, great ability, and enormous efforts on the part of all concerned to produce and organize the material and men which the situation demanded. For either French or British the offensive was for a time impossible. It was their duty to keep on the defensive -an active one, maybe, but still a defensiveuntil the arrival of American troops gave us something nearer equality of forces, when we should be able to resume active operations.

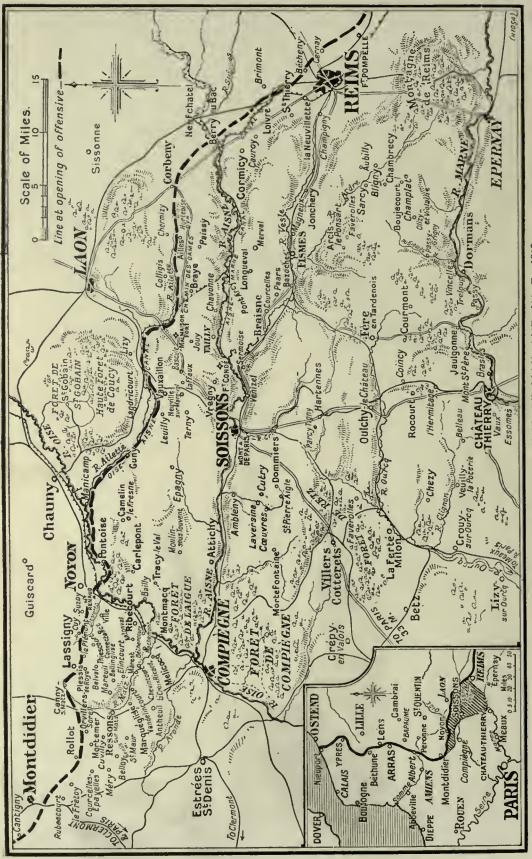
The policy, therefore, to be undertaken was a tentative one. The first duty was to hold our new positions, taking advantage of every opportunity by minor operations to keep the enemy in a state of tension and uncertainty, and as our divisions were rested and reorganized and increased in numbers, the little aggressions might become bigger or, what was the same thing, more frequent, thus enabling us to effect local improvements in

our lines, whether for the purposes of defence or for subsequent offensive movement.

As will be seen in the course of the narrative, the middle of July marked the turning point in the campaign and commenced the new era of attack. Meanwhile, abandoning for a time attacks on the British, the Germans made a determined attack on the morning of May 27 against the French on a front of about 35 miles north-west of Reims, and the fighting against the French and the English attached to them went on until July 18, when Marshal Foch launched his great counter-offensive, which he had been a long time preparing on the line between Château-Thierry and Soissons. With the details of all this we shall deal later. Now let us turn for a time to that part of the strategic front with which the British were more especially concerned.

Chapter CCLXX. described the operations in the Western theatre up to the latter part of April, when the great effort of the Germans to break through the northern part of our line was brought to a standstill.

For various actions in the Lys fighting the following divisions of the Second Army were specially thanked by the Field Marshal commanding in chief the British Armies in France, viz., the 9th, 19th, 21st, 25th, 29th,



THE GERMAN OFFENSIVE OF MAY AND JUNE, 1918.

31st, 33rd, 34th and 49th Divisions; and the 1st Australian Division. We had lost prisoners during April, but we had taken, on the other hand, 5,241 Germans, of whom 136 were officers, which shows the success had not been all on one side. Moreover, during the month, we dropped 23,900 bombs behind the German lines, while they only let fall 2,033 behind ours. Although nothing further of great importance occurred for some little time after the termination of the battle, still a considerable amount of fighting went on all along the region where we were in contact with the enemy from the Oise up to Ypres. Most of this was due to local attacks made by our Allies or ourselves to improve the position. Occasionally the Germans, too, tried to push a little more forward, but on the whole it may be said that the balance of success was on the side of the Allied troops, and the policy which had placed General Foch at the head of the whole of the forces in the Western theatre of war was beginning to bear fruit.*

On April 29 the Germans attacked the Belgian advanced posts in the region of Langemarck and forced them to retire for a short distance on a portion of the line attacked, but a counter-attack drove the Germans back and the situation was completely restored. On the other hand, Belgian raids near Nieuport as well as towards Kippe resulted in favour of our Ally, who brought in prisoners. The most serious fighting on that day took place in the neighbourhood of Locre. This village was an important point to the west of Kemmel, which it was necessary for the Germans to hold if they moved forward towards the heights of Scherpenberg and Mont Rouge. It was a point the possession of which had been severely contested, and it is said to have changed hands 14 times during this period of the fighting; at any rate, on April 29, after a great deal of hand-to-hand fighting, during which the tide of battle ebbed and flowed through the village, it fell into the hands of the Germans at half-past 12 and the latter then advanced towards the Scherpenberg. They were shortly after countered by a fresh French division, which, storming forward, drove the enemy back to the cross-roads outside the village, capturing 94 prisoners. To the north of this and in connexion with the attack on the French the British troops near the village of Voormezeele were strenuously attacked and a severe engagement took place at the Ridge Wood south-west of this point. There was no fighting north of the canal, though the Germans held the position known as the Lankhof Farm, just on the north side of it, which they had captured on the 28th, and which gave them a favourable point of vantage; but between the Voormezeele and north-eastwards through Verbranden Molen



[Belgian official photograph.]
BELGIANS OCCUPYING A GERMAN
TRENCH NEAR DIXMUDE.

up to Zillebeke Lake the Germans came on in dense masses with fixed bayonets, after a heavy preliminary bombardment of high explosive and gas shells, which lasted 11 hours. They carried their packs and seven days' provisions, and were evidently intended to carry their line far forward. The point attacked here was held by the Lancasters and West Riding Regiment with the Scottish Rifles and the Royal Scots Fusiliers, the last named holding Ridge Wood. Near Voormezecle were men of the Leicester Regiment. There was a thin mist, but not enough to screen the enemy when within decisive infantry range, and for somo 400 yards the advancing troops were plainly visible.

In front of Voormezeele we had some of the usual advance posts, machine-gun nests, and these fell to the first rush of the numerous enemy. But rifle and machine-gun fire brought him up at the main defence line with heavy

^{*}The Belgian Army had been placed under his orders on April 17.



[French official photograph.

THE FRENCHMEN WHO DROVE THE GERMANS OUT OF HANGARD, TAKING OVER 100 PRISONERS.

loss. The Germans delivered three attacks, one after the other, all equally unsuccessful. The successive waves were beaten back by our infantry fire, and after the third attempt had been brought to a standstill our men left their trenches, and, attacking with the bayonet, drove the enemy back in confusion. The fighting extended along a front from Voormezeele down to Meteren, a distance of 10 miles, and no less than 11 German divisions tried to break through the Allies' line; but all their attempts were foiled and they were compelled to retire from before the position our troops held. The result of the day was distinctly unfavourable to the enemy and was made more so by a counter-attack delivered by the French which drove him some 1.500 yards to the rear in the direction of Kemmol. So bitter was the fighting that out of an enemy garrison of 1,500 men in the village only 200 escaped, the rest being all killed or taken prisoners.

This segment of the battlefield was the only one in which severe infantry fighting took place, though the artillery fire of the enemy had been extremely severe against the whole of the Ypres salient, the southern Lys battlefield, and the Lens-Arras region.

In the southern battlefield, in front of Villers-Brctonneux, the British line was advanced a short distance and some prisoners were taken.

On April 30 there was some smart fighting in the Noyon region. The Germans fired briskly on Montdidier, and when they attacked in the neighbourhood of Grivesnes and west of Montdidier, ponetrated to the south-west of Noyon and over the Oise and Aisne Canal near Varesnes. Here an American regiment was stationed which drove back the three attacking battalions with heavy losses, though they themselves suffered considerable casualties.

On May 2 the Germans made a small local attack on the Belgian trenches near Nieuport, but this was stopped without difficulty. The only other point to note was a considerable increase of artillery fire, especially in the neighbourhood of Boesinghe. More to the south, in the Amiens region, the French captured the German position on the western side of the Avre extending from Hailles to Castel, including Hill 82, which was an important gain and considerably improved the position at this point, adding considerably to the strength of the junction point between the French and

British forces in the neighbourhood of Hangard. The French took over 100 prisoners.

The same day a German attack on Thennes, on the east side of the Avre, between Hangard and Hailles, was defeated, and our troops ecoperating south of Villers-Bretonneux also took a few prisoners. This fighting occurred because the Allies wished to improve their position on the Avre and because the Germans also endeavoured to push on to give themselves more favourable ground for a further advance on Amiens. (On the 3rd, at Hinges, west of Loeon, in a local attack we took 40 prisoners

At the northern end of the Allied line, near Kemmel, raids attempted by the enemy to the south of Loere were driven off by French troops, and the local fights which took place near Locon and on the Lawe River were also to our advantage. There were also lively little encounters round Noyon, in which the French were equally successful. It will thus be seen that all round the front line of the German position on the Somme there was considerable infantry activity, and the usual artillery fire went on; it seems to have been more intense against the junction of the French and English



NOYON CATHEDRAL.

and eaptured two machine-guns. The Germans attempted early on May 4 to recapture this ground, but were driven back).

Two days later, on May 4 and 5, the Australians made another attack for the same reason. On this occasion it was between Morlancourt and Sailly-le-Sec—i.e., to the north of Villers-Bretonneux. The result of their assaults on the two consecutive nights was to push through the German lines along some 1,200 yards, to a depth of 700 yards on the first night, and to a further 500 on the second. They took 200 prisoners and some machine-guns and a trench mortar.

forces at Hangard—all pointing to a renewal of the attempt to reach Amiens.

We see, therefore, that on the position to which we had been forced back from Albert to the Avre we had advanced again, and now interposed a firmer and better line between Amiens and the Germans, which relieved immediate pressure from the direction of Corbie and gave us better observation over the ground behind the German trenches on the south side of the river and to the east of Villers-Bretonneux.

It was especially noteworthy as showing that, while it might have been reasonable to suppose that the Allied troops would have been depressed by their previous retreat, and the Germans elated, the exact reverse was the ease; we not only held our own gains at Villers-Bretonneux, but at the points just mentioned had been able to retake a part of the ground we had lost—besides defeating the local attacks of the enemy. The Germans, as usual, denied our successes, and claimed their own attack near Courey as a success. They admitted that the Australians succeeded in reaching their foremost line, but said that "their twice-repeated attack broke down before our posts with heavy losses." There were also encounters between the opposing forces to the east of Reims, but nothing of importance.

There was now a temporary lull in the battle, and the next effort of the Germans was onee more shifted up to the Ypres end of the Franco-British defences. On May 6 we made a successful raid near Neuville-Vitasse, capturing some prisoners and three machine-guns and driving back an attempt by the Germans in the same neighbourhood without difficulty. There was also great artillery activity in the region of the recent combats, Hailles-Villers-Bretonneux, showing that the enemy was not giving up all his hope of advancing thence on Amiens.

The next day was very wet, and was without incident, but on May 8 the weather improved

and an attack of a more vigorous nature than any which had occurred since the Germans were held up at Keinmel on April 29 was made by them against our trenehes there. Early in the morning, after a severe artillery bombardment, a powerful force advanced against the forward line we had taken up after April 29. between La Clytte and Voormezeele. Fivo divisions appear to have been employed. In the eentre two divisions made some progress, entering the front line of posts and pushing back those on the east side of the Kemmelbeck and Vyverbeek, entered Ridge Wood. few troops even penetrated through to the ruins of some buildings behind it. But at 7 p.m. they were driven back by a counterattack of Seaforth Highlanders to the far side of the wood, and our original line was again oecupied. The wings of the German attacks wero completely unsuccessful. On the northern flank our artillery stopped all advance, and similarly on the south the French guns held the enemy's infantry. Thus the grand attack by five divisions dwindled down to one of two only, the 52nd Reserve Division against the wood, the 56th Division to the south of it on a front of about a mile, which was completely held by a single British division, apparently the 51st.



[Official photograph.

LEWIS GUNNERS IN A POST ON A CANAL.



[Official photograph.

TWO BRITISH GENERALS DISCUSSING PLANS.

The next day the Germans again attacked north of Kemmel, and succeeded in pressing our line back a little, but were once more driven off. The only result that accrued to them after the two days' fighting was the losses they had sustained.

There was also some fighting in the neighbourhood of Bouzincourt and about Albert, with no great success to the Germans. In the first caso they failed to reach our trenches, the attack going down under our rifle and machinegun fire. It is said that during the fighting one of the Germans shouted in a loud voice of command, "Retiro," in imitation of the tones of a British officer. It was a silly trick which did not succeed, and the attack was completely broken. Immediately to the west of Albert the Germans succeeded in forcing their way into about 150 yards of our trench, but they were promptly turned out of it, and lost some prisoners, besides other casualties in killed and wounded.

Throughout the fighting up in the north our artillery had played a great part. They had, as a rule, a good view over the country along which the enemy had to advance, and the consequence was that, not only were the guns very formidable in the actual defence, but they

were able also to bring heavy fire to bear on the approaches to the German lines. Reports of prisoners show that parties carrying rations up to the front suffered so much that they often refused to go on, and that the lines of communications were perpetually shelled by our guns. Troops were shelled out of their billets at night, in which action our aeroplanes added to the destruction. Reports show without doubt that the result was demoralizing to the Germans.

We have already seen with what bravery the artillery had acted during the Somme battle. Their conduct during that and the fighting on the Lys drew from Sir Douglas Haig the following well-earned Special Order of the Day:

I wish to convey to all ranks of the Royal Regiment of Artillery my deep appreciation of the splendid service rendered by them in all stages of the Somme and Lysbattles since the opening of the enemy's attack.

The difficult conditions imposed by a defensive fight against greatly superior numbers have been faced with the same skill, courage, and devotion to duty which characterized the work of all branches of the Artillery throughout the offensive battles of 1917.

With less constant and loyal cooperation or the part of both field, heavy, and siege batteries, the great bravery and determination of the infantry could scarcely have availed to hold up the enemy's advance. The infantry are the first to admit the inestimable value of the artillery support so readily given them on all occasions.



[Oh.ciai photograph

A BATTERY OF HOWITZERS IN ACTION.

The knowledge possessed by each arm, doubly confirmed by the sovere tests already passed through successfully, that it can rely with absolute confidence upon the most whole-hearted and self-sacrificing cooperation of the other is the greatest possible assurance that all further assaults of the enemy will be met and defeated.

I thank the artillery for what it has already done, and count, without fear of disappointment, upon the mainteoance of the same gallant spirit and high standard of achievement in the future.

On the southern field of battle there was a more important engagement on May 9. Northwest of Montdidier, at the small village of Grivesnes, the Germans held an important post in the park of the château situated there. This interfered with the French line running up on the western side of the Avre, and it was determined to recapture it—After a short but intense artillery preparation, the French infantry moved forward against this post, and after hard fighting established a firm line which was held in spite of counter-attacks of the Germans during the evening and also the next day. The French captured 258 prisoners.

The suecess of the operation was largely due to surprise. The attack started at 7 a.m., and its object was gained in a quarter of an hour. The speed at which it was carried out completely paralysed the Germans, so much so that their barrage only started after the ground had been won. The new position gave the French complete command of view along the two ravines which ran from it—the one to Gratibus, the other to Hargicourt—and this much affected the enemy's communications in the rear. The object of the Germans in this part of the field had been to gain the Esclain-

villers plateau, to the west of Grivesnes, so as to command the Amiens-St. Just railway, along which an approach to the south from Amiens was possible. A direct approach from the east was far more difficult as the ground was marshy along the banks of the Avre and also on the Somme. It may here be observed that on the south side of their salient, from Montdidier back towards Noyon, the Germans had at this time constructed a strong defensive position consisting of three lines of works, showing that they still thought a direct attack on that part of their front was possible. Moreover, if the advanced part of their salient towards Amiens were drawn back, the lines would serve to protect the southern flank of the retreat.

On May 10 there was some further fighting on the ground to the north of Kemmel, where Hill 44 in the Vierstraat region after severe fighting, in which possession changed more than once, finally remained in our hands. North-west of Kemmel there were also engagements in which our Allies improved their position and took 100 prisoners.

The German view of these fights was that they had carried out minor operations successfully. The French local attacks to the north of Kennnel and near Locre had been repulsed t

The German artillery in the north now began a systematic bombardment of the Trappist Monastery on the Mont-des-Cats, at the western end of the range of hills which stretches back from Mont Kemmel. This point stands nearly 600 feet above the plain, and from it a view of about 30 miles can be had. The bombardment was pure wicked destruction without any military object whatever. It is true the monastery afforded a good view in certain directions, but not in that of Keminel, from which a German attack would have to come, and the destruction wrought on the monastery had, therefore, no military justification.

On May 11 and 12 there were a considerable number of minor engagements. The French advanced their position north-east of Locre and captured prisoners. We made a successful the La Gaune Wood, south-west of Mailly-Raineval. The enemy, being favoured by the mist, succeeded in gaining an entrance at the northern portion of the wood, but a brilliant counter-attack drove them out again with very heavy losses, including 100 unwounded prisoners, 15 machine-guns, and some war material.

Attacks the next day by the Germans on the positions the French had captured were defeated

May 13 saw a certain recrudescence of the fighting in the north near Robecq and Merville



THE ABBEY OF MONT-DES-CATS.

[French oficial photograph.

raid to the north-west of Merville, and stopped two raids of the Germans in the neighbourhood of Ypres.

On May 11 the French again advanced north of Kemmel village, and there was fighting along the Ypres-Comines Canal and in the neighbourhood of Meteren. In the southern portion of the field there was again some lively fighting. The artillery duel about Grivesnes-Mailly-Raineval increased in intensity. In addition to minor raids, the French attacked the wood of Moreuil. Here they gained a considerable amount of ground which materially improved their position, and took 39 prisoners and several machine-guns In the evening the Germans in their turn made an attack in the same neighbourhood, directing their assault against the French positions in

and north of Kemmel, but without any great results. A German attack made against Kleine Vierstraat was stopped by the French.

The next day a determined attempt was made by the Germans to regain the ground they had lost to the Australians near the Somme. They attacked over a length of a mile to the south of Morlancourt, but failed to obtain any successes. On the other hand, a small French advance south of Hailles in the angle where the Avre joins on to the Luce was successful and 70 prisoners were taken. This was an important point, as it tended to the greater security of the Allied line which ran on f om Hangard at Thennes, just south of the Luce. This part of the German line was now so surrounded as to make any advance from it practically impossible.

The next day the French were equally successful to the north of Kemmel, where they advanced their line a little distance and took some prisoners.

On the night of May 18 the Australians arranged for an attack on the German positions near Morlancourt. Their trenches at this point directly overlooked Morlancourt, which was screened by an amphitheatre of hills



THE CHURCH OF RUBLU.

running north from the main high ground just east of the village. This and the village of Ville-sous-Corbie was the object of their attack. There was a short bombardment and at 2 a.m. our troops went forward on a front of 3,500 yards, protected by a barrage. The ground over which the attack took place was not easy for the assailants; those on the right had to advance over high ground, forming the summit of the ridge, while those on the left, moving along the Ancre valley, had to cross swampy ground cut up by drainage ditches and dykes, which in places necessitated wading, under an oblique fire from the rear side of Morlancourt. The trenches attacked were strong in themselves and their position was naturally difficult

German supports had been sent up the night before, but these appear to have played but a small part in the action. The result was never in doubt, and after some smart fighting, while here and there the enemy had to be cleared out by bombing, the Australians carried the ground, taking 380 prisoners. It was an advantageous gain for us, as it brought our line into better junction with the trenches near Albert.

The next day, in the north, the French had an additional success, advancing on a front of two and, a half miles near Locre. They pushed back the enemy's line some considerable distance and took over 400 prisoners. On the same day, near Merville, the British gained forward to some small extent, taking 30 prisoners. It was a smart little affair, in which a salient projecting into the British lines was cut across and 30 prisoners and six machinegens taken. It is curious to note that the Germans regarded this operation as having failed with the heaviest losses!

On May 21, to the north-west of Reims, the 'French made a vigorous incursion into the German trenches near Berméricourt, penetrating right through into the enemy's third line and doing much destruction. The next few days there was nothing important to record.

Here we may look back and record the work done by our armies since the beginning of May.

It will be noticed that the general outcome of the fighting was distinctly favourable to the Allies. The strong attacks on the Lys and on the Somme had not only been held, but a part of the ground lost had been regained; the confidence that Marshal Foch felt with regard to the situation was distinctly justified.

But the Germans, nevertheless, had not given up their attempts to push westward. Unable to carry out their plan against the British, they now determined to make their next attack against the French.

Above the valleys of the Oise and the Aisne there rises to the east of Picardy and north of Champagne a range of hills which runs generally in a south-westerly direction, to which the name of the Ile de France is usually given. Among the woods and more slight elevations the rocky mass on which the town of Laon stands rises to a considerably higher elevation. The semicircle of hills which runs round this point slopes down gradually on the south

towards the valleys of the Ailctte and the Oise-Aisne Canal. Between the Ailettc and the Aisne there rises another elevation, the sides of which are fairly steep and of which the crest is overlooked by the country lying to the north. The depression which runs from Soissons towards Laffaux divides this hilly range into two parts, the eastern of which carries the road known as the Chemin-des-Dames on a fairly even elevation, which rises to a greater height at the Winterberg and thence falls steeply towards the east. Rolling ground divides the bed of the Aisne from that of tho Vesle. To the south of this river the ground again rises to the watershed of the Oise and Marne and includes the sources of the Ourcq. Then it rises further to the source of the Marne and its wooded covering and then falls steeply to the south into the wide river valley. Thus the north-eastern portions of the Ile de France

with their parallel heights and valleys form four natural defensive positions which are protected on the east by the steep slopes south-west of Reims and on the west by the extensive woods of Compiègne and Villers-Cotterêts.

After the battle of the Marne in 1914, the armies of von Kluck and von Bülew, in accordance with orders, took up a position on the third of these, leaving the two more advanced to the French. The line of German trenches extended then from Moulin-sous-Touvent along the north slope of the river valley past Berryau-Bac, then crossing to the south went on towards Brimont and terminated on the northern forts round Reims, which had fallen into their hands.

In the spring of 1917 this line was shortened by the Siegfried line, and now the defences turned away by Laffaux sharply to the north.



FRENCH TRENCH-DIGGING MACHINE.

In addition to the whole west half of the third line of heights, the eastern borders of the Aisne valley were abandoned to the French and the defensive line taken along the Chemin-des-When the German retreat was Dames. finished, the movements began which the French hoped would bring about the final victory (this is the German view). On both sides of Reims the French troops advanced to the attack. After many months' fighting and heavy losses, the French succeeded in capturing the north slopes of the third range and, further, the Chemin-des-Dames, which overlooked the lower-lying country where the German lines were. From the time that Laon

favourable outcome of affairs induced the German Supreme Command to undertake a series of operations, of which the first object was the reconquest of the Chemin-des-Dames, and then a general improvement of the front between Reims and Noyon, but was (according to the same authority) to be limited to those parts only.

The above forms the official German view of the position which led to the great offensivo launched against the Aisne front on the morning of May 27, along a line of 35 miles north-west of Reims. Five British divisions had been placed at Marshal Foch's disposition, viz., the 8th, 21st, 25th and 50th Divisions,



A CAPTURED GERMAN TANK IN PARIS.

was captured, the French artillery set to work to demolish the villages which lay round this point. The German view is that the game was not worth the candle, for the Germans now occupied the fourth and last of the lines of hills, those which ran round Laon, covered by the two waterlines of the Ailette and the Oise-Aisne Canal. The recent operations had given back to the Germans on the west of Laon the ground they had previously held, but the result was that the new line, instead of turning from Noyon to the Aisne, followed the north bank of the Oise and joined on at a sharp angle with the Siegfried line by Tergnier. Von Boehn had improved this when at the beginning of April he had, as the result of the fighting round Amigny and Coucy-le-Château, been enabled to take the line at a less acute angle back to the Siegfried position. The

to which the 19th Division was subsequently added (these formed the IX. British Corps, under the command of Lieut.-General Sir A. Hamilton Gordon), at the end of April and early in May. During the first fortnight of the month, the 21st, 8th and 50th Divisions took over a line of about 15 miles between Bermoricourt and Bouconville, north-west of Reims. When the German attack began on May 27. 28 German divisions, supported by tanks, were directed against the Sixth French Army on a front of about 35 miles north-west of Reims, of which the British formed the right and the VI. French Corps the left.

From May 23 to 26 inclusive there were no infantry engagements along the whole extent of the Franco-British line. The German activity was limited to artillery fire directed against different sections. Sometimes these



[Official photograph.

A LONG COLUMN OF FRENCH TROOPS ON THE WAY TO THE FRONT.

were of an intensive character, with gas shells. The Allies perfectly well recognized the fact that a policy of inactivity meant defeat for the Germans, as the longer they delayed action the stronger would become the American Army, and it was therefore probable that a fresh attack would soon be delivered to bring about a decision before these reinforcements arrived. Two points required consideration. A direct advance on Amiens offered perhaps the greatest possibility of results. It would have involved the separation of the French and British Armies and thrown the way open for an advance along the Somme to the sea, but, on the other hand, it was to be remembered that the Germans had already been stopped in their two efforts to carry out this policy, the one on the Somme, the other in the Ypres direction directed on Hazebrouck. Now the Germans were averse from repeating attacks along lines where they had been held up. They probably considered that the British Army was very much weakened by the result of the fighting from March 21 to the end of April, and although the French had also sustained losses in the struggle, they had not suffered to anything like the extent that the British had. It therefore seemed likely that a new offensive would be directed against the French to reduce them to the same level. This being the case, it was evident that it would take place on a front which would connect up with the progress made towards Amiens. It had been known for a long time past that the Germans had collected troops in positions which pointed to an attack in the neighbourhood of Reims, and the new attack, which was indeed made in this direction, was therefore not unexpected. There had been various hints in German newspapers and those of neutral countries which esponsed the German cause, and it cannot, therefore, be said that when the attack did take place it was a complete surprise to the French.

All modern attacks resemble one another in so far as the concentration of large forces lends itself at the early stage of the fighting to a success which may only be temporary, but which may also be the opening phase of decisive action. The history of the entire war shows that all attacks properly carried out had been in their initial stages successful, but what had not yet been seen and what was not to be seen till a later period was the continued success in the initial direction of any of these assaulting enterprises.

According to the German accounts, the first attack was only intended to be conducted within certain fixed limits. They might have

added that these limits would be fixed by the French, and not by themselves, for there can be no doubt whatever that the attack was meant if possible to join on to the left flank of the advance on Amiens, and so open a wide field for an advance on Paris. It was a mere



GENERAL WICHURA, Commanded a German Army Corps on the Chemin-des-Dames under General von Boehn,

excuse on the part of the Gormans to say that their offensive had been limited from the first. It was absurd to say that its only object was the conquest of a certain amount of territory between Soissons and Reims.

The chief part in the German attack fell to the army of von Boehn on a front which extended from the west of Reims to the mouth of the Ailette, about 35 miles long. Wichura's Corps was opposite the Chemin-des-Dames, between Lizy and Colligis. Winckler's Corps was in the neighbourhood of Chermizy, Conta's at Corbeny and beyond. The left corps of Boehn's Army under Schmettow carried on the line over the Aisne valley to Berry-au-Bac, where it was in touch with Ilse's Corps of von Below's Army, which was to accompany the forward movement. Larisch's Corps was in support behind Wichura. East and west of Noyon, between Landricourt and Cuy, were Francois's Corps of Boehn's Army and Hoffmann's of von Hutier's, a mass which was at first held in reserve. The total force employed was about 28 infantry divisions, with some tanks. The infantry divisions and artillery destined for the attack were all in position in the evening of May 26. Long and careful camouflage had kept the full extent of the preparations unknown to the Allies. This was indispensable, as for the success of the operation some degree of surprise was absolutely needed, for it was necessary to capture the Chemindes-Dames before the local reserves of the French could be ready to meet the attack. Therefore, as in the provious operations about St. Quentin, the artillery preparation was reduced to the lowest level, and only a few hours could be given to overpower the French artillery and destroy the obstacles and shatter the defences. It commenced at 1 a.m. on the 27th.

The infantry attack was fixed for 4.40, at which hour the German troops went "over the top" between Landricourt and Brimont. The French artillery, which had only feebly replied to the fire of the German guns, was no longer



LIEUT.-GENERAL VON WINCKLER.
Commanded a German Army Corps under
von Boehn.

capable of offering much resistance to the German troops.

The centre of Boehn's Corps quickly overcame the resistance in the French trenches on the northern slope down from the Chemin-des-Dames. Winckler's divisions attacked in concentrated force on a narrow front and by a frontal stroke took the heights on either side of Cerny. Conta's troops attacked the French between Ailles and Paissy and the Winterberg, and this facilitated the advance of the centre through the difficult ground north of Hurtebise



(U. esas protost spil.

WIRING TREES FELLED ACROSS A CANAL TO HOLD UP THE ENEMY.

Farm. Wichura made but slow progress, as the resistance offered by the French was considerable. His left wing, combined with Winckler's troops, carried the ground on the east side of Braye-en-Laonnois; then wheeling round with part against the old fort of Malmaison carried that point.* On the inner flanks of von Boehn and von Below, the Corps of Schmettow and Ilse made steady progress towards the south-west. On the right, notwithstanding the determined resistance of the French, Larisch succeeded in taking the high ground on either side of the valley leading from Laffaux on Laon. This turned the line of the Chemin-des-Dames and the whole of the third French line of defences, but the determined resistance of the French about Antioche Farm held up any further advance during the forenoon.

When once the ridge had been won and the French compelled to fall back down the slope, the German troops pushed rapidly forward towards the Aisne and by noon they occupied a line from Bascule, Jouy, and Chavonno to the Aisne and thence by the north bank to Berryau-Bac. The Aisne itself was passed at several points between Vailly and Berry-au-Bac,

notably at Chavonne and Pont Arcy. Francois's Corps, which had not taken part in the main attack, had succeeded in crossing the Ailetto at Leuilly and threw up a bridgehead there.

The overwhelming strength of the Germans had enabled them to push forward with great swiftness in the centre of their attack, and early in the afternoon they had passed tho Aisne between Chavonne and Berry-au-Bac. But on the right of the Allies the defence had held out better. Where the armies of von Boehn and von Below joined together on the Aisne-Marne Canal the resistance was greater, the Allies being supported by the reserves in position near Reims; thus it was that the German centre formed a sharp wedge into tho French position, while on the flanks thereof the resistance was still considerable. But when Vailly had been taken after severe fighting, the Germans stormed up the slopes on the southern side of the Aisne over the obstinatelydefended machine-gun nests which studded them. They then pushed on beyond Longueval and Merval and reached the Vesle at Courcelles and Magneux before sunset, and during the night advanced over the river at Bazoches and Fismes, and extended their left to Villette and their right to Paars and Courcelles, where another passage over the river

^{*} The Fort of Malmaison had been half destroyed by the French themselves before the war broke out.



THE BRITISH IX. CORPS HOLDING UP THE GERMAN ATTACK ON REIMS.

was completed near the Pottery. Meantime, Below's troops on the left had forced the British troops composing the left and centre of the IX. Corps, now reinforced by the 25th Division, to swing back to a position facing west and north-west between the Aisne and the Vesle. On the right of the German attack the resistance of the French had held up the German attack, and south of Vauxaillon they had only succeeded in gaining ground towards Terny and the plateau of Vregny. It will thus be seen that the German gains were improving and at the close of May 27 they had made a serious breach in the Allied lines.

During the night the Germans made further progress, especially in the centre. On the flanks there was more or less of a pause in the fighting.

On May 28 fresh attacks were launched in great force along the whole battle-front. On the German right flank the French madecounter-attacks, but these, though of a very determined character, were defeated by the Germans, who pressed forward along the valley leading from Laffaux to Soissons. The fort of Condé, east of Vregny, was defended by several battalions of French Chasseurs, and these put up a strenuous resistance, and it was only when the Vesle was passed above its junction with the Aisne that the fort, being attacked from the rear as well as in front and flanks, was finally captured. Fismes, after severe street fighting, was completely taken in the early hours of the morning and Braisne also fell into the hands of the Germans. These two gains allowed the centre troops of the German attack to advance on a wide front over the Vesle, and by noon they had won the high ground to the south of the river. On the left the progress of the enemy had not been so rapid, and it was only after long and severe fighting that they gained the heights between the Aisne and the Vesle and pushed down the southern side of it.

The IX. British Corps had lost severely on the previous day's fighting and it also had to retire across the Vesle and was gradually pressed back in a south-easterly direction between the Vesle and the Ardre. Cormicy, Cauroy, and Loivre fell into German hands, and it was evident that the attack in this direction aimed at pushing back the British from the heights of St. Thierry, which covered Reims on the western side.

In the course of the afternoon German Corps which had been kept in support were brought up into line. Conta's troops attacked the heights to the south of the mouth of the Vesle, and, vigorously opposed, pushed forward along the Aisne valley to the west. As far as Jonchery the Veslo valley was captured and the ridge of the heights to the south of it reached. On both flanks of the German attack the greater resistance offered by the Allied troops opposed to them had kept back the German advance about Soissons and



A STREET IN FISMES.

Reims, but the progress in the centre now began to take effect on the troops on the defensive at these points. On the plateau between the Ailette and the Laffaux Valley further progress was made, and west of the Aisne-Marne Canal the north border of the Vesle valley was secured.

Here we may pause to give the German view on the progress which they had made. It was as follows:—

The attack against the middle of the battle-front held by the French and English Armies under Pétain had almost annihilated them. The disintegrated front-line troops had in their retreat carried back with them the reserves sent up to help them. A large number of divisions had completely lost all formation, and the survivors filled the German prisoner depôts. Field batteries and heavy guns, aircraft and motor transport, as well as the

highly equipped camps had fallen into the victors' hands. Among the booty were 20 of the heaviest natures of guns mounted on railway-wagons, which the French had brought together to use against the long-range guns firing on Paris. It was a useful capture, which later proved of great value to the Germans. The breach which Boehn's centre had forced in the French line Pétain had found impossible to stop, much less repair. He had used all his Army reserves and many Work Companics and recruit depôts, and, even with the advent of the strategical reserves on the second day,

During the night of May 28-29, the 19th Division was brought up in omnibuses and set to fill a gap in the French line across the Ardre Valley, which it occupied with great skill and steadiness. On the evening of May 28, the German line ran from the heights of Neuvillo-sur-Margival and the plateau of Vregny to the north of Soissons along the heights and plateau to the south of the Vesle to the north-west of Reims. The German offorts were now directed largely against the Allied troops on the flanks of the German heights. To the north of Soissons the Allies



[Official photograph.

FRENCH AND BRITISH IN THE SAME LINE.

it had been found impossible to construct an efficient line of defence to stop the enemy.

Seeing what the situation was, the German Army Command determined to continue the attack "beyond the ground which had hitherto formed the limit of its efforts. This was done not merely for the purpose of winning further territory, but with the object of inflicting more heavy losses on the enemy"

In pursuance of these instructions, the line of attack was given a slight deviation towards the west, and in accordance with this idea, some of the German divisions were directed towards Arcis-Le Ponsart

had been compelled to retreat to the outskirts of the town, and at the other extremity of the line the British had been forced into the anglo formed by the Vesle-Aisne-Marne Canal.

The next day the battle was continued with great fury, and the Germans found that the strong reserves which had come into the Allied line had considerably strengthened it. Not only was the defence more obstinate, but many counter-attacks were delivered against the German troops; still the Germans were able to press forward. The high ground between the Vesle and the Ourcq, which was well defended by powerfully wired trenches,



FÈRE-EN-TARDENOIS: THE MARKET PLACE.

did not stop their advance. The watershedbetween the Aisne and the Marne was gained about midday, and the German troops pushed through the numerous small valleys and water-courses to the slopes of the upper Ourcq and reached Courmont and in the evening Fère-en-Tardenois. Closely connected with Boehn's centre his left flank marched on towards the south-west. By evening Faverolles on the Ardre was passed and the heights south of the Vesle as far as Champigny captured. To the north of Reims, the suburb of La Neuvillette as far as the eanal and Béthény were taken. On the western flank of von Boehn's Army Wiehura's divisions erossed the Aisne by Venizel and captured a complete French battalion. The advance was othen continued and the road Soissons-Château Thierry was reached. On the right of this force Brandenburg Grenadiers eaptured Soissons and gained a footing on the heights to the south of the town. Pioneer detachments had the previous evening penetrated into the outskirts, and seizing the bridges prevented their destruction. Between the Aisne and Ailette further gains were made on the plateau west of these valleys by Laffaux.

The results of the third day of battle yielded in many respects more considerable and important results. The continuous arrival of reserves, although these were thrown into the fight with great vigour, had not been able to stop the tide of conquest, nor even to hinder its rate of progress. The ground gained on the third day of fighting was not less important than that which had been won on the two previous days. The important points of Soissons and Fère-en-Tardenois were eaptured. In vain had the French endeavoured to gain sufficient time to save their important reserves of ammunition, equipment, provisions and transport. Most important of all was that by the fall of Soissons, which had formed an important supporting point behind the Franco-British lines, the difficulty of advancing on either side of it was now removed.

The advanced troops of the Germans pushed on with doubled speed to gain the Marne. The line laid down for the advance on May 28 had been reached within four and twenty hours, and, indeed, had been exceeded by the still further forward movement which Conta had given to his divisions.

On May 29 the German attack on Reims was brought up at Cernay, but the advance of the centre and right of the Germans still continued in close touch with the retreating French and Francois's corps won along its whole front the south slopes of the banks of the Ailette-Oise-Aisne Canal, took Guny, and by the end of the day had reached the watershed between the Oise and the Aisne. In the evening the left of Hutier's flank corps under Hoffmann gained touch with Francois and threw up a

bridge-head between Pontoise and Manieamp, and during the night completed its connexion with Francois at Camelin and Le Fresne. On the western extremity of the front of operations Larisch's corps reached the heights to the south of the Aisne, captured the Mont de Paris, and reached the Soissons-Paris road on the high ground south of the town.

By the morning of May 30, Winckler's and Wiehura's troops were in front of the main line of the French trenches which extended from Fère-en-Tardenois over the heights of the Upper Oureq to the forest of Villers-Cottorets, which blocked the access to the Marne. Following up the valley of the Oureq, the Gormans broke through the wholo defensive system of tho French on a broad front, and, after hard fighting during the night, reached the line Oulchy-le-Château-Parcy-Tigny. Tho advance was not made without resistance on the part of the Fronch, and a considerable force of cavalry and infantry advancing from the woods of Villers-Cotterets brought the right flank of the German attack on the river Crise for a time to a standstill. After defeating this attack, the Germans pushed onwards over the river valley and the road leading from Soissons to Château Thiorry, and penetrated

to some considerable depth into the French defences.

On the eastern side of the battlefield Feldmann's divisions pressed onwards on both sides of Cernay nearer to the line of the north-east Reims defonces. Hse's and Schmettow's corps were formed, on May 30, as a single body, whoso left flank held the ground before Reims, while the right joined on to Conta's advance towards the south. Béthény and La Nouvillette were successfully held by tho left of this body. The watershed between the Vesle and the Ardro was eaptured from Champigny to Sarey. Between Ardre and Semoigne the two eorps pressed forward until they reached Olizy et Violaine and Passy-Grigny. Boehn's corps had reached, on May 29, the line laid down for its advance, and the next day the advance to the Marne was continuously pressed. Pressing forward through the forests which lay to the south of Fère-en-Tardenois, before nightfall it reached the Marne at Mont St. Pere, Jaulgonne and Tréloup. During the night a line was established which ran wost of Coiney and by l'Herémitage, following the line of the Marne from Brasles and then bent by Vincelles in the direction of Passy. Thus the French offensive of the previous year was revered



Official protograph.

BRITISH TROOPS FIXING BARBED WIRE DEFENCES.

by the Germans after a four days' battle, and their troops were now on the banks of the Marne. Especially was this the case near Chatcau Thiorry, where an important reinforcement in the shape of American troops now came up on May 31, and took up a position north-wost of the town, across the road through that place from Soissons to Paris, and extended to the east as far as Jaulgonne. They were able to support the French there with a considerable number of machine-guns, and helped to drive back the Germans. The next day the enemy endeavoured to rush the bridge at Chatcau Thierry under cover of the evening. Tho town was hoavily bombarded and the attack was also covered by smoke bombs. A few of the enemy contrived to cross, but were all made prisoners, while a good number were destroyed by the mine which blew up the bridge. Subsequent attempts to construct a new one in its place were all defeated. The enemy had on this date completed tho occupation of the Marne from the neighbourhood of Chateau Thierry to Dormans, a length of about 10 miles,

On June 1 the fighting was severe and continued through the night and the next day. The French troops barring the road to Paris between the Ourcq and the Marne held the Germans in check, and in many places made slight advances. During the next two days the Germans made further efforts on both sides of the Chatcau Thierry-Paris road, but were brought to a standstill at Bouresches. They failed to cross the Marne at Jaulgonne, but pushed on past Chateau Thierry to Monthiers and Veuilly-la-Poterie, and also made some progress towards the Forest of Villers-Cotterets. On the 5th a further attack on the Forest failed, as did an attempt to cross the Oise south of Noyon. The tide was beginning to turn. The next day the French, with British and American troops, advanced against the Germans, and drove them back, capturing important points in the Veuillyla-Poterie-Bussiares region, the nearest point to Paris reached by them.

The British troops on the right of the French V. Corps, with which they acted on the eastern side of the German salient, had been compelled to conform to the retreat of their Ally, and withdrew gradually, in the early days of June, to the line Aubilly-Chambrecy-Boujacourt, where they took up a firm position. This the Germans persistently attacked for some

time longer, and on June 6, they made two vigorous attacks on the position of the Montagne de Bligny, which commanded the valley of the Ardre; but in vain. In the language of the French general under whose orders they were now acting: "They have enabled us to establish a barrier against which the hostile waves have beaten and shattered thomselves. This none of the French who witnessed it will ever forget."

For a time at any rate the Soissons-Reims



GENERAL FELDMANN.

Commanded a German Army Corps on the

Western Front.

offensive, like their two previous attempts, was brought to a standstill.

On June 9 a new phase of the battle for Paris was opened—this time under the leadership of the German Crown Prince, who took the offensive with the Army of von Hutior between Montdidier and Noyon. The French military leaders were quite prepared for the new advance of von Hutier in this direction, as it was evident that for the advance on Paris it was desirable to level up the German line on the west of the Oise to bring it into proper relationship with von Boohn's Army between the Oise and the Marne. This necessitated a forward movement of the German troops on the Oise. Three sudden movements had in March, April, and May brought the German Armies far forward into the Allied fortified line, and it was evidently thought possible that a similar movement conducted on the same plan might be successful onco more.

The length of the front attacked measured 22 miles from the south of Montdidier to the south of Noyon. The ground on the right of



[French official photograph.

NOYON.

the attack was fairly easy, consisting of undulating plateaux. On the left it went through the wooded and cut-up country between the Oise and its tributary the Matz, which, after a very winding course, runs into the Oise at Montmacq. The valley of this little river formed the centre line along which von Hutier proposed to make his offensive movement.

From midnight on June 9 the now usual short but intenso bombardment was commenced, and a rain of gas-shells was thrown against the French positions. The infantry attack started at 4.30 a.m. It was conducted with extreme violence, regardless of losses. The French first line then ran by the north of Frétoy, south of Rollot, taking in Orvillers-Sorel, then going by Canny-sur-Matz, then to the north of Plessis-de-Roye and Plémont to the south of Cuy and Suzoy, rejoining the Oise to the south of Noyon in front of Mont Renaud. The assault of the Germans was received with the customary firmness of the French troops, who stopped or slowed down along various parts of the line the efforts of the enemy masses. The fighting was of a very obstinate character, consisting of attacks which were dealt with by counter-attacks, and by really obstinate tenacity, and the fortunes of the day fluctuated. Thus, in the centre along the valley of the Matz the Germans reached the villages of Ressons and Marcuil. To the west they were able to make but little progress, only attaining the outskirts of Rubescourt,

Frétoy, and Mortemer, but they could make no further progress. On the east the French still held the valley of the Divette at Belval, Cannectancourt, and Ville.

During the ensuing night, von Hutier endeavoured to increase his gains, throwing his strength on the valley of Matz and trying to enlarge towards the wings the ground he had gained. He succeeded in taking his front line to the south of Cuvilly, the wood of Ressons, and the plateau of Bellinglise; but on the right of his irruption ho was completely brought up in front of Courcelles, and on his left he only succeeded in just entering the wood of Thicscourt.

The next day the Germans continued their efforts to enlarge the wedge which they had driven into the French lines in the centre, and for this purpose they directed their chief efforts along the line Estrées-St. Denis, the point where the railways from Compiègne and Clermont joined, and also against Ribécourt-sur-l'Oise over the undulating and open plains through which the highway from Paris to Lille passes. Fighting was carried on with great fury and the villages of Méry, Belloy, and St. Maur were only taken by the Germans after suffering great losses. From Courcelles to Rubescourt, the French left still held its ground. In the centre von Hutier's troops only advanced about a mile and a quarter, reaching Marquéglise and the outskirts of Elincourt. On the French right, however, in the neighbourhood of Thiescourt, the assaults of the enemy compelled the abandonment of the wood of that name. The ground between the Matz and the Oise was of a very cut up character and covered with woods, which enabled the Germans to advance along the ridges covered by the surrounding trees. Following their plan of pushing on small parties as they did in the opening days at the end of March they succeeded at last in pushing the French out of this wood and debouching on to the plain beyond.

This compelled the French to fall back during the night of June 10/11, and they took up a line south of Vandelincourt-Antonval-Ribécourt, while a little later severe fighting took place in the streets of Machemont and Béthencourt. The German progress gravely affected the French positions on the other side of the Oise, and they were obliged to fall back from the northern edge of the wood to Carlepont to the forest of Laigue and the line Bailly-Tracy le Val. Meanwhile the order of the German advance in the direction of Marquégliso and Belloy had exposed their right, where the French had been able by a counter-attack at 10 p.m. on June 10 to retake the village of Méry. At first, yielding to the violence of the attack, the French troops fell back to the Aronde, a tributary of the Oise, then, re-forming, they fell upon the enemy along his whole front

and re-established their line to the south of Belloy-St. Maur and Marquéglise.

On June 11 the French undertook a counterattack on a large scale along a line of 71 milos between Rubescourt and St. Maur. This movement threatened the flank of the German advance on the Matz and the Oise. counter-attack was supported by tanks and was very successful. By the evening it reached the southern edge of Frétoy, held the plateau between Courcelles and Mortémer, pushed on a mile and a quarter beyond Méry, and, having taken the Genlis Wood and Belloy, reached the borders of St. Maur. In this brilliant operation 1,000 prisoners were taken and many guns. In the meantime, between Matz and Aronde, another effort made by the German centre was brought up short at Antheuil.

During the night of June 12 and in the early morning of that date there was no change in the general situation. On the French left, all the attempts of the Germans to retake the ground they had just lost were unsuccessful, and the French made some lit le progress to the east of Méry. In the centre they continued to hold their positions in despite of the violent efforts made to thrust them back to the Arondo. On their right the French, hanging on to the southern sides of Chovincourt and Marest, stopped the advance over the lower



[French official photograph.

Matz, but the Germans renewed their attacks, and after a time succeeded in capturing Mélicocq.

A further fresh attack developed on the morning of Juno 12 between the Aisne and the forest of Retz. Von Boehn resumed his offensive movement, and severe fighting took place round the villages of Dommiers, Cutry and Amblény.

This practically marked the close of the new German offensivo. In the ovening French counter-attacks thrust back the enemy beyond Matz, and Mélicocq and Croix Ricard were retaken.

On the next day, although the Germans tried advancing from their right in a new effort directed against the French position from Courcelles to the north of Méry, they were 'not able even to reach their objective, and they were driven back with heavy loss. In this and on the previous day's fighting the French captured in addition to a good many prisoners 19 guns, of which 11 were of heavy calibre. Von Hutier then gave up his . offensive. In the meantime, to the south of the Aisne, von Boohn's troops had continued the advance begun on the morning of June 12, between the river and the forest of Retz. They captured the villages of St. Pierre-Aiglo and Cœuvres, and managed to retain the outskirts of Laversine, and thus reached the

depression on the other side of which was the plain of Morto Fontaine, but all their efforts to debouch from these villages were in vain.

On June 15the Fronch were able by a smart counter-attack to retake Cœuvres, and thus put an end to the fighting. For both von Hutier and von Boehn were brought to a standstill, and their efforts which they had begun on June 9 had been of little advantage to them.

On June 18 von Below attempted to improvo the position, and to capture the town of Reims, which had so long formed the object of German ambitions. After a preliminary bombardment as the day was failing, three German divisions were sent forward along the semicircle of trenches which the French held between the slopes of Rémy on the west of Reims, and the fort Pompello on the east side of the town. The enemy obtained no successes whatever, and was driven back with very heavy losses, nor did he try to make any further attack in this direction. This may be said to close the battle, and for a time, at any rate, there was no further effort of the Germans to improve their position to the southern portion of the advance against Amiens. It was becoming more and more evident that the time would soon be at hand when the French could assume the offensive against them.



THE HÔTEL DE VILLE OF REIMS,



RUINS OF FORT LA POMPELLE, REIMS.

While the fighting had been going on on the Soissons-Reims segment of the Allied front, there had been little of moment on the remainder of the line, but on May 27 there was a fairly important gain by the Allies south of Ypres.

On May 27 the Germans made an attack between Locre and Voormezeele-the attack was delivered between 4 and 5 in the morning after a sharp bombardment on a front of about 6 miles, from near Locre to Kruis-Straathoek, near Voormezeele. The 8th, 56th and 58th German Divisions and the 16th Bavarians were engaged in the fighting, and were unsuccessful except north of Kemmel, towards La Clyte and west of Voormezcele towards Dickebusch Lake. At both these places the Germans made some progress against the French holding the trenches there; especially was this the case a little north of Ridge Wood, towards the east of the lake, but this was the limit of the German successes. By mid-day they were held at all these points; during the afternoon a good deal of the ground was regained, and on the morning of the next day a concentrated counter-attack regained the whole of the positions lost. A few prisoners and some machine-guns were taken by either side.

On the southern or Somme area of battle, the American troops attacked the Germans about a mile and a quarter north of Mont-didier, aiming against the salient in the German line there. This they captured, taking the village of Cantigny and some 140 prisoners. This was the first definite operation of any magnitude undertaken by the Americans, was well fought, and was a proof that the American Army possessed definite worth for offensive operations.

On June 3 a considerable improvement was made in the British line by the capture of the hill known as Mont de Merris, west of the village of that name. The troops engaged were the 29th Division and the 1st Australian Division, the former under Major-General D. E. Cayley, the second under Major-General Sir-



[Ulive Edis photo.

MAJOR-GENERAL D. E. CAYLEY, C.M.G. Commanded the 29th Division.

H. D. Walker. The attack was a complete success, and the position gained was of great benefit to us; 300 prisoners were taken from the Germans. There was also on this day a good deal of minor fighting about Aveluy Wood and in the neighbourhood of the Lawe River and Merville.

Let us now see what was done by our airmen during the month. With the coming of May, the long nights and brighter days favoured the operations in the air; although at the beginning of the month, and occasionally through it, there were periods when, owing to mist and rain, the work of the aviators was much limited, gradually, but surely, during the period under review, our airmen gained a decided predominance. The enemy, of course, denied this, but the statisties as to the relative gains on either side show most clearly which was the superior, not only on the immediate front of battle, but also far behind the enemy's lines.

On May 2, although the weather was not particularly favourable, being somewhat misty, in addition to the ordinary work of reconnaissance and artillery observation, five and a half tons of bombs were dropped by us on Chaulnes, Juniville railway junction, Bapaume and Caix during the night of May 2-3, and three very heavy bombs were also dropped from a low height on the lock gates at Zeebrugge. The actual fighting in the air was severe, and 14 German machines were erashed down and four others compelled to descend out of control, whereas only five of our machines were missing.

The Carlshitte works were struck, as also

were the station and gasworks All of our machines returned in safety. On this day the weather facilitated the work of the British airmen, a large number of reconnaissances were earried out and photographs taken, and the fire of the artillery was much facilitated. Over-20 tons of bombs were dropped on Chaulnes as before, Tournai and La Bassée stations and on Estaires, Marcelcave, Mclin, Comines and Middelkerke. The actual fighting in the air increased in intensity, and continued all day. Twenty-eight German machines were brought down and five others compelled to descend. Our anti-aircraft gunners brought down three German machines which had managed to come over our lines. All this was done with a lossof only 11 of our machines. With night a thick mist set in over most of the front, but still our airmen contrived to drop about two tons of bombs on Chaulnes and Junivillerailway junctions, and the whole of the machines engaged in this work came back without loss

The next day the mist lasted till the afternoon, when the weather slightly cleared and allowed some work to be done. However, although there was little fighting in the air, our men brought down one German acroplane and four others were driven down out of control. Two-



AMERICANS AT CANTIGNY: SMOKING-OUT THE ENEMY FROM CELLARS AFTER THE CAPTURE OF THE VILLAGE.

of our machines were missing, against which may be set off two of those reported as missing on May 3, which turned up. We again did bombing at night without any easualties to our own aviators.

The French during this time had done equally good work, accounting for 34 enemy machines, against which the Germans claimed to have shot down 25. The weather now became too bad for much work in the air. There had been a great deal of rain and also mist, but on May 6, after the rain had stopped, at 5 p.m., our airmen destroyed six German machines at a cost to themselves of only two, and the French brought down six, while 10 were seen to fall in a damaged condition. The French, moreover, dropped four and a half tons of bombs on the railway stations of Flaville-Martel, Mennessis, Ham, Guiscard, Noyon and Vermand. There was only one advantage we gained from the weather, which is that it materially increased the German difficulties in moving troops and transport in the shelldevastated areas in Flanders; indeed, much of the country had become a mere quagmire. One of our pilots had a thrilling experience during this period. Being out reconnoitring, he came across an enemy patrol of 12 machines. Notwithstanding the enormous disparity of numbers, he attacked the rearmost one, which was flying at a greater height than the others. The German dipped to avoid him, but the Englishman followed up and, firing at short range, sent the hostile machine out of control to the ground. Thoso of the enemy had meanwhile turned on the Englishman. Putting his aeroplane into a spin he went whirling down through them, but his control was shot away and his machine plunged down to within a few hundred feet of the earth, when it fortunately flattened out of its own accord. The sudden strain broke the back of the machine, it snapped in half, and the fuselage broke immediately under the pilot's seat. while the latter, seeing what was coming, had undone his belt, was fortunately thrown elear of the machine, and reached the ground in safety. The enemy, following, opened with their machine-guns, coming down to quite elose range, within some 30 feet, on our aviator; he could only reply with his revolver, but happily the English infantry, with their machine-guns close at hand, were able to bring so severe a hail of bullets on the Germans that, they turned and flew back.

On May 6 one British machine fought four German triplanes and one seout; shot down two of the former and came home safe.

On May 7 flying was again impossible till after 5 p.m. owing to the rain. The weather then cleared suddenly and our machines went out on their usual duties. In the eourse of these a severe fight took place in the neighbourhood of Douai, in which eight German machines were accounted for; in addition to this successful fight four others were brought down at different



Oyicial process ph.

ANTI-AIRCRAFT GUN.

points and one German observation balloon sent down in flames. These successes were obtained without any loss to ourselves. The Belgians at the north were also successful, setting fire to two German observation balloons near Zarren and crashing down an aeroplane in the Belgian lines near Westvleteren.

On May 8, the heavy mist which hung over the lines south of Arras prevented almost all air-work in that part of the field, but in the northern portion, where conditions were more favourable, severe fighting took place in the air throughout the whole day. Twenty-two hostile machines were brought down and seven others driven down out of control, while another German aviator was shot down by machine-gun fire from the ground. These gains were made at a cost of seven of our, own machines missing. The night was somewhat misty and very little work could be done, but both Douai and Marcoing were bombed without any loss to us.

Whenever possible our airmen earried out their work, and this sometimes led to great adventures. For instance, on the evening of May 7 flew to attack them notwithstanding the heavy handicap. The fight had hardly commenced when two other flights of German machines came up, making a total of 20 against our two. Nevertheless, our men continued to attack.



TWO AGAINST TWENTY.
A fight in the air.

two of our battle-planes, each carrying a pilot and observer, were over our front seeking for the enemy, and had proceeded so far as to be well behind the German lines. Here they saw seven of the enemy's scouting machines, and at once A series of rapid manœuvres took place, as our men swooped over and uncer the German machines, seeking to attack under favourable conditions, pouring out a rapid fire from their machine-guns wherever they could bring them

to hear on an enemy aviator. After a few minutes, one of the latter suddenly dropped down, leaving a trail of fire across the evening sky. Of seven other German planes following up three suffered a like fate, of which the first went down in a blaze of flame. Five others of the enemy were so riddled with bullets that they were forced to abandon the fight and were seen to dive in a homeward direction. This left seven machines against our men, who, by this time, had no more ammunition left and were compelled to withdraw. This they did in safety. Between the two they had accounted for eight out of the original 20, while they had compelled the remaining 12 to seek safety in flight. It may be added that on the following day the same two aviators fought four more engagements, in which they crashed down one German machine and drove three others to the ground out of control.

May 9 was a cloudless day and our airmen showed great activity. Besides their ordinary work of reconnoitring and taking photographs and aiding the artillery, they let fail 24 tons of bombs on various targets. Severe fighting took place in the air, especially towards the end of the day. Twenty-seven German machines were brought down and 12 others driven out of control and one of their observation balloons was destroyed. We lost six of our aeroplanes.



LIEUT. FONCK, The famous French aviator.

It was at this time that the German airmen taken prisoner began to tell our men how much they had suffered from them. It was stated that the German air forces had lost some 700 pilots and observers since the beginning of the offensive of March 21. One reconnaissance flight alone lost 130 of its



[French official photograph.

CHATEAU THIERRY: A PATROL BY THE RIVER-SIDE.



Wineral , holograph.

BRITISH TRANSPORT CROSSING A PONTOON BRIDGE ON THE MARNE.

men. They expressed great admiration for our aviators, but explained that in their opinion our machines were better than the German.

Lieutenant Fonek, the well-known French aviator, during two patrol flights on May 9 brought down no less than six German aeroplanes. On the first of these he brought down two within 10 seconds; the third, five minutes afterwards. He then returned to his aerodrome, and after a brief rest went off again. During the second flight he brought down three more German two-seaters in less than five minutes. Two of our airmen had performed a similar feat, but Fonek was the first Frenchman to do so. These last successes gave him the head score on the French side.

May 10 was unfavourable for air work for the greater portion of the Allied lino. Here and there, there was some activity, in which 17 German machines were accounted for, but at a loss to our own of nine.

The next day was equally unfavourable, but still some work was done, but only one hostile machine was brought down. On the other hand, we lost two. The French also did good work on these two days, bringing down or damaging 10 enemy machines and setting a captive balloon on fire. They also

dropped some seven tons of bombs. The German report on the fighting on May 10 and 11 was that they had shot down 19 enemy aeroplanes; this is very nearly double what our returns showed, viz., the German losses, 17; our losses, 11. If they added in the six we lost on May 9, then altogether 17, while our seore would be raised to 45.

On May 15 a great deal of work was done by our air warriors: from dawn till dark 24 tons of bombs were dropped on Tournai, Courtrai, Chaulnes, Douai, Bapaume, Menin, the river Somme and the Zeebrugge Canal. The enemy was also active in the early morning and again in the evening; hostile scouts attacking our bombing machines with particular vigour; nevertheless, we brought down 37 German aeroplanes and one was shot down by our anti-aircraft. We lost 11. Bombing was continued after dark by our night-flying aviators, who dropped over 14 tons of bombs. This day also marked an important raid into Germany. Early in the morning our machines set out to bomb the factories and railway station at Saarbrücken. They were met while erossing the German lines by 10 hostile scouts, and our men had to fight the whole way to their objective, and by the time Saarbrücken

was reached 25 hostile machines had collected against them and attacked with great vigour. In spite of all this, hewever, 24 heavy bombs were dropped on our objectives, several bursts were seen on the railway and a fire was started. Having done their work, our aeroplanes then turned their attention to the enemy's fighting machines, five of which were brought down. We lost only one on the whole expedition. The French did a good day's work also on this date. Seventeen German machines were brought down and one more was demolished by the anti-aircraft guns; four enemy captive balloons were also set on fire.

May 16 was an important day for our air forces. A great deal of reconnoitring work was done, and a large amount of registration for the artillery. Twenty-three tons of bombs were dropped on important railway stations, aerodromes and billets. The actual war in the air was intense in the early morning and in the evening. Thirty hostile machines were brought down, and five others driven down out of control. Two more were shot down by our anti-aircraft artillery. Two hostile machines were compelled to land behind our lines, and during the night one Gotha was also compelled to land behind our trenches. This total of 40 machines accounted for was

won by a loss of only five to us. During the night, too, a further $10\frac{1}{2}$ tons of bombs were dropped on various railway stations and billets in the neighbourhood of Bapaume, Péronne and Rosières. It was this constant worrying at the resting places of the German troops which produced a considerable diminutien in the fighting capacity of the German infantry.

It would be wrong not to recount some of the exploits of the German aviators. instance, on the night of June 15-16 they dropped bombs on the Belgian Hospital at Calais. A few days later they made a determined attack on our large hospitals near Etaples. They must have known perfectly well that these were hospitals, for they were marked with a Red Cross, and as they were right down on the coast they could not have been intended for any active military. purpose. Moreover, there was no military target anywhere within range of the hospitals. This no doubt was the reason why they were so boldly attacked, because the Germans knew that little resistance could be offered. German aeroplanes during the daylight had often been seen over this part, and they must have known without a shadow of doubt that they were Red Cross establishments, as they were



Official photograph.

BRITISH TROOPS CROSSING THE MARNE IN EARLY JUNE.

marked most distinctly. The hospital hut. contained large numbers of badly wounded men undergoing treatment, to whom rest and tranquillity was everything, and it was for this reason that they were taken far down from the front. Only the night nurses and attendants were in the ward keeping watch over the patients and ready to attend to their wants, when suddenly the noise of aeroplane engines was heard, and then, without the slightest warning, bomb after bomb fell eraslung amongst the huts, killing the wounded, pounding the wards out of all shape, and then turning machine-gun fire on them from a low elevation. The Germans were out to kill, and the faet that those whom they intended to destroy were helpless invalids, who could do nothing to save themselves, only made it another reason why the attack should be made. They saw what they were doing. They meant to do it: It was an orgy of bloody lust. The accounts of shrapnel bombs are nonsense; it was machinegun fire from low elevation.

There were a few anti-aircraft guns in the neighbourhood, and these were used against the Germans, and one aeroplane was brought down. The officer in charge spoke perfect English, and claimed to have been in the German diplomatic service before the war. When he

vas asked why he bombed our hospitals he diselaimed all knowledge of having done so, and said: "If you will insist upon putting your hospitals near railways you will get them bombed."

It was at this time that a question was put to the Imperial German Chancellor in the Reichstag eoneerning protection against air attacks. He said "that perfectly sure methods of preventing air raids do not exist. In the first place comes good anti-aircraft defence; then the menace of reprisals against the enemy eapitals. The Army administration is active in both directions." "Aecording to newspaper reports," said the German Chancellor, "serious and urgent voices were raised in the French Chamber, and especially in the Municipal Council of Paris, in favour of an agreement amongst the belligerents as to the eessation of air attacks against towns outside the zone of operations. This so far has not led to definite proposals from the enemy's side. Should this happen, military quarters would first be eharged with the examination of the proposal." The Germans were beginning to find that the medicine they had so long served out to France and England was now being given to them, and the Rhine towns were receiving the same treatment they had so often given



[French official photograph.

A TRENCH ON THE MARNE.



[Official photograph.

AN OUTPOST ON A CANAL BANK.

to their adversaries. In accordance with German psychology they at once began to howl at the wickedness of bombarding their towns!

During all this time they kept up the longrange fire on Paris, and from March 21 to June 10 they fired 43 shells into Paris, killing 34 people and wounding 91.

The bombing of the ammunition dumps, bivouacs and military points in the country immediately behind the Front went on incessantly, for the weather was now favourable to our aviators. It also revived the German efforts to deal with them, and on more than one occasion the so-called "travelling circuses," i.e., specially organized aeroplane squadrons, the members of which were of a picked character, made many efforts against their British opponents. The Germans had one excellent plan. The aeroplanes of these circuses were usually picturesquely painted, and so were easy to distinguish, which was precisely what our men wanted.

On May 17 one of these combinations came into collision with some English aviators. The battle swayed backward and forward for some time, but at last the British airmen drove down three of their opponents, and the rest, with great prudence, retired.

Similar fighting went on whenever a chance occurred. On May 19 our aviators brought down 30, but on this occasion they lost 12 of their pilots. On May 20 Landau in Germany

was visited and a ton of bombs dropped on barracks, gasworks and railway stations; from this daylight raid our machines returned without any loss.

The Kölnische Volks:eitung expressed in no measured terms its indignation that the Entente airmen should have selected May 17, i.e., Whitsuntide, for their raid on Cologne, which was their first, in which 25 persons were said to be killed, and 47 wounded. This is somewhat amusing, because all this time the Germans were bombarding Paris, not caring the least where the shells fell. Our airmen, when they bombarded Cologne, took care only to drop on objects of some military value; moreover, on Whit Sunday itself, a big air raid was made on London, in which 44 were killed and 179 injured, and their bombing expedition directed against the hospitals at Etaples on the same date produced 300 casualties. After this, due no doubt to the improved air defences of London, all attempts on our capital ceased. Something also was probably due to the fact that we were now in a position to bomb the Rheinish towns, and they did not like it.

On May 21, Thionville, Mctz and Coblenz on the Rhine were also bombed. It may here be remarked that since the opening of hostilities on March 21 our airmen brought down 1,000 German machines and dropped more than 1,000 tons of bombs over the enemy's lines.

May 24 saw two further raids into Germany one on Mannheim and the other on the station



[Official photograph.]
FRENCH MULE TRAIN AND BRITISH SOLDIERS IN MARCHING ORDER.

at Kreusewald, just east of Saarbrücken, and in the morning of the next day the muchbombed Metz-Sablons station was again dosed.

There can be no doubt that the frequency and success of our raids had produced a great effect on the German air forces. They wanted to stop them, but they maintained a strict defensive for this purpose. One of the conflicts which ensued, and there were many of them, is worthy of a special description. On Whit Monday a number of German aeroplanes attacked two British machines which were in search of adventure. One of the latter closed with an enemy and fired into him at close range. At the same time a second enemy machine attacked the British pilot from above and set his machine on fire, and down he dropped some 2,500 feet, in the course of which in some miraeulous way the occupants succeeded in extinguishing the fire and then flattened out.

The second British aeroplane had meanwhile engaged a hostilo machine, diving on it from above, when he struck the German machine and had the cover of his right-hand top plane ripped away. This seriously affected his stability, but, notwithstanding his own distress, he manœuvred in the direction of the opponent who was still dropping earthwards, and, attacking him, forced him to abandon the pursuit. Now the first British plane attacked, having managed to recover, attacked in his turn the German himself with his machine-gun. The German was winged and abandoned the fight and the whole of his companions accompanied him. The two British aviators, although in somewhat parlous plight, managed to reach their home with very little injury. Machines manned in this way take a great deal of beating, and thus at the end of May our air service stood in a dominating position over that of their adversaries.



CHAPTER CCLXXIV.

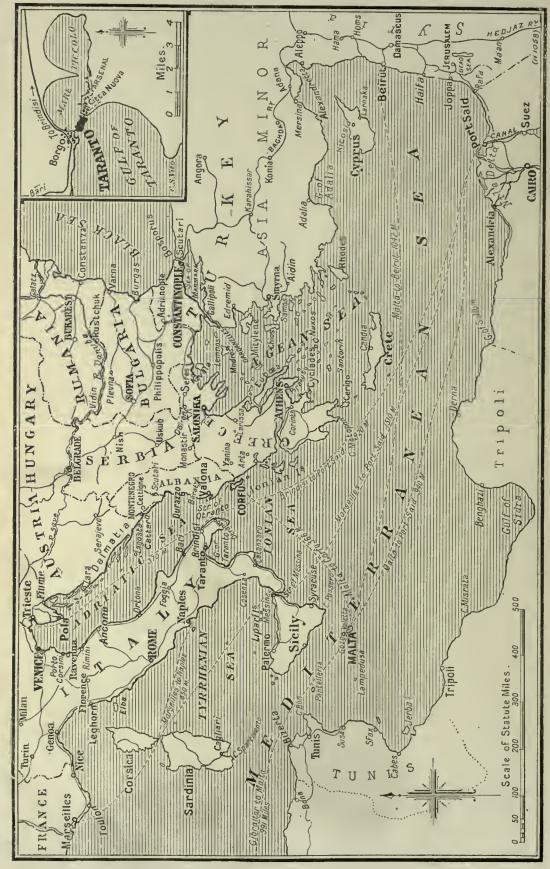
THE ALLIES IN THE MEDITER-RANEAN.

THE MEDITERRANEAN PROBLEM—ALLIES OPERATE IN SECTORS—ALLIED NAVAL COUNCIL—SUBMARINE HUNTING—ALLIED BASES—THE FRENCH NAVY'S WORK—ITALY AND THE AUSTRIAN FLEET—ITALIAN HEROES—ARRIVAL OF THE AMERICANS—THEIR SUBMARINE-CHASERS—THE OTRANTO BARRAGE—DRIFTERS AT WORK—VENICE DEFENCES—THE JAPANESE NAVY—ALLIED COOPERATION IN THE AIR—RAIDS—THE ALLIED ACHIEVEMENT.

F the many problems that confronted the Allies during the Great War, few were more complex than those of the Eastern Mediterranean. entry of Turkey into the struggle not only led to the Gallipoli Expedition, but by making hostile the coasts of Asia Minor and Syria, necessitated the presence and action there of Allied naval forces. The evacuation of the Peninsula occurred in January, 1916, before this German U-boats appeared in those waters, and the submarine had become a serious menace to the transport and reinforcement of troops to Egypt and the Ægean, as well as to the keeping open of the Mediterranean route for commerce.

The position in the Balkans towards the end of 1915 became extremely difficult. Serhia was invaded, Bulgaria's army was concentrated on her frontier, and King Constantine of Greece maintained an attitude of armed neutrality. Great Britain and France determined on military action, and early in October, 1915, the first units of the Expeditionary Force landed at Salonika. This was an additional tax on the Allied naval forces, for the stream of transports and supply ships increased, and thus a larger target was presented to the submarines. Special preventive measures were called for, and put in train.

When Bulgaria definitely joined with Germany Serhia lay at the mercy of the enemy. The plight of the Serbians went from bad to worse, and their rescue became the imperative and immediate duty of the Allies. The French and Italian Navies, with British cooperation, successfully evacuated the remnants of the Army and the civil population, transferring them to Corfu, which was occupied by the Allies in January, 1916. With an everincreasing force at Salonika relying entirely on sea communications, and with Italy occupied in the treble task of defending her land frontiers. creating and dispatching a military force to Albania to replace the Serbian Army resting and reconstructing at Corfu, and keeping a watch by sea on the Austrian Navy, the Allied position was one of grave anxiety. The change of events in Greece at the end of 1916 —the abdication of King Constantine and a reversal of the country's policy-somewhat relieved the anxiety. It was sea-power which finally helped to clear an otherwise obscure situation. The silent relentless grip of the Naval forces in the North Sea was effective from the beginning of the war because of the unity of command. Only the British Navy was concerned; it acted immediately and in accordance with a definite strategical plan. The Mediterranean presented a totally different



THE EASTERN MEDITERRANEAN.



FRENCH ANTI-SUBMARINE 75mm. GUN IN A MERCHANT SHIP.

problem, but once the Powers concerned evolved a co-ordinated strategical plan, their efforts were effective, and played a vital part in the final victory of the Allied eause.

When the British Fleet "moved" to its war stations on July 29, 1914, France promptly dispatched her squadrons from the Northern Coast to the Mediterranean. The coming of Italy into the war on May 23, 1915, added materially to the Allied naval strength, but it did not promote unity of cemmand. The Mediterranean was divided into various sectors. Each Allied Power-Great Britain. France, and Italy-was responsible for certain of these sectors. It was necessary to provide against any attempt of the Austrian Fleet either to earry out raids or to challenge a decisive engagement. At the same time, the submarine menace had to be met and conquered. The Austrian ships were at Pola and Cattaro, and were masked by an Allied Fleet at Taranto, while smaller divisions at other places on the Italian coast were in readiness to counter efforts at raiding.

The U-boats came from three quarters: first, through the Straits of Gibraltar; secondly, from the Adriatic; and thirdly, to a less extent, from the Dardanelles, a certain number of boats being earried overland in sections from Germany to Constantinople, as well as to the Austrian ports, to be reassembled and sent to sea. After the Russian Revolution, the accession to the Turco-German forces of several warships in the Black Sea constituted a further threat to the Allies in the Mediterranean; and the foray of the Goeben and Breslau from the Straits in January, 1918, pointed to the possibility of an attempt being

made by the enemy, assisted by the cx-Russian ships, to make a simultaneous sortic with the Austrian Fleet. Special preparations were needed to meet such a possible scheme of attack.

The unsatisfactory system of dividing the Mediterranean into sectors was among the subjects discussed at a Conference of Allied naval experts towards the end of 1917, when the authorities decided that a more effective co-ordination of forces and a common plan of action were necessary to meet the submarine. The result was the creation of an Allied Naval Council. This body consisted of the Ministers of Marine and Chiefs of the Naval Staffs of the countries represented, but it was distinctly stated that "the individual responsibility of the Chiefs of Staff and of the Commanders-in-Chief at sea towards their Governments as regards operations in hand, as well as the strategical and tactical disposition of the forces placed under their command, remains unchanged." The next step towards real unity of control was thus described by Sir Eric Geddes in his speech on March 5, 1918:

The naval command in the Mediterranean rests with the French, and in the Adriatic with the Italians, British naval forces in both seas acting under the French and Italian admirals. This matter of antisubmarino warfare in the Mediterranean was referred by the Allied Naval Council to a committee to meet at This decision merely extended the principle of "one Allied front" which has been adopted in military matters. The committee accepted fully the anti-submarine proposals put forward by Vice-Admiral Calthorpe, the British Commander-in-Chief in the Mediterranean, and it was agreed that we should forthwith adopt and adapt to the Mediterranean the measures which have given such success in the waters around these islands, and that the main anti-submarine operations decided upon should be undertaken under Admiral Calthorpe's orders.

Every form of patrol vessel and anti-submarine craft was brought under the direc-



THE SEA FORT, BRINDISI.

tion of this central organization; moreover, the British plan of dealing with the submarines, which had been found to work well in home waters, was now adopted for the Mediterranean, with excellent results.

To show what hard work was involved in



ADMIRAL GAUCHET.

In supreme command of the Allied Forces in the Mediterranean.

the incessant patrolling and submarine-hunting, it may be mentioned that the destroyers averaged twenty days a month at sea, and the trawlers 25 to 27. One of the principal results was a demand for the immediate establishment

of a barrage at the exit from the Adriatie—a measure intended to put a stop to the free run of the submarines from their Austrian ports of origin. There was established a force of British, French, and American vessels, numbering about 300 craft, to work in this barrage at the Otranto Straits. That was in addition to Italian craft.

Towards the end of June, 1918, American destroyers arrived to cooperate in the work of protecting the barrage. At the same time, the heavier ships of the Allies were so disposed as to force the enemy to action should he deem it safe to come out. The central authority was established at Corfu. This island became valuable on account of its proximity to Otranto, and of its suitability as a training centre. the adjacent waters offering ideal facilities for exercising a battle squadron. The ships could get down to the southern end of the waterway and fire at 20,000 yards range without interfering in any way with other operations. When the Germans got hold of the greater portion of the Black Sca Fleet, the possibilities presented thereby foreed the authorities to revise their dispositions, but no alteration was made in the disposition of tho forces employed against submarines and in the protection of commerce. These forces were supported by airships, kite-balloons, and seaplanes. The lines of communication were so well protected that, of the thousands of men who were convoyed to Salonika through the Ionian Isles, not a single life was lost. There was one ship sunk, but all on board were saved,

and the submarine destroyed. The work of the men of the Mercantile Marine, in the drifters and other types of craft, throughout was worthy of the highest praise.

The central, or supreme authority, at this period, was at Corfu, under the French Admiral



REAR-ADMIRAL A. W. HENEAGE, C.B.,
Senior British officer at Taranto.

Gauchet. Other authorities were the British Rear-Admiral A. Hayes Sadler, at Salonika, and the British Vice-Admiral the Hon. Sir S. A. Gough-Calthorpe, at Malta. The Italian battle fleet was at Taranto, under the command of Admiral Acton. In the Adriatic, the defences of Venice were controlled by Vice-Admiral Marsolo, the new naval port of Ancona was in charge of Vice-Admiral Gallcani, while the naval forces at Brindisi were under the command of Admiral Cusani-Visconti. The Senior British Naval officer at Taranto was Rear-Admiral A. W. Heneage; at Brindisi, Commodore W. A. H. Kelly; and at Corfu, Captain C. V. Usborne. The barrage at the Straits of Otranto was in charge of Captain G. O. Stephenson, R.N.

When the French naval forces were first concentrated in the Mediterranean they were under the command of Vice-Admiral Boué de Lapéyrère. In conjunction with the British Mediterranean Flect, these forces secured from possible Austro-German attacks the transport to France of the Algerian troops. The Franco-British ships also patrolled the Adriatic, sinking

by gunfire the Austrian erniser Zenta, and they established a rigid guard over the Austrian naval forces at Trieste and Pola. After the entry of Turkey into the war, in November, 1914, a French squadron was 'ormed, under the orders of Admiral Guepratte, to act in conjunction with the British naval forces based on Mudros, for the attack in the Dardanelles. A blockade of the coasts of Asia Minor, as well as the protection of the Suez Canal from Turkish attacks, was undertaken by the Syrian Division, under the orders of Vice-Admiral Dartigo du Fournet. The French ships engaged in defending the canal were the Requin and the d'Entrecasteaux.

When Italy declared for the Allies, the policing of the Adriatic was confided mainly to her naval forces, assisted by French destroyers, under the orders of Frigate-Captain de Cacqueray. After the German submarines



VICE-ADMIRAL MARSOLO.
Commanded the Naval Forces defending Venice.

made their appearance in the Mediterrancan, the F ench battleships, under the command, first of Admiral Boué de Lapéyrère, Commanderin-Chief of the Allied forces in the Mediterranean, then of Admiral Dartige du Fournet, and later of Admiral Gauchet, remained in port, chiefly at Malta and Corfu. Among the principal operations carried out in the Adriatic was the transportation from Albania to Corfu of the remnants of the Serbian Army, including

a large number of sick and wounded—a difficult undertaking earried out with complete success by Admiral de Gueydon. The organization of the base at Salonika was entrusted to Admiral de Bon, who, on his appointment to the post of Chief of the Staff of the French Navy, was



VICE-ADMIRAL MARQUIS CUSANI-VISCONTI. Commanded the Naval Forces at Brindisi.

replaced by Admiral Salaun. The latter officer was responsible for the blockade of Greece, until the deposition of King Constantine and the advent to power of M. Venizelos, in December, 1916.

The ships of the first line, battleships and eruisers, except for the operations at the Dardanelles, were not called upon to undertake great military operations, owing to quieseenee of the Austro-Hungarian Fleet. In 1918, however, the collapse of Russia and the subsequent seizure by the Germans of the Black Sea Fleet made necessary the reconstitution of another French squadron at the

Dardanelles, which was placed under the command of Admiral Amet. The Syrian Division, commanded by Admiral Varney, occupied Beirut and made its presence felt at Alexandretta, after having cooperated successfully on many occasions in the land operations of General Allenby.

The principal rôle of the French Fleet in the Mcditerranean was the protection and support of the whole of the forces at Salonika. This involved the organization, by Admirals Faton and Ratye, of the eonvoying of merchant ships, the uneeasing pursuit of the enemy's submarines, mine-sweeping, and the securing of the supplies of men, food, and material. These aims were achieved under the supreme direction of Admiral Gauchet, on the one hand by destroyer flotillas, torpedo boats, mine-sweepers, etc., and on the other hand by the uneeasing use of aeroplane and airship patrols, having their bases spread over all the eoasts of the Mediterranean. By their wonderfully elose ecoperation with the patrolling ships these aircraft over and over again upset the earefully prepared plans of the enemy submarines.

To an English Press representative who interviewed him in February, 1918, the commander in charge of a French mercantile patrolling station in the Mediterranean said: "We are reducing convoying to a fine art, but we have all sorts of difficulties to face. Our pilots, who know every detail of the coast backwards, are having the time of their lives in exploiting their knowledge." He then described hew such pilots found their happiest hunting ground along portions of the eoast off which vessels had been warned by sailing directions, as the skippers, brought up on life-long lessons of prudence, found it very trying to their nerves to disregard the latter and trust to the local skill of the pilots. Neutral spy vessels which occasionally appeared presented a difficult problem. So, too, did the necessity of having to exhibit lights at night when sailing in eonvoy. It was impossible to abolish all lights, and on more than one occasion a U-boat commander had been able to pass unseen up the lino of a eonvoy and sink ship after ship, making good his own escape in the darkness. Yet the suecess achieved by the Allied convoy system was proved by seme interesting figures relating to a French Atlantic port which a special correspondent of The Times received from the

naval authorities in August, 1918. From February 1 to July 1, 1918, of 3,262 vessels escorted to the coast of Spain, only one was torpedoed; 1,363 vessels were safely escorted to the coast of England. Of the 391 vessels escorted to America, not one was lost. These figures were exclusive of vessels carrying troops. A certain number of vessels sailed



VICE-ADMIRAL ALFREDO ACTON.

Commanded the Italian Battle Fleet.

without an escort, and of these 27 were lost. The value of escort was therefore obvious.

The same correspondent was permitted to inspect the training course for officers' and men engaged in dealing with the submarine menace. He saw the "listening school" and the hydrophone section, and also the methods of instruction in range-finding defensive measures against U-boat attacks. On the aviation side the "spotting" for submarines by airships, seaplanes, and kite-balloons was described. It will suffice to mention these matters-all of which are dealt with more fully in other chapters of this History—only as a reminder of the very important and highly teclinical work of the French seamen. A vast amount of organizing and constructional work was also accomplished at the French ports. In 1918 the northern ports took an important share in keeping open the channels of communication for the stream of men, munitions, and material from America which made such an immense difference to the military situation on the Western Front. Similarly, in the south. A

Press correspondent who visited Toulon in August, 1918, gave the following picture of industry and growth at this great French naval arsenal:

When I reached Toulon its aspect from the sea was even more deserted than that of Portsmouth in the days of war. Ashore, however, one sees that Toulon is still the great base of the French Navy, the storehouse from which are dispatched all those thousand necessaries of ships-coal, oil, shells, new guns, depth charges, torpedoes, new compasses, new charts, clothes, food, mess traps, and mails. Admiral Lacaze, the former Minister of Marine, who is now the Commander-in-Chief at Toulon, received me at his office, and in a few moments that could be snatched from the responsibilities of the post outlined the work that is done in the port and the arsenal. Toulon Dockyard is the great repairing centre for French warships, and, since the Mediterranean is not always of the dainty calm and southern ease that it has shown us on this passage, repair work, particularly for the smaller craft, is often heavy. Mercantile repair work is mainly done at Marseilles, but urgent needs can always be met by



REAR-ADMIRAL L. GALLEANI.
Commanded Allied Naval Forces at Ancona.

Toulon, as happened within the past month, when two British merchant ships which had been torpedoed were towed in and patched up. The arsenal has grown out of all belief. There are now five times as many women and eight times as many men employed there as before the war, and the director has a reserve of some four or five thousand women enrolled who can be called in at any time of extra need.

Arduous and exacting, with no visible glory attaching to it, was the task performed during four years by the French Fleet in the Mediterranean. It was undoubtedly in a measure due to its work that the efforts of the Allies were crowned with success, and that Bulgaria and later Turkey were forced to lay down their arms.

It may be said that, generally speaking, the Austro-Hungarian Fleet in the Adriatic followed the tactics of the German Navy in the North Sea. Apart from rare excursions, never far from shelter, it kept to its mine- and fortress-defended base and relied upon the submarine. In another respect the war in the Adriatic possessed a character of its own. In no other part of Europe—perhaps in the world—is there an example of a sea-pocket of which one shore possesses a number of magnificent bases for naval operations, while any operation undertaken from the other shore is exposed to great risk without the possibility of adequate defence.

These were the conditions in which, when it

situation demanded and that experience indicated to be necessary.

The task of organizing the defence of the Otranto Straits, of assuring the communications with Valona, and of the latter with the interior and Macedonia, was partly that of the Italian Navy, which at all times assisted in the guard kept over the convoys to the East. The Italian Fleet also performed splendid work in connexion with the evacuation of the Scrbs from Albania, particulars of which will be found in Chapter CLXXXIX.

In other directions the Italian Fleet over-



ITALIAN SUBMARINE-CHASERS.

began liostilities, the Italian Navy had to operate in the Adriatic; in no other part of the field of naval warfare wero the conditions similar. At the outset, the Austrians-like the Germans-adopted the "cut and run" tactics. Profiting by their splendid positions on the Dalmatian shoro, they bombarded Italy's coasts at dawn, and at a prudent distance shelled defenceless towns, the ships afterwards returning to their hiding places in the labyrinth of the Dalmatian ports. This state of affairs called for prompt and energetic action. The Fleet multiplied its scouts and patrols in all directions, established formidable defences at most points of the littoral, and aided the Army on the Isonzo and the lower Piave. To sum up, the Fleet did all that the

came a thousand difficulties, and by the spring of 1918 the naval offensive was undoubtedly in its hands. This was obtained by the energetic and daring enterprise of the lighter vessels, torpedo craft, and the airmen. From the time that war broke out the battleships were practically confined to the harbours, none putting to sea for any distance without the greatest caution. The peril likely to be incurred by heavy and comparatively slow ships in a narrow sea like the Adriatic was such as to render the leaving of their base an act of folly unless the conditions practically assured the probability of decisive action with similar forces. By securing the command in the Adriatic, the Italian Fleot, among other objectives, destroyed tho menace to the right flank of the Italian Army.

Some of the most thrilling deeds of the Great War are associated with the motor scouts—craft so small that it seems incomprehensible that they could do such great damage. And yet a 30-ft. boat can lay claim to sinking a Dreadnought. The enemy ships remaining in port, it was the Italian seamen's business to seek and destroy them. And in this the small motor scouts played a prominent and successful part. These swift-moving little vessels, with a



CATHEDRAL OF ANCONA After the Austrian Bombardment.

crew of less than a dozen, carried two torpedoes on either side of the deck. The first attempt was made on the vessels in Pola harbour on the night of November 1-2, 1916. The hero of the exploit was Commander Ildebrando Goiran It was a dark, foggy night, and shortly after midnight, in his scout, or "M.A.S." (tho Italian contraction for Motoscafi anti Sommergibili), in company of a torpedo boat, he lay close to one of the obstructions which barred the entry to the Faisana Channel, the great outer roadstead of Pola. It was necessary to get over or round the obstructions, and Goiran succeeded. Within half-an-hour he was in the harbour, which appeared to be deserted. A sailor, De Angelis, volunteered for tho perilous task of showing the way back after the blow had been struck. He passed in a skiff beyond the obstruction and made his investigations. Goiran searched the harbour thoroughly, and was near to San Gerolamo without finding a trace of any ship, when suddenly the shadewy

bulk of a battleship loomed out of the water. Cautiously advancing, Goiran satisfied himself that she was of the Maria Theresa type, and, at a distance of about 450 yards, launched his torpedoes. The torpedoes, however, were caught in the protecting nets, the alarm was given, anti-aircraft guns came into action, and the flares broke out. It was thought that an air raid had commenced. Goiran's position was desperate, but the faithful De Angelis displayed the signal agreed upon. Goiran saw it, and, following, picked up his companion and rejoined safely the waiting torpedo boat. The blow had failed, but Goiran showed that Pola was not impenetrable. He gave the example to those who followed.

Little more than a year later, it was the turn of Muggia, the great newly constructed port of Trieste, and the hero, whose qualities were revealed fully for the first time on this occasion, was Luigi Rizzo. Aged 31, and formerly in the Merchant Service, this sturdy son of sunny Sicily now showed his mettle in the winter



ST. APOLLINARE, RAVENNA.
Bombed by the Austrians.

mists of the Adriatic. This was how he sank the battleship Wien. It was on the night of December 9-10, 1917, dark and moonless, that Italian torpedo boats cautiously approached the port. The night grew darker; they steered with increased caution. The torpedo boats suddenly stopped; they were at Muggia. Two motor scouts proceeded. Rizzo guided them, recognizing the coast. It was midnight,

and they had not been perceived. Rizzo cut the wire entanglements at the mouth of the . harbour, and his boat shot through the gap' the others following. It was about two o'clock in the morning when the outlines of a great vessel were seen, and then another was descried. Rizzo went for the first, while Ferrarini, in the second motor scout, steered for the other. Two torpedoes were each discharged by Rizzo and Ferrarini, and the two warships were both hit. Rizzo sank the Wien, but Ferrarini was not so fortunate, though his victim was badly damaged. Great confusion followed the attack; guns were fired and torpedoes discharged, but both scouts escaped from the harbour and reached their base. Rizzo was said to have been occupied for nearly twelve months in working out the details of this daring attack.

There is the story of the "Four of Pola," as the whole of Italy call the four sailors who took part in the memorable excursion to Pela ou May 14, 1918. On this occasion a boat capable of climbing over obstacles blocking the harbour mouth was used. "Sea-tank" may well describe her. She got into the harbour, and Lieut.-Commander M. Pellegrini, in command, blew up with his torpedoes a battleship of the Viribus Unitis class, of 20,000 tons. A correspondent who spoke to those who were on the escorting ship said that there was not a minute's delay after the last adjustments had been made. Commander Pellegrini replied, "Yes, sir," to the captain's question whether he recognized his positions. Then he and his three com-



MUGGIA HARBOUR.



POLA HARBOUR.

panions put on rubber suits that could be immediately inflated.

"Addio. In bocca del lupo" ("Good-bye. Into the wolf's mouth with you"), said the captain. The four made off towards the harbour mouth. The escort waited for the signal that the task had been accomplished. All at once, after nearly an hour, they saw the sudden flash of a gun. Immediately afterwards came the noise of torpedoes striking their quarry and exploding. A moment after, and the harbour had sprung into life. Batteries opened, machine-guns sputtered, rifle shots eould even be heard by them, while from everywhere the beams of searchlights poured down into the harbour. Every searchlight deserted the outer sea and concentrated upon that space where Austria's battleships were moored. This eonfirmed the watchers in their assumption that Pellegrini had got through, and that it was his torpedoes they heard. The loud uproar eontinued, and then, a full two minutes after, up from the harbour soured a signal light, as arranged, saying, "I've fired my torpedoes against a vessel of the Dreadnought type." Then, perhaps half a minute after, came a second signal, which read, "There is no more to be done for us; good-bye." For Pellegrini and his companions knew well that if by some miracle they could get into the harbour, there was no miracle that could bring them out again.

These signals were followed by a burst of furious machine-gun fize. The watchers were discovered and had to turn for home. But for 20 minutes more, as they sped across the sea, they could distinguish the sounds of firing. They had no doubt that Pellegrini and his men fulfilled their errand, especially because of the calm and unhurried way in which he sent up his signals, not immediately, but after two or three minutes of delay. Before leaving Italy, Pellegrini left a note addressed to his family stating that he had gone on a special mission, and that in case of his non-return they

that a powerful enemy squadron was approaching. There were two battleships of the Viribus Unitis class, preceded, flanked and herded by 10 destroyers. I said to myself, 'You'll never get a chance like this again. You'vo got to go about it.' I ordered Aonzo to attack as he thought best, and I made straight for the squadron. They did not see or hear me. When I judged that the moment had come, I slipped in between the second and third of the escorting destroyers. As I passed, the former



[Italian Naval official photo.

COMMANDER RIZZO AND LIEUTENANTS AONZO AND GORI.

were not to mourn him, as he would have done his duty. The other three left similar missives.

Rizzo's second exploit was more amazing than his first. In December, 1917, he sank a Dreadnought in harbour—the Wien; in June, 1918, he destroyed another—the Szent István—in the open seas of the Adriatic. No other individual in this war had the fortune to sink two such monsters. In company with another motor-scout, commanded by Midshipman (afterwards Lieutenant) Guiseppe Aonzo, he had been mine-sweeping off the Dalmatian coast. When making for his home station just before daybreak he noticed volumes of smoko. In Rizzo's own words, "Wondering what it was I changed my course, and was soon running northward. I could make out in the dim dawn

caught sight of me, and alarm whistles were blown violently. She began firing, but her shells passed over us. I was already between the lines at a distance of between 400 and 600 feet. I let go my torpedoes. One struck abreast of the funnels; the second struck farther aft, but also exploded with full force."

A Vienna telegram on June 12, 1918, admitted that the battleship Szent István had been lost, as the result of a torpedo attack. Rizzo, his work accomplished, made speed to escape, pursued by a single destroyer, and so close was she that her shells passed over the scout. Ever resourceful, Rizzo dropped two depth charges, and the destroyer was so badly holed that she was compelled to give up the chase. For his valour and skill Rizzo was promoted to Captain and appointed Knight of

the Military Order of Savoy. Meanwhile Aonzo had launched his torpedoes against the second battleship, which he hit astern, and

The last feat of this character was recorded a few days before the cessation of hostilities. Engineer-Commander Raffacle Rosetti and



CAPT. RIZZO TORPEDOING THE AUSTRIAN BATTLESHIP SZENT ISTVÁN ON THE NIGHT OF JUNE 9-10. 1918,

which was believed to have sunk later. In the confusion that followed he also escaped. He was promoted to sub-lieutenant and awarded the Manfredi gold medal for valour.

Medical Lieutenant Raffaele Parolucci got into the inner roadstead at Pola on October 31, 1918. With great daring, at a favourable moment towards dawn, they sank the Dreadnought Viribus Unitis, the flagship of the Austrian Fleet, by placing a mine alongside the ship's hull. Thus a whole squadron of first-class battleships of the "Dreadnought" type was wiped out by individual daring.

The most ambitious naval engagement in the Adriatic was the raid on Durazzo on October 6, 1918, which was planned to synchronize with the retirement of the Austrian Army in Albania. The combined Allied naval forces included three Italian battleships and three British cruisers. These crossed the Adriatic in line ahead, the battleships leading, with British mine-sweepers, Italian, British, and American destroyers and "chasers" ahead, and destroyers and other lighter vessels on the flanks and rear Advancing behind its screen of sweepers, the flagship approached within about 11,000 yards of Durazzo, and then turned southwards, parallel with the coast, and fired a broadside. Each succeeding ship fired a broadside and passed on, the mine-sweepers making a path for them. The Austrian batteries replied vigorously to the squadron's fire, but their shells fell either short or too far. No doubt the pounding they were receiving from 10 in. and lesser guns afloat played havoc with the artillerymen's aim. As a cruiser, the rearmost of the six, came into position for her broadside she saw the trail of a torpedo from a submarine approaching her. Immediately the captain swung his ship round and saved her from the impact. As the cruiser was again turning into the firing position another torpedo, coming too late to be avoided, struck her forward. Her wheel went in the explosion that followed, along with some 40 ft. of her forepart. The cruiser, steering by the alternate use of her engines, was brought into line, and bombarded Durazzo "as arranged." But the submarines, for there were two, that had fired at this vessel fired no more at anything else. A swarm of some 15 or 16 American chasers and other light vessels scurried down upon them, and disposed of both, for they were not sufficiently submerged to escape the depth charges dropped.

. While aeroplanes were dropping bombs over Durazzo, a group of four "M.A.S.," under Commander Bertonelli, went within 900 yards of the quayside, in the centre of Durazzo. On his way in Bertonelli saw an Austrian vessel escaping from the harbour and made for her. But as he came close he saw she bore the Red Cross on her sides, and recognizing her as a hospital ship, with a wave of the hand

co her he bore away. Immediately after he saw two Austrian destroyers and a torpedo boat close in under the quayside. They were trying to slip out of the harbour, but the launches, turning straight for them, fired several torpedoes. One destroyer was struck amidships and sank almost at once. The torpedo-boat, badly hit, ran herself ashore to avoid sinking. The third vessel got out, only to find that two British destroyers were waiting outside for just such contingencies. One of the "M.A.S." launches crossed the harbour and attacked and torpedoed a large Austrian armed transport. Another transport was seen from the launch to be a complete wreck and grounded on her side. Meanwhile Bertonelli had received an Austrian shell in the midst of his small craft, but, by wonderful luck, no damage to speak of was done. After an hour, the Austrian reply having ceased, the squadron left, and aerial reconnaissance, carried out five hours later, reported Durazzo as destroyed. All the sheds, depôts, naval docks-everything that had a wall to crumble or a structure to break-appeared to be in ruins. A week later the town could hold out no longer against the advancing Italians. After having forced, on the afternoon of October 13, the enemy's defences on the heights of Paljamaj, and of the Sasso Bianco, the Italian troops penetrated into the city next morning, capturing prisonors and material. The occupation of the town on October 14 was thus due to military effort covered and supported by the exertions of the seamen afloat.

An interesting review of the achievements of the Italian Navy during the War was given by Vice-Admiral Del Bono, Minister of Marine, at a meeting at the Scala Theatre in Milan on December 15, 1918. After emphasizing the difficulties caused by the inferiority of Italy's naval bases, of which over a long stretch of the Adriatic coast she had only two-Venice and Brindisi, more than 80 miles apart -the Admiral pointed out that the Austrian occupation of Montenegro and Albania had added to the strength of the enemy. "To defend ourselves from growing dangers," he said, "we occupied Valona, where the Navy did some very important work." He then recalled that in the six months following August, 1915, submarines had sunk in the Mediterranean 400,000 tons of shipping, while in the Northern seas 300,000 tons gross were At the same time the Italian Navy



THE VIRIBUS UNITIS, AUSTRIAN DREADNOUGHT, SUNK.

transported to the island of Asinara 80,000 Austrian prisoners infected with cholera. Ten thousand Serbian refugees were transported to Lipari, Marseilles, and Bizerta, and 150,000 soldiers, with 10,000 horses, to Corfu. Not a single transport was torpedoed. Referring to the barrage in the Otranto Straits, the Admiral said that the channel "was obstructed by an explosive wire, which made the blockade most efficacious." He paid a warm tribute to the close cooperation of the Allied Navies, and concluded by saying that the Italian Navy had achieved its task with imperishable bravery and glory.

On August 18, 1917, the U.S.S. Birmingham, a seout cruiser and flagship of the patrol force of the United States Atlantic Fleet, steamed into Gibraltar harbour. That incident definitely marked the entry of the United States into active cooperation with the Allies in the Moditerranean. This single unit presently multiplied to 75 ships and 5,542 men. Out of this contribution 40 vessels were concentrated at Corfu in the early summer of 1918, under the command of Captain C. P. Nelson, U.S.N. Of these, 39 were submarine chasers; the other was their mother ship. The American ehaser was a craft of 110 feet in length and only 65 tons displacement. In spite of their limited size the chasers came across the Atlantic under their own power, passed through the Straits of Gibraltar and made their home at the Island of Corfu, in the mouth of the Adriatic Sea.

The American chaser was a very vicious-looking little war vessel for its size. Forward there was mounted a 3-inch gun, and aft the necessary and elaborate paraphernalia for launching depth charges. A small pilot-house stood just forward of amidships and behind it a mast, on the top of which was a lookout's nest; wireless was also rigged from this mast. With the help of three high-powered gasolene engines, the chaser had more speed at its disposal than it could often use. Each chaser was manned by a crew of two officers and about 22 men.

Corfu had never been occupied as a base for anti-submarino work, although its location for hunting U-boats was ideal. Accordingly, the Americans were confronted with the task of converting a barren coast town into a modern naval base for chasers. This work was accomplished by the 1,444 officers and men of the crews in a romarkably short time. Huts for staff officers, repair shops, barracks, hospitals, etc., all had to be erected, but before the end of June the job was completed and the force was ready for operations.

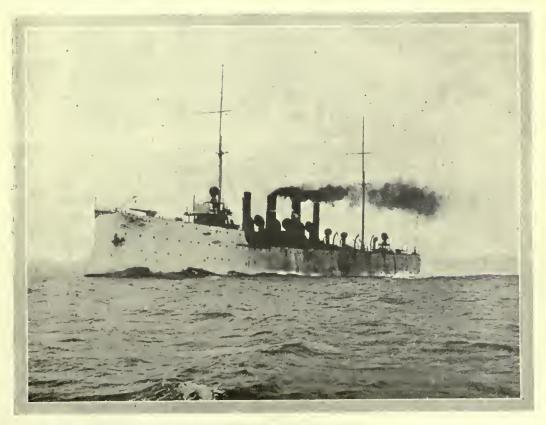
The American genius for organization had full scope in the creation of bases in the Mediter-

ranean from which the anti-submarine craft could operate. One captain of such a flotilla was directed to a tiny bay in an island. Here he and his men felled trees to build huts, improvised a cook-houso from spare boilerplates, and supplied lighting power from the flagship. In this Robinson Crusoe fashion did the captain get ahead with things before the arrival of the regulation stores and supplies. On August 17, 1918, the French President and Ministry of Marine concluded a two-days' inspection of the Franco-American bases in the vicinity of a certain port, during which they made a trip to sea to observe the arrangements made for the protection of ships. At the American depôts, the provision of which had completely transformed the port, the President was shown how a convoy, which had arrived recently from America, discharged 30,000 tons of materials in ten hours, thanks to the efficiency of the American arrangements.

The first American hunt from the Island of Corfu took place in the latter part of June, 1918. From that date at least three units, usually four or five (three vessels in a unit), wore out hunting day and night. A hunt ordinarily lasted from four to six days, during which time

the chances of at least hearing a submarine, or of perhaps getting one, were always good. These chasers carried out over 32 hunts, and had some very favourable results. In other words, the U.S. Navy, from the middle of June until hostilities ceased, by means of its smallest war craft, operating 4,000 miles from their home waters, maintained a constant and tireless watch at the mouth of the Adriatic, by which enemy submarines sought access to the Mediterranean. They were rewarded in their work, for two submarines were sunk and one submarine was classified as "probably sunk," while others were probably very much shaken up or damaged sufficiently to put them out of action and make the submarine commanders abhor the passage in and out of the Adriatic.

The most spectacular operation of the chasers was in the attack on Durazzo by the Allied forces on October 6, 1918. Eleven chasers participated under the command of Captain Nelson. They acted as fringes to the main attacking party of British and Italian men-of-war. On nearing the enemy's coast, all ships came under the fire of the coastal batteries. The chasers, by means of skilful zig-zagging and by rushing in under the enemy fire, escaped



U.S. CRUISER BIRMINGHAM.

without casualties. As if this were not enough excitement for any of the young crews on beard the chasers, none of whom had ever been under fire before, the periscope of a submarino was sighted. Chaser No. 215 opened fire at once, and by a combination of good fortune and good shooting, demelished its periscope on the second shot. Chasers 215 and 128 then joined in the attack, and steered full speed ahead for the submarine, dropping their depthcharges right above where it was seen to submerge. A large piece of steel plating appeared

sank. As the chaser stopped to look at the havoe she had wrought, a gigantic globule of oil and water, which seemed to be almost boiling, made its appearance. This lasted for 20 seconds, and then a steady stream of heavy black oil continued to rise. During this engagement the submarine-chaser No. 129 was hampered by engine trouble, but, in spite of being thus crippled, she helped to contribute towards the general success of the manœuvre. The submarine she sank would in all probability have torpedoed one of the large British or Italian warships.



CORFU FROM THE CASTLE.

end then sank amongst the flux of heavy black oil and bubbles coming to the surface. A moment later chaser No. 129 sighted another submarine contemplating an assault towards the attacking Allied ships. It submerged at once and stayed so for a moment, but then reappeared a short distance away from chaser No. 129, which made its courso towards it. The chaser dropped two deptheharges in a position which it thought was right over the submarine, but the submarine in the meantime had changed its course. The periscope appeared a moment later, and then submerged slowly; chaser No. 129 ran straight for it, and when directly over the submarine, let go one depth-charge, and then two mere. Seven large pieces of steel framework or plating came to the surface in the swirl and then

In the meantime, the engagement continued. The encounters with the submarines were over. but there was other work to be done. At the entrance to the harbour submarine-chaser No. 130 sighted two floating mines, one of which she destroyed by gunfire; the other she rendered harmless. She approached it just ahead of English destroyers, which were bearing down upon it at 30 knots, causing them to sheer off to the right, and so to pass out of harm's way. All the enemy's boats in the harbour were either sunk or crippled, and the base rendered useless for naval or military purposes. The contribution of the Americans to the Allied cause in the Mediterranean was the more valuable by reason of the whole-hearted cooperation between them and the Allies. The British and Italians wanted forces at the



AMERICAN SUBMARINE CHASERS AT ANCHOR.

Stra'ts of Otranto at the mouth of the Adrictic; the United States Navy sent its little 110-ft. chasers across the Atlantic under their own power, to be of what service they could. The close cooperation proved its value.

Partly owing to the attention paid to the doings of the American vessels with the British Fleet in the North Sea and off the Irish coast. the services of the flotillas in the Mediterranean did not figure very largely in the public view. On May 25, 1918, Mr. Franklin Roosevelt, Assistant Secretary of the Navy, said to a correspondent of the Matin:-" Even in the Mediterranean our vessels were brigaded in cooperation with the Italian and Japanese ships." Similarly, on July 4, 1918, Vice-Admiral W. S. Sims said: "Most of the United States destroyers have been serving under a British vice-admiral since May, 1917. Others are in the Mediterranean, under a British officer, and many destroyers and other vessels are under the French, not to mention the submarine chasers in the Adriatic." On the occasion of his visit to America in October, 1918, Sir Eric Geddes made the following reference to the matter in a speech at New York: "As regards your cruisers, they are working with us in the White Sea, North Sea, Atlantic and Mediterranean. and I have seen them and admired their efficiency in all these places. It is to them, as well as to the gallant little destroyers working

with the corresponding forces of all the Allies, that the successful convoy system is duc."

Interviewed on his arrival at Rome on August 12, 1918, by a correspondent of *The United Press*, Mr. Franklin Roosevelt said that his mission to Italy chiefly concerned the discussion of future naval operations in the Adriatic and Mediterranean. He added:—

As we intend to increase our help to Italy, we are now endeavouring to solve the problem of using the Italian ports to their fullest capacity. Henceforward the goods shipped to Italy must be discharged at Italian ports instead of French, as we want to reduce traffic overland. In order to accomplish this the Mediterranean must be made safe from submarines, and we expect that the American and Italian navies will easily see to this. We also want to close the Adriatic and prevent the exit of Austrian submarines and paralyse the efforts of the enemy fleet.

Mr. Roosevelt further announced that America was prepared to send a sufficient number of troops to the Italian Front to make victory certain. In the North Sea and the Adriatic the naval initiative had passed to the Allies, which was proved by the diminished naval losses.

On January 1, 1919, it was reported that 30 American submarine-chasers had arrived at Malta from Corfu to refit before sailing for home. From May 4, 1917, to the date of the signing of the Armistice United States naval units engaged in 500 encounters with enemy submarines, of which 46 were definitely successful, 10 submarines being sunk, while many



others were badly damaged. Of the 10 known to have been sunk, two were destroyed by United States naval units in the attack on Durazzo on October 2, 1918, and one in the Adriatic.

To the barrage across the Straits of Otranto must be given the largest share of eredit for the final defeat of the submarines operating from the Adriatic, and for securing the safe transit of troops to Albania and Salonika. It went a long way towards solving the Mediterranean submarine problem. Italy had oecupied the harbour and hinterland at Valona, in Albania, and it was imperative that sea communication-no other was available-should be kept free for the constant supply of men. munitions, material and food to General Ferrero, commanding the Italian Forces The French and British troops for Salonika were embarked at Taranto. Two vital routes, therefore, had to be guarded, and with the gradual development of the ports of Valona and Taranto to cope with the over-increasing traffie, the effectiveness of the barrage was of paramount importance. To develop Valona practically everything had to be carried across the sea, and native labour in Albania was searce. But the Italians, with their genius for engineering, were not long in transforming a barren bay into a port destined to render invaluable service.

Taranto, on the other hand, was a port of some importance, though badly equipped. Taranto is the ancient Tarenteum. Its "glassy bay" may be found mentioned in Horace, but for those whose taste is for the moderns, it can be read of in the pages of Georgo Gissing and Norman Douglas. At Taranto, if one mistakes not, Mr. Douglas encountered the eloquent barber who cut the boy's hair very short in defiance of the father's instructions, and then proved how right he had been by reference to esthetics, tonsorial taste, and the position adopted by the King of Italy. Taranto is generally sun-baked, and the impression left on the mind of Mr. Douglas was that the inhabitants loved to cut down every bit of shade, from trees or architecture, and to face their smitten streets in a stern determination never to go a yard into the country. But this was before the war, which made such changes in Taranto that the inhabitants might well have become different people.

At a time when the U-boats were threatening the Mediterranean, Mr. Lloyd George said

there must be an overland route for the passage of troops and stores to the Near East. Italy responded splendidly. She gave Great Britain a free hand at Taranto, and provided coal and several thousands of Italian labourers. The British Directorate of Movements and Railways took on the task. They made a new harbour of Taranto, building docks and piers, barracks and wharves. Men sent from England and France found accommodation by thousands, with a corresponding storage for supplies, at Taranto. The battle fleet of Italy was also based on Taranto, always ready to move out and join the French battle fleet at Corfu should occasion arise.

The creation of the Adriatic barrage de-

omployed—hydroplanes, listening devices, and depth charges. Everything above surface was used to the utmost to detect and rid the sea of the pest. And should the enemy succeed in eluding the watchers and listeners on the waters, there were obstructive perils beneath which would bring about his destruction.

The mere methods of hunting presented many difficulties. Listening for a submarine required a trained ear on the part of the listener; he must be able to distinguish the peculiar sound of a "submarine beat" from that of surface craft; learn how to ascertain its speed, course, etc. Furthermore one chaser alone could not accurately fix the position of a submarine; to do this it was necessary to have



[Italian official photo.

ITALIAN ANTI-AIRCRAFT COASTAL DEFENCE ARMOURED TRAIN.

manded great technical skill, indomitable courage, and human endurance of high degree. In comparison, the Straits of Dover barrage was almost simplicity. The waters of the Straits of Otranto run swifter, the depth is immensely greater, and the enemy submarines were closer at hand. At first the forces at work on the barrage were small in number, mostly destroyers. The best naval and engineering brains were empanelled, and eventually a formidable force was evolved. Night and day in all weathers the 50 miles of the Straits were patrolled by British, French and Italian destroyers, patrol boats, drifters and trawlersmainly from Scotland, but some from England-fast travelling Italian motor scouts, and-during the last six months of the war-a valuable contribution of 50 submarine-chasers from the United States Navy. All the devices for hunting and destroying the submarine were cross-bearings from other chasers also. It can easily be seen that close cooperation between the various chasers or units was imperative; they had to listen together, and to report or communicate the results of their listening to each other, and thereby establish the information on which to base their attack. While ehasers were hunting it was also necessary that their listeners should not be hampered by other eraft in the vicinity. Accordingly listening periods were established during which all vessels in the vicinity were required to stop their engines to give the chaser a chance. In order to prevent the submarine from learning the intervals between listening periods during which he could stop his engines and between which he could run them, these periods were different every day. The personnel of the chasing eraft, then, had a great deal to learn. Efficiency always reaps reward. Three months before the termination of the war the barrage had become so efficient that if an enemy submarino ventured to run the gauntlet it would have been subjected to nearly 40 depth charges. It was a veritable nightmare for the undersea pirates; no wonder that the enemy contemplated abandoning his bases in the Adriatic and transferring to Constantinople.

Of the international forces on the barrago, the work of the drifters attracted peculiar attention and sympathy. The men of tho Navios were accustomed to travel the seas of the world; it was otherwise with those who manned the drifters. In pre-war days they sailed from their home port for a few days' fishing, never more than 100 miles away, certainly never outside British waters. Yet they responded to the call of duty, and sailed to the Eastern Mediterranean and the Adriatic. For two and sometimes three years these mon had seen neither kith nor kin. Sixty-eight per cent. of their time was spent in hunting the submarine, and sea life in this part of the world is not very comfortable. Yet they went on from day to day, ungrudgingly, living for the most part on tinned food. That they were

always keen and alert was a tribute to the fino character underneath the tanned skin of these hardy sons of Britain. It is an impossibility to record all their exploits of pluck and endurance. There is the story of the two drifters tackling the Gocben when she came out and sank the monitor Raglan. One drifter fired her small gun: the other dropped smoke boxes. And in his official report on the incident one skipper wrote: "Not having received other orders, I proceeded to patrol the nets." Then there was the trawler in the Ægean Sea which, with a three-pounder, chased a submarine for an hour and a half, until the submarine disappeared. Whether something had gone wrong with the enemy's machinery was not known, but she cortainly fled. Many attacks were made on these vessels, and the names of a not inconsiderable number will be found in the "Roll of Honour."

The first scrious attempt to raid the barrage, on July 9, 1916, was referred to briefly in Chapter CLIII., page 72, describing the British Navy's work in 1916; and in Chapter CLXXXIX, page 335, dealing with the work of the Italian Navy. A few more details have now to be recorded. The drifters on this dato



AN ITALIAN MINE-LAYER.

were engaged upon anti-submarine work, and were lying to their nets in the early hours of the morning. At about 4 a.m. a dostroyer was seen to be approaching, and the skippers took her for an Allied vossel. At 4.15, however, the destroyer opened fire on the nearest drifter at point blank range. The R.N.R. lieutenant in command ordered his crew to put on their life belts, while he sent off a signal by wireless, reporting the enemy's presence. He made this signal twice, and then came on deck. Seeing that the stern of his ship had been blown away, he gave the order for all hands to jump overboard, and everyone except the second hand, who had been shot dead, obeyed the order. Meanwhile the enemy had turned his guns on the next drifter in the line, the erew of which, except one man, took to their boat when they found their ship was sinking. The man who remained behind jumped overboard as the vessel went down, when he had an unpleasant experience. The drifter's depth charges exploded at a certain depth, and the explosion shook the man considerably It gave him, he said, "cramp in the legs"; but he was not really hurt, and was picked up later.

Other individual performances are recorded. The second hand of one drifter displayed great coolness while under fire. Seeing that the enemy were endeavouring to destroy the wireless telegraph apparatus, he went aloft to strike the topmast, quite regardless of the fact that shells were passing between the mast and funnel. An engineman from one of the drifters which was sunk was in the ship's boat. The enemy determined to take the boat's crew prisoners, so the engineman jumped overboard. He was recaptured, but when alongside the enemy destroyer he again jumped overboard and escaped. A deckhand of one drifter remained at his post firing his gun, although under heavy fire from a very superior force, and, together with the remainder of the crew, gave three cheers when called upon to surrender by the enemy. The result of the enemy raid was that two drifters were sunk, ten men killed, eight men wounded, and nine men missing.

The biggest attack on the drifters of the barrage occurred early in the morning of May 15, 1917. The official communiqué issued by the British Admiralty stated that an Austrian force consisting of light cruisers, which were subsequently reinforced by destroyers, raided the Allied drifter line in the Adriatic, and succeeded in sinking 14 British

drifters:—2284 Admirable; 2114 Avondale; 2112 Coral Haven; 2271 Craignoon; 1399 Felicitas; 1869 Girl Gracie; 2714 Girl Roso; 2274 Helenora; 2414 Quarry Knowo; 2711 Selby; 2186 Serene; 2155 Taits; 2434 Transit and 1916 Young Linnet. From them (according to an Austrian communiqué) 72 prisoners were taken. H.M.S. Dartmouth (Captain A. P. Addison, R.N.), with



AN ITALIAN SEAPLANE.

the Italian Rear-Admiral on board, and H.M.S. Bristol immediately chased the enemy off, assisted by French and Italian torpedo-boat destroyers. The chase was continued, with the enemy under heavy and continuous fire, till ncar Cattaro, when, some onemy battleships coming out in support of their cruisers, our vessels drew off. Italian airmen, after a battle in the air, attacked the Austrian warships outside Cattaro, and they confidently asserted that one of the enemy cruisers was heavily on fire, and was being taken in tow off Cattaro in a sinking condition. One other enemy cruiser was reported by the British Admiral as being ' "badly damaged." During her passage back H.M.S. Dartmouth was struck by a torpedo from an enemy submarine, but returned into port with three men killed and one officer and four men missing-believed dead-and seven wounded. There were no other casualties to our ships.

The Italian semi-official statement said: "
'Taking advantage of the darkness of the night, an enemy group of some cruisers, which subsequently were joined by some torpedo-boat destroyers, encountered shortly before daybreak on May 15 a small convoy, without

troops, which was being escorted across the Adriatic. In a short, unequal fight which followed one of our escorting torpedo-boats, a steamer, and motor fishing vessels employed on patrol service were sunk. Allied naval forces, which were quickly joined by other British and French ships, including two French destroyers, came up, and the enemy fled rapidly towards the north, pursued by us. Our gunfire was certainly efficacions. Two enemy units, pursued by light warships, fled towards Durazzo under the protection of the coast defences, while the British cruiser Dartmouth—on board of which was the Italian Admiral commanding the Division of Scouts—followed by another emiser and our destroyers, succeeded, thanks to her great speed, in brilliantly maintaining contact for over two hours with three other enemy ships of the Novara type. She fired about 600 shots at them, until, arriving near the works of Cattaro, larger ships came out to support the enemy. At the same time our daring seaplanes, after repulsing the hostile machines in an acrial combat, attacked the enemy ships with bombs, and were subsequently able to confirm the serious damage suffered by them as the result of the fire to which they had been subjectedTwo different aeroplanes reported that one of the enemy cruisers, which was completely shrouded in smoke, with its after-part destroyed, was on the point of sinking close to Cattaro. All the units engaged in the actions returned to our bases, as also did all our aviators,"

It was on the occasion of this action that the wireless operator of the drifter Floandi gave the fine example of devotion to duty referred to in an earlier chapter.* He was an A.B., R.N.V.R., named Douglas Morris Harris, and when the Floandi was attacked by three Austrian destroyers he remained at his post, continuing to send and receive messages under heavy fire, until he was killed while writing the log. The line made by his pencil when he was hit could be seen on the page of the log, which had been perforated by a piece of shell. At the Imperial War Museum in December, 1918, one of the most precious of the relics displayed at the Sca-Power Exhibition was this log-book of the Floandi.

It is impossible to estimate the number of submarines that were definitely destroyed by the Adriatic barrage. That a large number

* CCXII., page 179.



[Official photograph.

STAFF CAPTAIN UMBERTO VITALE DI PONTAGIO, Attaché to General Headquarters, visits one of H.M. ships, Eastern Mediterranean Force.



[Italian official photo.

AN ITALIAN BATTLESHIP AT TARANTO.

was destroyed is certain, and probably those that were claimed, but for which there is no definite evidence such as prisoners or wreckage, are considerable. Here is a typical report: "On the 27th June, 1918, trawler 3621, Lieut. G. E. Johnson, R.N.R., in position Lat. 39, 27 N., Long. 18, 47 E., hunted an enemy submarine. The hunt lasted from 5.20 p.m. to 7.20 p.m. The submarine continually attempted to throw off pursuit. At 7.20 p.m. it was estimated that the submarine was directly underneath the trawler. An attack was made with bomb throwers and depth charges. The third explosion was an exceptionally heavy one, and no further sounds were heard by the trawler." Here is a "certainty." At 1.47 a.m. July 30, 1918, H.M.S. Badger received a report from armed trawler William Coggswell that he was in touch with a submerged submarine Badger closed in and at 3.25 a.m. sighted three trawlers in hunt formation. At 4.21 a.m. Badger heard depth charges dropped. He then proceeded at full speed, when a submarine periscope suddenly appeared between him and Cornelius Carroll on his port bow. He proceeded at full speed and dropped six depth eharges over the submarine. At the fourth depth charge the submarine came to the surface, driven up by the explosion, which had evidoutly been just beneath it. The submarine was on its side. It went down again, but reappeared at the sixth explosion, tail up.

It was an hour's run in a motor launch from the Piazetta to the fighting line on the Piave—Venice was almost within the grasp of the enemy. After the retreat from Caporetto the abandonment of the city was discussed, but the defensive measures, were too sound to compel such a decision. The enemy's guns never got within range, but a long series of raids by aeroplane caused considerable damage to buildings.

The Lagoon, the canals and the rivers form a natural defence. Floating batteries and sandbag trenches manned by Italian Marines and British monitors were the complement of Nature. "Spotting" by aeroplane observers was so effective that three bridges across the lower Piave in the enemy's use were destroyed by the gun-fire of a British monitor. The Marines manning the floating batteries and the sandbag trenches at the Cortellezzo bridge-head -there were no dugouts in this dreary stretch of marsh-land-were a production of the war. The Italian Navy did not possess Marines like the British Navy. The Italian Marine Corps owed its inception to Captain Dantiche, who was head of the defence of Erado. At that time a considerable number of sailors were free, and Italy needed every man she could muster for the firing line. The sailors were formed into a definite unit as Marine Corps or Regiment. Many battalions of infantry and artillery were raised. With such splendid material it is not surprising that the Marine Corps built up a



Italian Naval official photo.

ITALIAN WARSHIPS ANCHORED IN THE BAY OF VALONA.

reputation equal to any of Italy's fighting units. After the retreat from Caporetto it was the Marine Corps, under the command of Commander Starita, that held the Austrians along the lower Piave. For 30 hours they withstood the Austrian onslaught, and having stayed his advance secured the safety of Venice. Many were the heroic deeds performed by officers and men of the corps. The story of the death of Commander Bafile is one of the legends of the new formation, and one of the battalions bears his name. He was the first man to cross the Piave in March, 1918, after the Austrian retirement. Knowing that a counter-attack was intended, he resolved to reconnoitre. With four men he crossed the river in a small boat. His first act was to kneel down, pick up a piece of the soil, kiss it, and put it in his pocket. He stayed for an hour and a half, and on returning to the boat found that one of the men was missing. He went back to search for him, and in so doing alarmed the enemy, who opened fire. Re-embarking with the three men, Bafile crossed the river, but while doing so he was badly wounded. He died on the way to hospital, but not before he had dictated all the information he had gained. He was posthumously awarded the gold medal, the highest honour in Italy. The missing sailor subsequently turned up, having swum the river. No one was prouder of the achievements of the Corps than Vice-Admiral Marsolo, Commanderin-Chief of the Venice defences.

There still remains one other phase of the work of the Navies in the Mediterranean to be described—the dispatch of light forces from the Japanese Fleet and their valued service against the submarines. It was on May 24, 1917, that Lord Robert Cecil, in the House of Commons, made the first official announcement on the matter, as follows:—

The activities of the Japanese Navy have not come to an end with their extersive operations undertaken in the early stage of the war in conjunction with the British Navy, which culminated in the extermination of the German naval forces in the Pacific. The special detachment of several cruisers and destroyers which was dispatched to the coast of the Straits Sottlements Jarly in 1916 has ever since been and is assisting the British Navy in guarding the Indian Ocean east of Colombo, while in the Northern Pacific detachments of Japanese cruisers have in the course of last year carried out on several occasions, at the instance of the British Government, extended cruises which were of great importance to the Allied cause.

More recently, in view of the development of the naval situation, the two Allied Governments deemed it necessary that the operations of the Japanese Navy should be further extended. Accordingly the Imperial Government dispatched a considerable force of light craft to the Mediterranean, where they are now cooperating with the naval forces of Great Britain and other Allies. In addition thereto several new detachments of powerful and fast cruisers have been dispatched to assist the British Navy in the protection of shipping in the Indian and South Pacific Oceans. These services to the Allied cause, gratifying and important as thoy are in themselves, gain additional value as showing the spirit of every one of our Allies, and as indicating the greatness of the assistance which we may expect from them in the future.

The Minister of Marine, in a simultaneous announcement at Tokio, stated that the squadron sent to the Mediterranean was commanded by Admiral Kozo Sate.

Evidence of the skill and resource of the Japanese crews was afforded on the occasion of the sinking, on May 4, 1917, of the British transport Transylvania. Although the fact was not revealed for many days, the great majority of the British, soldiers and nurses

rescued owed their safety to the speedy arrival and seamanlike handling of the Japanese vessels. One destroyer alone saved 1,000 out of the 4,000 people on board the liner. Several officors and gurses from the Transylvania, on reaching London, called at the Japanese headquarters to express their thanks for all the kindness shown them. These survivors must have read with deep regret the following announcement in the newspapers on June 18, 1917:—

The Japanesc Naval Attaché communicates the following:

"On June 11 one of the Japanese destroyer flotillas attacked enemy submarines in the Mediterranean. The result is not known. On that occasion Sakaki received some damage by enemy torpedo with loss of 55 lives. Sho was, however, towed safely into port."

The Secretary of the Admiralty adds the following note:

"This is one of the destroyers which so gallantly aided in rescuing troops and crew from the torpedoed transport Transylvania at imminent risk of being herself torpedoed. Her handling on that occasion won the admiration of everybody."

The spirit animating the Japanese authorities was exemplified by a statement of Admiral Kato in the Diet on July 1, 1917. Replying to criticism that the dispatch of Japanese warships to the Moditerranean was not required by the terms of the Alliance, the Minister of Marine said that the Government was justified in cooperating with the Allies to bring about the defeat of Germany, and if necessary Japan would send a Fleet to the Atlantic.

At Malta, on August 2, 1917, Rear-Admiral G. A. Ballard, on board the Japanese flagship, presented British decorations and medals to officers and men of the Japanese flotilla for services rendered, especially at the sinking of the Transylvania. In all, five officers and 16 petty officers and men were honoured, of whom two officers and four ratings had since lost their lives, the decorations being forwarded to their relatives.

The next recorded incident was the following, particulars of which were circulated by the Japanese Naval Attaché:--"Ono of the Japanese naval forces in the Mediterranean while escorting British transports on July 22 at 1.50 p.m. sighted an enemy submarine. While one unit protected the transports from attack on one side the other proceeded to attack the submarine and fired on it, smashing the periscope, and, after closely pursuing, again attacked with success and undoubtedly destroyed the submarine." On August 12, 1917, the Japanese Naval Attaché announced that some additional Japanese naval units had joined the Allied forces in European waters. A few weeks later, information came to hand from the Japaneso Admiral of a fine piece of work, in which our Far Eastern Allies, by good seamanship and great rapidity of action, kept at bay and probably destroyed an enemy submarine, protected an escorted transport, produced smoke-screens for a great torpedeed



FLOATING BATTERIES ON THE PIAVE, MANNED BY ITALIAN MARINES.

liner, and saved all the passengers and crew of the liner-550 persons, including women and children-in the space of little over an hour. Again, on December 30, 1917, enemy submarines which attempted to attack British tran ports convoyed by Japanese warships were beaten off, and the Japanese Ministry of Marine was able to report that none of their ships was damaged. About this time submarines were frequently encountered during transportations and convoying, and an official Tokio message reported that U-boats wero sunk on February 12 and 19, 1918. On March 6, Captain Sato Yamamoto, the Japanese Naval Attaché at Rome, declared to an American interviewer that 15 enemy submarines had been sunk in one month by American and Japanese destroyers, in cooperation with the Allied Fleet. This officer declared that practically all the Austrian submarines had been cleared from the Adriatic by the Italians, but their places had been taken to a great extent by German boats, shipped in parts from the Fatherland and assembled at Trieste.

The appreciation of the Japanese seamen's work was very general. The Diet passed a vote at the end of 1917 thanking the Navy "for its valuable services in the Pacific and Indian Oceans and the Mediterranean in cooperation with the heroic officers and men of

Japan's Allies in the war." Similarly, Admiral Kato declared to The Times Correspondent in Tokio on July 11, 1918, that the Navies worked in complete harmony. The Admiral Commanding, he said, reperted repeatedly to the Department in Tokio, "mentioning in high terms the good fellowship oxisting." Tle Minister disposed of certain mischievous criticisms of the character of Japanese work in the Mediterranean by pointing out that, as the only enemy craft navigating the sea were submarines, these were being fought by squadrons of small craft such as destroyers, etc. A capital ship, therefore, was useless in the Mediterranean, but in the Indian Ocean and the Pacific, where raiders might operate, Japan had large craft. The Minister made it clear that his statement was made with a view to informing those unfamiliar with naval matters, and also that he might counteract reports evidently designed to cause trouble and to represent Japan as being dissatisfied, whereas the naval cooperation was most complete and much more effective, in his opinion, than cooperation on land.

On August 16, 1918, at a luncheon to the members of the Japanese Red Cross Mission, Mr. Balfour referred to the signal service rendered by the people of Japan. "Our Japanese Allies," said Mr. Balfour, "extended their naval activities from the



BRITISH SOLDIERS, RESCUED FROM THE TRANSYLVANIA, ON BOARD A JAPANESE DESTROYER.

Pacific and the Far Eastern seas to the Mediterranean, and no one could to-day go from Great Britain to Egypt, India, or Australia without obtaining evidence of the work done by the Japanese destroyers and other of their units in preserving the safety of the seas."

It was also pleasing to read of the appreciation expressed for the help given to the Japanese warships by the British during their service in the Mediterranean. On October 30, 1917, it was announced that the Japanese Government had decided to bestow decorations on a number of British naval officers and men for the gallant behaviour of British destroyers in rescuing under circumstances of great difficulty a Japanese destroyer that had been torpedoed. Although badly damaged, she was towed by British destroyers to an adjacent port, where she was repaired. About half her officers and crew were saved. Nearly a year later, on September 13, 1918, there was published the following, which may have referred to the same destroyer. The letter was from the Japanese Naval Attaché to the Secretary of the Admiralty:

I am desired by the Minister of Marine, Tokyo, to convey to you, and through you to the British Navy. his most sincere thanks for the efforts of your Department, which have resulted in the completion of H.I.J.M. destroyer, and to assure you that the difficulties as regards material and labour are fully realized, and that the completion of the vessel is due alone to the persistent efforts of the British authorities. The Minister of Marine, who has just been informed that the destroyer is again in commission, has received the news with much satisfaction, and is happy that this vessel can now take again its place alongsido the ships of the Allied Navies.

An important adjunct in the counter-offensive against the submarines, and in attacks on enemy ports, was the cooperation amongst the Allied air forces. Until the middle of the summer of 1918, the air forces at work were the British, Italian and French in the Adriatic and Middle Mediterranean, with French, British and some Greek machines based on the ports of the Eastern Mediterranean. Towards the end of Juno the American Air Force began to take an active part in the operations, and opened bases, one of the largest being at Porto Corsino, on the Adriatic coast, operating chiefly in conjunction with the Italian air stations from Venico to Ancona. The installation of British kite balloon sections on this coast in the spring of 1918 also added to the efficiency of the Allied Air Forces. These balloons were brought

into use in connexion with the Otranto barrage, and were also used for meteorological observation. In addition, a kite balloon station was opened at Ipso, in the Island of Corfu, also under the command of the British. Effective work was also done by the French air station at Giorene, in Corfu, and by the French airships attached to the French Fleet.

The effect of the Allied cooperation in the air was felt before the close of the summer, in spite of the fact that Austria possessed extra.



VICE-ADMIRAL KOZO SATO.

Commanded the Japanese Squadron in the Mediterranean.

ordinary natural advantages for submarine work. Unlike the Adriatic coast of Italy, which slowly shelves to deeper water and affords but a poor hiding place for submarines, the deep water on the Austrian coast presented many hiding places for U-boats, which could lie submerged at a depth at which it was impossible for an aircraft observer to spot them. Notwithstanding this, the activity on the part of submarines began to decrease, and this may be partly attributed to the almost incessant bombardment of the ports of Pola, Durazzo and Cattaro and the sea islets which had afforded good hiding places. The earlier bombing expeditions on Cattaro and Durazzo had had successful results, the Italian stations at Venice, Ancona, Porto Corsino and other points on the coast cooperating with the British station at Otranto

to such an extent that the junction of Austrian surface and under-sea craft was prevented at any given point, and on several eccasions the concentration of enemy ferces was broken up or rendered impossible. These constant harrying tactics also prevented a repetition of attacks on the Otranto-Valona barrage.

The kite balloons of the British at Brindisi (Base No. 3) and Corfu (Base No. 4) quickly proved their efficacy, and on several occasions while on patrol and secret duty were able to



OBSERVATION CAR OF AN ITALIAN COASTAL-DEFENCE ARMOURED TRAIN.

detect submarines in the neighbourhood of the barrage. Climatic conditions were none too good for the work, and the intense heat in the Southern Seas gave rise to problems connected with the fabric of the gas containers such as had not been met with in home waters. It was found that the fabric perished quickly, and this necessitated the duplication of the number of balleons engaged on the work, with a corresponding increase of stores and personnel. Besides bombing expeditions, reconnaissances of enemy territory by seaplanes were frequent, and much useful information was obtained not only for naval purposes, but for the Italian troops in Albania under General Forrero; while spotting was carried out for the British monitors which cooperated in the advance of the Italian troops on Borat.

In Nevember, 1917, there was an interesting attack on an enemy submarine by a British bombing acroplane. The submarine had been sighted by an Italian look-out and was intercepted by the acroplane, it being too rough to send out seaplanes. As our machine approached to attack the submarine began to

dive, and was badly shaken by bombs which fell on either quarter. In spite of the strong wind the aeroplane circled down to the submarine and hit the conning tower several times before the U-boat completely submerged. The firing, it is thought, damaged the periscope of the submarine, and prebably had the effect of blinding it. Constant observation was kept until nightfall; the only indication of the submarine being patches of oil observed by an Italian airman.

Early in January, 1918, a seaplane from the Otranto station spotted a submarine, which dived just before our airman could get over her. The pilot, however, dropped a bomb on the spot where the submarine had submerged, and two large patches of oil appeared on the surface. Nothing more was seen or heard of the submarine although a continuous patrol was kept up by Italian and British machines. In the same month, in spite of very adverse weather, attacks were made on two other submarines. Owing to strong gales it was extremely difficult to distinguish the wash of a submarine from the waves themselves.

During a raid towards the end of May, 1918, by British aircraft on Durazzo, one of our escorting seaplanes observed a large enemy submarine at one of the jetties to the south of the harbour, and at once attacked. A very heavy anti-aircraft barrage was set up, shells bursting on all sides of the machine without hitting it. In spite of this, and of the fact that the enemy fired smoke bombs to obscure the submarine, the seaplane manoeuvred over the vessel and obtained a direct hit on the bows, causing her to heel right over.

A few days afterwards, an attack was made on Cattaro in which over one and a half tons of bombs were dropped. The raid caused great alarm among the Austrians, whose vessels at once left their moorings and scattered in the hope of evading the bombs. Several submarines were seen in the act of submerging, and in one case a bomb fell directly by the side of the bows of a U-boat. Considerable damage was done to the base. On the return journey one of the escorting seaplanes was forced to alight on the water through engine trouble and capsized. The pilot and observer, who had managed to clamber out on to the floats, were rescued by one of our torpedo boat destroyers.

In June, the Otranto base conducted three highly successful raids on Cattaro, in the first of which the submarine and seaplane bases were badly damaged; a large two-funnelled steamer, believed to be a transport, was set on fire, and a fighting seaplane of the latest type bombed. On June 2, the military works on the island of Lagosta were bombed with visibly good results.

The American airmen had but a few months'. experience of the Adriatic, the termination of the war preventing the development of ambitious schemes. Pola, however, had cause to remember their presence in that short period. Incessantly by day and by night they conducted their "stunts." The majority of the flying men were well on the young side, and carried out their work with all the zest-and carelessness-of youth. The following incident demonstrates the spirit of the young American airmen. One night two machines had flown over Pola, being subjected to a heavy bombardment. One machine was hit, and came lown in the sea. The pilot sank the machine and began swimming-he had no idea of direction, he swam on. His companion in the other machine missed him, and presently swooped down towards the swimming airman, who managed to scramble aboard. Meantime the machine was under heavy fire, but the journey home was safely made. questioned about his adventure, the man who had lost his machine expressed his regret that when rescued he had a cigarette, but no match!

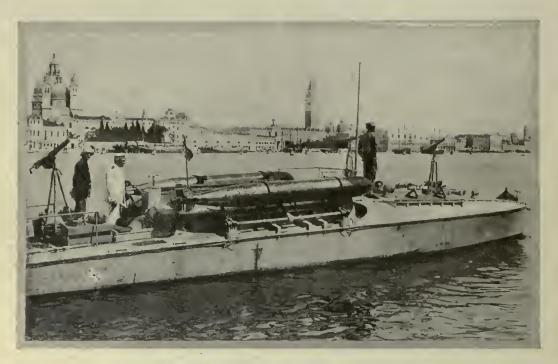
More than any other class of fighting the war in the air stirred the soul and fired the imagi-

nation of the Italian people. The country, in deadly peril, had realized through Gianni Caproni, one of the world's pioneer airmen, that her salvation largely lay in the destruction of the enemy's factories. And this spirit of waging warfare was reflected in a remarkable pamphlet dedicated to Caproni by Nino Salvaneschi under the title "Let Us Kill the War." Salvaneschi concluded in these words: "Let us aim with a sharp volley at the heart of the enemy's resistance; consume with a rain of destruction the factories which create the German defence; accomplish the task by a combined manœuvre amongst the Allies to produce the hoped-for inequality between the enemy forces and ours; and, above all, strike without regret or remorse; no pity for them who know neither love, nor faith, nor reverence. The dead, killed by treachery in the trenches and on the seas, are waiting. The fallen, mown down by machine-guns for the mad dream of Imperial Germany, are waiting. The mother, the widows, the aged and the babies in the empty houses, in the deserted fields and the plundered churches, are still waiting. Let the deadly rain borne by Italian wings fall from the skies! No one will ever condemn us for having killed the war!"

The poetic spirit of the race was kindled to a degree that aroused enthusiasm in the four corners of the earth. Gabriele d'Annunzio, whose poetry had thrilled the youth of the world, now inspired the soul of his country to



GUN MOUNTED FOR THE DEFENCE OF THE LOW-LYING ITALIAN COAST ON THE ADRIATIC.



AN ITALIAN MOTOR SCOUT AT VENICE.

aerial activity The greatest of Italy's living poets and novelists became one of the most popular and heroic figures of the war. He became an airman. His patriotism and love of justice and freedom became a passion. He had the same fiery temperament as Lloyd George. He dominated everything and everybody. He had no respect for "form fours" discipline. If there was dangerous work, he not only volunteered, but insisted on being sent. His exploits were as romantic as his poetry; he performed the most amazing feats by land, sea and air. 'A Special Correspondent of The Times who met him at the headquarters of his flying squadron in August, 1918, described him thus:

"He was in cavalry uniform (he had served in the army before this war) and immaculately groomed. He wore large dark spectacles, for he had lost the sight of one eye by shell splinter, and it was at one time feared that he would become totally blind. And on his tunic were four full rows of ribbons, each one a token of an act of bravery. To me the world of poetry seemed to have turned topsy-turvy. When he escorted us round his 'planes, explaining their teehnique and what they had done, d'Annunzio the poet had vanished and only d'Annunzio the soldier remained. But we met d'Annunzio the poet when he conducted us to his room. Here was the poet-his room was poetry itself in the beautiful draperies of the wall,

the arrangement of the furniture, and the books. And then in search of incident I asked him about his trip to Vienna, when he dropped pamphlets over the city. He regarded it as just an ordinary flight. Could I see the pamphlet? Yes. Could I have one? Yes. And would be autograph it? Yes. So he sat at his table and autographed the pamphlet, and then handed it to me with a smile and a bow. I asked him to recite his pamphlet. With a gesture of pleasure he began to intone the words which he literally flung at the Austrians, and which end: 'On the wings of victory that rise from the rivers of liberty we have only come for the joy of courage and daring. We have only come to demonstrate what we might dare and do when we so desire.' And with a handshake and a few werds of farewell I left him."

It was on August 9, 1918, that d'Annunzio's squadron visited Vienna. Within a few days of this propaganda flight, the poet-airman was again over enemy territory, this time on vengeance bent. Pola was the objective. Describing the affair Mr. G. Ward Price says:—"Major Gabriele d'Annunzio, Italy's poet-airman, who led the raid on Vienna, has carried out an adventurous and personal reprisal for an Austrian night air raid during which one of the enemy machines dropped a bomb within a yard of his sleeping quarters. The bomb did not explode, but the

thud knocked over and broke a glass from which d'Annunzio had drunk an hour before. In this the soldier-poet gaily saw a matter for personal vengeance, and starting off in the afternoon with his pilot in a new typo of fast weight-carrying land machine, he flew about 100 miles straight across the Adriatic Sea to Pola, dropped 14 bombs on the arsenal, and returned safely to his aerodrome. I was waiting there when he arrived amid a round of eheers from his squadron. 'There was a heavy barrage fire,' he told us, 'and once I thought our tail had been struck. But not a single one of the Austrian chaser machines got up after us. The Austrians are very keen to get me, but they missed a good chance this afternoon.' "

Earlier in the day, too, the Austrian flyers had been baulked. An Italian single-seater eame down with damaged engine out in the Adriatic. Austrian destroyers and seaplanes eame out after it, but before they could get there another seaplane pilot swooped down, took the airman from the damaged machine up behind him, sitting astride the fuselage, sank the damaged machine, and made off, leaving the baulked Austrians behind. Major

d'Annunzio henceforth wore in his flights an ivory-hilted dagger. This weapon was the mark of the Italian Arditi or storm troops, and all the eight airmen who took part in the raid on Vienna were named by their comrades, "Storm troops of the air."

It may be urged that the prominence given to the exploits of d'Annunzio dwarfed the achievements of other Italian airmen. In a sense perhaps this was true. But this amazing man was the embodiment of the soul of Italy, and others were well content to follow his example, to wear decorations won by personal valour, but to avoid popular clamour, so that he who interpreted the spirit of the nation might work untrammelled for the triumphant victory and future security of his country.

The foregoing is a summary of the work of our Allies and associates in the Mediterraneau during nearly 4½ years of war. It is, on the whole, an inspiring and edifying story of heroism, skill, patience, and devotion to duty on the part of the seamen. In addition to the nations whose ships have been mentioned—Great Britain, France, Italy, Japan, and the United States—Russia was represented in the



SEARCHING FOR SUBMARINE BASES IN THE MEDITERRANEAN With a gun trained on a suspected spot.



THE ACHILLEION, THE EX-KAISER'S PALACE AT CORFU.

Used as a Hospital for Serbian Wounded.

early part of the War by the cruiser Askold, and in the later stages the Greek Navy, which had benefited by a staff of British officers under Rear-Admiral Clifton Brown, also helped. By circumstances beyond their control the Navies of Portugal and Brazil were prevented from cooperating in the Mediterranean, the ships of the latter Power having only just reached European waters when the Armistice with Germany was signed.

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