The History of the 51st (Highland) Division 1914-1918

by

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51st (Highland) Division

Dedicated

TO THE YOUTH OF SCOTLAND,

In the hope that this record of the courage, skill, and endurance of a Highland Division may strengthen their purpose, when their time comes, to uphold in no lesser degree the great traditions of their forebears.
FOREWORD
If it were possible for the General who for three years commanded all the British Divisions in France, and was served with equal gallantry, devotion, and success by each, to admit a predilection for any of them, my affection would naturally turn to the Division that drew so many of its recruits from the same part of Scotland where my boyhood was spent and my own people lived. Those who read the pages of this book will find therein a tale of patient endeavour and glorious achievement of which I claim a good right to be as proud as any of my fellow-countrymen. The 51st Division does not need to boast of its prowess or its record. It can point to the story of its deeds, plainly and simply told, and leave the world to judge.

HAIG OF BEMERSYDE, FM
8th August 1920

PREFACE
In compiling the 'History of the 51st (Highland) Division' I have been beset by various difficulties, which have contributed towards the long delay in its publication.

In the first place, it has been written in circumstances in which military duties have afforded little leisure for continuous effort; secondly, the work has been carried out in many places, most of them highly unsuitable for research, such as the desert of Sinai, native villages and the deserts of Lower Egypt, Jerusalem, Bir Salem, and at sea.

Not only had the difficulty of transporting from station to station the large mass of available material to be overcome, but also the conditions of life in huts and under canvas in an eastern climate are seldom conducive to clear and consecutive thinking.

Further, the material available has been unequal. Up to the conclusion of the battle of Arras, no completed narratives of the operations carried out by the Division were compiled. To this point, therefore, the only resources were the bald and rather incomplete entries in the official war diaries and personal diaries, which threw little light on the operations in their broader aspects.

From the third battle of Ypres onwards a detailed account of all engagements was published by Divisional Headquarters shortly after the conclusion of each operation. These have rendered the compiling of the 'History' from this point considerably less laborious, and have allowed it to be carried out in greater and more accurate detail.

It has been necessary, owing to the increased and increasing cost of production, to keep the size of this book within certain bounds, and to reduce as far as possible the number of maps. On this account there has been no alternative but to restrict the detail in which actions are described. It is regretted that in consequence much material which officers and men of the Division and their relatives have submitted, often at my request, has been necessarily omitted.

It was only thus that the book could be kept sufficiently reduced in size to prevent its price prohibiting the circulation desired.
The 'History' is now presented with every consciousness on the part of the author that full justice has not been done to its great subject. Indeed, it is doubtful if full justice can be done to the part played by the British Army in the Great War until a generation not intimately involved in it has arisen and has come to regard the burdens sustained for over four years by the British soldier in the true perspective.

My thanks are due to all those who have assisted me in the compilation of this work by the loan of diaries, maps, documents, &c., and in particular to Lieutenant General Sir G M Harper, KCB, DSO; Major General R Bannatine-Allason, CB; Brigadier General L Oldfield, CB, CMG, DSO; and Colonel Ian Stewart, CMG, DSO.

General Bannatine-Allason kindly wrote for me the first chapter, and spared himself no pains in assisting to procure for me information concerning the early days of the Division in France. Had it not been for him and Colonel Ian Stewart, information would have been so scanty that it is doubtful if the earlier chapters could have been written.

To Captain A Scott, DSO, MC, 7th Argyll and Sutherland Highlanders, late Staff Captain 154th Infantry Brigade, I am particularly indebted. Captain Scott has kindly relieved me of the labour of reading through the proofs and of completing the final arrangements for the publication of this book, a labour which residence in the Near East would have made it difficult for me to perform.

Lastly, I am indebted to Mr James Blackwood, in no small degree, for taking upon himself, while I have been abroad, much of the burden of the preparation of this book for the Press, which would normally have fallen upon the author.

FW 13,
HEADQUARTERS,
3RD (LAHORE) DIVISION,
BIR SALEM, PALESTINE

CHAPTER I
MOBILISATION
(By Major General R Bannatine-Allason, CB)

The Highland Division arrived at its War Station, Bedford, about 15th August 1914, and was billeted in and near that town. The farthest off unit was the 1st Highland Brigade RFA, which was at St Neots. The billeting had been previously arranged, with a view, as far as possible, to training facilities.

The units were, many of them, considerably below strength, and, generally speaking, horses and transport (locally acquired in Scotland) inferior in quality, though many animals actually went overseas and did good work.

The Division moved under General Colin Mackenzie, but he was almost immediately transferred to command a New Army Division, and Major General Bannatine-Allason took over about the 24th August. The Division, having been scattered over the north of Scotland, would and did naturally benefit by concentration, and the work of Divisional and other staffs immediately began to make itself felt.
The movement to Bedford was extremely well managed, and gave a foretaste of the good staff work which was to follow.

The country round Bedford can only be called a moderate training-ground for the larger units. The absence of ranges, the particularly obnoxious clay soil, and generally small enclosures were obstacles to overcome. Ranges were at once commenced; but two sites, which were under water in winter, required a lot of pumping to make them serviceable. As a matter of fact, the Division was never really abreast with the necessary musketry training, though, owing to the excellent work of the Divisional sappers, particularly of their Adjutant, Captain Wecll, and to the really strenuous efforts of the units themselves, it is possible, even probable, that the Division left for France with average "Territorial" efficiency in this respect. Shortage of ammunition was, of course, common to all.

It may be guessed that the arrival in the peaceful city of Bedford of 20,000 Highlanders would occasion some sensation, if not misgivings, in minds of the local authorities and townspeople. Be that as it may, it must be recorded that the best feeling soon became pronounced between the troops and the inhabitants; and, as will be shown later, the Highland Division left Bedford with the blessing of the "City Fathers".

Very naturally some at least of the people benefited considerably by the invasion, but, generally speaking, the Division was treated with the greatest kindness, and the survivors of those times will ever be grateful for the generosity and helpfulness accorded. It may be invidious to mention names, but when it is said that the "Chief Citizen", then Mr Browning, set the example, the great majority of the people very naturally followed suit. The Entertainment Committee - chairman, Mr Henry Tebbs, with its secretary, Mr Machin, himself a born organiser - was a boon to every man. To them, assisted by hundreds of ladies and gentlemen, was due the New Year's dinner (appropriate to Scotsmen), the Highland games, and innumerable concerts and other entertainments which materially helped to enliven the few spare moments of a strenuous existence. The clergy of all denominations gave over their churches; schools were given up for hospitals; VAD women vied with each other in helping in the field ambulances. Each field ambulance was opened out for training purposes as well as for care of the sick.

A Mrs Thomson was the first VAD worker, and took charge at once of our reception hospital with much success. The UOC was glad to be able to help to obtain some recognition of her good work.

The police, both town and county, were ever sympathetic; and Major Stevens, Chief Constable of Bedfordshire, laid himself out to smooth out rough ground - in fact, he was a sort of voluntary chief APM and police adviser to the GOC.

The Division kept New Year's "nicht" much to the amusement of the people. Dinners were given at most messes, reels were danced in the market square at midnight, in which, it was said, the Chief Constable assisted. Then "Auld Lang Syne" was sung, and the men of various units played to their billets by their pipers. The whole proceeding was most orderly, and witnessed by many of the leading townspeople in evening dress, while the men were under complete control by the APM.
A swimming bath - with hot and cold water - was started for the men of the Division, the ground being given by the Midland Railway. The bath was opened with much ceremony, and the little daughter of the Town Clerk (Mr Stimson) gallantly took the first "header" into the tepid water. She was presented at the time with a box of chocolates, but later with a gold watch with a suitable inscription from the Highland Division, which may serve in after life to remind her of her connection with that now rather celebrated fighting unit.

There were, of course, some amusing incidents connected with our stay at Bedford. On one occasion some one wrote to the papers complaining of the behaviour of certain training divisions. His Majesty inquired, through his private secretary, about the Highland Division. The GOC was able to reply, after consultations with the local authorities, that there was far less crime in Bedford than in ordinary times of peace. On this his Majesty was pleased to congratulate the Highlanders on their exemplary behaviour.

To show the sort of feeling existing in the town many stories might be told. But the following rather pathetic one is an example of the many acts of kindness, some anonymous, that actually occurred. During the severe epidemic of measles the GOC was visiting one of the hospitals, and seeing a poor man inside the gates and sentries, asked what business brought him there. The man replied, "I am a working man, but I saw in the papers that the hospitals wanted fruit, so I bring a few oranges twice a week."

It is quite natural that imaginary evils were invented by outsiders, and the work of the staff unnecessarily increased. But at that time, the beginning of the war, every one wanted to do something, sometimes for personal advertisement, sometimes to obtain congenial occupation. Two instances may be quoted. Some one, it doesn't matter who, discovered that the water supply of the town came from the river, and that the health of the troops must suffer from some imaginary germ. It was useless for the GOC, the Mayor, the Medical Officers of Health, and others to protest that the people of Bedford had drunk the same water for years, and its many thousand inhabitants were robust and healthy. The correspondence went on for weeks, much useless scribbling resulted, and much valuable time wasted. But the troops drank the water.

Again, there was a serious outbreak of measles among the men. Everything possible under the circumstances was done by the Divisional medical officers and local authorities. But people wrote to the papers, with the best intentions, that the men were being killed almost deliberately, and the result was a good deal of confusion, some useless correspondence, and, again, much valuable time wasted. However, great credit is due to the Divisional medical officers, their assistants, and the VAD ladies, for grappling with the epidemic during the bad months of November and December. The disease worked itself out by the end of January, and by the end of February the Division was practically sound again.

It is an interesting fact that the epidemic was far more deadly in the case of men from the extreme north and the islands. This is shown by the following table, and bears out the opinion of the medical officers as to the probable incidence of the disease in units from different localities.
Taking the southern boundaries of Banff, Inverness, and Argyll, and including the western islands, Scotland is roughly divided into two fairly equal areas. Calling the northern area A, and the southern B, we find that:

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<thead>
<tr>
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<th>Recruits</th>
<th>Cases of Measles</th>
<th>Deaths</th>
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<tr>
<td>A</td>
<td>5,200</td>
<td>477</td>
<td>59</td>
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<tr>
<td>B</td>
<td>13,000</td>
<td>52</td>
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The percentage of deaths from measles worked out to 10.8 per cent of the cases, as seven deaths were from scarlet fever and one from diphtheria.

It will be easily understood that the rapid preparation for war of a Territorial Division presents numerous difficulties. It was originally laid down that Territorial troops would require, and have, six months to complete training. Even with a very complete elementary training this is not an over-estimation, assuming that equipment is up to date and complete. But when it is stated that most of the equipment, guns, rifles, technical stores, &c., were quite out of date, besides being ridiculously inadequate, some, at least, of the difficulties are obvious. One of the first troubles was the removal of most of the permanent staff. Only those who know the importance of these instructors can realise what it meant. They were, however, required elsewhere on more important duties, and had to go. Later, the regular adjutants of infantry were taken, also a great blow, but some eventually came back. Such difficulties were, of course, common to all Territorial Divisions. The Highland Division was not singular, but it had, and was able to keep, some very excellent staff officers, both Divisional and Brigade, who did splendid work. Here it may be recorded, and it is due to the General Staff, War Office, and other high formations to say, that so far from interfering with training, we received every assistance, and any reference to that body met with prompt and sympathetic attention. So with the QMG's department, and it is obvious that some of those in high places realised the wisdom of trusting the man on the spot, and have therefore earned our gratitude.

The War Office issued a special "syllabus" for training, necessarily modified as experience was gained, and a good deal was left to local commanders; but, as a matter of fact, it was in most cases necessary to begin with the "goose-step". The "barrack" discipline was excellent, but the field discipline left much to be desired. It was some time before some CO's even could be made to understand that an order in the field did not admit of heated argument before execution; and the rank and file had to learn that training was not a recreation to stop when they got tired. But all this gradually wore off, and in less than three months units began to assume a workmanlike and even serviceable appearance on parade.

What has been said applies to all units more or less, but while technical units, such as ambulances, transport companies, signal company, and engineers came on very fast, the artillery moved slowly in the direction of preparedness for war. They had ancient "pieces", poor and ill-fitting harness, while only in a few cases was any knowledge of "horse management" evident. Thus, care of horses, riding and driving, had to be instilled from the beginning. Added to this, the horses of all mounted units, and the vehicles of transport, had been commandeered in a great hurry on mobilisation, and were consequently rather a handicap.
New vehicles came necessarily very slowly, but with drastic castings and the ever-ready assistance of the Remount Department, the horse question rapidly improved. It is interesting here to record, in connection with remounting, that a hundred polo ponies were sent to England as a present from the "Zemindars" of Madras. They were not looked on with favour by other units; but the GOC, with considerable experience of such animals, gladly accepted the offer of them by the Director of Remounts, with the result that the company commanders and staffs of the Highland Division went to France better mounted than any other.

There were two notable exceptions regarding "horse management". One was the Highland Mountain Brigade, which came down with a splendid lot of pack ponies, and made a very creditable turn-out from the first. The other was one of the transport companies, which showed considerable knowledge and good work in respect of its animals. It must, however, be common knowledge that the Highlands is not the best place from which to obtain, in a hurry, four or five thousand good army horses, nor are Highlanders, as a rule, "horsey" people. But in spite of all this the improvement was wonderful, the interest taken in their animals was most creditable to the various units, and the Division was fortunate in digging out a lot of very useful transport officers.

So training went on in its various branches, units gradually completing in personnel, and by December Divisional exercises were attempted. Inspections by the Commander of the Central Force, and later by his Majesty the King, gave a useful fillip to the proceedings, and if there was one thing more than another which made successful training possible under adverse circumstances, it was the grand spirit of all ranks, and the determination of all to "play the game" - a spirit common to all Territorial units of the kingdom. No praise can be too great for the regimental officers and men.

Towards the end of 1914 certain units were taken from Territorial Divisions to complete the field army, and the first "bomb-shell" came when a field ambulance and a field company were called for. The 1/1 Highland Field Ambulance and the 1/2 Highland Field Company were sent. Then three battalions of infantry were ordered to France. There was not much to choose between the various battalions, so the chief consideration was given to numerical strength. One battalion was selected from each brigade, and 4th Seaforths, 6th Gordons, and 7th Argylls went off. In the same way, shortly afterwards, 4th Camerons, 4th Gordons, and 9th Argylls were sent. To replace these the 2nd line battalions were sent from Scotland, but it was obvious that they would not be ready to accompany the Division abroad. The 2nd line medical and engineer units, however, came on very quickly, and soon took the place of their front line. The mobile veterinary section - a very well-run unit - was also depleted, and replaced by degrees.

The next and last act of depletion was the ordering of the Mountain Artillery Brigade to the East to take part in the Gallipoli expedition. Two batteries only were sent, and the third kept as a training unit for mountain artillery - the only one at home. The health of Lieutenant Colonel Robertson was doubtful, and the GOC decided to retain him, and he was afterwards given the billet of organising and commanding the Divisional Ammunition Column. He was, as a sort of comment to the GOC's decision, the only Colonel who served with the Division from start to finish.
The winter of 1914-15 was a wet one, and the state of the country round Bedford was all against training. Horse lines and the few hutments were a sea of mud, and movement off the roads for wheeled vehicles was difficult, in some cases impossible. However, such operations as were possible under these conditions were very useful, judged by later experience.

Towards the end of March 1915 it became known for certain that Territorial Divisions would go overseas as complete units, though the exact order of movement was undecided. There had been continual changes in the staff, both Divisional and Brigade. Fortunately, the GSO 1, then Major Moir, Royal Scots, was retained, and to him, both in that capacity and as, later, AQMG, the Division generally and the GOC in particular is deeply indebted. Several Brigadiers were changed, while commanders of battalions, &c., were also weeded out, chiefly for age. Thus, before leaving for France, the CRE, ADMS, ADVS, AQMG, and various other commanders, were replaced, of whom Colonel Cook of 6th Argylls was nominated as Base Commandant in France.

At last the order came to prepare for embarkation, and there was much to do. To begin with, the Division was six battalions short. So to complete it a whole Lancashire brigade Was sent under command of Brigadier General Hibbert, and two battalions of the Black Watch (6th and 7th), which regiment was not included in the Highland Divisional organisation.

The Lancashire brigade was a very fine one, but, of course, quite unknown to the GOC and staff, and there was little time to get to know them. It is unnecessary to say, however, that they were received with open arms, and still less necessary to say they "played the game" and at once became an integral and very useful part of the Division.

The Black Watch battalions were splendid in physique and appearance on parade, and though they had not been trained with other troops, they very soon proved their value, and vied with the other units in adding to their brilliant regimental records.

So, after about twelve days of the ceaseless work of final equipment, completion in stores, clothing, animals, and every sort of war-like implement, eventually the Division commenced entraining for France with, perhaps, some misgivings as to thorough training, but none whatever as to the determination to uphold the honour of the land of its birth!

In looking back on those last days at Bedford, one can hardly understand how the final touches were given to a unit so incomplete in nearly everything. It seems nothing short of a miracle that Territorial Divisions generally were completely equipped in the short space of ten or eleven days. And it may not be out of place to record the obligations such units are under to the ordnance, remount, and other departments, for the ceaseless work, with depleted staffs, which was necessary, and which was so successfully accomplished. Nor will it be out of place to pay a final tribute to the good people of Bedford, who certainly evinced a quite unexpected sincerity in the "send-off" of the "invaders".
Shortly before leaving, the GOC sent the usual short letter of thanks to the Town Council, through the Mayor, for the assistance, general kindness, and consideration accorded during the Division's stay in the town. The following letter was received in reply:-

BUSHMEAD,
THE EMBANKMENT,
BEDFORD,
29th April 1915

Major General Allason

Dear Sir,
Please accept on behalf of the Town and myself our many and sincere thanks for your kind letter of yesterday.

The people of this Borough will never forget the visit of the Highland Division, and the desire of all concerned to cause as little inconvenience as possible, leaving alone the material benefits that have accrued to the inhabitants generally through your visit.

I need hardly say how much we shall miss you. The friendships formed during the last nine months will last for many years to come.

We shall watch for news of the Division as if they were our own people.

I will have your letter read at the next Council meeting. May God grant you all a safe return to the friends you leave behind.

Yours very truly,
Harry Browning

CHAPTER II
ARRIVAL IN FRANCE - FESTUBERT

On 13th April 1915 telephone instructions were received from the War Office that the 1/1 Highland Division was at once to be prepared for service overseas. The following day information was received that the battalions which had already been sent overseas would be replaced by the 6th and 7th Black Watch, and by four Lancashire battalions - the 1/4 Battalion King's Own Royal Lancashire Regiment, 1/8 Battalion the King's Liverpool Regiment, 1/4 the Loyal North Lancashire Regiment, and the 2/5 Battalion Lancashire Fusiliers.

By 18th April these battalions had all joined the Division. On 29th April orders were received that the Division would entrain to Southampton and Folkestone for Havre and Boulogne during the next few days. By 5th May the journey had been completed without any unusual incidents, and the Division was concentrated in billets in the area Busnos, Robeeq, and Lillers, and formed part of the Indian Corps (Sir James Willcocks) of the First Army (Sir Douglas Haig).
As soon as the Division had completed its concentration in the First Army area, General Sir Douglas Haig paid it his first of many visits. The assistance which the Division received from Sir Douglas Haig and the First Army Headquarters Staff while finding its legs during its first days in France was invaluable.

At this period the general situation on the Western Front was as follows. The second battle of Ypres, prepared by the first discharge of asphyxiating gases, had begun on 22nd April, and was to continue with great intensity for over a month.

During the early part of this period the French were preparing an attack to be launched on 9th May between Arras and the right of the British lines. The First British Army, having been ordered to support this operation by an attack, had issued instructions directing the IVth Corps against the German position in the neighbourhood of Richebourg (south-west of Fromelles), and the 1st and Indian Corps against the German trenches between Givenchy and Neuve Chapelle. These attacks as planned were accordingly delivered on 8th, 9th, and 10th May 1915. They, however, met with little success. It was therefore decided that the First Army should concentrate on the southern point of attack, and renew the operations on 12th May. This attack was subsequently postponed until the 15th owing to low visibility.

In the attack on the 15th the Indian Corps, owing to the strength of the enemy's defences in the neighbourhood of Richebourg l'Avoue, again failed to make progress. The 2nd Division of the 1st Corps, however, captured the enemy's first and support lines. On the following day, the 7th Division on the right of the 2nd Division successfully captured several second lines of enemy trenches, and these two Divisions continued the advance on the day after as far as the Le Quinque Rue-Bethune road.

On 19th May the 2nd Division was relieved on this front by the 51st Division. [On 11th May 1915 the 1/1 Highland Division was renamed the 51st (Highland) Division, the Infantry Brigades being numbered, 152nd (Seaforth and Camerons), 153rd (Gordon Battalions), 154th (Lancashire Battalions)].

On the 25th, the object of these operations having been attained, orders were given for Divisions in the line to act defensively and consolidate the ground won.

These operations were attended by serious casualties, but, to quote Sir John French's despatch, they assisted in securing the brilliant successes attained by the French forces on the right, not only by holding the enemy on this front, but by drawing off a part of the German reinforcements which were coming up to support their forces east of Arras. In this battle of Festubert the enemy was driven from a strongly-fortified position, and ground was won on a front of four miles to an average depth of 600 yards.

From the above summary it will be seen that the 51st Division was initiated to the ways of war in the midst of a great battle. On 9th May it remained in reserve to the Indian Corps, and was held in readiness to move at short notice until 11th May. By this date it had become clear that the progress of the Indian Corps had not been such as to render the employment of its reserve at all probable.
On 14th May the 51st Division, less two brigades RFA temporarily attached to the Lahore and 49th Division, moved to the area Caestre, Borre, Merris, Meteren, and came into GHQ reserve. Shortly after this move Lieutenant Colonel A J G Moir, who had mobilised as GSO 1 to the Division, returned to the Division as AA and QMG.

On 18th May the Division moved into the area La Gorgue-Vieille Chapelle. On the night 19-20th May the 152nd Infantry Battalion began the relief of the 2nd Division (General Horne), south of Neuve Chapelle, and on 20-21st the 153rd Infantry Brigade relieved a Canadian brigade in the Richebourg sector.

The Highland Division during its first tour of duty in the line was thus employed in the particularly trying operation of consolidating a newly-won position. Few operations call for more resource and more tactical skill on the part of junior officers and NCOs, or for more detailed planning and arrangement on the part of commanders and staffs. Order has immediately to be evolved from chaos. Covered approaches are non-existent, and must be constructed before movement during daylight becomes possible; sniping with rifles and, in some cases, field-guns is constant; the protection afforded by barbed-wire entanglements is wanting; arrangements for sanitation and cooking have not been planned. In fact, the amount of work required to make the position defensible and habitable appears overwhelming.

To make confusion worse confounded, officers, runners, reliefs, ration parties, &c., as long as movement is restricted to the hours of darkness, find the greatest difficulty in acquiring a working knowledge of the geography of the defences.

Moreover the Germans, in those days of short advances, were quick at recovering from the confusion in their artillery arrangements created by a successful attack. They were therefore always liable to bombard a newly-captured position heavily before the men had time to construct sufficient field-works to protect themselves from shell splinters.

In the case of the front taken over by the Division on this occasion, the normal difficulties were accentuated by the fact that digging-in was only possible to a depth of from two to three feet. Everywhere in the Flanders mud, below that level water is encountered. It is therefore necessary to erect above ground double rows of traversed breastworks, between which the men must live and have their being.

The difficulty of consolidation in this mud country requires to have been experienced to be fully appreciated.

The work of maintaining breastworks, when completed, in a state of repair is considerable, as they cannot withstand a bombardment by artillery or trench-mortars. In consequence sections of the trenches are frequently levelled to the ground, and have to be reconstructed. The labour of maintaining them when once erected is, however, a small problem when compared with the difficulty of erecting them de novo during active operations.

In the first place, owing to the flatness and absence of cover from view, which is characteristic of Flanders, the work of construction is in the initial stages almost entirely confined to night work.
As breastworks will only stand if their sides are graded at the proper slope, darkness makes this work infinitely more difficult. Moreover, breastworks during their construction and before they have reached their full thickness can be demolished by light field-guns, and be seriously damaged even by machine-gun fire. Of these two facts the enemy used to take full advantage. He also knew well that much of the work had to be done by men standing in the open on his side of the breastworks, and so made considerable use of machine-guns to inflict casualties on working parties thus engaged.

There are other serious drawbacks to garrisoning breastwork trenches. Deep dug-outs cannot be mined in the clay in the normal way, again on account of water. Concrete shelters, which take a considerable time to erect, are therefore the only alternative form of shell-proof cover. Even these have a marked tendency to fill with water.

There was a good example of a concrete dug-out in the right sector at Armentieres in September 1916. Some simple-minded soldier, finding that it was gradually filling with water, made a hole through the concrete floor to let the water out. In consequence the dug-out filled with water up to the level of the ground surface in a few hours, driving its occupants out. A battalion medical officer subsequently visiting the trenches came across this dug-out, and thinking it was a storage tank for water, tested the water and caused a notice-board to be placed on it, saying, "For ablution purposes only; not fit for drinking".

Breastwork parapets, even when they are not subjected to bombardment, require constant attention. They have in particular a disconcerting habit of settling down and losing height, particularly after rain. In consequence it sometimes happens that by the gradual subsidence of the parapet men may unwittingly expose themselves to enemy snipers in places where a day or two previously they were completely hidden from view.

Apart from the amount of labour the upkeep of breastworks requires, there are other reasons which make them unpleasant to live in on an active front. During a bombardment, for instance, when a shell hits the trench, men are constantly being buried in a heap of sandbags and earth. They have then to be dug out immediately to save them from suffocation. In these circumstances the rescue parties often have to work while the bombardment continues, and with enemy snipers and machine-gunners ready to engage them whenever they expose themselves in the breach.

German machine-gunners were also expert at firing a series of bursts into a particular portion of breastwork until it became non-bullet-proof. They would then continue firing bursts at irregular intervals at the same spot, with the result that the bullets penetrated the parapet and came through into the trench. Casualties were often caused in this manner.

The Highland Division, thus having arrived in France with its training only partially completed, was called upon to undertake a difficult and unpleasant task - namely, the holding and consolidation of a newly-captured position in Flanders. Moreover, the circumstances were such that the Division could not carry out a period of attachment in the line to an experienced Division for instruction.
Thus no opportunity was vouchsafed to officers and men of being "put wise" before the full responsibility of holding a captured position was thrust upon them. The significance of this statement is that troops on the first occasion that they enter the battle zone are liable to be "gobrowed" by their new circumstances. They require, as it were, a chaperon to assist them to assess things at their true value, and teach them what not to fear but to respect, and what they may disregard.

Discussing this question, a Brigadier-General once related how when he first arrived in France as a company commander he saw a "woolly bear" burst over a wood in which his company was lying in mass. He turned and galloped back to the wood *ventre a terre* in a frenzied state of mind, certain that he would find numbers of his men dead and dying. He was amazed to find that, on the contrary, not a single man had been touched. A veteran would, of course, have regarded the woolly bear in its true light - as a vulgar and ostentatious beast that usually burst too high and seldom took any effect on the ground.

In the other direction one remembers the novice who, during his period of initiation, cut up a duck-board (a most impious act in itself) in a forward sap and kindled a smoking bonfire on which to boil a mess-tin of water, and his indignant astonishment at the shower of rifle grenades which he unwittingly but naturally provoked.

Indeed, the debutante Division entering its first theatre of battle may well be excused a certain amount of shyness concerning its behaviour, however well prompted it may have been before it left home.

General Davies, commanding the 8th Division, however, gave the 51st every possible assistance, even lending them his own instructors to help to complete their training. His assistance proved most valuable.

On 26th May Divisional Headquarters was shelled out of Lacouture. This bombardment was attributed to an article which had appeared in the press, and which disclosed the location of units about Lacouture, including Divisional Headquarters and a Canadian 60-pounder battery. The Germans appear to have taken full advantage of this information, as both the Divisional Headquarters and the 60-pounder battery were heavily shelled. Several of the Divisional Headquarter signal section were killed or wounded, and General Bannatine-Allason had a narrow escape, the windscreen of his car being shattered. After this episode it was noticed that the censorship of articles appearing in the press became more rigorous.

On taking over the line, the clearing of the battlefield had to be undertaken in addition to the work of consolidation. The bodies of men who had been killed in the recent operations lay thick throughout the whole area. Even the wounded had not all been brought in. The men were thus quickly introduced to war in its worst aspects, in a manner which clearly revealed to them the power of modern destructive weapons. Officers and men still speak of the depressing effect which the spectacle of so many dead had on them. This feeling was augmented by the unpleasant duty of searching for the bodies in the polluted atmosphere and burying them, which had to be undertaken during their first few days in the line.
The whole countryside was further littered with arms, equipment, clothing, tools, and ammunition. Considerable exertions were therefore required to save even a portion of the serviceable stores which had been left on the ground during the preceding operations.

On 30th May the Division was transferred to the IVth Corps, being relieved by the Indian Corps. The following day the 153rd Infantry Brigade relieved the Canadians between Festubert and Le Quinque Rue. This sector was subsequently divided, the 152nd Infantry Brigade taking over the line on the left.

On 7th June orders were issued from the IVth Corps to attack the enemy's positions about Rue d'Ouvert and Chapelle St Roch and farther south on the morning of the 11th, with the object of gaining ground towards Violaines. Later this attack was postponed until the 15th. On the 12th the operation order for this attack was issued. The objective of the IVth Corps was "the German positions from Chapelle St Roch along the Rue d'Ouvert to L12.

"The Canadian Division was to attack on the right and form a defensive flank; the 7th Division was allotted the Chapelle St Roch and the southern end of the Rue d'Ouvert as its objective; and the 51st Division the extreme end.

"The actual objective given to the 51st Division were the houses at L11, L12, L13, and K7. At the last-named they were to join hands with the 7th Division.

"The 154th Infantry Brigade were detailed for the attack, their right being directed on the south-west corner of the German salient - that is, a point about 150 yards east by south of L8. The left of this attack was to be directed through L9.

One section of the 1/1 Highland Field Company, RE, and "C" Company of the 5th Seaforth Highlanders, were ordered to assemble in the D line towards the left flank, in readiness to construct and occupy a fire-trench between M6 and L12 after that point had been gained.

One section 2/2 Highland Field Company, RE, with two platoons of the 154th Infantry Brigade, were ordered to assemble in B line near the right flank. Their purpose was "to protect the right flank of the attack and to construct a point d'appui on a suitable site between L8 and L10".

It was arranged that sufficient infantry bombing parties should be detailed from the bombers of the Division to carry out various tasks, according to the progress made by the assaulting infantry.

In these days the bomb commonly used was the Bethune bomb. These were made of cast-iron, and were exploded by means of time-fuses fixed into detonators, with patent lighters attached to the fuse. They were but clumsy and dangerous weapons when compared with the modern Mills bomb.

Bombing and its tactics was then an art which could only be acquired by a course of specialist training, which, with the facilities that then existed, lasted a considerable time.
The result was that the output of bombers was small, and it was therefore considered necessary, if full value was to be obtained from them, to amalgamate all the bombers of each brigade into brigade grenadier companies.

On this occasion all three brigade grenadier companies detailed bombing squads to take part in the operations.

The artillery available for this attack was, both as regards the number of guns and the amount of ammunition, insignificant in the light of more recent experience. The Divisional artillery, it is true, had been reinforced by a group of French 75s. The 15-pounders, with which the Divisional artillery was armed, had, however, such faulty ammunition and so little of it that effective co-operation with the infantry was, according to modern standards, out of the question. The artillery programme included wire-cutting, a two days' continuous bombardment, and a final intensive bombardment. The first bombardment was to continue up to the moment of the infantry assault. At 6pm, the hour of the assault, the guns firing on the enemy's front line were to lift on to the line L9-L10. At 6.15pm there was a further lift on to the Rue d'Orient.

The general plan can be summed up as being an attempt to straighten out a re-entrant in our line by pinching off a salient in the enemy's.

The artillery began wire-cutting on 13th June, the deliberate bombardment beginning on the 14th. On the 15th it continued, becoming intensive between 5.30pm and 6pm. Mountain-guns and trench-mortars also joined in the bombardment.

At 6pm, 15th June, the attack was launched by the 4th Loyal North Lancashires and the 6th Scottish Rifles of the 154th Brigade. The 6th Scottish Rides had replaced the 2/5 Lancashire Regiment, a second-line battalion, which was withdrawn from the Division to complete its training.

The attack was at first successful. The west end of the German salient was carried, and the attack pushed on to the main German line near the Rue d'Ouvert. and for a time the third German trench line was occupied and held. Three companies of the 4th King's Own Royal Lancaster Regiment were accordingly sent forward to reinforce the Scottish Rifles.

Meanwhile "C" Company of the 5th Seaforth Highlanders had advanced to the attack at 6.45pm.

The action of this company of the 5th Seaforth Highlanders is amply described by the following extracts from a letter written by a platoon sergeant who took part in the attack.

*On the night of the 14th we went into the front line, the 6th Seaforth Highlanders having eased away to the left of the Divisional sector towards the Orchard, to make room for our company.*
Communications from reserve trenches to front line were very bad; movement had mostly to be carried out in the open under direct German observation. Daylight movement had therefore to be restricted as much as possible.

On the 15th we had a most uncomfortable day. The Boche rose early, having apparently known our plans. In fact, some of them were heard to call across No Man's Land, 'Come along, Jocks; we are waiting for you.' And undoubtedly they were. From early morning we were subjected to continual shell-fire, causing many casualties to us. As the afternoon drew on the Boche became still more lively, but we still had great hopes. These, however, became fainter as each occasional look over the top showed the German wire unbroken.

At 5 o'clock we began to make our final preparations. The adjutant and CO arrived and took up a point of vantage in the trench where a view of the 6th Scottish Rifles could be got during their advance. It was only by this means that the CO could judge as to the failure or success of the Scottish Rifles.

Thus we awaited our further orders. From this time onwards an occasional bark from a field-gun could be heard, and a small shrapnel burst could be seen over the German lines.

At last the hour had come for the 6th Scottish Rifles. Over they went. Then the Germans showed to advantage the quantity and quality of their munitions. Machine-guns swept over the parapets and tore them to pieces; the 154th Infantry Brigade were seen to be advancing gloriously in front of the most colossal artillery and machine-gun fire - their ranks thinned considerably before they were many yards from their own trenches. But on they went and entered the German front line, where they were lost to view.

Our time had now come. Nothing for it but to go over. The order was passed along, 'Get ready'. At 6.45pm the order came 'Advance!' The place was a perfect hell. Just one solid sheet of bullets. Over we went. Many were hit on the top of the parapet; before a distance of thirty yards was traversed all the officers of our company were hit, as well as the brigade bombing officer (Lieutenants Mowatt and Dunnet killed, Captains Robertson, Ritson, and Lieutenant Fraser-Campbell wounded). On we went; but men were falling in all directions, and by the time we were within reach of the German wire, not more than fifteen of the company were still on the move. The outlook was hopeless, the wire was an insurmountable obstacle, and the few who remained had to take cover in the nearest shell-hole until darkness allowed us to make our own lines again - a sad dejected remnant of a company.

So much for the subsidiary attack of the 5th Seaforths.

The attack of the 7th Division on the right of the 154th Infantry Brigade had failed to develop substantially, and no progress was made. Farther back the 1st Canadian Brigade captured the German front line trenches. Night thus fell with the 154th Infantry Brigade having penetrated the German positions on a narrow front, but with both its flanks "in the air".
The situation, however, remained too obscure to enable the salient thus made in the German lines to be utilised for developing flank attacks against the German front and support line trenches.

The nature of the country, as has been pointed out above, made it impossible for the men to dig themselves in, and they were thus dependent for protection on the slender breastworks that they had been enabled to improvise during the night amongst the debris of the German trenches. In this exposed position they were counterattacked in the early hours of the morning. Engaged with bombs and machine-gun fire, both from their front and flanks, they were unable to hold their position, and were finally forced back to their original front line trenches. They had suffered considerable casualties, the 1/4 Loyal North Lancashires alone having lost 19 killed, 255 wounded, and 145 missing, amongst them 5 officers being killed and 8 wounded.

During the night the remnants of the 5th Seaforth Highlanders and the sappers who accompanied them crawled back from the shell-holes or long grass in which they had been lying to our own trenches. In a similar way the Canadians, also unable to hold their exposed position on the German trenches, had returned to their own lines.
The failure of the attack was thus complete. Great credit is, however, due to the 154th Infantry Brigade for their advance in the face of heavy artillery and close-range rifle and machine-gun fire. There is little doubt but that, had the operations on their flanks been successful, they would have had every prospect of holding their gains. "C" Company of the 5th Seaforths did all that could have been expected of them in circumstances in which success, as it turned out, was out of the question.

General Ross, commanding 152nd Infantry Brigade, says of them in his report of the operations. "I am glad to say that both officers and men behaved very well indeed, and all went into the attack with the full intention of getting through. The company had been somewhat shaken during bombardment, as they had had several casualties from shell-fire, mainly from our own shells, and the German shells had fallen amongst them more steadily than usual. The casualties are not known yet exactly, but are heavy, being over a hundred in one company."

Results were undoubtedly discouraging in the first attack carried out by troops of the Highland Division, but it is doubtful if, in the circumstances, any troops could have done better.

They had within a few days of arriving in France played a principal part in the deepest tragedy that attacking infantry can assist in - the tragedy of uncut wire.

After a gallant advance across No Man's Land, through which nothing but their determination to close with the enemy could have carried them, the survivors had been suddenly halted by an intact entanglement covered at close range by rifles and machine-guns.

In cases such as this the whole impetus of the attack collapses, skill and initiation are no longer of avail, the brain can no longer help the body. Some men plunge into the entanglement, tearing at it with their wire-cutters, and lacerating their flesh on the barbs until they fall.

Others double up and down the belt looking for a gap through which they may make their way. Odd heroes may find such a gap, and, if they live to reach the German trenches, leap into them, subsequently to be posted as missing. Their story is never told.

Others, with a disregard for death born of despair, may stand for a moment or two and return the enemy's fire until they are shot down.

Only those survive to answer the roll who either fall wounded and have strength subsequently to regain their own lines under cover of darkness, or who with quick perception see that the obstacle is impenetrable, and instantly seek cover in which they may be hid until nightfall.

Uncut wire might be written as the epitaph on the grave of many a British infantryman, and equally well in later days, when air reconnaissance was perfected, on the grave of many a commander's reputation.
During the following night the 6th Scottish Rifles, the 4th Loyal North Lancashire, and the 4th King's Own Royal Lancashire Regiment were withdrawn, and were replaced by the 8th Liverpools and the 7th Black Watch. The latter had been sent up from the 153rd Infantry Brigade to take over the reserve trenches.

On the morning of the 16th orders were received from the IVth Corps to renew the attack at 4.45pm after an artillery bombardment. The 5th and 7th Gordons from the 153rd Brigade were therefore temporarily attached to the 154th Brigade to replace the battalions which had been withdrawn.

The attack met with no more success than its predecessor. The 8th Liverpools, supported by the 7th Black Watch, carried out the advance. It was, however, impeded from the start by a heavy bombardment opened on our trenches by the enemy. The 8th Liverpools managed to get forward in small parties, and passed the west end of the German salient. The troops on their right flanks were, however, unable to make progress, and about 8pm the Liverpools were forced back to our trenches.

It had been intended that, if the 154th Brigade was successful, the 152nd Brigade should continue the attack. These orders were therefore cancelled, and during the night the 5th and 7th Gordon Highlanders replaced the 7th Black Watch and 8th Liverpools.

In view of the failure of the first attack, it is doubtful if the second, which at best could only be hastily improvised, had any prospect of success. However, at 5pm, 17th June, further orders were received by the Divisional commander to renew the attack on the German salient at 3am on the night 17-18th after a short intense artillery preparation.

At 2.30am, to the relief of all concerned, this attack was postponed and subsequently cancelled.

The failure of these attacks can be attributed to the inadequacy of the artillery preparation. Subsequent battles proved that the number of guns and the allotment of ammunition per gun required is far in excess of those allotted to the Division for the battle of Festubert, if infantry are to have a reasonable chance of success in attacking organised resistance, protected by strong wire entanglements.

In addition to the inadequacy in the number of guns, the 15-pounders again proved themselves highly unsatisfactory. As evidence of the unreliability of their ammunition, it is worth recording that Captain Duncan of the 8th Argyll and Sutherland Highlanders had an eye knocked out by a shrapnel bullet half a mile behind the British front line.

On the day after the launching of the first attack, the following message had been received from Lieutenant General Sir James Rawlinson. “The Corps commander wishes you to convey his appreciation to the troops of the 51st Division for their gallant conduct of yesterday and to-day, particularly to the assaulting battalions - viz, the 6th Scottish Rifles, the 4th Loyal North Lancashire Regiment, and the 8th King's Liverpool Regiment.”
On the nights 18-19th and 19-20th June the 7th Division took over the right sector, leaving only the 153rd Brigade in the line.

On the 24th orders were received for the 51st Division to rejoin the Indian Corps, and to take over the line from the Lahore Division south of Laventie. On the 27th June, this relief having been completed, the GOC took over command of the new sector.

All ranks experienced a sense of relief on leaving the Festubert area. Not only on account of the serious casualties suffered by many units during the attacks and the retaliation provoked by them, but also for other reasons, it was rightly regarded as an unpleasant sector.

Communications had been almost non-existent, so that movement by day was very restricted. The trenches, where they existed, were very open, and sniping was rife. The ill-famed "Orchard", which it was hoped might be consolidated and incorporated into the defences, had an evil reputation. Breastworks were no sooner erected there by night than they were knocked down by day. The Germans were, in fact, so opposed to the consolidation of the Orchard that they introduced trench-mortars to check it.

The large calibre trench-mortars, or "Yon Minnie Wafers", as the Jocks styled them, do not so much damage breastworks as remove them. They frequently leave in a place where breastworks once stood nothing but a deep crater, with two feet of water in it. In this case the result was that, in spite of a vast amount of work carried out on the consolidation, the sector was still far from completed when the Division was relieved.

In those days there was little with which to reply to trench-mortars. Appeals to the artillery for retaliatory shoots would seldom be answered, owing to the restrictions placed on the use of ammunition on account of its scarcity. Mountain-guns, manned by the RGA, were, however, employed, and also a form of trench howitzer; but these were inferior weapons when compared with the formidable mortars of the Germans.

The Laventie front was in character similar to the Festubert front. When the Division took over the line, the defences consisted of little more than a single line of breastworks. Behind this, some 200 to 400 yards in rear, lay a series of detached supporting posts at intervals of from 300 to 500 yards. A reserve line composed of similar posts lay 1000 to 1500 yards in rear of the supporting posts.

The enemy was occupying the lower slopes of the Aubers Ridge, from which he overlooked all the country in which the British defences were situated.

Each sector has, as a rule, its particular "unhealthy spot". In the Laventie sector Red Lamp Corner occupied this role.

The front line ended in a butt-end, some 100 yards from the German line at Red Lamp Corner (Point B on the diagram); 300 yards west of Red Lamp Corner the front line started from another butt-end (Point C). These two butt-ends were connected by a fire-stepped communication trench (C-E). See diagram.
The corner took its name from a red lamp which was lit at dusk and placed at B to prevent the troops garrisoning CD from shooting into those garrisoning AB in the dark. The trench from E to C was continuously subjected to close-range rifle and machine-gun fire in direct enfilade, and both it and the corner itself were places to be avoided.

In these days the red lamp was a necessary precaution, as a form of activity which came later to be known as "wind fights" frequently occurred. A post would see or imagine it saw an enemy patrol, which it took to be a prelude to an attack. It in consequence opened rapid fire. This fire was taken up by posts on its right and left. Subsequently the alarm travelled for several miles, and rapid fire was opened all along the line. The fight, often occasioned by Private X, just out from home, mistaking a pollarded willow for a German, involved an enormous expenditure of ammunition, in which the shooting was not always under complete control.

It will be easily understood that, without the red lamp, CD might have made things very unpleasant for AB in these circumstances.

This sector presented many difficulties. The defences that had been constructed were so limited that the troops in the line were far too congested. They were therefore liable to suffer undue casualties in the event of bombardment. Moreover, the supporting posts being isolated sections of trenches clearly visible, particularly in air photographs, were in consequence liable to attract a considerable volume of artillery fire. Further, communicating trenches, as usual, were quite inadequate to meet the requirements of the garrison.

General Bannatine-Allason therefore at once decided that the whole scheme of defence must be recast and largely augmented. Accordingly work was begun on a continuous support line, and on increasing the number of communication trenches. In fact, a considerable effort was demanded from the ranks to render the sector reasonably defensible.

When the Division was relieved in July much progress had been made, General Willcocks expressing himself to the Divisional commander as very satisfied with the great improvements that had been effected in the defences.

In this period the Division learnt many lessons in trench craft.
On taking over the line enemy sniping was continuous. The hostile snipers were masters of the situation, and inflicted serious casualties. However, every effort was made to check the enemy's activities in this respect, with excellent results. Towards the end of the Division's tour in this sector, the Highlanders were at least on equal terms, if not superior to the enemy as snipers. In some cases telescopic rifles were bought by private enterprise. The men who were entrusted with these rifles were carefully selected from amongst the gamekeepers and stalkers in the infantry, and on several days they were able to register good bags.

On 1st July the Division saw the first British mine exploded. At 3am two rounds were fired by the artillery as a signal; a moment later the mine exploded. The artillery and machine-guns then opened on the enemy's trenches for fifteen minutes. The German retaliation was slight. When day broke it was reported that about fifty yards of the German parapet was blown in. Later the Germans were seen with stretchers on and about the crater. The blow, therefore, appeared to have been successful. After daybreak, however, the enemy snipers killed several of our men who exposed themselves in trying to see the results of the explosion.

As in the last sector, work in the defences was considerably hampered by the enemy's artillery and trench-mortars, which were constantly levelling the British trenches. As usual, appeals for artillery retaliation could seldom be met, owing to the paucity of ammunition. It became most discouraging to the men to see their breastworks being damaged and destroyed in this manner, their labours of the previous night often being undone in a few minutes, without it being possible to fire a round in retaliation. In this sector life in the trenches was made more uncertain than ever by the introduction of the rifle grenade by the Germans.

In the early part of July, Colonel Ian Stewart, DSO, Scottish Rifles, who had joined the Division as GSO 1 in June, formulated a scheme of training every man in the use of the bomb. Bombing, before this innovation, had been regarded as the duty of specialists. The new scheme was that every man should be trained to be able to light and throw a bomb in the case of an emergency. At the same time the brigade grenadier companies were put through a longer and more thorough course of instruction than had been the case in the past. The introduction of this scheme marked a big advance in the practice of bombing.

On 20th July orders were received that the Division was to join the Xth Corps under the command of General Morland, in the area of the newly-formed Third Army. The Xth Corps was then to consist of the 5th Regular Division, the 51st Territorial Division, and the 18th Service Division. Accordingly during the nights 22-23rd and 23-24th July the Division was relieved in the line by the Lahore and 8th Divisions.

On the 26th, 27th, 28th, and 29th of July the Division proceeded by train to the Neuilly area east of Amiens.
CHAPTER III
THE PERIOD OF APPRENTICESHIP

It was some ten weeks since the Division had heard its first shot fired. Up to the present it had, indeed, experienced war. It had, however, been employed throughout either in actual battle or in consolidating a battle front in particularly trying circumstances. It had, therefore, had little time or opportunity to collect its thoughts and profit by its experiences.

During the next few months it was given the opportunity it required, and it will be seen that these months were profitably employed by all ranks.

This period may be called the Division's apprenticeship to war.

In this connection it must not be forgotten that, in spite of its late successes, there was a time when the Highland Division was what can best be described as "green". That this was the case is no reflection on the spirit which animated the men or the manner in which the troops had been trained by their commanders. Under the conditions of modern warfare it could not have been otherwise.

Lord French writes of the newly-arrived Territorial Divisions: "At first certainly they were crude and untrained, but every day they improved under instruction, and developed great intelligence under a thorough and practical exposition of the objects to be aimed at."

The manner in which the Division "trained on" and developed from apprentices into skilled tradesmen was most creditable, both to the men and to those responsible for their education in the ways of war.

One difficulty that must always exist with inexperienced troops, particularly non-regular troops, is the question of discipline. To maintain discipline in the circumstances of peace does not present a tithe of the difficulties which are encountered in times of war. The ill effects of the lack of discipline in peace conditions are evident to all. War, on the other hand, produces fresh and unexpected circumstances, in which experience alone can teach how efficiency is dependent on rigorous adherence to discipline, often in apparently trivial matters. This was felt by the Highland Division, in common with many others, in numerous ways.

In a Division in which the officers and men of the various companies and battalions are recruited from the same villages or towns, and are known to one another intimately in civil life, the enforcement of the rigid discipline demanded by war will always be a difficult matter, until experience has shown the necessity for it.

Officers and NCO's have first to appreciate the degree to which they must exercise command over their men, if the military machine is to stand the test. They must also learn that the efficiency of the troops under their command is dependent on the manner in which they supervise the daily life and actions of their men, and on the amount of forethought they exercise on their behalf.
Owing to inexperience, delay in reliefs, entailing much fatigue to the men, the
miscarrying of working parties, entailing the loss of valuable time, were in the early
stages frequent. Further, in spite of continual warnings, men light-heartedly ignored
the enemy, and were constantly being killed by enemy snipers through wilful
exposure. There were cases of men asphyxiating themselves in their dug-outs with
the fumes of their own coke fires through want of the necessary precautions.

The diaries of senior officers contain frequent references to instances in which they
found the enemy working in daylight in full view, unmolested, through want of
initiative on the part of local commanders. Occasions were not unknown when troops
in the line evinced what has since become known as "wind".

However, the Division recognised from the first that it had much to learn, and an
organised effort was made to help the men to profit by experience in the shortest
possible time. To this effort the men responded admirably.

Junior officers and NCOs gradually acquired the necessary habit of true command
over their men. The men were quick and ready to discover that the better disciplined
a unit is, the more efficient it is, the less it suffers from the actions of the enemy
and the conditions of war. They learnt, too, that the best-disciplined battalion is the most
comfortable and the most contented.

As Lord French writes: "Each unit learned by degrees its own relative place and
position in the great Divisional machine. Enthusiasm was raised in the idea
engendered in all ranks that they formed part of a great engine of war, furnished by
their own country and immediate neighbourhood."

In the early stages of its apprenticeship the Division first took part in a series of
unsuccessful attacks. Subsequently it passed many weeks in areas in which trench-
mortaring and mining - the two forms of trench warfare most trying to men's nerves -
were considerably in evidence. Nevertheless, in spite of their inexperience and of
this unfortunate beginning, the men at all times remained in good heart and retained
a high standard of morale.

By August 1915 the Division had so successfully overcome its earlier difficulties that
it was selected to instruct the 18th Division, newly arrived from England, in trench
warfare. Subsequently the 22nd Division, 32nd Division, and afterwards the 36th
Division, were also attached to the Highland Division for tours of instruction in the
line.

Throughout this period the rivalry between the Territorial and New Army Divisions
was acute. The men had a strong impression, further accentuated by the fact that
the Division did not take part in the battle of Loos, that since they were a Territorial
Division, the higher command would never employ them as a complete Division in a
major operation. In this belief, after General Harper had taken over command of the
Division, they began to call themselves Harper's Duds, asserting that the Divisional
sign, HD, was formed from the initial letters of these two words.
On 27th July 1915, orders were issued by the Xth Corps for the 51st Division to take over the lines from near Becourt to the river Ancre near Hamel, relieving the 22nd Division of the XIth French Corps.

On the night 30-31st the 152nd Brigade took over the left sector from the 116th French Regiment. On the following night the right sector was taken over by the 154th Infantry Brigade, who relieved the 22nd French Territorial Regiment, and by the 153rd Brigade, who took over a portion of the right sector from the 44th French Brigade.

The Divisional artillery, with six batteries of the 18th Division attached for instruction, moved into the line in relief of the French artillery on the nights 2-3rd, 3-4th, 4-5th August.

The taking over from the French, both from a military and from a social point of view, was satisfactory in every way. The details of the handing over were complete, and the arrangements made by the French commands and staffs excellent.

It was a considerable relief to all to find trenches cut deep in the chalk or loam, in place of the hated breastworks. The French system was also extensive, and contained numerous communication trenches and trench shelters. There was not, in consequence, the same exposed feeling which was attached to the Festubert and Laventie trenches.

The French troops were Bretons. Their great traditions as fighters produced immediately a bond of sympathy between them and the Highlanders. The Highland dress and the pipes evoked great interest and admiration in the French soldiers and in the inhabitants of the neighbouring villages, which lost nothing from the fact that the Highland Division was the first British Division to serve in that part of the country.

During the relief the French officers and men did their utmost to help our troops. Their hospitality was unbounded. Indeed, the excellent manner in which the French officers messed, even in the line, was the cause of considerable surprise to the British officers.

When the relief of the French troops was complete and they were marching away to take their place in the line in Champagne, the pipers and drummers of various units accompanied them for several miles of their first day's march. The Bretons, having themselves pipes of a kind, were delighted, and the manner in which they refreshed the pipers during the march clearly showed their gratitude.

Willie Lawrie, the famous pipe-major of the 8th Argyll and Sutherland Highlanders, composed a pipe tune in honour of this event, known as the "Pipers of Bouzincourt" and another called "The 8th Argyll and Sutherland Highlanders farewell to the 116th De Ligne".

A copy of the tune was sent to Lieutenant Colonel V Arnoux, commanding the 116th, from whom the following reply was received:-
1 le CORPS D'ARMÉE, 22ND DIVISION,
AU BIVOUAC,
43RD BRIGADE.
le 10 Novembre 1915

Le Lieut.-Colonel Arnoux, Commandant le 116th Regiment d'Infanterie a
Monsieur le Lieut.-Colonel DOUGLAS BAIRD, Commandant le 1/8 Argyllshire
Highlanders.

No. 1 Objet au sujet d'une marche militaire.

MON CHER CAMARADE,—J'ai l'honneur de vous accuser reception de la
marche pour cornemutes composee par le corne-musier major de votre
bataillon, et jouee par vos cornemutes et tambours le matin de la releve du
116th de Ligne dans le secteur de Thiepval Authuile.

Au nom de tous mes officiers et soldats je vous prie d'agreer mes vifs
remerciements. Tous ont garde au 116th le meilleurs souvenirs de cette
marche dont le rythme et l'harmonie melancolique evoquaient les melodies
du pays natal.

Je l'ai confiee a mon chef de musique qui s'occupe de vous composer une
marche appropriee a notre musique sur la theme de la votre.

Cette harmonie de nos deux marches militaires sera un souvenir et un gage
de plus de la bonne amitie qui unit nos deux regiments et nos deux armees
dans la meme ardeur vers la victoire commune.

Veuillez agreer, mon cher Camarade, l'expression de mes souvenirs les
meilleurs et les plus devoues.

V ARNOUX

General Baumgarten, commanding the XIth French Corps d'Armee, remained in
command until 5th August, when General Bannatine-Allason took over from him,
with his headquarters at Senlis. General Baumgarten subsequently called on
General Bannatine-Allason to express his delight with the manner in which the taking
over had been carried out without any hitch in spite of the difficulties which arose
from the difference of language.

The new sector proved to be both interesting and instructive. Many problems arose
while the Division held this portion of the line which required solution, and which, as
it turned out, were all solved satisfactorily.

The front was looked upon by the French as a quiet one, with the exception of a
section of the line adjacent to the Albert-Bapaume road known as the Ilot. This
ground had been captured by the French in a brilliant advance, and on this account,
though of little tactical importance, continued to be held. Subsequently, after the
Division had been relieved in this portion of the line, the troops were withdrawn from
it.
There can have been few places on the Western front where the distance separating the Allied and the German lines was less, as in the Dot the breadth of the No Man's Land was in some places no more than ten yards. The opposing trenches were thus well within bombing range, and the locality was a running sore to both sides.

The sector did not remain a quiet one for long, and throughout the Division's occupation of it every effort was required to prevent the enemy from gaining the upper hand.

The most acute problem was the enemy's activity in mining. When the sector was taken over from the French, the situation in this respect was anything but good. No British tunnelling companies being available, French engineers remained in charge of mining operations. This was an unsatisfactory arrangement, and the work of countermining made little progress, while the efforts of the enemy were fully maintained.

On the 22nd August the 179th Tunnelling Company, RE, arrived in the area and relieved the French engineers. It had by this time become evident that a very considerable effort would be necessary to check the enemy's mining if it was to continue possible to hold the existing frontline trenches. The 179th Tunnelling Company had only a strength of 300 men with which to take over from the 500 men which the French had employed in the sector. It was therefore decided to reinforce the tunnellers by attaching to them infantry who in civil life had been skilled miners.

Sixty miners from each infantry brigade were accordingly added to the tunnellers. The efforts of the tunnelling company thus reinforced, by dint of working continuous shifts day and night, proved equal to the task, with the result that superiority as regards the mining situation ultimately passed to the British.

It was, however, only after a severe struggle that this result was obtained. The discharging of mines and of camouflets - small discharges used for blowing in the opponent's galleries - were almost of daily occurrence.

Mine warfare played so large a part in the trench warfare of 1915, 1916, and 1917, and so affected the daily life of the soldier in the trenches, that a description of what it means to those engaged in it may not be out of place.

In the first instance, success in mine warfare is dependent on the tunnelling company. By their efforts it is determined whether our troops are to be blown up by the enemy, or whether it is the enemy who is to meet this fate. To secure protection for the troops listening galleries have to be driven at various points along the front, so that the enemy's galleries can be located by sound, and the element of surprise can then be eliminated. The tunnellers who listen in these galleries are equipped with instruments by which the enemy can be heard working. If he is close, he can be heard by the ear alone. In chalk, a good medium for the carrying of sound, he can be heard working, without the aid of instruments, many feet away. If he is heard still using picks or shovels, it is known that he has not driven his gallery as far as he intends, and that there is therefore no immediate prospect of his blowing.
If, on the other hand, he is heard tamping - i.e., packing in his explosive - it is known that his work is nearly completed, and that his mine will in a few hours be ready for exploding. In the latter case two alternatives are available, either of which may be adopted to protect the troops from the effect of his blowing. First, if we have a gallery sufficiently close to his, we may blow a small mine or camouflet, designed either to destroy his gallery or so to disintegrate the soil by the explosion as to make further tunnelling impossible. If a camouflet is impracticable, the only other alternative is to evacuate the area which it is estimated will be affected by the explosion.

In some cases the tunnelling company were able to destroy his galleries by camouflets when they were actually being worked, and thus bury the tunnellers and their spoiling parties. On these occasions the tunnelling company were always highly elated, as they took a professional pride in scoring off their real opponents the tunnellers, and considered this a far finer achievement than blowing up a trench full of mere infantrymen.

The Germans also adopted the same tactics, and continuous warfare between the tunnellers of both sides raged underground. Though the tunnellers, when once in their galleries, were free from the attentions of snipers, trench-mortars, and shells, yet their own form of warfare was hazardous and dangerous enough. When the galleries of the opposing sides were close, it was never known whether a gallery had not been located and might not at any moment be blown in, all the men working in it being crushed or suffocated.

On occasions a British and German gallery would meet, and hand-to-hand fights with picks and crowbars underground would ensue, which had to be fought out in darkness in the narrow tunnels.

The danger from natural gases, with all the attendant difficulties of rescuing men overcome by the fumes, was constant. Falls of earth and chalk, possibly due to some heavy explosion above ground, might also occur, which might bury the worker or cut him off from the exit of the gallery.

It must be remembered that the tunnellers were not highly trained soldiers in their early manhood, but professional miners, often men of middle age, who had in many cases come to France straight from the pits at home. They were, indeed, a splendid breed of men, and the infantry owed much to them. There is little question but that they were far superior to the German tunneller. The latter was often a cunning worker, but the British tunneller could always be relied on to beat him for pace. It may also be added that the tunnelling companies all contained an appreciable number of Scottish miners.

Mine warfare affects the infantry in several ways. First, it necessitates their finding an enormous number of carrying parties to assist in getting rid of the spoil, as the excavated earth or chalk is called. The infantryman never liked this work, as, among other things, it made his clothing, particularly his kilt, extremely dirty. It also appeared unending. However, he was reasonably contented with it if he had the satisfaction of occasionally seeing the German trenches and dug-outs hoisted into the air.
The question of finding working parties is, however, a minor consideration for the infantry when compared with the possible effects of the explosion of a German mine. This usually occurred either as darkness fell or during the night. Though warning might have been given by the tunnellers that a mine was to be expected, yet the explosion always appeared to come as a surprise. To a man standing up in the vicinity of an explosion the first sensation was a feeling that he had been struck on the soles of the feet by a heavy beam. This was immediately followed by the opening up of the earth and the issuing forth of a belch of flame, capped with a great rolling cloud of smoke and followed instantaneously by a deep muffled roar.

Huge fragments of earth and chalk, some weighing a ton or more, with wire entanglements, trench-boards, dugout timbers - all were hurled many feet into the air. There followed a sensible pause, and then for some seconds the falling debris would come pouring down. This in turn was followed by a mist of dust which continued to float in the air for many minutes.

If the explosion had occurred under an occupied portion of the trench, the men in the area which was transferred into the crater were either immediately buried or else hurled many feet into the air in the sheet of flame and smoke, often to descend back into the crater crushed, bruised, burnt, and almost invariably dead. Others in the immediate vicinity of the explosion were crushed in their shelters or buried in the trenches by the collapse of their sides. Men further away, in their turn, were in danger of being killed or mutilated by the falling debris of stones and chalk which whirled down from a great height into the trenches. The result was a scene of horrible desolation. Nothing remained intact. Trenches with their garrisons were obliterated. The positions where posts had once been could only be determined by rifles or limbs projecting through the upturned earth. At times, the heaving of the earth showed where some buried man, still alive, was struggling to extricate himself. The whole air was fetid with the sickly stench of high explosive.

Mine warfare was, indeed, the most trying ordeal to which troops holding trenches were exposed.

Next to mining, the most nerve-racking form of trench warfare was provided by the trench-mortar. Towards the latter end of August the enemy began to make a considerable use of these weapons. In consequence the trenches were frequently severely damaged, and many casualties were sustained. The British trench-mortars were in these days only in their early experimental stages; moreover, difficulty always existed in obtaining sufficient ammunition for them to be of any real service.

The enemy, on the other hand, appears to have had an unlimited supply of ammunition for mortars of a considerably heavier calibre and longer range than ours. At this time his commonest types were those that discharged the "oil can" or "rum jar" and the aerial torpedo. The "oil can" was little more than a tin canister about nine inches in diameter, filled with high explosive, and fitted with a time fuze. In those days it was fired from a smooth-bored wooden mortar, and in consequence turned over and over in its flight, and was therefore not particularly accurate. The explosion was, however, terrific, devastating to wire or trenches, and most trying to the nerves of any one who had to live in an area in which they habitually burst.
The aerial torpedoes had a fixed propeller which kept them from turning over in the air, and were in consequence a more accurate projectile. Their effects were if anything worse than those of the "oil can".

The Division had attached to it one 11-inch mortar battery and a 4-inch mortar battery for which ammunition was available only in small quantities. On 2nd September, a 2-inch trench-mortar battery arrived, though its ammunition did not join it till 7th October.

The 2-inch trench-mortar fired a bomb exactly similar in shape to the hammer used in Highland games in "throwing the hammer". For this reason it was known to the troops as "Donald Dinnie". It was also known as the "Plum Pudding" or "Football". It was on this account that an English brigade-major was once heard to confess that he had always thought "Donald Dinnie" was Scots for plum pudding.

The "Donald Dinnie" was an excellent projectile when it burst in the right place. Sometimes, however, it did not burst at all, while at others it burst within a few feet of the mortar. Again, the mortar frequently misfired. Trench-mortaring was rather a game of chance in those days, with the odds slightly against the man firing the mortar.

In the early days of the "Donald Dinnie" its long iron handle, with a diameter of two inches, was firmly fixed to the bomb. On occasions this handle was blown tremendous distances by the explosion, and more than once fell in the British trenches, causing casualties to the garrison.

There was thus no adequate weapon with which to counter the German trench-mortars. He was therefore able to do considerable damage to our trenches and troops, more or less, with impunity.

It was in consequence necessary to institute a system of artillery retaliation, by which a certain number of rounds were fired back at the enemy by howitzers for every trench-mortar round he fired. Howitzers of various calibres up to 6-inch as well as the field-guns took part in these retaliatory shoots, according to the ammunition supply. As this became more liberal, this system tended to check the enemy's trench-mortar activity, particularly when, by careful observation, the positions of his trench-mortar emplacements were located, and the retaliation was brought to bear actually on the offending mortars.

The enemy could, however, bombard certain sections of trenches so systematically that he was able to obliterate them. This was particularly the case opposite La Boisselle and in an area known as the Salient. The latter received so much attention as to become untenable, and on 1st December it was evacuated, a retrenchment being dug and occupied behind it.

During these trench-mortar bombardments, it had been discovered that the French shelters, having only three or four feet of cover, were not shell-proof. They were, in fact, death-traps, as they gave the men a false sense of security.
In consequence, during a bombardment men would crowd into them to take cover, and should a trench-mortar bomb then strike one of them, it was blown in and all its occupants were killed.

On 21st October it was therefore decided to provide fresh dug-out accommodation for the whole garrison. The tunnelling company, as has been explained, was strained to its utmost to keep pace with the mining situation. The construction of the dug-outs was therefore entrusted to the 8th Royal Scots, who had joined the Division as the Divisional Pioneer Battalion on 25th August 1915. Fresh calls were made on the infantry for skilled miners, who were attached to the 8th Royal Scots. Work was carried on day and night, and the greatest exertions were made to provide the Division with shell-proof shelters with the minimum of delay.

These dug-outs were designed to give 10 to 12 feet of head cover. Charges of 60 lb and 100 lb of gun-cotton were exploded on the roofs of dug-outs of this depth, and the shock of the explosion was successfully resisted. With the later and more delayed fuzes it was necessary to have thirty feet of head cover to be secure against bursts of 5.9-in. or 8-in. shells.

Attempts were made to construct dug-outs by digging deep pits and then roofing them in with layers of material calculated to burst shells; but this was found to take more time than was required to construct a dug-out by tunnelling.

While the mining and the construction of dug-outs was being carried on as intensively as possible, an enormous amount of spoil (excavated earth and chalk) was accumulated. The disposal of this spoil became a very serious problem. Chalk cannot be scattered broadcast except at a distance from the shaft-heads, as its presence would disclose to the enemy that work was in progress and draw shell-fire. The accumulation of spoil was thus very difficult to dispose of, and frequently the trenches became almost impassable owing to the heaps of sandbags full of chalk stacked against their sides waiting to be emptied. The usual method of disposing of this spoil was to dump it into disused trenches and shell-holes. These, however, were soon filled, and it became evident that elaborate arrangements must be made beforehand for dealing with the spoil whenever operations entailing excavations on a large scale are planned, otherwise vast accumulations will be formed.

In this sector it was therefore necessary to establish a carefully-organised system of spoiling parties to keep pace with the output of the tunnellers and pioneers. It was only thus that it could be ensured that the intensive mining and dug-out construction would not be checked owing to delays in dealing with the excavated earth.

Large numbers of men had thus to be found daily for this work, with the result that there was little labour available for the ordinary duties of trench maintenance. As long as the weather remained fine, difficulty was not experienced on this account. Subsequently, however, when the weather changed, the whole Division was taxed to its utmost to keep the trenches in a condition which rendered them passable to troops.

This was particularly difficult in the sector between La Boisselle and Thiepval. Here above the chalk was a deep overlay of clay.
Thus, when towards the end of the year there was a heavy fall of rain and subsequently of snow, the country in this area became water-logged, and in consequence the sides of the trenches were continually collapsing. This was partly due to the fact that the trenches constructed by the French were cut with perpendicular sides. Trenches of this pattern stood well enough in fine weather or where cut in chalk, but when cut in clay could not withstand the additional pressure which the weight of absorbed rain-water brought into play. The result was that throughout this portion of the sector the sides of the trenches fell in, and they became merely shapeless ditches knee- or waist-deep in mud and water. Water and mud, too, flowed down the stairs of the dug-outs unless dams were carefully made, while the "Bairnsfather" type of shelter collapsed on to its occupants at least. once with fatal results.

The nature of the soil was such that revetment was of little avail. Even machine-gun pits revetted with close-lagged timbers - that is to say, with their walls supported by a continuous lining of thick planking - caved in. The result was that the struggle with the elements almost took precedence over the struggle with the enemy. The carrying out of reliefs became a question of many hours, and entailed great exhaustion to the troops. The labour required for trench maintenance was far in excess of the resources of the Division. Attempts were made to dig out the trenches with their sides at a slope of 6/1, which would enable them to stand in spite of the incessant pressure on their sides due to the absorbed water. The soil was, however, of such a nature that digging in its sodden state imposed an immense physical strain on the men. Not only was the weight of the mud on the shovel considerable, but the mud adhered to the face of the shovel and could not be flung clear of the trench. In consequence, the men often had to hoist the shovel with its load out of the trench, leaving the earth to be scraped from the shovel by a man working above ground.

In spite of the increasing labours of the men, as long as the wet weather continued it was only possible to keep the trenches sufficiently open to enable troops to pass along them with difficulty. In some cases, notably in Campbell Avenue, even this was not possible, and the trench became temporarily unfit for use. Subsequently the frost came, and the labours of trench maintenance, to the delight of all, suddenly ceased. The sides of the trenches stood as though they had been carved out of wood. Officers and men began to take a fresh outlook on life. For the first time for many days they went dry-shod, and began to forget the unpleasant feeling of a mud-sodden kilt chafing the back of the knees, and of muddy water oozing between the toes at every step.

But this short-lived return to dry trenches only accentuated the miseries of the inevitable thaw, for the last state became worse than the first. Not only did the clay trenches on which so much labour had been expended collapse en bloc, but the action of the frost on the chalk made it crumble. In consequence the chalk trenches collapsed universally. The entire trench area became a ruin. The situation was such that strong measures alone could deal with it. The mining could not be discontinued, as this would involve too serious a risk. All other work was, however, stopped, and the 8th Royal Scots and the Reserve Brigade were all employed on restoring order out of this most appalling chaos.
Even with this amount of labour available, as long as wet weather with short intermittent periods of frost alternated, more earth and chalk fell into the trenches day by day than could be cleared out in a day by the available working parties.

Apart from the mining operations, the construction of dug-outs, and the creation of entanglements, little new work was carried out in this sector. The French had already begun a system of defence in depth. This was worked upon and improved. The only important new work undertaken was the construction of the corps reserve lines, known as the Bouzincourt Switch, which ran from Martin-sart to Bouzincourt and across the river Anere to Albert.

In this reserve line there were constructed what are believed to be the first concrete "pill-boxes" made either by the Allies or the Germans on the Western Front. These were formed of walls of reinforced concrete five feet thick, with loopholes through which machine-guns could fire.

After the British lines had been driven back by the great German offensive in March 1918, these pill-boxes were situated in or about No Man's Land, and were on several occasions struck by direct hits. They were, however, undamaged, and, it is hoped, played the part with success for which they were intended.

During the period in which the Division was in this sector, great progress towards efficiency was made by the Divisional artillery. By the time they had arrived in France mobile warfare was for the time being in abeyance. This was a distinct advantage to Territorial gunners, as the conditions of service in peace time afforded them few opportunities for training for warfare of movement. They had, however, devoted a considerable amount of study to technical gunnery. Consequently, they had less ground to make up than would have been the case if they had been engaged in a war of movement.

Their training at home had, however, been carried out under difficult conditions, and when they arrived they still required considerable training as units. This was mostly carried out in the line, as from the time of its arrival in France the artillery was practically continuously in action until early in 1916. In spite of this they made great progress. An artillery brigade commander describes them as follows: "By the end of their first year they were good; by the end of their second year they were better; and by the end of their third year they were first-class field artillery - very mobile, very quick, and full of initiative."

On the 31st August the 15-pounders were replaced by 18-pounders, to the great relief of all concerned. The 15-pounders had always suffered from a very restricted supply of ammunition. What ammunition they had was so erratic as to be a positive danger to our own troops. The gunners also had not had the opportunities at home of becoming complete masters of their weapons. The result was that the artillery, working in these adverse circumstances, did not at first enjoy the confidence of the infantry. However, their work in this sector went far towards inspiring in the infantry full confidence in their gunners.
Preparations for the battle of Loos brought to the Division for the first time a fairly liberal supply of ammunition. This was to be employed for the purpose of wire-cutting and bombardment as a feint to the big attack farther north.

On 23rd September 600 rounds (18-pounder) were issued, and on 25th September a further 1200 rounds, an unheard-of amount in those days. The use of the artillery became less rigid than had been the case during the first few months at the front. On 8th November an 18-pounder gun was run up during the night to Coniston Street, about 800 yards behind the front line. From this position, as soon as there was sufficient light, thirty-six rounds were fired at an enemy sap, on which work was in progress, at a range of 1,200 yards.

On 15th December experiments were made in wire-cutting with 4.5 howitzers. One howitzer fired at a range of 800 yards with percussion shrapnel and was most successful, a lane being cut right through the belt of wire.

The following extract from the Divisional war diary for 28th August may be quoted as a typical instance of the enterprise shown by the Division as regards the use of artillery during this period:

The repair of the parapets damaged by our mines of the 28th had been constantly hindered by enemy rifle grenades, large trench-mortar bombs, and aerial torpedoes. The last two sorts of bombs, having a very large charge, had reduced the front and support line trenches opposite La Boisselle (where most of our mine shafts are) to such an extent that passage along them had been dangerous. Only one 11-inch mortar battery was available to reply, as the 4-inch battery had no ammunition. Sanction was obtained for the expenditure of 5-inch and 6-inch howitzer and 18-pounder ammunition to keep down the enemy’s fire, and enable a day working party to work on the demolished trenches. Work was continued all day with only eight casualties.

On 28th November 1915 three 18-pounder batteries of the Lowland Brigade were brought into action, bringing the Divisional artillery up to establishment.

An advance was also made in this sector in machine gunnery. Eight machine-gun emplacements were made, fitted with traversing mountings for indirect fire. These mountings were designed by Captain S J L Hardie, machine-gun officer of the 152nd Brigade, and made by the Divisional Supply Column.

By this means aimed indirect fire was brought to bear by day or night on localities known to be constantly used by the enemy.

In this period few events occurred which call for detailed description. The explosion of mines was of frequent occurrence, and in several cases the trenches sustained damage and losses were incurred. On the 12th and 20th August the French tunnellers were successful in destroying sections of the enemy’s trenches with mines, but on the latter date the mine also did considerable damage to the British trenches.
In September preparations for the battle of Loos began. The Third Army was not involved in this attack. Efforts were, however, made to lead the enemy to anticipate an offensive in this sector, so as to make him unwilling to transfer reserves from this front to the scene of the actual operations.

Accordingly on 21st September work was begun on preparing the sector for attack. Sap-heads and forming-up places were constructed, while the artillery carried out wire-cutting and bombardment.

On 25th September the combined British and French attack was launched at Loos. On the 26th preparations for attack were discontinued in the Divisional sector. On the 27th the allowance of ammunition was reduced to the minimum requirements necessary for retaliation.

During the sojourn of the Division in this part of France bombardments of villages in the back areas occurred fairly frequently - Henencourt (Corps Headquarters), Aveluy, Authuille, Albert, and Martinsart all receiving attention.

The enemy was particularly lucky with one heavy shell which he fired into Authuille on 29th November. It burst close to a working party of the 5th Seaforths, who had just fallen in to draw tools from a dump, and wounded 26 of them, including two officers.

On 18th September Martinsart was bombed by a hostile aeroplane, in those days a most unusual occurrence.

On Christmas Day a curious exchange of compliments took place with the enemy. On Christmas Eve he sang carols; this was at once stopped by the Divisional artillery. He then came out of his trenches to fraternise; this was also stopped by the Divisional artillery. He retaliated by shelling Albert; the Division on the right immediately shelled Courcelette. The enemy then shelled Aveluy; the gunners replied by shelling Pozieres. The enemy had the last word, for he then shelled Martinsart, where he hit a horse, a mule, and a limber loaded with grenades, which fortunately did not burst.

While the Division was in this sector various other New Army Divisions, as has been mentioned, were attached to it for periods of instruction in the line. The men did not fail to make the most of the fact that they had been selected as instructors for the rival organisation, the New Armies, and it was a matter of great satisfaction to them to find that they had been chosen for the work.

On 2nd August the Divisional artillery had taken over from the French, and taken into the line six batteries of the 18th Division, who were attached for instruction. The artillery were particularly jealous of the 18-pounders with which their pupils were armed, while they were still equipped with the obsolete 15-pounder. The same night the 53rd Infantry Brigade Group, 18th Division, also moved into the line to begin a period of attachment to the 51st Division for instruction in trench warfare. Other units of the 18th Division followed, and carried out similar periods of instruction in the line.
On conclusion of this attachment, when the 18th Division took over a section of the line from the 51st, Major General F I Maxse, commanding the 18th Division, wrote the following appreciative letter to General Bannatine-Allason. "I must write you a line to say how grateful my Division is for the great assistance we have received from yours. General Ross has done more to help us than I have experienced from any other GOC. He not only left officers behind to put us up to local tips on his sector, but he told off his best snipers to put our snipers on to the Huns, which they successfully did. My people all swear by the 51st Division. May we long soldier together."

General Maxse became a great friend of the 51st Division, particularly when, in 1917, the Division carried out two most successful operations under his command as Corps commander in the third battle of Ypres.

In September the 65th Infantry Brigade Group and a brigade of artillery of the 22nd Division carried out its period of instruction in trench warfare attached to the 51st. Later in the same month officers of the 36th (Ulster) Division were similarly attached. In December the 32nd Division was instructed in the same manner, and finally relieved the 51st in this sector.

On 24th September 1915 General Bannatine-Allason gave up command of the Highland Division. He had for some time been in indifferent health. The strain of the past four months, in which he had commanded the Division during its first experiences of war, had been severe, and the General therefore felt that he could not either with justice to himself or to his Division continue in so responsible a position until his health was sufficiently recovered.

He therefore returned to England, and was given command of the 61st (2nd Line South Midland) Territorial Division. During the period of his command of the 2nd Line Highland Division, the General despatched over 15,000 men and over 3000 horses to the front. Most of these men were sent as reinforcements to the 51st Division, so that he still materially contributed towards the successes of the Division. From this fact, and from the fact that under his command the Division was first initiated into the ways of war, General Bannatine-Allason is still known in the Highlands as the "nurse" of the 51st Division.

General Bannatine-Allason was succeeded by Major General G M Harper, CB, DSO, who was promoted from the command of the 17th Brigade, 6th Division, to the command of the Highland Division.

General Harper, during his period of command, inspired all ranks with such confidence that it is difficult to express the high regard in which he was held by the Division.

The success and consequent reputation gained by the Highland Division can be attributed to the happy combination of the particular qualities of the commander and his troops, and to the brilliant manner in which the directing genius of the former was seconded by the genius for fighting of the latter.
Major General R Bannatine-Allason, CB
No better selection of a commander could have been made for the Division, and no Division could have better suited the particular qualities possessed by the new commander. Experience has since proved that General Harper understood the ways and means of defeating the German in a manner which was probably unequalled, and certainly never surpassed on the Western Front. Further, he possessed such gifts as an instructor as enabled him to train his Division in these ways and means in a manner which set a standard to the British armies in France.

On their part, under General Harper's command, the Highlanders proved that they possessed qualities which enabled them to respond to training in a degree which few other troops could equal.

The result was that General Harper, having formulated principles applicable to every phase of attack and defence, was able to imbue his whole Division in their training with these principles. In consequence, during active operations, officers and NCOs could be relied on to lead their men intelligently in any circumstances in accordance with tactical methods in which they had already been exercised in their training.

The relief of the Division by the 32nd Division began on 23rd December, and was completed by 2nd January 1916. After the relief, the Division moved to the Flesselles area, coming under orders of the 1st Corps. Their time in the line, beginning as it had done on 30th July 1915, had been long and arduous. The men were in consequence beginning to show signs of becoming stale. Though there had been no infantry action beyond a few encounters between patrols and a small bombing raid carried out by the 154th Infantry Brigade on 2nd January 1916, yet the conditions had been far from pleasant.

Great strides had been made by the enemy in trench weapons, the range, calibre, and accuracy of his trench-mortars, and the numbers in which they were employed, having considerably increased. His rifle grenades had also been improved, and were used with increasing frequency. The mining situation, as has already been pointed out, had at one time been serious, though it never led to the same serious infantry fighting which occurred later in the Labyrinth. The want of shell-proof cover had been considerably felt; the burden of work imposed on the Division when the trenches collapsed had been almost insupportable. The general conditions of trench life during this period are admirably summed up in Sir Douglas Haig's despatch, dated 29th May 1916, as follows:-

Although the struggle in a general sense has not been intense, it has been everywhere continuous...  

The maintenance and repair of our defences alone, especially in winter, entails constant heavy work. Bad weather and the enemy combine to flood and destroy trenches, dug-outs, and communications; all such damages must be repaired promptly under fire, and almost certainly by night.

Artillery and snipers are practically never silent, patrols are out in front of the lines every night, and heavy bombardments by the artillery of one or both sides take place daily in various parts of the line.
Below ground there is continual mining and counter-mining, which, by the ever-present threat of sudden explosion and the uncertainty as to where and when it will take place, causes perhaps a more constant strain than any other form of warfare. . . In short, a steady and continuous fight has gone on day and night above ground and below it.

It will be appreciated from the above that, though many of the days under review were described in the official communiqués as “quiet days on the Western Front”, the quietude was not always apparent to those who lived within the range of the enemy’s activities.

The absence of depression amongst the men in these adverse circumstances was, however, constantly remarked on, and throughout the Division remained in good spirits.

Colonel Ian Stewart reports an incident which bears witness to the imperturbability of the men even in the lot, the storm centre of the mining activity. Colonel Stewart was crawling round the front line with General Ross, in such close contact to the enemy that they dare speak only in whispers for fear of provoking a shower of rifle- or hand-grenades. As they came round a sandbagged traverse they found a Jock sitting on his fire-step, smoking the inevitable cigarette and reading Pearson’s Magazine, quite oblivious to his proximity to the enemy.

Colonel Stewart, shortly after arriving back at Divisional Headquarters, received a telephone message from General Ross informing him that he was just going up to the line to investigate a mine which had been exploded almost in the exact spot where the Jock had been reading Pearson’s. The fate of the said Jock was not recorded.

The Division had profited considerably by their prolonged tour in the same sector, and had completed its education in trench warfare in a most thorough manner. The men had learnt trench-craft, that art which enables them to keep the enemy constantly on the alert and at the same time to protect themselves by their wits from avoidable casualties and discomforts.

They had also had time to acquire that sixth sense which a short spell of the war gave to all the fighting troops, of working, walking, and fighting in the dark. They had become good snipers, and experienced trench workers. They had learnt valuable lessons regarding such questions as the influence of the nature of the soil on trench construction, the organisation of working parties, the disposal of mine spoil, &c.

In fact, the Division was most fortunately placed. After a long experience of close contact with the enemy, it was now to be given a period in which time would be available to collect and crystallise its thoughts on the problems of defence and to be trained by General Harper in the principles of the attack.
CHAPTER IV
TRAINING AND REORGANISATION - THE LABYRINTH

The Division was now out of the line for the first time under General Harper's command, and the latter lost no time in instructing officers and men in a form of attack which at the time was employed by no other Division.

Past experience, emphasised by the battle of Loos, had made it evident that to hold captured ground against the inevitable counter-attack, the attackers have not only to compete with the enemy actually manning the assaulted trenches. They must, in addition, dispose themselves at the end of the advance in a manner which enables them to resist the counter-attacks which will inevitably be delivered by the enemy's reserves. In the past, the objectives of the attack had not been sufficiently clearly defined, with the result that the forward movement frequently came to an end with some bodies of troops far in advance of others, and all in a state of disorganisation. The foremost troops were thus left exposed, holding insufficiently consolidated salients, and disposed in a manner which prevented command being adequately exercised over them. The result was that the enemy was able to employ his fresh reserves against the tired and disorganised troops holding these salients. His counter-attacks, organised so as to be delivered both frontally and from the flanks, were in consequence frequently successful.

It thus followed that Divisions which in the early phases of an attack had carried out a brilliant advance, were subsequently in the later stages often overwhelmed and severely cut up.

It had, further, been the custom in the past for the same body of troops to be ordered to fight its way through a succession of trench lines or defended localities. Thus, as the action progressed, the attack became weaker and more disorganised through casualties, and so increasingly lost its driving power. At the same time, when the forward movement came to a standstill, no organised bodies of troops were left suitably disposed to hold the ground gained.

The plan of attack adopted by the 51st Division was designed to eradicate both these sources of failure. It was realised that if counter-attacks were to be defeated, the advance must be made in a series of clearly-defined bounds. Each bound was to be made good before the operations for the capture of the next began.

Further, the idea was to employ a fresh body of troops for each bound. Thus, when the troops detailed for a particular bound had reached their objective, they remained on it, and disposed themselves in the most suitable manner to hold the ground they had gained against counterattacks. A fresh body of troops then passed through them and made good the next bound, consolidating in their turn the ground gained.

This form of attack became the sealed pattern for all attacks carried out by the Highland Division, and was largely responsible for the many outstanding successes of the Division.
Gradually as the war progressed and the Division achieved one success after another, its value became apparent, and it eventually became the stereotyped form of attack in the majority of the Divisions in France.

During this period, apart from the training of units under their own commanders, Divisional schools of instruction were formed to give individual training to officers and NCOs. A Divisional grenade school was formed, at which 13 officers and 260 other ranks were put through a course every week. At this course instruction was given in the Mills bomb, which had now replaced the former types of improvised bomb.

A Divisional school for infantry was also opened at Villers-Bocage under Lieutenant Colonel D Baird, commanding the 8th Argyll and Sutherland Highlanders. At this school 20 officers and 40 NCOs attended a series of fourteen-day courses. The object of this school was to increase the powers of command of the senior officers and N.C.O.'s, and to improve their knowledge of tactics.

A show-ground was also laid out, where the best methods to be adopted in trench warfare could be demonstrated. Here also types of trenches suitable to the varying natures and conditions of ground were constructed for purposes of instruction.

On 8th February the course of training was interrupted by the move of the Division to the Daours area, with a view to taking over from the 30th Division, on the sector on the north bank of the Somme. The orders for this relief were, however, cancelled on the 18th February, and the Division moved back to the Flesselles area.

During this period the composition of the Division underwent considerable alteration. The three Lancashire battalions left the Division on 3rd January 1916 to join the 55th (West Lancashire) Division.

The 6th Scottish Rifles joined the 33rd Division. They were met again later by many of their former comrades of the Highland Division in High Wood in July and August 1916.

These four battalions were replaced by the 4th and 5th Black Watch, the 4th Seaforths and 4th Camerons. Brigadier General C E Stewart, Black Watch, was placed in command of this brigade, and it retained the title 154th Infantry Brigade.

In February 1916 further changes took place; the 4th and 5th Black Watch were posted to General Headquarters, and the 4th Camerons to the Base. These three battalions were replaced in the 154th Infantry Brigade by the 9th Royal Scots, the 4th Gordon Highlanders, and the 7th Argyll and Sutherland Highlanders.

All the battalions in the reconstituted 154th Infantry Brigade had landed in France some months before the remainder of the Division, being posted to various regular brigades as an additional battalion.

Thus, as regards the infantry, the original composition of the Highland Division was restored, with the exception of the 4th Cameron Highlanders, the 6th Gordon Highlanders, and the 9th Argyll and Sutherland Highlanders.
During the same month changes were also made as regards the organisation of machine-guns. The infantry battalions had joined the Expeditionary Force each equipped with two machine-guns under the command of the battalion machine-gun officer. In July 1915 the battalion machine-gun section was increased by an additional two guns.

In January 1916 a machine-gun company of sixteen guns was affiliated to each brigade. These companies were formed by the amalgamation of the four battalion machine-gun sections in each brigade, Captains Hardie, Calder, and Board commanding the companies of the 152nd, 153rd, and 154th Infantry Brigades respectively.

In the early part of 1916 the trench-mortar situation was greatly improved. Three 2-inch trench-mortar batteries were formed by the Divisional artillery. These mortars fired the 60-pound bomb already described known as the "Donald Dinnie." They were still considerably inferior to the German trench-mortars in range, but they constituted a considerable advance on all previous experiments. Their chief faults lay in their liability to misfire, and in their frequent inaccuracy, due to the boxes containing the component parts not being water-tight.

When the "Donald Dinnie" did burst on its target, the effect was gratifying. The retaliation they almost invariably drew from the enemy was the best evidence of their efficacy, and made the duty of serving the mortars an extremely hazardous one.

In May 1916 a light trench-mortar battery, consisting of four Stokes mortars, was formed for each brigade. The Stokes gun proved the most satisfactory British light trench-mortar invented, and remained the weapon of the light trench-mortar batteries throughout the war.

On 1st March 1916 orders were received for the Division to march northwards and take over from the 23rd French Division of the XIIème Corps d'Armée in a sector north of Arras, now known to history as the Labyrinth. This move was due to the necessity for the British to take over more line from the French. The object was to free as many French Divisions as possible for the defence of Verdun, against which the German was delivering his great attack.

Preliminary reconnaissances of the new line by senior commanders and their staffs began on 3rd March. The first troops moved off to the new area on 6th March. During the march, the Division staged in the Beauval-Candas area and the Frevent area. Finally, Divisional headquarters opened on 12th March at Duisans, General Harper taking over command of the line at 8 am on that date.

The march to the new area is chiefly memorable to those who took part in it from the fact that much of it was carried out in a blinding snowstorm, with all its attendant discomforts.

The cold was intense, and was severely felt by parties proceeding to carry out preliminary reconnaissances in motor lorries and by the troops as they arrived each night in new billets.
The Division, after its six weeks period of rest and training, was at the top of its form, and presented a most soldierly appearance. It had profited considerably from its training, in spite of the fact that it had been handicapped by spells of bad weather.

This was the last period of rest of more than ten days' duration which the Division was to have until the following January.

The new sector extended roughly from the ruined village of Roclincourt on the right to the ruined village of Neuville St Vaast (exclusive) on the left. The front line trenches were some thousand yards east of these two villages.

This country had been the scene of tremendous fighting when the French had advanced along the Lorette ridge and attacked the Vimy heights in conjunction with the British operations at Loos.

Here the French had made considerable progress, much of iit yard by yard, after bitter fighting. Their gains, however, had not all been held. The fighting had been of so desperate and stubborn a nature that French and Germans had repeatedly dug themselves in in close proximity to each other. As a result, the whole sector consisted of an unintelligible maze of trenches, aptly called by the French the Labyrinth.

The country in rear of the lines contained many villages now well known to the Highland Division - the ruins of Ecurie, Anzin, Marceuil, Bray, Ecoivres, Mont St Eloi. This area can almost be called the spiritual home of the Highland Division in France, since it occupied it for three months in 1916, five months in 1917 during the battle of Arras, and returned there in May 1915. From May onwards it remained in that part of the world, with the exception of a brief interlude in Champagne, and from it began its victorious advance which culminated with the Armistice.

In this sector the whole countryscape was overlooked by the enemy in an astonishing degree. He occupied the famous feature known as the Vimy Ridge, of which the highest point just north of Thelus reached the height of 135 metres. His foremost trenches were on the outlying spurs of the Ridge, while the trenches taken over from the French were in the low-lying ground at the foot of these spurs.

The enemy thus possessed all the advantages of close observation over our lines; while, in addition, from the upper slopes of the Ridge, he obtained a magnificent panoramic view of the whole of the areas in rear of the British trench systems. On a clear day he could see from Thelus as far westwards as the road running from Habareq to the Hermaville-Arras road.

Moreover, south of the Searpe, Observatory Ridge stared down at Roclincourt and Reurie.

The French, to neutralise his facilities for observation, had constructed communication trenches of what seemed interminable length. These ran from Anzin, Marceuil, and Mont St Eloi to the fire trenches, none of these villages being within two miles of the front line. The labour of walking along these trenches, all cut on a very winding pattern, was severe.
It, however, fortunately transpired that the French in constructing trenches of this length had either flattered the enemy’s vigilance, or that his vigilance had subsequently diminished, as it proved unnecessary to walk inside the trenches, certainly for the first three-quarters of a mile.

The enemy did, however, keep a sharp look-out for movement on the roads within range of his artillery. He had, shortly before the Division arrived, killed a French regimental commander who took the liberty of riding on horseback along the Arras-Bethune road.

These long communication trenches were admirably dug by the French Territorials, who had constructed them, and were still standing and in daily use when the Division returned to this sector in February of the following year.

In the British lines the defended village of Ecurie, about 100 metres above sea-level, afforded a good view of Thelus and of the enemy’s defences at a distance of from 400 to 500 yards behind his front line. Observation of his frontline trenches could in most places only be obtained from observation posts in the forward area.

The relief of the French 23rd and 24th Divisions of the XIIème Corps d’Arink was completed by 14th March. It was carried out during a blizzard of great severity, which continued for forty-eight hours. During this period the troops could do no more than remain where they had been placed by their guides, or mislaced as the case might be. During the relief and, in fact, until the blizzard abated, officers and men had only a hazy idea as to where they actually were. Similarly commanders were ignorant of the position of their troops. All three infantry brigades were in the line - the 154th Brigade on the right in the vicinity of Roclincourt, the 152nd in the centre, and the 153rd on the left.

When the weather cleared, it was found that the Division had taken over from the French an unintelligible tangle of trenches dug in what can only be described as a vast cemetery, in which the earth in many places barely covered the dead.

The sector was also honeycombed with mines from end to end, the enemy apparently being complete masters of the mining situation. In fact, his supremacy in mining had become so complete that, immediately prior to the relief, the French had drawn up a scheme for evacuating the front line except for lightly-held outposts. The plan they had intended to adopt was to recast the scheme of defence and construct amidst the existing network of derelict trenches a new support and reserve line. The scheme had been completed, and was on the point of being put into execution when the Highland Division took over the sector. The Divisional commander decided to continue with this policy. The construction of the new scheme of defences necessitated a vast amount of work, and was only fairly complete three months later when the Division left the sector.

This alteration in the siting of the trenches demanded the construction of an enormous number of dug-outs. It soon became evident that without these the daily casualty list must be heavy. Not only was the artillery activity considerable, but the German had also concentrated in this sector every type of trench-mortar which had been evolved, and was extremely free in his use of them.
The mining was of a more savage nature than had been the case in La Boisselle, and in many instances resulted in serious infantry fighting. The mines were, as a rule, blown by the enemy with two objects. If the breadth of No Man's Land was not considerable, they were frequently blown with a view to destroying our trenches with their garrisons. If, however, the breadth of No Man's Land was great, or his system of defensive galleries were good, he would blow his mines in No Man's Land with a view to occupying them as a line of observation and snipers' posts. By the frequent blowing of this type of mine, he was able to cover his front with a screen of craters which denied the British observation of his front line, and created for him a chain of commanding mounds along our front.

In some cases, if the crater formed by a mine explosion was some distance from the British front line, no infantry action would follow. If, however, a mine was blown under a British trench, it was usually accompanied by an enemy raid, which was planned to enter our trenches during the confusion caused by the mine and surprise the surviving garrison. If, on the other hand, it was blown in No Man's Land close to the British front line, it was necessary at all costs to prevent the enemy from occupying it. Thus in the two last cases heavy infantry fighting often occurred. In the latter case, the object of these actions was to prevent the enemy from establishing himself on the crater. If lie did so the position was serious, for the crater became a permanent menace to the security of our lines. Where the ground might have been flat, a large hollow mound had now arisen. If the enemy established himself on the British side of the mound (i.e., the near lip, as it was called), he might construct sniping-posts which would dominate the trenches. Should he only establish himself on the far lip, he still was able, by working around the lip of the crater towards the flank, to shoot down into our trenches in enfilade.

It was suggested that the Germans, by some peculiar method of tamping (i.e., packing the explosive in the chamber), used to blow his craters with the far lip higher than the near lip. Thus, if he only established himself on the far lip, the near lip, being lower, did not obscure his view to the front; conversely the view from the near lip, if occupied by the British, was obscured to the front by the higher far lip. Whether his craters were formed in this manner from accident (i.e., the lie of the ground) or from design is not clear. The fact remained that an examination of many craters in the Neuville St Vaast area proved this to be the case.

These crater fights often developed into considerable minor operations involving many casualties. They almost always took place in the dark, and were an unpleasant ordeal for all concerned.

The crater, still smoking from its base like a miniature volcano; the stench of the fumes; the whiteness of the freshly-turned chalk standing out in the darkness, produced a setting which intensified the normal horrors of battle.

When the German blew a mine he, of course, knew the hour and the place at which the explosion would occur. He knew also from the depth of his gallery and from the amount of explosive used how close to the spot his assaulting troops might assemble without fear from the falling debris.
He was also able to assemble dumps of loophole plates, prepared and portable obstacles, bombs, etc, close to the scene of operations. The troops might or might not have been warned that a mine was to be expected in a certain area.

In these circumstances he therefore started with the odds considerably in his favour; and yet, as will be seen, as far as the Highland Division was concerned, he seldom met with the success he anticipated.

His plan was to form up his consolidating party as close to the place where the crater was to be blown as was safe. He then blew the mine, and simultaneously opened a barrage of artillery, trench-mortars, and rifle grenades, etc, on the two flanks and on the British side of the crater.

He thus hoped to deny to our troops access to it. Under cover of this barrage he then rushed his assaulting parties up to the crater, and attempted to consolidate posts both on the near and far lips.

Immediately, therefore, that a mine was blown, parties had to be organised to rush to the crater and seize at least the near lip. These parties had, of course, no previous knowledge as to the time at which the mine was to be exploded. They were also liable to be temporarily disorganised in the general confusion caused by the explosion. Thus, as a rule, when the crater fighting began, the enemy was already on the near lip before our parties were fairly on the scene.

A closely-contested fight would then ensue with bombs, Lewis guns, and rifles, and would continue until the enemy had been ejected at all events from the near lip. Posts would then be established on it, and a sap would be dug connecting the posts to the foremost British trench.

In these encounters casualties were frequently heavy, as the parties had often to pass through a heavy barrage, followed by their bomb carriers. The latter were employed in large numbers, as in this form of warfare several hundred bombs were often thrown in one night.

On first taking over, the mining situation was obscure. The French tunnellers had been withdrawn, leaving only old French Territorials to man the listening galleries. These veterans considered this duty *Tres dangereux*, as indeed it was.

In consequence, the period was marked by a constant state of anxiety as to what portions of the line were safe from the possibility of being blown up at any moment.

However, on the arrival of the British tunnelling companies, which were again largely reinforced by the coal miners in the Division, accurate information was soon obtained as regards the enemy’s underground activity. The defensive galleries were first perfected, so that timely warning could be given of any mine that he was likely to explode. By this means camouflets could be used to hinder his progress. Subsequently it became possible to take the offensive, and mines were blown to destroy his crater positions and trenches.
Later, when heavy calls were made upon the German troops to sustain the fighting on the Somme, they were compelled to relax their efforts in this sector, with the result that the British tunnellers established a marked superiority over them.

As soon as the aforementioned blizzard had cleared and commanders could find out the disposition of the men, it became evident that the ground in the forward area was far too thickly held. Orders were in consequence issued for the line to be thinned immediately. Small sectors of disused trenches were dug out to accommodate the surplus men temporarily while a more detailed scheme of defence could be formulated.

The advisability of this measure was soon proved, as from 24th March mines were continually being exploded under or in close proximity to the front line. A typical case occurred on 26th March, when at 2.30 am the enemy fired two mines simultaneously, one on the left of the 152nd Brigade, the other on the right of the 153rd.

These explosions were followed by a heavy bombardment of our front and support trenches with shrapnel, all types of trench-mortar bombs, and rifle and machine-gun fire. A party of about eight Germans then advanced towards the crater in the 153rd Brigade area, but were driven back by two officers and a party of grenadiers. Our losses were severe: four officers (one killed, two wounded, and one missing) and 74 other ranks (14 killed, 24 wounded, and 36 missing). In addition, there were 24 other ranks suffering from shock. Of these, one company of the 6th Argyll and Sutherland Highlanders lost 2nd Lieutenant O'Neil and four men killed, five wounded, and 15 missing. The missing were those unfortunate men who were buried by the falling earth. Of these two craters, the one on the right proved to be seventy yards in length. On 31st March another mine was fired by the Germans on the front of the 153rd Brigade, with the loss of one officer wounded, six other ranks killed and three wounded. The explosion of this mine was also followed by an intense bombardment by weapons of all natures. A party of Germans then entered a sap. Of these one approached a Jock who had survived the explosion, and pointing his rifle at him, said, "Hands up, Englishman!" The infuriated Jock threw a Mills bomb at the German, having failed to remove the safety-pin, and shouted, "Scotsman, you bastard". The bomb struck the German full on the forehead and felled him. He was captured, and subsequently died in the casualty clearing station from a fractured skull.

The 6th Argyll and Sutherland Highlanders were particularly unfortunate as regards mines, and by the 10th April had already experienced six mines on their fronts.

On 28th April four mines were exploded in front of the 6th Seaforth Highlanders and 8th Argyll and Sutherland Highlanders. The resultant casualties to these two battalions were six officers wounded at duty, 12 other ranks killed, 75 wounded, and 30 missing, believed buried. The explosions of these mines were followed by a 45 minutes’ intense bombardment. The Divisional artillery, however, opened a barrage on the enemy's lines opposite the newly-formed craters with such rapidity that he was unable to employ his infantry. Throughout the whole period the manner in which the artillery supported the infantry in this form of warfare was admirable, and gave the latter great encouragement.
The explosion of mines became of such frequent occurrence that the troops became very expert in rapidly seizing and consolidating craters. Dumps were made at frequent intervals along the front containing all the materials required for consolidation. In a short time the troops could be relied on to establish themselves on the near lip, however unexpectedly a crater might be blown. This was largely due to the gallantry and initiative of the junior officer on whose skill and leading success in these enterprises was dependent.

Demonstrations were given in consolidation, and a platoon for each front-line battalion was earmarked for the consolidation of any mine crater which might be blown on the battalion's front.

A natural concomitant to mining was sniping. The lip of a crater affords an excellent post from which to snipe, particularly when, as was the case in this sector, the ground sloped from the German position towards the British. The trenches on this sector were also particularly open.

After the enemy positions in this sector had been captured by the Division in April 1917, an examination was made of the German crater posts. It was astonishing to see to what an extent he could look down into the British trenches. It was realised at the time that men walking along the trenches were often under observation, and, indeed, the casualties from sniping proved that this was so. It was not, however, appreciated till later to what a degree men in the trenches, particularly the communication trenches, were visible to the Germans. In some places even the duck-boards at the bottom of the trenches were in enemy view.

The result of this situation was that at first the enemy made a considerable bag by sniping; Colonel Campbell, commanding the 4th Seaforth Highlanders, was killed by a sniper the day after the Division had taken over the line. Within a fortnight his successor was killed in a similar way.

However, the Highland Division, with a number of stalkers and gillies in its ranks, had probably the best material the country produced from which to make snipers. After a short period devoted to organisation and training, the snipers of the Division soon obtained a superiority over the enemy. It, however, always remained a sector in which the greatest care had to be exercised in looking over the parapet or in moving amongst the saps and forward boyaux. Enemy snipers were continually shattering periscopes with rifle shots.

In the Labyrinth the Division made its first organised raids. These raids consisted in heavily barraging a certain area, then at a given moment the barrage lifted off certain portions of this area and allowed the assaulting infantry to enter it. The barrage remained down on three sides of the area to protect the attackers who entered it from the fourth side from interference from without while they were destroying the Germans within. This form of barrage, originally first employed by the Germans, was known as the Box Barrage. The two most successful raids which took place during this period were those carried out by Lieutenant E A Mackintosh of the 5th Seaforth Highlanders (since killed in action), and Captain Herd of the 6th Black Watch. The former was in consequence awarded the Military Cross, and the latter the DSO.
Raids subsequently became of such frequent occurrence that want of space forbids description of them all. Certain raids have, however, been selected for description, which will be dealt with later.

These raids in particular brought to light certain facts concerning German trench construction. The German trenches did not resemble the small ditch-like trenches commonly seen at schools of instruction and training grounds. They can better be compared to the marker's gallery in a rifle range. They were ten to eleven feet deep, with the sides for the most part revetted with planks. To get into them was not easy; to get out of them still less easy; while evacuating the wounded from them was a matter of very considerable difficulty. In fact, in the case of Mackintosh's raid, it is doubtful if his wounded could have been brought back to our lines at all had not a sally-port through which the more severely wounded were carried been discovered.

On 21st May the enemy became extremely active. The Divisional artillery were heavily bombarded during the afternoon and evening with lachrymatory shells, as also were the communication trenches. At the same time the trenches of the 25th Division on the left of the Highland Division, and of the 47th Division, were intensely bombarded. Marceuil, Anzin, and Mont St Eloi were also shelled during the night, as well as several villages in rear of the 25th and 47th Divisional areas. At Maroauil an 8-inch shell burst in the 152nd Brigade headquarter office within a few seconds of the clerks having left it for the cellar, completely wrecking it, and killing the staff captain's two horses, which were tethered outside it.

This bombardment culminated in a successful hostile attack, the enemy, with apparently little difficulty, attaining his object and establishing himself firmly on the western slopes of the Vimy Ridge.

The cause of his success was due to the fact that he succeeded in secretly concentrating a large force of artillery with which to support his attack. He then subjected all the trenches involved to a bombardment of an intensity which in those days was considered unparalleled. The garrisons of the trenches attacked were almost completely without the protection of shell-proof dug-outs, and the defenders were thus for the most part killed or wounded by the bombardment before the infantry attack was launched.

At this juncture the Divisional sector was considerably increased; in fact, the Division took over the whole front of the XVIIth Corps. This extension was caused by the necessity of withdrawing troops from this part of the line preparatory to the Somme battle.

The 152nd Brigade was withdrawn on 23rd May, the 153rd and 154th Brigades extending their brigade sectors so as to include the area previously held by the 152nd. On the nights 1-2nd June and 2-3rd the 152nd Brigade moved northwards and relieved troops of the 25th Division in the Neuville St Vaast sector.

To conceal from the enemy the fact that the whole Corps front was held by the Highland Division alone, the kilt was no longer worn by the troops in the line, khaki trousers being issued instead.
The situation in the new sector taken over by the 152nd Brigade was a curious one. The extreme left of the enemy's attack on the Vimy Ridge rested on the left boundary of the new sector. Thus on the brigade left boundary in the front and support lines the British and the Germans occupied the same trenches, sandbag bombing-stops alone separating them. In some cases the British held communication trenches while the Germans occupied the trench into which the communication trench led, bombing-blocks again separating the two forces.

Across these blocks lively exchanges of bombs and rifle grenades spasmodically occurred. The distance separating the opposing sides was, however, so small that artillery and trench-mortars could be used by neither owing to the danger of short rounds inflicting casualties on friends as well as foes.

In these circumstances the left flank in the front and support lines was very unprotected and presented to the enemy a "raw edge". It was an uncomfortable situation, as there appeared to be every prospect of the enemy's developing his initial success by a flank attack delivered southwards from the area into which he had penetrated.

The feeling of apprehension on this score was accentuated by the fact that if he supported this attack with a similar concentration of artillery, the absence of shell-proof dug-outs in the Neuville St Vaast sector would ensure for him success. In these circumstances the artillery would have had an easy task, as this sector was completely overlooked by a high crater called Broadmarsh, from which the Germans obtained magnificent observation of the whole Divisional left front. Broadmarsh crater was an awe-inspiring feature that appeared to follow one with its eyes wherever one went. It was like a volcano that might erupt at any moment, and played a prominent part in every minor enterprise which took place in its vicinity.

In these adverse circumstances it became clear that the only way a hostile attack against the Neuville St Vaast sector could be defeated was by employing to the full every day's grace which the enemy gave.

A defensive flank was therefore sited and its construction begun, so as to round off the defences where the troops were in closest contact to the enemy and present to him a continuous front rather than an edge. The digging of a reserve line was also put in hand, and the construction of a large number of shell-proof dug-outs begun.

In actual fact the enemy made no further attacks, but he maintained a continuous activity with artillery and trench-mortars. Later, after the Somme battle had begun, the calls made on the German troops compelled him to relax his efforts considerably. The feeling of tension was thus appreciably lessened, though the sector could at no time be described as a quiet one.

During this period of anxiety the situation was made still more difficult by a snap of bitterly cold weather in June, which had followed a period of violent rain-storms. The result was that a number of eases of trench-feet occurred in midsummer, when all materials and stores used for the prevention of this complaint had been handed in as no longer required.
The weather, combined with the constant work on trench construction and the continual mine explosions and bombardments, proved very wearing to the men. At this period, with all three brigades employed in holding the line, the men were in the trench area for twenty-one days and at rest only for seven every month. The result was that, when the Division was ordered to the Somme, they had, owing to the constant strain, become thoroughly tired and stale. Indeed, in the Labyrinth and Neuville St Vaast sectors, trench warfare, as far as the Highland Division was concerned, reached its zenith of intensity. A great effort was required from all ranks, first to reduce the superiority which the enemy had established, later to reduce the balance so that the superiority gradually passed to the British. There was no feature in trench warfare in which, during the period immediately following the relief of the French, the enemy did not hold the advantage. The mining situation, the sniping, the absence of dug-outs, all produced acute problems which demanded immediate solution if disaster were to be avoided.

His observation of our lines in this sector was probably unparalleled in the British zone. He employed in large numbers rifle grenades and trench-mortars of every calibre with astonishing accuracy. Finally, he added to the troops an additional embarrassment by his capture of the Vimy Ridge.

The enemy, the 2nd Guards Reserve Division, proved themselves throughout worthy opponents, ready and eager to profit by any weakness displayed opposite to them. This Division is remembered for an act of courtesy of a kind seldom associated with the German people.

A certain Private Robertson of the 5th Seaforth Highlanders was captured in a saphead after having made a gallant attempt to defend himself, in spite of a fractured skull. The following day a number of undetonated rifle grenades were fired into the British lines stating in English that the gallant soldier Private Robertson, Seaforth Highlanders, had died of his wounds and had been buried with full military honours in the cemetery at Rouvroy.

In spite of the strength of the opposition the men showed excellent spirit throughout, having carried out many good raids, and having repulsed with losses numerous hostile raids, nor was a square yard of ground lost.

On Saturday, 24th June, an intense bombardment started at some distance to the south, and lasted throughout the day and night. This was the opening of the preliminary bombardment of the great Somme offensive. It continued incessantly until 1st July, when the attack was launched. Rumours of every kind began to circulate round the trenches, and much speculation arose as to whether and when the Division would be given an opportunity of taking part in the battle.

During this period the artillery carried out periodical bombardments of the enemy's trenches, with the idea of making him think that an attack in this sector was imminent. In this they seem to have been successful, for each night the Germans fired intermittent short hurricane bombardments on the front and support and communication trenches, presumably with a view to preventing the assembly of attacking troops.
These bombardments were extremely heavy while they lasted; but, thanks to the large number of dug-outs which had by this time been completed, they inflicted little loss on the trench garrisons.

On 27th June arrangements were begun for the attachment of the 60th (2nd Line London Territorial) Division to the Highland Division for a period of instruction in the line. The news of the arrival of the 60th Division was welcomed by all ranks, as it was looked on as a sure indication that the Division would be relieved and would move to the Somme battle.

It had been arranged that as soon as the 60th Division were ready to take over the line, the Highland Division should be moved to the back areas for a period of much-needed rest and training before proceeding southwards.

Possibly, with its later experiences of battle fighting the Division might not have been so anxious to hurry off to take part in a great attack. In these days, however, apart from the battle of Festubert, it had not been employed in an offensive. Officers and men were therefore anxious that the Division should be given an opportunity of operating in an attack as a complete unit.

The 60th Division began their attachment on 30th June. This was carried out first by individual officers and NCOs, then by sections, by platoons, by companies, and finally by battalions. On 13th July the brigades of the 60th Division began taking over from the brigades of the Highland Division. On 14th July General Bulfin, GOC 60th Division, assumed command of the sector.

This system of instruction meant that there were reliefs of some kind being carried out every night. These were greatly hampered by the sudden intense bombardments to which the enemy subjected the British trenches. In consequence, casualties were frequently heavy. In one brigade sector alone over sixty casualties were sustained during a single night.

As a parting gift to the Germans on the last day the Division was in the line, the 5th Gordon Highlanders raided the enemy's trenches, bombed his dug-outs, and killed several of the garrison.

On 14th July the Division moved by motor lorry to the Doullens-Lucheux-Baudricourt area. The popular supposition amongst the troops was that they were bound for a rest area. On the 15th the move was continued by march south to the area Bernaville-Candas-Hem.

All doubts were dispelled on the 20th, for the Division then entrained at Candas and detrained at Mericourt. While passing through Amiens, it was interesting to pass several trains going westwards, packed with battle-soiled soldiers, all in the very best of spirits. They were a Division coming out of the Somme battle to rest and refit. Many of them wore captured German pickelhaubers. Apart from the raggedness of their appearance and their stubbly beards, they looked at the top of their form. One always felt that it was spectacles such as these which gave the war correspondent that erroneous theory to which he adhered so fixedly throughout the war, that soldiers like "going over the top" and do so full of jests and wreathed in smiles.
From Mericourt the Division marched to the Ribemont-Meaulte area, parties being sent in advance to reconnoitre the line.

On 21st July orders were received that the Highland Division would relieve the 33rd Division in the line northeast of Fricourt during the coming night.

Just prior to the arrival of the Division on the Somme, two officers joined it who, second only to General Harper, were most responsible for the high standard of efficiency which it attained. These were Brigadier-General L Oldfield, DSO, RA, and Brigadier-General H Pelham Burn, DSO, Gordon Highlanders. The former was appointed CRA in place of Brigadier-General M J MacCarthy, CMG, who left to take up a new appointment. The latter assumed command of the 152nd Infantry Brigade in place of Brigadier-General W C Ross, CB, who took up an appointment at home, and later commanded a brigade in Salonika.

General Ross's departure from the 152nd Infantry Brigade caused the deepest regret to all ranks. He had been intimately known in peace time to many of the officers, NCOs, and men whom he now commanded in war. He was secretary of the Territorial Force Association for his county, and he had commanded his brigade since November 1914. General Ross had a personality which won for him the friendship of all who came in contact with him. The Highland soldier had become one of his first interests, and he possessed great knowledge and understanding of him. Further, no one could fail to admire his natural courage. General Bannatine-Allason has described him as spending many hours, both by day and night, in crawling round the most exposed saps and dangerous places in his sector. General Ross spent so much of his time amongst his men that he was a familiar figure to them all, while he knew numbers of them by name, and in many cases knew also their parents, families, homes, and employers.

General Oldfield was not only a scientific gunner of the first order, but also rapidly developed a commanding knowledge of infantry tactics.

This knowledge enabled him, in conjunction with General Harper, to draw up the artillery plans for attack and defence, so that in all operations the infantry were directly supported by the maximum energy of his artillery covering them. The successes of the Division were in no small measure due to the effective manner in which the two arms co-operated.

General Oldfield was continually moving towards artillery perfection. He set a very high standard to his officers, to which they admirably responded. In the later stages of the war, his energy as a commander had resulted in the Divisional artillery having reached a high degree of efficiency. They could improvise a barrage in a shortness of time which surprised many artillery commanders from other Divisions. They had, further, become extremely mobile, and were possessed of extraordinary initiative. Later chapters in this book will show how General Oldfield's officers not only handled their guns with great skill, but also, as a result of his teaching, were able in emergencies to take command of disorganised detachments of men and fight equally skilfully as infantry officers. During General Oldfield's command, all infantry commanders had complete confidence both in the artillery and in the artillery arrangements.
General Burn was at the time of his appointment the youngest Brigadier in the British Army, being thirty-four years of age. Later in the war there were several younger, but prior to the Somme fighting the day of the young Brigadier had hardly come.

He is perhaps best described by a Jock, who said, in speaking of him, "They a' have their fads, and his fad is effecieney".

General Burn had abundant experience of warfare in the front line. He had served as Adjutant, Staff-Captain, and Brigade-Major, and had commanded three separate battalions.

It can safely be asserted that he spent every moment of the day, and much of the night, in thinking how he could increase the efficiency of his command and how he could do damage to the enemy.

His vast experience enabled him to grasp details which actually were far-reaching in effect, but which to a man of less experience might have appeared trivial or have passed unnoticed.

In every direction, even in the smallest points, lie accepted only one standard - namely, the highest; nothing less was tolerated. He spared himself no pains to attain this standard. Holding these principles as strongly as he did, it is natural that he found it frequently necessary to check officers and NCOs. They, however, bore him no ill will for this, and officers were frequently heard to say, "You can't argue with PB when he strafes, because he's always right".

To those who served with General Burn he will always stand out as a man who possessed in full the essential qualities of the perfect soldier.

While the Division was in this sector the 6th Argyll and Sutherland Highlanders left the 152nd Brigade, being posted to the 5th Division as pioneer battalion, their place being taken by the 6th Gordon Highlanders, who had landed in France in 1914, and had seen considerable service with the 7th Division.
CHAPTER V
THE BATTLE OF THE SOMME - HIGH WOOD

The Division entered the area of the Somme battle under bad auspices. It undoubtedly required a rest before it could be expected to reproduce its true form. On the 21st of July it received orders to take over the line on the same evening. On the 22nd it received orders to carry out an attack. Moreover, this attack, for which the Division was given less than twenty-four hours to prepare, was to be delivered from the point of a salient. There was, in fact, a general impression throughout the Division when they left the Somme area that their efforts had not been attended by a reasonable chance of success.

As far as the Highland Division is concerned, the tactical feature with which this phase of the Somme operations is primarily associated is High Wood. This wood, the highest point in Picardy, is perched on the summit of a large upland flanking the road, which, passing between the two Bazentins, leads from Contalmaison to Longueval.

Between the two Bazentins is the road junction where the road through the Mametz valley strikes the Contal-maison-Longueval road.

During previous operations, in which the 7th Dragoon Guards and the Deccan Horse had participated, the whole of High Wood had been captured. The enemy had, however, regained a footing in it. When the Division arrived in this area the German line ran through Guillemout, through Delville Wood north-east of Longueval, through High Wood, but on the reverse slope of this aforementioned upland, north of Bazentin-le-Petit, and between Contal-maison and Pozieres.

The enemy did not, however, hold sufficient of High Wood to secure observation of the country south-west of it, with which the Division was primarily concerned.

Of this section of the front the portion taken over by the Division at one time or another during its tour at duty in the line ran from a point about half-way between Longueval and High Wood to Bazentin-le-Petit exclusive.

The Divisional area was traversed throughout its length by the road which ran from Becourt-Becordel-Fricourt, south of Mametz Wood-Bazentin, and on to Longueval.

The Mametz Valley, through which this road ran, was familiarly called the Happy Valley. The valley, with the possible exception of the Chemical Works at Roeux, has probably stamped itself more on men's minds than any other topographical feature with which the Division came in contact. In Happy Valley was situated the headquarters of the brigade in the line, and of the supporting brigade itself. In addition, the advanced dressing station and many batteries were also located in it.

Running as it did towards the apex of a salient the enemy could concentrate a tremendous weight of artillery against it. Thus, when he was bombarding it with his maximum intensity, shells used to arrive from the direction of Leuze Wood in the right rear, and from Gueudecourt and Courselette frontally, and from behind Pozieres on the left.
This valley was the only line of communication through which every relief, every round of ammunition, and every ration had to pass on their way to the line, not only for the Highland Division but for several neighbouring Divisions.

Portions of the valley were under observation from balloons, while throughout its whole length the clouds of dust raised by the continual stream of wheeled traffic disclosed to the enemy any considerable movement that was taking place in it.

The enemy shelled Happy Valley mercilessly day and night, an intense barrage of high explosive, air bursts and gas shells being placed completely across it at irregular intervals, and moved backwards and forwards, up and down it.

For the most part the only protection the residents in the valley had against shell-fire were slits cut in the ground covered with waterproof sheets or corrugated iron. By degrees, however, more and more German dug-outs were discovered, until shell-proof accommodation was ultimately found for almost all.

The valley was traversed day and night by a constant stream of traffic. The infantry used overland tracks well clear of the road, and marched in platoon or section groups. All wheeled traffic was, however, restricted to the single road, so that periods of great congestion often occurred.

When the German barrage opened, men, animals, and motor vehicles broke into their best speed. Great columns of white dust, due to the intensity of the summer heat, rose up, choked everything, and made seeing a matter of difficulty. Guns and limbers moved at a stretch gallop, lorries bounded from shell-hole to shell-hole, and every effort was concentrated on getting out of the zone involved in the barrage with as little delay as possible.
The heavily-burdened infantryman on his way to and from the line, however, carried too much on his back to make him think of doubling. He used to plod along at his regulation three miles an hour, trusting that his luck would take him through.

It was no uncommon sight to see direct hits scored on gun-teams, limbers, and groups of infantry. When the barrage ceased and it was possible to take stock of the result, appalling scenes were often disclosed. Teams with their riders lying in a heap, ammunition dumps on fire, riderless and driverless horses and waggons bolting in all directions, and coming down in the midst of old wire entanglements, were daily spectacles in the Happy Valley.

At each pause in the barrage all haste was made to complete the work of succouring the wounded and collecting the dead, and filling in the latest shell-holes in the road before it reopened.

In this valley the conduct of the Royal Army Medical Corps was superb. Other troops could at least make some effort to make their way out of the danger zone as fast as possible, but the bearers of the field ambulances and the regimental stretcher-bearers could not. They slowly pushed their wheeled stretchers from the Crucifix at Bazentin to the dressing station, heedless of the shell-fire and their own security, and careful only to evacuate the wounded with the minimum of discomfort to them.

Similarly ambulance car-drivers could not join in the helter-skelter for security on the road to Fricourt. Day and night they plied slowly along the damaged road with their burden of wounded, returning again and again through the valley as soon as their cars had been cleared.

Had the Germans in those days been in possession of the instantaneous fuze which bursts its shell before it has had time to bury itself in the earth and thus lose much of its missile effect, this road could have been made almost impassable. Happy Valley, with its dust and its flies and its stench of half-buried animals and men, will remain to an who knew it an ineffaceable memory.

The trench lines taken over by the Division consisted of odd, narrow, and shallow trenches which had gradually evolved from the connecting of posts in which troops had dug themselves in during previous engagements.

By means of saps running into High Wood from the trench dug along its southern and western edge, a footing was held in the wood. Between High Wood and Delville Wood the British trenches were hidden from the Germans opposite them and vice versa by the ere,st line of the upland.

To the left of the wood the trench lines, which were not continuously connected up, curved in a south-westerly direction towards Bazentin-le-Petit, leaving the wood as the apex of an acute salient. In this section of the front the trenches seemed to fulfil no tactical requirements. There was no depth to the defensive system; the trenches were little more than knee-deep, and were choked with dead. Work on a single communication trench - High Alley, running from the Crucifix at Bazentin to High Wood - had been begun.
The Germans held a strong redoubt in the eastern corner of High Wood. In this corner the contours were such that there was a depression in the ground similar in shape to a saucer. The Germans had fortified this saucer, and garrisoned it with machine-guns, mostly sited so as to fire to a flank. They could thus, by firing eastwards from this redoubt, rake No Man’s Land in direct enfilade. By firing westwards, they could place an enfilade barrage of low trajectory bullets which swept the rides through the wood. This redoubt was surmounted by wire entanglements, the tops of the pickets being just visible when looked at frontally and from our foremost saps.

Passing through the north-east corner of the wood was a strong switch line, which ran from Flers through High Wood towards Martinpuich. This was a well-dug, heavily-traversed trench protected by wire, but during this period had no completed dug-outs in it. Air photos, however, showed where work on the shafts of several dug-outs had been begun.

The whole of this area had been the scene of repeated encounters, as the ground amply testified. In the undergrowth of the wood, and in the standing corn which covered the whole area, lay the dead of many different regiments.

The result was that, owing to the scorching summer weather, the troops in the line lived in an atmosphere of pollution and in a positive torment of bluebottle flies. In one sap in particular, as one moved along it the flies rose in such clouds that their buzzing sounded as the noise of a threshing-machine. In this sap the sentries could only tolerate the conditions by standing with their handkerchiefs tied over their mouths and nostrils.

By 3 am on 22nd July, the 154th Infantry Brigade had completed the relief of the 33rd Division. The 13th Brigade of the 5th Division were on their right, and the 57th Brigade of the 19th Division on their left.

Of the 154th Brigade two battalions held the line, the remaining two being in support and reserve in Bazentin-le-Grand Wood and Bazentin le Grand.

The Divisional artillery were in position in the open, the personnel for the most part living under tarpaulin shelters. Some batteries were in the Mametz Valley, while others were on the high ground south of Bazentin-le-Grand. It is difficult to determine who were most to be sympathised with - the gunners who lived alongside their guns, or the drivers who had to pass two or three times a day through the Happy Valley with ammunition. The batteries in positions in the valley itself probably lived in circumstances which could not have been more hazardous and unpleasant.

The 153rd Brigade in support occupied the area about the south-east corner of Mametz Wood and Caterpillar Wood. The 152nd Brigade in reserve bivouacked between Frieourt Wood and Mametz Wood. At dawn on the 23rd the Happy Valley barrage, about which the Division had received no information, opened with great intensity. The 153rd and 152nd Brigades were seriously involved in it, and suffered considerable casualties.
The 152nd Brigade was immediately fallen-in and marched westwards towards Frieourt, ultimately moving to bivouac in the vicinity of Becourt-Becordel. The 153rd Brigade extended its area so as to diminish the number of casualties.

It was later discovered that numerous shell-proof dugouts existed in and about Mametz and Fricourt Woods. Apparently no organised reconnaissances of this area had been made, for bad this been the case, and had the location of these dug-outs been made known to the Division on its arrival in the area, many unnecessary casualties would have been avoided.

The day on which the relief was concluded, 22nd July, the Division received orders to carry out an attack during the coming night. The objectives given were the north-east and north-west edges of High Wood and the switch trench from the north-east of High Wood to a point five hundred yards north-west of it.

The 154th Brigade was detailed to carry out this operation. As a preliminary the redoubt at the eastern corner of High Wood was to be seized at 10 pm in conjunction with the left brigade, 5th Division. The main attack on the German switch line was timed to take place at 1.30 pm.

The troops engaged in this attack had little or no knowledge of the enemy's dispositions. They had barely completed the relief by dawn on the previous night. During the clay movement was restricted and patrolling impossible. Thus when the attack was launched at 10 pm, circumstances had afforded the attackers no opportunity of studying the ground, or of forming any detailed plan of action. Added to this the wood was such that the trees prevented a shrapnel barrage from being effective. Further, the "going" within the wood, owing to shell-holes, brambles, dense undergrowth, and wire entanglements, was extremely bad - so bad, in fact, that even many weeks after its capture, to walk from one end of the wood to the other was a laborious process demanding considerable physical effort.

The attack was therefore delivered with an ineffective barrage with which the men were unable to keep up.

The result was that the enemy had little inducement to take cover. He was thus able with his machine-guns and riflemen, whom he posted at night in the woods in advance of his trench lines, to defeat the attack completely and inflict heavy losses on the 4th Gordon Highlanders, and the 9th Royal Scots.

At 1.30 am the main attack was delivered, but it met with no better fate. The volume of fire, particularly from the machine-guns in the redoubt, was so intense that no progress could be made. The men had advanced to the attack with great gallantry, but the cross-fire opposed to them rendered success impossible. Morning found them back in their original line, but seriously depleted in numbers.

The day was spent in improving the trenches and in connecting by a trench the southern edge of High Wood with the Windmill north of Bazentin-le-Grand. Both the troops in the line and the brigade in support were heavily shelled during the day, lachrymatory shells and 5.9 howitzers being used profusely.
During the night work was continued on the trench joining High Wood and the Windmill, and in High Alley. By the end of the night the latter was negotiable for traffic to within sixty yards of the wood. The following day the former of these two trenches was heavily and accurately bombarded.

At 7.30 pm, 24th July, the enemy launched a surprise attack against High Wood and against the left company of the 154th Brigade. For some time the situation was obscure, but by 10 pm the artillery had been asked to slacken. It subsequently transpired that our line remained intact, and that the German attackers were falling back.

During the attack the enemy again barraged the new trench mentioned above extremely heavily. He also bombarded High Wood and set it on fire.

By 11.30 pm the situation was completely in hand, and work in the trenches was resumed.

Meanwhile orders had been received that the 154th Brigade was to relieve the left battalion of the 5th Division, and thus extend its front towards Longueval. This relief was completed by 6 am, and gave the brigade a frontage of some 2,500 yards to hold.

On 25th July the enemy bombarded Mametz Valley and Fricourt Wood in a most savage fashion with guns of all calibres. This bombardment opened at noon, and continued until 6 pm. It was the worst experience of shell-fire which the residents in Happy Valley encountered during the Division's sojourn in the Somme area. Much material damage and many casualties resulted.

At 9.20 pm the 4th Seaforth Highlanders delivered another attack against the German redoubt. It, however, met a worse fate than its predecessor. An intense machine-gun fire was opened on the British trenches at the moment when the attackers were mounting the parapet. The troops suffered such losses from this fire that the attack never materialised.

This operation roused the enemy considerably, and he shelled the forward area throughout the night. In this bombardment he used a considerable number of shells containing phosgene gas. This was one of the earliest occasions on which this form of gas was used. It was particularly insidious, as at first it did not cause any inconvenience, and its smell was not offensive, being similar to that of sweet apples.

Meanwhile the brigade in support had been kept fully occupied. The intense heat created a great demand for water for the first-line troops. The water supply in the forward area was, however, non-existent, so that a dump of petrol tins of water had to be formed in the Happy Valley. From this dump all the water used in the forward area was carried by the supporting brigade. Similarly, with no light railways in repair, every round of SAA bombs, trench-mortar ammunition, Verey lights, barbed wire, screw pickets, etc., had to be carried forward by man power. The result was that practically every man in the supporting brigade made at least one journey daily from the dumps at the south-east corner of Mametz Wood to the forward dumps in rear of High Wood.
The labour thus entailed, coupled with the fact that the supporting brigade lived in a heavily-shelled area with insufficient dug-out accommodation, meant that the troops had lost much of their fighting efficiency before they went into the line. In the circumstances there was, however, no alternative.

On the 26th July the 153rd Brigade relieved the 154th Brigade, and the 152nd Brigade moved forward to the support position. This relief was considerably interrupted by a further lavish use of phosgene by the Germans.

The work of consolidating and digging more trenches south and south-west of the wood was continued, as until touch in the front line could be obtained on the left, that flank was in the air.

On the 27th the forward area and the supporting brigade (152nd) in Mametz Valley were heavily shelled all night. This shelling was intense, it being estimated that two shells per minute burst in the area close to brigade headquarters alone throughout the night; 77 mm gas shells were primarily used, but 5.9s were also from time to time employed freely. As a result of this bombardment the 8th Argyll and Sutherland Highlanders alone sustained eighty gas casualties.

During the following day the 153rd Brigade co-operated in an attack on Longueval by rifle and machine-gun and Stokes mortar fire. They, however, took no part in the infantry action.

During the night 27-28th July, connection in the front line was established about 200 yards north-east of the Bazentin Windmill by the 6th Black Watch with the 29th Division. For the first time in this sector a continuous line of defence was presented to the enemy.

The 153rd Infantry Brigade had carried out a number of patrols. They had already had three days in which to reconnoitre the enemy's position and study the lie of the land when they received orders to attack the enemy's line from halfway between Delville and High Woods to the western edge of High Wood.

Patrols had located the enemy as occupying various positions, and these were subjected to bombardments during the forty-eight hours previous to the attack. At this stage in the war the shooting of the heavy howitzers had not reached that pitch of accuracy to which it afterwards attained. Nor was the liaison between the infantry and the Corps artillery as close as it became later. These causes and faulty observation made the shooting somewhat erratic at a place where very exact shooting was necessary. To these bombardments the enemy usually replied by shelling the Mametz Valley and the infantry in the line.

The attack was launched at 6.10 pm, and to the east of the wood proceeded some distance. However, on topping the rise in the middle of No Man's Land, the troops came under a very severe machine-gun fire, in which the accursed redoubt on the eastern corner of the wood, as usual, played a prominent part. In the wood itself the advance was again checked by enfilade machine-gun fire, and the result of the action was much the same as it had been in the case of the 154th Brigade.
The net gains were, however, an advance of 200 yards on the right and centre, and
of 70 yards in the wood. The men maintained themselves in their new positions in
the wood for some time. Finally, however, owing to the intensity of the enemy's
bombardment, they withdrew to their original positions.

The right and centre consolidated their new position in posts, and held their gains.

Orders were meanwhile issued for the attack to be resumed at 9.45 pm. These
orders were, however, not received at Divisional headquarters in sufficient time to
enable them to be transmitted to the attacking companies before the attack was due
to start. No further action therefore took place.

The 31st July was remarkable for a violent bombardment of the country between
Bazeutin-le-Grand and Mametz Wood, which was practically continuous throughout
the day.

On 1st August, the 152nd Infantry Brigade relieved the 153rd, and the 154th Brigade
moved forward to the support brigade area. It had now become quite clear that no
good purpose could be served by ordering the Division to carry out any further local
attacks. There was no reason to suppose that such attacks would meet with any
more success than their predecessors. The 152nd Infantry-Brigade was therefore
instructed to adopt a vigorous policy of peaceful penetration. By that is meant that
the policy was to be the acquisition of more ground by digging and by minor
operations, without the delivery of any set piece attack involving a large number of
troops.

Orders were thus issued for as much ground as possible to be gained in High Wood
by sapping forward. Progress was also to be made between High Wood and the
Divisional right boundary, by digging-in posts in advance of the existing front line
during the night, and ultimately connecting them up into continuous trenches.

The actual labour of digging in the wood was considerable, as beneath the soil there
lay a tangled mass of thick roots, in many cases too stout to be severed by a spade.
The work, therefore, was slow and arduous, axes and billhooks having to be
employed as well as picks and shovels. The enemy, however, paid little attention to
the working parties.

On the right it was considered likely that, as there was no cover, the enemy would
interfere considerably with digging operations. An apparatus was therefore
employed, known as the Bartlett Forcing Jack. The Bartlett Jack was designed to
drive iron pipes loaded with tin canisters of ammonal (containing two lb of ammonal
per foot run) through the ground at a depth of from four to five feet. When a sufficient
length of pipe had been driven into the ground in the required direction, the charge
was exploded. The explosion blew a fissure in the ground which served as a trench.
In this instance the labour of carrying the pipes and ammonal up to the line, and of
working the task, proved incommensurate with the results obtained. This was
particularly so when it became evident that considerable liberties could be taken by
working parties without interference from the Boche.
On the night 3-4th August General Burn decided to employ a considerable working party and boldly "jump" a trench some 200 yards in front of the existing front line. That is to say, instead of sapping forwards and digging "T" heads at the ends of the saps for the posts to occupy, and finally connecting the "T" heads together so as to form a continuous trench, a continuous fire trench was dug in the first instance during the night, and occupied by a garrison at dawn. Subsequently communication trenches were cut to connect this trench with the support line, Seaforth Trench.

The Germans thus on 4th August woke to find that the whole of the Divisional front line, exclusive of the wood, had advanced some 200 yards towards them.

When the Division was relieved on 7th August, more than half High Wood was in our hands and consolidated. The redoubt in the eastern corner was, however, as formidable as ever. To the right of the wood the line had been advanced some 300 yards, while to the left the position had been so consolidated that there was no gap in the lines, and the flank was properly secured.

In addition, High Alley, 1,000 yards in length, had been cleared out and made into a first-class communication trench by the 8th Royal Scots. Further east they had also dug a completely new communication trench called Thistle Alley. The digging of these trenches was a considerable task, as the soil for the most part consisted of chalk containing countless large flints or gravel, so that every spadeful had to be loosened by the pick before it could be thrown out of the trench.

On 7th August the 152nd Brigade was relieved by the 100th Brigade, 33rd Division. Owing to the intensity of the enemy's shelling of the valley at night, it was decided for the first time to carry out the relief in daylight. In spite of some apprehension caused by three German aeroplanes flying low over the lines while the relief was in progress, the experiment proved highly successful. The 152nd Brigade, in fact, did not sustain a single casualty during the operation.

On 8th August the Division remained in bivouacs near Meaulte, in glorious weather. In the evening the "Balmorals", the Divisional troupe, using the tail-board of a lorry as a stage, gave a performance in the open air, which was attended by practically the entire infantry of the Division. It is doubtful if, in the whole of their highly successful career, any performance given by the "Balmorals" was more appreciated than this one.

The Division had passed from sixteen days of continuous and unsatisfactory strife to an unexpected haven of rest, set in the midst of corn-lands during harvest-time.

It was a real refreshment for the men to sit in the cool of a delightful summer evening and listen to "Stanley" and "Gertie", both of whom rose to the occasion admirably.

So ended the first offensive operations in which the Division had been employed as a whole unit. The results had been disappointing and dispiriting to all. Over 3500 casualties, including more than 150 officers, had been sustained in two fruitless attempts to carry a German position which remained intact, in spite of many attacks by a succession of Divisions, until 15th September. The Germans had shown that High Wood could not be taken hurriedly by a direct frontal attack.
Three months later General Harper was able to show that the much stronger position of Beaumont Hamel could be stormed frontally after careful preparations and with adequate artillery support.

High Wood was finally overcome by a mine, which shattered the redoubt, and by tanks, which on this occasion were employed for the first time in the Great War.

The mine referred to above was suggested by General Pelham Burn on the morning of 5th August as being the least costly means of subduing the redoubt. His suggestion was at once adopted. Tunnelling officers reported at brigade headquarters the same evening, the actual mining operations beginning on the following morning.

It was most satisfactory to those engaged in High Wood to visit it after the German withdrawal in the Somme area, and see in place of the saucer in which the German redoubt was situated a vast crater. Many graves were in it and round it, and arms, equipment, and ammunition lay scattered about it. In fact, it had all the appearance of having admirably served its purpose.

On the 9th August the Division, less the artillery, which remained in the line, entrained at Edgehill and Mericourt, and was moved to the area Longpre-Pont Remy. The following day it again entrained, and began to move into the Blaringham area.

High Wood now stands in the centre of a vast cemetery. There is barely a portion of ground of the size of a tennis court in all that countryside which does not contain the graves of one or more British soldiers. In the wood itself stand memorials erected to the memory of the fallen of many Divisions which were shattered there. The Highland Division was not by any means the only Division which failed to capture a natural fortress situated at the apex of a salient.

CHAPTER VI
ARMENTEhRES AND HEBUTERNE

On 15th and 16th August the 153rd and 154th Brigades relieved the 1st New Zealand Division in the line. The new front extended from Chapelle d’Armentieres on the right to the river Lys on the left. The 152nd Brigade in reserve was billeted in Armentieres. Divisional headquarters opened at 98 Rue Sadi Carnot.

By 19th August the Divisional artillery had arrived from the Somme, and completed the relief of the New Zealand artillery.

The tour of duty in the Armentieres sector was remarkable for its tranquillity. The weather was excellent, the breastwork trenches reasonably comfortable, and the enemy’s activity slight. The town of Armentieres itself provided many excellent billets for the troops in reserve, and for all three brigade headquarters. The batteries were also for the most part comfortable, some of them being in the unique position of occupying houses for quarters, with their guns in the gardens and conservatories.
Armentieres was indeed fairly described by the Jocks as *bon*. In these days it was still occupied by civilian inhabitants in large numbers. There were in consequence plenty of the beloved "estaminets", as they were usually called, and numerous shops. The latter all appeared to keep the same articles in stock - "yin blonk", "oofs" - either to be consumed on the premises or taken home; chips and those wonderful postcards on which patriotic designs were embroidered in alarmingly coloured silks, and on which were superscribed such mottoes as "To my dear sweetheart", "To my darling wife".

The officers were equally well catered for, considering that Armentieres was within range of the lightest field-guns. There were a few naturally expensive and equally naturally indifferent tea-shops. There were one or two restaurants where dinner could be obtained, in which the French cooking afforded a relief from the normal efforts of the company's mess cook. And there was the famous Lucienne's.

Lucienne lived at a corner house in the Rue Sadi Carnot, and had assisted in the management of a restaurant there since the early days of the war. The majority of the neighbouring houses, including the large church some fifty yards from the restaurant, bad at one time or another been struck by shells. Most of Lucienne's windows had been broken during these bombardments. She, however, still possessed the most buoyant spirits. She had ready wits, and in any form of badinage usually had the last word. She, in fact, resembled a character from a light opera rather than a player in the real drama of war. After the German offensive in April 1918 she was driven out of Armentieres, but remained undaunted; and subsequently, after the tide had turned, opened a similar establishment in Amiens. The officers of the Division had to thank Lucienne's courage for many a pleasant evening spent in Armentieres.

The sector, in fact, acted a.s a tonic to the Division, and with its quiet trenches, wonderful weather, and good billets soon effaced all the bitter memories of the Somme and the weariness of the Labyrinth.

The enemy's activity, such as it was, was directed chiefly against the town and the suburbs of Houplines, both places being intermittently shelled, particularly the latter. At times the bombardments were severe, Divisional headquarters being ultimately shelled out of their house in Rue Sadi Carnot, and being in consequence moved to Steenwerk.

On 14th September the Division sustained a considerable loss in the death of Brigadier General C E Stewart, CMG, commanding the 154th Infantry Brigade. General Stewart and his intelligence officer were walking through Houplines when a chance shell burst within a few feet of them, killing them both. It was a ease of the cruellest bad luck, as this was the only shell which fell in that vicinity during the day. General Stewart had commanded the 154th Brigade since its reconstitution as a Highland brigade. His troops were considerably attached to him, and his loss was much felt by them.

On 17th September, Brigadier General J G H Hamilton, DSO, Black Watch, assumed command of the 154th Brigade.
Operations at this sector were for the most part confined on the part of the enemy to a fairly consistent but only moderate activity with the Minnenwerfer. At times, too, he was active with his Grenatenwerfer, known to the troops as the "Pineapples" or "Fishtail". "Yon minnie-wafers" were fortunately clearly visible in the air, and so with a little judgment could be avoided. They had, however, a most devastating effect on breastwork trenches, with the result that, as a rule, more damage was done in a day than could be repaired in twenty-four hours by the troops available. Minnenwerfer sentries were posted who, whenever they saw or heard a "minnie" fired, blew a whistle. The troops in the trenches then at once looked into the air to locate the bomb. As soon as they had judged where it was going to fall, they took the necessary steps not to be there at the time of its arrival. Watching the "minnies" in the air rather resembled waiting for a high catch in the deep field at cricket. If there was no wind it was comparatively easy to judge them. If, however, there was a strong breeze blowing, the wind would catch them and alter their flight considerably. The men, however, soon learnt their idiosyncrasies, and it was a rare occurrence for casualties to be inflicted by them.

The Grenatenwerfer was quite a different proposition. This form of projectile was fired from a machine of about the same size and weight as a typewriter, and in consequence it could be moved with ease from place to place after every few rounds. It was thus difficult to locate the position from which it was fired. Further, it was most unusual to be able to see the projectile in the air, so that no steps could be taken to avoid it.

As regards British operations, a discharge of gas from cylinders took place on 31st August. The preparations for this discharge involved a considerable amount of work. The cylinders of gas had to be carried the full length of the communication trenches, each one being supported by two men. The weight of these cylinders was so great that a second pair of men were also required for each cylinder to act as reliefs.

Enormous carrying parties were therefore required to carry the cylinders to the fire-bays in the front line into which they were to be installed by the gas companies. This was always an unpleasant task, as the danger of a bullet or fragment of shell striking a cylinder and causing a leakage of gas in the midst of the carrying party was ever present.

The discharge on this night was followed by a raid half an hour later. The enemy, however, was found to be alert, and he met the raiders with such a heavy machine-gun fire that they were unable to reach the hostile wire.

Subsequently raids became a frequent occurrence. On 15th September four raids were carried out. In each case Bangalore torpedoes - ie, long tubes of ammonal with a time fuse - were used to destroy the enemy's wire.

These raids were carried out by the 6th Gordon Highlanders, the 6th Seaforth Highlanders, the 7th Gordon Highlanders, and the 7th Black Watch.

Of these, the first and third failed owing to the torpedoes not bursting; the second was an unqualified success, and is described in detail later. The fourth was successful, but only two Germans were found in the trench.
The following night two more raids took place. Of these, one carried out by the 5th Gordon Highlanders was completely successful, and twenty-five Germans are reported to have been killed. The second raid, carried out by the 9th Royal Scots, was also successful, but only one German was found in the trenches. He was killed. On 22nd September the 6th Gordon Highlanders made a second attempt at the raid which had been unsuccessful on 15th September. However, the enterprise again had to be abandoned, as the torpedo failed to explode and the wire remained uncut.

As raiding became so marked a feature of the war, space forbids that each raid should be described in detail. General Harper was therefore asked to select the raid he considered most suitable for description, and he has chosen that carried out by the 6th Seaforth Highlanders on 15th September 1910. This raid is therefore now described in detail.

The area selected for the operation was a most prominent salient formed by the German front line. Through the apex of this salient, and running at right angles to the fronts of the opposing forces, ran the Armentieres-Lille Railway. Across the base of the salient ran a well-defined entrenchment.

The general plan was as follows: The raiders were divided up into two parties, each consisting of one officer (Lieutenants J Sainter and D F Jenkins), one sergeant, one corporal, and ten privates, with a blocking party each of one NCO and three men.

The scheme was that each party should cut the wire at its own point of entry by means of Bangalore torpedoes, while the wire was to be cut for a point of exit by the 2-inch mortars.

The two parties were to enter the salient from opposite sides and close to its base. They were then to leave their blocking parties to cover their rear, while they both worked forwards to the apex. By meeting at this point it was hoped that the entire garrison of the salient would be accounted for.

The Bangalore torpedoes, both seventy-five feet in length, were to be placed under the wire thirty minutes before zero, Lieutenants Sainter and Jenkins, each with two men, being responsible for placing the torpedoes in position.

The raiding parties were ordered to leave their trenches and form up in No Man's Land about thirty yards away from their torpedoes, ready to rush through the gap in the wire as soon as the explosions took place.

The actual trench area to be raided had been reproduced exactly according to scale in a large pasture close to Armentieres. It was thus possible to practice the men continually over the course, so that they acquired a true sense of direction, and of the distances they would have to traverse during the raid.

The parties paraded for the raid with their faces and knees blackened, with their bayonets covered in mud, and with their steel helmets encased in sandbags to which grasses and weeds had been sewn.
These precautions were necessary, as the men had to lie out in No Man's Land, where they would be in danger of being observed by a German sentry, so that they could enter the trenches immediately the torpedoes were exploded.

Ropes were also carried, as it was anticipated that there might be some difficulty in getting the prisoners out of the deep breastwork trenches, and it might be necessary to drag them out.

The men wore Dayfield body-shields to protect them from bomb splinters.

The arms carried were as follows: Officers, one revolver, six bombs, and one electric torch; NCOs, one revolver, 10 bombs, and a bludgeon; four bayonet men, rifle and bayonet, six bombs, electric torch attached to rifle, 30 rounds of ammunition; eight throwers, 10 bombs and a bludgeon; eight spare men, a bludgeon, 10 bombs, and a wire-cutter; blocking party, rifles and bayonets, 30 rounds of ammunition, and 10 bombs.

In the first instance the success of the raid was dependent on the gaps being adequately cut in the wire. At the time many persons thought that General Burn's scheme of using torpedoes seventy-five feet long was too ambitious. Certainly when the torpedoes were constructed and were seen for the first time, they looked awkward things with which to have dealings in No Man's Land, being as they were considerably longer than a cricket pitch. When the time arrived the torpedoes were hoisted out of the trenches, and the torpedo parties set off with them. Lieutenant Jenkins had little trouble with his; he reached the selected point in the German entanglement without incident, and placed his torpedo in position. This was difficult work. Here were two parties, each of three men, within 70 yards of the German sentries, forcing a metal tube three inches in diameter, 75 feet long, and loaded with ammonal, underneath the German entanglements. Very lights were fired by the enemy continually, illuminating the whole countryside and making the work more hazardous than ever.

It was further impossible to place the torpedoes in position without a certain amount of noise being made, which the German sentries might at any time hear. The whole wire entanglement stood in a mass of rank undergrowth, through which the nose of the torpedo had to be forced. The posts supporting the entanglements were not placed in regular rows, so that occasionally as the torpedo was pushed forward its movement was brought to a standstill by a wooden post standing directly in its way, and its course had to be altered. The lower strands of wire also scraped along the upper surface of the torpedoes, and made a horrible grating noise.

In spite of these difficulties, Lieutenant Jenkins placed his torpedo in position exactly as arranged, and in sufficient time to return to the trench and to lead his party out to a point about thirty yards from the German wire. The party followed the fuse which connected the torpedo to the firing mechanism in the trench, so as to ensure joining up in the right place.

Lieutenant Sainter, on the other hand, was completely out of luck. His torpedo came apart at several of its joints on three separate occasions, and had to be repaired by him in No Man's Land.
Sainter reported that had it not been for the German Verey lights, he did not think that he could have managed to repair it. Having finally arrived with it intact at the right place, he had forced it nearly through the German wire when it stuck and could be moved forward no farther. He therefore had to extract it and make a second attempt at a different place. On this occasion he was successful. The operation, however, had taken so long that no time was left for Sainter to return to the trench and lead out his party. The party was therefore ordered to advance, following the fuse as Jenkins' party had done, until they came upon Sainter. This was done, and the party had joined him and was in position just ten minutes before zero.

At zero the two torpedoes were fired almost simultaneously, leaving gaps clear through the German wire 15 feet broad and 25 yards deep. At the same time the barrage opened. Major A G Graham, MC, commanding the 6th Seaforth Highlanders, writes in his account of the operations. "The barrage opened punctually, and can only be described as perfect. All ranks taking part in the raid were unanimous in their praise. The efficacy of the barrage is borne out by the fact that no German machine-gun fired for forty minutes. The casualties caused by the barrage must have been heavy, as both parties report that on entering the trenches parties of the enemy were seen rushing away from the salient into our barrage."

Immediately the torpedoes exploded, the raiders rushed through the gaps in the wire and into the enemy's trenches. The enemy was taken completely by surprise. The first sentry encountered by Sainter's party was bayonetted in the back, while still staring over the parapet in blank amazement at the curious explosion that had just occurred in front of him.

From now onwards all the luck came to Sainter, Jenkins meeting with considerable difficulties. Sainter's men acted exactly as they had done in the practices. They entered the trench at the point intended; there they killed a couple of sentries. They then found a dug-out containing four Germans, which they bombed until all were killed. At the next dug-out two Germans came out, one being immediately shot by Sainter, the other being killed by a bayonet man. Other Germans were killed in the dug-out with bombs. Four Germans were then found hiding in the trench; three of these were killed, the fourth being kept as a prisoner. Later he refused to leave his trench, and was also killed. A lasso had been put round him to assist in hauling him out of the trench. At this he became so terror-stricken that he became incapable of movement, and so had to be despatched. Unfortunately, his remains were left lying in the trench with the rope still around them. The party then searched the point of exit, where they found the wire well cut by the 2-inch mortars, and returned to our lines, having been in the German trenches six and a half minutes.

Lieutenant Jenkins' party entered the German trench according to plan; the first fire-bay they entered contained arms and equipment, but no sentries. There was a dummy parados to this trench made of boards, behind which dug-outs were found. Four of these were bombed until all sounds within them ceased. The party then proceeded another ten yards along the trench, where they encountered an organised German bombing party. A bombing fight lasting some two minutes then ensued, the Germans apparently being all knocked out. Lieutenant Jenkins' party sustained five casualties in this encounter, three men being seriously wounded, and two slightly.
Orders were therefore given to retire by the gap at which the trench had been entered. As the retirement was being carried out a second party of Germans attacked. These were heavily bombed; many were killed, the remainder running away. Three Highlanders bad, however, caught one of them alive, and hurled him bodily over the parapet, and then jumped after him and pinioned him in a shell-hole. He was finally taken back to the British lines as the solitary prisoner.

On a bugle sounding the two parties began their withdrawal. Sainter's party regained our trenches without having sustained a casualty. Jenkins on his return found that three of his men were missing. He therefore returned to the German trenches three times with Private A Macdonald, and each time succeeded in bringing in a wounded man.

The Dayfield body-shields were found to have numerous splinters of bombs sticking into them, and undoubtedly saved the raiders from several casualties.

The German trenches were formed of enormous breastworks 12 to 15 feet wide, and were revetted with brushwood. Let into the parapet were numerous concrete dug-outs, each capable of holding from four to six men. The floor of these dug-outs was level with the bottom of the trench. The effect of a Mills bomb inside these confined spaces was devastating, and there is no doubt that every German inside them was killed. One of the Jocks was asked how he had dealt with these dug-outs. He replied, "Och, we just boomed yon stone boxes until they stopped their blether, and then went to the next one".

The barrage for this raid was worked out to the minutest detail. All weapons were employed, the following amounts of ammunition being used: 2-inch mortars, 228 rounds; Stokes guns, 981 rounds; Vickers guns, 29,500 rounds; 18-pounders, 1200 rounds; 4.5 howitzers, 100 rounds; and several hundred rounds of rifle grenades.

Every weapon had a particular task given to it. These tasks were arranged (a) so that no fire could be opened by the Germans which might be brought to bear on men crossing No Man's Land; (b) so that no troops could run away from the area being raided to the rear; (c) so that no troops could counter-attack the area raided over the open either from the rear or flanks; (d) so that no movement could take place in the German trenches within about 800 yards of the raid. Every trench junction and every known trench and mortar position on a front of 1500 yards was steadily bombarded throughout the operation.

The results were beyond all expectations. No Germans were able to reinforce the salient, so that the raiders could deal with its garrison without fear of interruption. The Germans who broke from the salient and fled to the rear ran into a barrage of 18-pounders, 15 howitzers, Stokes guns, and 2-inch mortars. Not a single round was fired by the enemy occupying the trenches on the flanks of the salient.

The barrage thus cut off the troops in the area raided from any support which their neighbours might have given them, and enabled the raiders to despatch them just as ha-d been planned.
Many of the Germans on the opening of the barrage had left their arms in the trenches and run into the dugouts. When the raiders arrived and began bombing a panic seems to have set in. The Boches ran about in terror on seeing the Jocks with their blackened faces and knees and with grasses in their helmets, holding up their hands, crying, "Kamerad Kaffirs, Kamerad Kaffirs!" They had apparently mistaken the Jocks for some species of native troops. This impression and the sight of the ropes reduced many of them to such a condition that they were even too terrified to be carried off as prisoners, and refused to move. In consequence many had to be despatched who might otherwise have been taken back to our lines alive.

The one prisoner captured turned out to be a good one. He volunteered much information about the German position, the positions of headquarters, routes to the trenches, hours of relief, hours and places at which ration and working parties assembled. A series of violent bombardments were accordingly arranged based on the information he had given.

During the remainder of the night the area was occasionally subjected to short intense bursts of artillery and trench-mortar fire for the benefit of any Germans who might be inspecting the damage in the salient.

As a result of their gallant conduct on this raid Lieutenants Sainter and Jenkins were awarded the Military Cross, and four men the Military Medal.

During the remainder of the Division's sojourn in the Armentieres area, the only other noteworthy operations that took place were outbreaks of the most excessive trench-mortar activity on the part of the Jocks.

Organised bombardments of the enemy's lines were repeatedly taking place, with the result that whole sections of the breastworks were obliterated. Whenever rain occurred and his breastworks became sodden they were heavily bombarded, so as to give them the necessary incentive to collapse and bury the Germans in them.

On one occasion over 1,200 rounds of Stokes mortar bombs were fired in a single day by one light trench-mortar battery. It soon transpired that these bombardments produced very little retaliation from the enemy. It was therefore felt that we were in a position really to bully him and make his life a burden to him. The bombardments therefore became more frequent than ever, and he was unmercifully harassed day after day to the great delight of the troops.

It was not a sector in which the Germans were much exposed to view. There was, however, a barricade across a road near Premesques, where both men and waggons tended to congregate. This barricade could be seen from an OP at Square Farm on the extreme right of the sector. An electric bell was therefore rigged up in the gun-pit, with a bell-push in the OP. A gun was then kept permanently laid on the barricade. Every time the observer saw a reasonable bag of people and waggons collected round the barricade he rang the bell and the gunners fired. This sport, however, became too popular, with the result that, after a day or two, no Boche would show himself anywhere in the vicinity of the barricade.
The holding of the Armentieres sector will always be regarded as the most pleasant period of trench life which the Division passed through.

On 12th September 1916 the first Divisional Horse Show was held. It proved an unqualified success, and stimulated a great interest in the condition of horses, harness, and vehicles throughout the Division. To the delight of the Jocks, the officers’ jumping competition was won by General Harper on Charlie, a big bay horse well known to many members of the Division.

In the Armentieres sector, the 152nd Infantry Brigade received a large parcel of picture postcards, displaying types of Russian soldiers, from the 152nd Vladicaucasian Regiment, with the following message printed on them:

21 May 1916.
Friends! The birthday of your king is also a holiday for us. Long live our alliance of the fight with the lie and may the victory triumph the ingresson of low force. From your comrade, a soldier of the Vladicaucasian Regiment.

General Pelham Burn retaliated by sending the Vladicaucasians half a dozen haggises, a case of whisky, and a tin of oatcakes.

On 25th September the Division was relieved in the line by Frank's Force, and moved to the area Bailleul, Meteren, Estaires. On the 30th the Division entrained again for the south at Bailleul and Merville, Doullens and Candas being the destination.

On 1st October the Division proceeded by march route to the area Bus-les-Artois, Bois du Warnimont, Authie, Vauchelles, Thievres, and came under the orders of the XIIIth Corps.

On 4th October the 152nd Infantry Brigade relieved the Gth Brigade, 2nd Division, in the sector cast of Hebuterne from John Copse on the right to Sixteen Poplars Road on the left. The Divisional artillery came into the line on 6th October.

The next ten days were devoted to preparations for an attack on Puisieux. The scheme was that the Division should attack on a one-brigade front, all three brigades being employed on the leap-frog principle. The attack was to be carried to a considerable depth, Puisieux being the first objective. Those who were to take part in this attack had strong misgivings as to the likelihood of its success. The natural fortress of Serre, which had been enormously strengthened with every modern artifice, lay on the flank of this attack on the summit of a crest. Thus if the operations against Serre failed, the whole Divisional attack would be compromised. Urgent representations were made on this score, and finally the attack in its original form was abandoned. Meanwhile the whole German trench system had been reproduced by means of tracing tapes, and practice of the attack had been well advanced.

In this sector the trenches had been named after characters in French history, the pronunciation of whose names tried the Jocks very high.
Jean Bart they could manage, though they assumed that the trench was named after some female celebrity. Du Guesclin and Vereingetorix in particular were, however, a sore trial to them. "What's the sense in giving a trench a name like that?" said one of them, referring to Vereingetorix. "I suppose," replied his platoon commander, "you would like it called Sauehiehall Street or Auchtermuchty Avenue." "Aye," said the Jock, "anything that a decent body can pronounce." There were probably only three French place-names which the Jock really appreciated; they were Auchonvillers, Villers Plouich, and Martinpuich.

On 17th October the 153rd Brigade, which was then in the line, was relieved by the 92nd Brigade of the 31st Division, and the 152nd Brigade relieved the 189th Brigade of the 63rd Division in the Beaumont Hamel sector. The remainder of the Division moved to the Lealvillers-Force-ville-Varennes area.

On 20th October the 153rd Brigade came into the line on the right of the 152nd Brigade and took over part of the front. Systematic and deliberate preparations were then made for the capture of the village of Beaumont Hamel and the ridge beyond it.

CHAPTER VII
THE BATTLE OF THE ANCRE-BEAUMONT HAMEL

The village of Beaumont Hamel and the surrounding country was admirably adapted by nature for defence. The village lay on low ground at the meeting-point of several of the rolling uplands which are the characteristic feature of Picardy. The slopes of these uplands were gradual, and so provided large areas on their reverse side which were entirely free from observation from the ground. Further, they were intersected by numerous sunken roads, which provided every facility for the construction of dug-outs, where reserves could be concealed and protected from bombardment.

The chief centres of resistance lay in the village itself and in the now celebrated "Y" Ravine. The village, which the guide-books tell us was famous for its manufacture of powder-puffs, contained vast caves and cellars capable of containing many hundreds of men, in addition to the countless concealed dug-outs with which the German invariably strengthened all ruined buildings occupied by him.

The "Y" Ravine, so called on account of the resemblance of its shape to the letter Y, was a deep ravine with almost precipitous sides. It lay with its two arms pointing like antennae towards the British lines, some 300-500 yards south of the village.

It ran from the Station Road, a road entirely screened from observation which led from the village to the river Ancre, to the Front Line. It was honeycombed with dug-outs, and was crossed by numerous trenches. Its garrison could thus be reinforced either from the Station Road or from any of the neighbouring trenches.

It was therefore a place of tremendous strength, and obviously one which would be extremely difficult to clear of the enemy.

From the centre of Beaumont Hamel there ran in a north-easterly direction the Waggon Road, deeply sunken, riddled with dug-outs, and protected at its southern end by a large chalk-pit of most forbidding appearance.
The German position to be attacked by the Highland Division was traversed by two valleys running cast and west, one being the “Y” Ravine and the other containing the old Beaumont Road, which traversed the village and met Station Road and Waggon Road at the chalk-pit mentioned above.

These two valleys were linked together by a highly-organised system of defence. The Germans had occupied the same trenches since the early days of the War. With their characteristic efficiency they had laboured to render their position as nearly impregnable as human energy and ingenuity made possible. Their trenches were at a great depth, and were lavishly provided with dug-outs. Of these, some contained two underground stories; all of them had several entrances, one in particular having eleven. The trenches were also connected from front to rear by numerous tunnels, so that reinforcements could be sent forward along underground passages proof against any bombardments.

In addition, the whole position was heavily and skilfully protected by strong wire entanglements throughout.

In fact Beaumont Hamel, after the disastrous attack on it on 1st July 1916, had come to be regarded, by British and Germans alike, as almost impregnable.

So much was this the case that the original plans for this coming attack assumed that the Beaumont Hamel position could not be taken frontally, and contemplated engaging it only in front and turning it from both flanks.

In preparing for the attack the destruction of the wire entanglements was one of the first considerations. In many places, owing to the undulations of the ground, this presented considerable difficulty, as direct observation could not be obtained.

Even with the wire cut the attack could only be considered a difficult operation. The enemy was afforded such protection from his dug-outs that success was likely to be dependent on the attacking troops keeping close on the heels of the barrage. The artillery could not be expected to do more than drive the enemy to ground.

Following the barrage closely was, moreover, in this case a difficult operation, as in few cases were the trench lines parallel. Thus the keeping of direction was certain to require skilful leading. The elaboration of the trench system also entailed a very careful detailing of objectives to the different bodies of troops, and an exact knowledge of what these objectives were.

Wire-cutting was begun by the artillery and the 2" trench-mortars on 20th October, and was carried on continuously until the day of attack. Every precaution was taken to ensure that this was successful. Patrols, often accompanied by artillery officers, inspected the wire protecting the enemy front lines every night.

Maps were made daily, in which the portions of the enemy wire which could be observed were shown in one of four colours, a separate colour being used to denote the varying conditions of the wire - ie, satisfactorily cut, partially cut, damaged, and intact. These maps were submitted daily to Divisional Headquarters, and were passed on to the gunner officers responsible for the wire-cutting.
The results were beyond expectation, and the success of the attack was in no small measure due to the skilful manner in which the artillery destroyed the entanglements. Not only was the wire under observation shot to pieces, but concealed belts of wire, whose existence was only discovered from the study of air photos, were so damaged as to give the infantry a free passage through them. Strands of cut wire lay in heaps resembling hay-cocks throughout the trench area.

The general scheme for the attack was as follows: The Reserve Army, as the Fifth Army was then called, was to attack and establish itself on the line Miraumont-Beauregard Dovecot-Serre. Cavalry were to be held in readiness to exploit their attack in the direction of Achiet-le-Petit and Achiet-le-Grand. The IInd Corps was to attack south of the river Ancre, the Vth Corps north of the river.

The Vth Corps consisted of five Divisions: the 63rd Division on the right, the 51st Highland Division and the 2nd Division in the centre, and the 3rd Division on the left, with the 37th Division in reserve.

The 51st Division was to capture Beaumont Hamel and push forward between the converging flanks of the 63rd and 2nd Divisions as far as Frankfurt Trench between Glory and Leave Avenues. The 63rd and 2nd Divisions were then to continue the attack, and join their inner flanks east of the 51st Division, thus pinching the latter out of the front line of attack.

General Harper was urged to attack with his three infantry brigades in line. He did not, however, consider that an attack launched in such strength and unsupported by a complete unit of reserve was justified. He therefore decided to attack with two brigades in line. It will be seen that the success of the attack and the length of time the Division was able to continue in the line after the attack bears ample testimony to the accuracy of General Harper's judgment in this respect.

The 153rd Brigade was detailed to attack on the right, the 152nd Brigade on the left, with the 154th Brigade in reserve.

Two distinct objectives for the attack were selected. The first, the Green line, included the Station Road and the village of Beaumont Hamel. The second objective, the Yellow line, was the portion of Frankfurt Trench mentioned above. A further objective east of the Yellow line was given to the 63rd and 2nd Divisions.

In the attack on the Green line, three intermediate objectives were selected, known as the Pink line (the German front line), the Blue line (the German second line), the Purple line (the German third line).

Each of these lines had a separate wave detailed for its capture composed of units from the following battalions:

**Front line:** 7th Gordon Highlanders, 6th Black Watch, 5th Seaforth Highlanders, 8th Argyll and Sutherland Highlanders.

**Blue line:** 7th Gordon Highlanders, 6th Black Watch, 5th Seaforth Highlanders, 8th Argyll and Sutherland Highlanders.
Purple line: 7th Gordon Highlanders, 6th Black Watch, 5th Seaforth Highlanders, 8th Argyll and Sutherland Highlanders.

Green line: 7th Gordon Highlanders, 6th Black Watch, 6th Seaforth Highlanders (in two waves).

The bulk of the machine-guns of the Division were massed in Trench 86 near the Bowery, a small rise in the shape of a tumulus just east of Auchonvillers. From this position an intense barrage was to be fired, moving forward from the German third line through the Green line and across the western slopes of the high ground east of Beaumont Hamel. This barrage was designed to prevent the enemy from using long-range machine-gun fire against the attacking waves, and to hamper the movement of his reserves. In both these respects it proved effective.

This was the first occasion on which the Division had employed machine-guns to fire an overhead barrage during the attack. The men were accordingly specially warned that the enormous volume of bullets passing over their heads would sound as if they were only a few inches above the crowns of their steel helmets, whereas in reality there would be a margin of safety of many feet. This warning proved to be a sound precaution when the barrage was first to be experienced, since the bullets seemed unpleasantly close and might have otherwise created despondency and alarm.

The trench-mortar batteries were also fully occupied, and were continually employed in wire-cutting and assisting the raids and trench bombardments.

The attack was originally planned for 24th October, but owing to the weather a succession of postponements took place. The first postponement was until 30th October; on 25th October a further postponement of forty-eight hours was ordered. On 29th October the date of the attack was changed to 5th November. Later, it was again postponed to 9th November, and again to 10th November. On 7th November information was wired that the attack was indefinitely postponed. On 10th November it was ordered to take place on 13th November. On 11th November the hour for zero - that is, the hour at which the infantry advance begins - was selected as 5.45 am.

The weather, which was responsible for these postponements, could not well have been worse. The country had become water-logged owing to excessive downpours of rain. Continual mists and the absence of wind prevented the rain from being absorbed in the atmosphere. The ground thus remained sodden, the roads were reduced to a pulp, and tracks and paths became lost in oozing mud of the consistency of porridge.

In fact, the state of the ground had become so bad that a small raid which took place on 11th November failed because the raiding party found it a physical impossibility to keep up with a very slow-moving barrage. Not an officer or a man could move a yard at the double.

The results of this spell of bad weather were such that for a period not more than four lorries daily per Division were allowed on the roads, for fear that the foundations of the road would disappear permanently into the abyss of mud beneath them.
The inconvenience caused to "Q" by this unavoidable restriction was immense, but the ingenuity of the quartermaster's staff, as usual, overcame the difficulty with marked success.

The repeated postponements, though very trying to the men's nerves, proved in reality a blessing. The plan was that the attack should be preceded by a four days' bombardment, including a lavish use of gas shells. The result was that in many cases the first and, in some cases, the second day's bombardment had been fired before the postponement took place. They, therefore, had to be repeated when a fresh date for the attack had been selected. In consequence, the German positions were continually being subjected to a bombardment of intense violence. The enemy thus received a far larger ration of shells than would have been the case if the attack had taken place on the date selected in the first instance. Moreover, these bombardments not only assailed the Germans frontally from batteries in positions west of Beaumont Hamel, but also in enfilade from positions south of Beaumont.

In the period of preparation for the battle a considerable amount of labour was required to keep the trenches fit for traffic. In the low-lying land which separated the various chalk downs, the soil was a red loam. In consequence, whenever it rained, the sides of the trenches fell in great flakes like miniature avalanches. The water was also very slow to soak into the ground. Thus large sections of communication trenches became knee-deep and even waist-deep in liquid mud. When it is remembered that all munitions, rations, water, tools, etc, required for the battle had to be carried on the backs of men through these trenches to the forward dumps, it will be appreciated what a burden of discomfort and toil the conditions due to the weather imposed on the troops.

A considerable amount of work had also to be done on the construction and extension of dug-outs for reserve troops and headquarters. The successive postponements, however, enabled this work to be satisfactorily completed, and in consequence the casualties sustained in our own trenches during the battle were negligible. In one portion of the area a chalk cliff some forty feet in height lent itself admirably to tunnelling operations. Enough head-cover was provided without the necessity of making chambers to dug-outs at the foot of a long flight of stairs. Full use was made of this feature, and many dug-outs were hewn in it, as well as a large vault capable of holding a company, secure from the heaviest artillery.

This feature lay at the foot of the reverse slope of a large chalk upland, and was thus entirely hidden from enemy view. Looked at from the reserve British lines, it appeared as a great white scar on the landscape, and was an obvious centre of activity. It had in consequence been christened the "White City". It ran northwards for some considerable distance, and was put to similar uses by neighbouring brigades on the left of the Division.

An attempt was made to blow an assembly trench for the troops detailed for the attack on the Green line by means of tubes of ammonal buried in a shallow trench cut through the surface of the soil. The ammonal was discharged successfully, but the results were disappointing. The disintegrations in the soil caused by the explosion, coupled with the rain, produced conditions of mud that rendered the trench which the explosion had created impassable.
During the fortnight preceding the attack patrolling and raiding were carried out with great activity, both with a view to gauging the strength of the resistance likely to be encountered and to inspect and damage the enemy’s wire. This activity disclosed the fact that the German was employing knife-rests made either of heavy timber or of iron, to fill the gaps caused by our artillery and trench-mortars in his entanglements. (Knife-rests are portable wire entanglements. The framework is shaped like a knife-rest, numerous strands of barbed wire being stretched from end to end of it. It is carried up to the trenches folded up so as to make it easily portable. At night they are taken into No Man’s Land, opened out, and placed in position and pegged to the ground)

Knife-rests are not easily damaged by shrapnel sufficiently to give the infantry a free passage through them. Efforts were therefore made to locate the places where they were in use, and to destroy them with 4.5 howitzers.

The fire of enfilade machine and Lewis guns was then employed to prevent fresh knife-rests being put in position to replace those which had been damaged. Twenty thousand rounds of SAA were frequently fired in a single night for this purpose.

At the end of October it was realised that these knife-rests were being employed by the enemy in most formidable numbers, and were becoming a serious proposition.

A number of Bangalore torpedoes were therefore made and carried up to the trenches. Raiding parties then carried these torpedoes into No Man’s Land with them, and blew gaps in the rows of knife-rests. On 1st November a particularly good raid of this nature was carried out. Lieutenants Booth and Carnie of the 6th Gordon Highlanders with a party of men placed four torpedoes under the enemy knife-rests. These were exploded, and after a short interval the officers led the party through the gap caused by the explosions. They then exploded four more torpedoes under the next double rows of knife-rests. The party returned without a casualty, and reported that still a third row of knife-rests existed beyond the last one they had damaged.

Raiding parties had also been employed to enter the enemy's trenches to gain identifications - that is, to return with evidence as to what units were holding the line in front of the Division. Obtaining identifications was a matter of extreme importance, as it enabled GHQ to estimate the number of German Divisions holding the line, and the number in reserve available to be moved from one portion of the front to another.

On 26th October both the 6th Black Watch and the 7th Gordon Highlanders of the 153rd Brigade entered the enemy’s front line, the latter capturing a prisoner of the 62nd Regiment. On the same night the 7th Argyll and Sutherland Highlanders of the 154th Brigade made a similar attempt, but could not find a passage through the enemy's wire. In the raid of the 7th Gordon Highlanders, Lance-Sergeant Morrison killed four Germans and disarmed a fifth, who was taken prisoner. At this point Sergeant Morrison had expended all his ammunition and bombs, and was faced by two more Germans with fixed bayonets. Appreciating the situation, Private Louis Thomson rushed past Sergeant Morrison and killed the first German with his entrenching tool. He then picked up the fallen German's rifle and with it killed the second. For this exploit both Sergeant Morrison and Private Thomson were awarded the Military Medal.
On 29th October a patrol of the 154th Brigade entered the enemy's front line and proceeded to his second line, which they found protected by an impassable belt of knife-rests. This patrol encountered none of the enemy. The absence of the Boche on this occasion proved rather disconcerting. In consequence, the 4th Gordon Highlanders and the 9th Royal Scots carried out further raids. In each case they found the enemy holding the trenches in strength, and were unable to effect an entrance. This was partly due to the fact that the ground was so sodden that the troops found it a physical impossibility to keep up with the barrage.

A further raid attempted on 4th November by the 6th Gordon Highlanders also met with strong resistance, and made no progress. It was therefore almost impossible to form an impression of the strength in which the enemy was holding his line.

On 31st October a deserter entered our lines. He was a miserable creature, described officially as "undersized and of poor physique". He stated on examination that the battalion was holding a front of only 700 yards, and that the rifle strength of the four companies was about 180 each. His statement, if it was accurate, meant that the enemy was holding the position in considerably greater force than was probable. In view of his apparent poverty of intellect, it was considered that his evidence was unreliable. It, however, transpired during the attack that his statements were not exaggerated, and that the enemy was indeed very thick on the ground.

The final preparations for the attack consisted in forming dumps of ammunition, water, rations, &c., sufficiently far forward to enable carrying parties to take forward supplies to the advanced troops after the capture of the enemy's position.

This was a heavy task, as the following figures of supplies which were carried through the water-logged trenches and placed in the brigade dumps testify:-

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small arms ammunition</td>
<td>400,000 rounds</td>
</tr>
<tr>
<td>Mills grenades</td>
<td>23,000</td>
</tr>
<tr>
<td>Petrol tins of water</td>
<td>1,600</td>
</tr>
<tr>
<td>Rations</td>
<td>4,800</td>
</tr>
<tr>
<td>Stokes bombs</td>
<td>7,500</td>
</tr>
<tr>
<td>Very light cartridges</td>
<td>8,000</td>
</tr>
</tbody>
</table>

On one night alone one brigade had 34 wagons and 150 men employed in bringing forward material for these dumps.

By the time the attack took place sufficient stores had been accumulated to render it unnecessary for any wagons to be employed in the forward area on the night after the battle. This was a great advantage, as the enemy was always liable during a battle to make a lavish use of high-velocity guns and gas shells to harass our communications.

Some days prior to the day of the battle, the troops in the line witnessed an attack on a fairly large scale delivered against the famous Stuff and Schwaben Redoubts. These were situated just below the crest on the northern slopes of the Thiepval Ridge, of which a magnificent view could be obtained from many places in the Beaumont Hamel sector.
The spectacle certainly had an encouraging effect on all who saw it. The barrage appeared excellent, and several waves of infantry could be seen following it apparently without difficulty. Subsequently parties of German prisoners could be seen moving back to the rear.

These two redoubts were notorious for the strength of their defences, and had figured largely in recent communiques, yet as far as could be judged they were captured behind the barrage exactly according to plan. This attack therefore gave a most practical example of the possibilities of the 18-pounder barrage when closely followed by the attacking infantry.

The assembly of the troops prior to the attack on the 13th was an arduous performance, some of the battalions being billeted in the Forceville area some five miles from the front line.

At 9 pm on 12th November the march to the position of assembly began, the last battalions being reported in position at 4.30 am. A halt of three-quarters of an hour was made *en route*, between Mailly-Maillet and Auchon-villers, and tea was served to the men from the field-kitchens there.

The length of time required for this march was due to the deplorable state of the roads and communication trenches, and to the weight carried by the men. In addition to battle order equipment, each man carried on him at least two Mills bombs, a pick or a shovel, and two days' preserved rations. Moreover, numbers of aeroplane flares, Very light pistols and cartridges, phosphorus bombs, *etc.*, were distributed throughout the different platoons.

Owing to the mud in the trenches movement was largely carried out over the open. The attention of the enemy was not, however, attracted, and there was little artillery fire before zero.

So many troops had to be assembled that it was necessary for the leading companies to be in position several hours before those that were to be the last to assemble. Further, to ensure that the assembly was completed up to time, orders were issued for the troops to be ready in their appointed positions one hour before zero.

This allowed a good margin in which to make up for any delays which might be caused by gas-shelling or bombardments occurring during the advance to the assembly trenches.

During this period a covering screen of troops, who were not detailed to take part in the first phase of the attack, lay out in No Man's Land to prevent German patrols from approaching our trenches and discovering that assembly for an attack was in progress.

This period of waiting in assembly trenches for the hour of zero to arrive is one of the most unpleasant ordeals which a soldier has to endure. On this foggy November night the troops arrived with their kilts and hose-tops sodden with water and mud. The duck-boards in the assembly trenches were in many places under water.
The fire-steps on which men sat, or the parapets and parados against which they leant huddled together for warmth, were exuding moisture and occasionally laud-sliding into the trenches, bringing down in their fall a multitude of telephone wires, over which men stumbled and tripped for the remainder of the night.

Rifles and Lewis guns needed the greatest care to prevent them from becoming clogged with mud and unserviceable. Silence was enforced and smoking forbidden, for fear that the arrival of a large force of men in the front line - a sure indication of an impending attack - might be disclosed to the enemy. Men were forbidden also to use their water-bottles before zero hour, partly because the need for water would become acute later during the battle, and partly on account of the noise which a half-emptied water-bottle is capable of producing, particularly when silence is most desired.

During this anxious and seemingly endless vigil, the morale of even the boldest depreciates. The most unimaginative loon, particularly if it is not his maiden fight, knows that there are many men assembled with him who in an hour or two will see the dawn break for the last time. The stoutest-hearted cannot help reflecting on what his own fate is to be, and on the odds for or against his being hit; if hit, will the wound be a "cushy" one, or will he, in the next few hours, be transformed from an able-bodied soldier into a permanent cripple or a dead man?

These are not pleasant reflections, particularly when the solace of speaking and smoking is denied.

As a rule, when the assembly is complete there is too much congestion for officers and NCOs to move about amongst their men. Then walking along the trench is like passing to one's seat in the centre of the stalls after the curtain has gone up; in the darkness the floor seems carpeted with feet, and one stumbles along what appears to be a narrow passage with its walls bristling with projecting knees.

The time spent in the assembly trenches hangs heavily. The throats of the men get dry, partly because they are told they must not cough, and partly perhaps for other reasons. In these circumstances men have a peculiar desire to cough, just as a congregation has towards the end of a long and tedious sermon. If one man begins, the rest take it up. The noise thus made appears deafening. To obviate this, petrol tins of water and tea in hot food-containers have been dumped about the assembly positions, so that men may from time to time moisten their mouths and throats. Further, a tot of rum is served to all. Rum played a great part in the war. It produces a marvellous and immediate effect, dispelling depression, creating warmth, and stimulating the morale. Even the staunchest teetotallers will drink rum with avidity in the assembly trenches.

There is a further disquieting thought which occurs during this period, particularly to commanders. Will the enemy discover that our foremost trenches are packed solid with humanity, that almost all our eggs are in one basket? Has that infernal listening machine overheard details of the day and hour carelessly spoken over the telephone, in spite of the many orders on the subject? If he discovers we are here, he will produce what he pleases to call annihilating fire, in which he concentrates his guns and trench-mortars on our assembly position.
When he has been successful in doing this, the results have been indescribable. Each shell that falls into the trench bursts in the midst of a closely-packed group of men. The members of the various head-quarters therefore anxiously listen for any signs of an enemy bombardment, and are only relieved of their anxiety when the arrival of zero hour is denoted by the opening of the British barrage.

The reserve troops of the two leading brigades were safely accommodated in deep dug-outs, secure from any bombardment which the enemy might open in reply to the attack.

The 154th Brigade in reserve lay at Mailly-Maillet Wood, out of the range of field howitzers, their headquarters being at the Cafo Jourdain.

The signal for zero hour was to be the explosion of a mine. In the attack that had been launched against Beaumont Hamel on the first day of the Somme offensive, a mine had been exploded just short of the enemy's front line. As the attack had failed, the enemy had been left in complete possession of this mine. He had fortified it with dug-outs and made considerable use of it both as an observation-post and as a position for snipers. Arrangements had therefore been made to run out another shaft and lay a fresh charge in chambers constructed below this crater.

At 5.45 am this mine was successfully exploded, and the artillery opened an intense bombardment of the German position. At this time dawn had only just begun to show signs of breaking. The darkness was further accentuated by a fog, similar to a typical London November fog, which did not lift throughout the day. This fog was a definite asset to the attack, as, though it made the maintenance of direction more difficult, it concealed the movements of the attackers, and prevented the enemy gunners from seeing the artillery signals fired by their infantry. The result was that the hostile artillery barrage on the British front line and in No Man's Land was ragged, and did not open with any intensity until 6.15 am. In consequence, the losses from hostile artillery fire in the assembly trenches and while the troops were crossing No Man's Land were negligible.

The infantry had crept close to the barrage before it had lifted, so that when it moved forward they succeeded in entering the trench at most points. Indeed, so close did they get to the bursting shells that many of them reported that they were waiting on the outskirts of the remnants of the enemy's entanglements while the barrage was still down in the Boche front line. The 6th Black Watch pressed forward so close to the barrage that they sustained some casualties from it.

The two right companies of the 7th Gordon Highlanders took the first line without difficulty. They continued keeping close up to the barrage, each successive wave capturing its objective, until they had occupied the Green line according to the programme. These two companies could not have carried out their task in a more exemplary manner. Throughout this advance on the right flank touch was maintained with the left of a Royal Marine Light Infantry battalion of the 63rd Naval Division.

On the rest of the front the attack bore no resemblance to the traditional form of attack as pictured in the illustrated weeklies, or demonstrated by the bayonet-fighting expert.
There was no wild charge of Highlanders with flying kilts and glittering bayonets. On the contrary, it was carried out at the rate of an advance of twenty-five yards per minute. As the barrage lifted off a trench, the troops made their way into it as quickly as they could, but a steady double was the most that they could manage. In many cases even that was found impossible.

The men floundered in the dark in mud over their ankles; the weight they carried was enormously augmented by the moisture that their clothing had absorbed and by the mud which glued itself to their kilts and which clung to their boots; the ground was ploughed up into a sea of shell-holes half filled with water; stooks of cut strands of wire and overturned knife rests lay everywhere. Forward movement of any kind called for considerable physical effort; to charge was out of the question. In some places men even became bogged up to their waists, and were unable to extricate themselves from the morass, until parties of German prisoners could be organised to dig them out.

Let two teams dressed in battle order play football in the dark on a ploughed field in a clay soil after three weeks’ steady rain, and the difficulties of the attacking troops might then in some measure be appreciated.


The left of the 7th Gordon Highlanders and the right of the 6th Black Watch were delayed in their advance by machine-guns from the south of the "Y" Ravine.
The German garrison on the point of this salient was thus able to man the front trench, and beat off our attack at this point by the volume of their fire. Here the enemy maintained himself for several hours. Being in a position from which they obtained splendid observation both to the north and south, they made communication with the forward troops who had swept on, on either flank extremity, difficult.

A gap had also been caused in the centre of the next battalion through wire just south of the crater, which had been screened from observation by being uncut.

On the left of the 5th Seaforth Highlanders, the 8th Argyll and Sutherland Highlanders had received a temporary check caused by machine-gun fire on their extreme left, and had suffered heavily. The remainder of the battalion had, however, pressed forward on the flanks, captured the guns, and enabled the advance to be continued to the third German line.

By 7.50 am it was reported that troops of both brigades had reached the third German line, and many prisoners had been taken, but pockets of Germans were still holding out in various points in the first and second lines. These pockets were, no doubt, formed by parties of the enemy who had come up into the front line out of the various, underground tunnels.

Casualties had been unduly heavy, as the state of the ground had proved in places so bad that the troops had been unable to keep up with the barrage.

At this hour the position in the village was obscure. The 153rd Infantry Brigade had employed all its reserves in its endeavour to carry the "Y" Ravine, where a party of the enemy, estimated at from three to four hundred strong, was offering a most gallant and successful resistance, all attacks to overcome them being beaten off.

Two companies of the 4th Gordon Highlanders from the Divisional reserve were therefore ordered forward and placed at the disposal of General Campbell. Meanwhile General Burn had ordered forward a company from the reserve battalion (6th Gordon Highlanders) to fill the gap caused in the ranks of the 5th Seaforth Highlanders by uncut wire. This company successfully entered the German second line, but was unable to debouch from it owing to fire from the German third line. Two bombing squads from the 6th Gordon Highlanders were therefore sent forward to clear the front. These squads were extremely well handled by their leaders, and by attacking the machine-guns in the third line from the flank succeeded in capturing 2 officers and 51 men. This action enabled the whole of the right battalion to reach the Green line. Two other bombing squads were also ordered forward from the 6th Gordon Highlanders to bomb southwards, so as to clear the left flank of the 6th Black Watch. It was not, however, until dusk that all resistance in this area was successfully overcome.

The 8th Argyll and Sutherland Highlanders were meanwhile consolidating the Green line in touch with the 2nd Division on their left. At this time little news could be obtained by headquarters of the 153rd Brigade, as all their runners were killed or wounded by Germans still holding out in the trench system.
The situation was therefore obscure except at the "Y" Ravine, which was known to be held by the enemy. The two companies 4th Gordon Highlanders were therefore ordered to supply three bombing parties to work inwards towards the "Y" Ravine, one from the north and two from the south.

The 5th Gordon Highlanders, who had followed in support of the leading battalions south of the salient, were fighting with elements of the 6th Black Watch and the 7th Gordon Highlanders for the German second line. In front of the salient parties of men who had been held up had returned to the British front line. These men were collected by Lieutenant Colonel T M Booth, DSO, commanding 6th Black Watch. He at once sent out patrols to locate exactly where the enemy was holding out, and on the information thus obtained organised a fresh attack against the "Y" Ravine.

Colonel Booth arrived with this party just as Lieutenant Leslie of the 6th Black Watch, by a most gallant action, had gained an entrance at the point of the "Y" Ravine. He was immediately followed by Colonel Booth with forty men and a Lewis gun, and by parties of the 5th and 7th Gordon Highlanders who had been hanging on to the occupants of the "Y" Ravine all the morning.

During all this time a party of about a hundred of the 6th Black Watch and 5th and 7th Gordon Highlanders were in the centre of the "Y" Ravine, where they had been surrounded by Germans who had emerged from dugouts and tunnels and pinned them to their ground by machine-gun fire. As soon as Colonel Booth and Lieutenant Leslie arrived and a bombing action had begun, these men began bombing outwards from their position, and cleared the whole ravine up to the third German line. General Campbell then ordered the 4th Gordon Highlanders to advance to the Green line. This operation was carried out without opposition, the 6th Black Watch in the Third German line joining in the advance.

On arrival in the Green line, the 4th Gordon Highlanders learnt that the 7th Gordon Highlanders had not only reached the Green line according to plan, but had continued their advance 250 yards beyond in the direction of the Yellow line. At this point they encountered and captured fifty Germans. In this advanced position they remained for some considerable time, but as no troops came to support them on either flank, they finally withdrew to the Green line. Every runner that had been sent back by these companies to report their position was either killed or wounded in attempting to pass through the German trench system.

Even after the capture of the Green line on the whole Divisional front, isolated pockets of the enemy continued to offer resistance, particularly on the south-western edge of the village. Here a belt of marshy country, just east of the mine crater, had been found impossible to cross owing to the depth of the mud. The result was that the Germans in this area were not put out of action until troops from the reserve had moved round the northern edge of the marsh and attacked them in flank.

At 10.30 am two tanks were sent forward to clear up isolated pockets of the enemy still holding out in the village. This was the first occasion on which the Division had co-operated with tanks. The condition of the ground was, however, such that the tanks only just reached the German front line.
By the time they had travelled this distance they had built up great mounds of mud under their bellies, which prevented their further advance.

One of the tank officers, incidentally a Scot, refused, however, to be prevented from joining in the fight. He therefore made some captured Germans carry his Hotchkiss guns and their ammunition up to the Green line, where he joined in the consolidation. The attack on the Yellow line, apart from the individual effort of the two companies of the 7th Gordon Highlanders, never took place. The fighting had been so severe that, by the time the leading troops reached the Green line, the barrage had been lost irretrievably. Moreover, the troops detailed for the capture of the Yellow line had been considerably involved in the fighting for the Green line, and were too reduced in number for an attack unsupported by an artillery barrage to have any chance of success.

Later in the day orders were given for the 153rd Brigade to renew the attack on the Yellow line; they were, however, subsequently cancelled, as the Corps commander had decided to renew the attack on the following day.

Towards the evening two companies of the 7th Argyll and Sutherland Highlanders were placed at General Burn’s disposal. The two companies of the 8th Gordon Highlanders which had not as yet been employed were therefore ordered to march up the Beaumont Road at dusk and occupy and consolidate the Green line.

The night was spent in consolidating and reorganising. At 2.30 am on the night 13-14th orders were issued for the attack on Munich Trench to be resumed at 5.45 am, the remaining two companies of the 7th Argyll and Sutherland Highlanders and two companies of the 9th Royal Scots being placed at General Burn’s disposal for the purpose.

The headquarters and the remaining two companies of the 9th Royal Scots were placed at the disposal of General Campbell. During the night a telephone message, spoken over a faulty wire, was misunderstood, and the attack was cancelled instead of being postponed. When this error had been discovered, a fresh attack was initiated, in which the 7th Argyll and Sutherland Highlanders carried out a most successful bombing operation up Beaumont Alley and Leave Trench, and occupied Munich Trench. This attack, hastily improvised as it was, was admirably and gallantly executed, and was a complete success. Subsequently, however, the Argylls could not maintain themselves in their exposed position in a trench almost obliterated, and withdrew to Leave Alley.

On the night of the 14th the 2/2 Highland Field Company, RE, and one company of the 8th Royal Scots dug a new trench 150 yards west of Munich Trench. This trench was named New Munich Trench, and was occupied by a garrison before dawn.

During daylight on the 14th, the 4th Gordon Highlanders took over the whole of the Green line on the 153rd Brigade front, the 6th Black Watch returning to Mailly-Maillet Wood. On the 152nd Brigade front the 6th Gordon Highlanders similarly took over the whole of the Green line, the 5th Seaforth Highlanders and the 8th Argyll and Sutherland Highlanders being withdrawn to Mailly-Maillet, and the 6th Seaforth Highlanders to the old British trench area.
At 9.50 pm on 14th November, General Burn was ordered to prepare an attack in conjunction with the 2nd Division, the frontage of attack of the 152nd Brigade being that portion of Frankfurt Trench between Leave Avenue and Glory Lane. At 5.30 am orders were received that the attack was to take place at 9 am.

The attack was made by two fresh companies of the 7th Argyll and Sutherland Highlanders, who had relieved the troops in New Munich Trench during the night. One company of the 7th Argyll and Sutherland Highlanders was in support.

The 2nd Division formed up with its right on the Waggon Road at least 500 yards in rear of New Munich Trench. The lifts of the artillery barrage of the 51st Division were therefore arranged to suit the major attack by the 2nd Division. It was placed, in the first instance, in Munich Trench, and subsequently lifted on the Frankfurt Trench by bounds of fifty yards. These short bounds in the barrage were arranged so as to allow the 2nd Division time to come up into line.

When the attack was launched, it was found that the enemy was no longer holding Munich Trench, so that it was occupied without difficulty. However, after passing Munich Trench, the attackers ran into our own barrage, and suffered severe losses sufficient to disorganise the whole attack. This unfortunate incident was due to the impetuosity of the men. Their previous training had been to follow a barrage which moved forward by bounds of a hundred yards. No blame, therefore, rests with the artillery, the over-anxiety of the men to gain their objective being the sole cause. Only a few individuals managed to reach Frankfurt Trench.

While this action was in progress, the right of the 2nd Division had lost direction, and had come up in rear of the 7th Argyll and Sutherland Highlanders, reaching Leave Avenue to the west of Munich Trench.

In these circumstances it was decided not to renew the attack without further artillery preparation. This attack was an unfortunate conclusion to what had otherwise been a successful series of operations. Had the 7th Argyll and Sutherland Highlanders succeeded in capturing Frankfurt Trench, their position "in the air" on a 300 yards front would have been a precarious one, and a source of embarrassment to the artillery when called upon to bombard the remainder of the trench.

To ensure success, it would have been advisable to have made certain that the 2nd Division's line of attack was abreast of the 51st Division's before a further advance against Frankfurt Trench was made. The chances of success would also have been greatly increased if the whole attack had been carried out by a formation under one command.

During the day of the 15th, the 154th Brigade took over the whole battle front from the 152nd and 153rd Brigades.

The 51st Division took no further part in active operations, although it continued to hold New Munich Trench until 17th November, on which date the foremost positions were taken over by the 32nd Division.
The battle of Beaumont Hamel was the foundation-stone on which the reputation of the Highland Division was built. General Harper's leap-frog system of attack had been proved; his attack with two brigades instead of three had been fully justified, and an experience had been gained from which the future training of the Division was evolved.

The whole position up to and including the Green line had been captured with over two thousand prisoners and a vast amount of material in a few hours. Moreover, had the positions of the Divisions on the flanks been less obscure, an advance to the Yellow line could have been undertaken with every prospect of success.

The satisfactory results of these operations may be put down to the following causes:

First, to the resolution and gallantry of the officers and men. In spite of heavy losses and of the appalling state of the ground, they pressed on to their objectives with the greatest determination. In many cases the barrage was irretrievably lost. The resistance of a courageous and cunning enemy, protected by the strongest field defences that experience could devise, had then to be overcome by the superior fighting qualities of the infantry soldier alone. The manner in which he overcame this resistance was in accordance with the highest traditions of the Highland regiments.

The artillery played no small part in this battle. The heavy gunners had demolished the enemy's trenches in an exemplary manner. In the village of Beaumont Hamel there was barely a square yard that was not torn up by shell-fire. The deep dug-outs alone escaped destruction, and even in their case many entrances were blown in. A German battalion headquarters sustained three direct hits, all of which went through the roof. In one case two layers of reinforced concrete and one layer of tree-trunks had been penetrated. In the enemy front line machine-gun emplacements, made of concrete over a metre thick, were in many cases wrecked.

Both the destruction of the wire and the accuracy of the barrage further strengthened the great confidence of the infantry in the Divisional artillery. It was the first occasion on which most of the troops had followed an artillery barrage. Those who were able to keep up with it could not speak too highly of its accuracy.

The decision to have no preliminary bombardment immediately before the attack proved to have been a wise one. Such a bombardment would only have served to warn the enemy of our intention to attack. As it was, the infantry began their advance the moment the artillery opened. They were thus able to assault the front line within a few seconds of the barrage having lifted. The enemy was in consequence to a large extent taken by surprise, and large numbers of them were captured before they had had time to leave their dug-outs.

The enemy had, however, this advantage. It could not be told whether a shaft was the entrance to a dug-out or to a tunnel connecting two lines of trenches. As a result, it was difficult to ensure that any particular trench would remain cleared of Boches. The large traversed dug-outs were also difficult to clear up. A Mills bomb did not seem to have much effect on their occupants. A phosphorus bomb, however, bolted eighty-six Germans in all stages of undress out of a single dug-out.
The machine-gun barrage appeared to have been very effective. The 7th Gordon Highlanders reported a considerable number of German dead between the Green and Yellow lines who are believed to have been caught in this barrage. The machine-gunners who went forward with the attacking waves also executed their tasks admirably.

Vickers guns were in position in the German front line within half an hour of zero. One gun-team had some close-range fighting with revolvers and bombs, and captured seventeen prisoners, not, however, before the section officer had been wounded and a sergeant killed.

Vickers guns were assigned definite roles in the consolidation and were placed in depth throughout the captured area. Several guns took up advanced positions well east of the Green line.

The light trench-mortar batteries fired in the initial barrage, according to all reports, with considerable accuracy. Subsequently two mortars were placed at the disposal of each battalion commander to be employed to assist the advance when required. In the attack on Frankfurt Trench on the morning of the 15th, four Stokes mortars of the 152nd Trench-Mortar Battery fired in the preliminary bombardment. These mortars carried out their task extremely well in difficult circumstances. They did not leave brigade headquarters until 3 am, but by 6 am they were dug into their positions with 20 rounds per gun in the emplacements.

Among the prisoners captured were two battalion commanders with their staffs complete. These were captured by 2nd Lieutenant G V Edwards of the 6th Seaforth Highlanders and Lieutenant W D Munro of the 8th Argyll and Sutherland Highlanders, both since killed in action. These officers had been detailed to lead their platoons straight to certain points which had been marked as battalion headquarters on a captured map. The result of this plan was that the battalion commanders were rounded up and captured before they had had time to exercise any influence on the battle by the use of their reserves.

The headquarters allotted to Lieutenant Edwards for capture was situated in an enormous cave. Some 300-400 prisoners surrendered to his party in the first instance, but as his platoon was by this time considerably reduced in numbers, he was compelled to hand them over to troops of the Naval Division under the command of a chaplain. It was, however, undoubtedly due to Lieutenant Edwards that these men took no part in the battle.

The leading of these two platoons was admirable. The exact manner in which their instructions were carried out considerably upset the enemy's defensive arrangements.

The captured booty included weapons of all kinds, with the exception of artillery, as well as large magazines of ammunition. In addition, a large canteen containing tinned beef from Monte Video, Norwegian sardines, cigarettes (including Wills' Gold Flake), cigars, and many thousand bottles of excellent soda and of beer fell into the hands of the Jocks and was much appreciated. For many days afterwards the Jocks were to be seen walking out smoking large cigars with evident satisfaction.
Further, a piano, some ladies’ dancing slippers, silk stockings, and petticoats were also found, but there was no evidence to show whether they belonged to a German lady or to a local Boche "Gertie".

A light trench-mortar battery officer also captured the whole of the German incoming mail.

The casualties sustained by the Division during the month of November amounted to 123 officers killed, wounded, and missing, and 2,355 other ranks. For modern warfare these were not heavy, particularly when compared with the number of prisoners captured during the operations. It must, however, be borne in mind that at the time of the battle the battalions were extremely weak in numbers. The casualties during the action represented 45 per cent of those who took part in the attack.

The results of the capture of Beaumont Hamel were far-reaching. It was undoubtedly the loss of this stronghold and its immediate effects which largely determined the German High Command to evacuate in the following spring the salient formed in their lines during the battle of the Somme.

The artillery arrangements made for this battle introduced for the first time that liaison with the heavy artillery which, as far as the Division was concerned, continued until the end of the war, and was of the greatest value to the infantry. For this the Division is mainly indebted to Brigadier General R P Benson, CB, CMG, commanding the Vth Corps Heavy Artillery.

On 19th November the 152nd Infantry Brigade relieved the 154th Infantry Brigade. The 5th Seaforth Highlanders formed into two composite companies, and the 6th Gordon Highlanders took over the Green line. The 6th Seaforth Highlanders and the 8th Argyll and Sutherland Highlanders, each formed into two composite companies, took over the old British trench system. On completion of this relief the 152nd Brigade came under the orders of the 32nd Division.

This tour of duty was uneventful, the enemy carrying out no infantry action. He was, however, at times fairly active with his artillery, particularly against the village of Beaumont Hamel and the Green line. The weather, however, remained bad, dense fogs continuing day after day, so that the enemy had little chance of locating our positions.

During this tour of duty an immense amount of salvage work was carried out. The whole battlefield was cleared of arms and equipment; old dumps were moved forward so as to be available for use in the consolidation of the Green line. Large parties were also employed in collecting the dead, and loading the bodies on to waggons, so that they might be buried in the British cemeteries at Mailly-Maillet or Auchonvillers. Parties were also employed in burying the numerous skeletons which lay scattered about the old No Man’s Land. These were the remains of the troops who had taken part in the unsuccessful attack on Beaumont Hamel on 1st July. The flesh had been devoured from the bones by the rats, which swarmed in thousands, and made their homes in the empty trunks.
Six hundred and sixty-nine of these skeletons were buried on the front of the 152nd Brigade alone - an unpleasant task, and one which had a considerable effect on the highly-tried nerves of some of the men.

On 23rd November an operation was arranged by the 32nd Division with the object of relieving 5 officers and 120 of their men who had been isolated and surrounded in Frankfurt Trench. They had made their position known by attracting the attention of a British aeroplane. Later, several of these men made their way back to our lines at night, and reported that the position of the party was desperate. They had few bombs, and depended for rations on what they could recover from the dead at night. The only water they had to drink was obtained from shell-holes. They, further, had several severely wounded men, who required immediate attention if their lives were to be saved. In support of this operation the 6th Gordon Highlanders were ordered to hold themselves in readiness to move in case the enemy were to counter-attack.

The attack was timed to take place at 3.30 pm. It, however, failed in its object, the attackers being unable to do more than gain a footing in Munich Trench. In consequence, the isolated party, after a most gallant and prolonged resistance, were compelled by the circumstances to surrender.

On the morning of the 24th the 152nd Brigade was relieved by the 7th Division. A dense fog enabled the relieving troops to march by parties up the old Beaumont Road into their positions, with their company officers still mounted.

Lieutenant General Sir E A Fanshawe, KCB, commanding the Vth Corps, summed up the part played by the Division in the battle of the Ancre as follows:-

The 51st Division leaves this Corps to-morrow to take a place in another part of the line, and although this postpones a well-earned rest, it is also a sure sign of the very efficient state of the Division that it should be called upon to do this by the army after its recent splendid fight.

It is evident from the newspapers that all the world looks upon the capture of Beaumont Hamel as one of the greatest feats of arms in the war, and to those who know the ground and the defences it must ever be a marvellously fine performance.

I can only hope that the good-bye which the Vth Corps now wish the 51st Division is for a short time, and that the good luck may be for many years to come.

One of the Jocks summed it up more briefly in the single sentence, "Onyway, they winna ca' us Hairper's Duds noo."

The spirit of the men in this battle is exemplified by a certain Jock who was found lying in a shell-hole in advance of the Green line, with a shattered leg, forty-eight hours after he had been hit. He was asked by the medical officer if no one had come near him, and he replied, "Aye, a German Red Cross man came up to me." "Surely he attended to you," said the MO. "Attended to me?" replied the Jock, "I flung a bomb at the blighter."
CHAPTER VIII
COURCELETTE

Immediately after the battle of Beaumont Hamel, Lieutenant Colonel Ian Stewart, DSO, left the Division. Colonel Stewart had been chief staff officer to the Division through all those months in which it was learning the art of war, and in which many battalions were for the first time blooded in active operations.

During this period the amount of work which Colonel Stewart carried out, and the careful thought exercised by him on behalf of the Division to lessen the difficulties of all and to raise it to the high standard that it reached, was indeed vast. It was therefore a matter of great satisfaction to the Division to hear that his services had been rewarded by promotion to be Brigadier General, General Staff of the XIIIth Corps.

It must also have been equally satisfactory to Colonel Stewart that the Division should have proved its worth at Beaumont Hamel before his service with it came to an end.

Lieutenant Colonel J K Dick Cunyngham, DSO, Gordon Highlanders, succeeded Lieutenant Colonel Ian Stewart as GSO. Lieutenant Colonel Dick Cunyngham will always remain to those who came into contact with him the ideal of what a staff officer should be. He had a wide sympathy with the regimental officer, and understood his difficulties thoroughly. He had, moreover, an unruffled temperament, which enabled him to keep a clear head and think quickly and correctly even in the most adverse circumstances. The speed with which he would write a long and intricate operation order in clear and unambiguous language was a definite asset to the whole Division, and largely eliminated that confusion which is so liable to occur during the fluctuations of a modern battle. "Dick", as he was familiarly known, was certainly one of the chief pillars on which the efficiency of the Division rested.

The whole Division was now out of the line, lying in the area Arquevess-Raneheval-Hedauville-Varennes-Force-ville-Lealvillers. It was not, however, to be allowed to rest, for on 25th November the 153rd Brigade began its march to Ovillers Huts. The following day the 154th Brigade moved to Aveluy, and the 152nd Brigade to Bouzincourt and Senlis. It was then learnt that the Division was immediately to take over a peculiarly unpleasant sector.

On the 27th the 153rd Brigade relieved the 12th Canadian Brigade, 4th Canadian Division, in the Courcelette sector. This sector extended from the dyke valley just west of Le Sars to the western of the two roads running from Courcelette to Miraumont. The Dyke Valley in particular, and the whole area in general, were painfully open to observation from tree observation-posts in Loupart Wood. This wood was perched on the summit of a commanding upland. There was hardly a square yard in the Divisional sector which was not overlooked from some portion of it.

Moreover, the enemy made the fullest use of his observation. Even single men were frequently sniped by howitzers and field-guns to such an extent that movement in the forward area by day became out of the question.
The ground taken over by the Division had been captured by the Canadians a few days previously. The conditions could not have been worse; the limits of human endurance were all but reached. The whole area had been ploughed up by shell-fire to such an extent that the vegetation had completely disappeared. The rain, which had been the cause of the frequent postponement of the attack on Beaumont Hamel, continued day after day. The whole countryside had in consequence been transformed into unending acres of treacherous and, in some places, dangerous mud. It was no uncommon thing for men to sink up to their waists and for horses to be drowned. By December the mud had become saturated with water to such an extent that it became necessary to issue ropes as trench stores to enable men who had become bogged to be extricated.

Moreover, the earth had become so disintegrated by the shocks of the continuous bursting of shells that trenches could not be cut in it. No sooner had they been dug than the sides fell in and filled them again. The front and support line troops thus lived in shell-hole posts. In a few cases these were connected to one another by what had once been trenches.

The condition in which the men lived in these posts defeats imagination, and needs to have been seen to be appreciated. They could not move by day. Their only seat was the oozing fire-step; if they stood up they gradually sank into the mud; even ration-boxes and duck-boards used as platforms soon became submerged. The conditions of sanitation were ghastly, the possibilities of cooking were non-existent, and from dawn till dusk the troops were cut off from communication even with the next post.

Trench feet became an epidemic, frost-bite occurred frequently. In some cases old wounds reopened, as they did in the days of scurvy. In December dysentery appeared. The wastage amongst the troops became serious, and a general air of depression settled down over the Division. In fact, General Harper once confessed that he had never seen a man smile east of Pozieres.

One of the great problems of the Courcelette sector was the difficulty of finding one's way to the forward area. All movement being restricted to the hours of darkness, and the whole countryside being a featureless abomination, working parties, runners, reliefs, and ration parties were continually losing their way, and wandering through the mud until they had become exhausted.

To make matters worse, when the Division took over the sector there were no wire entanglements created, so that there was always a reasonable chance of men who were lost wandering into the German lines, as it was difficult to discover when one was in No Man's Land. This, indeed, happened several times, while similarly lost Germans were more than once found wandering in our lines. In fact, prisoners were taken in this manner on six different occasions.

The Division, therefore, had many problems to face on its arrival in this area. At first an attempt was made to link up the front line posts, wire them in, and dig communication trenches leading up to them. The whole area was further littered with the unburied dead and with salvage of every kind.
The troops in the reserve line had in a few cases dug outposts, which had been discovered in Regina Trench - a famous trench captured by the Canadians a few days previously.

The reserve battalions were little better off than those in the line. They were for the most part quartered in disused gun-pits and Bairnsfather villas, proof neither against shell-fire nor the weather.

The artillery were in a similar plight; their gun-pits were constantly flooding, and the movement of wheeled transport became impracticable. All gun ammunition had therefore to be brought to the gun emplacements on pack saddles, eight rounds only being carried on each horse. Journey after journey with the pack animals had therefore to be made by the gunner-drivers, with the German field-guns doing their best to aggravate the conditions.

The Division took over this sector within a few hours of leaving another battle front. The men had been given little or no opportunity of resting and recuperating after a severe engagement. The result was that their vitality was low, and that their powers of resistance were not at their best. They in consequence suffered considerably more from the adverse conditions than would have been the case with fresher troops.

Every method of constructing trenches was tried, and pumps were employed to keep them dry. The results were, however, always the same. No sooner was a trench dug to a depth of three feet than water began to rise in it and the sides fell in. Trenches had therefore to be given up, and overland tracks took their place. For this purpose duck-boards or wattled tracks were laid, the routes being marked out with tracing-tape or posts and wire until such time as the track was completed.

As regards protection for the troops against the weather, it was evident that if men were to be left lying for many hours exposed to the weather in shell-holes the wastage from sickness would be appalling. A considerable effort was therefore made to provide the battalions both in the line and in brigade reserve with weather-proof accommodation.

For the troops in the line the Divisional engineers designed a highly satisfactory form of shelter, composed of corrugated iron elephant shelters sunk below the level of the parapet of the trench or shell-hole. The material for each shelter could be carried up to the line by ten men, and could be completed in a day and night's work. When completed it accommodated a section post.

Large elephant shelters were made for reserve battalions in the sides of sunken roads, while all troops that could be spared were moved back to the camps in the back areas.

Thus, after three weeks, conditions had been materially improved. During this period, however, there was a snap of sharp frost. For a while this dried up the mud and much improved the situation; but, as is always the case, the thaw which followed seemed to render the mud, if possible, more all-pervading than had been the case before the frost came.
Meanwhile the "Q" staff had been making every effort to alleviate the sufferings of the men. A gum-boot store had been established at Pozieres, with sufficient boots for the whole brigade in the line. There was, however, a continual wastage of these boots, as, though they reached almost up to the hip, many of them were sucked off the men's legs in extricating themselves from the mud. It was found that these thigh boots and the kilt did not make a good combination. The boots had to be worn underneath the kilt, with the result that the top edge of the boot, rubbing against the bare thigh, used to chafe the men and cause septic sores. In consequence, the kilt was for the time being abandoned, and six thousand pairs of trousers were issued to the men.

A soup-kitchen was also established outside brigade headquarters. Here the Divisional master-cook, an old Hussar, used to issue hot soup to working parties and reliefs on their way to and from the trenches. The master-cook was shelled in his kitchen on most days of the week; but beyond asking for a party to repair it when it had sustained any damage, he made no complaints. His services to the Division on this and, indeed, on many occasions were invaluable.

Efforts were also made to provide the men with hot meals in the line. The portable hot-food containers issued for this purpose proved too heavy a burden for a man to carry over two thousands yards of water, shell-holes, and slippery mud, and they had to be abandoned.

In place of them the men were issued with Tommy Cookers, small tins of solidified alcohol on which they could heat their own food. Tins of meat-and-vegetable rations were on this account made the permanent issue for troops in the line. Each man was thus able to heat for himself a really good and nourishing stew, even if he lived in a shell-hole and had no previous knowledge of cooking. This system proved very satisfactory, and the number of hot meals a man could have during a day was only limited by the number of Tommy Cookers that could be obtained. Ingenious quartermasters therefore discovered means of improvising Tommy Cookers, and making them in large numbers for their battalions. This in itself was a great improvement for the men, and it became no longer necessary to live from dawn to dusk with nothing but cold meat and biscuit to eat and with cold water to drink, as had been the case when the sector was first taken over.

In spite, however, of all the arrangements made, the men did not recover their vitality, and the wastage remained immense. A system of relief was therefore introduced by which battalions held the line for only forty-eight hours each. They were also given twenty-four hours complete rest before going into the line and after coming out. This system had an immediate effect on the health of the men.

Farther, on 11th December it was arranged that the whole Divisional front should be held by two battalions, each battalion being on a one company front. These front-line companies were reinforced by two Lewis guns of the remainder of the battalion manned by nucleus crews. As company strengths had by this time fallen to about fifty to sixty men, this meant that the line was extremely lightly held.
So much was this the case that a German machine-gunner, who was returning to his emplacement with filed water-bottles and had lost his way, wandered right through our lines, and was captured by some machine-gunners close to brigade headquarters. These machine-gunners were the first British troops he had seen.

Operations in the line, apart from combating the mud and water, were confined to sniping. When the Division first took over the line the Germans showed themselves in a most daring manner. The 153rd Brigade took full advantage of this in their first few days in the line, Colonel Cheape's battalion claiming eleven hits in one day. After this the Germans unfortunately became very much shier, and the bags fell off considerably.

Brigade reliefs in this sector were a sore trial to the men. Apart from the exhaustion caused by the conditions in which they lived, the struggle through the mud from the line to brigade headquarters was in itself a heavy task for a man in battle order.

Added to this, the continual standing in mud and water and the prolonged wearing of gum-boots caused the men's feet to become so swollen and soft that a march of even a few thousand yards became a physical impossibility to many of them. It was therefore necessary to bring motorbuses along the Albert-Bapaume Road to Pozieres. Here, as the men straggled in, the loads were made up and driven off to Wolfe Huts, near Ovillers, where the men spent the night.

For many hours after the relief was completed, stragglers would come limping along in ones and twos to the embussing point, coated from head to foot in mud, with a three days' growth of beard on their faces. They were a depressing spectacle. Their exhaustion was in some cases so great that many of them would lie at the roadside in these winter nights wet through, and fall asleep often when another half mile would have carried them to the buses, to daylight, and to a warm hut. War has certainly lost much of its romance since going into winter quarters went out of fashion.

To the rank and file Courcelette will remain as a nightmare. Though the men in the shell-holes may have been too obsessed by the beastliness of their conditions to appreciate the fact, yet on few occasions can the administrative services of the Division and its commanders have exercised more thought on their behalf. Nothing that could have been done to alleviate their sufferings was left undone; much was done which would not have occurred to a less efficient staff.

Left to himself, the Jock, exhausted as he was, was in danger of sitting down and doing no more than saying, "Isn't this b—y?" He was right; it was what he called it, and General Harper, who had visited the men in their shell-holes, knew that it was so. But he knew also that so long as the men remained passive it would become still more so. He therefore insisted that the men should either be in complete rest, or should be working their utmost to improve the conditions. On no account was the merely passive and reflective attitude to be adopted. During this period Colonel A J G Moir, DSO, who had come out with the Division, and after leaving it for a short time had returned to it as chief administrative staff officer, and Major J L Weston, DSO, were responsible for the "Q" services of the Division.
The latter had also come out with the Division, and subsequently succeeded Colonel Moir, remaining as AA and QMG, 51st Division, until a few months from the armistice.

Colonel Moir seconded General Harper's efforts to keep the Division going in a most effective manner, and it was largely due to his administrative ability that the Jocks ultimately went back to rest with sufficient powers of recuperation left in them to recover their old form after a nineteen days' rest behind the line.

Colonel Moir was, in turn, admirably served by Major Weston, whose unwearying devotion to his Division and unfailing good temper made him an ideal "Q" officer. Great as was the wastage owing to sickness, casualties owing to enemy action were few. This was owing to the small number of men employed holding the line. The total in killed, wounded, and missing for the months of December and January amounted to four officers killed, 15 wounded, and one missing; and to the men, 86 killed and 333 wounded.

Amongst the killed was Captain Lauder of the 8th Argyll and Sutherland Highlanders, son of the famous Scottish comedian. He was shot while moving from one front-line post to another in the early morning.

Amongst these casualties, twenty-five were caused by a single 4.2 shell at Tulloch's Corner. This shell burst amongst a working party of the 6th Seaforth Highlanders, killing the officer and three men, and wounding 21 other ranks.

On 12th January the Division was relieved by the 2nd Division. Divisional headquarters moved to Marieux, the 152nd Brigade to Beauquesne, the 153rd Brigade to Puchevillers, and the 154th Brigade to Rubempré. The Division then marched to the Buigny-St Maclou area west of Abbeville, arriving there on 16th January, having staged in the Bernaville and St Riquier areas.

At the time that the sector was handed over to the 2nd Division, a vast change had been wrought in it. A system of defence had been put into force which reduced the number of defenders to a minimum. Shelters had been provided for the whole trench garrison. Dug-outs were nearing completion, one in the East Miraumont Road being capable of holding two companies. Overland routes had been marked out, laid, and notice-boarded. Large numbers of elephant shelters had been erected for the reserve battalions, so that men not actually holding the line were able to obtain adequate rest in fair comfort. The whole front had been wired so as to have at least one belt to protect the garrison of the front line from hostile raids. A vast amount of material had been salvaged and put into use. All dead had been buried except those lying in the actual trench area.

Considering the conditions this is a fine record of work. Though the infantry contributed to it in some degree, it must be said in justice to the Royal Engineers and pioneers that theirs was the lion's share. The efforts which these units made to ameliorate the conditions for the infantry were magnificent. That the sickness and wastage was not greater, and that the whole conditions of life materially and visibly improved, was mainly due to the enterprise, energy, and endurance of the three field companies and the 5th Royal Scots.
The Division was, however, now at its lowest ebb. It had been in the line for a year, including two very trying periods of mine and trench warfare, plus the fighting in July and August on the Somme and the battle of Beaumont Hamel. It was considerably reduced in strength, and had lost heavily in company commanders and NCOs. A period of at least a month's rest was considered essential in which to train the new drafts and restore the fighting efficiency of the Division. It was therefore with some misgiving that it was learnt that on 30th January the 8th Royal Scots and the 1/1 and 1/2 Highland Field Companies, RE, had proceeded to Arras to work in the Third Army area. This could have only one meaning.

The rest lasted exactly nineteen days, as on 5th February the Division moved to the Barilly area en route to join the Third Army.

The Buigny-St Maclou area was not a good one. Training-grounds were difficult to obtain, while in many villages the billets were indifferent. They consisted for the most part of mud-plaster barns, verging on a state of collapse, and with unpleasantly ventilated walls. Since this was the coldest period experienced in France during the Great War, the men suffered considerably. An intense frost set in, which continued almost without interruption up to the last days of February. On some nights twenty-four degrees of frost were registered. In consequence, both work and recreation were greatly hampered, and it was extremely difficult to provide warmth for the men at nights. Where men were housed in the mud-plaster barns there were numerous cases of frost-bite, the men's knees suffering in particular.

Thus the recollections of the first nineteen days' rest which was vouchsafed to the Division since it first went into action are not as pleasant as might be imagined.

When the march to Arras began, the effects of the frost were felt still more acutely. The march lasted six days, the route lying across a country of hills and valleys, including many steep ascents and descents. The result was that, as in many places the roads were little better than sheets of ice, the transport had the greatest difficulty in carrying out the march. In consequence, field-kitchens and cooks' carts often arrived several hours after the men had reached their billeting area. This was attended by considerable discomfort to the troops, as they were dependent on the kitchens and the cooks' carts for their next hot meal. The cold was also felt considerably more "on trek" than in ordinary circumstances, as the men, since they were changing their billets daily, had no time or opportunity to make their quarters comfortable.

The difficulties of this march reached their climax at St Pol. Water-mains had in many places burst, and flooded the roads with several inches of water, which had frozen into hard ice. In consequence, the steep descent into, and the equally steep ascent out of, the town became barely negotiable. In fact, it was only by employing large numbers of men with drag-ropes and additional teams that the transport could make its way through the town. Blocks occurred in the road which checked the columns, often for considerable periods, and which kept the men shivering in the roads and delayed them from reaching their billets until late in the evening.

Indeed, it was hard to believe during the last three months that one was in what the railway advertisements call "Sunny France".
One had lived in fogs which were a match for London, and mists and rain which
compared favourably with the Western Highlands, and degrees of frost, wind, and
snow which could hardly have been improved upon in Caithness. There were,
however, no winter quarters in this war in Gaul. The men lived as hard a life as could
well be imagined; and though it would not be true to say they thrived on it, they
endured it in an exemplary manner. One requires to have wintered in "Sunny
France" in canvas tents, open-work barns, and "Bairnsfather" shacks on perhaps
one hot meal a day to appreciate the hardships and discomforts of winter warfare.