



General Sir Arthur Currie's After Action Report on the Attack on Vimy Ridge

With Commentary by Robert Paterson



From the Archives
of the Brome County
Historical Society



Vimy Ridge, 1917



“The great lesson to be learned from these operations is this: if the lessons of the War have been thoroughly mastered; if the artillery preparations and support is good; if our intelligence is properly appreciated; then there is no position that cannot be wrested from the enemy by well-disciplined and well-lead troops attacking on a sound plan.” Arthur Currie

In this short booklet, you will find General Arthur Currie's report on the attack of the First Canadian Division on Vimy Ridge in April and May of 1917.

Until now, this document has only been available in the archives in the UK and in Canada. Our intent, at the Brome County Historical Society (BCHS), is to make this document widely available to all.

The importance of this document is that it shows, for the first time, the new thinking that ultimately enabled the British Army to find the answers to the stalemate of the Western Front.

This document is laconically titled: 1st Canadian Division - Report on the Vimy Ridge - Willerval - Arleux and Fresnoy Operations - April 9th - May 5th 1917. Dated June 1917. It was written as a tutorial for officers. It is part of the new culture of the Canadian Corps to share hard won lessons immediately.

In this booklet you will find the full text transcribed for easy reading. We have also added a running commentary and end notes that include more detail.

This copy of the document comes from the papers of Canadian Brigadier General Dennis Draper. At the time of Vimy, Draper was the CO of the 5th Mounted Rifles. Recruited in the Eastern Townships in Quebec, the home of the Brome County Historical Society, the 5th CMR served in the 3rd Division at Vimy.

After the Great War, Draper donated his military papers to the BCHS.



Introduction



Image Capt. H E Knobel - PA - 00101020

“Trained during the late 19th century, the British generals were confronted by the weapons technology of the 20th. Rather than evaluate the premise on which the war was being fought, they applied the old concepts or merely improved tactics” (George Cassar – Beyond Courage).

In late 1916, the war was in stalemate. No general had found a way to break through the defences of trenches, artillery and machine guns. Knowing that he had to find a new way of waging war, the new commander of the Canadian

Corps, General Julian Byng, took two of his best officers out of the line in late 1916 and sent them off to interview their allies and to learn the lessons that might give the Canadians the edge.

The result of their tour was to change the rules of war.



Arthur Currie

In Currie's plan, he describes how best to use air reconnaissance and raids to provide detailed intelligence. How to use artillery to protect the assault troops by cutting wire, forcing defenders to stay in their dugouts, destroying and interdicting counter attacks and by isolating strong points. How to plan inclusively so that, in a barren landscape, all men knew where to go and what to do. How to use the platoon structure to push decision making down to the single man and so overcome the chaos of combat.

We also see that the key industrial issue of the war so far had been solved. For the first time, there were sufficient shells to feed the guns so they could be used to keep casualties down. Currie, a gunner, was a master of this art. The section on

the artillery plan is as large as the section on the overall plan. In this, he was aided by an artillery genius, Lt Col Andrew McNaughton, who brought science to gunnery.



Julian Byng

Image - The George Metcalfe Collection. MCG 19920085-262

This innovation was not just about Currie. The CEF was incredibly fortunate that its new commander, an aristocratic Briton, Julian Byng encouraged the development of a culture that would release the potential of this extraordinary group of men. Byng, who had recently organized the brilliant evacuation of Gallipoli and who was a personal friend of the King, had the prestige to provide political protection to Currie and to McNaughton. Byng went further and actively encouraged innovation.

Another advantage for the CEF was that it had no tradition of its own. Most of its soldiers were not pre-war military professionals. Currie had a high school education and was in peace time a real estate agent. McNaughton had been a university

professor. He would become a general aged 29. Most officers in the CEF were open to new ideas.

“Canadians were unaccustomed to showing respect and deference to anyone who could not stand firmly on his own two feet without the supports of wealth or title”. (Currie).

The officer corps was remarkably coherent and caring. *“We were a close knit organization. We served with people that we knew – there was a personal acquaintance and a personal friendship; we had a feeling of personal responsibility for the men’s well being.” (McNaughton)*

This was the raw material of the CEF. It was an organization that was inclined to taking personal responsibility. An organization that was inclined to care for each other. An organization that was not inclined to take bull from anyone.

An organization that was ready to learn from experience.



1st Canadian Division - Report on the Vimy Ridge - Willerval - Arleux and Fresnoy Operations - April 9th - May 5th 1917.

SECRET.

1ST CANADIAN DIVISION
REPORT ON THE
VIMY RIDGE-WILLERVAL-ARLEUX
AND FRESNOY OPERATIONS
APRIL 9TH - MAY 5TH
1917

June 1917.

REPORT ON OPERATIONS CARRIED OUT BY THE
1ST CANADIAN DIVISION.
APRIL 9th - MAY 5th 1917.

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JUNE 1917.



PRELIMINARY PREPARATIONS.

SECTION I.

PRELIMINARY PREPARATIONS.

1. In February, 1917, the 1st Canadian Division was holding the Left Sector of the Canadian Corps Front North of the SOUCHEZ River.

2. The Division had been warned of impending operations against the VIMY RIDGE, but it was not until the 2nd February that definite proposals were received from the Corps allotting Frontages to Divisions and sketching the outlined plan of attack.

In these instructions the 1st Canadian Division was allotted the Battle Front on the extreme right of the Canadian Corps, and at the same time was warned that every endeavour would be made to relieve it on the Front it was holding by the first week in March to enable it to take over its Battle Front.

3. With the above instructions, the Canadian Corps forwarded a plan of attack for the Right Division, which had been drawn up by the 3rd Canadian Division, who were holding the Front at the time, showing suggested boundaries, frontages, objectives, assembly areas, dumps, etc., and the work it would be necessary to carry out in the Area before the Operations could commence.

4. The G.O.C. held a Conference at Divisional Headquarters consisting of Infantry Brigadiers, C.R.A., C.R.E., O.C., Signal Co., and the Senior Divisional Staff Officers. At this Conference the G.O.C. explained the task allotted to the 1st Canadian Division in the forthcoming Operations and detailed their tasks to the three Brigades.

5. Arrangements were made whereby parties of selected Officers and N.C.Os. could visit the Now Area and spend some days there with Units of the 3rd Canadian Division, in order to make themselves acquainted with their new Battle Area.

6. Between the 2nd and 5th March the 1st Canadian Division was relieved in the BARLIN SECTOR, North of the SOUCHEZ River, by the 24th Division.

As each Brigade was relieved it marched straight down into its new Battle Area, where it came under the orders of the 2nd Canadian Division, who had taken over from the 3rd Canadian Division.

The 1st Canadian Division took over its Battle Area from the 2nd Canadian Division on March 9th, with Headquarters at ECOIVRES.

7. Instructions had been received that all preparations were to be completed by the 31st March, and as there was an enormous amount of work to be done in the Area, though a start had been made upon it by the 2nd Canadian Division, it was decided to put the 2nd and 3rd Canadian Infantry Brigades straight into the Line, each on its own Battle Front, and to keep the 1st Canadian Infantry Brigade out of the Line to carry out its Training for the attack over a Taped-out Course.

8. The 2nd and 3rd Canadian Infantry Brigades were each allotted a Field Company of Engineers and were made responsible for all work in their own Areas. This scheme worked well for the Battalions became acquainted with their own Areas, and knew that all the work they carried out was for their own benefit.

9. Work was hampered by the very adverse weather conditions during March. In the thaw which got in after the hard frost existing Trenches slid in so that the labour which had to be expended on purely maintenance work made any new work very difficult.

Under these circumstances, great credit is due to all ranks that the work in the Area was completed by Z day.

10. A start had been made by the 2nd Canadian Division on the new Battery positions for the large number of additional Batteries which would be available for the Operations. This work was continued by the 1st Canadian Divisional Artillery

as soon as it arrived in the Area. Their work, however, was not only hampered by the weather, but also by the difficulty in obtaining Engineer material. During the severe frost, when the Roads were in good condition, this material was unobtainable, and when the frost broke and more material became available all the roads were cut of action, owing to 'Thaw Precautions', making it impossible to get material forward.

11. Two Infantry Subways had been started in the Left Section of the Divisional Battle Front by the 185th Tunnelling Company, R.E.

Note on Subways

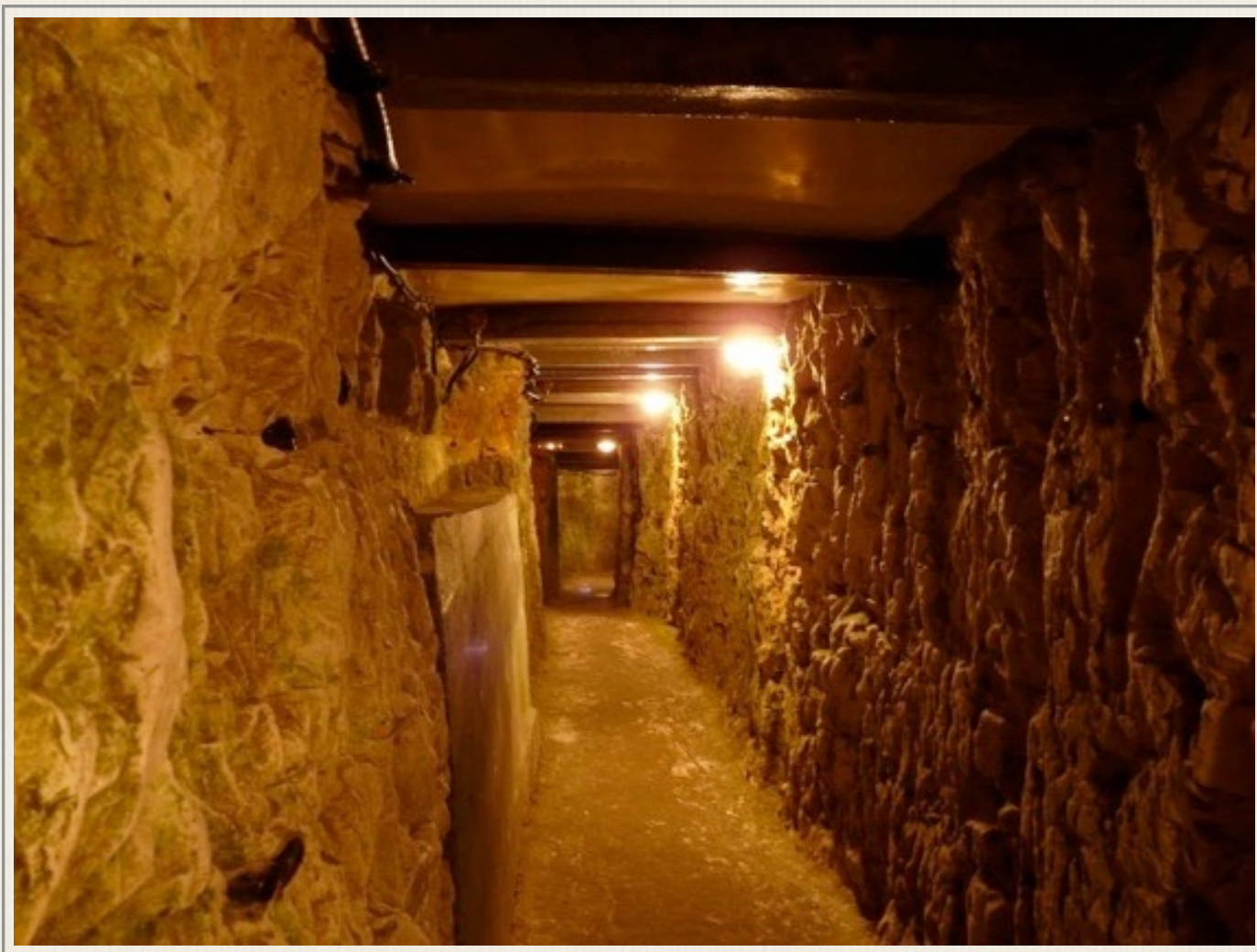


Image: Grange Subway: CEF Research. <http://www.cefresearch.ca/phpBB3/viewtopic.php?f=14&t=6436>

Vimy Ridge is a chalk escarpment. Chalk is easy to mine and does not need to be propped as much as clay or earth. Prior to 1917, the main activity had been mining and counter mining. Many of the larger craters that you can still see on the Ridge today are the result of blowing mines. Recently the Durand Group defused a mine under the park. There may still be others left.

To support the assault on April 9, 14 subways were built all along the front. These would enable the attacking troops to concentrate under cover and out of site.

Coburg - 407 m , Gobrun - 265 m, Blue Bull - 466 m, Vincent - 508 m, Tottenham - 1408m, Cavalier - 1024 m, Grange - 1228 m, Goodman - 1722 m, Lichfield - 485 m, Zivy - 789 m, Bentala - 680 m, Douai 646 m, Barricade - 364 m, Souchez - 520 m

If you visit Vimy today you can still see part of the Grange Subway. The most comprehensive guides to the underground war in the Vimy sector are “The Underground War: Vimy Ridge to Arras”. Phillip Robinson and Nigel Cave. And “Underground Warfare 1914 - 1918”. Simon Jones.

More notes on Subways are at the end of this chapter.

Great praise is due to this Company for getting these Subways through in time, and for the making of Brigade and Battalion Headquarters, Signal Dugouts, etc., that were asked for. These Subways proved invaluable during our final preliminary bombardment, the Operations themselves, and also immediately after the Operations.

12. The 2nd and 3rd Canadian Infantry Brigades continued to hold the Front until the 28th March, when they were relieved by the 1st Canadian Infantry Brigade, and withdrawn to carry out their Assault Practice over the Taped-out Course near ESTREE CAUCHIE. The 1st Canadian Infantry Brigade thus took over the whole Front of the Division, the relief being complete by March 30th.

13. On March 26th the 31st Divisional Artillery arrived in the Area, and came under the orders of the G.O.C. for the forthcoming Operations. Subsequently the Divisional Artillery was increased by the 5th Army Horse Artillery Brigade, 26th Army Field Artillery Brigade, and the 72nd Army Field Artillery Brigade.

14. In addition to the above, two Groups of Heavy Artillery, grouped together into what was known as No. 1 Double Group, R.G.A., under the Command of Lt. Col. WALTERS, were affiliated to the Division. Lt. Col. WALTERS had his Headquarters close to Divisional Headquarters, and worked in close touch with the Intelligence Officer of the General Staff, and with the C.R.A. of the Division.

15. During the preparatory stage systematic harassing of the enemy's communications by night by Heavy and Divisional Artillery and by Machine Gun Fire was carried out.

16. By day, the Heavy Artillery carried out systematic trench destruction and wire cutting.

Note on Wire

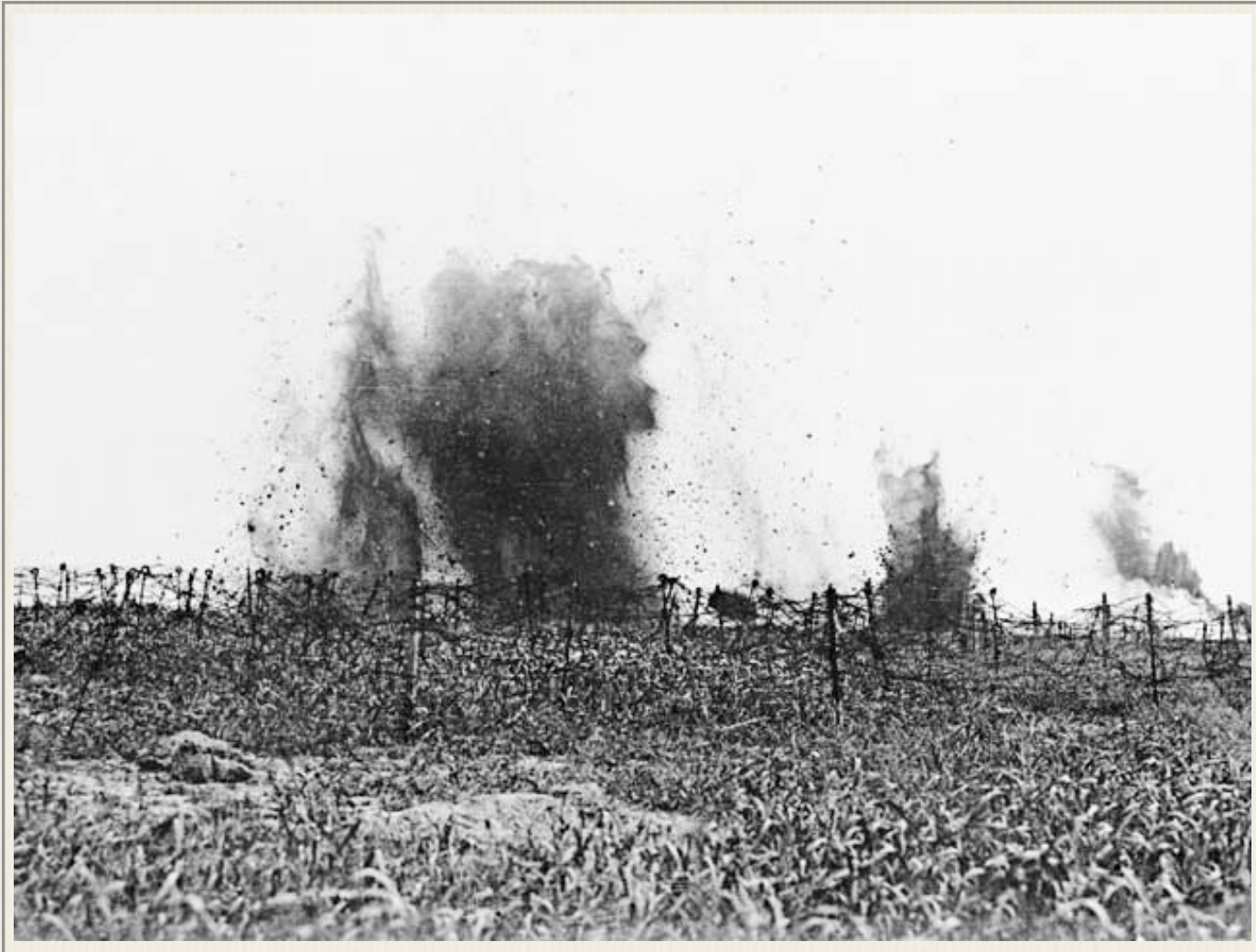


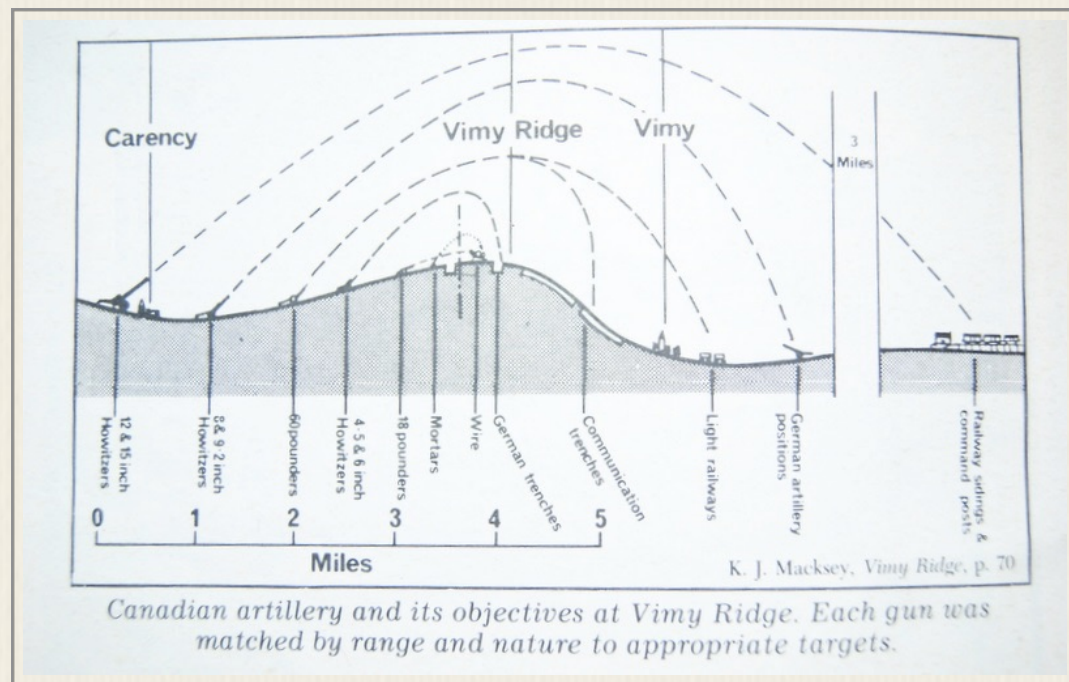
Image - PA-001380

One of the reasons behind the massive casualties of the Somme was that, in spite of the greatest bombardment in history, the gunfire had not cut the wire. Here we see a picture of the German wire at Vimy being attacked by artillery. The difference between then and the Somme was the fuse in the shell. What was new was the wide availability of the 106 fuse. This was a very sensitive fuse that exploded the shell on contact. Older fuses had allowed the shell to be buried in the ground and so had muted the effect on the wire. It was only by April 1917 that there enough 106's and 18 pounder ammunition.

17. Many practices were carried out, by the Divisional Artillery, of the Creeping Barrage which would actually be used on "Z" day, in order to rectify errors and avoid gaps, and to induce the enemy to disclose his Artillery defensive programme and Machine Gun Battle Emplacements. The Barrage was always brought back on to one of the trenches of the German Front System in order to train them to keep

in their dugouts, so that the final attack should come as a surprise, despite the long Artillery preparation. These practices, as a rule, were carried out in conjunction with those of the Divisions on each Flank.

Note on Creeping Barrage



18 Pounder in a Gun Pit

Images Barrage - Wikimedia Commons; Australian War Memorial E00600.

Much of the work was done by the 18 pounder field gun as shown above. In a gun-pit like this, the range could be extended as it was possible to increase the elevation. During the creeping barrage phase each gun was firing 700 shells a day. They were often accompanied by a standing barrage, mainly

from the 4.5 inch howitzers, that would pour fire on top of the enemy trench until the first wave reached it. What Currie and McNaughton had learned, when reviewing the Somme, was that most German dugouts were impervious to all but the heaviest gun. Given a minute's respite, the German machine gunners could make it back up to their firing positions and so decimate any attack. The Creeping Barrage and the Standing Barrage were designed to obscure the advance and to keep the defenders in their bunkers until the moment that the attackers reached the trench.

18. From the moment that definite orders were received allotting the "Battle Front" of the Division, the General Staff Officer for Intelligence started to collect all the information that it was possible to obtain regarding our own area, that of the Germans on our Front and of the German Troops opposite to us. Valuable information was taken over from the 3rd Canadian Division, but this was all checked and added to by the Brigade and Divisional Intelligence Officers. A Map on the scale of 1/2500 of the whole area East of and including our Assembly Area was got out at Divisional Headquarters. On this Map was shown all the German Trenches in use, with their "German" names which had been obtained from a captured map, all the wire, trench mortar emplacements, O.Ps. and dugouts that could be definitely located from observation and Aeroplane Photographs. This Map was subsequently proved to be very accurate and was of immense value to all Units. Great credit is due to the Officers and Other Ranks who were concerned in its compilation.

19. From the above Map a "Practice Course" was taped out life size on the Area South of the Main Road between ESTREE CAUCHIE and QUATRE VENTS.



Image: PA-003666

Note - The Canadians sharpened their pre-assault plans using scale models of the battlefields like this one of the trenches northwest of Lens, autumn 1918. The small sign in the middle indicates "No Man's Land."

Every trench was shown by tape and flag, numerous "Name Boards" being put up showing the German name; trench mortar emplacements and machine gun emplacements, Battalion, Company and Signalling Headquarters were all marked on the ground. All Units, Infantry, Engineers, and F.O.Os. that were to go over in the attack were practised in turn, and in conjunction with each other over this Course. As in our other preparations, the adverse weather conditions greatly hampered these practices.

20. In addition to the above, a Plasticine Model on a Scale of 1/5,000 was prepared for the Division by an Intelligence Officer at the First Army Headquarters, assisted by a Draughtsman of the Division. Insert Maps and Models here This Model was set up in a Hall at Divisional Headquarters and studied by all ranks, Artillery, Machine Gunners and Infantry.

Note on Maps and Models

At the Battle of the Somme, there were 60,000 casualties on the first day. A reason for such high casualties was that too much top-down control was put in place. This need to impose control was why they moved en masse, slowly and in close order. It was also why so many became disoriented when their officers were killed.

Currie acknowledged that he could not control the battle once the men had gone over the top. So instead of trying to apply direct control, he took a novel step and brought all the officers, NCO's and men into the plan. They all knew everything except the day of the assault. For the first time in any war, every single man had a map and all had spent time on a model that showed the entire front.

21. On April 4th, No.2 Special Company, R.E., under Capt. H. MAY, arrived in the Area and was attached to the Division. This Company was provided with Projectors and 4" Stokes Mortars. It was decided to use the Projectors for the discharge of "LETHAL" Bombs into selected areas previous to "Z" day. The areas selected being those known to contain dugouts, and on which direct observation was difficult.



Stokes Mortar Team

The 4" Stokes Mortars were to be used to form a Smoke Cloud to cover the advance of our troops from THELUS Village and HILL 135. The whole of the work of reconnoitring positions for the Mortars, construction of emplacements and carriage of the bombs to the positions, had to be carried out by the personnel of the Special Company unaided. The work was heavy and the time extremely short, but by 11.00 p.m. on April 6th, the Company were standing by ready to discharge their "LETHAL" Bombs. The wind, however, was unfavourable and the discharge had to be postponed. On April 7th, the wind still being unfavourable, it was decided to abandon the discharge and to carry out of the Area the "LETHAL" Bombs.

On the day of the Assault the Smoke Cloud was discharged with success, as will be seen later in the 'Narrative'.

22. The Machine Guns of the Division were employed in two distinct roles, fixed and mobile. Each Brigade retained two Sections of its Brigade Machine Gun Company under the Command of its Brigadier. The remaining two Sections of the above three Machine Gun Companies each formed a 'Barrage' Battery. In addition, two Barrage Batteries were found by the 13th Canadian Machine Gun Company, two by the 15th and 95th Machine Gun Companies of the 5th (Imperial) Division, and three by the Canadian Corps Motor Machine Gun Brigade. The arrangements for the Barrage Batteries were co-ordinated by the Canadian Corps Machine Gun Officer. The preparation of the Battery positions and the accumulation and supply of ammunition were arranged by the Divisional Machine Gun Officer, and carried out by the Machine Gun Companies of the Division. The large supply of ammunition which it was necessary to move forward, as the attack progressed, for the use of the Barrage Batteries was a difficult undertaking, but was successfully carried out by the formation of a Pack Train formed by the Pack Animals of the Machine Gun Companies, together with Infantry Carriers attached to Machine Gun Companies, at the rate of two Carriers per Machine Gun. These Carriers were given an Armstrong Carrier to lighten their task, but as these Carriers were only issued 24 hours before the actual Operation took place and therefore no practice in their use was possible, it cannot be said that great use was made of them.

23. The Trench Mortar Batteries were used in the following manner.

Each Brigade retained four Stokes Mortars to go forward in the Assault for the purpose of coming into action against any Machine Gun or Strong Points that were

holding up the actual Assault and afterwards to take up defensive positions to cover the Line, that was being consolidated, against Counter Attacks.

The remaining four Mortars of each Battery, i.e., 12 Mortars in all, were used to supplement the initial Barrage on the German Front and immediate Support Line and to engage selected targets within their range. These Mortars, as soon as they had completed their task, returned to the Command of their Brigadier, to be held in reserve until required.

24. Owing to the maze of old trenches in the area and to the observation at the disposal of the enemy it was decided not to dig any new trenches in which to assemble the assaulting Infantry.

The actual assaulting battalions of the two leading Brigades were assembled in the old French trenches in front of what was used as our Front Line trench, and beyond clearing them of wire no new work was done on them. The reserve Battalions of the two Brigades were able to use old shallow mine galleries in which to assemble.

25. Before coming out of the line, the 1st Canadian Infantry Brigade carried out daylight raids into the German Front System on the whole of the German Front, useful information being obtained as to the enemy wire and the front trenches.

Raids were also carried out by both the 2nd and 3rd Canadian Infantry Brigades during the 48 hours preceding "Z" day.

26. The wire cutting of the German second line - SWISCHEN STELLUNG - was seen to have been efficiently carried out by the Heavy Artillery with the 106 Fuse, assisted in places by the Divisional Artillery, but wire in front of the German Front Line Trenches caused us considerable anxiety. This wire, except in a few places, could not be cut by the 18 pdrs. of the Divisional Artillery; consequently, we had to rely on the 2" Trench Mortars. Our observation and information obtained by the patrols and raids showed that this wire was not satisfactorily cut, especially round some of the main crater groups. It was therefore decided to withdraw our front line garrisons and to turn on the Heavy Artillery and some 4.5" Batteries, all using the new 106 Fuse; the result of this was most successful.

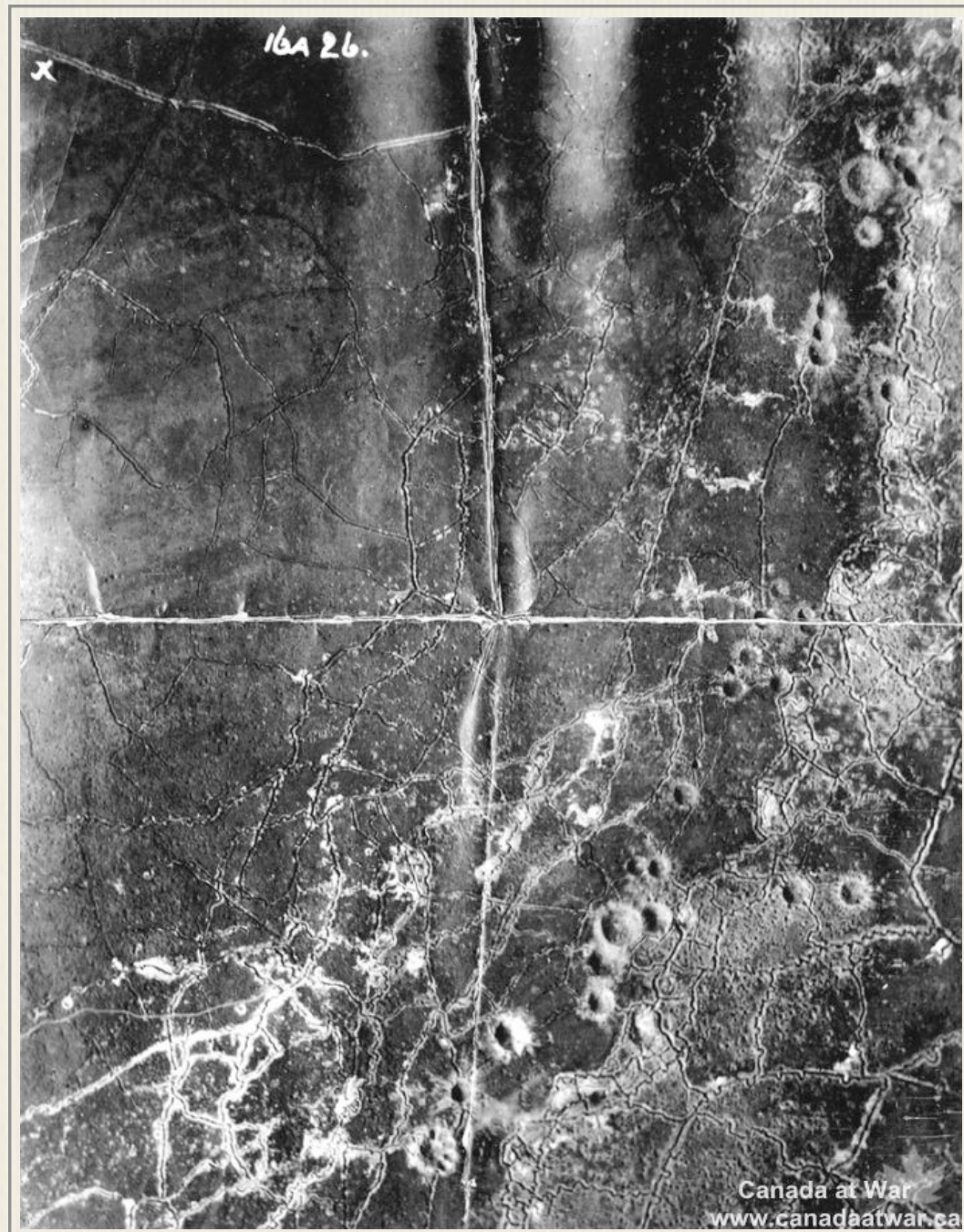
27. Considering the adverse weather conditions, which on several days made aeroplane observation impossible, the trench destruction was efficiently carried out by the Heavy Artillery and 4.5" Howitzers. Only one trench in the whole area -

EISENER KREUZ WEG - remained which might be said to have required more destruction.



4.5 Inch Howitzer

28. The 16th Squadron, R.F.C., rendered most valuable assistance in registering for our Artillery and carrying out photographic reconnaissances, in spite of the adverse weather conditions and interference from the latest pattern German Machines, which caused them many casualties. (See next page)



Note: This aerial photograph illustrates the major trench lines around an unknown sector on Vimy Ridge. CWM 19740387-060 (Source: <http://www.canadaatwar.ca/photo/856/battles-and-fighting/>)

29. Owing to the uncertainty of the date of arrival of the Maps, promised by the Army, the Division made up its own Maps, as those were necessary for the preliminary preparation. The Army Maps arrived before the actual operations commenced, and were excellent.

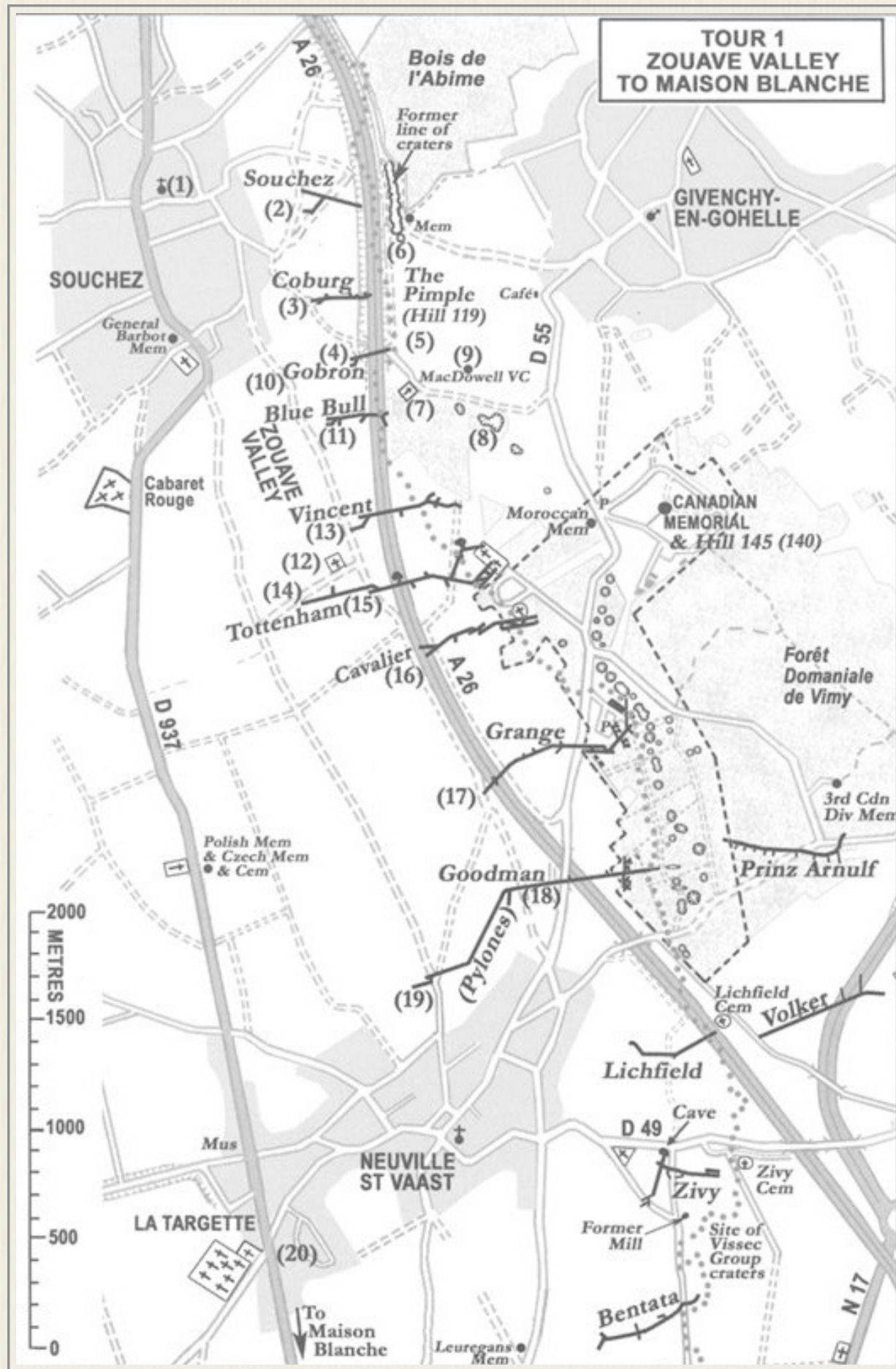


Men of No. 2 Sub-section of No. 1 Section, 185 Tunnelling Company. Most of the men were ex-coal miners.



Note: Here is the 185th Tunnelling Company, Royal Engineers. They arrived in the sector in 1916 and drove the Subways used by Currie's 1st Division. The Zivy Subway was 2,523 feet long. The Bentata was 2,229.

Map on next page.

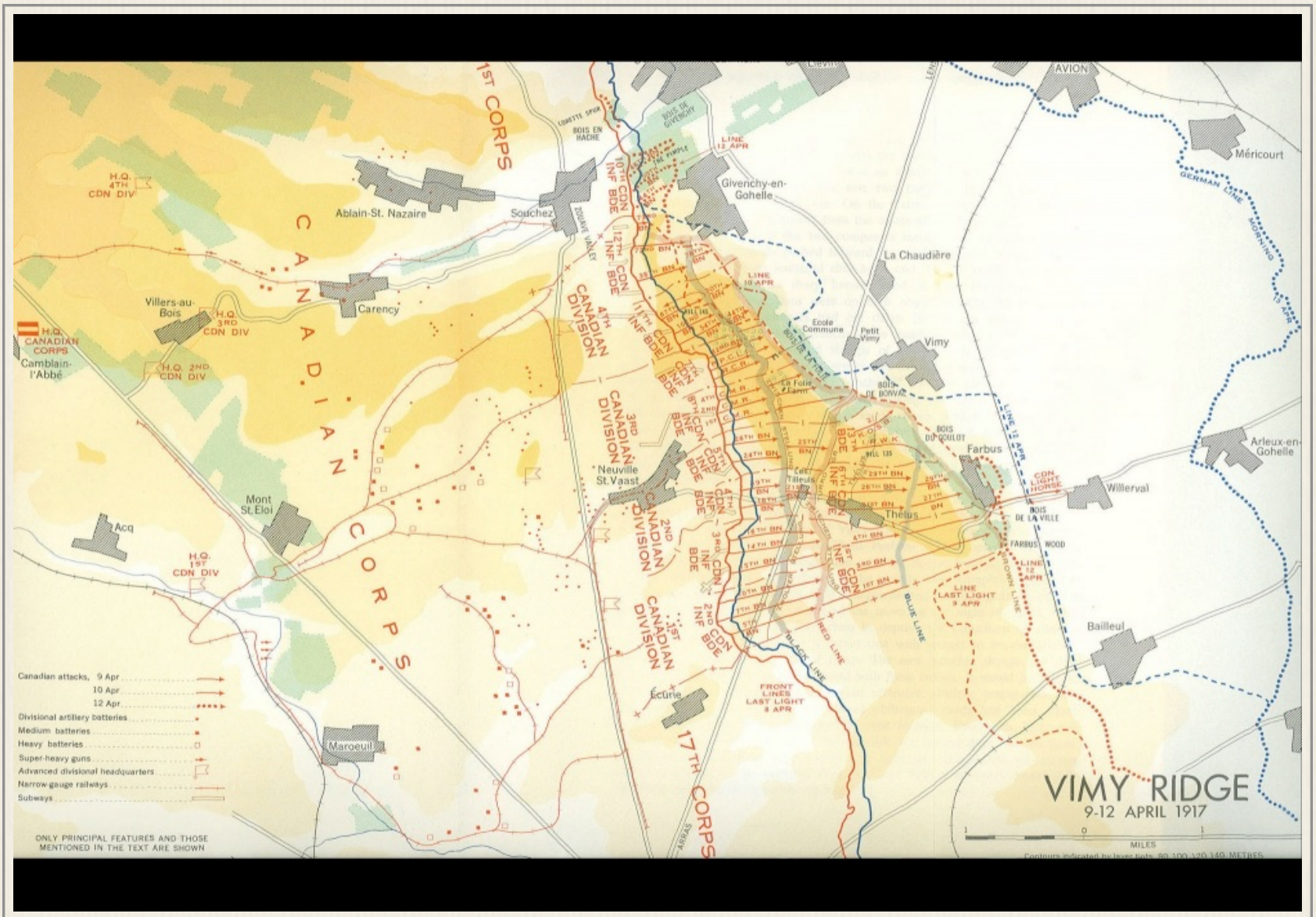


The Zivy and Bentata subways are at the bottom right.

Source: "The Underground War Vimy Ridge to Arras". Phillip Robinson and Nigel Cave



The Plan



1. The details of the plan are given in 1st Canadian Division Instructions for the Offensive, March, 1917, G.O-150 dated March 22nd.

Roughly, the task allotted to the Division was an assault on the German systems of trenches on a front of 1,800 yards and to a depth of 4,500 yards.

The attack was to be made in four bounds; each bound was to place a definite line of the enemy's defences in our hands and became the objective of the troops detailed for its capture.

2. The initial assault was to be carried out by two Brigades in line, the 2nd Canadian Infantry Brigade on the Right and the 3rd Canadian Infantry Brigade on the Left, the frontage of each Brigade being approximately 900 yards. These two Brigades had for their final objective the RED LINE. Each of these Brigades were to attack with three Battalions in the front line with the remaining Battalion in Brigade Reserve.

3. The 1st Canadian Infantry Brigade was to follow up the two leading Brigades, to go through them on the RED LINE and to capture remaining objectives. This Brigade also attacked with three Battalions in the front line, keeping one in reverse.

4. The 1st Canadian Division being on the right flank of the First Army its objectives, unfortunately, did not coincide with those of the 51st Division on its right, which was the left Division of the Third Army. Arrangements were made, however, to overcome this and for linking up the flanks of the two Divisions on their various objectives. The most pronounced instance of the above was the assault on the SWISCHEN STELLUNG, south of the NINE ELMS beyond the RED LINE. This assault was to be carried out by a Battalion (1st Canadian Infantry Battalion) of the 1st Canadian Infantry Brigade, which followed close on the heels of the 2nd Canadian Infantry Brigade and was to take place in conjunction with the assault of the 51st Division.



Narrative of Events

April 9



"The Battle of Vimy Ridge" by Richard Jack (1866-1952).

ASSEMBLY PREPARATORY TO THE ASSAULT.

1. The date by which preparations were to be complete was laid down as March 31st, 1917. Prior to this date it was made known that the Operation would not commence till the first week in April. "Z" day was later notified as being the 8th April.

April 5th. On this day information was received that "Z" day had been changed to April 9th. It was too late to cancel the moves of those portions of the assaulting Brigades for that day, but no further moves forward took place on April 6th. The alteration in "Z" day was most beneficial to the 1st Canadian Infantry Brigade as it gave the men an extra day's rest. This rest was much needed not only on account of the strain of holding the line during the preliminary bombardment, but also on account of the fatigue caused by the bad state of the trenches owing to weather conditions.

April 7th. The forward moves to the Assembly Areas were recommenced on April 7th and continued without a hitch. All troops were in their Assembly Areas ready to carry out the assault by 5.00 a.m. April 9th.

April 9th. 2. THE ASSAULT.

The Assault took place at 5.30 a.m. April 9th. The attack was carried out exactly as planned. The final objectives were gained and the subsequent advance made in accordance with time table laid down in the Preliminary Instructions. The Infantry followed the creeping barrages closely and this was one of the factors which led to success.

3. ORDER OF BATTLE - 2nd and 3rd CANADIAN INF. BDES.

The 2nd Canadian Infantry Brigade, on the Right, attacked with the 5th Canadian Infantry Battalion on the Right, the 7th Battalion in the Centre and the 10th Battalion on the Left, the 8th Battalion being in Brigade Reserve.

The 3rd Canadian Infantry Brigade, on the Left, attacked with the 15th Canadian Infantry Battalion on the Right, the 14th Battalion in the Centre, the 16th Battalion on the Left, and the 13th Battalion in Brigade Reserve.

4. ADVANCE TO THE BLACK LINE.

5.30 a.m. At 5.30 a.m. our barrage came down on the enemy front line, synchronization being perfect along the whole line. Simultaneously the six assaulting Battalions commenced to advance on the BLACK LINE Objective. The enemy immediately sent up all kinds of flares, Red bursting into two Green and Golden Spray Rockets being the most numerous. The German Artillery reply

was not heavy and what there was of it was scattered; few casualties are reported as a result of this fire.

The German machine guns, however, were handled with skill and bravery. The crews appeared to be picked men and in all cases continued fighting until killed or surrounded.

The 5th Canadian Infantry Battalion on the extreme right met with little opposition in the German Front Line Trenches, but on approaching the **SUNKEN ROAD** they came under a heavy rifle and machine gun fire from the **BEREITSCHAFT STELLUNG** about A.17.c.5.2 Lieut. W. WILLS, Commanding "A" Company, assisted by Major K.A. MAHAFFY, Commanding "B" Company, worked their way up to the machine gun, bombed out the crew and captured the gun.

All three of the assaulting battalions of the 2nd Canadian Infantry Brigade suffered casualties from machine gun fire, more especially "A" and "B" Companies of the 10th Battalion who were strongly opposed by the enemy **TOFF WEG**.
Insert Machine Guns here

5.50 a.m. By 5.50 a.m. the leading troops of the 2nd Canadian Infantry Brigade had reached the **LENS-ARRAS Road** and by 6.14 a.m. the Brigade was able to report that they had captured the **BLACK LINE**, and were in touch on their Right with the 1/4th Seaforth Highlanders, 51st (Highland) Division.

At the same time the 3rd Canadian Infantry Brigade was advancing on the Left of the 2nd Canadian Infantry Brigade and were undergoing very similar experiences.

The 15th Canadian Infantry Battalion on the Right of the 3rd Canadian Infantry Brigade advanced to the **BLACK LINE** with comparatively few casualties and no outstanding point is mentioned during their advance.

The 14th Canadian Infantry Battalion in the Centre of the 3rd Canadian Infantry Brigade reported that their leading waves found the **EISENER KREUZ WEG** manned by Infantry and Machine Guns who put up a stout resistance and

caused them many casualties. The machine guns were four in number and were dealt with as follows.

The Nos.1 of two of these guns were killed by hand grenades.

The gun on the extreme right of this battalion, which was enfilading the advance of the 15th Canadian Infantry Battalion was put out of action by Lieut. B.F. DAVIDSON who shot the crew with his revolver. The remaining gun on the left was dealt with by C.S.M., J.F. HURLEY who, unassisted, bayoneted the crew of three men and captured the gun.

The clearing of the EISENER KREUZ WEG was materially assisted by fire from Lewis Guns fired from the hip which kept the German heads down until our men were close enough either to bayonet or bomb them.

The 16th Canadian Infantry Battalion on the extreme left made slow progress at the start on account of the heavy machine gun fire encountered from behind the VISSEC Group of Craters and from the enemy Support Line.

As the line advanced it became apparent that the enemy was manning strongly the EISENER KREUZ WEG (the Support Trench about 200 yards West of and parallel to the LENS-ARRAS Road).

The 16th Canadian Infantry Battalion also met further opposition to their advance from the garrison of the EISENER KREUZ WEG and from a machine gun in a concrete emplacement concealed in an old haystack on the LENS-ARRAS Road about A.11.b.1.1. A direct hit was made on the haystack by a rifle grenade and the garrison then came out with their hands up.

Another machine gun, which was firing from a position between the EISENER KREUZ WEG and the BLACK LINE, was bombed and captured by Pte. MILNE of the 16th Canadian Infantry Battalion, who crawled up to the gun on his hands and knees.

6.30 a.m. The 3rd Canadian Infantry Brigade reached the BLACK LINE at approximately 6.30 a.m., the delay being caused by having to overcome the opposition in the EISENER KREUZ WEG. It has already been stated that the

destruction of this trench by our Artillery was not as complete as that of the remaining trenches in the area, owing to difficulties of observation.

A considerable number of prisoners, approximately 500, were captured by both Brigades during the advance to the BLACK LINE.

Few enemy dead were found West of the German Support Line, but East of this line, up to the BLACK LINE, many dead were found.

During the advance to the BLACK LINE, No.2 Special Company, R.E., fired a total of 128 heavy smoke bombs and 4" Stokes Mortars with the object of screening the attack of the Division from the direction of THELUS and HILL 135. This discharge, which lasted 15 minutes, was most successful, and the smoke cloud produced was thick and kept low.

5. CAPTURE OF THE RED LINE.

The Artillery Barrage, after passing the BLACK LINE, halted for just over half an hour to give Companies time to reform. The forming up of the new Assaulting Companies was easily effected within the time allotted and the troops recommenced their advance as soon as the barrage commenced to move forward at 6.45 a.m.

6.45 a.m. The next advance was over very open country as the net work of trenches in the Front System had been passed, and only five Communication Trenches had been dug by the enemy in this area, all of which lay perpendicular to the line of advance.

The SWISCHEN STELLUNG, which formed the RED LINE Objective, consisted of a main fire trench with a close support trench immediately behind it. It was sited on rising ground and commanded the whole area to the West and South-west. The trench was very strongly wired, but our wire cutting had been very thorough.

The battalions advanced on this line in the same order as already mentioned.

The 5th Battalion on the right, after clearing up the BLACK LINE, discovered that the enemy was holding the WITTELSBACHER WEG with three machine

guns and some infantry with bombs. They were quickly dealt with by our bombers and the machine guns captured.

No.23 Rifle Grenades were successfully used in this operation, to reach targets which were out of range of hand grenades. This operation took place just East of the BLACK LINE inside our protective barrage. The advance of this Battalion to the RED LINE was unopposed except by isolated snipers who were dealt with by rifle grenadiers. A considerable number of prisoners were captured in the RED LINE, and a party of 80 of the enemy who attempted to escape along the WITTELSBACHER WEG were engaged by Lewis Guns, and, those who were not killed, surrendered.

The 7th Canadian Infantry Battalion, during the advance to the RED LINE, was met by numerous small isolated parties scattered in shell holes. These parties were dealt with by bombers who worked their way forward up the Communication Trenches. This procedure, although it broke up the Line formation, undoubtedly saved many casualties.

The 10th Canadian Infantry Battalion on the Left of the 2nd Canadian Infantry Brigade, during their advance from the BLACK LINE, caused many casualties among the enemy, who retreated in front of them, by Lewis Gun and rifle fire. The Lewis Guns were fired from the hip using slings. Rifles were fired from the shoulder, the men pausing to fire a round. No difficulty was experienced by this Battalion until the SWISCHEN STELLUNG was entered. The enemy here had to be vigorously dealt with before he was subdued.

In the 10th Battalion only one officer, Major A.W. SPARLING, accompanied the attack from the BLACK LINE as all the others had become casualties. Major W.R. CRITCHLEY had been sent up from Battalion Headquarters and arrived just in time to enter the SWISCHEN STELLUNG, as the assault was carried out.

All Battalions of the 2nd Canadian Infantry Brigade were in the RED LINE Objective very shortly after 7.00 a.m.

7.00 a.m. Simultaneously with the advance of the 2nd Canadian Infantry Brigade, the Battalions of the 3rd Canadian Infantry Brigade advanced to the capture of the RED LINE, in their area. The advance was made without incident.

The SWISCHEN STELLUNG in this Brigade area had been very badly damaged, which may account for the comparatively weak resistance offered by the enemy to the troops of this Brigade.

The left Company of the 18th Canadian Infantry Battalion on the extreme left suffered some casualties from isolated parties of the enemy in shell holes, between the BLACK and RED LINES and from some infantry machine guns in the SWISCHEN STELLUNG. Our barrage, however, effectively dealt with these parties and the enemy was seen endeavouring to escape. Rifle and Lewis Gun fire was opened by men of this Company on the retreating Germans. Several machine guns were captured in this trench and many prisoners were taken in their dugouts.

One of these guns, near the RED LINE, was stalked and captured by Pte. MILNE, employing similar tactics as before. This very gallant young soldier was unfortunately killed later in the day.

7.35 a.m. The 14th Canadian Infantry Battalion reported at 7.35 a.m. to Brigade Headquarters that a machine gun was troubling them from about A.12.c.4.1, just East of the RED LINE. The Brigadier at once asked the Artillery, through his Liaison Officer, to deal with this gun, and within five minutes a 4.5" Howitzer had been turned on to the spot and had silenced the machine gun.

6. CONSOLIDATION OF BLACK AND RED LINES.

Orders had been issued that each objective was to be consolidated as it was captured irrespective of whether other troops had passed through or not. This order was complied with by both assaulting Brigades but two different methods were employed.

The 2nd Canadian Infantry Brigade employed the "Leap Frog" method of attack. Each of the assaulting Battalions attacked in four waves. The first two waves were allotted the BLACK LINE as their Objective which they had to capture and consolidate. The third and fourth waves which entered the hostile trenches closely in rear of the first two waves, in order to get within the hostile barrage, remained there until the BLACK LINE had been captured. They then advanced in artillery formation until they were in front of the BLACK LINE,

when they formed line preparatory to advancing behind the barrage to the RED LINE, which they were to capture and consolidate.

The reserve battalion (8th Canadian Inf. Bn.) was to remain under cover in the assembly position, ready to reinforce if necessary. This scheme worked well.

7.47 a.m. At 7.45 a.m. the 7th Battalion reported that owing to casualties it had not sufficient men to consolidate the RED LINE. The Brigadier at once sent forward a Company of the 8th Battalion to the BLACK LINE, and the company of the 7th Battalion, thereby released, went forward to assist in the consolidation of the RED LINE.

8.30 a.m. The 8th Battalion remained under cover until 6.15 a.m. when the Battalion was moved forward by its C.O. to the German Front Line System which was reached by 8.30 a.m. with the loss of only 21 casualties.

The 3rd Canadian Infantry Brigade adopted slightly different tactics. The three assaulting Battalions were responsible for the capture of the BLACK and RED LINES and the final consolidation of the RED LINE. The consolidation of the BLACK LINE was to be commenced by the three assaulting Battalions, but to ensure that sufficient weight was given to the attack on the RED LINE, the whole of the three Battalions were to take part in the advance.

The Battalion in Brigade Reserve was not to move up to the BLACK LINE until the last wave of the three assaulting Battalions was clear of it. It was then to advance and complete the consolidation of the BLACK LINE. This scheme was carried out as planned and no reinforcements to the assaulting Battalions were required.

The consolidation of the BLACK LINE was well under way by 6.30 a.m. in the Right Brigade area, and shortly after this hour it was commenced by the Left Brigade.

The consolidation of the RED LINE was commenced at 7.15 a.m. by all six assaulting Battalions.

7. ACTION OF 1ST CANADIAN INFANTRY BRIGADE.

The task of the 1st Canadian Infantry Brigade can be divided into the following phases:

- (a) The capture of the Eastern Arm of the SWISCHEN STELLUNG.
- (b) The capture of the BLUE LINE.
- (c) The capture of the BROWN LINE.
- (d) The exploiting of any successes as far as the Railway East of VIMY RIDGE.
- (e) The consolidation of the BROWN LINE.

5.30 a.m. The 1st Canadian Infantry Battalion advanced at 5.30 a.m. in the artillery formation in rear of the right of the 2nd Canadian Infantry Brigade and formed up in front of the RED LINE, after its capture, under cover of the barrage. At 7.42 a.m. two Companies of this Battalion advanced from the RED LINE in touch with the 1/4th Gordon Highlanders (51st Division) on the right and captured the Eastern Arm of the SWISCHEN STELLUNG.

In this attack the right Company was held up for a short time, but with the assistance of the left Company gained their objective. 74 prisoners were taken and 3 machine guns captured. Rifle Grenades were used to overcome machine guns with marked success.

During this assault the 10th Canadian Infantry Battalion from the RED LINE, about the NINE ELMS, caused many casualties to the enemy, by rifle and Lewis Gun fire, who were attempting to retreat from the SWISCHEN STELLUNG.

In the meantime, the 3rd Canadian Infantry Bn. in the Centre and the 4th Canadian Infantry Battalion on the Left had advanced in artillery formation from their assembly positions, which they left at 7.30 a.m., as far as the RED LINE in front of which they formed up preparatory to taking the BLUE LINE as soon as the barrage moved forward. The 2nd Canadian Infantry Bn. followed the 4th Canadian Infantry Battalion in Brigade Reserve.

Very few casualties were incurred by these Battalions during this advance.

9.55 a.m. At 9.55 a.m. the 4th Canadian Infantry Battalion, in touch with the right Battalion of the 6th Canadian Infantry Brigade on their left, commenced the advance on the BLUE LINE, and at 10.05 a.m. the 3rd and 1st Canadian Infantry Battalions, following the Barrage, prolonged the line on the right.

The 1st Canadian Infantry Battalion, during the advance to the BLUE LINE, was troubled slightly by a machine gun about POSEN HOUSE, with which they quickly dealt. The 3rd Canadian Infantry Battalion reached the BLUE LINE without incident. The 4th Canadian Infantry Battalion was 'Played Over' to the RED LINE by the Pipers of the 16th Canadian Infantry Battalion, and advanced to the BLUE LINE with very little opposition.

The consolidation of the BLUE LINE was commenced at once. Some small parties of the enemy observed beyond this line and were scattered by Lewis and Colt gun fire.

12.26 p.m. At 12.26 p.m. the barrage began to move forward again to the BROWN LINE and was closely followed by the 3rd and 4th Canadian Infantry Battalions. The 3rd Battalions, on the right, gained TIRED Trench by 12.47 p.m. and were on the BROWN LINE at the scheduled time about 1.20 p.m., but touch had been lost with the left of the 51 Division. This Battalion came under machine gun fire from the direction of FARBUS WOOD and from the South of the WOOD.

The 4th Canadian Infantry Battalion, on the left, gained the BROWN Objective with little opposition with the exception of a machine gun near BOIS GARRE, the crew of which surrendered after two rounds from a Stokes Mortar had been fired at them.

A few prisoners were captured by the 'Mopping up' party in BOIS CARRE. This small wood had been subjected to severe treatment by our Heavy Artillery, but the dugouts therein, with the exception of their entrances, had not been damaged.

The C.O. of the 4th Canadian Infantry Battalion, (Lt. Col. RAE), who had moved up close to the BLUE LINE, had ordered his Colt guns to move forward

with the leading waves so as to take advantage of any targets offered by the retreating enemy.

12.50 p.m. The advance continued to the Western line of German wire on the RIDGE. This wire was found to be almost intact but lanes were cut by Lieuts. R.S. HARRISON (O.C., Colt Guns), and H.E. SALSBUURY, assisted by Sergt. G. CROUCH, covered by fire from the Colt guns.

The barrage remained on the second line of German wire for twelve minutes.

A party of the enemy was seen near the crest of the RIDGE on the COMMANDANT'S HOUSE - FARBUS WOOD Road (about B.7.d.7.81/2), and was dispersed by the fire from the Colt gun, two of the party being taken prisoners.

Lieuts. HARRISON and SALSBUURY passed through our barrage and entered the German battery position in the Northern end of FARBUS WOOD. They found the position deserted and captured the guns, inscribing the name of their Battalion on them in chalk. These two Officers then returned through our barrage to the Western line of wire.

1.30 p.m. While waiting for the protective barrage to lift, Lieut. SALSBUURY observed German transport moving on the WILLERVAL - VIMY Road. The Colt guns were immediately turned on to this target. The range was coolly and accurately taken with a range finder by Pte. PRINTY. This fire must have been effective as some time later a party was seen moving wagons and dead horses off the road. The Colt guns also engaged parties of Artillerymen retiring from Battery positions.

2.00 p.m. At 2.00 p.m. the final barrage died down and patrols were pushed out by both the 3rd and 4th Canadian Infantry Battalions through FARBUS WOOD towards the Railway Line.

3.00 p.m. The 3rd Canadian Infantry Battalion patrols captured a Battery position in the Wood and about 3.00 p.m. passed back a party of 3 Officers and 35 men; one of the Officers was a Battalion Commander, another a Major of Artillery, the majority of the men being Artillerymen.

The 4th Canadian Infantry Battalion patrols captured the gun positions previously reconnoitred by Lieuts. HARRISON and SALSBURY and took prisoner a few of the enemy who were concealed in the Wood. The patrols pushed forward beyond the Eastern edge of the Wood and found no signs of the enemy West of the Railway. So hasty had been the flight of the German gunners that the Officers' lunch was found ready on the table of their dugout.

8. ACTION OF CORPS CAVALRY SQUADRON.

At. 11.55 a.m. a Squadron of the Canadian Light Horse had been placed under my orders for the purpose of pushing forward towards WILLERVAL to ascertain whether this Village was held by the enemy.

4.00 p.m. By 4.00 p.m. two troops had reached the West side of FARBUS WOOD. Patrols, each consisting of half a troop, were pushed out North and South of WILLERVAL, crossing the Railway at the Level Crossing. The remaining troop was kept in support.

The northern patrol entered WILLERVAL from the North-east, but had to retire under heavy machine gun fire. The southern patrol came under accurate machine gun fire from a trench South of WILLERVAL and from Infantry lying in the open.

9. CONSOLIDATION OF THE BROWN LINE.

As soon as the 3rd and 4th Canadian Infantry Battalions had reached the western line of German wire protecting FARBUS WOOD, the work of consolidation commenced.

The consolidation was carried out according to plans with the following modifications:-

(a) Owing to touch having been lost with the troops of the Division on the right from the BLUE LINE onwards, it was necessary to form a defensive flank facing South-west. A trench was dug and held by "B" Co., of the 3rd Canadian Infantry Battalion running approximately along the SUNKEN ROAD, which runs South-west from COMMANDANT'S HOUSE.

The Main Resistance Line was dug just West of Westerly line of wire.

(b) In the 4th Canadian Infantry Battalion area, the Main Resistance Line was brought forward between the two rows of wire in order that the Crest of the RIDGE could be commanded.

During this period the enemy scattered shells in varying intensity and irregularly over the whole area, his chief target appearing to be FARBUS WOOD.

A hostile machine gun, which caused a few casualties, was in action some 500 to 1,000 yards South of the Right of the Line which was being consolidated. Apart from this, the work of consolidation was not interfered with. The trenches were laid out with tape and were well traversed; the men worked with great energy so that by about 5.00 p.m., when a Divisional Staff Officer inspected the Line, a good trench had been dug.

10. DISPOSITIONS ON EVENING, APRIL 9TH.

The dispositions of the Division on the evening of April 9th were as follows:-

1st Canadian Infantry Brigade.

The 3rd Canadian Infantry Battalion on the Right: one Company finding the Forward Outposts, two Companies holding the Main Resistance Line, one Company forming a defensive flank facing South-west.

4th Canadian Infantry Battalion in touch with the 3rd Battalion on the Right and the 27th Battalion on its Left held the Main Resistance Line with Outposts in front.

2nd Canadian Infantry Battalion in Support: two Companies dug in immediately South of BOIS CARRE about 200 yards East of the Island Traverse Trench, one Company astride the LOEN WEG about the Island Traverse Trench, the remaining Company being used as a Brigade carrying party.

1st Canadian Infantry Battalion in Reserve dug in on the Eastern arm of the SWISCHEN STELLUNG and ALBRECHT AVENUE.

2nd Canadian Infantry Brigade.

8th Canadian Infantry Battalion holding the RED LINE within the Brigade boundary.

5th Canadian Infantry Battalion on the BLACK LINE and about the EREITSCHAFT STELLUNG and the SUNKEN ROAD.

7th Canadian Infantry Battalion in the old German Front Line System.

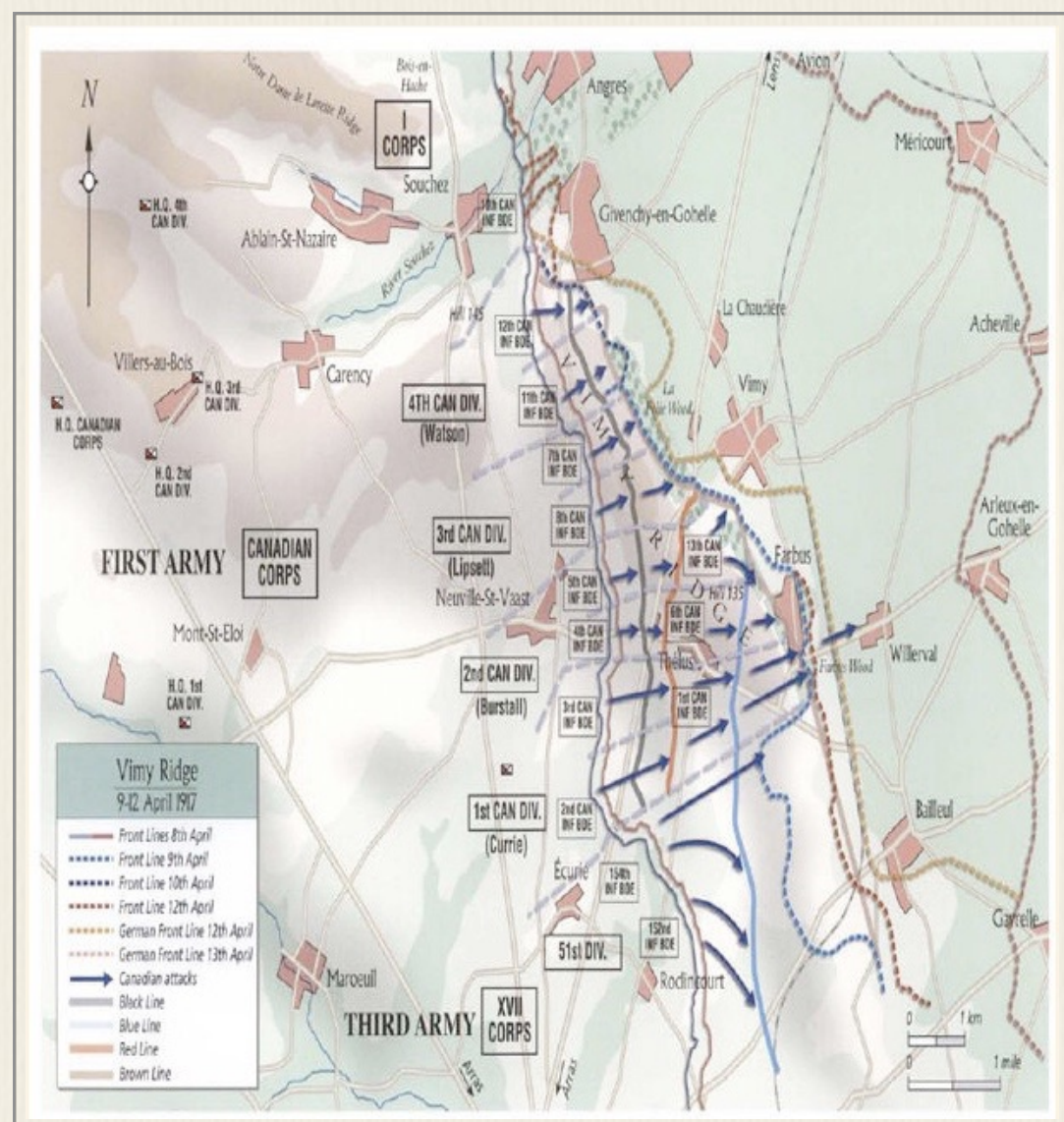
10th Canadian Infantry Battalion in the old British Line.

3rd Canadian Infantry Brigade.

15th and 16th Canadian Infantry Battalions holding the RED LINE.

14th Canadian Infantry Battalion behind the BLACK LINE.

13th Canadian Infantry Battalion in the old German Front Line System.

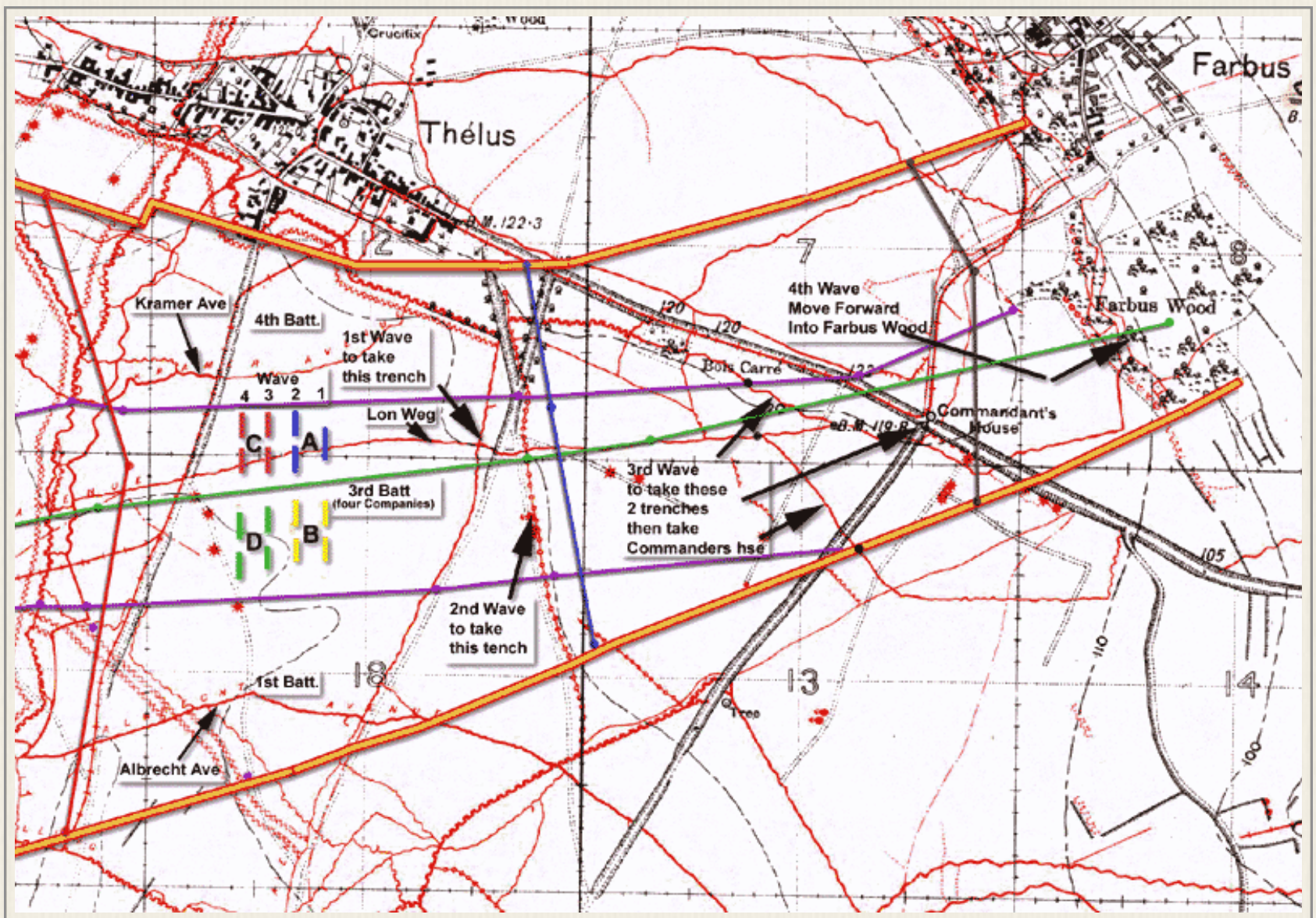


Results on April 9. Source: Chapter 10, Vimy Ridge and Arras: The Spring 1917 Offensive in Panoramas, Peter Barton.



Narrative of Events

April 10 - Onwards



April 9th/10th.

11. NIGHT, APRIL 9th/10th.

The night passed quietly. Our patrols going down to the Railway East of the RIDGE were fired at from the enemy on the East side of the Railway.

A heavy fall of snow rendered work very difficult, and caused great discomfort to the troops.

April 10th.

12. APRIL 10th.

The Divisional Headquarters moved from ECOIVRES to the SUNKEN ROAD near LABYRINTHE TUNNEL at 10.40 a.m.

Orders were received from the Canadian Corps that the Division was to extend its front to take over a portion of the line held by the 2nd Canadian Division.

During the day the dispositions of the 2nd and 3rd Canadian Infantry Brigades were modified, the 3rd Brigades being withdrawn into Divisional Reserve, in the area of the old British Front System. The 2nd Brigade in Divisional Support taking over the whole of the RED LINE and occupying the German Trenches West of this line.

During the day patrols were pushed out towards WILLERVAL, but were fired at by the enemy who were holding a line East of the Railway. A party of about 12 Germans were dislodged by our patrols from the ruined houses near the Level Crossing between FARBUS and WILLERVAL.

April 10th/11th.

13. NIGHT, APRIL 10th/11th.

The 1st Canadian Infantry Brigade extended its front Northwards, taking over a portion of the front from the 2nd Canadian Division.

April 11th.

14. APRIL 11TH.

During the day the 154th Infantry Brigade (51st Division) came up into the Line on the Right of the 1st Canadian Infantry Brigade on the BROWN LINE.

The enemy shelled the Eastern face of the RIDGE with varying intensity throughout the day, special attention being paid to FARBUS WOOD and BOIS de la VILLE.

April 11th/12th.

15. NIGHT, APRIL 11th/12th.

The 51st Division on our Right was relieved by the 2nd British Division.

April 12th.

16. APRIL 12th.

The situation was quieter throughout the day and the German shelling was not so persistent.

In the evening, the 2nd Canadian Infantry Brigade commenced to relieve the 1st Canadian Infantry Brigade, relief being reported complete at 4.30 a.m. on Apr.13th.

April 13th.

17. APRIL 13th.

During the night of April 12th/13th, the Woods on the Eastern side of the RIDGE were heavily shelled by the enemy.

In the morning indications seemed to point to the withdrawal of the enemy. Patrols were ordered to be pushed out towards WILLERVAL and gain touch with the enemy.

5.00 p.m. WILLERVAL. Reports, however, were received that the 8th Battalion had entered WILLERVAL at 5.00 p.m. without opposition, and that the 7th Battalion had advanced on the left of the 8th Battalion.

By 9.00 p.m. a Line had been established approximately 150 yards to the East of WILLERVAL and thence North along the road towards MONT FORET QUARRIES. Touch was maintained on both Flanks - on the Right with the 24th Royal Fusiliers, and on the Left with the 18th Canadian Infantry Battalion.

Patrols from the Canadian Light Horse were sent out to reconnoitre the ARLEUX LOOP, and the MONT FORET QUARRIES. The ARLEUX LOOP was found to be strongly held by the enemy, but the QUARRIES were found to be vacated.

During the advance of the 7th Canadian Infantry Battalion a British Aeroplane was brought down by enemy machine in Square T.27.a. The Pilot and

Observer who were uninjured, started to walk East, and a small party of the enemy were seen to advance to capture them. Lieut. FRASER and some Scouts of the 7th Battalion came up, and removing the Lewis Gun from the Aeroplane opened fire with it on the Germans and drove them off. The Airmen were thus brought back safely to our lines.

APRIL 14TH.

18. APRIL 14th.

The advance was ordered to be continued and the 2nd Canadian Infantry Brigade was detailed to act as an Advanced Guard to the Division.

At 7.00 a.m. the advance started.

The leading Platoon of the 8th Canadian Infantry Battalion on the right came under severe machine gun fire from the ARLEUX LOOP, but on our left an advance of about 800 yards was made.

A new line was consolidated as a result of this operation, and ran approximately from B.10.central where touch was established with the 2nd (British) Division to B.4.central, to T.28.central, T.22.central, where we joined up with the 2nd Canadian Division.

April 15th.

19. APRIL 15th.

The 3rd Canadian Infantry Brigade relieved the 2nd Canadian Infantry Brigade in the Forward Area.

20. This closed the First Stage of the fighting. The next few days were used to get guns forward, to carry out wire cutting on the ARLEUX LOOP, to give time for the necessary reconnaissances to be made, and for the formation of Forward Dumps.

The date proposed for the attack on ARLEUX and the plan of the operation underwent several changes and modifications during this period, before that finally adopted was approved.

It was originally intended to capture ARLEUX and FRESNOY in the same Operation, but recommendations were made that the attack should be carried out in two Stages; the First Stage to consist of the capture of ARLEUX Village, with the Trenches defending it, the Second Stage, to be carried out as soon as the wire cutting could be completed, was to comprise the capture of FRESNOY Village, with the Trenches covering it. These recommendations were finally approved.

The progress of the wire cutting on the ARLEUX LOOP caused some anxiety. The wire had to be cut by Heavy Artillery using 106 Fuse. The difficulty of observing the wire in certain places was very great. In addition to the topographical difficulties of observation, bad luck was experienced in obtaining Aeroplane photographs. On one occasion the Aeroplane was hit, and on another the camera was broken by hostile fire. Special efforts were made to ensure that the wire had been cut, and an Aeroplane carried out a very daring reconnaissance at a height of about 300 feet from the ground to examine the wire. A very valuable report was received from the Observer of this Aeroplane.

April 21st/22nd.

21. NIGHT, APRIL 21st/22nd.

On the night of April 21st/22nd, the 1st Canadian Infantry Brigade relieved the 3rd Canadian Infantry Brigade in the Forward Area.

April 26th/27th.

22. NIGHT, APRIL 26th/27th.

On the night 26th/27th April, the 2nd Canadian Infantry Brigade, who had been detailed to carry out the attack, relieved the 1st Canadian Infantry Brigade, and made their final preparations.

The Front to be attacked was about 2,600 yards.

Our Front Line at this period consisted of a nearly continuous trench East of WILLERVAL, but from 800 to 1,000 yards West of our Objective. In front of this line was a line of Posts. It was decided not to dig a Jumping Off Trench, but in order to get a correct alignment a trench was dug through by the 1st Canadian

Infantry Brigade, before they were relieved, parallel to and at an average distance of 500 yards from the German Trench right across our whole front. In front of this trench a line of Posts joined up by black wire was established about 400 yards from our Objective. On this line the assaulting Battalions were to form up.

23. The Instructions for the Attack on the OPPY-ACHEVILLE LINE were issued on April 25th. (See 1st Canadian Division G.0-87O).

The 16th Canadian Infantry Battalion was placed under the orders of the G.O.C., 2nd Canadian Infantry Brigade for the operation.

The 1st, 2nd, 3rd and 13th Canadian Machine Gun Companies each supplied one Battery for Machine Gun Barrage work. These Batteries were strengthened by two Batteries from the 1st Canadian Motor Machine Gun Brigade.

The attack was to be carried out by 3 Battalions in the Front Line and 2 Battalions in Support.

The 1st Canadian Infantry Brigade was in Divisional Support, with 2 Battalions on the Eastern side of the VIMY RIDGE, and the 3rd Canadian Infantry Brigade (less one Battalion) in Divisional Reserve.

April 27th/28th.

24. ASSMEBLY.

On the night of April 27th/28th the troops of the 2nd Canadian Infantry Brigade moved to their Assembly Area.

The 8th, 10th and 5th Canadian Infantry Battalions were formed up in depth behind the 'Jumping Off' Line in the above order from Right to Left. The 7th Battalion was in Support on the Right, 16th Battalion in Support on the Left.

Touch was established on the Right with the 2nd Battalion, Ox. and Bucks Light Infantry (2nd British Division), and with the 25th Canadian Infantry Battalion (2nd Canadian Div.) on the Left.

The 2nd Canadian Infantry Brigade advanced Headquarters was established at the S.W. corner of FARBUS WOOD.

April 28th. ARLEUX.

25. THE ASSAULT.

At 4.25 a.m. April 28th, our Barrage came down in front of the enemy trenches and commenced creeping towards the Village closely followed by the Assaulting Infantry.

The wire proved to be a considerable obstacle in places. The morning was unfortunately misty, and men could hardly see to pick out the gaps in the wire.

The 8th Canadian Infantry Battalion on the Right attacked with 3 Companies in line and 1 in Reserve. The Right Company reached their Objective after strenuous fighting, linking up with the 2nd (British) Division on their Right. The Left Company passed through the wire fairly easily and captured the trench without difficulty, but stout opposition was encountered in the Village, and the advance was checked by Machine gun and rifle fire from the Wood on its right. The men, however, fought their way through, gained, and consolidated their Final Objective about the same time as the Right Company. The Centre Company of this Battalion had considerable difficulty in getting through the wire on its front, and the enemy machine gunners and riflemen in the ARLEUX LOOP put up a strong resistance. The resistance was overcome and the Company continued its advance only to meet a Strong Point consisting of a Machine Gun in a Sap in front of a small but very deep Sunken Road at B.5.d.7.6. The fighting here was very stubborn, but the enemy were finally overcome; the Company was somewhat disorganized for a time and became mixed up with a Company of the 7th Battalion who had been moved up in Support.

Capt. E. MICHELMORE, however, arrived shortly after this with a Platoon of the 8th Canadian Infantry Battalion and collecting all the men that were left of the Centre Company continued the advance and reached the Final Objective of this Company, filling up the gap which had temporarily existed between the Right and Left Companies.

The Reserve Company of the 8th Canadian Infantry Battalion took up a position in rear of the Front Line and established three Strong Points - one South of the Wood, and two just West of the North edge of the Wood.

The 10th Canadian Infantry Battalion in the Centre also attacked with three Companies in the Front Line.

The Right and Centre Companies had no difficulty in passing the wire or the enemy Front Line Trench. The wire in front of the Left Company, however, caused considerable delay and some casualties were inflicted by the hostile barrage which came down about 8 minutes after Zero hour.

Two machine guns just inside the wire on the North-west of the Village delayed this Company considerably until the crews of both guns were bombed and shot from a flank. In one case, Pte. MCMACKING engaged the enemy gun from the front with his Lewis Gun, and when this jammed used a rifle compelling the enemy to keep down until our bombers had outflanked the crew.

The Right and Centre Companies encountered strong opposition in the Village from the enemy Infantry, but with bayonets and rifle grenades soon overcame them.

A Machine Gun which was enfilading the 8th Canadian Infantry Battalion from the West of the Village was captured by Capt. G.C. BURBIDGE and some of his men, using rifles and rifle grenades. On emerging from the Village the enemy was seen to be retiring in good order in two waves and casualties were inflicted on them.

A Line was established and digging commenced at once, Lewis Guns being pushed ahead into shell holes.

The 5th Canadian Infantry Battalion on the Left also attacked with three Companies in the Front Line.

The Right and Centre Companies experienced no exceptional difficulty in their advance, and kept touch with the 10th Canadian Infantry Battalion on their Right.

The Left Company, however, found that there was only one gap in the German wire on their Front, and that this gap was covered by a Machine Gun. Major K.L.T. CAMPBELL bravely attempted to rush and bomb this gun, but was killed

whilst so doing. The gun was eventually captured by means of rifles and hand grenades.

The Support Company following closely behind the three leading Companies saw the predicament of the Left Company and a party entered the old German trench on the front of the Centre Company and succeeded in bombing up the trench and clearing the garrison. This enabled the advance to proceed towards the Second Objective of this Battalion.

On the left of the 5th Canadian Infantry Battalion the advance of the 25th Canadian Infantry Battalion (2nd Canadian Division) was hung up and became somewhat disorganized. On Supports coming up they unfortunately mistook the Sunken Road running through T.29.central for the one running through T.29.b, and halted, thinking they were on their Final Objective. The Left of the 5th Canadian Infantry Battalion was, therefore, in the air. The enemy brought enfilade machine gun fire to bear on the Left Company forcing it to retire behind the Sunken Road in T.29.b and d as far as the old German Trench immediately behind this road. This position was then consolidated.

Hostile Aeroplanes circled over our positions shortly after the consolidation was begun, and although the enemy kept up a strong Artillery fire on our new positions the casualties they caused were not very numerous.

About 8.30 p.m. the enemy were seen to be preparing to attack our Left with about 100 men, but our barrage came down on them, and no actual attack developed.

26. On the evening of April 28th, the situation was that the Village and WOOD of ARLEUX were in our hands, and that the three Battalions were holding a Line East of the Village in touch with the troops on both flanks.

The Line on the extreme Left was not as far forward as had been intended, as it had to swing back to conform to the 2nd Canadian Division on the Left.

One Company of the 7th Canadian Infantry Battalion had reinforced the 10th Canadian Infantry Battalion and were dug in close behind it. Two Platoons of the 16th Canadian Infantry Battalion had also been sent up to Support the 5th

Canadian Infantry Battalion on the Left. The 7th Canadian Infantry Battalion had been moved up from its Assembly position to positions immediately West of ARLEUX in and about the old German Trench. The 16th Canadian Infantry Battalion had also been moved forward from its Assembly position.

27. APRIL 29th.

Shortly after 4.00 a.m. on April 29th our barrage was called for and came down simultaneously with that of the enemy. Again no hostile attack developed.

The enemy bombarded the whole of the newly captured area, paying special attention to the Village of ARLEUX. WILLERVAL was also heavily shelled, several gas shells being used.

During the day the Boundary between the 1st and 2nd Canadian Divisions was re-adjusted lessening the frontage to be held by the 1st Canadian Division.

The extreme Left of the 5th Canadian Infantry Battalion was withdrawn to enable the 2nd Canadian Division to re-bombard the German trenches, to enable them to gain the line of their Final Objective, which operation they succeeded in carrying out.

April 29th/30th.

On the night of April 29th/30th the 3rd Canadian Infantry Brigade relieved the 2nd Canadian Infantry Brigade in the Forward Area.

April 30th-May 3rd FRESNOY.

28. APRIL 30th - MAY 3rd.

The next few days were spent in preparing for the attack on FRESNOY. Wire cutting and trench destruction, as well as the destruction of the houses in FRESNOY, had to be carried out. Posts were pushed out in order to form a 'Jumping Off' line similar to that for the ARLEUX operation.

The wire cutting was a much easier operation in this case than in that for the attack on ARLEUX, but the "foot-shaped" hill South-east of FRESNOY Wood caused us anxiety, as it was realised that this hill overlooked most of the ground allotted as our objective. Behind this hill the enemy could approach unseen up the

Valley leading from IZEL. In addition to this, it was known that the enemy could overlook us from the high ground about the CHEZ BONTEMPS Brewery.

The "foot-shaped" hill, mentioned above, was in the area in front of the Division on our right, but in order to make certain that it should be occupied arrangements were made with the Division on our Right that the 1st Canadian Division should also establish a post approximately at the cross roads on the hill about C.1.b.central.

Special Golden Rain Rocket Signals were to be carried by the troops on our extreme right and left with a view to being used as a signal to our Heavy Artillery in the event of the enemy approaching from the East.

The Brewery of CHEZ BONTEMPS was specially dealt with by a concentrated bombardment of heavy Howitzers during the period of consolidation.

29. The 1st Canadian Infantry Brigade carried out the attack with the 3rd Canadian Infantry Battalion (less 2 Companies) on the Right, the 2nd Canadian Infantry Battalion in the Centre, and the 1st Canadian Infantry Battalion on the Left, the 4th Canadian Infantry Battalion being in Brigade Reserve. The remaining two Companies of the 3rd Canadian Infantry Battalion were to be prepared to form a defensive flank on our Right should the Division on our Right be held up.

A composite Brigade of the 2nd (British) Division attacked on the Right, and the 8th Canadian Infantry Brigade on the Left.

Just prior to the attack the enemy commenced a severe bombardment of the Forward Area causing some casualties, especially to "D" Company of the 3rd Canadian Infantry Battalion.

30. MAY 3rd.

In order to suit operations to the South, Zero hour was fixed at 3.45 a.m. which meant that the Assault had to be commenced in the dark.

At 3.45 a.m. the Assault was started behind a creeping barrage.

The two Companies of the 3rd Canadian Infantry Battalion on the right found that the wire on their front had been successfully cut but difficulty was experienced in walking over the loose stands and in moving through the Wood South of the Village on account of the darkness. These two Companies reached their final objective shortly after 5.00 a.m. and commenced consolidation.

Owing to the situation on the right being obscure Capt. H. HUTCHISON decided to throw back a line of posts approximately along and on the North side of the German Communication Trench running through C.1.central.

It was subsequently ascertained that the Division on our right had not succeeded in gaining their objectives.

Owing to Artillery and direct machine gun fire throughout the day, it was found impossible to reinforce the 3rd Canadian Infantry Battalion until nightfall.

Owing to the darkness several of the numerous dugouts in FRESNOY WOOD were over-run in the first assault and the occupants caused a few casualties during the early morning. It was not possible to 'Mop up' these parties of the enemy until nightfall owing to the heavy German Artillery fire which was directed on the Wood all day.

It should be noted that the enemy often employs these tactics. On our troops, to all intents and purposes capturing - but sometimes over-running - a strong system of dugouts - such as existed at FRESNOY, MOUQUET FARM, etc., - he immediately shells the area heavily and continuously. His garrison hides in the deep dugouts, many of which are very intricate, while our assaulting troops suffer severely. Here I am convinced that from these especially strong centres he has a cable communication to the rear. At a given hour, no doubt agreed upon by his troops in the hidden dugouts and his Artillery, the latter ceases fire and his troops emerge from the dugouts and attack our depleted garrison. We then become the attacked instead of being the attackers, and can get no help from our Artillery. To capture such strong points is a very difficult operation and necessitates a most careful, and very well thought out plan. It is very wrong to ask troops to attack such places in the dark.

31. The 2nd Canadian Infantry Battalion in the Centre attacked as follows -

One Company was allotted the task of capturing and consolidating the German Trenches West of FRESNOY Village.

Two Companies then passed through and were responsible for the capture of the Village and part of the Park North of the village and for establishing a Line East of the Village.

The remaining Company was to assist in the 'Mopping up' and was then to relieve one of the Companies on the Final Objective. This plan was carried out in its entirety.

The leading Company followed the barrage so closely that the enemy were only able to put up two calls for his barrage.

In spite of machine gun fire, the leading lines entered the hostile trench on time. The machine guns were all dealt with by encircling movements, bombs and rifle grenades were used to destroy the crews, while the guns were engaged by rifle or machine gun fire from the front. Over 200 prisoners, including four Officers and a Sgt. Major, are claimed by this Battalion during the operation. Consolidation was carried out by this Company about 50 yards East of the German Trenches and a good fire trench had been dug before the hostile shelling became intense.

The two Companies destined for the Final Objective moved forward five minutes after Zero hour and passed over the German Trenches. The Right Company was opposed by a machine gun in the Village, but this gun was captured by an encircling movement of bombers. The Company then passed on through the Village, cleaning up dugouts and houses, and reached its Final Objective, commencing consolidation in touch with the Company on the Left.

The Left Company was held up in front of the German wire for 15 to 20 minutes by a machine gun. This gun was similarly dealt with by flanking parties and about 25 unwounded prisoners were captured. The advance through the Village was continued unopposed and consolidation was commenced in line with the Right Company and with the 1st Canadian Infantry Battalion on the Left.

A patrol of this Company, under Sergt. AMES, moved down the road running North-east from the centre of FRESNOY and captured two Officers and 50 Other Ranks in a large dugout thought to be a Signalling Station. Sergt. AMES was the leader of the party that had previously captured the machine gun mentioned above.

The fourth Company, according to plans, moved up in rear and relieved the Right Company on the Final Objective.

The 1st Canadian Infantry Battalion on the Left attacked with two Companies in the front line whose task was to capture and consolidate the enemy trench West of FRESNOY Park. The remaining two Companies were to pass through and consolidate a line East of the Park.

The two leading Companies carried out their task according to plan, the wire proving to be no serious obstacle. The Right Company, which passed through this line, reached the Final Objective without undue opposition and commenced digging in touch with the 2nd Canadian Infantry Battalion on its Right. The Left Company was held up for a considerable period on the Northern edge of the Park owing to the troops of the 2nd Canadian Division on their Left being unable to make headway. The Company was also subjected to enfilade fire from two machine guns in concrete emplacements just North of the Divisional Boundary. One of these machine guns was silenced by a Stokes Gun which had been attached to the Battalion, the other was disposed of by bombers. The Left Company, although considerably delayed, managed to maintain touch with the Company on the Right, but had to form a defensive flank on its Left, facing North.

32. The 2nd Field Company, C.E., had been placed under the orders of the G.O.C., 1st Canadian Infantry Brigade, to assist in consolidation. This Company carried out its task most efficiently, the trenches and strong points were carefully taped out and the work well supervised, at the same time accurate reports were sent in as to the progress of the work. These reports were afterwards verified by Aeroplane photographs and found correct.

The 4th Canadian Infantry Battalion, in Brigade Reserve, was used in the evening to reinforce the three Battalions in the Front Line, one Company being sent to each Battalion, the remaining Company remained in close support West of ARLEUX.

At. 9.00 a.m. the 14th Canadian Infantry Battalion and two Sections of the 3rd Canadian Machine Gun Company were placed under the orders of the G.O.C., 1st Canadian Infantry Brigade, and the 14th Battalion commenced moving forward from FARBUS Village towards ARLEUX.

Between 10.00 a.m. and 1.00 p.m. the enemy made two counter attacks on our newly won positions. The first one was against the Left and was dispersed by rifle and machine gun fire before our Artillery barrage came down. The second counter attack appeared to be directed against our Right and Centre; again the enemy were caught by rifle and Lewis Gun fire and also by the Artillery barrage, and the attack was broken up.

The shelling throughout the day was intense, especially in the area immediately in rear of our Front Line and on the Southern end of the ARLEUX Village.

No further counter attacks were made but the enemy attempted to dig a trench about 400 yards East of our Line.

Small parties of the enemy, moving across the open, were successfully engaged by a Battery of the YUKON Motor Machine Gun Company on our Right Flank, inflicting many casualties.

33. The night of May 3rd/4th was spent in bringing up Supplies, S.A.A., and Bombs and in improving the consolidation.

34. On May 4th no counter attack developed, and the situation was considerably improved on the Left as the 2nd Canadian Division were able to make ground and gained the old German Support Trench on the FRESNOY-ACHEVILLE Line.

On our Right a Brigade of the 5th Division had relieved the Composite Brigade of the 2nd (British) Division.

During the day the 95th Infantry Brigade (5th British Division) started to relieve the 3rd Canadian Infantry Brigade in Support, the 2nd Canadian Infantry Brigade moving back into the Corps Reserve Area.

May 4th/5th.

35. During the night of May 4th/5th the 95th Infantry Brigade completed the relief of the 1st Canadian Infantry Brigade.

As the Battalions of the 1st Canadian Infantry Brigade were moving out the enemy bombarded WILLERVAL, and its vicinity, with Gas Shells. Much delay was caused, but, although some of the men were slightly affected by the gas, no casualties resulted.

May 5th.

36. At 2.45 a.m. on 5th May, on the completion of the Relief of the Forward Area, the G.O.C., 5th (British) Division took over Command of the 1st Canadian Division Area.

During the day, the Headquarters of the 1st Canadian Division moved to BRUAY.

May 6th.

37. On May 6th, the 1st and 3rd Canadian Infantry Brigades moved into the Corpse Reserve Area.



Artillery

Preparations for the attack on Vimy



PART I.

PREPARATIONS FOR THE ATTACK ON VIMY RIDGE.

December 1916.

On December 13th., 1916 when the 1st. Canadian Divisional Artillery were in "Rest" with H.Q. at PURNES, the first intimation was received that the Canadian

Corps would be partaking in Offensive Operations which were designed to take place in the early Spring of 1917.

Preliminary Reconnaissances.

Instructions for an Artillery Reconnaissance were issued by G.O.C.R.A., Canadian Corps, this reconnaissance to be carried out by Reserve Divisional Artillery (late Lahore Divisional Artillery) and 2nd. and 3rd. Canadian Divisional Artillery.

The 1st. C.D.A., not being in the line, were not detailed for this work.

The contemplated Operation was described as on "Offensive against the VIMY RIDGE".

Relief of 2nd. C.D.A. by 1st C.D.A. January 25th.

On January 25th., 1917 the 1st. Canadian Divisional Artillery relieved the 2nd. Canadian Divisional Artillery who were covering the front from SOUCHEZ River to the DOUBLE CRASSIER.

From this date the 1st. C.D.A. participated in the elaborate Artillery preparations for the operations of April 1917.

Building of Positions on I Corps Battle Front.

The interests of the 1st. C.D.A. were at this time considerably divided.

The front being covered was to the North of and not included in, the First Army Offensive Battle Front.

The Reconnaissance and preparation of Artillery positions entrusted to the 1st. C.D.A. concerned the Battle Front of the I Corps, and was to the North of the Canadian Corps Battle Front.

Lastly the Battle Front of the 1st. Canadian Division, and consequently of the 1st. C.D.A. lay on the Right of the Canadian Corps Battle Front, opposite VIMY Ridge.

The date of the Offensive was at this time in doubt, but preparations were being pushed ahead with a view to "Z" Day being early in March.

Severe weather at the end of January, and at the beginning of February hindered work, but progress was made by Batteries and Brigades on positions immediately North and immediately South of the NOTRE DAME de LORETTE Ridge. This work was done in consultation with the G.O.C.R.A. I Corps whose Artillery would eventually operate on this front.

The Medium and Heavy Trench Mortar Batteries were also busily engaged in building extra emplacements.

At the end of February and in the first week in March the 1st. Canadian Division effected some successful raids, demanding considerable Artillery activity, which to some extent detracted from a concentration of purpose on the new Battery Positions, designed for the I Corps Battle Front.

Relief of 1st. C.D.A. by 24th. D.A. March 9th.

At 10.00 a.m. on March 9th. the G.O.C. 1st. C.D.A. handed over to G.O.C. 24th. Divisional Artillery, and on the same day moved his H.Q. to ECOIVRES, establishing his Offices at the Chateau, in which the 1st. Canadian Division H.Q. were already situated.

Relief of 2nd. C.D.A. by 1st. C.D.A. March 11th.

On the nights March 9th/10th. and 10th/11th. the 3rd. and 12th. Brigades C.F.A. relieved those Brigades of 2nd. Canadian Divisional Artillery which were covering the Battle Front of the 1st. Canadian Division and at 9.00 a.m. on March 11th. the G.O.C. 1st. C.D.A. assumed command of the Artillery covering that front.

Owing to the reorganisation of all British Artillery into six-gun Batteries, and the contemplated reorganisation of the Field Artillery of the Canadian Corps on the same lines, all positions on this front were built for six-gun Batteries. The 3rd. and 12th. Brigades C.F.A. were disclosed as follows:-

Right Group 1st. C.D.A. Lieut-Col. S.B. Anderson.

12th. Brigade C.F.A.

M.Q. 12th. Brigade C.F.A.

(4 guns 7th. Battery C.F.A.

Composite Battery (2 guns 49th. Battery C.F.A.

(H.Q. 47th. Battery C.F.A.

(4 guns 8th. Battery C.F.A.

Composite Battery (2 guns 49th. Battery C.F.A.

(H.Q. 8th. Battery C.F.A.

Left Group 1st. C.D.A. Lieut-Col. E.W. Leonard, D.S.O.

3rd. Brigade C.F.A.

(4 guns 10. Battery C.F.A.

Composite Battery (2 guns 11th. Battery C.F.A.

(H.Q. 10th. Battery C.F.A.

(4 guns 12th. Battery C.F.A.

Composite Battery (2 guns 11th. Battery C.F.A.

(H.Q. 12th. Battery C.F.A.

9th. (Howitzer)Battery C.F.A.

X.I.C. Medium Trench Mortar Battery and one Heavy T.M. of V.I.C. Heavy T.M. Battery were also in action. The remainder of the 1st. C.D.A. was situated as follows:-

1st. Brigade C.F.A. in wagon lines at CAMBAIN L'ABBE.

2nd. Brigade C.F.A. in Rest area near MAISNIL LES RUITZ their move down to the 1st. Canadian Division area having been delayed on account of an adequate supply of water not being yet installed.

The 1st. Canadian Divisional Ammunition Column at ECOIVRES, and Trench Mortar Batteries (Except those in action) at CAMBLAIN L'ABBE.

On March 11th., therefore, the 1st. Canadian Divisional Artillery was occupying the area, and covering the front allotted to it for the Spring Offensive.

Artillery allotted to the Attack of the 1st. Canadian Division.

The Artillery allotted to the Attack of the 1st. Canadian Division was:-

108 eighteen-pounders.

36 4.5" howitzers.

18 Medium Trench Mortars.

5 Heavy Trench Mortars.

These numbers were subsequently increased to:-

144 eighteen-pounders (24 batteries).

34 4.5" howitzers (6 batteries).

18 Medium Trench Mortars.

6 Heavy Trench Mortars.

The three existing Trench Mortar Batteries were reinforced by X/7 Medium Trench Mortar Battery and fifty men of the 1st. Canadian D.A.C. who had been trained at First Army T.M. School.

One Officer from each of the 1st. and 2nd. Brigades C.F.A. and 1st. Canadian D.A.C. had also attended the T.M. School, and was attached for duty to the Trench Mortar Batteries.

Building of Battle Battery Positions.

The preparation of positions for this large number of guns involved much labour and material. Progress on them had to some extent been impeded by the fact that continuity had already been once broken when the 2nd. C.D.A. relieved the 3rd. C.D.A. at the end of February.

The work to be done was allotted to 1st. 2nd. and 3rd. Brigades C.F.A.

Artillery Concentrations.

On March 12th. the 26th. Army Brigade R.F.A. commanded by Lieut-Colonel G.B. Hinton, C.M.G., R.F.A. joined the 1st. Canadian Division, and went into Wagon Lines at CAMBLAIN L'ABBE.

By March 17th. the whole of the 2nd. Brigade C.F.A. had moved down from MAISNIL LES RUITZ to Wagon Lines at CAMBLAIN L'ABBE.

Re-organisation of 1st. C.D.A. March 18th.

On March 18th. the 1st. Canadian Divisional Artillery began to reorganise into six-gun batteries; this necessitated a few minor reliefs which were completed on the night of March 19th/20th.

The composition of the Artillery, covering Battle Front of 1st. Canadian Division became -

Right Group Lieut-Colonel S.B. Anderson

12th. Brigade C.F.A

H.Q. 12th. Brigade C.F.A

3rd. and 5th. Batteries C.F.A.

Left Group Lieut-Colonel E.W. Leonard, D.S.O.

3rd. Brigade C.F.A.

H.Q., 3rd. Brigade C.F.A.

10th. and 12th. Batteries C.F.A. and

9th. (How.) Battery C.F.A. (4 guns).

Re-organisation of 1st. C.D.A. March 18th. Cont'd.

These changes resulted in a re-allotment of the tasks in connection with the work on battery positions etc.

Time was getting short, for on March 15th. instructions had been received from 1st. Canadian Division that all preparations must be completed by March 31st.

Material was at this time scarce, and the hard weather having broken, practically all immediate supplies were required for the building of ammunition pits.

Ammunition Dumps.

The formation of the necessary Dumps at the Battery Positions also became a serious problem, and called for a very strenuous effort on the part of all horses.

R.A. Canadian Corps had fixed the Ammunition Dumps at 1500 rounds per gun (18-pr) and 1000 rounds per 4.5" howitzer. With all the vehicles and horses available it was just feasible to get the ammunition forward in time.

Throughout this period the German retirements South of the River SCARPE indicated that they might also fall back North of the River.

In order that everything might be in readiness to deal with such a retirement, the Artillery covering 1st. Canadian Division was reinforced on March 21st by all available batteries in rest.

This resulted in the following regrouping which took effect from 8.00 a.m. on March 23rd.-

Right Group 1st. C.D.A. Lieut-Col. C.H. Maclaren, D.S.O.

1st. Brigade C.F.A.

H.Q. 1st. Brigade C.F.A.

26th. Army Brigade R.F.A.

1st. Brigade C.F.A.

All Medium Mortars on Right Group front under the command of Lieut. J. Ward.

Left Group 1st. C.D.A Lieut-Col. S.B. Anderson.

2nd. Brigade C.F.A.

2nd. Brigade C.F.A.

3rd. Brigade C.F.A.

All Medium Mortars on Left Group under the command of Lieut. L.G. Black.

Policy prior to Z-20 Day.

(a) The Artillery policy up to this time had been to bring fire to bear on any enemy movement by day.

(b) To harass the enemy's approaches by night.

(c) To devote a considerable proportion of the available 4.5" Howitzer ammunition on deliberate bombardment of communication trenches.

Opening of period Z-20 to Z-7 day.

On March 22nd. instructions were received that the period Z-20 should be considered as commencing from that day.

This indicated that the attack would take place about April 11th.

For the period Z-20 to Z-7 only the following batteries were to be employed, the remainder being considered as "silent" batteries.

1st., 2nd., 3rd., 5th., 6th., 7th., eighteen-pounder Batteries C.F.A., and 2nd., and 9th., Howitzer Batteries C.F.A.

Policy for period Z-20 to Z-7.

The policy for this period was:-

(a) Continuation of building of positions, O.P's, etc.

(b) Selection of Advanced Wagon Lines.

(c) Wire-cutting.

- (d) Harassing fire by day and night.
- (e) Deliberate bombardment of Enemy's Defences.
- (f) Formation of ammunition dumps at gun positions.

Heavy Artillery.

The Heavy Artillery work on the front of the 1st. Canadian Division was in the hands of Lieut-Colonel Walters, R.G.A. Commanding No.1 Double Group R.G.A., and all 4.5" Howitzer Bombardments were arranged in consultation with him.

This Group continued to support the 1st. Canadian Division up to the time of its relief, after the capture of FRESNOY.

Arrival of 31st. Div.Arty.

On March 25th. the 31st. Divisional Artillery (Brigadier-General E.P. Lambert, C.B., R.A.) under the temporary command of Lieut-Colonel C.B. Simonds, joined the 1st Canadian Division and established their H.Q. in the grounds of ECOIVRES CHATEAU.

The 170th. Brigade R.F.A. of this Divisional Artillery moved into action on the same night, relieving the 26th Army Brigade R.F.A. who moved forward to advanced positions East of the ARRAS-NEUVILLE ST. VAAST Road, and remained "silent" till "Z" day.

The 170th. Brigade R.F.A. replaced 26th. Brigade R.F.A. in Right Group.

The 165th. Brigade R.F.A. (also of 31st. Divisional Artillery) took over incomplete positions near MAISON BLANCHE, and moved into them on the night March 30th/31st.

From noon March 31st. the 31st. Divisional Artillery with 1st. Brigade C.F.A. (attached) covered the Right Group front. This front coincided with the Battle front of 2nd. Canadian Infantry Brigade, and from this date close Liaison was established between 31st. Divisional Artillery Group and 2nd. Canadian Infantry Brigade.

Possibility of German Retirements.

Further retirements on the part of the enemy opposite the Third Army resulted in orders being issued by Canadian Corps on March 25th. that the 1st. Canadian Division must be prepared at 24 hours notice to capture the German Front Line System in cooperation with the XVII Corps.

In the event of this Operation being ordered, it would be carried out by the 2nd. Canadian Infantry Brigade.

The German wire on this front was very strong, and the Right Group had to set to work to cut lanes, so that if the attack was ordered at short notice, there would be some possibility of the attacking troops getting through. Preparations for this special Operation were not allowed to interfere with the preparations for the main attack.

Completion of Concentration.

On March 29th. the Battle Strength of the 1st. Canadian Divisional Artillery was completed by the arrival of the 5th (Army) Brigade, Royal Horse Artillery, and 72nd (Army) Brigade, Royal Field Artillery.

The former commanded by Lieut-Colonel A.T. Butler C.M.G., R.H.A., and the latter by Colonel J. M. Stirling, C.M.G., R.F.A.

The 5th. Brigade R.H.A. were given incomplete positions just East of those occupied by the 26th. Brigade R.F.A. on the Eastern side of the ARRAS-NEUVILLE ST. VAAST Road.

The 72nd. Brigade R.F.A. on arrival moved straight into positions North of the BRUNHAUT Farm-AUX RIETZ Road.

The 5th. Brigade R.H.A. were ordered to move into action as soon as the positions were ready. This move required several trench bridges, and it was not until April 3rd. that all batteries were in action.

Silent Battery Positions.

The positions allotted to the 5th. Brigade R.H.A. and 26th. Brigade R.F.A. were sited about 700 yards behind our front line; owing to the ground rising from

the Battery Positions to our front line and then falling away towards the SWISCHEN STELLUNG, those batteries could only clear the crest, i.e. the parapet of our front line, at ranges of about 2.500 yards. These batteries were accordingly kept silent until the capture of the RED Line on Z Day; their registration was to be carried out during the preliminary bombardments. Then going over the captured territory after the operations of April 9th. it was discovered that the German front line parapet overlooked these batteries, so it is curious that they were left alone, before, and during the operations, in fact their casualties from shell fire were exceedingly small.

Opening of Period Z-6 to Z Day.

On April 1st. Lieut-Colonel A.T. Butler was wounded, and Butler's Group consisting of 5th. Brigade R.H.A. and 26th. Brigade R.F.A. became HINTON'S Group under the command of Lieut-Colonel G.B. Hinton, C.M.G., R.F.A.

On April 2nd. a period of more intense Artillery activity commenced, 75% of the available guns being disclosed, the remaining 25% being disclosed on April 3rd. The 5th. Brigade R.H.A. and 26th. Brigade R.F.A. however still remained silent.

Hitherto only the normal gun power of a Division had been employed on the wire-cutting, trench destruction and harassing fire, but naturally the narrowness of the Division Battle Front may have given the appearance of a concentration of Artillery.

The difficulties of establishing the requisite ammunition dumps had been mastered, and except for the advanced positions East of the SARRAS-NEUVILLE ST. VAAST Road all preparations were complete on the appointed day (i.e. April 1st).

As these positions were silent ones, and not required till Z Day, it was of no consequence that they were not complete in every detail on Z-8 Day.

With the increased Artillery Activity which began on April 2nd., the daily ammunition expenditure became correspondingly greater.

Throughout the period Z-20 to Z-7 day the expenditure had been based on a daily allotment of 100 rounds per 18-pounder, and 70 rounds per 4.5" Howitzer, the number of active guns being thirty-six 18-pounders and twelve 4.5" howitzers; this amounted to a daily expenditure on the Divisional front of about 4000 rounds 18-pounder and 1000 rounds 4.5" howitzer.

For the period Z-6 to Z Day, the daily allotment was increased to two hundred rounds per 18-pounder and one hundred and fifty rounds per 4.5" howitzer, based on 108 active 18-pounders, and 36 active 4.5" howitzers. This allowed for a daily expenditure on the Divisional front of about 28.000 rounds 18-pounder and 4.000 rounds 4.5" howitzer.

A large proportion of this allotment was intended for wire-cutting, and was more than was actually required for that service, so the actual expenditure was probably not as high as the above figures.

Wire-cutting.

From April 2nd onwards the wire-cutting task was taken in hand seriously. Hitherto the active batteries had been nibbling away at different points in the line; neither the number of active Batteries nor the ammunition allotment had allowed of any serious damage being done; it was also not considered advisable to pay any marked attention to the wire on the Battle Front.

The means available for wire-cutting were, firstly, Colonel WALTER'S Double Group of Heavy Artillery using the new 106 fuze, secondly the 18-pounder batteries within wire-cutting range, and thirdly the Medium Trench Mortars of which eighteen had been allotted to the Division Front.

To Colonel Walter's Group was entrusted the wire in the back country behind the German Front Line, and immediate support lines. On the Medium Trench Mortars devolved the responsibility for cutting the wire in front of practically the whole of the German front line, and the 18-pounders were detailed for all wire between the German front line and the grid line between squares A. 15. and A.17.

Trench Mortars.

The full gun power of the Trench Mortars was not to be developed until Z-4 Day.

As has been anticipated, the Operations of the Medium Trench Mortars were studded with difficulties. The weakness of the firing mechanisms, which had recently been so prominently illustrated, continued; the daily toll was a heavy one, and the supply of spare mechanisms was barely adequate. This had been foreseen by the G.O.C.R.A. many weeks ahead, and application had been made for a large reserve to be formed before the Trench Mortars would be called upon to play an active part in preparations. This reserve had, however, not been formed.

The Trench Mortar emplacements came in for a considerable amount of retaliation, and practically every day one or more emplacements were blown in and damage of some kind done to Equipment and personnel.

The ammunition supply for the Trench Mortars also presented difficulties.

Wire-Cutting.

Throughout the whole front, the wire-cutting problem was not a simple one. To take it in detail.

On the Battle Front of the 2nd. Canadian Infantry Brigade observation was not good, and there was a considerable area which was at first believed to be dead ground.

The use of many O.P's which afforded different points of view eventually cleared up the situation considerably, and by the end there was very little ground on which direct observation had not been obtained.

The cutting of the wire on this front was carried out by 31st. Divisional Artillery (consisting of 165th. and 170th. Brigades R.F.A. and 1st. Brigade C.F.A.).

None of the Batteries of this Group afforded ideal ranges for wire-cutting, but on the other hand practically all the batteries were within possible wirecutting range. Owing to the fact that our front line was situated on a crest with 'No Man's Land' falling away beyond, it was not possible to site batteries in forward positions and bring their fire to bear on the German Front and Support Lines.

On the Battle Front of the 3rd. Canadian Infantry Brigade the wirecutting problem was still more unattractive. Observation was good but gun positions within wire-cutting range were few. The situation was somewhat improved by the 7th. Battery C.F.A. pushing forward a section to a temporary position near NEUVILLE ST.VAAST. Another expedient was resorted to, viz the use of 4.5" howitzers with 106 fuzes, this means was, however, restricted by the small number of these fuzes available.

Throughout the wirecutting week the reports on the operations were not encouraging, and it was only about April 7th. that the Infantry began to give favourable verdicts. Investigations of the German wire after the attack had gone over showed that the wirecutting had, as a matter of fact, been carried out with the most satisfactory results.

In addition to wire cutting the Divisional Artillery were devoting their energies to harassing fire, trench destruction, and bombardment of THELUS.

Harassing Fire.

Harassing fire was carried out vigorously by night, fire being directed on all the enemy's communications, and also on points where he was likely to be attempting to repair his trenches or wire. About 7.000 rounds were expended each night on the Divisional Front. Close touch was kept with the night firing operations of the Machine Gunners, so that the best results could be obtained by a judicious mixture of the two natures of searching fire.

Trench Destruction.

Trench Destruction was carried out by the 4.5" Howitzer Batteries; the enemy's main communication trenches could be well enfiladed by these batteries, and their fire was accordingly concentrated on them. About 3.000 rounds were expended daily on this work. It was not possible to estimate from Aeroplane Photographs what damage was being done, but the state of these Communication trenches on April 9th. testified to the accuracy and effectiveness of the 4.5" howitzer fire.

The bombardment of THELUS was carried out daily in conjunction with the Medium and Heavy Howitzers. 4.5" howitzers took part in the bombardments,

and the 18-pounders placed intense bursts of fire on the village at some time just after the bombardment.

Other Artillery work which was progressing included, maintaining the ammunition dumps, and preparations for the advance on Z Day.

Ammunition Dumps.

Owing to the bad weather the hauling of the ammunition to keep the dumps up to strength became a serious problem; practically every draught horse was out every night; the roads were congested and progress was slow, resulting in "all-night" journeys. The daily expenditure of Horse Flesh was abnormal, and was distributed throughout all batteries both British and Canadian.

Forward Routes.

The preparations of the forward routes to be used on Z Day were entrusted to Lieut-Colonel E.W. Leonard, D.S.O., 3rd. Brigade C.F.A.

The bridging of our support trenches and the levelling of a track right up to our front line were completed before Z Day, and a Reserve of Brigades was dumped well forward available for crossing our front line system and the German Trenches beyond "No Man's Land".

The work was done by a party from the 1st. and 3rd. Brigades C.F.A. which were the Brigades detailed to make the first advances.

This track was of the greatest assistance on Z Day, but the preparation of it resulted in the much regretted death of Lieut-Colonel E.W. Leonard who, whilst superintending the completion of the work on Z Day, received wounds from which he died the same evening.

The parties of 1st. and 3rd. Brigades C.F.A. employed on this work were strongly reinforced on Z Day by the Trench Mortar personnel, who on completion of their tasks on the eve of the Battle came under the orders of Lieut-Colonel Leonard.

Feint Barrages.

On April 5th. a feint bombardment and barrage were put on at 8.00 a.m. this took place on the front of the whole Canadian Corps, and the Third Army cooperated. The enemy retaliation was not severe. A similar barrage also took place under Divisional arrangements on April 6th, but on that occasion the initial barrage was brought close down on the German F.L.T.

The initial barrage arranged for the Battle had to be just East of the German front line, as the assaulting troops were going to jump off from advanced saps and trenches.

It was hoped that by placing the Feint Barrage close on the trench, the enemy might, when the moment of assault arrived, expect a barrage on the trench and keep well down until the assaulting-troops got home.

Early on this morning the 1st. Canadian Infantry Brigade raided the enemy's trenches, supported by 31st. Divisional Artillery Group.

At 9.00 a.m. on April 5th. the front line trenches were cleared and from that hour till 2.00 p.m. the German wire in "No Man's Land" was engaged by 18-pounder, 4.5" howitzers, and No.1 Double Group R.G.A. This was arranged because the Medium Trench Mortars had been delayed in their wire cutting by casualties to equipment, etc.

Postponement.

On April 5th Z day was postponed 24 hours bringing it to April 9th.

Battle Fronts.

At 2.00 p.m. April 7th the Artillery Groups and Brigades assumed their Battle Fronts as follows:-

31st Divisional Artillery Group (consisting of 165th and 170th Brigades, R.F.A. and 1st Brigade, C.F.A.) covering the Battle Front of 2nd Canadian Infantry Brigade, who were the Right attacking Brigade.

3rd Brigade, C.F.A., covering the Battle Front of Right Battalion, 3rd Canadian Infantry Brigade.

2nd Brigade, C.F.A., covering the Battle Front of Centre Battalion, 3rd Canadian Infantry Brigade.

72nd (Army) Brigade, R.F.A., covering the Battle Front of Left Battalion of the 3rd Canadian Inf. Brigade.

The 5th (Army) Brigade, R.H.A. and 26th (Army) Brigade, R.F.A., remain silent in their forward positions.

Liaison Officers.

Liaison Officers were established as follows:-

At H.Q. 2nd Canadian Infantry Brigade.

Major L.C. GOODEVE, 1st Brigade, C.F.A.

At H.Q. 3rd Canadian Infantry Brigade.

Major J.A. MACDONALD, 2nd Brigade, C.F.A.

At H.Q. 1st Canadian Infantry Brigade.

Major D.H. MCCONNELL, 26th Brigade, R.F.A.

At each Battalion H.Q. there was a Liaison Officer from the Artillery Brigade covering the Battalion front.

By the evening of April 7th 1917, the Artillery programme of preparations was completed, and on April 8th, a day of grace brought about by the postponement which had been announced on April 5th, nothing remained to be done but to clean up any hitherto uncut wire and to deal with any Machine Gun Emplacements, strong points, etc., which had escaped destruction.

For the two or three nights immediately before Z day, the harassing fire had been so arranged that each morning there was an increasing intensity throughout the three or four hours before dawn. The intention being that, on Z day, the harassing fire should merge into the Barrage, without any lull immediately before Zero hour. It was therefore necessary to accustom the enemy to an increased activity about dawn.

Communications.

No mention has yet been made of the arrangements for communications; these had gradually been built up under the direction of Lieut. D.H. MACFARLANE, the Artillery Signal Officer, each Artillery Brigade Signal Officer arranging for the Brigade Communications to Batteries, O.Ps. and Liaison Officers.

Visual stations were also established.

Army Artillery Brigades.

An interesting feature of these operations was the first employment in the Canadian Corps of Army Artillery Brigades. The reinforcing Artillery for the 1st Canadian Division amounted to five Brigades, i.e., 31st Divl.Art. (two Brigades) and the following Army Brigades: 5th Bde. R.H.A., 26th and 72nd Bdes. R.F.A. The presence of 31st Divl.Art. complete with H.Q. was of great assistance, and relieved the H.Q. 1st C.D.A. of considerable work.

If they had been replaced by two Army Brigades, there would have been eight separate Brigades to control, this would have presented many difficulties. It might have been possible to form them into two groups, but it is doubtful if the establishment of personnel and telephone equipment of Brigades would have allowed of the formation of two new Groups H.Q's each capable of controlling four Brigades.

Heavy Artillery Double Group.

Another interesting feature of the Artillery preparations was the close cooperation of the Heavy Artillery - No.1 Double Group R.G.A. under the command of Lieut-Colonel Walters, carried out the H.A. preparation on the 1st. Canadian Division front. Close co-operation between the General Staff, Heavy Artillery, and Divisional Artillery, prevailed throughout. Colonel Walters had his Headquarters in ECOIVRES, and personal liaison between the G.O.C.R.A. and the Heavy Artillery greatly enhanced the judicious employment of the two natures of Artillery.

The period of Artillery preparation which one may say commenced in the middle of December 1916 terminated on Sunday April 8th.



Artillery Narrative



Part II.

April 9th. to May 3rd., 1917.

Before entering on the details of the Operations on April 9th., it will be well to review the orders that had been issued to the Divisional Artillery.

Artillery Orders for April 9th.

The Artillery Support of the Attack was to consist of:-

- (a) A Creeping Barrage formed by 18-pounders.
- (b) A Standing Barrage formed by 18-pounders.
- (c) A Standing Barrage formed by 4.5" howitzers.
- (d) Counter Battery Work by 4.5" howitzers.
- (e) The engagement of Targets of Opportunity.

The Attack of the 2nd. and 3rd. Canadian Infantry Brigades was to be supported by 31st. Divisional Artillery, 72nd. Brigade R.F.A., and 1st., 2nd., and 3rd. Brigades C.F.A.

Hinton's Group consisting of 5th. Brigade R.H.A. and 26th. Brigade R.F.A. were not to open fire until the 1st. Canadian Infantry Brigade carried the attack forward from the RED LINE.

There was this available for the initial Stages 108 eighteen-pounders and 34, 4.5" howitzers.

These were disposed as follows:-

Creeping Barrages. 72 - eighteen-pounders.

18-pdr. Standing Barrages. 36 - -do-

4.5" How, " " 28 - 4.5" howitzers.

Counter Battery Work. 6 - 4.5" howitzers for the period zero to zero plus 320 minutes.

6 - 4.5" howitzers for the period zero to zero plus 15 minutes, employed on intense neutralization.

The arrangement would hold good till zero plus 110 minutes, when the ranges would become too long for the 3rd. Brigade C.F.A. who would drop out and prepare to advance. Other Brigades would drop out as their ranges became too long.

At zero plus 220 minutes Hinton's Group would open up, and by zero plus 330 minutes the only batteries still within range would be Hinton's Group, who would be forming Creeping Barrages, and one battery from each of the 170th. Brigade R.F.A. and the 1st. Brigade C.F.A. who would be forming standing barrages.

The two latter batteries would drop out at zero plus 440 minutes and the 36 eighteen-pounders of Hinton's Group from that moment onward would be the only ones supporting the 1st. Canadian Infantry Brigade. As the Battle Front narrowed down considerably at the final objective, this number of guns was adequate. In a similar way each 4.5" howitzer battery would continue to form Standing Barrages until the ranges became too long, and would then drop out.

The 4.5" howitzer Standing Barrages were never to be within 200 yards of the attacking troops.

The Standing Barrages were so designed that every enemy trench, sunken road, or suspicious locality would be subjected to a bombardment by 4.5" howitzers or 18-pounders, possibly both up to the time that the Creeping Barrage reached it.

The 4.5" Howitzers were especially used for "Walking up" the communication trenches.

It must be remembered that in advance of the Field Artillery Standing Barrages, the Heavy Artillery were to do the same job within safety limits.

It will thus be seen that arrangements had been made for any enemy troops in the area over which the attack would go, to be thoroughly bombarded and shaken up before the creeping barrage reached them.

The orders for the Standing Barrages were issued in the form of Barrage Tables, those for the Creeping Barrages were issued in the form of Barrage Maps with dividing lines showing the zones of each Brigade.

These maps were issued in large numbers, probably four or five to each Battery.

Orders had been received from R.A. Canadian Corps, and were issued to Group and Brigade Commanders and Liaison Officers that on no account were

barrages to be interfered with without referring the matter to the G.O.C.R.A. Canadian Corps.

The Artillery programme accurately legislated for Barrages for five hundred and ten minutes, i.e. for 8 1/2 hours.

April 9th.

Zero Hour was fixed for 5.30 a.m.

The Artillery programme opened on the stroke of time, and was carried through to its close without any alteration.

The duration of the Barrage was phenomenal. Several batteries fired as many as five or six hundred rounds per gun in continuous Barrage.

The 165th. Brigade R.F.A. fired 530 minutes and must have expended over 700 rounds per gun.

It had been feared that this excessive strain would result in much damage to equipment, but such was not the case.

Out of 144 eighteen-pounders in action at Zero Hour, there were only three out of action at dusk, and the damage to these three was only of a trivial nature.

On one occasion only was any variation made. Major Macdonald who was Liaison Officer with 3rd. Canadian Infantry Brigade turned the fire of a 4.5" howitzer battery on to a Machine Gun which was reported by the Infantry to be giving trouble. The effect was reported to be almost instantaneous.

As soon as the attacking troops had crossed 'No Man's Land' Colonel Leonard's Bridging Party pushed the Artillery track forward bridging trenches and filling in shell holes etc.

Advance of Batteries.

The task was not an easy one, the ground was sodden, shell holes were full of water, and the enemy kept up quite an appreciable barrage on 'No Man's Land'. However, good progress was made and the 3rd. Brigade C.F.A. were able to have two batteries in action in 'No Man's Land' by 2.30 p.m. The remainder of the

Brigade occupied similar positions during the afternoon. The Artillery Track beyond 'No Man's Land' required a lot of work and material, and the G.O.C.R.A. had considered it advisable to get the 3rd. Brigade C.F.A. into action as soon as possible and let the 1st. Brigade C.F.A. advance through them.

It was while superintending the completion of the Artillery Track that Colonel Leonard received wounds, which though reported at the time to be slight resulted in his death that evening.

By about 6.30 p.m. all the 3rd. Brigade C.F.A. was in action and being 'Registered' by Major McTaggart.

In the meantime the 1st. Brigade C.F.A. had been pushing forward; the 3rd. Battery C.F.A. (Major Durkee) led the way; this battery passed through the 3rd. Brigades C.F.A. and got as far as the LENS-ARRAS Road without much difficulty, but considerably to the detriment of the track. Beyond the LENS-ARRAS Road there was a belt of very bad going, and in spite of the determined efforts of the working party it did not appear passable; arrangements were made for an Infantry working party to assist, but they did not materialize, and the gunners of the 1st. and 3rd. Brigades C.F.A. and the Trench Mortar personnel, who had been working away since dawn, stuck gallantly to their task, and levelled the ground up sufficiently to allow Major Durkee to get his battery into action near the SWISCHEN STELLUNG that night.

The advance of this battery had damaged the track so much that the remainder of the 1st. Brigade C.F.A. were unable to progress, and the track between 'No Man's Land' and the LENS-ARRAS Road was strewn with vehicles and teams firmly embedded in the very deep and holding mud.

Colonel Anderson of the 2nd. Brigade C.F.A. had in the meantime carried out a reconnaissance for forward positions further North in about square A.10.c. on the West side of 'No Man's Land'. The approaches required very little Bridging and during the course of the night he was able to get his whole Brigade forward.

The three Brigades of the 1st. C.D.A. had been selected to go forward because instructions had been received that the 31st. Divisional Artillery and the Army

Brigade of the R.R. and the R.F.A. were not to become too involved, in case they might have to be withdrawn.

During the evening the Headquarters of the 5th. Brigade R.H.A. had been struck by a gas shell which inflicted many casualties, including the death of Lieut. Pearce, the Orderly Officer. Major Stillwell of the 51st. Divisional Artillery assumed command of this Brigade during the afternoon vice Lieut-Colonel A.T. Butler.

At 7.45 p.m. heavy snow fell which further increased the difficulties of moving batteries forward.

The night April 9th/10th. was fairly quiet, the frost being covered by Hinton's Group, with the 3rd. Brigade C.F.A. ready to open fire in case of any Counter Attack.

April 10th.

On April 10th. the advance of the 1st. Brigade C.F.A. was renewed, the idea of moving across 'No Man's Land' to the LENS-ARRAS Road was abandoned, and a working party of Infantry under supervision of Engineer Officers and ECO's concentrated their efforts on making this road passable from ECURIE. The batteries of the 1st. Brigade C.F.A. which had been stuck the night before were withdrawn and moved round via ECURIE to positions near the SWISCHEN STELLUNG about 500 yards south of the NINE ELMS.

This move was effected without great difficulty. Headquarters 1st. Brigade C.F.A. were established 200 yards South of NINE ELMS.

During the day H.Q. 1st. Canadian Division and 1st. Canadian Divisional Artillery move forward to the LABRYNTH TUNNEL (Square A.21).

The active artillery were regrouped as follows:-

Hinton's Group (5th, Brigade R.H.A. and 26th. Brigade R.F.A) supporting the Right Battalion of the 1st. Canadian Infantry Brigade and Anderson's Group (2nd. and 3rd. Brigades C.F.A) supporting the Left Battalion of the 1st. Canadian Infantry Brigade.

The remaining Brigades being held available in case any determined hostile counter attack.

April 11th.

On April 11th. 4.5" howitzers were employed in preparing the way for the next advance which looked likely to take place on April 12th. Considerable attention was paid to the houses just West of the FARBUS level crossing, which contained Machine Guns. The 9th. Battery C.F.A. shot with great effect.

The following areas were allotted to 72nd. Brigade R.F.A., 2nd. and 3rd. Brigade C.F.A. for forward positions:-

72nd. Brigade R.F.A. west of SWISCHEN STELLUNG and North of an East and West Line through A.18.a.0.6.

2nd. Brigade C.F.A. East of SWISCHEN STELLUNG and North of an East and West Line through A.18.a.0.6.

3rd. Brigade C.F.A. East of SWISCHEN STELLUNG and South of an East and West Line through A.18.a.0.6.

Later in the day orders were received that the attack would not be renewed before April 14th.

April 12th.

On April 12th. the 31st. Divisional Artillery relieved the 51st. Divisional Artillery.

Preliminary orders were issued for the support of a further advance on April 14th. the objective being given as:-

"S.E. corner of FARBUS Wood across the railway about B.8.b.7.2. to B.8.b.91/2.91/2 to B.2.b.91/2.1 to about T.26.d.7.5 where it joins the objective of the 2nd. Canadian Division.

At this time our line ran approximately B.8.c.75.25 to B.8.a.35.55 to B.8.a.0.7 to B.7.b.85.90 to B.1.C.15.60 with advanced posts at B.8.d.00.45. B.8.C.9.6.

B.8.d.00.75. B.8.a.95.10. B.8.a.8.5. B.8.a.8.6. B.2.c.80.25. B.2.c.25.70.
B.1.d.95.95.

The Artillery to support the attack were to be

Right Battalion Front.

Maclaren's Group. (1st. and 3rd. Brigades C.F.A)

Left Battalion Front.

Anderson's Group (72nd. Brigade R.F.A. and 2nd. Brigade C.F.A.)

Right Flank Barrages.

Hinton's Group. (5th. Brigade R.H.A. and 26th. Brigade R.F.A.)

These dispositions were dependent on 72nd. Brigade R.F.A. being able to occupy and get registered in, forward positions on April 13th.

Later in the day information was received that the Attack would not take place before April 16th.

On the night April 12th/13th the 2nd. Canadian Infantry Brigade relieved the 1st. Canadian Infantry Brigade.

The 72nd. Brigade R.F.A. occupied forward positions just West of the SWISCHEN STELLUNG Line.

During the night the enemy shelled our front line heavily.

April 13th.

On April 13th. Indications of an enemy withdrawal were noticed and 2nd. Canadian Infantry Brigade were ordered to push out patrols and discover the line held by the enemy.

In view of this development, orders were issued by G.O.C. 1st. C.D.A. for the 2nd. Brigade C.F.A. to move forward and on completion of their move for 3rd. Brigade C.F.A. also to move forward.

Occupation on WILLERVAL.

The reconnaissance by the 2nd. Canadian Infantry Brigade resulted in the occupation of WILLERVAL; accordingly both the 2nd. And 3rd. Brigades C.F.A. were ordered to move forward to positions between COMMANDANT'S HOUSE and BOIS CARRE.

By the evening of April 13th. The Artillery covering the front were as follows:-

1st. Brigade C.F.A

72nd. Brigade R.F.A. (and one composite battery of 2nd. Brigade C.F.A. which was composed of one section from each of the 5th. 6th. and 7th. Batteries C.F.A. which had been pushed forward to a position near BOIS CARRE during the day)

9th. (How) Bty C.F.A.

The 1st. Brigade C.F.A. was in action in B.17.d. and B.18.c. and 72nd. Brigade R.F.A. were in action in B.11.c.

The Defensive Barrage was the line B.4.d.5.1 to T.27.b.6.0.

2nd. And 3rd. Brigade C.F.A. were moving to positions South of BOIS CARRE.

Owing to the occupation of WILLERVAL, Hinton's Group was out of range, and under orders to reconnoitre for positions East of the FARBUS RIDGE.

April 14th.

On April 14th. The 1st. And 3rd. Brigades C.F.A. supported the 8th. Canadian Battalion in advance guard action against the ARLEUX LOOP which was found to be held in strength. The position was accordingly not attacked.

It was hoped to move some of the 2nd. Brigade C.F.A. to positions on the Railway Embankment East of FARBUS Ridge, on the night April 14th/15th., but the state of the roads did not allow of it. During the day Major Stillwell had selected positions just East of BOIS CARRE for 5th. Brigade R.H.A. and Major Ritchie (who had succeeded Colonel Stirling in command of 72nd. Brigade R.F.A, on the latter's promotion) selected positions just South of BOIS CARRE for his Brigade.

Owing to the very heavy state of the country and the exhaustion which the past months had produced in the horses, the C.R.A. issued instructions that, for the present, only 233 of the 18-pounders of each Brigade should be moved forward.

One 4 gun battery 5th. Brigade R.H.A. moved into action just East of BOIS CARRE during the night (April 14th/15th).

April 15th.

On April 15th. The 5th. Brigade R.H.A. completed the move into action of all three Batteries but with only four guns of each. The remaining two guns per Battery were afterwards brought up.

The 72nd. Brigade R.F.A. moved one 18-pounder and one 4.5" howitzer Battery into action just South of BOIS CARRE.

In action.

1st. Brigade C.F.A. about SWISCHEN STELLUNG.

2nd. Brigade C.F.A. (less 8 guns in reserve) South of BOIS CARRE.

3rd. Brigade C.F.A. South of BOIS CARRE.

Moving into Action but not Registered.

5th. Brigade R.H.A. (less 6 guns).

One 18-pdr. Battery and one 4.5" How. Battery.

72nd. Brigade R.F.A.

26th. Brigade R.F.A. and details of 5th. Brigade R.H.A., 72nd. Brigade R.F.A. and 2nd. Brigade C.F.A. in Reserve.

The 3rd. Canadian Infantry Brigade relieved the 2nd. Canadian Infantry Brigade on the night April 15th/16th.

It was then decided that no further advance should be made until adequate Artillery support was available. The general line held by the Canadian Corps was B.4.central - Mount Foret Cuarries (T.16.central) - T.8.central - M.35-central.

In view of further operations Artillery reconnaissances were being made to ensure the close support of a further attack.

For a further advance it would be necessary to employ batteries East of the FARBUS Ridge. Once over the ridge the ground drops steeply to the Railway and then rises gently towards the enemy's line - beyond the Railway the country is absolutely open and flat, overlooked from the North, East and South. On first appearances it would appear that one could site one of two Batteries close under the Railway embankment where they would get bare flash cover and nothing more.

The possibility of finding positions for more than one Brigade seemed small.

The G.O.C.R.A decided to cover the line with Batteries West of the Ridge, and to move other Batteries forward over the Ridge into positions about the Railway Embankment, these batteries to remain silent.

The general dispositions were to be as follows:-

The 72nd. Brigade R.F.A. and 11th. Battery C.F.A. to defend the Right Front, the 5th. Brigade R.H.A., one Battery 26th. Brigade R.F.A. and 2nd. Battery C.F.A. to defend the Left Front.

The 1st., 2nd., and 3rd. Brigades C.F.A. less 2nd. and 11th. Batteries C.F.A. to be moved to Forward Positions.

The 26th. Brigade R.F.A. (less one Battery) to occupy silent positions close up to the ridge on the western side of it.

April 16th.

The moves commenced on the night April 16th./17th.

The tracks over the crest and down into FARBUS were in very bad state of repair and subjected to considerable shell fire.

Major Crerar who had been commanding the 3rd. Brigade C.F.A. since Colonel Leonard's death) sited the 9th. (Howitzer) Battery C.F.A and 12th. Battery C.F.A. between FARRBUS WOOD and the Railway, South of the Level Crossing.

The 10th. Battery C.F.A. selected a position in WILLERVAL.

Colonel McLaren chose positions for 1st. And 3rd. Batteries C.F.A. just South of the 3rd. Brigade Positions, and for the 4th. Battery C.F.A. in WILLERVAL.

Colonel Anderson decided to place his Brigade just North of FARBUS.

On the night April 16th/17th/ the 9th (Howitzer) and 12th. Batteries C.F.A. of 3rd. Brigade C.F.A. got safely to their positions, and six eighteen-pounders of the 2nd. Brigade C.F.A. got down to their positions.

On the night April 17th/18th. Further moves were carried out:-

The 1st. Battery C.F.A. and six more 18-prs. of 2nd. Brigade C.F.A. moved over the Ridge. By April 21st. the moves were completed. Owing to shell fire, when moving into action, the 48th. (Howitzer) Battery C.F.A. 2nd. Brigade C.F.A. had abandoned the idea of going into action in FARBUS and had occupied a position in the nest of batteries of 1st. and 3rd. Brigade C.F.A.

While these preparations were going on instructions had been received that the next attack would include the capture of ARLEUX EN GOHELLE and FRESNOY and the D/72 Battery R.F.A. and 2nd (Howitzer) Battery C.F.A. had started cutting wire (using 106 fuze) on the ARLEUX Loop. The attack was to take place on April 23rd.

On April 21st. 1st. Canadian Divisional Artillery Operation Order No.17 was issued.

This order dealt with the Artillery Support of the Attack on ARLEUX and FRESNOY. The available Artillery were to be employed as follows:-

For the capture of ARLEUX, Creeping Barrages would be formed by the batteries West of FARBUS Ridge with a few selected batteries East of the Ridge forming Standing Barrages.

For the attack of FRESNOY the only batteries within range would be those East of the Ridge.

Although the positions East of the Ridge had very little cover, it was hoped that they would be able to register under cover of Practice Barrages, Bombardments,

and Wire-cutting. They would open up in the attack, but if all went well the capture of FRESNOY and ASHEVILLE would deny the enemy most of the points of vantage which overlooked WILLERVAL and the Railway Embankment.

On April 22nd. Orders were received from General Staff 1st. Canadian Division that the attack would be postponed.

On April 23rd. a Feint Barrage was put on in co-operation with the XIII Corps on (unreadable) and an attack on the Left of the Canadian Corps.

Wire-cutting and Trench destruction of the ARLEUX LOOP was to continue.

As the batteries East of FARBUS Ridge were the only ones within wire-cutting range, and they were to remain silent, the greater part of the wire-cutting was carried out by Walter's Group.

The D/72 Battery R.F.A. and 2nd. Howitzer Battery C.F.A. assisted as far as the supply of 106 fuzes allowed. A certain amount was also done with Fuze 101E, but good results were not obtained with this fuze.

On April 24th. information was received that the operations against ARLEUX and FRESNOY would take place in two stages.

The first stage which would take place on April 28th. Would include the capture of ARLEUX and the Sunken Road in T.29. d and b.

The second stage would take place at a later date, and would include the capture of FRESNOY.

This arrangement presented considerable difficulties from an Artillery point of view.

The Batteries west of the RIDGE could not cover the First Stage through without the assistance of the Batteries East of the Ridge. On the other hand the depth of the penetration of the attack would not deny the enemy those points of vantage from which he could overlook the Batteries East of the Ridge.

At the second stage of the attack, i.e. the capture of FRESNOY would have to be supported by these batteries, it was essential that their positions should remain intact.

The only solution appeared to be for extra batteries to be procured, these Batteries to be in action West of the Ridge, thus allowing the Batteries East of the Ridge to remain silent during the first stage.

This scheme was put forward but the batteries were not available.

Accordingly the 1st. C.D.A. Operation Order No.19 was issued.

This Order dealt with the support of the attack on ARLEUX and the SUNKEN ROAD.

It was necessary to employ all Batteries.

The Right attack was to be supported by:-

1st. Brigade C.F.A. (less 2nd. How. Bty) and 3rd. Brigade C.F.A (less 11th. Battery) which were both East of the Ridge., and by 72nd. Brigade R.F.A. (and 11th. Battery C.F.A) which were West of the Ridge.

The Left attack was to be supported by 2nd. Brigade C.F.A. which was East of the Ridge, and 5th. Brigade R.H.A. (with 2nd. Howitzer Battery, C.F.A) and 26th. Brigade R.F.A. which were both West of the Ridge.

The most exposed batteries East of the Ridge would only be used during the actual attack, and would stop shooting at Zero plus 60 minutes.

After zero plus 60 minutes the front would be covered by three groups each group covering a Battalion i.e.:-

Covering the Right Battalion.

3rd. Brigade C.F.A. consisting of -

H.Q. 3rd. Brigade C.F.A. 6th., 7th., 9th., and 12th. Batteries C.F.A.

Covering the Centre Battalion.

5th. Brigade R.H.A. and 2nd. (How) Bty. C.F.A.

Covering the Left Battalion.

26th. Brigade R.F.A. and D/72 Battery R.F.A.

The remainder of the 72nd. Brigade R.F.A. would be out of range.

This attack was to be carried out by 2nd. Canadian Infantry Brigade.

Major L.C. Goodeve, D.S.O., 1st. Brigade C.F.A. was appointed Liaison Officer with H.Q of the 2nd. Canadian Infantry Brigade, and Liaison Officers were also detailed for each of the attacking Battalions.

Throughout the period April 23rd. To 27th. The batteries near BOIS CARRE were having a bad time; owing to the congestion of guns the German Artillery were incessantly shelling them, and two or three batteries had to move further south.

The Capture of ARLEUX.

On April 28th. At 4.15 a.m. the 2nd. Canadian Infantry Brigade attacked. The attack went through to the final Objective East of ARLEUX with the Right Flank slightly refused in order to join up with the XIII Corps on our Right, where the situation was rather obscure.

Commanders of Brigades East of the Ridge were allowed to use their discretion about opening up their silent batteries on Targets of opportunity.

The use of these batteries for barrage work had not produced any great retaliation on them.

The day was fairly quiet, the enemy were seen massing on several occasions, and satisfactorily dealt with by Heavy or Field Artillery.

On April 29th. The 3rd. Canadian Infantry Brigade relieved the 2nd. Canadian Infantry Brigade and Major J.A. Macdonald, D.S.O. 2nd. Brigade C.F.A. relieved Major L.C. Goodeve as Liaison Officer at Infantry Brigade H.Q.

On May 1st. the 11th. Battery C.F.A. moved over the ridge to a forward position, and C/72 Battery R.F.A. moved to a position East of WILLERVAL and came under the tactical control of O.C. 2nd. Brigade C.F.A.

Concentrations of Heavy and Field Artillery were placed on FRESNOY during this period.

On May 1st., 1st. C.D.A. Operation Order No. 20 was issued. This dealt with the Artillery Support of the attack on FRESNOY which was to take place on May 3rd.

Up to one hour before Zero hour the front would be covered by the normal defensive batteries but after that hour the Supporting Artillery would cover the zone, and would be disposed as follows:-

1st. Brigade, C.F.A (less 2nd (How) Battery C.F.A)

3rd. Brigade, C.F.A

2nd. Brigade, C.F.A. (and C/72 Battery R.F.A).

The remaining batteries being available for Defense and protection of ARLEUX in case of a strong counter attack.

The Capture of ARLEUX.

On May 2nd. Practice Barrages were carried out. The Batteries not taking part in the barrages cooperated in blinding the enemy's O.P's.

The 1st. Canadian Infantry Brigade was to carry out this Attack.

Major D. H MacConnel, 26th. Brigade R.F.A was appointed Liaison Officer at Infantry Brigade H.Q. and other Liaison Officers were detailed for H.Q. of Battalions in the attack.

The Capture of FRESNOY.

On May 3rd. at 3.45 a.m. the 1st. Canadian Infantry Brigade attacked FRESNOY.

The situation was somewhat obscure throughout the day, and the Division on either Flank appeared to be in trouble, however, by 5.30 p.m. it was determined that the 1st. Canadian Division held all its objectives.

Artillery Support of the attack went according to the programme, and during the day many opportunities were seized for breaking up hostile counter attacks with Artillery fire.

On May 4th. the 5th. Brigade R.H.A. was transferred to 3rd. Canadian Divisional Artillery and 26th. Brigade R. R.F.A. was transferred to the 2nd. Canadian Divisional Artillery.

On the night of May 4th/5th. the 95th. Infantry Brigade of the 5th. (British) Division relieved the 1st. Canadian Infantry Brigade, and at 6.00 a.m. on May 5th. the 1st. C.D.A. (in 72nd. Brigade R.F.A) came under the orders of the 5th. (British) Division.

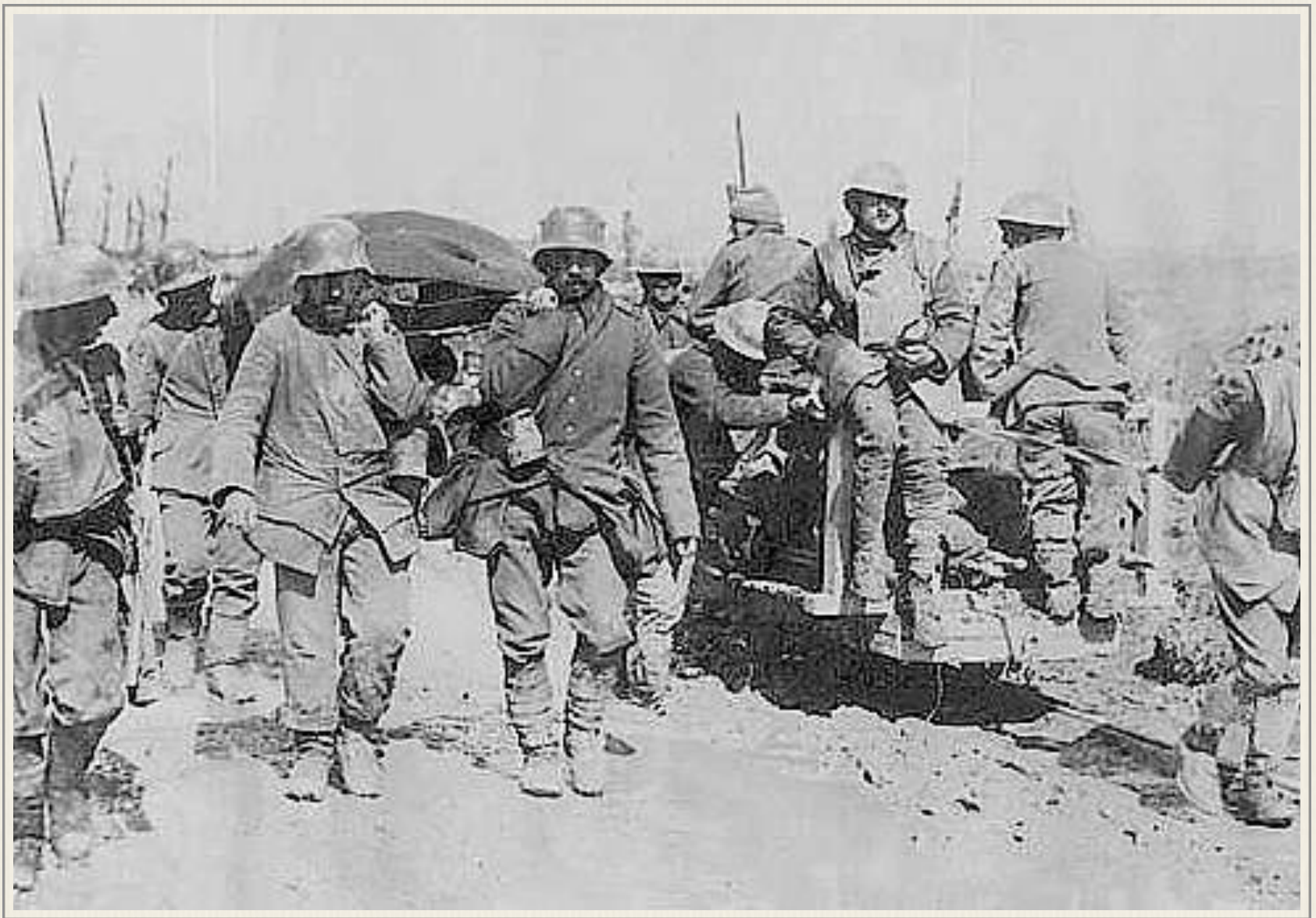
Throughout the Operations from April 9th. to May 3rd. the cooperation between Artillery and Infantry had been the closest imaginable, and to the efforts of Liaison Officers must be attributed no small share of the success.

On May 7th. the 5th. (British) Divisional Artillery and the 1st. Canadian Divisional Artillery changed positions, the latter moving further North and occupying positions between VIMY and FARBUS on the West side of the railway.

At 6.00 p.m. May 7th. the exchange of the commands took place, the 1st. Canadian Divisional Artillery from then covering the 2nd. Canadian Division North of FRESNOY.



Other Issues



SECTION V.

PRISONERS AND MATERIAL CAPTURED.

1. During the operations from April 9th to May 5th, the following prisoners passed through the 1st Canadian Division Cage and Field Ambulances:-

VIMY RIDGE OPERATIONS ... 21 Officers: 996 O.R. (1st Bav. Ros. Div.)

ARLEUX OPERATIONS ... 7 Officers: 282 O.R. (111th Division.)

FRESNOY OPERATIONS ... 14 Officers: 340 O.R. (15th Res. Div.)

In addition to the above, in the VIMY Operations about 400 prisoners captured by the 3rd Canadian Infantry Brigade passed through the 2nd Canadian Divisional Cage.

In the ARLEUX Operations about 100 prisoners captured by the 2nd Canadian Infantry Brigade passed through the 2nd Canadian Divisional Cage, and in the FRESNOY Operations 110 prisoners captured by the 1st Canadian Infantry Brigade also passed through the 2nd Canadian Divisional Cage.

The total number of prisoners captured by the 1st Canadian Division amounts to approximately -

42 Officers.

2250 Other Ranks.

2. During the above period, the following booty is reported to have been captured by the units of the 1st Canadian Division:-

VIMY OPERATIONS.

Rifles ... 600

Machine Guns ... 34

Trench Mortars ... 25

Grenatonwerfers ... 17

Grenade Throwers ... 4

77 mm. Field Guns ... 4

89 mm. Guns ... 4

15 cm. Howitzers ... 4

15 cm. Gun ... 1

21 cm. Naval Gun ... 1

3 Line Buzzer ... 1

Signal Lamps ... 2

Telephones ... 11

Receivers ... 3

Battery Box ... 1

Wireless Sets ... 1

Listening Sets ... 3

Switch Boards ... 2

Gas Signal ... 1

ARLEUX OPERATIONS.

Rifles ... 360

Machine Guns ... 15

Trench Mortar ... 1

FRESNOY OPERATIONS.

Machine Guns ... 6

SECTION VI.

CASUALTIES.

The following are the approximate Casualties of the 1st Canadian Division during the period 9th April, 1917, to 5th May, 1917, inclusive:-

VIMY OPERATIONS. 9.4.17 to 20.4.17 (inclusive).

Officers... 36 (killed) 100 (wounded) 2 (missing) 138 (total)

Other Ranks... 601/637(killed) 1975/2075 (wounded) 548/550 (missing)
3124/3262 (total)

ARLEUX OPERATIONS. 21.4.17 to 30.4.17 (inclusive).

Officers... 14 (killed) 44 (wounded) 3 (missing) 61 (total)

Other Ranks... 319/333(killed) 1011/1055 (wounded) 116/118 (missing)
1446/1507 (total)

FRESNOY OPERATIONS. 1.5.17 to 5.5.17 (inclusive).

Officers... 16 (killed) 51 (wounded) - (missing) 67 (total)

Other Ranks... 226/242(killed) 957/1008 (wounded) 145/145 (missing)
1328/1395 (total)

TOTAL:

Officers... 66 (killed) 195 (wounded) 5 (missing) 266(total)

Other Ranks... 1146/1212(killed) 3943/4138 (wounded) 809/814 (missing)
5898/6104 (total)

SECTION VII.

NOTES ON INTER - COMMUNICATION.

PREPARATORY ARRANGEMENTS.

Between March 5th and April 9th about four miles of Trench, in which Cable was buried, was dug by this Division, In addition to work previously done by Corps parties.

Twenty-five pairs were buried in each route and although the allotment of these pairs varied on the different routes, they were usually allotted as follows:-

6 pairs - Infantry.

18 pairs ~ Field and Heavy Artillery

1 pair ~ Signal Service

All this Cable was buried to a depth of at least seven feet which appears to be the minimum depth for safety, and all Command Posts were connected by it. Owing to the limited time available, some of these routes were not in proper working order until immediately before the operations; this was particularly the case with branch lines to the various O.Ps.

Receiving Amplifiers were installed near Brigade Headquarters and arrangements were made for Power Buzzers to go forward with the attacking troops. Wireless stations were also installed near Brigade and Divisional Headquarters.

Pigeons were allotted to units taking part in the attack, the number allotted depending on the task to be performed by the unit and the number of pigeons available.

Visual receiving stations were established in connection with the Brigade O.Ps. and were manned by specially trained signallers. Battalion signallers were accustomed to sending messages to these posts during the period of Battalion and Brigade training.

DURING OPERATIONS APRIL 9th.

On April 9th each Battalion in the attack carried forward a line to its new Headquarters from the forward end of the buried system. Selected lines were laddered and taken over by the Brigade Signal Sections who established Advanced Brigade Signal Stations.

The 1st Brigade Signal Section moved forward soon after the RED LINE had been reached and an Advanced Report Centre was established which was connected to the Buried Cable by laddered earth return circuit. When the Battalions of this Brigade advanced, they carried forward lines from the Advanced Report Centre. selected lines being laddered and later taken over by the Brigade Signal Section.

These lines were frequently cut by the enemy's shelling but, owing to the manner in which the lines were laddered and the number of lines which were run to Battalions, communication was very seldom interrupted.

Visual, Wireless, and Power Buzzer Stations were moved forward in accordance with the prearranged scheme, but there were very few occasions on which these means of communication were used owing to the success of the telephone system.

Visual signalling was much used after the attack had finished to maintain communication between the Battalions and Brigade Headquarters of the Support and Reserve Brigades.

As soon as the enemy's shelling and the general situation permitted, the buried cable system was carried forward, 21/2 miles (25 pairs) being laid between April 9th May 5th.

ARLEUX OPERATIONS.

Extensive preliminary arrangements were not possible owing to some uncertainty as to the manner in which the attack was to be carried out. The positions of the various Headquarters were definitely decided 16 hours before Zero hour and laddered lines were then run to each of the Assaulting Battalions. A common metallic circuit was laid to all Battalions by utilizing German buried cable, and, in addition, the Headquarters of the Assaulting Battalions had lateral earth circuits.

During the attack, the lines were frequently cut and several times it became necessary for the Battalions to use all three lines, but the longest period the Brigade Headquarters was out of touch with any Battalion was 23 minutes. It is noteworthy that the laddered line to one Battalion was cut in 37 places before communication was lost; this line consisted of D.2 Cable with the main legs 30 yards to 50 yards apart, laddered every 20-50 yards, according to the nature of the ground.

Visual stations were established but owing to smoke and ground mist no satisfactory results were obtained.

Power Buzzer sets were practically useless on account of the large number of earth circuits in use.

FRESNOY OPERATIONS.

A Brigade Report Centre was established in the ARLEUX LOOP Trench which was connected to Brigade Headquarters by two pairs, one pair being partly German buried cable and partly overland cable, and the other route being entirely overland cable.

From the Brigade Report Centro a metallic circuit and earth return laddered lines were laid to each Battalion; Battalions also being laterally connected by an earth return circuit.

Owing to the very heavy shelling these lines were frequently cut during the 36 hours following the attack but there were very few occasions on which any Battalion was out of touch with Brigade Headquarters.

No attempt was made to lay lines forward from the Battalion Headquarters for several hours after Zero as the enemy's shelling was too intense, consequently, all messages from Companies had to be sent by Runner.

Visual signalling was impossible during the hours immediately following the attack on account of the smoke, dust and ground mist. Late, lamps were used very successfully.

Power Buzzers were used and, occasionally, signals were received quite clearly, but the success of the telephone «system and the amount of interference through earth circuits made them almost valueless.

Wireless Stations were installed but no suitable accommodation could be found near the usual routes and, consequently, this means of communication was not used.

LESSONS LEARNT.

Telephones. Buried Cable again proved to be invaluable, but the following suggestions are made:-

- (1) The cable must be buried to a depth of at least seven feet.

(2) Every area should be provided, during normal trench warfare, with a complete system of cable trenches, sufficient to allow lines for the maximum number of units that could be concentrated in that area. If open cable trenches are used they can be made to resemble communication trenches and so will not disclose the position of Headquarters; they can have additional pairs laid without much trouble, because it sometimes happens that more pairs are required than were originally laid; repairs can be effected easily and wire can be more easily identified; the cable can be recovered after the theater of operations has moved; the trench could be used as a communication trench, in case of necessity.

(3) Headquarters must be selected as early, as possible and, if it is not possible to construct them until immediately before they are required, test stations or exchanges should be installed.

Field Cable must necessarily be used to a great extent during, and after, an attack. Earth return laddered lines are the most successful under heavy shelling, and these lines should be laddered at intervals of 20 to 50 yards, depending upon the amount of shelling to which the area is subjected.

All units should be thoroughly accustomed to using Code and Cypher.

In an attack to a distant objective, forming part of a large operation, telephone lines can be successfully laid by Companies or Battalions as they advance, but in an attack against a very limited object, where the enemy's Artillery fire is concentrated, it is usually impossible to lay lines forward for several hours.

VISUAL.

Visual communication is practically always impossible at Zero hour, and for several hours following it, but is most useful for supporting troops in a newly conquered territory and has sometimes been used successfully from the front line at night.

AMPLIFIERS AND POWER BUZZERS.

The value of these Instruments is rather doubtful. Each Instrument requires good cover which is often hard to find and there is a great deal of Interference from broken lines and earth return lines. Artillery Forward Observing Officers

always use earth return circuits and these lines alone would practically preclude the use of Amplifiers even if there were no infantry earth return circuits.

There are considerable difficulties in transporting storage batteries and no real messages were received by this means during any of the three attacks.

WIRELESS.

Wireless sets would probably be of great value in a big advance, but in the recent fighting circumstances did not permit wireless stations to be moved forward until such a time that telephone communication had already been established.

PIGEONS.

Pigeons were not used, this method of transmission being necessarily slow and uncertain. It is suggested that Pigeons should be retained for use with small isolated posts.

RUNNERS.

Communication forward of Battalion Headquarters was almost entirely by Runner in the ARLEUX and FRESNOY attacks. This was due to the impossibility of visual signalling or maintaining telephone communication.

It was found necessary at times to supplement the unusual mounted dispatch riders by using mounted orderlies and grooms.

GENERAL.

It would seem advisable to concentrate on telephonic, visual and runner communication, wireless being used as a subsidiary means of communication.

There is a tendency to make both messages and conversations too long.



Lesson Learned



SECTION VIII.

ITEMS OF INTEREST AND LESSONS LEARNT.

The following notes have been compiled from reports by Brigade and Battalion Commanders. Unless otherwise stated they refer to all three Operations.

1. EQUIPMENT.

The equipment carried was generally as laid down in "Training of Divisions for Offensive Action, S.S.135," with the following modifications:-

Riflemen carried two to four Mills Grenades; two to five sandbags.

Rifle Grenadiers carried 8 to 12 Mills No.23.

Men of 'Mopping up' parties each carried one "P" Bomb for dealing with Dugouts.

Candles and matches were carried by one or two Battalions and proved useful in the captured dugouts.

Chocolate and chewing gum were also supplied to certain Battalions.

2. WATER.

In addition to the water bottle carried by every man, each Brigade was supplied with 600 - 2 gallon petrol cans. These cans were placed in Brigade and Battalion Dumps and were brought forward during the attack. In some cases the petrol tins were carried forward by the lines behind the assaulting troops but on the whole this system was not satisfactory. It is considered better that the water cans be taken up during a lull.

3. PLATOON ORGANIZATION.

The now Platoon Organization was tested under battle conditions for the first time and proved, as will be seen from the Narrative, a great success. From the Narrative it will be seen that all four sections of the platoon, the Lewis Gunner, the Rifleman, the Bomber and the Rifle Grenadier were used to their fullest extent in close co-operation with each other and with neighboring platoons. This organization had enforced a higher training of the Platoon Commander and had demonstrated to him his responsibilities and the capabilities of the various arms with which his men are now equipped. The training on these lines during the winter months had greatly increased the efficiency of the Division and enabled it to carry out its task so successfully.

4.ARMS.

All Battalion Commanders are of opinion that, except in 'Mopping up', the day of the hand grenade is over in an assault. They all speak highly of rifle grenades and of the need of a rifle grenade similar to the No.23 Mills with a longer range. It is considered that if the two or four grenades carried by riflemen are rifle grenades it would increase the fighting power of the platoon, as they could be used either as rifle grenades or hand grenades.

Two of the Brigades carried their Lewis Guns in Slings. The opinion regarding these slings is at present a trifle divergent. Those who are expert in the use of the sling claim that the slings are very useful, enabling fire to be brought to bear during an advance.

Those who are not so expert state that the gun is difficult to handle when in the sling, especially when the firer wishes to adopt the prone position. In this connection, the 8th Canadian Infantry Battalion have invented a sling out of which the Lewis Gun can be taken with very great ease. After considering the two opinions, I would advocate the continued practice in the use of the sling as I consider it only a matter of training, and of great advantage to be able to fire the Lewis Gun as the attack advances.

The bayonet was used with good effect on many occasions, especially during the capture of the two Villages.

I am not satisfied that the rifle was used to its fullest extent, although good use of it was made after the capture of FRESNOY, I consider that the men have got into the habit of expecting Lewis or Machine Guns to be used to stop the so called sniping, which is probably fire from the opposing Infantry, to cover the advance of reinforcements which are sent up in small parties. The importance of the rifle must be emphasized in all training and every facility given for musketry practice.

5. SIGNAL LIGHTS.

Signal Lights were used in the Operations against ARLEUX and FRESNOY to indicate the capture of the German Front Line Trench and Final Objective.

In the ARLEUX Operations they were satisfactory, but in the FRESNOY Operations they were difficult to distinguish from the enemy's flares on account of a heavy ground mist.

I consider that in as far as they indicate the general progress of the fight they are useful, but not essential.

The special Golden Rain Rockets it had been intended to use to warn the Heavy Artillery of the approach of the enemy up the Valley from IZEL were a failure. 25 of these Rockets were allotted to the Right Battalion, but only 8 arrived at the place laid down and none could be fired on account of one defect or another.

6. The S.O.S. Signals.

The S.O.S. Signals consisted of a number of Red Rockets or Red Very Lights fired in rapid succession.

The Rockets were very unsatisfactory owing to their bulk and their liability to damage from weather or severe handling.

The Red Very Lights, being easily carried, were used throughout the operations.

The S.O.S. as laid down was very similar to that of the enemy and on several occasions the enemy's signals were mistaken for our S.O.S. This caused a considerable expenditure of ammunition.

7. SIGNAL FOR ARTILLERY TO LENGTHEN RANGE.

No such signal was allowed to be used, but it is suggested that such a signal should be laid down in order that posts which have been pushed out in front of our line should not be shot into.

A case in favour of some such signal occurred at FRESNOY.

The situation on the Right was obscure and the barrage was laid down on the line previously mentioned in Orders. It happened that the actual line consolidated was slightly in advance of where it was thought to be with the result that one battery shooting short was placing its shells amongst our troops. The only means

of communication at the disposal of the Company Commander at that time was by Runner. Owing to this fact, the fire of the battery was not lifted forward for a considerable period. Had a light signal for the Artillery to lengthen range been arranged this fire would probably have been lifted forward in much less time and without, endangering the lives of Runners.

8. PRELIMINARY TRAINING.

The value of the Taped Course and the preliminary practices over this Course, in the case of the attack on the 9th April, was that every individual taking part in the attack knew his place and what was expected of him and was one of the main factors which ensured the success of the operation.

The model of the country also proved of the utmost value.

In the 16th Battalion on the 9th April all the Officers, except the Commanding Officer, became casualties, yet the men reached their Final Objective in their correct place as laid down and practiced beforehand.

Practice over a Taped Course was also carried out before the attack on FRESNOY.

9. TRENCH MORTARS.

The value of the Stokes Mortar has been emphasized in these operations. The Stokes Mortar Is essentially a Battalion weapon. To be of any value it must have ammunition and the ammunition must be carried by Infantry men. An instance has been quoted in the Narrative of a Stokes Mortar silencing an enemy machine gun during the progress of an attack. The Mortar is also useful in the defense of a newly consolidated line to break up counter attacks.

10. MOPPERS UP.

Mopping up, with the exception of the case of FRESSNOY WOOD, was very efficiently carried out.

In the case of FRESNOY WOOD, the dugouts were at first difficult, to find on account of the darkness and later in the day 'mopping up' was impossible there on account of the heavy hostile shelling. The "P" Bomb was used with success for

clearing dugouts of their occupants without destroying the dugout. Only one dugout caught alight.

11. INFORMATION REGARDING ENEMY DEFENSES.

The data had been very carefully arranged by the Intelligence Branch of the Division and proved very accurate and reliable. This fact enabled targets of real value to be engaged by the Heavy Artillery with the best results and the minimum expenditure of ammunition compatible with the task. The accurate location of dugouts taken from a study of aeroplane photographs was of great value in selecting positions of Battalion Headquarters and Advanced Report Centers as the advance progressed.

The intelligence gained of the habits of the enemy so as to enable us to harass him with the greatest result and the accurate information gained of the area over which we had to attack was, I consider, one of the main causes of our success.

12. HEAVY ARTILLERY.

The system of affiliating a Double Group of Heavy Artillery under its Commander with a Division worked most successfully and gave confidence to all the Commanders in the Division.

13. 106 FUZE.

The 106 Fuze proved invaluable as a wire cutter with the Heavy Artillery and also is of great value in dispersing counter attacks.

14. ADMINISTRATIVE NOTES.

(a) Medical.

To ensure rapidity in the evacuation of wounded, extra stretcher bearers, amounting in some cases to 50 per Assaulting Battalion were detailed by Brigades to clear from the Front Line to the Regimental Aid Posts. German prisoners were also used for this purpose to good advantage.

It is necessary to have a large number of stretchers available as far forward as possible, that is to say, at the Regimental Aid Posts.

In the later operations the Divisional Train Line was used to a great extent in clearing the wounded from the RIDGE to ARIANE.

(b) Supply of Grenades, T.M. Bombs, S.A.A. & Fireworks.

The following system was adopted:-

A Tramway Base was established at the rear end of the Divisional Tram Line, in charge of a selected officer and a party of selected men.

The Main Division Dump was established as far forward as was considered safe. This Dump was under the charge of the Bombing Officer from the Divisional School and a selected party of men. All grenades were detonated at this Dump.

In advance of this was an Advanced Divisional Dump on the Tram Line, as far forward as possible, also under a selected officer and party.

Establishments were laid down for each of these three Dumps, and maintained up to establishment throughout the fighting from April 9th until the Division was withdrawn from the Line.

All grenades were sent forward by Tram Line. The officer at the Tramway Base controlled the traffic on the Tram Line and allotted the trucks.

Each Brigade had a Dump on the Tram Line for which an establishment was laid down, and kept filled from the Advanced Divisional Dump. Each Assaulting Battalion had its own Dump for which an establishment was laid down.

(c) Gun Ammunition.

Owing to the state of the ground and lack of roads, all the gun ammunition had to be carried forward on Pack Horses.

A large supply of Canvas Carriers are necessary.

(d) Supplies.

The work of the Divisional Train was excellent. The First Line Transport of Battalions had no great difficulties in delivering to the Front Line by Limber and Pack.

Every man in the attack carried an extra day's preserved rations, in addition to his Iron Ration and the current day's ration.

(e) Water.

Practically all water used in the Forward Area was carried up in Petrol tins. Before the advance took place a good deal of water was stored in tanks in our old Front Line System.

A Pipe line system had been laid out, but owing to the adverse weather conditions, etc., it was not ready in sufficient time, and did not keep pace with the advance of the troops.

(f) Advance of First Line Transport, Refilling Points, etc.

Complete arrangements were made beforehand for the advance of First Line Transport and of Refilling Points into the Forward Area, Reconnaissances were made and Area Commandants appointed beforehand. These arrangements worked out exactly as laid down.

(g) Clearance of the Battlefield.

The Salvage Company worked with great expedition.

Area Salvage Officers were appointed under the Divisional Salvage Officer.

The strength of the Salvage Company was not greatly increased - its greatest strength was never more than 60 men. From time to time, on special days, fatigue parties were attached to the Salvage Company for special purposes, rejoining their units at once when the work was over.

Large quantities of salvaged stores were collected and evacuated.

(h) Burial of the Dead.

The burial of our own and the German dead was carried out expeditiously by the Divisional Registration Officer and the Labour Company under him.

(i) Roads.

Beyond the PLANK Road from ARIANE to the LENS-ARRAS Road, which was only a one-way road, there were no roads in the Forward Area of the Division, until the LA TARGETTE-THELUS Road was finished.

This delayed the getting forward of the Artillery and Artillery ammunition.

It is considered that each Division should have at its disposal at least two Labour Battalions, from the commencement of operations, for the sole purpose of building or improving roads. Also that the necessary material should be dumped as far forward as possible.

It is not fair to ask troops that have just been through a heavy action to build roads during their short period of rest, which had to be done during these operations.

15. Thus briefly has been described the events leading up to and including the Operations of the 1st Canadian Division in connection with the taking of the VIMY RIDGE. Between April 9th and May 5th, the Division had penetrated the enemy's defenses to a depth of six miles, capturing every objective allotted to it on scheduled time and never failing to consolidate and hold a position once gained. The factors chiefly contributing to this remarkable success I would describe as follows:-

(a) The determined confidence and disciplined valor of the men. This confidence was born of good training and good discipline.

(b) The high qualities of leadership displayed by the Officers and Non-Commissioned Officers. Successful Officers and N.C.Os. must be two things - Instructors and Leaders. They must be capable of teaching and must instruct those whom they command in the best use and proper co-operation of all weapons at their disposal; in the best way of overcoming every obstacle; in the best formations in which to make an attack; in the best way to consolidate a position, and when the hour of battle arrives they must lead. (I have already forwarded the names of those Officers, N.C.Os. and Men whose conduct I consider worthy of reward.)

(c) Good Intelligence Work. I know that great strides have been made in the development of this branch of the Service, yet there is much room for improvement. Some are apparently satisfied to read the Summary to gratify their curiosity but those who study the information gained and draw the correct deductions therefrom, will find victory come easier. I believe the Staff correctly gauge the value of the information gained by the Intelligence Section, but a greater stimulation of the interest of Battalion Commanders, Company and Platoon Leaders in it is required. In this Division, I was particularly fortunate in having on the Staff as G.S.O.2 (Intelligence), Major W.R. BERTRAM, D.S.O., 8th Canadian Infantry Battalion, who organized this branch and whose deductions were at times uncannily accurate.

(d) The Artillery preparation and Support. This has already be thoroughly set forth, in preceding pages. An intelligent selection of targets coupled with a close study of the results of the shooting are important factors. The barrages had been practiced on several occasions previously for reasons already given and on the day of attack were as near perfect as could be.

(e) A Good Plan. In these engagements the results have proved that the plan in each instance was good. I have no suggestions to make as to how it could have been improved except in minor details. I wish to place on record my appreciation of the splendid work of Lt. Col. R. H. KEARSLEY, D.S.O., 5th Dragoon Guards, the G.S.O.1 of the Division, who, owing to the Staff being shorthanded, was called upon to work practically night and day from the beginning of March to May 5th when the Division was relieved, and of Lt. Col. J. Sutherland BROWN, D.S.O., Royal Canadian Regiment, the A.A. and Q.M.G. of the Division, who made such excellent, administrative arrangements.

The great lesson to be learned from these operations is this; if the lessons of the War have been thoroughly mastered; if the Artillery preparation and support is good if our Intelligence is properly appreciated; there is no position that cannot be wrested from the enemy by well-disciplined, well trained and well-led troops attacking on a sound plan.

[Arthur Currie - signature]

Major General.

Commanding 1st Canadian Division.

JUNE, 1917.



Assessment



Until April 9th, 1917, no leader had found the keys to unlock the stalemate on the western front. In the Appendices that follow, we will explore some of the key ideas that Currie had developed for Vimy that ultimately enabled victory.

1. The Artillery - Trading shells for lives.
2. The Platoon - Empowering the men.
3. The Culture - Learning faster than the enemy.

The application of these ideas in the Canadian Corps led to it being used as the spearpoint of the British Army. It was the force used to capture Passchendaele and it was the breakout force used in the final 100 Days offensive that won the war.



Appendix 1

Revolution in Artillery



Andrew McNaughton

Image PA 034180

Note the amount of detail in the document on the artillery plan. What is unsaid in this section is how the Canadians revolutionized the use of artillery by

April 1917. The traditional response to each failure of artillery to enable breakthrough before 1917 was simply to add more guns. The reason was not stupidity but organization.

Running the line artillery in 1916 was dominated by the immense operational issues. Where are the replacement guns? Where is the ammunition? What is the fire plan? Where are the horse replacements and their feed? The managerial issues were compelling and they had to be dealt with every day.

This left no room in the organization for the the consideration of the new. Such as, how to deploy artillery so that it could break the stalemate? How would it link to infantry? How would it be used to counter other artillery? How would it be used to substitute shells for lives?

Byng and Currie saw that they could not answer these kinds of questions unless they developed an organization that was not subject to the day to day managerial imperatives of running the artillery.

Lt Col Andrew McNaughton had been the other senior officer sent by Byng to look for the lessons of the Somme and Verdun. McNaughton, Currie and Byng must have talked long and hard about what they had found. They realized that they could not introduce change directly into the larger Artillery. For the day to day issues would never go away. So they came up with a truly novel approach.

They would create an organization whose entire role was to be novelty.

In February 1917, Byng appointed McNaughton as CO of the Canadian Counter Battery Office (CCBO). McNaughton in turn created the space for innovation below him.

“He (McNaughton) was considered a dangerous radical by all the old timers.”
(Swetenham)



Here is the pet lion that used to live at McNaughton's HQ.

Until 1917, there seemed to be a truce between gunners on both sides. McNaughton was to make German Gunners his principal target. The trick was to locate the German guns in secret and then, during an attack, to shut them down, so adding even more protection to the assaulting troops.

“In previous Allied operations, enemy artillery had inflicted over half of the casualties suffered by attacking troops. Both Allied and German artillery was primarily employed against infantry entrenchments and troops in offensive and counteroffensive barrages.

“The most serious obstacle to the tactical use of artillery against enemy batteries was locating artillery positions, which were situated far to the rear of the trenches. Byng appointed Colonel Andrew McNaughton to the new post of Counter Battery Staff Officer and assigned him the task of locating and targeting enemy artillery positions.

“Colonel McNaughton approached Captain Harold Hemming, a Canadian artillery officer who had been serving with the British 3rd Army. Hemming had been working on a method of locating enemy artillery by observing muzzle flashes and using triangulation to calculate their positions. Hemming had informed his senior British commander about his "flash spotting" technique, but his suggestion had been politely ignored.

“McNaughton also invited three British scientists to join his staff. The three civilians, Lawrence Bragg, Charles Darwin (grandson of Charles Darwin), and Lucien Bull had developed a technique called "sound ranging" to locate enemy artillery positions. The process involved a network of listening posts equipped with microphones and oscillographs that recorded the strength and direction of sound waves. The time intervals between listening posts were recorded and then triangulation was used to calculate the exact location of the gun. The British General Staff had ignored the work of these three men, who, consequently, were eager to join McNaughton's staff.

“By the end of March, Colonel McNaughton's team had plotted the location of virtually every German artillery battery behind Vimy Ridge.”

(Source: <http://www.lermuseum.org/index.php/first-world-war-1914-18/1917/flash-spotting-and-sound-ranging-jan-mar-1917>)

Byng and Currie now had the mechanism to integrate the use of artillery into every part of the war. Above all, they had the mechanism to trade shells for lives and so enable the Canadian infantry to take on missions that others could not handle.

With this change, the Canadians became the spearpoint of the British Army and took the lead on every important mission of the rest of the war



Here is an expanded view of the Barrage Map. NA W095-3884



Creeping barrage zone plan for batteries of light and medium guns. Each colour represents an artillery group and each line a lift of the guns NA WO 153-1144 from Vimy Ridge and Arras: The Spring Offensive in Panoramas, Peter Barton.

Only a very sophisticated organization could pull this task off and of course the coordination with the infantry had to be exemplary or many of them would be killed by their own shells. Such a task was beyond the skills of any unit in 1915 when the Canadians first arrived in France.



Appendix 2

The Platoon



Currie's thinking about the platoon is perhaps his greatest innovation and is easy to miss.

On July 1st 1916, the British Army rose in a mass formation on the Somme and was cut down like grass before a mower. Nearly 800 of Newfoundland Regiment were killed or wounded in less than 2 minutes on July 1, 1916 at Beaumont Hamel. One machine gun, well placed, could kill an entire battalion.

Leading from the front, the first people to die were the officers. As the men knew nothing about the plan, they became lost in minutes.

Currie's work on the Platoon is specifically designed to deal with these two issues of how to overcome the defensive power of the machine gun and how to cope with the inevitable loss of leaders in any assault.

He found, in the platoon, the way to disperse the mass and also to disperse the decision making.

By putting the platoon first, he recognized that the subaltern and his NCO's needed to have tactical flexibility to deal with all the unforeseen events that would inevitably take place once battle had been joined.

So the platoon became the planning unit for tactics. All the relevant information for an action would be communicated down to this level instead of being held at Brigade.

The use of many platoons also broke up the mass of an assault and so reduced the effectiveness of the machine gun in defence. The inclusion of the Lewis gun in the 8 man section gave the section the fire power of a company of 300 riflemen.

Canadians at Vimy, and for the rest of the war, moved tactically in platoon sized bunches. In the final assault, the men moved in separate bunches with those not moving supplying supporting fire. This was also true at the section level. Even the platoon was dispersed. This meant, as we see in the report, that strong points could be identified and dealt with specifically.

In practice, platoons were about 35 - 40 men strong with four 8 man sections.

In close up of the famous Vimy attack photograph at the chapter head, we see such a section of 8 men. Note that each section has a Lewis gunner. He is the second man in the file. Note their relaxed demeanour. Most have their rifles on a sling. They are protected by the Creeping Barrage. Note also how they are separated from the other sections in the platoon.

By using the section and the platoon, the Canadians were able to develop the key new infantry tactic of the war of "Storm Trooping". This is where small units

of independent skilled troops swarm objectives. The first use of this term was used by the Germans to describe the Canadians. The tactical lessons of the war were built from these precepts. “Dispersed Fire and Movement” is still the assault doctrine in all modern armies today.

The Germans responded to the storm trooping attack by moving away from a linear and rigid defence to a defence in depth that was anchored around strong points.

Attackers themselves became increasingly more flexible as the war went on. The Germans adopted the Canadian flexible attack in 1918 when they came close to winning the war.

There was also a social reason for Currie’s emphasis on the platoon. Currie knew that men who felt a sense of belonging performed better.

The emphasis on viable platoons “*made each man feel that he was not merely part of a big battalion but that he was one of a little group of chums, a team all working in the same way for the same end.*” (Dancocks – Currie).

The natural cohesion of the Canadians and their natural trust in each other was therefore enhanced by the social quality of the section and the platoon.



Appendix 3

Culture



Image: NAC PA 2004

“Here I am convinced that from these especially strong centres he has a cable communication to the rear. At a given hour, no doubt agreed upon by his troops in the hidden dugouts and his Artillery, the latter ceases fire and his troops emerge from the dugouts and attack our depleted garrison. We then become the attacked instead of being the attackers, and can get no help from our Artillery. To capture such strong points is a very difficult operation and necessitates a most careful, and very well thought out plan. It is very wrong to ask troops to attack such places in the dark.”

With this use of the personal pronoun, “I”, we see evidence that most, or all, of this report was written by Currie himself.

His purpose was to create a new culture of learning for the Canadian Corps.

He set up a defined channel where new ideas were routinely passed up the chain of command. This process was called “Lessons Learned”. All officers were encouraged to report problems and solutions up the line. Lessons from the “Lessons” were built continuously into the how the staff saw events and then reacted to them. Courses and schools were set up to spread the lessons. We see from Draper’s files that he and other senior officers were always going on courses. The learning never stopped and took precedence over everything.

Tactics and doctrine changed monthly as a result. The result was that the Canadians learned faster and better than their opponents and their colleagues.

Currie personally modelled the culture of receptivity. *“As a corps commander, Currie was highly receptive to criticism and suggestions and was open to new ideas provided that they were practical. Practicality above all might describe the Canadian corps approach to war – the Canadian Corps had learned to learn from their experience during war.”* (Schreiber).

Currie set up the incentives to support create a culture of enquiry and creativity.

He set the right environment at his HQ for creativity. In 1917, Currie operated a shirtsleeves HQ. To get his staff to open up, he would always profess his own ignorance. *“He would say – I don’t know. Will you explain?”*

He had been a gunner and knew the language of the new technology and could see the subtleties of the new ideas.

“It was a very wonderful thing to have behind us a man who knew the language in which these problems were being tackled, who was entirely sympathetic and who trusted us and who would take our views on the matter if he approved of them – and woe betide you if you put up something he could not approve of – and carry them to the senior formations to get us the approval and support to do the jobs that we had.” (McNaughton talking about Currie)

Currie was always humble. He was a brilliant man who did not tolerate fools either above or below him. But part of his appeal to his staff, who genuinely loved him, was his humility. “*I am not clever enough to guess at this game. I have to get everything down and figure it out. It is harder work than being brilliant but safer.*” (Dancocks – Currie)

He had the wisdom to know that he did not know and that finding out the new was going to take a lot of work.



Appendix 4

General Draper



The Brome County Historical Society is fortunate to have the War Papers of Brigadier General Dennis Draper. Draper was born and raised near Sutton Junction in Brome County. Before the Great War he was an active member of the Militia. In the Militia, he served latterly in the 13th Scottish Light Dragoons where Harold Baker, MP, was Lt. Col.

When Harold Baker, MP, raised the 5th Canadian Rifles in May 1915 in Sherbrooke, Draper joined as a Captain and took command of A Company.

The Battalion crossed the Atlantic in July 1915 and spent some time at Shorncliffe before arriving in France in October, 1915. The 5th CMR was in the 8th Infantry Brigade with the other 4 Battalions of the CMR that formed part of the 3rd Division.

Lt Col Baker was killed in action near “Maple Copse” in the Ypres Salient on June, 2nd 1916 and Draper took command.

5 CMR served in all the great actions of the Canadian Corps from late 1915 onwards. It had a reserve company in the Grange Subway on April 9.

Later in the war, Draper was promoted to Brigadier and commanded the 8th Infantry Brigade. This was made up of all the CMR battalions. After the war he became the Commissioner of the Toronto Place Force.

Drapers still live on Draper Road in Sutton Junction.



Appendix 5

The BCHS



The Brome County Historical Society (BCHS) is located in Knowlton, in the Eastern Townships of Quebec. We are about an hour's drive east from Montreal.

The BCHS has one of the finest collections in Canada of documents and material related to the Great War.

For example, this unrestored Fokker, serial number D.6810/18, is the only surviving original D.VII that retains its original, Vierfarbiger four-colour lozenge camouflage fabric covering.

Until now, this collection has remained inside the museum. This, our first online booklet, is intended to bring some of what we have into the world at large.

We plan also to do the same with other parts of our collection. For the museum tells the founding story of Canada. It talks to who came here and why and how they carved a living out of a challenging terrain with a challenging climate.

Mission Statement:

The Brome County Historical Society's (BCHS) aim is to acquire, preserve, research, exhibit, interpret, and publish items of historical interest encompassing all of the historic Brome County and its sites. With this intent, the Brome County Historical Society provides the infrastructure and programmes to deliver the learning experiences needed to educate present and future generations about the life and culture of prior generations.

The Brome County Historical Society (BCHS):

It began at a picnic on August 18, 1897, on a farm in West Brome, Quebec. The event was the centenary of the first land grant made in Brome Township. The outcome was the Brome County Historical Society, which was incorporated on March 9, 1898, and has since worked diligently to preserve the past for future generations.

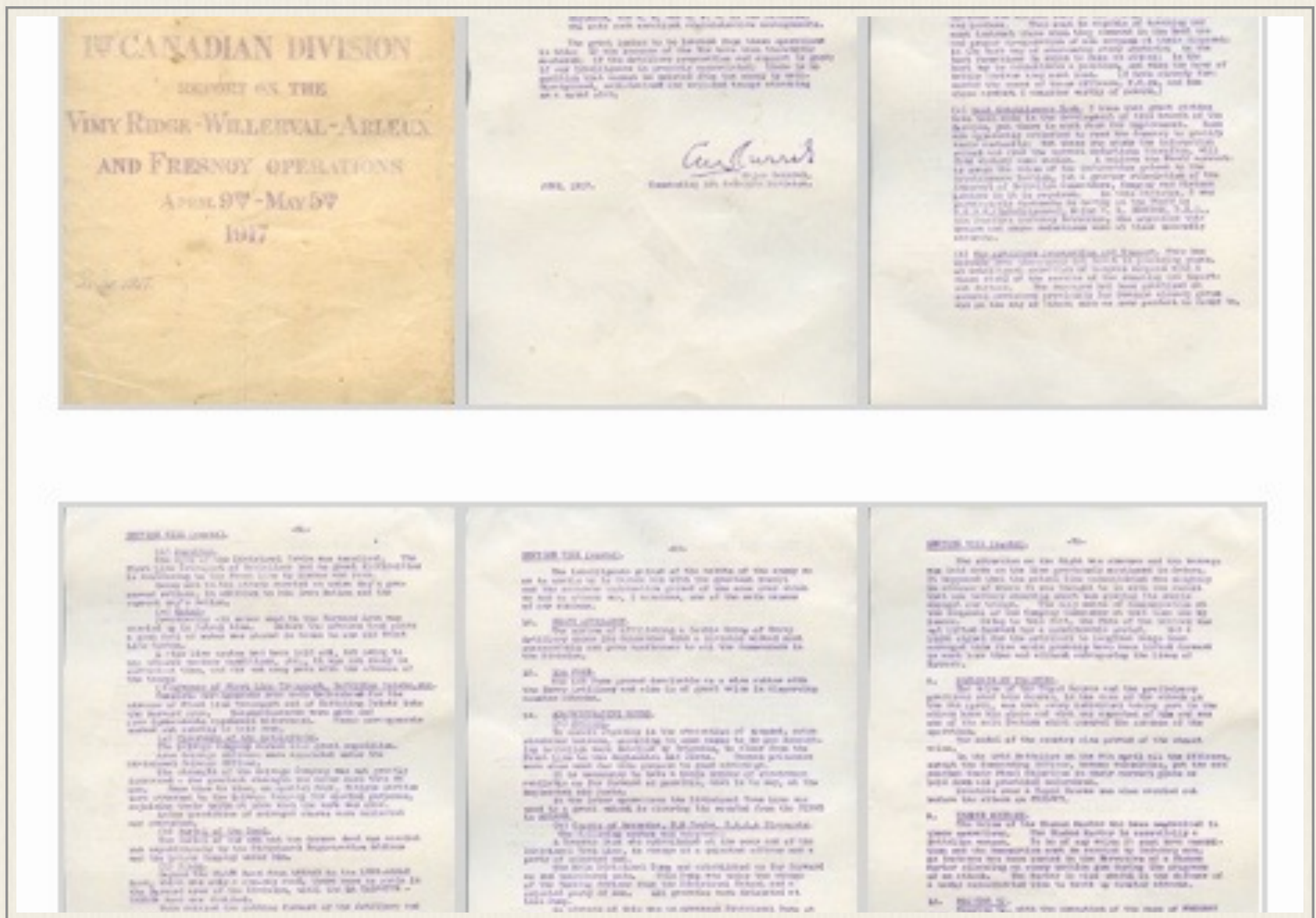
Today, the BCHS owns and maintains a number of heritage buildings, which welcome individuals, families and groups. Our extensive Archives delight history buffs and impress the most serious scholars, and our Museum educates and entertains, with displays of artifacts once used by the early people of Brome County. Our new Children's Museum enables families and young visitors to explore life in 19th century Brome County with interactive exhibits and activities. We invite you to journey back to the 19th century and still younger days of this historic region.

<http://www.bromemuseum.com>



Appendix 6

The Original Document



The original document is held in the archives of the BCCHS.



The Great War

BCHS

Director and Curator, Cari Ensio.

Director and Coordinator, Joanne Croghan

Archivist and Transcription, Abbey Lacroix

Vimy Booklet Editor, Robert Paterson

This document is part of the BCHS's ongoing work to showcase people and events of the Great War as they affected our local community.

In 2017, we offer a physical exhibition about Vimy and our community at BCHS.

Brome County Historical Society

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Online, we offer a special online exhibit: For King, Country, and Constituents: George Harold Baker and the 5th CMR. Explore the exhibit by following this link <http://www.bchs-baker.com>

More on the next page.



FOR KING, COUNTRY, AND CONSTITUENTS:

George Harold Baker and the 5th CMR

Introduction:

On June 13, 1915, Lieutenant-Colonel George Harold Baker, Commanding Officer of the 5th Canadian Mounted Rifles and Member of Parliament for Brome County, was honoured by 200 friends and family members at a special farewell dinner held at the Lakeview Hotel in Knowlton, Quebec.

Soon to be departing his native Eastern Townships for Valcartier en route to the war in Europe, “Harry,” as he was affectionately known to those closest to him, received high praise, as did his esteemed regiment, and was toasted by distinguished supporters like notary Ernest Fleury, who was the Mayor of Knowlton, and Justice William Warren Lynch.

Responding to their speeches, which extolled the virtues of Canada's volunteer soldiers, Baker rose and made an appeal for still more men to come forward and join the fight. He then bade goodbye to his well-wishers, Conservatives and Liberals alike, in a brief but touching address:

"I make no professions as a soldier; I lay claim to no special mission.

My aim is to win, if possible, the confidence of my men and to leave the rest to circumstance and the turn of events.

The memory of this gathering will follow me. You have strengthened my hand, and if ever I am in a tight place I shall try to acquit myself as you would have me."

Less than a year later, George Harold Baker would find himself in just such a tight place, and he would indeed acquit himself in a manner befitting one who had lived and would die in service to his king, country, and constituents.

Explore the exhibit by following this link <http://www.bchs-baker.com>

We are very grateful for the generous support of the MRC (Pact Brome-Missisquoi), the Knowlton Lions Club, and the individual donors whose financial assistance enabled us to complete this important project.