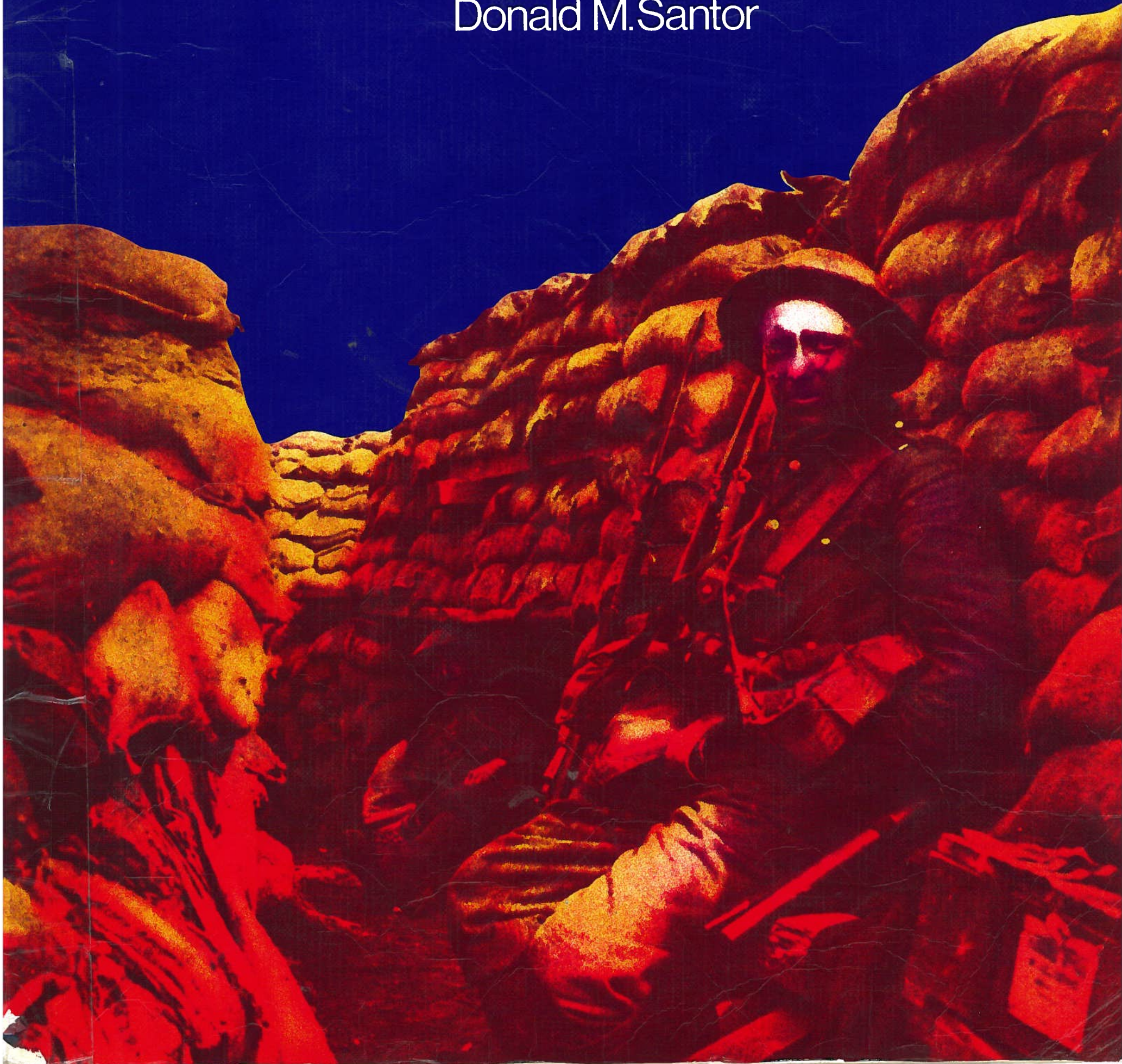


CANADIANA SCRAPBOOK

CANADIANS AT WAR 1914-1918

Donald M. Santor



Introduction

The First World War is the story of millions of men and women living and fighting in conditions that test the human spirit, not simply the story of great men directing great battles. It is the story of unprecedented human suffering and death as well as victory and glory. This book is a record of the thousands of people who responded to the jubilant call to arms and encountered the agony of war on the Western Front. The triumph of Vimy Ridge and the tragedy of Passchendale, along with the rats, mud and lice of the trenches, are significant elements of their story. The problems of mobilizing the homefront in support of the war effort are as much a part of the conflict as the soldier himself. The war did not end with the armistice in 1918, it carried on in the lives and minds of the thousands of survivors who returned home broken in body and spirit.

The reality of this story is presented by integrating the photographic documents with the accounts of those who served. Only then can you see the war as the soldier did. Words alone cannot describe victorious Canadians at Vimy, mud at Passchendale, aliens interned in Western Canada, a happy POW, a circus entertaining troops behind the lines, a flattened city, women making guns and shells, or a limb-fitters shop in Canada.

To understand the war you should experience the battlefield, the life of the soldier behind the lines, and the homefront. This book integrates these three themes and invites you to follow the young men of Canada as they joined up, went off to the training camps and finally met the enemy on the battlefields of Europe. You will join the Canadian soldiers in the trenches where they lived for over four years, assault the enemy across no man's land where certain death awaited them and then retire to the rear where recuperation and recreation occupied their time before they re-entered the lines. A visit to the casualty clearing station for medical aid and the limb-fitter's shop for an artificial limb for the stump of an arm or leg will complete your journey.

On the homefront you will help drum more men into the forces, participate in the efforts to raise money to pay for the war, and respond to the patriotic appeal to eat less bacon and sugar and more corn meal mush.

This book tells the story of Canadians at War 1914-1918.

Darcy, Garth and Eric

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DONALD M. SANTOR
London Board of Education

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British Ultimatum! War is Declared. Hell's Let Loose!

Ottawa Free Press, 4 Aug. 1914

On the night of August 4th Great Britain declared war on Germany. Canada was first officially declared to be at war on the 5th day of August, when the Governor-General-in-Council issued a document concerning enemy merchant ships which began thus:

"Whereas a state of war now exists between this country and Germany."

T. H. Russell, *The World's Greatest War*, p. 6

"Upon this occasion we invoke the blessing of God, not the God of battles, but the God of justice and of mercy, and it is with an ample trust in Providence that we appeal to the justice of our cause... Even those who on principle do not believe in war admit that this was a just war, and that it had to be fought."

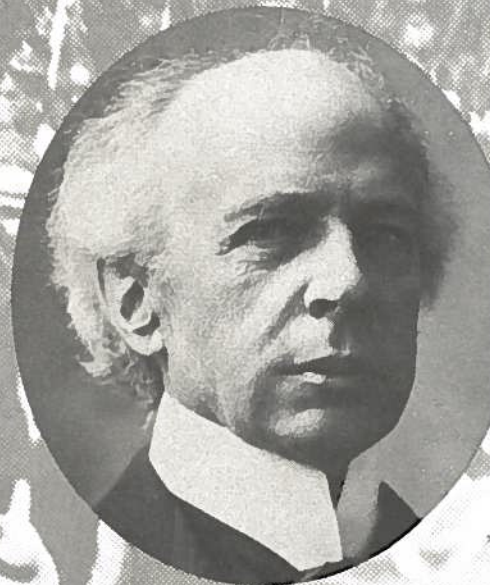
Sir Wilfrid Laurier.

House of Commons,
19 August 1914

The Call to Arms



Sam Hughes, Minister of Militia, hoped for 25 000 men. By the time the first volunteers had mustered at Valcartier, over 33 000 had joined up.



Sir Wilfrid Laurier

Famous Canadians who served overseas: John Diefenbaker, Lester Pearson, Grey Owl, A. Y. Jackson, Robert Service, Norman Bethune, Conn Smythe, Tom Longboat, Brock Chisholm, Frederick Banting, Raymond Massey, John McCrae.

Kerosene Soaked German Kaiser Is Burned in Effigy in City

Vast Crowd Gathers Near the Hotel Vancouver and Starts a Huge Bonfire.

An effigy of Emperor William, fully uniformed in the garb of the war lord of Germany, was burned at 10:15 last night on the vacant lot across from the Hotel Vancouver, while a crowd of hundreds, attracted to the spot by the firing of giant crackers and torpedoes, cheered wildly.

The orchestra at the hotel had just finished playing "Rule Britannia" a few minutes before. A group of enthusiastic Britons who had conceived the idea of burning the war lord in effigy,

started with their dummy down Granville street. Two of them, supporting the figure, rushed down the street and anon a great crowd was in hot pursuit, not knowing what was up. The supporters of the figure kept ahead, though had the race gone another block they would have been overtaken. They rushed their figure to a tripod ready for it, and it was but a moment when the kerosene-soaked emperor was a figure which stood out in almost perfect distinctness; while the flames licked it into a distorted heap. Strings of firecrackers hung around it cracked with the staccato reports of artillery, while the crowd danced and hooted.

Vancouver Sun, 6 Aug. 1914, p. 11

Twenty-two volunteers were chosen and on Friday, August 14th, clad in their red tunics, blue trousers and white helmets, they marched to the railway station, led by the officers who carried their unsheathed swords. They were supported by "C" and "G" Companies of the 35th Regiment, the Citizens' Band and the Collegiate Cadets Bugle Band. They were followed by the fire brigade and a large number of autos and horses and buggies decorated with flags. It was a gala event. The women of the town presented \$80 to the contingent, and the Council the next day presented each man with \$10 and each officer with \$15. The war, of course, would be over in three months. These men probably would not see action. Nevertheless, it was a great demonstration of Orillia's support of the Empire. War was still a chivalrous, romantic thing; the Battle of Mons was still ten days away. The awful casualties of modern warfare were not even suspected. After the speeches, as the train was about to pull out, Band Master Mitchell ordered his band to play "God Be With You Till We Meet Again." With this a hush fell over the crowd. Perhaps, after all, this was serious business. Both soldiers and citizens seemed to be affected for a few minutes. However, the enthusiasm soon again prevailed. The band struck up "The Cock o' the North," the Simcoes' regimental march, and the train pulled out amid the farewell cheers of the huge crowd.

L. M. Frost, *Fighting Men*, pp. 24-25

Many people predicted the war would be over by Christmas. It would simply be a matter of six weeks' autumn manoeuvres with live ammunition.



Sir Robert Borden

"As to our duty all are agreed, east and west, and shoulder to shoulder, with Britain and the other British Dominions in this quarrel. And that duty we shall not fail to fulfill as the honour of Canada demands. Not for the love of battle, not for the love of conquest, not for the greed of possessions, but for the cause of honour, to maintain solemn pledges, to uphold principles of liberty, and to withstand forces that would convert the world into an armed camp, yes, in the very name of the peace we sought at any cost, save that of dishonour, we have entered into this war."

Sir Robert Borden,
House of Commons, 19 August 1914

Italians in Vancouver Ask That They May Be Allowed To Fight for Great Britain

Prepared to Give Their Support to Triple Entente—Thousand Men Parade Principal Streets—Military Preparations Continue Locally—Position of Bank Clerks Who Want to Go to Front—Recruiting Still Active.

One thousand Italians loyal to the British Empire, carrying aloft side by side the British Jack and the Italian flag and headed by a band playing British, Canadian, Italian and French national airs, paraded the main streets of the city last evening between avenues of thousands of cheering citizens. The men marched four abreast and at the head of the procession a large banner was carried bearing the inscription "Loyal Italians of the British Empire." Each man carried a small flag of his native country and continuously during the parade cheered for the British Empire, Canada, France and King George. A great multitude of men, women and children congregated at the corner of Georgia and Granville Streets gave the Italians a most enthusiastic reception as the parade swung past.

[Vancouver Sun, 14 Aug. 1914, p. 2]

Canada's military readiness in 1914	
Population	7 500 000
Army	3 110
Sailors	350
Battleships	0
Cruisers	2
Submarines	2



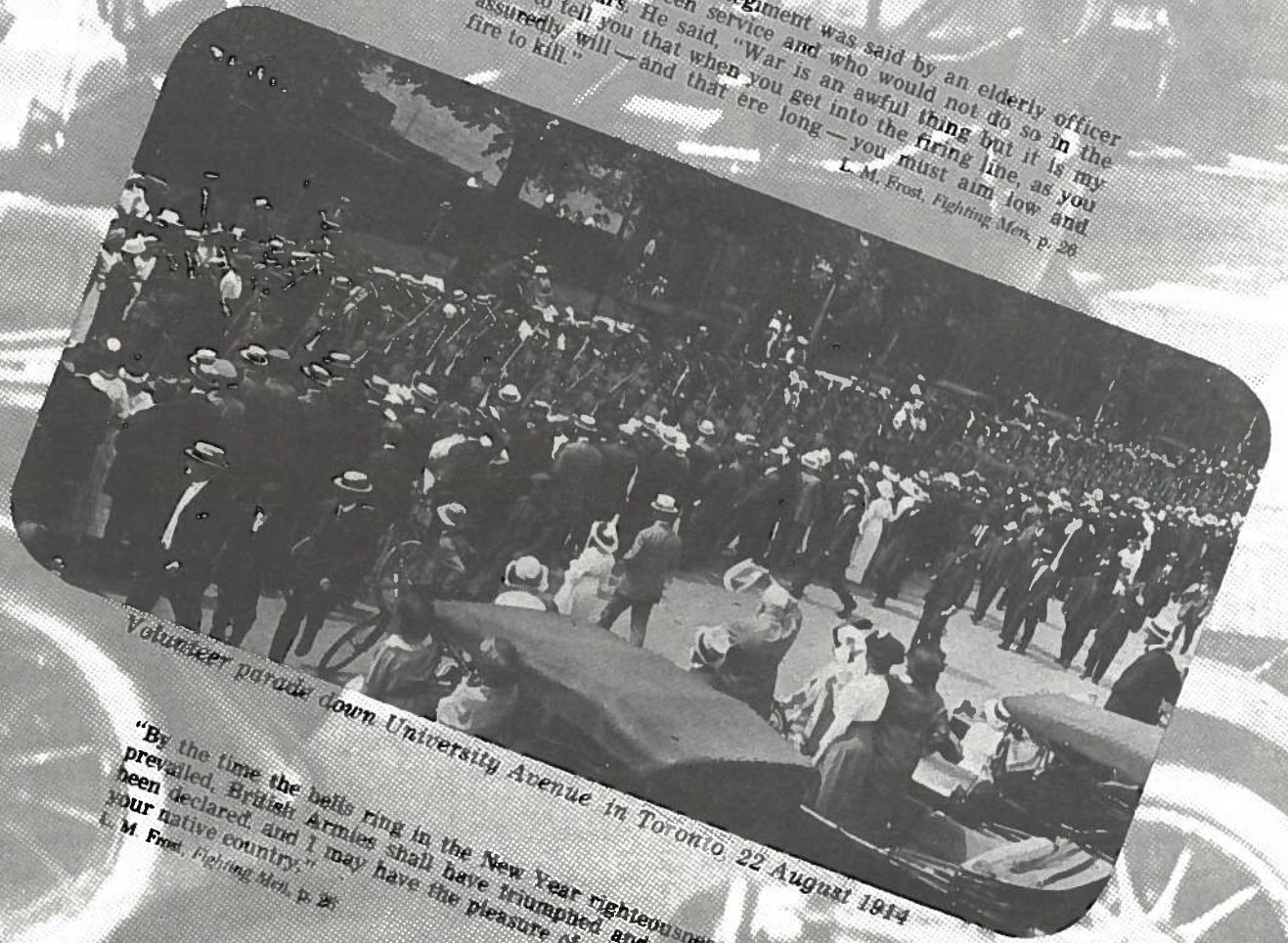
Charlie Potts From Bear Island, Timagami



...and Italian reservists answer the call in Toronto, September 2, 1915

The farewell for the Regiment was said by an elderly officer who had never seen service and who would not do so in the ensuing years. He said, "War is an awful thing but it is my duty to tell you that when you get into the firing line, as you assuredly will—and that ere long—you must aim low and fire to kill."

L. M. Frost, Fighting Men, p. 26



Volunteer parade down University Avenue in Toronto, 22 August 1914

"By the time the bells ring in the New Year righteousness shall have prevailed, British Armies shall have triumphed and peace shall have been declared, and I may have the pleasure of welcoming you back to your native country."

L. M. Frost, Fighting Men, p. 26

Mayor of Hamre, 1914

Service d'Outre-mer
178th BATAILLON C. F.
ECHELLE DU SALAIRE

SERGEANT	AGE 18 A 45 ANS	\$1.35	.15	\$1.50
CAPORAL	GRANDEUR 5 pds. ET 2 pds. Min.	1.10	.10	1.20
SOLDAT		1.00	.10	1.10

ALLOCATION POUR FAMILLE

FONDS PATRIOTIQUE

Le Gouvernement accordera une PENSION quand les Circonstances la Justifient.

Un grand nombre de patrons au Canada garantissent la preference pour emploi au retour des soldats.

ENROLEMENT
Adresses-vous aux quartiers Généraux
HOTEL-DE-VILLE

Training an Army

The Canadian Officers Training Corps was established in 1914 in the universities to train young men as officers for the Canadian Army.

"The aim of military training in wartime is to make one so fed up that they would prefer to go to the front and get shot."

OPA A-2 A Christmas Garland

Rates of Pay in the Canadian Army — 1917

Rank	Daily Rate	Field Allowance
Major-General (Div.)	\$20.00	\$4.00
Colonel	6.00	1.50
Major	4.00	1.00
Captain	3.00	.75
Lieutenant	2.00	.60
Sergeant	1.35	.15
Corporal	1.05	.10
Bugler	1.00	.10
Private	1.00	.10
Gunner	1.00	.10
Sapper	1.00	.10
Driver	1.00	.10
Drummer	1.00	.10
Cook	1.00	.10

PAC 1917 4573

Rules for Medical Examination: 1917

Principal points in medical examination of recruits.

- sufficiently intelligent
- speech is without impediment
- chest is capacious
- heart and lungs are sound
- limbs are well formed
- free and perfect motion of all joints
- between ages of 18 and 45
- at least 5 feet in height for infantry, 5'4" for artillery corps
- chest measurement 33" if 18 to 30 years, 34" if 30 to 45 years
- men may be accepted if one or two toes missing as long as great toes are intact
- can hear ordinary voice at 15 feet in each ear.

PAC 1917 4586

Some general grounds for rejecting a recruit.

- tubercular disease
- palpitation of the heart
- under standard vision
- pronounced stammering
- varicose veins
- chronic ulcers
- defective intelligence
- abnormal spinal curvature
- traces of corporal punishment
- deformity of chest or joints
- hernia
- inveterate cutaneous disease

PAC 1917 4586

Ethnic Battalions

French Canadian	11
Scot Canadian	28
Irish Canadian	4
Scandinavian	2
Indian	1
American	5



Officers' class at bayonet fighting practice in France, 1917

Enlistment in the different units of the Canadian forces.

INFANTRY	235,604
ARTILLERY	37,741
CAVALRY	7,268
ENGINEERS	29,259
SIGNALS	4,391
CYCLISTS	1,138
RAILWAY	22,801
PAY	1,541
CHAPLIN	442
NURSES	2,411
MILITARY POLICE	222
VETERINARY	1,479
ORDNANCE	1,250
SERVICE CORPS	14,030
POSTAL	352
FORESTRY	22,905
LABOUR	5,533
DENTAL	882
MEDICAL	15,929
GYMNASTIC	391
IN TANKS	1,812
MACHINE GUN	16,315



Valcartier Camp, Quebec 1917

TABLE OF MARCHES.

	Time per minute	Pace
Quick march	120 paces	30 inches.
Double march	180 paces	40 inches.
Side step	120 paces	14 inches.
Step short	120 paces	21 inches.
Step out	120 paces	33 inches.
Forming fours:		
Rear or forward	30 inches.	
Right or left	27 inches.	

Infantry Training 1915, p. 7

SALUTING.

The salute is performed by bringing hand smartly, with a circular motion, to brow, palm to front. Forefinger one inch above right eye, elbow to right.

A soldier will salute with hand farthest away from person saluted.

An officer will salute with right hand only. Saluting is one of the courtesies of military life and should be carefully observed by all ranks.

A salute should always be acknowledged by a return salute.

Infantry Training 1915, p. 7

GAMBLING FORBIDDEN.

All gambling in garrisons, camps, cantonments or billets is forbidden.

WINES AND SPIRITS.

The introduction of wines and spirits into quarters is forbidden. Soldiers should try and avoid their use. Officers should not enter a bar-room in uniform, and non-commissioned officers and men should be discouraged from doing so.

Infantry Training 1915, p. 4

Valcartier: The Ideal

As soon as the policy of the Government had been ratified, General Hughes devised and ordered the establishment of the largest camp that had ever been seen on Canadian soil. The site at Valcartier was well chosen. It lay some sixteen miles to the west of Quebec, within a day's march of the gathering transports. The soil was, in the main, light and sandy, and a river of pure water was available. Yet the work of adapting this virgin soil to military purposes was enormous, and the transformation, effected within a fortnight by an army of engineers and workers, a remarkable triumph of applied science. Roads were made, drains laid down, a water supply with miles of pipes installed, electric lighting furnished from Quebec, and incinerators built for the destruction of dry refuse. A sanitary system, second to none that any camp has seen, was instituted. Every company had its own bathing place and shower baths; every cook-house its own supply of water. Troughs of drinking-water, for horses, filled automatically, so that there was neither shortage nor waste. The standing crops were garnered, trees cut down and their roots torn up. A line of rifle targets 3½ miles long — the largest rifle range in the world — was constructed. Three miles of sidings were run out from the wayside station, and a camp telephone exchange was quickly put in working order.

M. Aiken, *Canada in Flanders*, p. 5

Canadians Serving in the First War

Canadian Expeditionary Force	418,052
Royal Air Force	21,169
Canadian Expeditionary Force in Canada	36,553
On harvest leave without pay	15,405
Rejoined British and Allied Units	14,590
Leave of absence for hardship and compassionate reasons	7,216

OPA 1919 7

Two sets of cases were extremely difficult to deal with: the one where a man was excessively anxious to enter the service, and the other where he desired to leave it. Men with impaired vision or even with one glass eye succeeded in passing the test by learning the letters on the chart as if they were a formula in algebra. A man who claimed that he suffered from night blindness was difficult to contradict.

A. Macphail, *History of the Canadian Forces*, p. 28

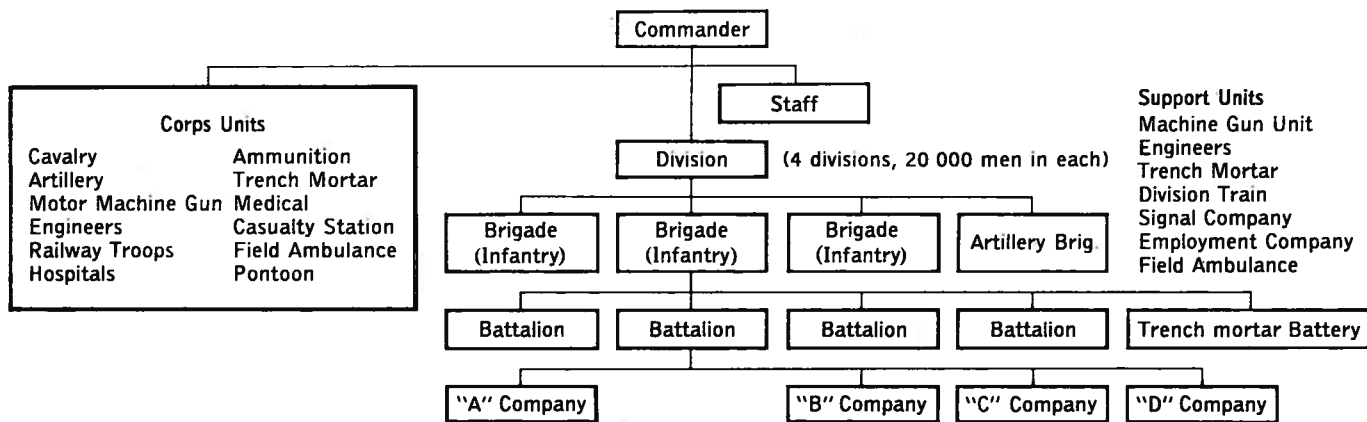
Tom Perkins had just been rejected at the recruiting office because his teeth were not in the best of form.

Inspector: I am very sorry but with your teeth in that condition I cannot pass you.

Tom (angrily): Why not? They are the same teeth you passed my brother with yesterday.

OPA A-1-2 The Record

ORGANIZATION OF THE CANADIAN CORPS



What 500,000 soldiers need

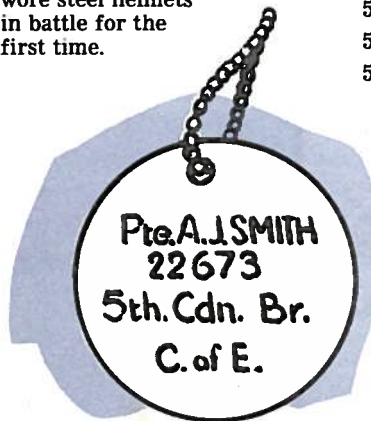
- 400,000 rifles and bayonets
- 4,000 machine guns
- 1,100 field guns
- 80,000,000 cartridges for each battle
- 1,250,000 shells and shrapnel per hour
- 100,000 horses
- 65,000 mules
- 4,000 wagons and trucks
- 500,000 first-aid packets
- 500,000 canteens
- 1,000,000 uniforms — coats, breeches, puttees, underwear, belts
- 500,000 caps
- 500,000 steel helmets
- 500,000 gas-masks
- 1,000,000 pairs of leather boots
- 500,000 pairs of rubber boots
- 500,000 haversacks
- 500,000 rubber ground-sheets, to keep them dry
- 1,000,000 blankets
- 2,000,000 pairs of socks
- 500,000 lbs. of meat per day
- 500,000 lbs. of bread per day
- 250,000 lbs. of vegetables per day
- 1,000,000 pints of tea or coffee per day
- 500,000 cups
- 500,000 plates
- 500,000 knives
- 500,000 forks
- 500,000 spoons

PAC 1918 4696 The Canadian War Thrift Book



It costs \$155.00 to outfit a soldier to serve in France.
PAC 1918 4696

On April 4, 1916 Canadian troops wore steel helmets in battle for the first time.



Brass Name Plate or Tag

Troop Movements to Europe

Rank	1914	30,999
Name	1915	84,334
Number	1916	165,553
Battalion	1917	63,536
Church	1918	73,630
	Total	418,052

OPA 1919 7

Valcartier: The Reality

The men were without adequate tentage and without great-coats in the autumn frosts and rain; the horses were without coverings. Catarrhal conditions developed. The Jacques Cartier river which flowed through the camp became polluted; swift precautions were taken; there was no epidemic of typhoid; only one case developed before England was reached. This method of concentration bore heavily upon the medical services. The officers were suddenly faced by forty thousand men for whom sanitary arrangements were required if epidemic sickness was to be avoided. Each recruit must be examined in a confused camp rather than in the peaceful leisure of his native town, where the established standards should have been applied... But at Valcartier military training in a general sense was negligible. The time was occupied in organizing and re-organizing, issuing clothing and equipment, examining and inoculating recruits, writing new attestation papers, and preparing for reviews.

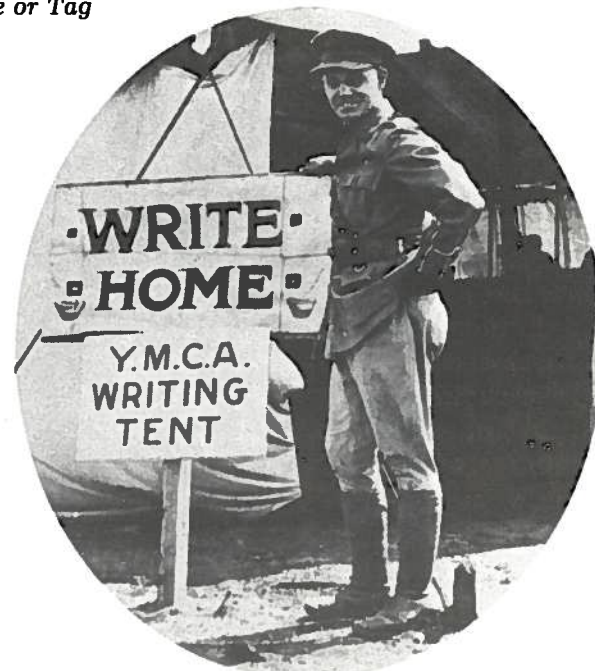
A. Macphail, *History of the Canadian Forces*, pp. 20-22

The total weight of a soldier's pack including clothing, arms, ammunition, tools, toilet articles, rations and water is approximately 60 pounds.

The object to be aimed at in the training of the soldier is to make him, in mind and body, a better man than his adversary on the field of battle. Fitness for war is the only thing that counts, and every soldier should school himself to keep this constantly in mind.

Discipline is the living force which turns a crowd of men into an army. It is absolutely necessary for the efficiency, safety, and comfort of all ranks. The essence of discipline is instant and cheerful obedience, not only to commands given by word of mouth, but to all rules and regulations duly issued by proper authority.

What Every Soldier Ought to Know, p. 4



Camp Borden, 1916

The Course of

Canadian Engagements
Major Battle
Mons
Casualty Figures in Brackets

"And down all the roads from the front, on every day in every month of that first six months of war... come back the tide of wounded: wounded everywhere, maimed men at every junction: hospitals crowded with blind and dying and moaning men."

British War Correspondent
Philip Gibbs A. M. Josephy, *American Heritage History of WW1*, p. 95

"At two or three places which I am forbidden to name corpses filled the Meuse until the river overflowed. This is no figure of speech. The river bed literally was choked by the mass of dead Germans. The effect of our artillery surpasses even our dreams."

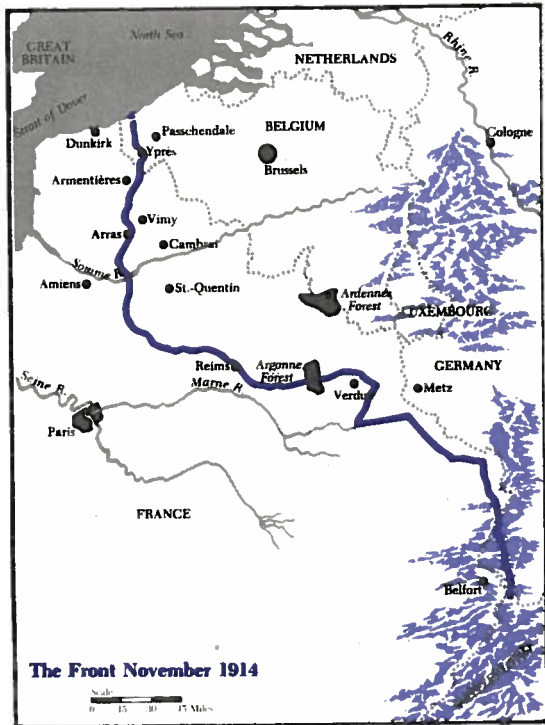
A. M. Josephy, *American Heritage History of WW1*, p. 185

Tannenberg (Russia—100 000 POW's)
Marne
First Ypres

1915

After only five months of war the total number of dead, wounded and missing men exceeded 1,500,000.

A. M. Josephy, *American Heritage History of WW1*, p. 95



After two months of fighting and 200 000 casualties the British army had gained 200 yards.

Gallipoli

Second Ypres (95 000)
Second Artois (French—400 000)

Second Ypres (6 000)

Festubert (2 000)

Givenchy (900)

1916

The Battle of the Somme July 1 to November 18, 1916

The artillery barrage before the infantry attack on July 1, 1916 which marked the beginning of the Battle of the Somme lasted for five days. In spite of it, the German defences were not destroyed. German soldiers emerged from dug-outs over forty feet deep to meet the British troops.

On July 1, 1916, the first day of the Battle of the Somme, British casualties totalled 57 470 the heaviest ever in the history of warfare for one day's fighting.

In spite of the heavy losses on the first day of battle Haig continued the attacks for 5 months. By the time the offensive was ended the British army (including the Canadians) had sustained 420 000 casualties.

During the 141 days of the Battle of the Somme the daily casualty rate of the armies involved was French... 1 632 casualties per day, British... 3 360 casualties per day, German... 5 360 casualties per day.

Verdun (930 000)

St. Eloi Crat
Mt S

Jutland

Brusilov (Russia—1 000 000)

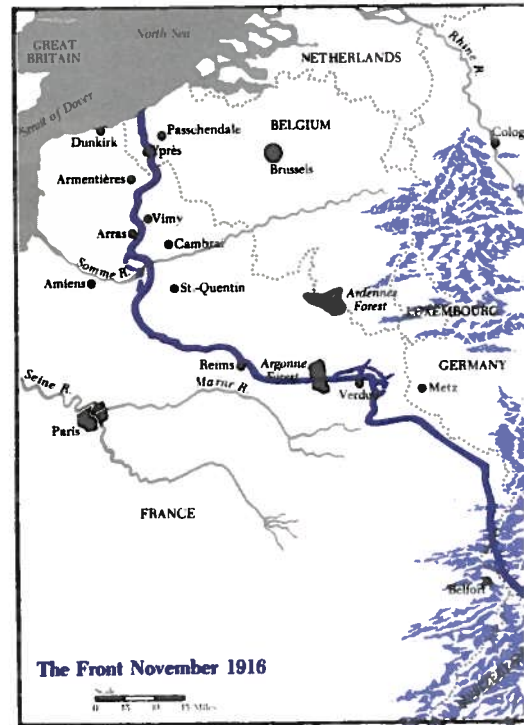
Somme (1 200 000)

"Humanity must be mad to do what it is doing. What scenes of horror and carnage! Hell cannot be so terrible."

French lieutenant, 23 May 1916.



The battlefield following a Canadian charge, 1916



the War

The presence of Canadian troops in the line because they were so often used as "shock" or "storm" troops to spearhead an attack was seen by the Germans as an omen of a coming attack.

Country	Area (sq. mi.)	Population	Army Strength	
			Peace Time	War Time
Austria-Hungary	241,491	50,000,000	426,000	2,000,000
Belgium	11,373	7,600,000	43,000	180,000
France	207,054	39,600,000	610,000	4,000,000
Germany	208,780	65,000,000	672,000	5,000,000
Russia	8,862,524	167,003,000	1,500,000	5,500,000
Great Britain	121,633	45,371,000	413,500	730,000
Italy	110,550	35,329,000	306,000	1,200,000
Canada	3,851,809	7,500,000	2,900	600,000

OPA 1914 12



The results of heavy shelling

Other bodies lie in absolute peace and serenity. Struck dead with a rifle ball through the heart or some other instantly vital spot. These lie like men asleep, and on their faces is the peace of absolute rest and relaxation, but of these alas! there are few compared to the ones upon whose pallid, blood-stained faces one reads the last frantic agony of death.

The soldiers themselves go on from battlefield to battlefield, from one scene of carnage to another. They see their regiments dwindle to nothing, their officers decimated, three-fourths of their comrades dead or wounded, and yet each night they gather about their bivouacs apparently undisturbed by it all. One sees them on the road the day after one of these desperate fights marching cheerfully along, singing songs and laughing and joking with one another. This is morale and it is of the stuff that victories are made.

T. H. Russell, *World's Greatest War*, p. 412

Sanctuary Wood

Somme (24 000)
Courcellette
Regina Trench

1917

For every square mile won by the French and British armies at the Battle of the Somme in 1916 the casualty rate was 3 400 soldiers per square mile. The cost to the Germans defending was 3 700 soldiers per square mile.

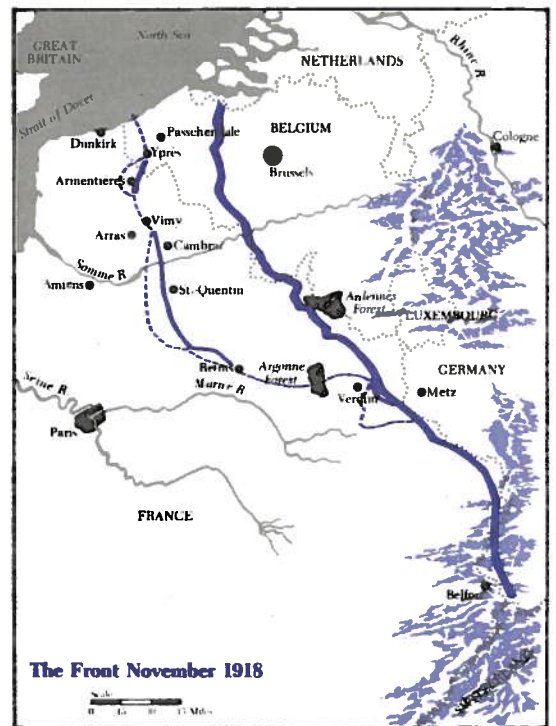
September 15, 1916:
First tanks used in the war.

Estimated number killed during the First World War

Germany	3,000,000
Russia	3,000,000
France	1,400,000
Br. Empire	1,000,000
Austria-Hungary	1,000,000
Italy	500,000
United States	81,000
Turkey	
Canada	60,000

Estimated total killed, died from disease, starved
12,000,000 to 15,000,000.

R. P. Reeder, *Story of the First World War*, p. 9



The Front November 1918

Arras
Vimy Ridge (13 400)
Scarpe (14 000)
Hill 70 (10 000)
Cambrai
Passchendale (16 000)
Caporetto (Italy—300 000)

I don't suppose there is any place on earth in quite such a mess as the surface of the earth surrounding Ypres. For over 6 miles in depth, the land is nothing but a sea of shell-craters, the majority of which are full of water. Live in this for a few days and you will begin to agree, "If this is what we are fighting for, for heaven's sake let's give it to Fritz and at the same time apologize for it being in such a mess."

OPA 1918 33

Letter from the front

1918

Spring Offensive

Amiens (11 725)
Arras (11 000)
Canal du Nord (13 672)
Cambrai (18 000)
Valenciennes (380)
Mons (75)

"The world was drowning in the blood of humanity and no one could see an end to the slaughter."

I. Werstein, *1914-1918 W.W.I Told with Pictures*.

COMPARISON OF WORLD WAR I TO OTHER WARS

War	Date	Length in days	Life lost	Cost in dollars
Napoleonic Wars	1793-1815	8,168	1,900,000	6,250,000,000
U.S. Civil War	1861-1865	2,456	656,000	3,700,000,000
Franco-Prussian War	1870-1871	405	280,000	1,580,000,000
Boer War	1899-1902	962	90,898	1,000,100,000
Russo-Japanese War	1904-1905	576	555,900	2,259,000,000
First World War	1914-1918	1,538	14,500,000	281,887,000,000

OPA

Trench Warfare

"In our part of the trench there was a large barn, in which the Germans were at one end and our boys at the other."
 OPA 1916 44



By November of 1914 a system of trenches was established from the Swiss border to the North Sea. For the next three years of war the front line would not vary by more than 16 km at any point.

When it rained, which it did a great deal, the water poured into the trenches and down into the dug-outs. Day after day, week after week, the men ate and slept, or crouched behind their rifles, in soaking wet uniforms. Often the water and the mud came above their knees. When shells landed near them they were half buried in mud. There was mud everywhere, thick, gluey mud, in which was mixed up all the ruin of the war, bits of trees and buildings and guns . . . and human bodies.

They could not keep warm and they could not keep clean. Their bodies crawled with lice, and rats swarmed everywhere. There was always plenty of food for the rats, for they fed upon the dead bodies. The men who died in no-man's-land could not be buried. It was not safe to go out and fetch them. And even the wounded could not always be brought to safety. The men in the trenches had to listen to the cries of their dying comrades. They had to smell the smell of blood and rotting bodies.

For the guns hardly ever stopped firing, day or night. High explosive shells fell upon the dug-outs and buried men alive. Shrapnel shells burst in the air, spraying their deadly splinters above the open trenches - the tin helmet was invented to protect men's heads against shrapnel. Machine-guns spluttered. Rifles cracked. There were many different noises at the front. Even more terrifying than the crash of the explosions was the noise the shells made as they flew through the air. The heavy shells rumbled like express trains. The smaller shells whined. The bullets whistled. The men learned to recognise the different noises and this often saved their lives.

R. Musman, *First World War*, p. 32



Canadian soldier examining dummy heads, June 1918

A rumour came that we were to be relieved, but we hooted at it. We were past believing any rumour. But it was true. After fifty-five days we were withdrawn from the trenches and taken back beyond the reach of machine-guns.

W. R. Bird, *Ghosts Have Warm Hands*, p. 119

Over the Top . . .

"We were in our trenches at dawn when suddenly a most infernal din commenced. You never saw such a sight; you never heard such a noise. I heard one of my men say, 'This is the end of the world,' and I did not blame him for thinking so. We could see in the distance great masses of flame, earth and brick in great clouds of smoke, all ascending together as enormous shells screamed over our heads and burst among the German entrenchments and the houses of the village. At the end of a half-hour's bombardment the fire ceased as suddenly as it had begun.

"All this time we were awaiting the order to advance towards Aubers. At length we jumped out into the open. The air seemed alive with bullets and shells. There was a buzzing noise, such as you hear in a tropical forest on a hot summer day. On we moved, until we came to an open stretch, which was being swept by an infernal shell fire. We crossed this in rushes to gain the shelter of a few houses, losing some 40 or 50 men. There we remained for some little time, reforming the battalion and awaiting further orders. When these came we moved forward over rough, open ground, coming upon lots of our poor fellows lying dead. They were from the only battalion which had preceded us.

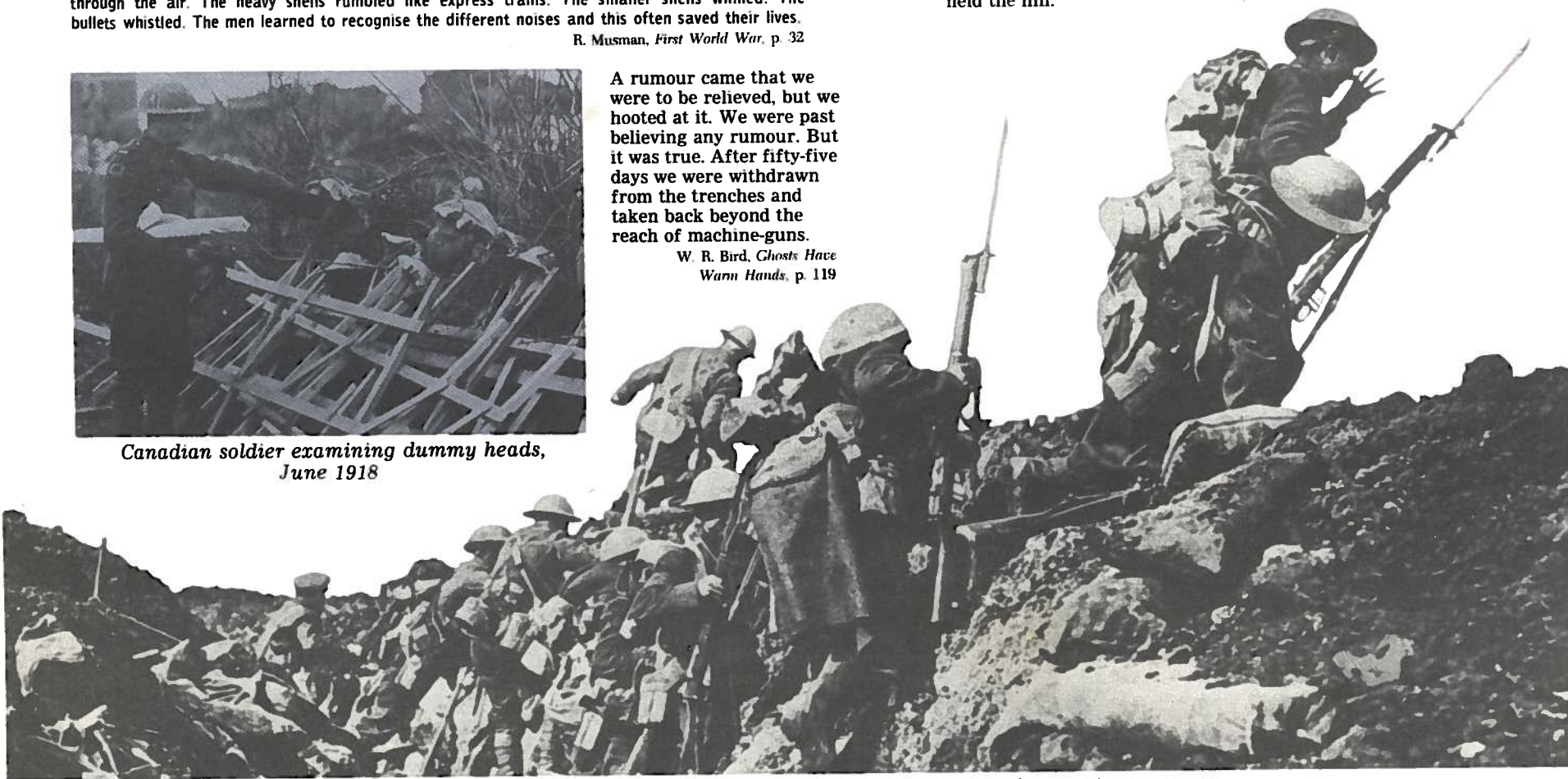
"Then we entered the German trenches which had been captured. Again we halted. All this time our shells, German shells and rifle and machine gun bullets were shrieking overhead.

"Thank goodness, in an action like this you seem to lose your senses! A kind of elevation above all ordinary feelings comes over you and you feel as though you were rushing through air. There is so much to frighten you that you cease to be afraid. Then your senses gradually come back. That is why all infantry attacks should be carried through with one overwhelming rush!"

T. H. Russell, *World's Greatest War*, p. 405

Following the Canadian capture of Hill 70 on August 15, 1917, the enemy counterattacked 21 times during 4 days and 3 nights. The Canadians held the hill.

After putting up a splendid trench during the night, he (the enemy) will pound it to pieces in the morning.



Most attacks against the enemy occurred in the early morning

A Gas Attack

Gas was used for the first time on October 27, 1914 by the Germans when they fired 3,000 gas shells into Allied lines. Its first effective use did not occur till April 22, 1915 at the Second Battle of Ypres. With an east wind blowing toward the French and Canadian lines, 5,000 chlorine gas-filled cylinders were opened causing panic in the lines.

... running blindly in the gas-cloud, and dropping with breasts heaving in agony and the slow poison of suffocation mantling their dark faces. Hundreds of them fell and died; others lay helpless, froth upon their agonized lips and their racked bodies powerfully sick, with tearing nausea at short intervals. They too would die later—a slow lingering death of agony unspeakable...

The whole air was tainted with the acrid smell of chlorine that caught at the back of men's throats and filled their mouths with its metallic taste. Behind the gas-cloud came the advancing hordes of Germans, under cover of a violent artillery fire.



Observation and listening posts were established in the forward areas to monitor enemy activities

DEFENSIVE MEASURES AGAINST GAS ATTACKS

1. Wind observation is to be made at regular intervals.
2. Sentries are to be posted.
3. Mufflers and great coats must not be tight around the neck to ensure rapid adjustment of gas helmet.
4. A sufficient number of men will be posted to arouse all men who are sleeping.
5. When gas attacks are expected wear helmet rolled up on head so it can be pulled down without delay.
6. Gas alarms could be hooters, gongs, whistles or word of mouth. Do not rely on a warning system which relies on use of lungs exclusively.
7. Fix all blanket covers over dugout entrances.
8. Tie hands of a wounded man so he cannot remove helmet.
9. Use sprayers and fans to remove gas when attack is over.
10. Ascertain that the trench is free of gas by raising a little of the skirt of helmet and smelling before issuing orders to remove masks.
11. Rifles and machine guns must be cleaned following an attack as gas affects them injuriously. Use boiling water and washing soda.
12. Carry helmet in satchel outside great coat when within two miles of front lines.
13. Inspect helmet once a week for
 - cracked eye pieces
 - small holes
 - dried out materials
14. Do not use helmet beyond stamped expiry date.
15. Always breathe through mouthpiece as air will be drawn through chemicals which remove gases.

PAG 1916 4441 Defensive Measures Against Gas Attack.



By the end of the war 79 000 were killed from gas and almost 1 000 000 were wounded.

How long in the trenches?

The men in the firing and supporting trenches exchange places every forty-eight hours. After a four days' spell they all retire for four days' rest, fresh troops taking their places as they move out. At the end of their four days' rest they return again to the trenches. All relieving movements are carried out in the dark to avoid the enemy's rifle fire.

M. Aitken, *Canada in Flanders*, p. 15

BARB WIRE ENTANGLEMENTS.

How Soldiers Overcome These Defensive Obstacles.

As has been learned from the reports from the war, barb wire entanglements have been freely resorted to by both sides for protecting their positions, and in a general way it is known that these consist in a number of irregular lines of strong posts set solidly in the ground with a maze of lines of barbed wire strung between them; but how these obstacles are overcome has been left for explanation to a military expert who has an interesting story to tell in the *Scientific American*. Some of the many schemes that have been tried are described as follows:

Experiments have been made in removing whole sections of wire at once by means of a rake, to which a wire rope is fastened. This is thrown over an obstacle, and thirty men pull upon the rope. Thus a section eleven and one half feet wide and sixteen and one half feet deep is torn out. In order to reduce the time required to pass through a barbed trap (the glint of the wire is usually concealed by a bank of

earth) some military engineers have thought that it is a waste of precious minutes to cut or tear it down, and that it is more rational to surmount the obstacle in some way. Structures of boards, ladders and bags should be thrown over the wire, according to their ideas, and upon the platform thus made the men can press forward. Boards eight feet long, nine inches wide and three-quarters of an inch thick, are fastened together by means of three cross pieces, leaving a clear space of three inches between the boards. The weight of the double board is thirty-two pounds, and sixteen of them are employed, each carried by a single man. To place the sixteen double boards on the wire net requires about one hundred and forty seconds, as actual tests have shown, and it takes seventeen men sixty seconds to pass over the boards. As a time saving-expedient, therefore, the method is hardly a success over that of wire-cutting.

Nor are ladders much better. In some experiments, conducted in England ten ladders with nine rungs each were used. Each ladder, twelve feet long and twenty-two inches wide, weighed thirty-two pounds, and was carried by a sin-

gle man. The ladders were laid down in one hundred and forty-five seconds, and sixty-five seconds were required by seventeen men to pick their way from rung to rung.

That this idea of surmounting an obstacle rather than cutting a way through it is not practicable, is better shown by the experiments which have been made with bags of cloth and wire. Twelve bags each eight feet long and four and one-half feet wide (measured empty) and weighing forty pounds when filled with straw, were placed upon a net in ninety-five seconds, and seventeen men passed over them in forty-five seconds. When the bags are made of wire poorer results are obtained. Such bags are composed of two pieces of wire meshing, eight feet long and four and one-half feet wide, laid on top of each other and placed together at the sides with wire. A quantity of straw three inches thick is pushed into the wire bag, which then weighs only twenty pounds. It takes ninety seconds to lay sixteen of these bags on a barbed wire entanglement, and it takes seventeen men sixty-five seconds to pass over them.

Aylmer Express, 12 Dec. 1914, p. 10

As I pitched downward, my steel helmet struck a strand of barbed wire that spanned the trench. The helmet saved my face on the right side, but not on the left. There the long barbs of German wire tore the skin above my eye, ripping to the bone. I landed with a crash but was not otherwise hurt. W. R. Bird, *Ghosts Have Warm Hands*, p. 126



Part of the Hindenburg Line, October 1918. Mass of barbed wire

Passchendaele:

All British Objectives On Passchendaele Ridge Won by Canadian Troops

General Currie's Men Are on the Outskirts of the Village of Passchendaele and They Are Holding Their Ground.

FIVE DESPERATE ATTACKS BY TEUTONS BEATEN BACK

In Spite of the Marshy Nature of the Ground and Bad Weather Conditions Important Progress Is Made by Troops

LONDON, Oct. 30. — The British troops in Flanders carried out successful operations today, according to Field Marshal Haig's report tonight. The Canadian troops gained all their objectives on the Passchendaele ridge and beat off five hostile counter-attacks.

The text reads: "Successful operations with limited objectives were carried out by us early this morning against German positions between the Ypres-Itoulers railway and the Poelcapelle-Westroosebeke road. In spite of the marshy nature of the ground on the greater part of the front attacked and notwithstanding heavy rain and gales which made communication with our troops extremely difficult, important progress has been made.

Canadians Advance.

"On the right of the attack, in spite of fierce opposition, the Canadian troops gained all their objectives on the main ridge and have reached the outskirts of Passchendaele. The fighting was most severe on the spur west of the village, where five hostile counter-attacks were beaten off by our troops. Captured German machine guns were used effectively in repulsing the attacks.

Vancouver Sun, 31 Oct. 1917



There are three things out here that are hard to get accustomed to, they are: filth, mud and hostile shells. We live in daily contact with all three and do not find that we like any of them any better.

This war goes on day and night, week in and week out. It is continuous for over two hundred and fifty miles on this front alone. We fight on the earth, in the earth, under the earth and in the air overhead. Rifles, machine guns, field guns, heavy guns, bombs, grenades, poisonous gas, etc., etc., are all employed. Sometimes the noise is terrible. One of our chaps in writing home dated his letter: "Somewhere in Hell." He was not far out. *Aylmer Express*, 20 Jan. 1916

They lived in mud and worse than mud; they lived in unutterable filth, breathing an air that choked the lungs with disgust, their young bodies attacked by vermin, their feet sinking into squelch, their heads touching at every turn things which one dare not speak about. And our people are the most domesticated in Europe; our climate has forced us into making indoor life the very heart of existence; and these young men were exiled from their homes, were forced to live almost entirely without the grace and charm and consolation of women, were obliged to herd together in great companies in a foreign country, and not only a foreign country, but a torn and blasted country from which the sulphurous flames of Germania had scorched the leaf of the meanest weed.

There they lived, always in the presence of death, always in the midst of horror, always on a rack of torture, a rack which stretched and tortured not the muscles of the body, but every nerve, and the whole mind, and the entire soul, and they endured. Yes, they endured, endured inexpressible agony with patience, even with humour, and at the end flinging themselves upon the enemy, they drove him headlong, they drove him out of the trenches, sent him flying, beat him, beat him to his knees. There has been nothing like this in the history of the world.

D. Lloyd George, *War Memoirs*, Vol. VI, pp. 3423-3424

There you came down from your post, chilled through, dazed from lack of sleep, and pushed your way into the crowded underground to your chicken-wire bunk. You could sit and eat your rations and consider yourself lucky if there was any lukewarm tea. The warmth of the men thawed the earth and chalk walls enough to make them oozing dampness. Rats were everywhere, podgy brutes with ghoulish eyes. They crawled over you as you lay under a blanket and tried to shiver yourself warm.

A. P. Bird, *Cherry Haze War Memoirs*, p. 19

A Muddy Nightmare

3 000 of the 16 000 casualties were sustained by the road building units.

Over 4,000,000 shells were poured into German lines before July 31, 1917 which marked the beginning of the Battle of Passchendaele. The artillery barrage which lasted 30 days dumped an average of 1,370 tons of shells per day on German lines for a total of over 45,000 tons. In comparison, the total of the shells fired at Waterloo in 1815 was only 37 tons.

The entire drainage pattern of the area was so disrupted that by the time the fall rains came the entire region was converted into a quagmire. The Canadian Corps was committed to the battle in October to seize the ridge of Passchendaele, an almost impossible objective. OPA CI-2

TROOPS ARE ESTABLISHED IN NEWLY WON POSITIONS ON PASSCHENDAELE RIDGE

Canadians Have Driven the Huns into the Mud of the Plains Below; Are Firmly Entrenched on Crest of Hill.

BRITISH MACHINE GUN FIRE WAS DESTRUCTIVE

Barrage Was Perfect, Causing the Enemy Heavy Losses; Captured Village a Mass of Ruins. Vancouver Sun, 8 Nov. 1917



Arguments which refute the need for the Passchendaele offensive:

1. The French army had recovered from the mutiny and had just successfully attacked Verdun and captured 10 000 prisoners.
 2. Currie argued that the October rains which turned the whole area into a bog made attack impossible for either side.
 3. Poincaré, the French president, inquired when the offensive at Passchendaele would stop so that British troops could take over more of the line.
- Currie protested against the attack on Passchendaele adding that the expected cost of 16 000 casualties was too high—in fact the casualties were 15 584.

Arguments which Haig felt justified beginning and continuing the Passchendaele offensive:

1. The French army mutinied in May and refused to attack—only hold defensive positions.
2. Many areas of the French lines were held by only a few troops and a German attack would surely be a breakthrough.
3. Haig said he was under pressure from the French to maintain an offensive.

There was an awful explosion and then a shower of dirt, frozen mud, shrapnel, etc. We had a seconds warning, no more, before it struck... A piece of shrapnel went right through his head poor fellow—My helmet had a bash in it...

OPA 1918 33

Letter from the front

anonymous yards of inconspicuous mud

Trench feet resemble frost bite... Men get them through long standing in mud and water, the circulation leaves the soles of the feet so in time they became quite dead.

It was as if a powerful flood had swept over the entire landscape snapping off the trees and destroying everything in its path, and as it, in their recession, the waters had left tons of sludge and stony pools where had been farms and fields. Everywhere was the jettison of war: light locomotives, sunk to their boilers; guns, axle-deep in mud, pointing grotesquely at the sky, and sprawling bodies that neither side could clear because of the continuous shelling. The swollen flanks of dead horses and mules stoned in the rain; human remains lay on every side. Not every dead face was caked with mud. Some of the recently killed were white, others grey, green, black or decomposed. A disgusting odour of sickly, sweet-smelling death pressed heavily on the senses. On the higher ground, across the swamps, were the enemy defences based on machine-guns in concrete pillboxes, extremely strong.

J. A. Swettenham, *Canada and the First World War*, p. 79

The Soldiers' Diet: Three Views

What do our soldiers get to eat? The very best and most substantial food and plenty of it. The first item is meat—fresh or frozen. Each soldier is entitled to one pound every day. In addition, he is given four ounces of bacon, usually for breakfast. Fish, too, much of it from Canada, sausages from government-owned factories, and pork and beans, are issued to supplement the meat rations. Bread is, perhaps, next in importance. Of this each soldier receives daily one pound, or ten ounces of biscuit, or an equivalent ration made up of the two. Bread for the Canadian army is made at the base bakeries at Boulogne. These turn out daily 220,000 two-pound loaves, made from Canadian flour of the same quality as in pre-war days. Other items in Private Jack Canuck's daily bill-of-fare are: ten ounces of rice, two ounces of butter served three times a week, three ounces of jam, five-eighths of an ounce of tea or coffee, two ounces of cheese, two ounces of oatmeal three times a week, three ounces of sugar, one ounce of condensed milk, an ounce of pickles three times a week, two ounces of potatoes, eight ounces of fresh vegetables when obtainable, or two ounces of dried vegetables.

Canada War Thrift Book: 1918.
PAC 1918 4696

The food was monotonous and barely adequate—biscuit that had to be soaked in water before it could be eaten, tinned meat that was all too often tainted when opened. No attempts at all were made to achieve a diet that would give strength to the body. The cookhouse at the training camp near the Chateau de la Haie had a hard-tack biscuit nailed to the door over a sign that read: "A square meal."

H. F. Wood, *Vimy!*, p. 47

Food in the trenches was always scarce; a day's ration was a tin of bully beef, hardtack, a billy-can of tea and possibly a sweet sticky mixture called plum and apple jam. The troops swore it was made of turnips and rhubarb.

L. M. Frost, *Fighting Men*, p. 24



Fresh vegetables were not always part of the diet

The war changed men mightily. Down in dugouts where there was hardly room to breathe, men who had come from comfortable homes moved without complaint. All grouching was reserved for the "brass hats," who were supposed to be responsible for all that went wrong. The men were unselfish, each with a balance and discipline of his own. We endured much. Dugouts reeked with odours of stale perspiration and the sour, alkaline smell of clothing. There was never enough water to permit frequent washing and when we could get warm the lice tormented us. The vermin were in every dugout, millions of descendants of the originals of 1915. We seared the seams of our shirts with candles, fought them constantly but never conquered them.

W. R. Bird, *Ghosts Have Warm Hands*, p. 19

Suppression of Flies

A fly lays between 100 and 150 eggs at a time, usually in horse manure. All horse manure should be collected and burnt in special incinerators constructed near camp.

PAC 1917 4583

Rats

One night I was awakened by stiff whiskers on my face. I opened my eyes to see a large rat scanning me gravely. He backed off a trifle as I looked at him and pushed himself into the palm of my hand. The feel of his feet was revolting and I pitched the thing from me. My revulsion lent strength to the movement. The rat rose in an arc and descended, head down, straight into Thornton's open mouth. Its weight drove it in and Thornton's jaw closed convulsively. For a heartbeat there was a picture of the rat's head and legs sticking wildly, then Thornton put a hand each side of the rat and threw it across the barn. The rat up and spat furiously, giving me a tug. I was almost strangling myself with teeth but pretended to be stupid. "What's up?" I asked.

"A rat—sfut—jumped—sfut—into my—sfut—mouth!"

"You're crazy," I said. "They wouldn't."

"But I'm—sfut—telling you they—sfut—did!"

Soon he had everyone awake and was describing, with much spitting, how the horrible thing had jumped into his mouth. All hands asked questions and shook with laughter.

W. R. Bird, *Ghosts Have Warm Hands*, pp. 120-121

Many times the Canadians took over front line trenches reeking from the stench of decomposing bodies of allied soldiers.

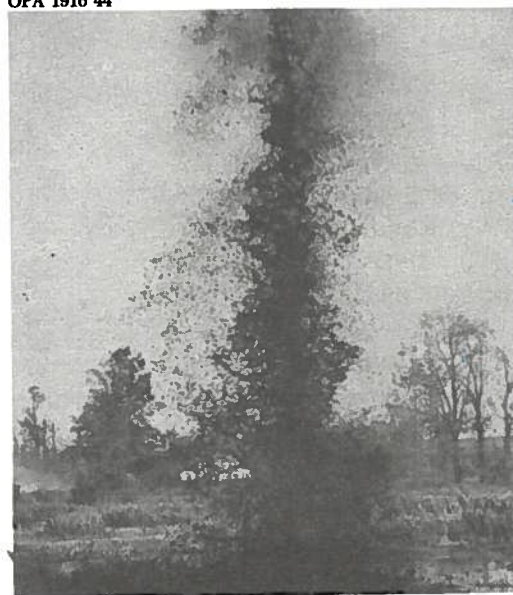
Life in



A front trench line, September 1916

"Our company had a sickener of bully beef and another officer and I thought we would take a few bombs and go fishing. We threw our bombs and got twenty-seven fish."

OPA 1916 44



There were the usual lice—itchie-coos, the men called them—and rats which, gorged on human remains, grew to enormous size.



Short hair served a useful purpose

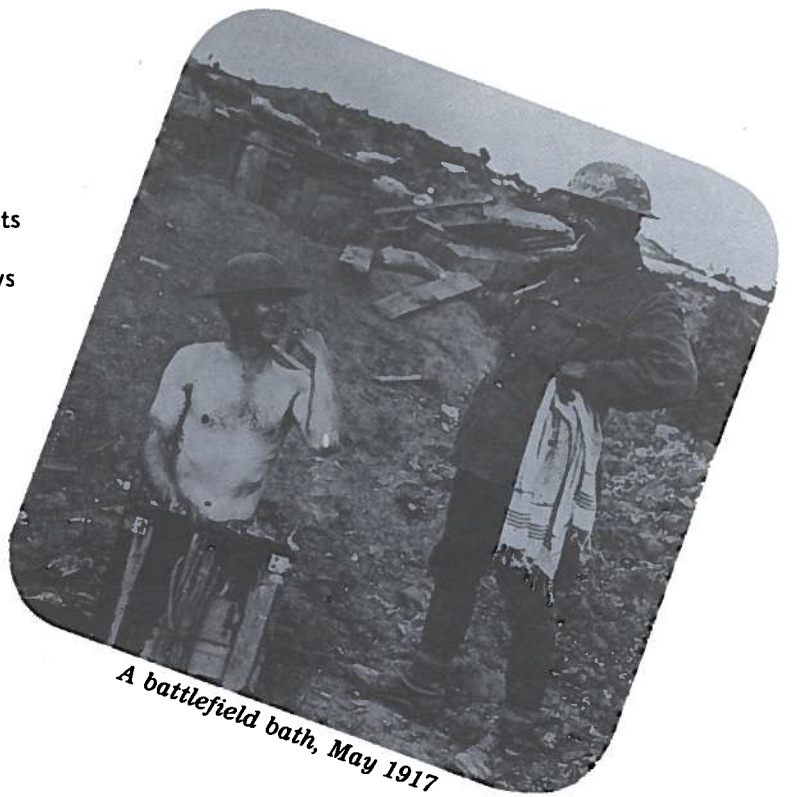
... and lice

Extermination of Lice

The body louse lives on clothes over the skin. It requires a meal of blood twice in 24 hours. It lays its eggs in the seams of clothing and retreats into the seams and folds after feeding. The female louse lays 6-7 eggs per day to a total of 295 and the eggs hatch in 3 days.

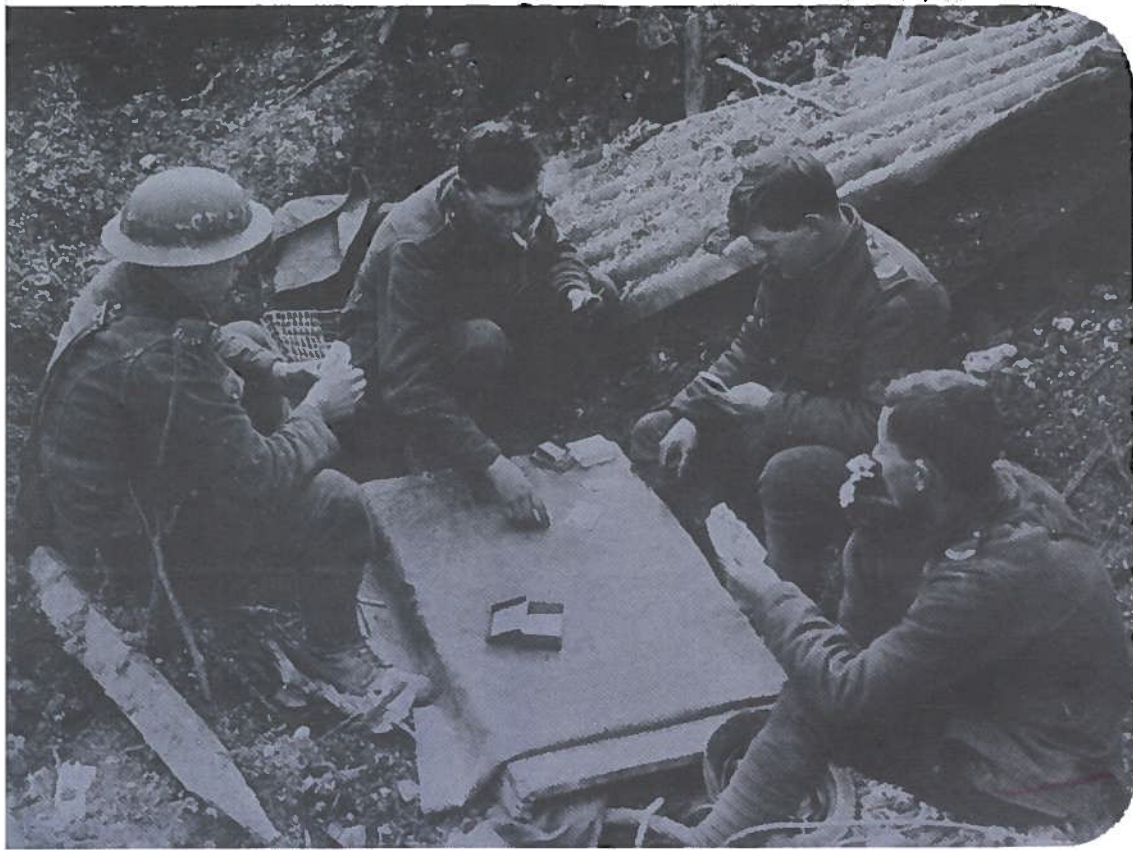
1. Change clothing as often as possible.
2. Keep verminous clothing away from an infested kit.
3. Lice die of starvation in a week's time in discarded clothes.
4. Brushing and ironing are the best means of destroying the eggs.
5. Badly infested clothes not needed should be burnt, buried or sunk in water.
6. The wearing of silk underclothes will prevent lice.

PAC 1917 4583



A battlefield bath, May 1917

the Front Lines



To pass the time Canadian soldiers often played black jack, spit in the ocean, poker, and seven-toed Pete. This game was played during a break in the action at Vimy, 1917



A wash-up while on the move

One of the more exasperating absurdities of dress was the kilt, and no fewer than eight Canadian battalions wore it with a fierce pride that made nonsense out of reality. Heavily pleated, the kilt was a happy haven for vermin. Made of coarse, unyielding wool, it could not be cleaned properly under battlefield conditions. On the march, when the kilted columns hunkered down for the ten-minute break that was decreed each hour, the garment picked up gobs of wet mud, which, when it dried, lacerated the calves of the marching legs. All men smelt in the line, but none gave off so basic an odour as a kilted Highlander.

H. F. Wood, *Vimy!*, p. 48



The complete efficiency of the men is largely due to the excellence of their food. The Army is, in fact, healthier than any other army that has ever faced war. Typhoid is almost unknown. The amazing record of health owes much to the sanitary precautions which are taken. One of the most remarkable of these is the system of hot baths and the sterilising of clothing.

Bathing establishments have been put up in various parts of the field, and the largest of them is in a building which, before the war, was a jute factory. Every hour of the day, successive companies of men have hot baths here. They strip to the skin, and while they wallow in huge vats of hot water, their clothing is treated with 200 degrees of heat, which destroys all vermin.

M. Aitken, *Canada in Flanders*, p. 19

The 42nd Infantry Battalion consisting of approximately 1,200 soldiers received... 90,625 packages of cigarettes. 18,125 packages of tobacco. 11,800 plugs of chewing tobacco. 380 plugs of smoking tobacco. 223 pipes.

OPA 1919 13

NOTHING is to be written on this side except the date and signature of the sender. Sentences not required may be erased. If anything else is added the post card will be destroyed.

I am quite well.

I have been admitted into hospital.

(sick) and am going on well.

(wounded) and hope to be discharged soon.

I am being sent down to the base.

letter dated 21.6.17

I have received your letter.

Letter follows at first opportunity.

I have received no letter from you lately.

four or long time

Signature only. J. S. Brown

Date

[Postage must be prepaid on any letter or post card addressed to the sender of this card.]

© 1916 U.S. G.P.O. : 200-1000-1015 J. J. K. & Co., Ltd.

Post Card, 1916

Please accept my many thanks. Chewing tobacco is the one thing men in this branch of the service will never say no to.

J. S. Brown
Captain
Forestry Corps

OPA 1919 13



*A Canadian tailor working outside his shop,
September, 1917*

The second episode I would remember was the issuing of whale oil to rub on our feet. It came in jugs and was colder than ice. It would prevent trench feet. Orders were that every man should rub it on his feet once in twenty-four hours while we were in those winter trenches. I did so religiously and never had the least trouble. But we had a big chap who had blustered much until we were within sound of the guns. Then he had tried in every way to get from the front, going on sick parade, complaining of blindness, even trying to wound himself slightly. He had been caught in the act and warned of what his punishment would be, so he never used the whale oil, although the sergeant who made the nightly check was told he did. The result was that after two days his feet started to swell. It was learned later he had purposely walked through wet places and the cold had penetrated. His feet became so bad he could not walk and finally he had to be taken out on a stretcher. The last we heard of him was from a lad who had been to see him in hospital in England. Both feet were huge blobs of mis-shapen flesh. He could only move around on crutches and his feet would never be normal again.

W. R. Bird, *Ghosts Have Warm Hands*, pp. 37-38

Stoppages of pay were made in the following cases:

1. Absent without leave.
2. In hospital for drunkenness.
3. In hospital with self inflicted wounds.
4. In custody for any offence against the Army Act.
5. In custody for drunkenness.
6. In hospital with venereal disease.

OPA 1917 4573

Canadians contributed funds to purchase tobacco products for soldiers in the trenches. Over a four year period the following quantities were sent overseas.

Cigarettes	25,630,850
Plugs chewing tobacco	551,400
Plugs smoking tobacco	123,310
Pipes	6,674

OPA 1919 13



Free coffee in the front lines, March, 1917



The Chinese volunteers, organized into labour battalions, built roads, railways and gun emplacements. Here they are celebrating New Year's 1918, February

In the absence of major engagements the troops spent the time maintaining trenches and breastworks that liquefied and dissolved in the rain. Water rose thigh-deep and the high rubber waders that had been ordered the year before did not arrive till the following spring, when the need was far less urgent. Illness was prevalent and the continual wetness induced a painful condition known as trench feet, similar to frost-bite. If neglected, it could turn to gangrene.

L. Worthington, *Amid the Guns Below*, p. 41

We have one or two cats in the trenches, which are very popular.

OPA 1916 44



Tom Longboat, the well-known Indian long distance runner, buys a French newspaper

A Soldier's Christmas

HAMPERS

for the boys at the front

No. 1 for \$2.50

6 pkgs. Chewing Gum25c
1 Pr. Leather Laces25c
1 Shaving Stick25c
1 Tooth Paste25c
1 Tooth Brush25c
1 Cake Soap15c
1 Labardilla Powder25c
2 Khaki Hdks.25c
1 Pair Wool Gloves75c

\$2.85

No. 2 for \$3.50

6 pkgs. Chewing Gum25c
1 Pr. Leather Laces25c
1 Shaving Stick25c
1 Tooth Paste25c
1 Tooth Brush25c
1 Cake Soap15c
1 Labardilla Powder25c
2 Khaki Hdks.25c
1 Pair Wool Gloves75c
2 Pr. Wool Socks65c

\$3.95

No. 3 for \$4.50

6 pkgs. Chewing Gum25c
1 Pair Leather Laces25c
1 Shaving Stick25c
1 Tooth Paste25c
1 Tooth Brush25c
1 Cake Soap15c
1 Labardilla Powder25c
2 Khaki Handkerchiefs25c
1 Pair Wool Gloves75c
2 Pairs Wool Socks\$1.30
1 Wool Scarf\$1.00

\$4.95

Any of these hampers, securely packed and delivered, express prepaid, to the front.

The Hudson's Bay Company

Vancouver Sun, 11 Nov. 1917

Christmas: 1914

Soon the men at the front began to wonder if the war would ever end. Soon they ceased to have any enthusiasm for the fighting. They did not even hate the enemy. In fact on Christmas Day, 1914, British and German troops met in no-man's land and played football matches and talked about home and peace. Senior officers on both sides were worried about this and said that it must not happen again. For they were afraid that if the men got too friendly they would no longer want to go on killing each other. They need not have worried. The soldiers in all the different armies went on fighting and dying bravely even though they hated the war much more than they hated the enemy.

R. Musman, *The First World War*, p. 34



Christmas Greetings to the enemy: Special Delivery



The quantity of mail sent to the Canadian soldiers required a special unit to handle it

"Last Call" for Overseas Christmas Parcels

If you haven't sent your Christmas parcel don't delay another day.

Both the Government and Red Cross have advised that, owing to transportation difficulties, this year's Xmas parcels should be forwarded much earlier than last year.

If you have sent your parcel, send "him" another box of cigarettes. Cigarettes are a necessity to the boys at the front. You can't send them too many.

Special Overseas Christmas Box, packed with individual packages of ten cigarettes each, and containing a label for convenience in addressing, can be secured from any tobacco shop.

Boxes of Fifty Cigarettes - 50 cents
Boxes of Hundred Cigarettes - \$1.00

AT ALL TOBACCO SHOPS
Vancouver Sun, 12 Nov. 1917

HE WILL LIKE A Trench Talking Machine

SEND one of the Stewart Trench Talking Machines to the boy at the front. It has a reasonably clear tone; is made of metal and is round in shape. We pack them all ready to mail free of charge; weight, 7 lbs.

COME IN AND HEAR THEM. PRICE,

\$8.50

Montelius Piano House, Ltd.

"The Big Victor Store."
524-528 Granville Street
Phone Sey. 874.

Vancouver Sun, 11 Nov. 1917

Christmas: 1916

Private Norman Keys (now a lawyer in Montreal) had gone to college in Germany before the war and spoke German. He and the battalion bomber sergeant arranged an armistice and we met the enemy in no-man's-land. They were surprised to see us with rubber boots, cigars and new clothes. It seemed to demoralize them. About ten that night the "Van Doos", who were on our left, raided the German trenches and stole all their Christmas presents and this ended the truce.

H. F. Wood, *Vimy!*, p. 100



Early in the war the German army fell back to Vimy Ridge when they failed to take Paris. There they established a defensive position which turned back a French assault in 1915. In spite of the 100 000 French casualties in 1915, the British tried unsuccessfully to take the Ridge in 1916. By 1917 the German hold on the Ridge was considered impregnable.

Vimy Ridge: April 1917

The Preparations.....



To ensure victory a constant supply of ammunition had to be guaranteed

Twenty miles of railroad in the Corps' area, over which gasoline-driven locomotives or even mules drew light trains, were reconditioned and extended until eight hundred tons of ammunition, engineer stores and rations came forward every day. Push-trucks were assembled forward for the evacuation of wounded. Stokes mortar positions, and projectors that could toss gas drums almost a mile forward, were installed.

C. W. L. Nicholson, *Canadian Expeditionary Force*, p. 249



A few empty crates and casing from the shells fired on Vimy Ridge, 1917

Large dumps for the enormous quantities of ammunition to be expended in the preliminary bombardment and attack, and for other stores necessary for the assault, were prepared in good time by British and Canadian sappers assisted by labour units. Work was done at night. Roads and light railways for transportation were built in the Canadian forward areas. Twenty-five miles of road in all were repaired and maintained; three miles of new plank road were constructed, at which the Canadian engineers were particularly adept.

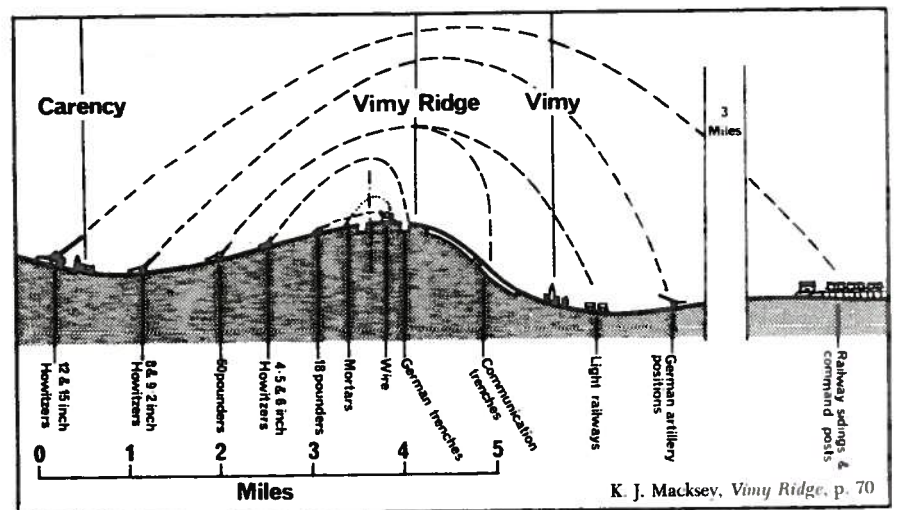
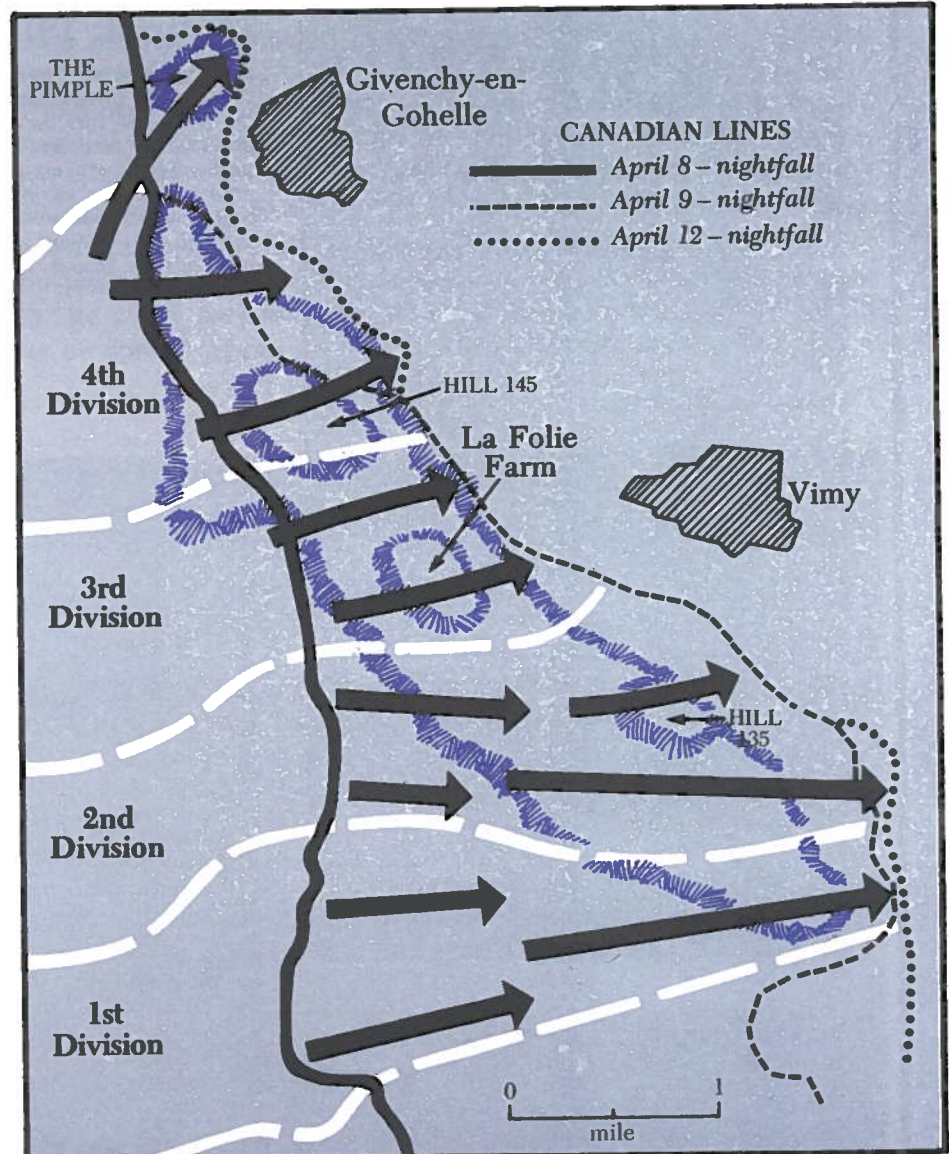
C. W. L. Nicholson, *Canadian Expeditionary Force*, p. 250

To guarantee contact between the front-line soldier and headquarters during the Battle of Vimy Ridge seven different systems were used.

1. Buried cable.
2. Telephone cable on poles.
3. Pigeons.
4. Morse code by power buzzers.
5. Wireless.
6. Visual signals—lamps, flags, flares.
7. Aircraft observation of ground flares. Messages dropped from plane.

It was necessary to bury telephone cables at least 6 to 8 feet below the surface to protect them from enemy shelling.

The tunnels which served Vimy Ridge were 20 feet below the surface, 6-7 feet high and 3 feet wide. They contained a light gauge railway, water lines, electrical lines, communication cables. To permit round-the-clock use they were ventilated with large fans.



K. J. Macksey, *Vimy Ridge*, p. 70

Canadian artillery and its objectives at Vimy Ridge. Each gun was matched by range and nature to appropriate targets.

It had already been agreed that the preparatory bombardment would last two weeks, with intensity increasing for the last six days. Not all the guns would be employed on this. It was vital not to indicate the exact day of the attack, and the fire that came down on the German lines, dumps, guns and billets from March 20th onwards was calculated to destroy slowly and methodically without alerting the enemy to the likelihood of imminent attack and provoking him into moving his reserves forward. Wire was cut a bit at a time by big guns using the 106 fuse, while others fired thereafter just enough to make repairs impossible.

H. F. Wood, *Vimy*, p. 119

In its final form it would be a "rolling" barrage, a curtain of fire that would advance one hundred yards every three minutes until each objective was secure. Supplementing this, medium and heavy guns would bombard known enemy strong-points throughout the timed programme. All this was impressive enough; each enemy machine-gun, each steel cupola, each concrete emplacement would receive its share.

H. F. Wood, *Vimy!*, p. 123



Each "bayonet" man in the assault waves carried his instruments of war with him: a rifle and bayonet, 120 rounds of ammunition, two Mills bombs, five sandbags, forty-eight hours' hard rations, a waterproof sheet, a respirator, a smoke helmet, goggles, one ground flare and a filled water-bottle.

H. F. Wood, *Vimy!*, p. 130

The Attack....

As they advanced a fireworks display of Very lights lit the sky; the enemy was signalling wildly for artillery fire. When it came, weak and desultory, it did little harm. The counter-battery programme had worked unbelievably well and the infantry passed over no-man's-land unscathed by shelling. Of the enemy batteries identified in those long months of preparation, eighty-three per cent had been silenced.

H. F. Wood, *Vimy!*, p. 137

Burgess was not so preoccupied with the advance that he could overlook what seemed, to him, to be a very funny incident: "There was a man struggling through the mass of rubble the same as the rest of us, when a 'whiz-bang' came over and drove into the ground right underneath him. The ground was so soft and the shell went in so far that when it exploded all it did was turn this man upside down, scattering his equipment and load around. He sat up and looked about him to see if anyone had noticed, got up, gathered up the scattered parts and started on his way again, evidently none the worse."

H. F. Wood, *Vimy!*, p. 147

Meanwhile, the infantry were on the move.

Out from the tunnels, over the parapets, into the torn landscape that was no-man's-land surged the assault waves. Each man knew his task, each had his section leader in his sight, and, as if in happy augury, the wire of the enemy positions had been cut. They could get through. The artillery had done its stuff.

H. F. Wood, *Vimy!*, p. 137



Crossing no man's land during the battle

CANADA'S EASTER GIFT TO FRANCE

The Victory....

"Truly magnificent, the greatest day the Corps has ever had."

Sir Arthur Currie, April 9, 1917

Canadian successes at Vimy Ridge.

4000 prisoners taken
54 guns lost by the enemy
104 trench mortars taken
124 machine guns taken
3 mile penetration
Canadian soldiers killed—3598.

The resounding victory, the first in Britain's two and a half years of war, gave every man a feeling of pride, the more so because the long battle line to our right had failed. A national spirit was born, and now to be British was not enough; we were Canadian and could do a good job of paddling our own canoe.

L. Worthington, *Amid the Guns Below*, p. 5

It had all happened so quickly. Questing Canadians, searching the dug-outs of the enemy for lurking snipers, found food on the tables, bottles of soda water and wine in the cupboards.

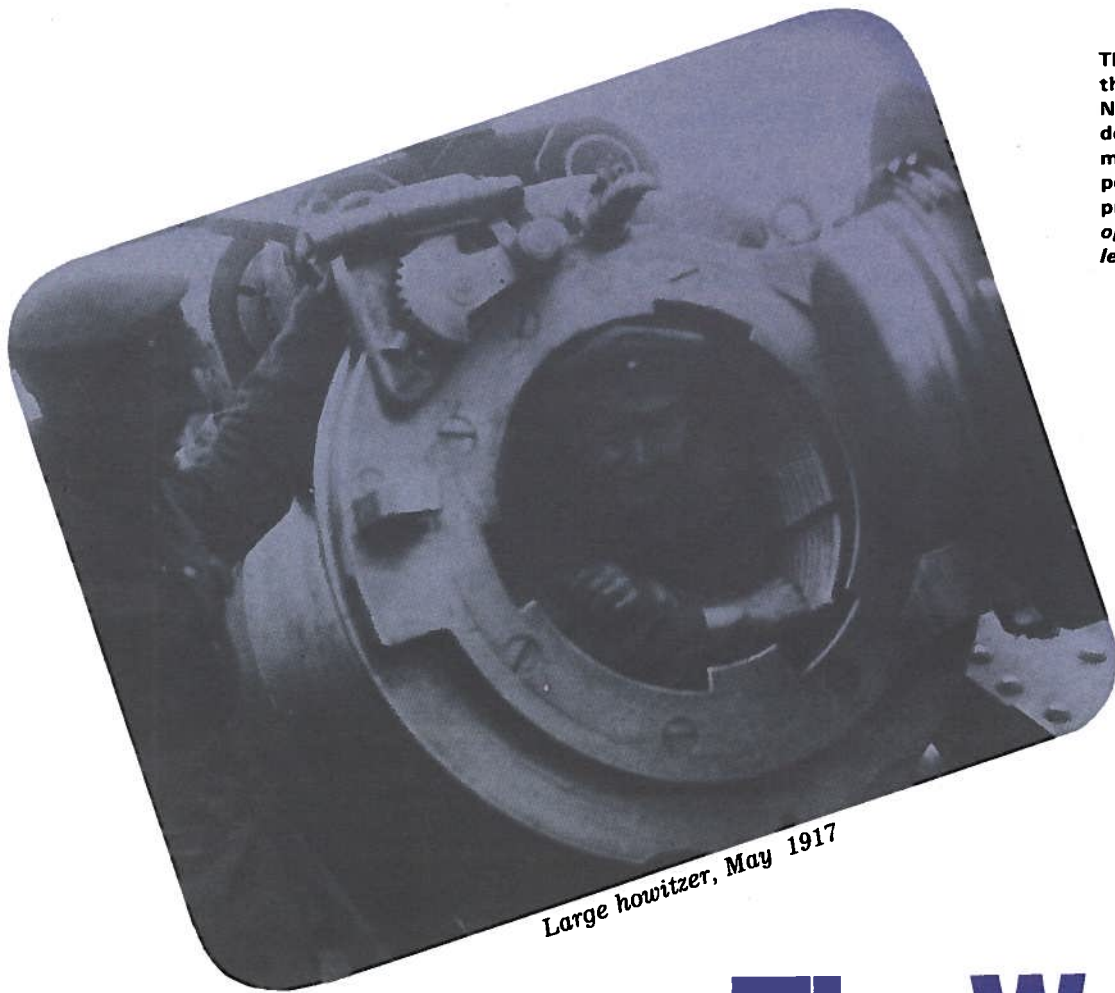
H. F. Wood, *Vimy!*, p. 160



Victorious soldiers return from Vimy

"I never felt like a Canadian until Vimy. After that I was Canadian all the way. We had a feeling that we could not lose, and if the other Allies packed it up we could do the whole job ourselves."

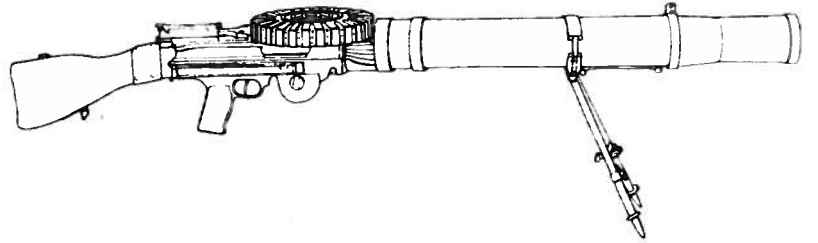
H. F. Wood, *Vimy!*, p. 164



Large howitzer, May 1917

The Lewis Mk I light machine gun. This was the standard light machine gun used by the British army in the First World War. Designed by an American, Colonel Isaac Newton Lewis, the gun was not adopted by the US Army, so Lewis brought the design to Europe, where quantity production was initiated by the Belgians. The main advantages of the weapon were its light weight and consequently its portability. Its disadvantage was the relative weakness of the mechanism, and its proneness to stoppages when only slightly dirty. *Calibre*: .303-inch. *System of operation*: Gas, automatic only. *Weight*: 27lbs. *Length overall*: 50.5 inches. *Barrel length*: 26.04 inches. *Feed*: 47 round drum. *Muzzle velocity*: 2,440 feet per second.

K. J. Macksey, *Vimy Ridge*, p. 46



The development of the 106 fuse enabled artillery to cut paths through barbed wire. The 106 fuse permitted the shell to explode on impact, thereby cutting the wire. Time fuses in use since the 19th century permitted shells to explode in the air and spray the entrenched soldiers with steel pellets. The 106 fuse was simply a mushroom cap with a small explosive behind it which speeded up the detonation of the main charge.



The Weapons of War

The main task of a counter-battery was to destroy the enemy guns which would be used to shell attacking troops. To achieve this goal enemy guns would have to be located before the attack across no-man's-land was launched, information was gathered from:

1. Aerial photography
2. Agents
3. Prisoners
4. Intercepted messages
5. "Flash Spotting" during the battle
6. Sounding

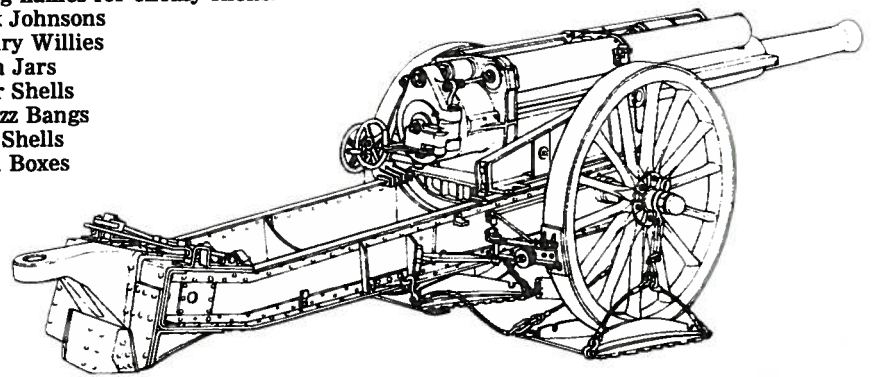
Factors to be considered by an artillery officer when aiming gun at target.

1. Temperature of air.
2. Temperature of charge.
3. Barometric pressure.
4. Velocity of wind.
5. Direction of wind.
6. Type of fuse.
7. Amount of wear of barrel.
8. Propellant for shell (cordite, ballistite).
9. Muzzle velocity.
10. Angle of barrel elevation.
11. Stability of platform.

OPA C21 McNaughton

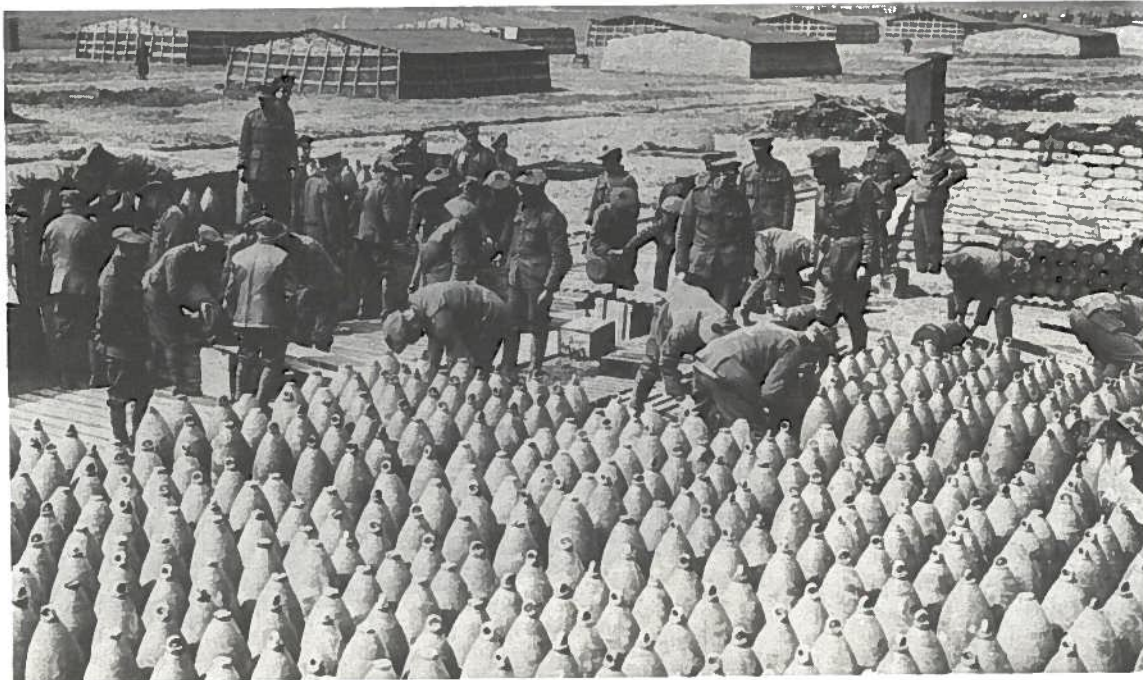
Slang names for enemy shells.

- Jack Johnsons
- Weary Willies
- Rum Jars
- Tear Shells
- Whizz Bangs
- Gas Shells
- Coal Boxes



The British 60-pounder gun, Mark I. Weight of shell: 60 lbs. Weight of carriage with gun: 58cwt 1 lb. Traverse: 4° left and right. Range: 10,300 yards. Rate of fire: 2 rounds per minute. Height: 6 feet. Width: 6 feet 6 inches. Length: 21 feet 7 inches.

K. J. Macksey, *Vimy Ridge*, p. 71



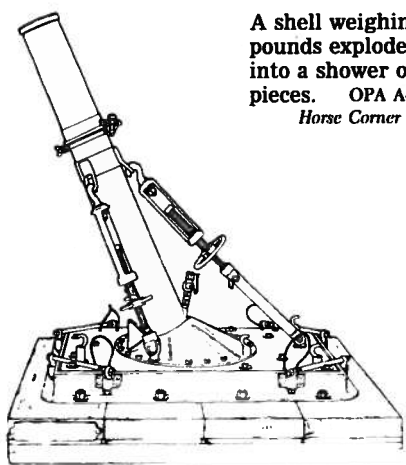
Shells for heavy Canadian artillery

Artillery Support for Infantry

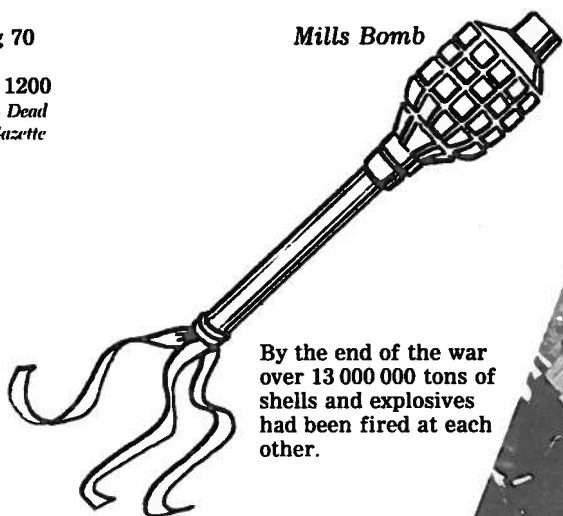
Rolling barrage—a wall of exploding shells just in front of the attacking troops would keep the enemy confined to his trenches and he could not use his machine guns.

Box barrage—the attacking infantry would also have the line of exploding shells protect his flank as he attacked.

Counter battery—through observation balloons, airplane reconnaissance and listening devices the enemy guns would be located. When the infantry attacked, the counter battery guns would shell enemy guns to prevent them from being used against attacking troops. At Vimy Ridge the artillery knocked out 80% of the German heavy guns.



A shell weighing 70 pounds explodes into a shower of 1200 pieces. OPA A-3 Dead Horse Corner Gazette



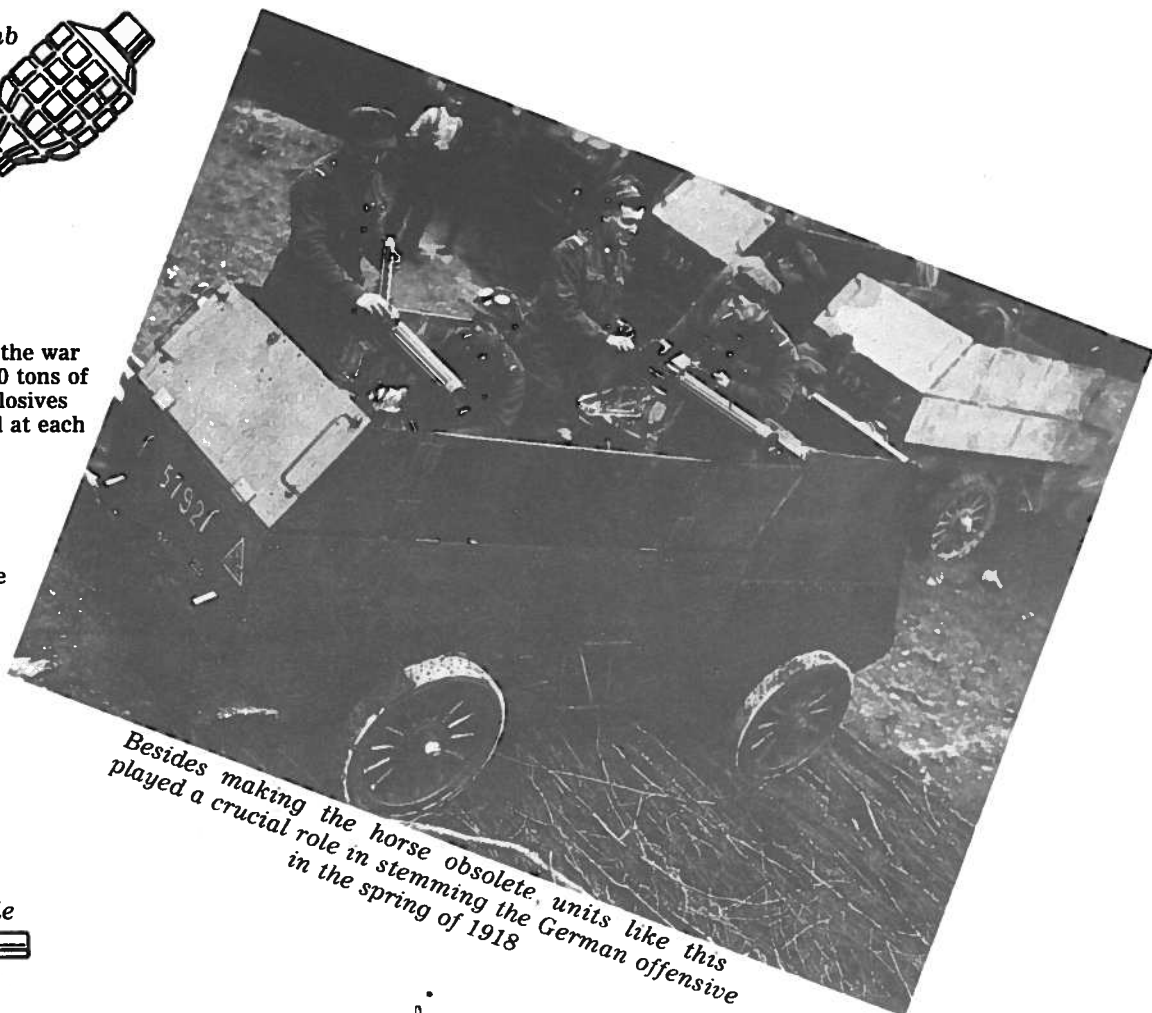
Mills Bomb

By the end of the war over 13 000 000 tons of shells and explosives had been fired at each other.

British 6-inch trench mortar. Typical of the 'trench howitzers' the British 6-inch performed well, remaining in reserve stocks until the Second World War. Elevation and traverse are applied by operating the turn screws on the barrel supports and the bomb was muzzle loaded. I. V. Hogg, *Guns*, p. 76

A typical shrapnel shell would explode just above the trenches spraying up to 300 lead balls, as well as fragmented shell casing, on the troops.

The daily ration of 7 rounds per gun per day in 1914 rose to 500 rounds per gun per day in the great artillery battles of 1918.

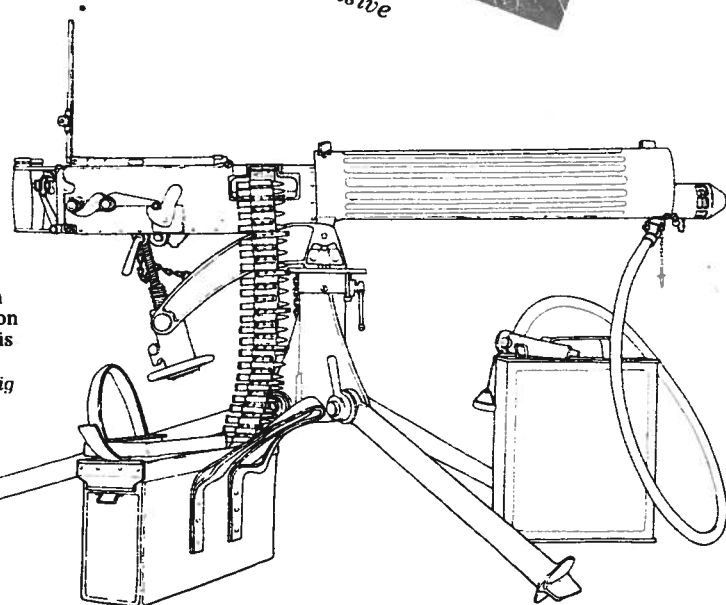


Besides making the horse obsolete, units like this played a crucial role in stemming the German offensive in the spring of 1918



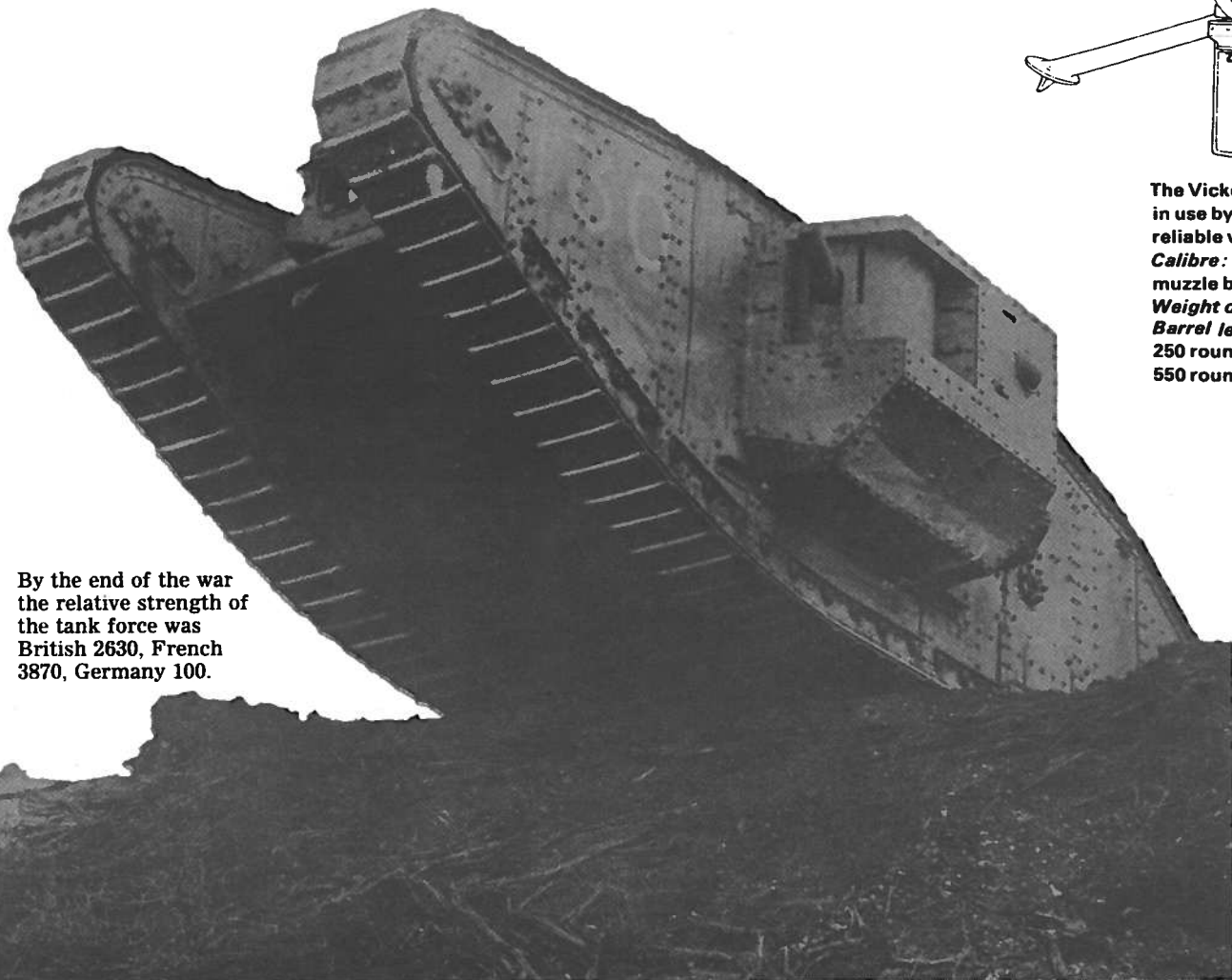
Rifle Grenade

The modern tank traces its origin to designs submitted by Lt.-Colonel Ernest D. Swinton to the War Office in 1914. When his proposals were rejected by the army, Winston Churchill, First Lord of the Admiralty, decided to proceed with the development of the "land ship" to be used to help naval personnel cross enemy defences in coastal areas. For two years the secrecy of the project was protected with the code word "tank", and finally on September 15, 1916 it lumbered into action at the Battle of the Somme. Shell craters, mud, and mismanagement contributed to their floundering, but on November 20, 1917 a massed attack of 400 tanks achieved a breakthrough at Cambrai of over 6 miles in only 12 hours while sustaining only 4000 casualties.



"The machine-gun is a much over-rated weapon and two per battalion is more than sufficient." Sir Douglas Haig

The Vickers .303-inch Machine Gun Mark 1 was the standard machine gun in use by British forces in both world wars, and was a sturdy (if heavy) and reliable weapon. It is shown mounted on a Mark IVB tripod. **Calibre:** .303-inch. **Method of operation:** Recoil with gas boost from a muzzle booster. **Weight of gun:** 33lbs (without water). **Weight of tripod:** 50lbs. **Coolant:** Water (7lbs in weight). **Length:** 43 inches. **Barrel length:** 28.4 inches. **Ammunition supply:** Canvas belts, each holding 250 rounds. **Muzzle velocity:** 2,440 feet per second. **Cyclic rate of fire:** 450-550 rounds per minute K. J. Macksey, *Vimy Ridge*, p. 95



By the end of the war the relative strength of the tank force was British 2630, French 3870, Germany 100.

Although artillery caused more casualties during the war the machine gun was the perfect weapon to stop an infantry attack across no man's land. Spitting out bullets at rates of 500-600 rounds per minute, it could mow down men like wheat.

Specifications (Mark I: 1916)

Length	32'	Weight	28 tons	hp	105
Width	14'	Speed	4 mph	fuel	50 gallon
Height	8'	Crew	8 men	range	27 miles
Guns	Male	(Big Willie)	2	6 pounders	
	Female	(Mother)	2	machine guns (Vickers)	

Caring for the Wounded



Stretcher bearers at Passchendale

He was a stretcher-bearer. For nine days before, during and after Vimy he got practically no sleep, little food and very little water. He said: "We lived on the rum ration." His job was to take stretcher cases, too serious to be operated on by the field ambulance, back to the casualty clearing station. On the return journey he and his companions brought forward two-gallon petrol tins of water. He remembers a young officer who came in on a stretcher so badly wounded that Smith could see his heart beating.

H. F. Wood, *Vimy!*, p. 157

From the battlefield...

A "flying pig" had exploded as it left the gun and three men had been shredded to fragments. We were to pick up legs and bits of flesh from underfoot, place all in the bags and then bury them. It was a harsh breaking-in. We did not speak a word as we worked. When we were done Stevenson told us we could go, but Tommy and I lingered in a trench bay and stared over the dark, flickering, silhouetted landscape.

W. R. Bird, *Ghosts Have Warm Hands*, pp. 13-14



Field Ambulance dressing wounded at Amiens

TOTAL CASUALTIES OVERSEAS FROM DISEASE AND WOUNDS To March 31, 1923

	Officers	Other Ranks	Total
Cases of disease	19,100	375,984	395,084
Died of disease	175	3,650	3,825
Percentage of deaths by disease to number of cases of disease.	.91	.97	.96
Cases of wounded	6,347	143,385	149,732
Died of wounds	819	16,363	17,182
Percentage of deaths by wounds to number of cases of wounds.	12.90	11.41	11.60

A. Macphail, *History of the Canadian Forces*, p. 248

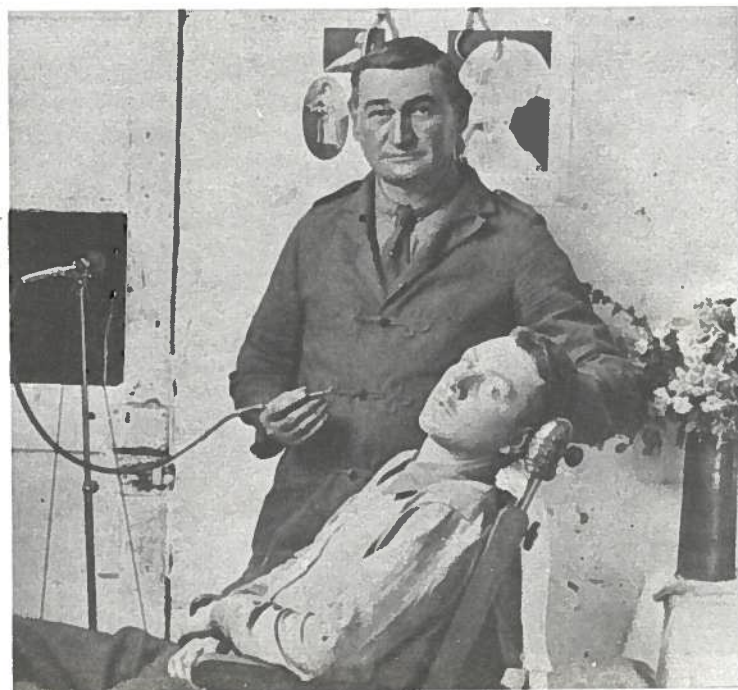
... to the casualty clearing station ...

During the years of their service the 2,555,442 operations which the dentists of the corps performed included: fillings, 933,765; treatments, 355,924; dentures, 164,543; prophylaxis, 187,110; extractions, 526,113; devitalizing, 87,987. During the year 1918, alone, they cared for 8,546 cases of "trench mouth," and these received 49,449 treatments.

A. Macphail, *History of the Canadian Forces*, p. 233



Mustard gas burns



Dental office at a field ambulance dressing station, 1916

A hospital for the wounded was established in Toronto mainly through donations. All those who contributed either \$40,000 or \$1.00 or even a pair of socks had their names listed and printed in a book.

The bomb burst between the two gunners. Not a bit of metal touched Brown or myself. One German never moved but lay on his back, dead. The other pawed at his side feebly for a time, then was still. Brown and I struggled up, went over and made sure both Germans were dead, then heard a voice calling. We found a 42nd man in a shell crater, holding his left arm and groaning. He told us he was from "A" Company, that his group was lost and most of them had been killed or wounded. His left hand dangled, held only by a strip of skin. I cut the skin with my trench knife and bound up the stump with his field dressing, poured a bottle of iodine over it, slit a hole in his tunic and had him thrust his arm through it for support. Then I took off one of his puttees and made a tourniquet of it as best I could to stop the bleeding. We helped him from the crater and away he went, past the dead German gunners.

W. R. Bird, *Ghosts Have Warm Hands*, p. 83



Happy wounded Canadians at a casualty clearing station near Arras

John McCrae (1872-1918) was born in Guelph, Ont. He studied medicine at McGill University and became a physician and pathologist. In 1914 he left his Montreal practice and joined the medical corps. It was during the Second Battle of Ypres in 1915 that he wrote "In Flanders Fields". He threw the poem out but it was recovered by a friend who sent it to Punch magazine. After its first publication on December 8, 1915 it became the best known Canadian poem of the war.

In one room a surgeon had a soldier on the operating table and was pulling pieces of shell from a huge hole in the inner side of one of his legs. On a stretcher on the floor, waiting for his turn to come under the surgeon's care, was an officer. His face was covered with blood, he was waving his arms wildly and gasping for air. This scene left an impression of the utmost horror upon me.

T. H. Russell, *World's Greatest War*, p. 361

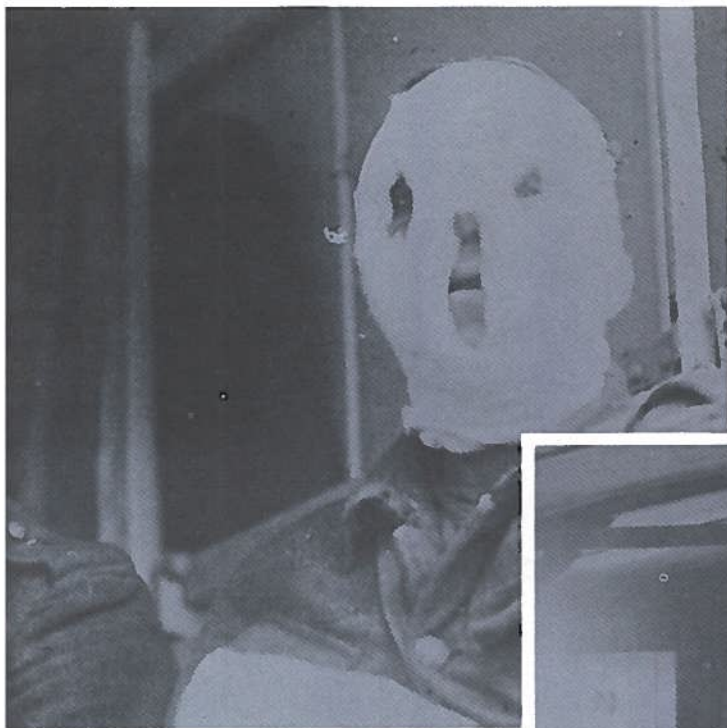
Robert Service of Klondike fame served on the Western Front as a stretcher bearer when he was over forty years old.

That one house was used as an outlying hospital or dressing-place nearest the firing line, and the wounded had to be led or carried only two or three hundred yards to reach it. They sat on the dining-room chairs or lay helpless on the floor. A few surgeons were at work upon them, cutting off loose fingers and throwing them into basins, plugging black holes that welled up instantly through the plug, straining bandages, which in a minute ceased to be white, round legs and heads. The smell of fresh, warm blood was thick on the air. One man lay deep in his blood. You could not have supposed that anyone had so much in him. Another's head had lost on one side all human semblance, and was a hideous pulp of eye and ear and jaw. Another, with chest torn open, lay gasping for the few minutes left of life. And as I waited for the ambulance more were brought in, and always more.

T. H. Russell, *World's Greatest War*, p. 391

Sphagnum moss was gathered in Cape Breton Island and used for surgical dressing during the war. Its remarkable absorbent qualities aided the healing process and by 1916 it was adopted by the British Army as an official dressing. Moss growing near the seacoast where the air was damp and subject to few violent temperature changes was found to be most suitable. The moss was gathered and sent to the Natural History Museum in St. John, New Brunswick where Red Cross workers graded it for use.

Canadian Red Cross Society, November 1918



... by truck ...

To care for the wounded the Canadian army mobilized a large staff and had the use of a wide variety of facilities.

- 1,617 medical officers
- 2,002 nursing sisters
- 12,382 other ranks
- 6 general hospitals
- 6 stationary hospitals
- 6 casualty clearing stations
- 13 field ambulances

In England there were

- 9 treatment hospitals
- 5 special hospitals
- 5 convalescent hospitals

In Canada 65 hospitals with a capacity of 11,786 beds were maintained.

OPA 1919 17

... to the field hospital.

