



Canada & the Western Front

COME LAD

SLIP ACROSS AND HELP

Trench Warfare

- Both sides dug their own system of defensive trenches – often only a few hundred meters away
- Soon there was a vast network of trenches stretching from the English Channel to the Swiss border
- Conditions in these trenches were hideous – cold & damp and often flooded in a heavy rain – even ice in the winter
 - Closer to Belgium, sea water flooded the trenches
- Typically overrun by rats feeding on the corpses and lice infesting the soldiers clothing, etc...



Aircraft can warn of the build-up of enemy troops before an attack.



Concrete block house for a machine-gun.

Long-range artillery is placed about 10 km behind the front line. These guns fire at advancing enemy troops.

Reserve trench

Support trench

Front-line trench

Barbed wire: metres deep and an impassable obstacle for any troops able to reach it.

Communication trenches allow reserves to be brought forward without exposing them to enemy fire.

No Man's Land (the stretch of land between the trenches of the opposing sides) has already been churned up by shell fire. In wet weather it becomes a mass of mud, making it even harder for troops to cross.

Front-line dug-outs provide protection but not against a direct hit from an artillery shell.

A deep dug-out. German ones could be 15 m below ground and too well constructed to be damaged by shell fire.

PROBLEMS FACING ATTACKING TROOPS



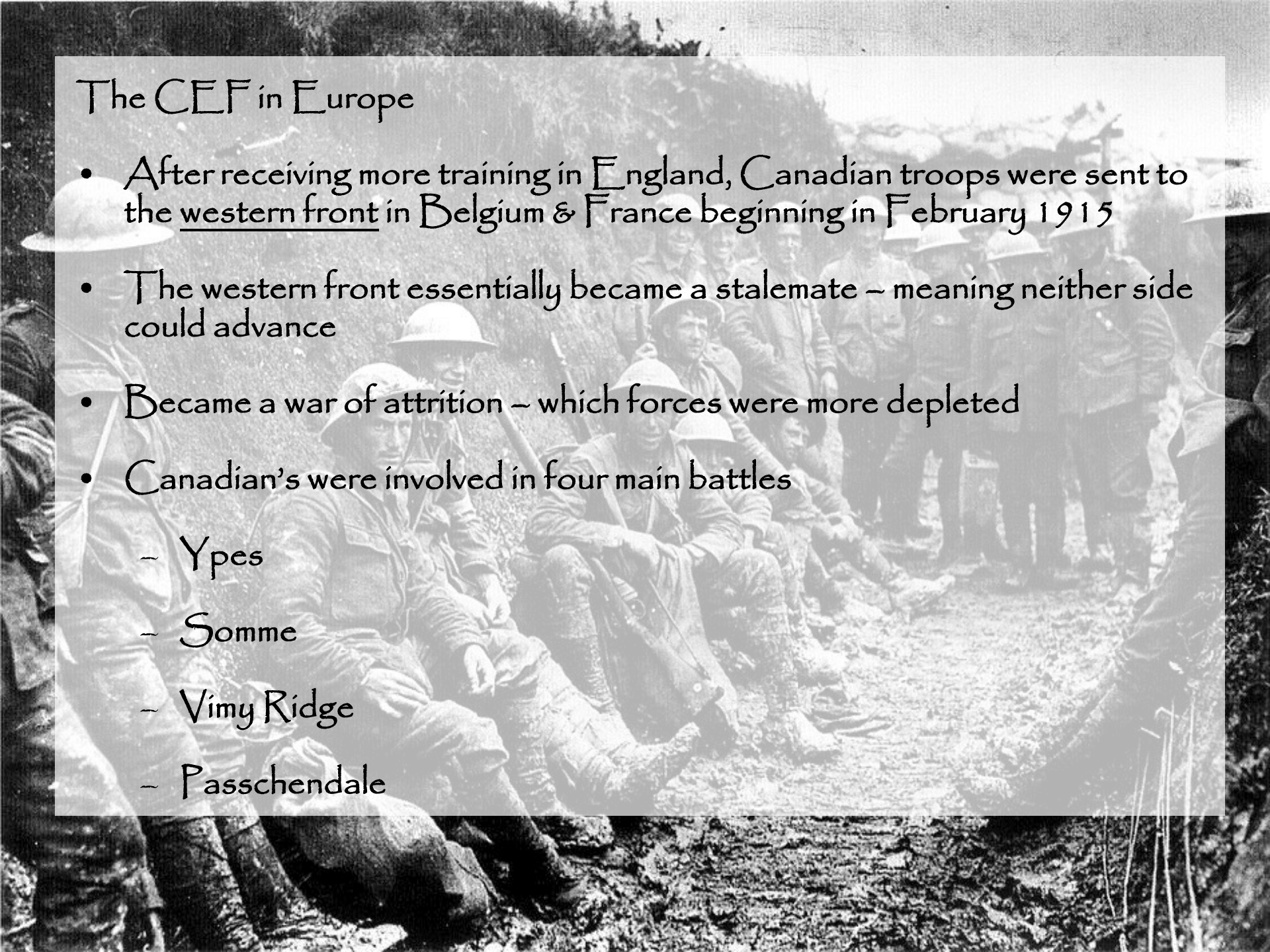
Battle Tactics

- 'Over the Top'
- Trench Foot
- Medical Attn

- No Man's Land
- Medical Attn

The CEF in Europe

- After receiving more training in England, Canadian troops were sent to the western front in Belgium & France beginning in February 1915
- The western front essentially became a stalemate – meaning neither side could advance
- Became a war of attrition – which forces were more depleted
- Canadian's were involved in four main battles
 - Ypres
 - Somme
 - Vimy Ridge
 - Passchendale



The Second Battle of Ypres

- Germans used chlorine gas – first time in history chemical warfare was used
- The gas destroyed lungs and many men suffocated or choked to death
- Canadians held the line by urinating into handkerchiefs and covering mouths
- Cdn. Lt.-Col. John McCrae writes In Flanders Fields – arguably the world's most famous poem
- First time a colonial army (CEF) pushed back a major European power
- Germans gained approx 1000 meters
- Cost: 70,000 Allied dead, wounded, or missing and 35,000 German dead, wounded, or missing between April 22 to May 13, 1915.



Dulce et Decorum Est by Wilfred Owen

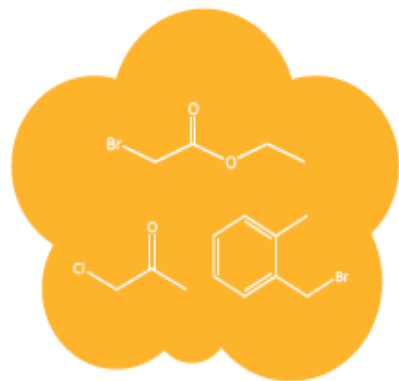


For What? by Fredrick Varley



CHEMICAL WARFARE WORLD WAR 1

WORLD WAR ONE IS SEEN AS THE DAWN OF MODERN CHEMICAL WARFARE, WITH A VARIETY OF DIFFERENT CHEMICAL AGENTS BEING EMPLOYED ON A LARGE SCALE, RESULTING IN APPROXIMATELY 1,240,000 NON-FATAL CASUALTIES, AND 91,000 FATALITIES. A VARIETY OF POISONOUS GASES WERE USED THROUGHOUT THE CONFLICT, WITH EACH HAVING DIFFERING EFFECTS UPON VICTIMS.



TEAR GASES

(ethyl bromoacetate, chloroacetone & xylil bromide)

SMELL & APPEARANCE

Both ethyl bromoacetate and chloroacetone are colourless to light yellow liquids with fruity, pungent odours. Xylil bromide is a colourless liquid with a pleasant, aromatic odour.

EFFECTS

Tear gases are what is known as 'lachrymatory agents' - they irritate mucous membranes in the eyes, mouth, throat & lungs, leading to crying, coughing, breathing difficulties, and temporary blindness.

FIRST USED

1914 In August 1914, the French forces used tear gas grenades against the German army, to little effect.

ESTIMATED CASUALTIES

0 fatal
These gases were used to incapacitate enemies rather than to kill; symptoms commonly resolved within 30 minutes of leaving the affected area.



CHLORINE

SMELL & APPEARANCE

Chlorine is a yellow-green gas with a strong, bleach-like odour. Soldiers described its smell as 'a distinct mix of pepper and pineapple'.

EFFECTS

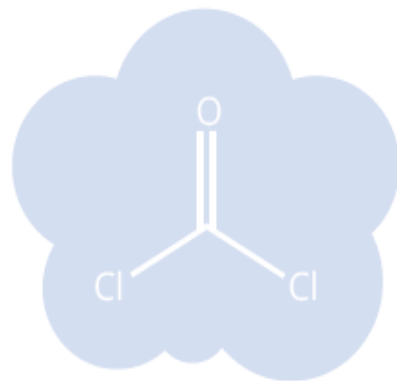
Chlorine reacts with water in the lungs, forming hydrochloric acid. It can cause coughing, vomiting, and irritation to the eyes at low concentrations, and rapid death at concentrations of 1000 parts per million.

FIRST USED

1915 Used by German forces at Ypres in April 1915. British forces used it for the first time at Loos in September.

ESTIMATED CASUALTIES

5,000
number of fatalities in first use of chlorine at Ypres
Chlorine was devastating as troops were initially unequipped to deal with it. Later, gas masks limited its effectiveness.



PHOSGENE

(carbonyl dichloride)

SMELL & APPEARANCE

Phosgene is a colourless gas with a musty odour comparable to that of newly mown hay or grass. If the odour is detectable, it indicates a hazardous level of phosgene. Its density is four times that of air.

EFFECTS

Reacts with proteins in lung alveoli, causing suffocation. Causes coughing, difficulty breathing and irritation to the throat & eyes. Can cause delayed effects, not evident for 48hrs, including fluid in the lungs & death.

FIRST USED

1915 In December 1915, the German forces used phosgene against the British at Ypres.

ESTIMATED CASUALTIES

85%
of all gas-related fatalities
It's estimated 85% of all gas-related fatalities in World War 1 resulted from phosgene. It was often used in combination with chlorine.



MUSTARD GAS

(bis(2-chloroethyl) sulfide)

SMELL & APPEARANCE

When pure, mustard gas is a colourless and odourless liquid, but it's used as a chemical agent in impure form. These are yellow-brown in colour and have an odour resembling garlic or horseradish.

EFFECTS


Powerful irritant and vesicant (blistering agent) that can damage the eyes, skin, & respiratory tract. Causes chemical burns on contact with skin. Forms intermediates that react with DNA leading to cell death.

FIRST USED

1917 On 12th July 1917, German forces used mustard gas against the British at Ypres.

ESTIMATED CASUALTIES

2-3%
mortality rate of mustard gas casualties
The mortality rate of mustard gas casualties was low - but its effects were debilitating, and patients required elaborate care.



The Battle of the Somme (France)

- Five month battle with little ground gained but at a huge cost in life
 - ~ approx 1.25 million casualties – allied & axis combined
- 24 000 Canadians
 - 11 km gained
 - a complete disaster
 - ~ Approx 141,000 lives per km
 - ~ Known by the Germans as the blood bath
 - ~ First tanks used

The Battle of Vimy Ridge

- Three previous attempts by French & British forces to take area had failed. Canadians sent in and defeated the German stronghold
- April 1917 - Huge victory for Canadians - Canada on the map of recognition
- Victory came at a cost of 10,000+ killed or wounded
- Entire CEF fought at Vimy as one unit, under British commander
 - Following Vimy Ridge, CEF would be under the command of Canadian Sir Arthur Currie, marking the first time Canada's military involvement was controlled by a Canadian (from Victoria!)
- Canadian troops earned a reputation as formidable & effective force because of the stunning success
- Looking back at this victory, many attribute this to Canada's mark onto the world stage of independent recognition
- "In those few minutes I witnessed the birth of a nation." BrGen A.E. Ross





The Power of Propoganda

0-1403

- This is the most famous picture to emerge on the Canadian 'homefront' during WWI. It illustrates the victorious Canadian forces following Vimy Ridge, and sells the idea of enlistment to and 'war weary' nation



Passchendaele

- October 1917. Canadians expected to reclaim the small town in Belgium
- a.k.a. the 3rd Battle of Ypres or 'The Battle of the Mud'
- Previous attempts to capture this area from the Brits left craters all along the battlefield. With the heavy autumn rains, it turned the area into a complete mess
- Canadians claimed 'victory', but at cost of 15 000 Canadian lives. More than 200, 000 combined on both sides. 1 in 5 survived
- Allied troops gained approximately 7 km's of mud. Steep price to pay!
- Sadly, this area would later be lost to the Germans in their final push at the closing stages of the war

