

The Long, Long Trail

The British Army of 1914-1918 - for family historians

The Special Companies RE

The Special Companies at the start of the war

No Special Companies existed in 1914. They were a war time invention. The Great War was the first in which chemical weapons were deployed. There was great moral shock and outrage at the first use of Chlorine, released by the Germans against defenceless French troops in the Ypres Salient. The Special Companies of the Royal Engineers were formed to develop the British response. By 1918, gas was used both offensively and defensively, delivered by a range of sophisticated techniques.

The first use of poison gas, 22 April 1915

A bulletin issued by the French Tenth Army on 30 March 1915 noted that the German XV Corps in the neighbourhood of Zillebeke (near Ypres) had installed iron cylinders containing an asphyxiating gas into their front-line trenches. A German prisoner taken near Langemark on 14 April told of a forthcoming gas attack on the French units in that sector, arranged for noon on 13 April but delayed while waiting for a favourable wind. The man carried a small sack filled with cotton waste, which would be dipped in some chemical solution to counteract the effect of the gas. A Belgian agent reported much the same thing. A reconnaissance flight by No 6 Squadron of the Royal Flying Corps reported nothing unusual in the German positions. Further information from Belgian sources on 16 April 1915 reported the manufacture in Ghent of 20,000 face masks.

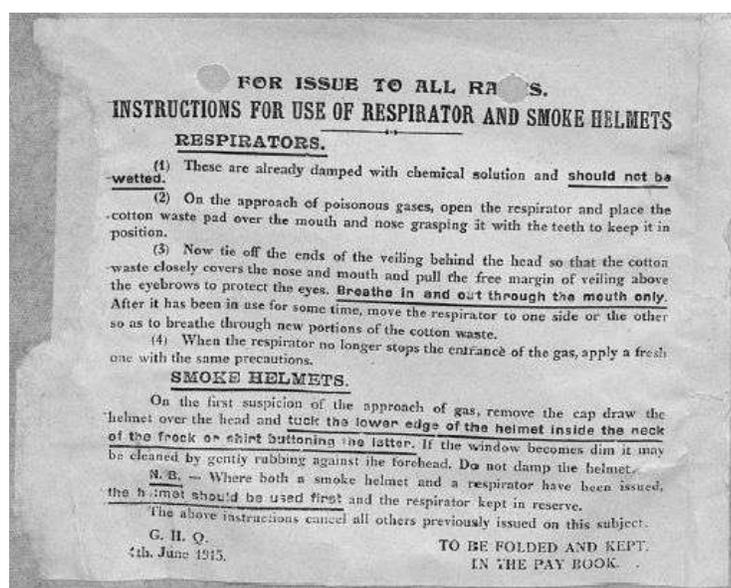
Despite these warning signs, no specific defensive steps were taken: the concept of large concentrations of a poison gas was unfamiliar, and barely believable from a practical or moral viewpoint. It was specifically banned by the Hague Convention of 1907.

The Germans attacked using a cloud of Chlorine gas, a bluish-white mist rolling forward on the wind, on 22 April 1915 near Langemark. The subsequent fighting, with both sides rushing reinforcement into the area, developed as the Second Battle of Ypres.

Chlorine has a powerful irritant action on the lungs and mucous membranes; prolonged exposure is fatal. Men who stayed in position, especially on the firestep of the trenches, suffered least as the cloud rolled past them. Terrified men who ran with it, and the wounded lying on the ground or in trench bottoms, got the worst exposure. The Germans released 180 tonnes of gas, in a flow which lasted for 5 minutes..

French and British reaction

Allied reaction was one of outrage and much propaganda capital was made of the German use of gas; but by mid-May 1915, after gas had been used again in the Ypres Salient on several more occasions, both French and British defences were already in place. The first batch of gas helmets (flannel bags with talc eye-pieces), enough to issue 16 to each infantry battalion, were provided for machine-gunners. Men already knew by then that a piece of gauze or cotton wadding, soaked in urine, provided a crude protection. Vermoral sprayers were issued, to neutralise any gas that hung in the trenches. With modification, these measures carried on throughout the war; 'gas gongs' (usually an empty shell-case) were located in most front-line trenches as an immediate signal of any presence of gas to unwary troops.



Instructions issued to troops in June 1915. A copy of a document attached to the war diary of the 2nd King's Royal Rifle Corps. Crown copyright. National Archives WO95/1272.

The first Special Companies are formed

As early as 3 May 1915 the British Secretary of State for War, Lord Kitchener, authorised the preparation of measures to retaliate against the German use of poison gas. Experimental research work was carried out at Porton, and a laboratory established at Helfaut, near St Omer in France. The Kestner-Kellner Alkali Company, being the only firm in Britain capable of manufacturing Chlorine gases in quantity, supervised trials with the final large-scale one taking place at Runcorn on 4 June. The method - as used by the Germans - was to form a continuous cloud by discharging compressed gas from cylinders to the atmosphere, and allowing the wind to move it over the enemy positions.

Special Companies of technically skilled men, under Major C.H. Foulkes of the Royal Engineers, were formed with a Depot at Helfaut, to deal with the new weapon. Nos *186 and 187 Special Companies* were formed first, in July 1915, followed by *188 and 189 Companies* in August. All of the men were given the rank of Chemist Corporal. On 4 September 1915 the first two Companies, totalling 34 Sections of 28 men, were assigned to First Army for forthcoming operations.

The British decide to use gas in the attack at Loos, 25 September 1915

The British army employed poison gas for the first time in the opening barrage for the Battle of Loos, principally to overcome a shortage of artillery. All ranks were issued with the original pattern gas helmets, but the battle and weather conditions at Loos proved them to be a severe hindrance (the eye-pieces prohibited vision and movement; rain caused chemicals in the fabric to run out and irritate the eyes, and breathing was difficult). Many men chose to discard the helmet.

Both sides develop gas as an offensive weapon

Significant advances in the production of gas were made after Loos by the Chemical Department of the Ministry of Munitions. Carbonyl Chloride - or Phosgene - had already been identified as a suitable cloud gas. It was similar to Chlorine yet could be inhaled for a considerable time without being noticed, only to produce serious or fatal inflammation of the lungs. (The Germans were the first to release Phosgene, in an attack at Ypres on 19 December 1915). The Allies decided to employ a Phosgene-Chlorine mixture, codenaming it 'White Star'.

In June 1915, British Commander-in-Chief Sir John French requested that 10% of all 4.5-inch, 60-pounder and 12-inch shell production should contain gas, in response to increased German use of lacrymatory (tear) gas shells. The first trial SK (South Kensington, codename for Ethyl Iodoacetate) shells arrived in September 1915, but it was not until April 1916 that 10,000 rounds had arrived, giving a small battlefield supply. By the end of 1916, only 160,000 rounds had been delivered and it was not until large quantities of Phosgene shell became available in 1917 that the Army was adequately equipped.

In the 1916 Battles of the Somme, the British army released 1,120 tons of gas, mostly White Star, in 98 separate attacks. Very little gas shell was used, all of which was fired by French artillery.

Defensive measures are also developed

The P (Phenate) gas helmet with glass eyepieces was introduced in November 1915. It did not protect adequately against Phosgene, and was replaced by the PH (Phenate-Hexamine) helmet from January 1916. From August 1916, the PH was replaced by the small box respirator, which although an unwieldy design gave protection against the different gases in use.

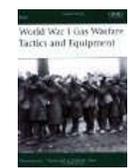
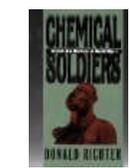
The Special Brigade is formed

Despite the limited results achieved by the cloud gas discharge at Loos, it was believed sufficiently successful to warrant further development. One of the first acts of Sir Douglas Haig on his appointment as Commander-in-Chief was to request that the War Office expand the four Special Companies of the RE into a more substantial force, viz.

- Four Special Battalions, each of four Companies, to handle gas discharge from cylinders and smoke from candles;
- Four Special Companies to handle gas shells fired from 4-inch Stokes mortars. Each Company to have 48 such weapons;
- Four Special Sections to handle flame projectors (throwers);
- plus a Headquarters and Depot, making all an establishment of 208 officers and 5306 men.

This request was approved and the Brigade built up by adding volunteers from units already in France to the four original Companies. Later, drafts from England would join. The force was designated the *Special Brigade*. It was placed under the command of Col. C.Foulkes, RE, who was appointed Assistant Director of Gas Services; he reported to Brigadier-General H.Thuillier, RE, Director of Gas Services. Lt-Col. S.Cummins, RAMC acted as Director of Anti-Gas Measures.

By the end of May 1916, No 1 Special Battalion and No 2 (less a Company) were allocated to Fourth Army; No 3 (less a Company) to Second Army; No 4 (also less a Company) to Third Army. No 4A Battalion was provisionally formed from the three detached Companies, and was attached to First Army. No 5 Battalion was the Stokes mortar unit, and had 3 Companies attached to Fourth Army and 1 to Third Army. The Flame Projector Sections arrived in France 26 June 1916.

 <p>?Gas! The Story Of The Special Brig...</p> <p>MGen C. H. Foulkes...</p> <p>Best Price £15.30 or Buy New £25.00</p> <p>Buy from amazon.co.uk</p> <p>Privacy Information</p>	 <p>World War I Gas Warfare Tactics and ...</p> <p>Simon Jones, Richa...</p> <p>Best Price £4.45 or Buy New £11.50</p> <p>Buy from amazon.co.uk</p> <p>Privacy Information</p>	 <p>Chemical Soldiers</p> <p>Donald Richter</p> <p>Best Price £13.74 or Buy New £14.06</p> <p>Buy from amazon.co.uk</p> <p>Privacy Information</p>
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