

## Hidden Heroes of the Great War (1914-1918)

The North of England's rich industrial history made both men and women vital to the war effort. Their work was of great importance and contributed to the Western Powers' ultimate success in the trenches.



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This exhibition explores the roles played by Durham miners, tunnelling under the Western Front in Belgium and France and munitionettes on the home front, who aided the war effort by working in the factories to produce ammunition.

Both roles had their dangers. Miners were at risk of tunnel collapses, suffocation, drowning, gassing, military fire and close combat. Munitionettes were in danger of poisoning, explosions and injury or death if they were caught in the lethal machinery they used.

**Western Front**  
The region where most battles were fought which covered parts of Luxembourg, Belgium and France.

## Miners Taking the Fight Underground

The First World War saw the introduction of many new types of warfare. One of the most dangerous was undertaken by the miners, sent to the Western Front from County Durham to dig underneath and destroy enemy fortifications.

In reaction to German mining attacks on the Western Front, Britain developed new tunnel warfare strategies. By 1915, eight Royal Engineering Tunnelling Companies had been deployed. One of County Durham's regiments, The Durham Light Infantry, recruited many local miners.

Tunnelling was a crucial tactic which was developed by Britain in response to German mining attacks. The Battle of Messines Ridge (1917) was the most ambitious tunnel attack ever attempted; the resulting explosion could be heard as far away as London.

**Messines Ridge**  
The battle for the Messines Ridge was an attempt by the Allies to capture strategically important higher land to the southeast of Ypres.



Image Courtesy of Craig Bellis

Working in almost absolute silence, British and German miners often dug close to each other. If tunnels intersected the miners could be faced with close combat. As tunnelling strategies became more complex, the work became more dangerous. The dangers included tunnel collapse, flooding and suffocation from carbon monoxide. Canaries were used to alert miners to the presence of gas. Their bright yellow colour made them easy to see in the darkness of the mine. If the canary fainted the miners knew they had to evacuate the tunnel immediately.

**Did you know?**  
Miners from County Durham preferred to wear their identification tags on their trouser braces just as they had when working down the coal pits at home. This may explain why the Durham Light Infantry had more unidentified war casualties than other regiments.

## Local Heroes: Abroad

What was the real impact on the people of County Durham? Find out more about their stories.

**Miner: George Alfred Clayton**

Born: 1891, West Stanley, County Durham  
War Service: 102322 Sapper G. W. Clayton, 178th Tunnelling Company, Royal Engineers.

Medals: 1914-15 Star, British War Medal, Victory Medal; 1918 Silver War Badge.

Died: 1990

Clayton grew up in Stanley, County Durham. He left school aged 13 to work at the Charlie Colliery making bricks. Clayton was discouraged from working underground in the colliery mines until the war started because his father was killed in a mining accident.

When war broke out, Clayton tried to join The Guards Division, but was rejected because he did not meet the height requirements. In 1915 he was recruited into the Royal Engineers. As part of the 178 Tunnelling Company, Clayton worked in the mines and trenches at the Battles of the Somme and Messines. He was discharged in 1918 after being wounded by shrapnel.



Image Courtesy of Bob Hooper-Woods

**Miner: Norman Margrave Dillon**

Born: 1896, Jesmond, Newcastle-upon-Tyne

Military Service: Numerous officer roles, including a position in the 178th Tunnelling Company, Royal Engineers

Medals: Military Cross, 1914-15 Star, British War Medal, Victory Medal.

Died: 1997

Dillon attended Haileybury College, a public school in Hertfordshire, where he joined the Officer Training Corps. Members were taught how to use rifles and read maps but not how to lead a battalion. Dillon then trained to become a mining engineer at Seaham Colliery, County Durham. He enlisted in August 1914 and was given command of his own company, but he had to teach himself how to command from a book he purchased from W H Smiths.

As an engineer, Dillon was brought in to advise the 178th Tunnelling Company. Working in the mines near the Somme, he directed tunnel construction and was involved in listening for German diggers. Dillon wanted to fight at the Somme and was granted a transfer to a combat unit. He continued serving until the end of the war.

## Munitionettes A Dangerous & Important Job

The role of women working in the munitions factories was vital to the war effort. By 1917 these women, nicknamed 'Munitionettes', were producing 80% of the weapons and shells used by the British army.

At the outbreak of the First World War women were usually found working in domestic service, shops or textile manufacture. As more and more men were conscripted to fight, women were called upon to fill the jobs they left vacant.



Munitions work was hazardous. Both pay and conditions were poor. Working 12 hour shifts and 6 days a week, the women were exposed to dangerous chemicals such as trinitrotoluene (TNT) which caused many health problems. It turned the munitionettes' skin and hair yellow, giving them their second nickname - 'canary girls'. Safety measures were very basic and many women were injured, poisoned or killed in work-related accidents.

**Shrapnel**  
Balls from an exploded artillery shell, mine or bomb.



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Despite the dangers, munitionettes experienced a greater level of freedom than they had previously known. Organised sport such as football or cricket provided welcome relief and increased morale on the home front. Munitionette teams across the UK played in charity matches to raise funds for injured servicemen. The 1918 Munitionettes Cup was played at St. James Park, Newcastle to a crowd of 25,000 people.

## Local Heroes: At Home

What was the real impact on the people of County Durham? Find out more about their stories.

**Munitionette: Annie Bell**

Born: 1899, Pelton Fell, Chester-Le-Street, County Durham

War service: Munitions worker, Shell filling

Died: 2 May 1917, Morecombe Cottage

Hospital, Lancashire

Annie Bell was born in County Durham and moved to Lancashire in 1917 to help with the war effort. She was employed at the White Lund Shell Filling Factory where she worked 9 to 10 hour shifts, 6 days a week in the factory's TNT powder mixing room.

The risk of poisoning meant she had to have regular health inspections. On her fifth health inspection, Bell was diagnosed with "toxic jaundice" and died twelve days later at the age of 18. She had only worked in the factory for eight weeks.

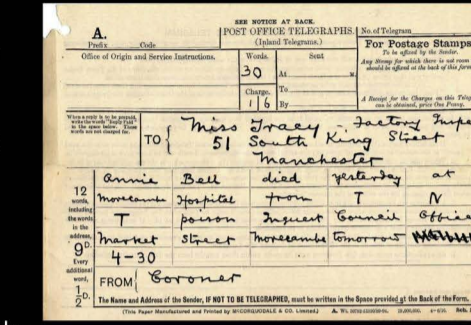


Image Courtesy of Lancashire Archives

**Wallsend Slipway Munitionette Football Team**

England's 1916-17 football season saw some new competitors - munitionettes' football teams. One of the earliest matches in County Durham took place on 3rd February 1917 between the Wallsend Slipway Company Munitionettes and the North Eastern Engineering Works. The match was played in aid of the Queen Mary Needlework Guild with a score of 3-0 for North Eastern. Wallsend Munitionettes played around 22 matches against other North East Munitionettes teams in 1917 and 1918. They drew or won many matches.

**Did you know?**

The Queen Mary Needlework Guild was founded by the Queen on 21st August 1914, specifically to help with 'comforts' for all serving sailors and soldiers.

Ladies' football flourished during the First World War and many of the skilled Wallsend players often appeared alongside other munitionettes in England's Ladies Football Team. Wallsend Munitionettes disbanded once the men had returned and their factory services were no longer required.



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## Impact of War

The war ended in November 1918; the cost had been high on all sides. Miners had been wounded or lost in tunnel warfare, while munitionettes were victims of chemical poisoning and poor working conditions.

Towards the last stages of the war tunnel warfare declined. Many miners were discharged from the army to return to work in the coal mines.

The majority of the munitionettes were forced out of the factories to create jobs for men returning from the front. 50,000 women were out of work by June 1918.

Following the war, society was changed forever. Many women felt the loss of the freedom they had been allowed to enjoy and a decline in industry impacted on the productivity of County Durham's collieries.

The miners and munitionettes of County Durham played an important part in Britain's war effort. Amongst tales of battles and daring deeds, their heroic contribution should not be forgotten.

The Exhibition Team would like to thank the following community members for their assistance. Without their support, this exhibition would not be possible.

- Beamish: The Living Museum of the North
- Durham County Local History Society
- Durham MA Museum and Artefact Studies Tutors
- Durham University Archaeology Department Materials Analysis Laboratory
- Durham University Palace Green Library
- Durham University Oriental Museum
- Durham University Computing and Information Services
- Imperial War Museum North
- Museum of Hartlepool (Hartlepool Borough Council)
- Lancashire Archives
- Wheatley Hill History Club