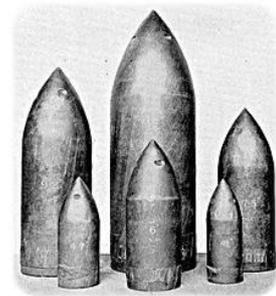


Sources for the Study of Sheffield and the Armaments Industry, 1900 - 1918



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Front cover illustrations – left to right:

Decorative arch on Savile Street to celebrate the royal visit of King Edward VII and Queen Alexandra, sponsored by John Brown and Co., 1905
(*Sheffield Local Studies Library: Picture Sheffield s03198*)

Shell workers, Cammell Laird and Co. Ltd., Sheffield, 1916
(*Sheffield Local Studies Library: Picture Sheffield s00540*)

The Heclon 12” capped shell produced by Hadfield’s Ltd, c. 1910
(*Sheffield Local Studies Library: y04811*)

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You can download a copy of this *Study Guide* from www.sheffield.gov.uk/archives

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Introduction

This Guide lists sources available within Sheffield Libraries Archives and Information for the study of the armaments industry in Sheffield from 1900 through to the end of World War One.

Sheffield was an important centre for supplying the nation's war machine. This wasn't restricted to World War One, for the city had been developing and supplying arms and armour plate for over a half a century before. During the Crimean War of the 1854 - 1856 it was Henry Bessemer of Sheffield who produced a new type of artillery shell shaped like a rocket. The war had also encouraged Bessemer to find a cheaper way of producing steel; in August 1856 he announced the invention of his now famous Bessemer Converter. In the 1860s John Brown pioneered armour plate production (Brown had a near monopoly and by the 1870s 75% of the iron clad warships in Britain were protected by Brown's armour plate). Sheffield's steel companies continued to produce arms, especially during the arms race with Germany in the period from 1900 - 1914.

Within a year of World War One starting it became clear that there was an acute shortage of munitions (weapons and ammunition), exacerbated by the large numbers of male factory workers who had left the factories and enlisted. The solution was to create a war-based economy. The Munitions of War Act gave munitions factories and related industries priority over non-essential work and production lines were switched to munitions production. Between June 1915 and November 1918 a number of national (and local) factories came under the control of the Ministry of Munitions.

Sheffield's strong industrial base meant that there was a heavy concentration of armaments industries in the city. Hadfield Ltd and Thomas Firth and Sons became National Projectile Factories (NPF) under the control of the Ministry of Munitions. Other firms played a key part in the nation's war effort including Vickers Ltd, John Brown, Cammell-Laird, Samuel Osborn, Edgar Allen, J. Beardshaw, Marsh Brothers, William Jessop, Seebohm-Dieckstahl (later Arthur Balfour & Co.), Kayser, Ellison & Co., Spear and Jackson and Thomas Andrews.

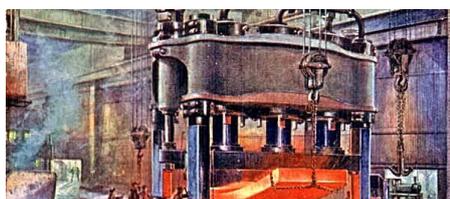
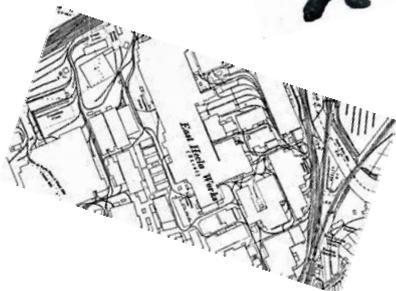
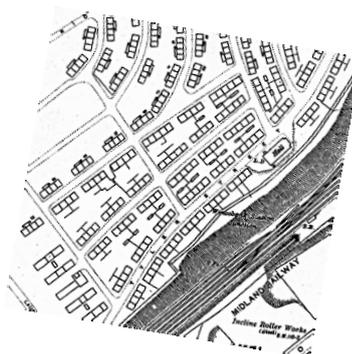
Sheffield steel was used to make a range of armaments, from bayonets and guns to heavy naval shells, as well as defensive products such as helmets and armour plate. Sheffield's steel companies experienced major growth during the war resulting in a significant increase in the industrial labour force (by 1915 over 5,000 women were employed at Thomas Firth and Son's National Projectile Factory at Templeborough). During the war the company produced over 4 million shells and 2 million steel helmets. Hadfield's had a workforce of over 15,000 by the time the war ended and was Sheffield's largest employer. New lodgings were built in the manufacturing areas to accommodate the influx of workers - huts on Tyler and Petre Street as well as Tinsley were built in 1916 for the Ministry of Munitions.

After the war ended Sheffield continued to play an important part in on-going research and development and the supply of arms up to and beyond the Second World War.

Timeline showing key dates

1897	During her visit to Sheffield Queen Victoria witnesses the rolling of armour plate for HMS Ocean at Charles Cammell and Co Ltd Cyclops Works
1905	King Edward VII visits Sheffield - the city's role in the defence industry is celebrated
1911	Admiral Count H. Togo, Chief of the Japanese Naval General Staff visits Hadfields Ltd
1914	World War One starts
1915	Ministry of Munitions established
1915	5,000 women work at the National Projectile Factory at Templeborough
1916	Huts for munitions workers are built at Petre Street, Tyler Street and at Tinsley
1917	Admiral John Jellicoe (First Sea Lord) and Jan Smuts (a member of the Government's War Cabinet) visit Hadfields
1918	World War One ends
1918 - 1919	King George V visits Sheffield including armaments factories
1919	Prime Minister Lloyd-George (former Minister for Munitions) visits Sheffield

A selection of images from the collections at Sheffield City Archives and Local Studies



Shell Workers, Cammell Laird and Co. Ltd., Sheffield, 1916 (*Picture Sheffield: s00540*); Ordnance Survey map showing munition huts at Tyler Street, 1923 (*Local Studies: 289.13*); a munionette from the cover of the *Bombshell* magazine, 1918 (*Picture Sheffield: y04576*); bullet proof body armour (*Sheffield Archives: HADFIELD'S box 57*); Munitions Manufacture, Sheffield Simplex Motor Works Ltd., Fitzwilliam Works, Tinsley, c. 1916 (*Picture Sheffield: s02069*); flags of the Allies from the cover of the *Bombshell* magazine, 1918 (*Picture Sheffield: y04569*); Ordnance Survey map showing East Hecla steelworks, 1923 (*Local Studies: 289.13*); The National Projectile factory, 1918 (*Picture Sheffield: y04555*); shell made by Thomas Firth and Son (*Picture Sheffield: s010874*); Hadfield's 'Era' gun shield, 1904 (*Picture Sheffield: y04810*); 12,000 Tons Armour Plate Bending Press, Cammell Laird and Company Ltd., Cyclops Steel and Iron Works, 1916 (*Picture Sheffield: s010828*).

List of documents, books, photographs and other items available at Sheffield Libraries, Archives and Information

Newspaper reports, etc.

Relevant articles and features may appear in local newspapers. The main titles available at Sheffield Local Studies Library include: *Sheffield Daily Telegraph*, 1855 - 1986 and the *Sheffield Independent* 1819 - 1938.

Archives of some national newspapers are available on the internet, notably *The Times* (<http://www.thetimes.co.uk/tto/archive/>) and *The Guardian* (<http://archive.guardian.co.uk>)

The British Library British Newspapers website includes over nine million pages from over 300 national and local newspapers (including the *Sheffield and Rotherham Independent 1819 - 1909*, *Sheffield Daily Telegraph 1855 - 1950* and *Sheffield Evening Telegraph 1887 - 1920*) (<http://www.britishnewspaperarchive.co.uk/>)

Photographs

Over 65,000 images from the Local Studies Library and City Archives photographic collections are available to search online at www.picturesheffield.com. There are images relating to armaments and Sheffield's major steel companies.

Iron and Steel Companies

There are extensive collections of material - Board of Directors minutes, order books, photographs and other items from hundreds of Sheffield companies - at both Sheffield City Archives and Local Studies Library.

The main companies involved in armament production were:

John Brown and Company Limited, Steel Manufacturers, Atlas Steel and Iron Works, Savile Street East and Carlisle Street East, Sheffield

- Records relating to corporate, management, legal, financial, employment, production and sales, plant and property, promotional material, research, overseas company, trade association, 1864 - 1980 (*Sheffield City Archives: X308*)
- Annual reports and accounts, 20th cent (*Sheffield Local Studies Library: journals*)
- 'Steel and Ships: A History of John Browns' (Sir A J Grant, 1950) (*Sheffield Local Studies Library: 338.4 S*)
- *John Brown and the Sheffield Armour Plate [song]* (*Sheffield Local Studies Library: MP 786 M*)
- A General Description of the Works and Products of John Brown & Company Ltd., 1864 - 1924 (*Sheffield City Archives: BRO/BUS*)
- John Brown & Company Ltd, Atlas Works, Sheffield; shipyard and engineering works, Clydebank, 1903 (*Sheffield Local Studies Library: 338.4 SQ*)

Charles Cammell and Company Limited, Merchants and Manufacturers of Armour Plates, tilters and forgers, etc., Cyclops Steel and Iron Works, Savile Street, Sheffield

- Description of Cyclops Works, c. 1900 (*Sheffield Local Studies Library: 338.4 SF*)
- The rolling of an armour plate for HMS Ocean, 1897 (*Sheffield Local Studies Library: 338.4 SST*)
- Cyclops Works 150 years, c. 1995 (*Sheffield Local Studies Library: 338.4 SQ*)
- Kosugi, [Tatsuzo], Report on Cammell's bullet-proof steel, 1896 (*Sheffield Local Studies Library: 669.1 SST*)

Cammell Laird and Company Limited, Steel Manufacturers and Shipbuilders, Grimesthorpe, Sheffield and Birkenhead, Cheshire

- Salaries journals, staff lists, registers of deeds, deeds, finance and legal papers, 19th - 20th cent (*Sheffield City Archives: MD8121*)
- Catalogue / brochure, c. 1911 and 1919 (*Sheffield Local Studies Library: 338.4 SSTQ and 338.4 SQ*)
- Visit of the members of the Institution of Locomotive Engineers (London) to the Grimesthorpe Steel Ordnance and Spring Works, Sheffield, 1919 (*Sheffield Local Studies Library: 338.4 SSTQ*)
- Brochure of visit of George V, 1918 (*Sheffield Local Studies Library: MP2601M and Sheffield City Archives: SY529*)
- Brochure of visit of George V, 1919 (*Sheffield Local Studies Library: local pamphlets vol. 180 no. 16 (042 S)*)
- Warren, Kenneth, 'Steel, Ships and Men: Cammell Laird, 1824-1993' (Liverpool University Press, 1998) (*Sheffield Local Studies Library: 338.4 S; also available in Central Lending Library: 338.76238*)

Thomas Firth and Sons Limited, Steel Castings Manufacturers, Norfolk Works, Savile Street East and Effingham Road, Sheffield (also at Claywheel, Wadsley Bridge)

- Monthly reports, 1906 - 1931 (*Sheffield City Archives: X308/1/2/1/4*)
- Company magazine, 'The Bombshell', 1917 - 1932 (*Sheffield Local Studies Library: 052.74 S*)
- A History of a Great Steel Manufacturing Firm, 1928 (*Sheffield Local Studies Library: local pamphlets vol. 86 no. 2 (042 S)*)
- The History of Firths, 1842 - 1918, A C Marshall, 1924 (*Sheffield Local Studies Library: 338.4 S*)
- One Hundred Years in Steel (Thomas Firth & Sons, 1938) (*Sheffield Central Library Store: 338.4*)
- Thomas Firth & Sons Ltd., Norfolk Works Sheffield, 1906 (*Sheffield Local Studies Library: 338.4 S*)
- Modern Projectile Factories of Thomas Firth and Sons Ltd [in Sheffield, Russia and the USA] (Thomas Firth & Sons, 1912) (*Sheffield Local Studies Library: 338.4 S*)
- Thos. Firth & Sons Ltd., Projectiles charged and ready for firing (c. 1912) (*Sheffield Local Studies Library: PAMP 34 SQ*)

Hadfields Limited, Steel Manufacturers, East Hecla Works, Tinsley and Hecla Works, Newhall Road, Sheffield

- Board minutes; ledgers; annual reports and accounts, legal agreements, patents; records of company sports club etc. [19th - 20th cent] (*Sheffield City Archives: HAD*)
- Projectile orders registers, 1899 - 1949 and Government contract registers, 1917 - 1940 (*Sheffield City Archives HAD nos. 151-158*)
- Correspondence with Admiralty regarding shells, 1916 - 1920 (*Sheffield City Archives: HAD box 33*)
- 'The First 100 Years: Hadfields of Sheffield', A W McKears, 1973 (typescript) (*Sheffield Local Studies Library 338.4 SQ*)
- The 'Sylat' prop withdrawer, 1914 (*Sheffield Local Studies Library: 622.28 SSTQ*)
- The Hadfield System as applied to war material, 20th cent. (*Sheffield Local Studies Library: 623.4 SSTQ*)
- 'The Evolution of the Modern AP Projectile' [in] *Brassey's Naval and Shipping Annual*, [1920s] (*Sheffield Local Studies Library: 623.4518 SST*)
- Hadfields Steel Foundry Co. Ltd: Hecla Works Attercliffe and East Hecla Works, Tinsley, 1905 (*Sheffield Local Studies Library: 338.4 S*)
- Reports of the Chairman's speech at the Annual General Meeting, 1919, 1929-1943, 1946 - 1949, 1951 (*Sheffield Local Studies Library: 338.4 SQ and PAMP 26 and 27 SQ*)
- Ordinary General Meeting 1915 (*Sheffield Local Studies Library: local pamphlets vol. 32 no. 8 (042 S)*)
- A short description of Hadfields Ltd: its history, plant and manufactures, 1938 (*Sheffield Local Studies Library: local pamphlets vol. 136 no. 16 and vol. 159 no. 4 (042 S)*)
- Royal visit, 1915 (*Sheffield Local Studies Library: 338.4 SST*)
- Visit of J C Smuts and Sir John Jellicoe, 1917 (*Sheffield Local Studies Library: MP 665 M, MP 680 S and local pamphlets vol. 180 no. 5 (042 S)*)
- Trade catalogues (*Sheffield World Metal Index*)

Vickers Sons and Maxims Limited, Steel Manufacturers, River Don Works, Brightside Lane, Sheffield

- Directors minutes, balance sheets, correspondence etc., c. 1833 - 1927 (*Sheffield City Archives: MD8121*)
- Analysis book, 1903-1921 (*Sheffield City Archives: LD1878*)
- 'The Vickers Brothers: Armaments and Enterprise, 1854 - 1914', Clive Trebilcock, 1977 (*Sheffield Local Studies Library: 338.4762345 S*)
- Vickers Centenary [the history of Vickers Ltd, 20th cent]. (*Sheffield Local Studies Library: VID 161*)
- Abstract of Vickers Sons and Maxim Ltd. catalogue, 1902 (*Sheffield Local Studies Library: local pamphlets vol. 43 no. 13 (042 S)*)
- Vickers Ltd., and Sheffield City Council Development Committee aerial transport [1919] (*Sheffield Local Studies Library: MP2852 S*)
- Vickers Ltd., publications, 20th cent (*Sheffield Local Studies Library: 052.74 S*)
- Vickers Ltd., River Don Works, 1915 (*Sheffield Local Studies Library: 338.4 SQ and local pamphlets vol. 11 no. 2 (042 S)*)

- Vickers Ltd., short history, 1920 (*Sheffield Local Studies Library: 338.4 SQ*)
- 'Vickers: A History', J D Scott, 1962 (*Sheffield Local Studies Library: 338.4 S*)
- Vickers Sons and Maxim Ltd., their works and manufactures, 1898 (*Sheffield Local Studies Library: 338.4 SQ*)
- Vickers Ltd., Visit of HM King and Queen, 1905 (*Sheffield Local Studies Library: 338.45 SF*)
- 'Vickers Ltd., Camera in the Works: A Miscellany of Pictures from the Vickers Archives', edited by Leslie Sansom, 1970 (*Sheffield Reference and Information Library: 779.9496 STQ*)
- 'An historical survey of the manufacture of naval armour by Vickers Sons and company and their successors, 1888-1956', typescript, 1956 (*Sheffield Local Studies Library: 669.1 SSTQ*)
- Vickers News, Vols. 1-2, 1919 - 1920 (*Sheffield Local Studies Library: 052.74 S*)
- Plan of gunshop, 1900 (*Sheffield City Archives: MD3166*)

For summary details of other steel company records available at Sheffield City Archives and Local Studies see <https://www.sheffield.gov.uk/libraries/archives-and-local-studies/collections.html>

Books, Documents, etc

Delegates' Guide to Sheffield and District (Ancient Order of Foresters, 1903)
At pages 160 - 161 and 176 - 177 there are interior views of steel processes at Charles Cammell & Co. Ltd., Cyclops Works (including armour plate shop and gun room); pages 182, 184-185 Fore Barbette of HMS Prince George manufactured at Vickers, Sons and Maxim Ltd; other items manufactured by Vickers, pages 187-188, 191-194; items manufactured by Wm. Jessop & Sons Ltd (including a ram for battleship HMS Implacable; pages 198 - 199 projectiles and propeller shaft made by Thos. Firth and Sons Ltd.
(*Sheffield Local Studies Library: 914.274 SST*)

Coventry Ordnance Works Limited, Ordnance Manufacturers, Coventry, Warwickshire (the company was set with the encouragement of the British Government in 1905 by a consortium of British shipbuilding firms including John Brown and Company Limited (Clydebank). The company was later acquired by Johnson and Firth Brown Limited of Sheffield.
Records, 1905 - 1919
(*Sheffield City Archives: X313*)

Sheffield City Council, Police Force sub-Committee of the Watch Committee lists the streets with munitions huts: refers to Tinsley - Norcross Avenue, Inglefield Avenue and First, Second, Third, Fourth and Fifth Avenue; Tyler Street - Roman Ridge, Road, Tyler Street (continuation), and First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth and Ninth Roads and Petre Street - Munition Street, Petre Street (continuation), and Cyclops Street (continuation) (*Sheffield Archives: CA-WAC/1/18, Police Force Sub-Committee, 15 June 1916*)

Vickers, Douglas and Sir Trevor Dawson, Armour and Ordnance [of Sheffield] in *British Association, 1910 Handbook and Guide to Sheffield* (Sheffield Local Studies Library: 914.274 S)

Spear and Jackson Ltd, correspondence in connection with the limitation of profits on controlled establishments under the Munitions of War Act 1915 (Sheffield Archives: SJC/1/5/5)

Tenders and orders for accepted tenders between Lockwood Brothers, Spital Hill, Sheffield, the War Office, the Ministry of Munitions of War and the Admiralty, 1915 - 1918 (Sheffield Archives: BUS12/15/3/1/3)

Day book of F Parramore and Sons Ltd containing items supplied to Sheffield Committee on Munitions of War, 1915 - 1918 (Sheffield Archives: LD2118)

Joseph Pennell's pictures of war work in England: reproductions of a series of drawings and lithographs of the munition works (William Heinemann, 1917) (Sheffield Central Library Store: 741.9 PENN)

'Town huts: how munition workers are housed' in *Sheffield Year Book* 1917, p.53 (Sheffield Local Studies Library: 032.74 S)

Article on armaments manufacture in Sheffield, [20th cent] (Sheffield Local Studies Library: newspaper cuttings relating to Sheffield, vol. 26 pages 100-120 (042. 74 S microfilm)

Report of the Admiralty tests on armour plate, including that made by John Brown and Co., [20th cent] (Sheffield Local Studies Library: newspaper cuttings relating to Sheffield, vol. 25 pages 336-337 (042. 74 S microfilm)

The Heeley Silver Rolling and Wire Mills Limited, Sheffield, letter regarding visit to Woolwich Arsenal, London [armaments factory], Jul 1915 (Sheffield City Archives: X241/2)

Sheffield City Council, resolution regarding the Munitions Act, 1915/16 (Sheffield City Archives: CA-MIN/54 page 287)

Sheffield City Council, resolution regarding representation to the Ministry of Munitions, 1916/17 (Sheffield City Archives: CA-MIN/55 page 93)

Sheffield City Council, resolution regarding Ministry of Munitions, refusal of permission regarding Blackburn Power Station, 1917/18 (Sheffield City Archives: CA-MIN/56 page 701)

Exhibition of samples of women's work and official photographs at the Mappin Art Gallery, Sheffield illustrating the various types of work upon which women were employed in engineering and other industries on munitions of war (Ministry of Munitions, Labour Supply Department, 1917)
(*Sheffield Local Studies Library: 623.4 SSTQ*)

Photocopies of photographs of workers at the Munitions Areas Inspection Department, King Street, Sheffield, c. 1914 -1918
(*Sheffield City Archives: MD7865*)

Sheffield Committee on Munitions of War, graphic illustrations of output, 1915 - 1916
(*Sheffield Local Studies Library: 358.3 SSTF*)

Sheffield Munitions Committee, meeting of the Board of Management, Sep 1915, list of those present
(*Sheffield Local Studies Library: MP 1636 M*)

Sheffield Committee on Munitions of War, meeting papers of Mr Lennox B. Dixon, including agendas, reports and accounts, 22 Dec 1915
(*Sheffield City Archives: DIXONS/A146*)

History of the University of Sheffield to the time of its coming of age, 31 May 1926 (1929) (includes reference to the Sheffield Committee of Munitions of War)
(*Sheffield Local Studies Library: 378.4274 S*)

Sheffield: the Arsenal of the World, 1916
(*Sheffield Local Studies Library: 942.74 SST*)

Hadfields Ltd., planning application for new National Projectile Factory, East Hecla Works, Vulcan Road, Sheffield, 1915
(*Sheffield City Archives: CA206/25447*)

Thos. Firth and Sons Ltd., planning application for a 4,000 ton press shop at East Gun Works, Sheffield, 1917
(*Sheffield City Archives: CA206/25457*)

Licence agreement between Hadfields Steel Foundry Company Limited and Washington Steel and Ordnance Company (USA) concerning production of armour piercing projectiles, 22 Sep 1914
(*Sheffield City Archives: X306/2/3/3/1*)

Johnson Firth Brown Ltd, copy patents application form for 'Improvements in or Relating to Explosive Bombs', 9 Nov 1915
(*Sheffield City Archives: X306/1/2/3/2/164*)

Johnson Firth Brown Ltd, Directors' meeting minutes, includes armour piercing shell reports, 1918
(*Sheffield City Archives: X306/1/2/3/2/168-169*)

Johnson Firth Brown Ltd, agreement and correspondence concerning grant of licence to the Bethlehem Steel Company, Pennsylvania, USA, to manufacture and sell fuses for high explosive shells, 1 Nov 1913
(*Sheffield City Archives: X306/2/3/9/1*)

Sheffield Smelting Company, correspondence between various members of the Wilson family relating to the making of munitions by the company and the resulting resignation of Cecil Wilson on conscientious grounds from the position of chairman of directors, Apr - Nov 1915
(*Sheffield City Archives: SSC/3/13/1*)

Sheffield, the World's arsenal: being notes on the manufacture of armaments and ordnance (Development Committee, 1918)
(*Sheffield Local Studies Library: Sheffield Trades: pamphlets no. 4 (338.4 S)*)

Hatch, Frederick Henry, *The Iron and Steel Industry of the United Kingdom under War Conditions: a Record of the Work of the Iron and Steel Production Department of the Ministry of Munitions* (privately printed for Sir John Hunter, 1919)
(*Sheffield Local Studies Library: 338.4 SST*)

War work executed by Davy Bros. Ltd., Park Iron Works, Sheffield, 1914-1918 (photocopy)
(*Sheffield Local Studies Library: PAMP 38 SQ*)

[Sheffield National Projectile factory (Messrs. Firth and Hadfield)], 1922
From "History of the Ministry of Munitions: Volume VIII, Control of Industrial Capacity and Equipment; Part II, The National Factories"
(*Sheffield Local Studies Library: MP 5876 M*)

Sheffield City Council, City Engineers correspondence and plans regarding temporary dwellings for munitions workers in Petre Street and Tyler Street, 1924 - 1936
(*Sheffield City Archives: CA495/1-2*)

Vickers Centenary [videorecording] (Firth Brown Research Laboratories, 1967)
(*Sheffield Local Studies Library: VID 161*)

Steam, Birch and Steel [Videorecording], 1978
Film of the steam engine used to power the River Don armour plate rolling mill. Built by Davy Bros of Sheffield, now preserved at Kelham Island Industrial Museum.
(*Sheffield Local Studies Library: VID 119*)

Hampshire, G. A., Armour Plate: the Sheffield connection in *Sheffield Spectator*, vol. 19 no. 73, Sep 1979
(*Sheffield Local Studies Library: 052.74 S*)

BBC Radio Sheffield recording - a group of women talk about their work during the First World War - all are depicted in a painting called 'The Munitions Girls' acquired by the Science Museum - they talk about the work, pay and conditions, c. 1980s
(*Sheffield City Archives: SY425/8602/4 band 1*)

- Mr Smith talks of the munitions huts at Tinsley c. 1916 (1980s)
(*Sheffield Local Studies Library: oral history recording: Tinsley 6-7*)
- Mr Jackson talks of working at Hadfield's East Hecla Works during World War One (1980s)
(*Sheffield Local Studies Library: oral history recording: St Mary's 48*)
- Mr Wilson talks of his work in armaments manufacture etc. (1980s)
(*Sheffield Local Studies Library: oral history recording: tape 46*)
- Dickinson, Betty, *Shanty Town: Childhood Memories of Poverty and Happiness in Tyler Street Munition Huts*, (Monteney Community Workshop, 1985)
(*Sheffield Local Studies Library: 942.74 S*)
- Tweeddale, Geoffrey, *Steel city: entrepreneurship, strategy and technology in Sheffield, 1743-1993* (Clarendon Press, 1995)
Chapter 5: Arsenal of the World, pages 188-210.
(*Sheffield Local Studies Library: 338.4 S*)
- Phillips, Martin, *Septimus Bennett: artist in arms: a Sheffield munitions worker, 1915-18* (Pentland Press, 2001)
(*Sheffield Local Studies Library: B.BENN S*)
- Greene, Gayle, *The Woman who knew too much: Alice Stewart and the Secrets of Radiation* (University of Michigan Press, 2001)
Includes references to Stewart's time as a munitions worker at the National Projectile Factory.
(*Sheffield Local Studies Library: B.STEW S*)
- Dalton, Stewart, *Sheffield: Armourer to the British Empire* (Wharnccliffe Books, 2004)
(*Sheffield Local Studies Library: 338.4 S*)
- Sources for the Study of World War One* (Sheffield Libraries Archives and Information, 2008)
(*Sheffield Local Studies Library: 016.9403 SQ and Sheffield City Archives: STUDY GUIDES*)
- Oldham, Douglas C., *A History of Rolled Heavy Armour Plate Manufacture at the Sheffield Works of Charles Cammell and Vickers* (South Yorkshire Industrial History Society, 2010)
(*Sheffield Local Studies Library: 671 SQ*)
- Lloyd-Jones, Roger and Myrddin Lewis, *Armaments Firms, The State Procurement System, and the Naval Industrial Complex in Edwardian Britain* in Essays in Economic & Business History, vol. XXIX, 2011
(*Sheffield Local Studies Library: MP 6363 M*)
- Reminiscences of Tyler Street munition huts, taken from Sheffieldhistory.co.uk, 2012
(*Sheffield Local Studies Library: MP 6364 M*)

Library and Archive collections held elsewhere

Sheffield Committee on Munitions of War, correspondence and other documents relating to the Sheffield Committee on Munitions of War, 1915-1919 are available at the [University of Sheffield Special Collections](#) (ref. MS76)

Ministry of Information First World War Miscellaneous Collection at the Imperial War Museum includes photographs of munitions factories at Sheffield <http://tinyurl.com/cm79oor> (accessed Nov 2014)

The Bombshell - the official organ of the National Projectile Factory, Templeborough is available at the Imperial War Museum (in addition to Sheffield Local Studies Library) www.iwm.org.uk/collections/item/publication/400000560 (accessed Nov 2014)

Film of male munitions workers at East Hecla Works during First World War <http://www.britishpathe.com/video/shell-making> (accessed Nov 2014)

Certificate of appreciation awarded to Ada Rodgers at the National Projectile Factory at Templeborough, Sheffield at the Imperial War Museum <http://tinyurl.com/cc434z8> (accessed Nov 2014)

Photograph taken while on war service at the National Projectile Factory in Sheffield, by Emeline Mary Vallance Gorringe (née Bradford), 1918 ([West Sussex Record Office](#): Add Mss 40,397)

Letter from Elsie Bowerman to Mrs Chibnall - written from Sheffield. 'She was sorry there was no news of 'poor Kitty'. She had a 'magnificent meeting' and sold 96 papers. She had been over the National Projectile Factory, which employs 5000 women', 9 Sep 1917
<http://www.lse.ac.uk/library/collections/featuredCollections/womensLibraryLSE.aspx> : 7ELB/B/5/18

The National Archives Discovery catalogue includes catalogues describing archives held locally in England and Wales <http://discovery.nationalarchives.gov.uk/>

Some records of Sheffield iron and steel companies are available in other libraries, archives and museums. For details see <https://www.sheffield.gov.uk/libraries/archives-and-local-studies/collections.html>

The Archives Hub contains catalogues describing archives held in universities and colleges in the UK <http://www.archiveshub.ac.uk/>

The National Archives (TNA) holds records of central government departments and agencies. You can search the TNA catalogue online at www.nationalarchives.gov.uk.

Sheffield Archives and Local Studies services collect and preserve original records and printed material relating to Sheffield and the surrounding area.

The information dates from the 12th century to the present and relates to Sheffield, South Yorkshire and north Derbyshire.

Included are extensive collections of books • pamphlets • photographs • church registers • newspapers • census records • minutes • diaries • films • maps • deeds • records from schools • hospitals • businesses and charities • family estates • personal papers etc.

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Adding to our collections

Sheffield Libraries and Archives seeks to preserve information about events in our city's history. If you have photographs or personal papers that may be worth preserving please consider safeguarding them for current and future generations by placing them in the care of Sheffield Libraries and Archives. It is only through the generosity of individuals and organisations that we are able to have a complete record of important events in the history of Sheffield and the nation. We are interested in photographs, flyers and posters, minutes of meetings etc. For advice on record keeping and the facilities we offer please contact us: archives@sheffield.gov.uk or 0114 203 9395).

<p>Sheffield Local Studies Library 1st floor Central Library Surrey Street Sheffield S1 1XZ</p> <p>Tel: 0114 273 4753 Fax: 0114 273 5009</p> <p>archives@sheffield.gov.uk</p> <p>www.sheffield.gov.uk/archives</p> <p>(selected) Sheffield Local Studies Library catalogue https://www.sheffield.gov.uk/libraries/archives-and-local-studies/catalogues.html</p>	<p>Sheffield City Archives 52 Shoreham Street Sheffield S1 4SP</p> <p>Tel: 0114 203 9395 Fax: 0114 203 9398</p> <p>archives@sheffield.gov.uk</p> <p>www.sheffield.gov.uk/archives</p> <p>(selected) Archives catalogues: https://www.sheffield.gov.uk/libraries/archives-and-local-studies/catalogues.html and http://discovery.nationalarchives.gov.uk/</p>
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