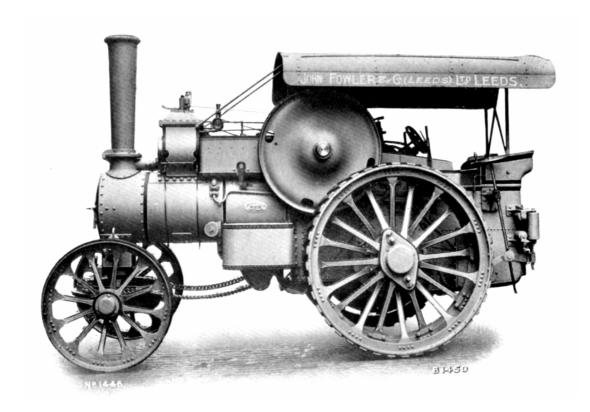
Heavy Metal archive workshop John Fowler & Co. (Leeds) Limited 21 August 2007





Museum of English Rural Life Redlands Road Reading RG1 5EX Tel: 0118 378 8660

Tel: 0118 378 8660 merl@reading.ac.uk

www.merl.org.uk







About the Heavy Metal project



'Heavy Metal' is an archive project, funded by the Heritage Lottery Fund, the Road Locomotive Society and the University of Reading.

The project started in January 2007 to encourage more people to use MERL's steam engine and farm machinery manufacturers' archives and to make them more accessible.

Over many months, Museum staff and volunteers have sorted and catalogued a large range of archives. These include 10,000 engineering drawings produced by steam engine manufacturers, Charles Burrell and 2,500 from Wallis and Steevens.

The volunteers, who include members of the Road Locomotive Society, also learnt conservation techniques enabling them to repackage glass negatives and preserve around 1,000 fragile drawings.

A project archivist was employed to sort and produce an electronic catalogue of three major archive collections: Wallis and Steevens and agricultural machinery manufacturers' International Harvester and Massey-Ferguson. These collections include technical literature, business and employee records, engineering drawings, photographs and advertising materials.

When the electronic catalogues are complete, the list of MERL archives will be available for everyone online at the Access to Archives' website – www.a2a.org.uk

The project has also enabled MERL to digitise a number of fragile archives to preserve them for the future and make them easier to use. These include a number of Wallis and Steevens production registers, which are requested frequently, and 600 glass negatives on loan from the Road Locomotive Society.

In order to attract more steam engine and tractor enthusiasts to use the archives, Museum staff took a touring archive exhibition to local steam rallies and country shows during the Summer. This included stands at the Steam and Vintage Show at Milestones Museum (Hampshire), the Etruria Canals Festival (Stoke-on-Trent), the Woodcote Rally (Berkshire), the Reading and Wokingham Country Show and the Newbury Show.

At each show, museum staff encouraged visitors interested in doing research on their engines or tractors to attend the Museum's archives workshops in the Autumn. The Museum also wanted to encourage children and families to visit MERL and a colouring-in competition was run at each show and the winners publicised in the press.

The project has been run in consultation with a steering group consisting of The National Traction Engine Trust, the Road Roller Association, the Steam Plough Club and the Road Locomotive Society. Each steering group organisation has also helped promote the project by displaying posters and leaflets at steam rallies they have attended and in their club journals.

The project has also been publicised in the Reading newspapers (*Evening Post* and the *Reading Chronicle*) and in the specialist publications including *Old Glory* and *Vintage Spirit* magazines and *The World's Fair* newspaper.







Heavy Metal archive workshop John Fowler & Co. (Leeds) Limited



A brief history of John Fowler's business and products

Early history

- 1850 John Fowler forms a partnership with fellow Quaker, Albert Fry in Bristol as agricultural implement manufacturers and traders
- 1856 Fowler becomes a sole trader of steam cultivation machinery and moves to a new office at 71 Cornhill, London

Steam on the farm

- The idea of applying mechanical power to the cultivation of the soil had been talked about for a long time
- A few steam engines had been used on farms as early as the 1790s. These were big stationary engines built into barns to drive threshing machines
- The problem was the weight of the steam engine compacting the soil
- The solution adopted was to keep the engines at the side of the field to haul ploughs and other implements across by cable

John Fowler's innovative products

- John Fowler's ploughing system used a steam engine on one side of the field and an 'anchor' on the other. Between them they pulled the plough across the field by a cable.
- 1858 John Fowler's steam cultivating machinery was awarded the prize of £500 by the Royal Agricultural Society of England
- Fowler was well-known for their steam ploughing engines and implements. They were also noted manufacturers of agricultural traction engines, road locomotives and railway locomotives

Working in partnership

- As a sole trader, John Fowler uses other firms to make his products.
 - These included:
 - o Robert Stephenson & Co
 - o Ransomes & Sims
 - o Clayton, Shuttleworth & Co
 - o Kitson, Thompson & Hewitson
- In 1860 Kitson and Hewitson become Fowler's sole supplier
- In 1862 John Fowler opens his own factory, the Steam Plough Works, at Hunslet in Leeds, in partnership with William Hewitson

Business history

- 1863 William Hewitson died and John's brother Robert joins the business
- 1864 John Fowler dies and Robert goes into partnership with Robert Eddison. David Greig, Reginald Wigram and Barnard Fowler join later as fellow partners
- 1886 John Fowler & Co. (Leeds) Limited is formed
- 1890s Much of the firm's output was exported across the world. Many ploughing engines went to Europe through the company's manufacturing works in Germany
- In 1914 steam ploughing equipment production came to a halt as Fowler made products for the war effort such as trench mortar bombs and gun wheels
- 1930s Fowler built more than 1,500 tanks that were used in the WW2
- 1940s Steam engineering production transferred to adjacent firm J. & H. McLaren
- 1947 Fowler merges with Marshall, Sons & Co. Ltd of Gainsborough to form Marshall-Fowler Ltd
- 1974 Production ceases although the business still remains as a registered company





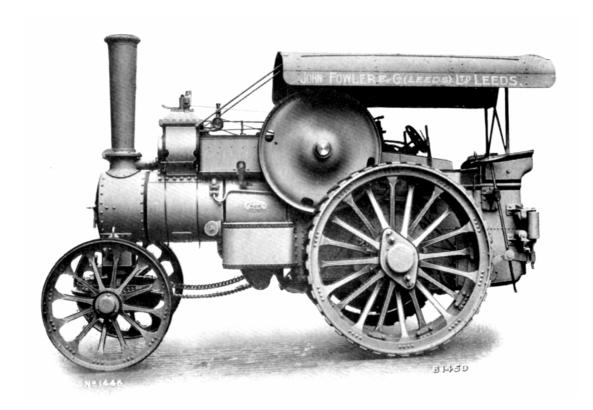


The FOWLER COLLECTION: Business records of John Fowler and Co. (Leeds) Ltd (TR FOW)



What Fowler records does the Museum of English Rural Life hold?

The Museum of English Rural Life holds Fowler records deposited on permanent loan, mainly during the 1970s. The records are by no means exhaustive as many records were lost or destroyed, but they nonetheless provide a fascinating collection of material about the company and its products.



How are the Fowler records organised?

The Fowler records that have already been catalogued have been given the overall reference TR FOW. Subsequent deposits are given the references TR 2FOW, TR 3FOW etc. Not all of the Fowler deposits have been fully catalogued yet.

The following are just a few examples of the records held:







Commercial records (accounts, administrative records and Legal records)

AC7	financial statements	1887-1937
AD4/1	inventory of the Steam Plough Works	1895
AD6	records of branches and worldwide subsidiaries	
CO1/1	partnership book	1863-1883
CO1/5-9	articles and memoranda of agreement	1864-1931
CO2/2-9	memorandum and articles of association	1886-1931
CO2/13-27	papers relating to shares and debentures	1886-1932
CO3/1-64	business agreements international,	1868-1938
CO5/1-137	letters patent, specifications, licences, agreements	
	and patent litigation	1850-1924

Engineering drawings

DO1	around 10,000 engineering drawings	1860-1960
DO2	drawings registers	1860-1912, and
		1926-1965

Technical and manufacturing records

E11/1-4	records of experiments and trials	
ET2/1-3	technical particulars and dimensions books	1885-1891
ET2/6	register of plough designs	1883-1926
ET3/1	technical particulars books	1908-1909
MP1/1	general product register	1909-1936
MP1/3-4	engine registers	1895-1938
MP1/5-6	locomotive registers	1923-1968
MP2/1-15	engine details books (only 15 of 91 held)	1893-1919

Publicity materials, photographic and personal records

P1/A1-11	volume of publications	1874-1912		
P2/A1-207	individual advertising and servicing publications			
PH2/1-79	publicity photograph albums	1881, 1948		
SP4/1	personal records of partners, directors and associa	sociates		
	1856-1933			







The FOWLER COLLECTION: Business records of John Fowler and Co. (Leeds) Ltd (TR FOW)

How can I find the record I want?



1) Search online

Online catalogue on Access to Archives website http://www.a2a.org.uk

Search under the KEYWORD Fowler

And choose LOCATION OF ARCHIVES Museum of English Rural Life

Select 'CATALOGUE IN FULL' from the bar at the top of the page to see all the records in this section of the catalogue on A2A

A general search under 'Fowler' will also bring up other records contained in other collections held at the Museum – e.g. Marshalls (TR MAR), Agricultural Machinery Department of Reading University (TR AMD) etc.

Online catalogue of the Museum of English Rural Life – OLIB

This provides an overall description of the records held and can be consulted via the Museum's website at http://www.merl.org

Choose COLLECTIONS AND CATALOGUE

Then COLLECTIONS DATABASE

Then OPEN DATABASE Choose KEYWORD SEARCH

Enter FOWLER

This should then bring up the Fowler collection, however this is only an overview and not as detailed as the catalogue on A2A.

NOTE: not all the records held are catalogued online.

2) In person at the Museum reading room Monday to Friday 09.00 – 17.00

You can browse through the online catalogues, printed catalogues and indexes.

- 1) **Printed catalogue entitled 'Fowler Collection'** detailed volume containing an exhaustive description of the TR FOW records from the first deposits
- 2) **Drawing index typewritten list** consists of date, drawing number and description by engine type
- 3) **Photograph index list 'Fowler Photographs'** can be consulted in the Museum reading room, includes number, date, gauge, type, cylinders, name or number, customer, drawing number (where known) and photograph number







- 4) **Photograph and drawing index cards** 19 drawers of index cards in the reading room which can be consulted. These are organised by type of machine. It is hoped that these will be added to the A2A online catalogue during 2007-2008.
- 5) **Microfiche of drawings** many of the drawings have been microfiched and these can be viewed in the reading room on the microfiche viewer

Uncatalogued records

Some of the collection has not been catalogued yet, ask a member of staff if you think a record exists but can't find it in the catalogue.

The reference library at the Museum of English Rural Life holds over 60,000 books and journals on agricultural themes. These include copies of books and pamphlets about Fowlers, some of these are listed here and the MERL reference is given in brackets.

Condbe, Jesse, Fowler locomotives in the Kingdom of Hawaii [Pamphlet 5342 CON]

Davis, Theo, John Fowler and the business he founded, 1951 [5342 DAV]

Gilbert, G., Fowler steam cultivating machinery 1900-1930 [Oversize 4080 GIL]

Jux, Frank, Fowler's century of locomotive building, 1970 [Pamphlet 5342 JUX]

Lane, Michael R., *The Story of the Steam Plough Works: Fowlers of Leeds*, 1980 [Oversize 5342 LAN]

Pepper, Alf, Retrospect of over fifty years with John Fowler & Co. (Leeds) Ltd.

Pepper, Alf, 'The Fowler method of constructing steam ploughing and traction engines' in *Road Locomotive Society Journal* (vol. 42, no. 4) 1989, pp.99-115







Heavy Metal archive workshop John Fowler & Co. (Leeds) Limited



How do I find out about my Fowler engine?

A. Dates and classes of engine

From an engine number we can find the basic information of date, class and who ordered it.

 Use surrogate lists, if possible, certainly for an initial check: Road Locomotive Society list (the Alan Duke lists), TR RLS MP1/7 Bill Smith, TR AFWS MP1/1-3

These are transcripts from order registers, which include some additional information on later owners. The RLS list covers the Fowlers' entire existence, but not the complete range of products. Bill Smith's is a transcript of the first production register only, but does cover all products.

2. Original order registers for traction engines, road locomotives, etc are TR FOW MP1/1-4, TR 8FOW MP1/1.

TR FOW MP1/1-2 are the later registers, big and heavy, which also include order details for ploughs, wagons and other products.

Those two cannot be photocopied, nor can 8 FOW MP1/1, which is very fragile.

B. Further production details

1. Building specifications

Variously called build sheets, build books, etc.

These give full building details, especially a list of drawings used. We only have a very small number: for coverage see the Fowler catalogues.

There are two series of bound specification books: TR FOW MP2/1-15, TR 6FOW MP2/1-5.

TR 2FOW MP2/1ff contains a number of individual sheets extracted from various books, for steam wagons, etc.

C. Drawings

- 1. Check the class of engine as in section A above.
- 2. Is there a specification? If there is it will tell us all the drawings used, whether we have them or not.
- 3. If no specification, go to the class lists. These are lists of drawings that we have, arranged by standard class (A5, Z7, etc). There are more lists which cover standard components, such as chimneys.







- 4. If no specification and no list, go to the cards, again arranged by class.
- 5. The drawings themselves are almost all microfilmed, and to be found in the drawers in the reading room. It is rare that we would need to produce the originals.
- 6. HS series. These are sketches, in bound volumes, at TR 2FOW.

D. Photographs

Only a small proportion of Fowlers' production was photographed: sometimes one or two photographs cover a class of a hundred or more.

- 1. Check class type, as section A.
- 2. Go to the card index, arranged by class. This will give you Fowlers' negative number (eg B1098), and a reference to the album in the TR FOW PH2 series (eg PH2/16).

E. Railway locomotives

- 1. For basic information on classes, etc go to the list compiled by Frank Jux. It's in the library, but we have a photocopy in the reading room. This gives the dates, customer, and also whether there is a general arrangement drawing and a photograph.
- 2. Check whether we have a specification. There are two books, TR FOW MP2/16-17. If we have it gives a list of all the drawings used.
- 3. If there is no specification, we have to use the index cards arranged by type of locomotive, and possibly the drawings registers.







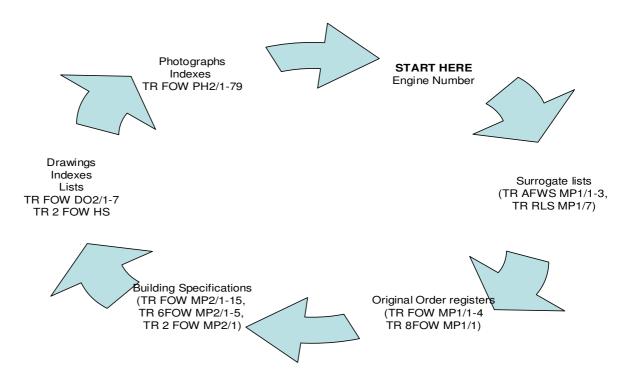








Navigating the Fowler Archive



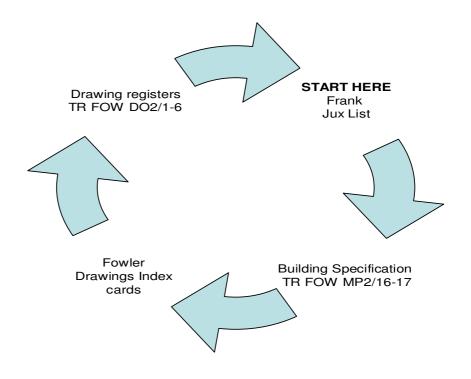








Fowler Railway locomotive









Archives containing information about individual engines







A1. Surrogate lists of Original Order registers.

Reference: TR RLS/MP1/7

John Fowler & Co (Leeds) Ltd

Creation dates: [n.d. 1870's-1920's]

Alan Duke transcript.

Reference: TR AFWS MP1/1-3

Transcript of reference TR 8 FOW/MP1/1 Engine Register c1860-1901

Creation dates: c1990-2007

Bill Smith transcript

A2 Original Order Registers

Reference: TR 8 FOW/MP1/1

Engine Register

Creation dates: c.1860-1901

Scope and Content

Kitson Numbers; 737-760, 797-802, 839-856, 875-886, 921-959

Fowler Numbers; 99-8999

Includes engine number, HP, date, customer address, engine type & remarks







GENERAL PRODUCT REGISTER No. 3.

Creation dates: 1909 - 1928

Extent and Form: Bound volume

Scope and Content

Arranged in sections according to product type, occasionally subdivided into classes or subtypes and then arranged in order of product numbers. The format per entry is; date, product number, description, weight, order date, order book reference, purchaser and delivery date. The sections are

- i. 1909 1928. Steam traction engines. Engine Nos. 12100 18063. Subdivided into classes, namely; T; N; D, DH and DH; A and TE; R and TE; Band BAA.Includes road locomotives, road rollers, tractors and showmans' engines.
- ii. 1912 1928. Self moving engines powered by oil, petrol, diesel, electricity or internal combustion. Engine Nos. 13424 18035. Includes road locomotives, road rollers, wagons, ploughing engines, tractors, ploughing punts and gyrotillers.
- iii. 1909 1928. Steam ploughing engines. Engine Nos. 12193 18033. Subdivided into classes, namely: DD, K and T; B, BKS, BB and BBS; AA, ZAA and ZHS; Z; EE.
- iv. 1910 1912. Steam hauling engines. Engine Nos. 12412 13378.
- v. 1909 1928. Steam boilers. Engine Nos. 12133 18096.
- vi. 1909 1928. Locomotives. Engine Nos. 12271 18095.
- vii. 1909 1914. Stationary steam engines. Engine Nos. 12191 14439.
- viii. 1909 1928. Ploughs. Implement Nos. 8912 15106. Subdivided into different types, namely: 1 and 2 furrow; 3 furrow; 4 furrow; 5 furrow; 6-10 furrow.
- ix. 1909 1928. Cultivators. Implement Nos. 8931 15109. Subdivided into: 5, 7 and 7/9 tyne; 9, 9/11 and 11/13 tyne; special and medium cultivators.
- x. 1909 1928. Harvesters, beetroot lifters, knifers, scarifiers and ridgers. Implement Nos. 8923 15099.
- xi. 1909 1928. Harrows. Implement Nos. 8941 15071. Subdivided into: flat; turning; disc.
- xii. 1909 1928. Planters, rollers, combined implements and land presses. Implement Nos. 9022 15013.
- xiii. 1909 1928. Mole ploughs and drainers. Implement Nos. 9190 15075.
- xiv. 1909 1928. Ditching ploughs. Implement Nos. 9015 15108.
- xv. 1910 1928. Scoops and land levellers. Implement Nos. 9213 15074.
- xvi. 1909 1928. Water carts, oilcarts and tar boilers. Implement Nos. 8943 15104. Subdivided into: 2 wheeled; 4 wheeled.
- xvii. 1909 1928. Wagons and gritters. Implement Nos. 8924 15101.
- xviii. 1910 1928. Trailers. Implement Nos. 9450 15060.
- xix. 1910 1928. Sleeping vans. Implement Nos. 9181 15034. Subdivided into large and small.
- xx. 1913 1924. Anchors, rope porters and snatch blocks. Implement Nos. 11114 14392.
- xxi. 1910 1927. Clip pulleys. Clip Pulley Nos. 939 956.
- xxii. 1909 1928. Repair and alteration work. 'X' Nos. X2287 4505.
- xxiii. 1909 1923. General expenses work, premises extensions and experimental work. 'GE' Nos. GE741 969.
- xxiv. 1915 1918. Military accessories. 'VK' Nos. VK101 532.
- xxv. 1915 1918. Ministry of Munitions orders. 'MNS' Nos. MNS101 561.
- xxvi. 1923 1928. Concrete making machinery. Engine Nos. 16035 18108.
- xxvii. 1923 1928. Stone crushers. Implement Nos. 14260 14695.
- xxviii. 1924 1928. Steam wagons. Engine Nos. 16252 17926.







GENERAL PRODUCT REGISTER No. 4.

Creation dates: 1928 - 1936

Extent and Form: Bound volume

Scope and Content

Arrangement and format as TR FOW/MP1/1 above. The sections are:

- i. 1928 1936. Traction engines. Engine Nos. 18140 21626. Subdivided into classes and types, namely: Class T; Classes D and DN; Class A; Class TE; Class R; Class B; motor and diesel road rollers; duplicate boilers; diesel and oil lorries.
- ii. 1928 1935. Ploughing engines. Engine Nos. 17791 20938. Subdivided into classes and types, namely: Class DD; Class K; Class BB; Class AA; Class Z; motor and diesel ploughing engines; duplicate boilers; large gyrotillers; 80 h.p. gyrotillers; track type tractors. Also gyrotiller attachments. Implement Nos. 15437 -15557.
- iii. 1928 1936. Steam wagons. Engine Nos. 18180 21454. Subdivided into: wagons; gully emptiers; duplicate boilers.
- iv. 1928 1935. Locomotives. Engine Nos. 18219 20765. Subdivided into: steam; motor; duplicate boilers.
- v. 1928 1935. Concrete making machinery. 'X' Nos. X4507 7388, Engine Nos. 18109 20947. Subdivided into: mixers [Eng. Nos.]; winches and hoists [Eng. Nos]; elevators ['X' Nos.]; flip carts and barrows ['X' Nos.]; contractors locomotives [Eng. Nos.]; brick and stone breakers ['X' Nos.]; crosswise axles and batch hoppers ['X' Nos.]; pumps ['X' Nos.]
- vi. 1929 1934. Wagons and trailers. Implement Nos. 15160 15497.
- vii. 1928 1935. Gritting machines. Implement Nos. 15118 15581.
- viii. 1928 1935. Tar boilers. 'X' Nos. X4510 7298.
- ix. 1928 1936. Scarifiers, Implement Nos. 15110 15606.
- x. 1928 1931. Water carts. Implement Nos. 15116 15232. Subdivided into: 2 wheeled; 4 wheeled; barrow pumps; fuel and water tenders.
- xi. 1928 1935. Sleeping vans. Implement Nos. 15135 15582. Subdivided into large and small.
- xii. 1928 1935. Register of 'X' Nos. X4506 7396.
- xiii. 1928 1935. Ploughs. Implement Nos. 15121 15500. Subdivided into: 1 furrow; 2 furrow; 3 furrow; 5 furrow.
- xiv. 1929 1931. Bevel frame ploughs. Implement Nos. 15158 15415. Subdivided into: 3/4/5 furrow; 4/5/6 furrow; 5/6/7 furrow.
- xv. 1928 1934. Cultivators. Implement Nos. 15133 15599. Subdivided into: 7/9/11 tyne; 9/11/13 tyne; medium; cane row.
- xvi. 1928 1930. Harrows. Implement Nos. 15120 15260. Subdivided into: flat; reversible; trailing.
- xvii. 1928 1934. Other implements. Implement Nos. 15120 15547. Subdivided into: knifers; ridgers; scoops; rollers and land levellers; mole drainers; combined implements, planters and levellers; mole drainers; combined implements; planters and graders; ditching machines.
- xviii. 1928 1931. Anchors, rope porters and snatch blocks. 'X' Nos. X4605 5879.
- xix. 1928 1935. Diesel engines. Various series. X4596 5170; Cl 105 196; M 197 408.







ENGINE REGISTER.

Creation dates: 1896 - 1920's

Extent and Form: Bound volume

Scope and Content

Engine Nos. 7670 - 15202. Traction engines; road locomotives; road rollers; tractors; showmans' engines; steam diggers; ploughing engines; locomotives; portable and semi-portable and stationary steam engines; hauling and winding engines; rock drilling engines; pumping engines; mill engines; boilers. In order of engine numbers. The format per entry is; engine number, description, remarks, customer, delivery date, 'K' order number, engine building book reference and shop order book reference.

Reference: TR FOW/MP1/4

TRACTION ENGINE REGISTER.

Creation dates: 1895 - 1938

Extent and Form: Bound volume

Scope and Content

Engine Nos. 7482 - 22053. Traction engines, road locomotives, road rollers, showmans' engines, tractors, road making machinery, steam wagons, gully emptiers and re-sealers, concrete mixers and stone crushers. Arranged in sections according to class of engine or machine and in order of engine numbers within sections. The format per entry is; order date, engine number, 'K' order number, engine type, purchaser, shop order book reference, engine building book reference, date of issue of specification and delivery date. The sections are:

- i. Class N.
- ii. Classes T and E.
- iii. Classes D. DH and DN.
- iv. Class O.
- v. Concrete mixers and stone crushers.
- vi. Classes A, R and TE.
- vii. Classes B and BAA.







B Building Specifications

Reference: TR FOW/MP2/1

ENGINE DETAILS BOOK No. [9].

Creation dates: 1893 - 1895

Extent and Form: Bound volume

Scope and Content

General. Includes traction engines, road locomotives, road rollers, ploughing engines, locomotives, portable and semi-portable steam engines. Engine Nos. 7076 - 7470. The book is in sequence of engine numbers arranged by orders. The orders, either to stock or customer's requirements, often include two engines or multiples thereof, as the engines were usually manufactured in batches. The information per order includes a heading giving the order date, engine number(s), 'K' order number, engine type and customer (if applicable), followed by details and specifications. These include a general description, a list of relevant drawings, painting details and outfit details, with dates of completion of the various stages of manufacture. This information is presented in a variable style with additional documents inserted at various points. These include supplementary orders, general and specific technical memoranda, sketches, photographs, engineering correspondence, testimonials, particulars and publicity extracts relating to other manufacturers [namely William Hepton & Son; Ruston, Proctor & Co.; R. Hornsby & Sons Ltd.: Clayton & Shuttleworth.] The rear of the book also contains entries for a few 'X' product numbers, [repairs and alterations work] and details of stock orders for components as opposed to complete engines and boilers. The front of the book contains two indexes:

- i. Customers. Includes engine numbers and page references.
- ii. Engines. Subdivided into traction engines; road rollers; ploughing engines; locomotives; semi-portable and portable steam engines. The divisions are in order of engine numbers and include engine type, customer and page references.

There are also various technical papers in the end papers of the volume, including:

- i. 1893(24 Nov). Outfit list for general purpose traction engines.
- ii. [1893]. Principal dimensions of agricultural traction engines.
- iii. 1894. List of engines and implements on order for the Berlin show, and show implements already at hand in Magdeburg stores.
- iv. 1895(13 Mar). List of suggested names for engines, extracted from the Admiralty list in 'The Engineer', 1895(8 Mar).
- v. 1895(25 Nov). Code list to traction engine, road locomotive, road roller and ploughing engine class types, divided into John Fowler & Co., (Leeds) Ltd., and John Fowler & Co., Magdeburg.







ENGINE DETAILS BOOK No. [10].

Creation dates: 1895 - 1896

Extent and Form: Bound volume

Scope and Content

General. Includes traction engines, road locomotives, road rollers, showmans' engines, steam diggers, ploughing engines, locomotives, portable and semi-portable steam engines. Engine Nos. 7471 - 7985. Arrangement and format as TR FOW/MP2/1 above, though the amount of inserted matter is much less. Traction engine, road roller and road locomotives entries ceased to be made in the book after early 1896, due to the commencement of book No. 11, TR FOW/MP2/3 below. There are no miscellaneous orders in the rear of the book. The indexes are as in TR FOW/MP1/1 above. At the front of the book is:

i. [1895]. Application form [blank specimen] for a licence for the use of a locomotive. Count of Worcester.

Reference: TR FOW/MP2/3

ENGINE DETAILS BOOK No. [11].

Creation dates: 1896 - 1897

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives and road rollers. Engine Nos. 7622 - 7910. After engine book No. 10, the practice of entering various types of engine in the same book ceased. Thereafter the series of books was continued with each volume being devoted to one of five specific engine type, namely: traction engines; ploughing engines; locomotives; portable and semi-portable steam engines; stationary steam engines. The arrangement of the book also became standard using six printed duplicates of the shop specification sheets for the information per order, to comprise six hundred and forty foolscap pages per book. The six specification sheets comprise a front sheet describing the engine(s), four erecting shop specification sheets giving the drawing details and a paint shop specification sheet including name plate details. The front sheet is headed by the order details, namely; 'K' order number, building book reference, order date, engine type, issue date of shop specification, customer and address and engine number. There is also an issue date on the paint shop specification sheet. The specification sheets are then filed in order of engine numbers. There are two indexes at the front of the book:

- i. Customers. Includes engine numbers and page references.
- ii. Engines. In order of engine numbers. Includes page reference, engine type, customer and address.







ENGINE DETAILS BOOK No. [14].

Creation dates: 1896 - 1899

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives and road rollers. Engine Nos. 7911 - 8198 and 8708. Arrangement, format and indexes as TR FOW/MP2/3 above.

Reference: TR FOW/MP2/5

ENGINE DETAILS BOOK No. [15].

Creation dates: 1898 - 1901

Extent and Form: Bound volume

Scope and Content

Ploughing Engines. Engine Nos. 8298 - 8539. Arrangement, format and indexes as TR FOW/MP2/3 above.

Reference: TR FOW/MP2/6

ENGINE DETAILS BOOK No. 17.

Creation dates: 1897 - 1899

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives. Engine Nos. 8095 - 8277. Arrangement, format and indexes as TR FOW/MP2/3 above.

Reference: TR FOW/MP2/7

ENGINE DETAILS BOOK No. [20].

Creation dates: 1898 - 1900

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives, showmans' engines and road rollers. Engine Nos. 8282 - 8563. Arrangement, format and indexes as TR FOW/MP2/3 above.







ENGINE DETAILS BOOK No. [23].

Creation dates: 1896 - 1912

Extent and Form: Bound volume

Scope and Content

Locomotives. Engine Nos. 7979 - 13545 and 15995. Arrangement and format as TR FOW/MP2/3 above, except there is also an outfit list per entry, from 1905 onwards. There are various related items affixed. Indexes as TR FOW/MP2/3.

Reference: TR FOW/MP2/9

ENGINE DETAILS BOOK No. 49.

Creation dates: 1907 - 1913

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives, showmans' engines and road rollers. Engine Nos. 11106 - 11309. Arrangement, format and indexes as TR FOW/MP2/3 above, plus an outfit list per entry.

Reference: TR FOW/MP2/10

ENGINE DETAILS BOOK No. 86.

Creation dates: 1913 - 1916

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives, steam tractors and road rollers. Engine Nos. 14331 - 14481. Arrangement, format and indexes as TR FOW/MP2/3 above, plus an outfit list per entry.

Reference: TR FOW/MP2/11

ENGINE DETAILS BOOK No. 87.

Creation dates: 1915 amd 1923

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives. Engine Nos. 14482 - 14565. Arrangement, format and indexes as TR FOW/MP2/3 above plus an outfit list per entry.







ENGINE DETAILS BOOK No. 88.

Creation dates: 1915 - 1922

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives, and road rollers. Engine Nos. 14566 - 14680. arrangement, format and indexes as TR FOW/MP2/3 above plus an outfit list per entry.

Reference: TR FOW/MP2/13

ENGINE DETAILS BOOK No. 89.

Creation dates: 1916 - 1920

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives, showmans' engines and steam tractors. Engine Nos. 14747 - 14854. Arrangement, format and indexes as TR FOW/MP2/3 above, plus an outfit list per entry.

Reference: TR FOW/MP2/14

ENGINE DETAILS BOOK No. 90.

Creation dates: 1916 - 1917

Extent and Form: Bound volume

Scope and Content

Traction engines. Includes road locomotives. Engine Nos. 14858 - 14941. Arrangement, format and indexes as TR FOW/MP2/3 above, plus an outfit list per entry.

Reference: TR 6FOW/MP2/1

Shop Building book – Traction Engines No 43

Creation dates: 1901

Extent and Form: Bound volume







Shop Building book – Traction Engines No 45

Creation dates: 1902

Extent and Form: Bound volume

Reference: TR 6FOW/MP2/3

Shop Building book – Traction Engines No 49

Creation dates: 1902

Extent and Form: Bound volume

Reference: TR 6FOW/MP2/4

Shop Building book – Traction Engines No 51

Creation dates: 1902

Extent and Form: Bound volume

Reference: TR 6FOW/MP2/5

Shop Building book – Traction Engines No 180

Creation dates: 1932

Extent and Form: Bound volume







Extracts of Shop Building books

Creation dates: 1922-1938

Extent and Form:

Scope and Content

Locomotives No 145 1922-1924, No 146 1924-1927, No 163 1927-1935, No 190 1935-1938

Road Engines No 160, No 164, No 165, No 167, No 168, No 169, No 177, No 181, No 184, No 185, No 191

Agricultural Machinery (gyrotillers) No 156, no (158)

C. DRAWINGS

Reference: TR FOW/DO2/1

DRAWINGS REGISTER Main Series No. 1.

Creation dates: early 1860's - 1881(Oct)

Extent and Form: Bound volume

Scope and Content

Drawing Nos. 1 - 18485. In order of drawing numbers, assigned chronologically. Format per entry is; drawing number, description, product number(s), drawer, casting number and remarks [usuall extended description]. The format has no provision for dates, which were added at monthly intervals on the page headings but only from 1875 (Aug) onwards.

Reference: TR FOW/DO2/2

DRAWINGS REGISTER Main Series No. 2.

Creation dates: 1881(Oct) - 1892(28 Jan)

Extent and Form: Bound volume

Scope and Content

Drawings Nos. 18486 - 37883. As TR FOW/DO2/1 above except casting numbers are omitted. Dates are entered monthly up to 1882(Nov) and at more frequent, though irregular, intervals thereafter.







Reference: TR FOW/DO2/2/1

DRAWINGS REGISTER Main Series No. 2.

Creation dates: 1881(Oct) - 1893(16 May)

Extent and Form: Bound volume

Scope and Content

Drawing Nos. 18486 - 39410. A transcript of TR FOW/DO2/2 with additional entries, for 37884 - 39410. The dates are now entered in an additional preliminary column on the register pages.

Reference: TR FOW/DO2/3

DRAWINGS REGISTER Main Series No. 3.

Creation dates: 1893(29 May) - 1912(26 Sep)

Extent and Form: Bound volume

Scope and Content

Drawings Nos. 39411 - 57889. Format as TR FOW/DO2/2/1.

Reference: TR FOW/DO2/3/1

DRAWINGS REGISTER Main Series No. 3.

Creation dates: 1893(29 May) - 1897(26 Apr)

Extent and Form: Bound volume

Scope and Content

Drawings Nos. 39411 - 44138. A transcript of TR FOW/DO2/3 up to 44138 only.

Reference: TR FOW/DO2/4

DRAWINGS REGISTER

Creation dates: 1946 - 1947

Extent and Form: Bound volume

Scope and Content

Nos. L1 - 100, 201 - 380 and 501. Locomotive components. Format per entry is; drawing number, size, date and description.







DRAWINGS REGISTER.

Creation dates: 1926 - 1936

Extent and Form: Bound volume

Scope and Content

Various series. Implements. The drawings were registered chronologically with the series intermixed, though with each series in its own numerical sequence. Format per entry is; drawing number, description, date registered, date completed and remarks. The register is succeeded by:

- i. 1925 1929. Register of suggested new designs for implements, including subsequent product numbers if actually manufactured.
- ii. 1925 1927. Notes on alterations to existing implement designs.

Reference: TR FOW/DO2/6

REGISTER of the contents of thirty four packets of locomotive drawings.

Creation dates: 1928 - 1953

Extent and Form: Bound volume

Scope and Content

The contents lists per packet state drawing description, drawing number and date. The drawings concern both locomotive components, including petrol and diesel engines, and associated goods.

There is a list of the packets at the front of the register.

Reference: TR FOW/DO2/7

LIST

Creation dates: c.1950 - 1965

Scope and Content

Of principal drawings for Challenger diesel crawler tractors, namely Challenger 2, 2A, 2AL, 3, 4 and 3M2R, and also for TC8 diesel crawler tractors.







D. PHOTOGRAPHS

TR FOW/PH2/1-2 W Series, Nos. 1 and 2 - General Range of Products

TR FOW/PH2/3-5 A Series, Nos. 1-3 - General Range of Products

TR FOW/PH2/6-32 B Series, Nos. 1-27 - General Range of Products

TR FOW/PH2/33-42 C Series, Nos. 1-10 - Cultivating Machinery

TR FOW/PH2/43-45 E Series, Nos. 1, 2 and 4 - Diesel Engines

TR FOW/PH2/46 G Series, No. 1 - General

TR FOW/PH2/47-50 L Series, Nos. 1-4 - Railway Locomotives and Rolling Stock

TR FOW/PH2/51-52 R Series, Nos. 1-2 - Road Making Machinery

TR FOW/PH2/53-56 T Series, Nos. 1-4 - Transport Machinery

TR FOW/PH2/57-74 Albums Variously Compiled from Numbered Photograph Series

TR FOW/PH2/57-70 General Range of Products

TR FOW/PH2/57-66 Subsidiary Reference, W and B Series, Nos. 2, 3, 5, 8, 9, 10, 11, 14 and 15

TR FOW/PH2/67 W Series

TR FOW/PH2/68-69 A Series

TR FOW/PH2/70 B and A Series

TR FOW/PH2/71 Concrete Mixing Machinery, CN Series

TR FOW/PH2/72 Diesel Engines, E Series

TR FOW/PH2/73 Railway Locomotives and Rolling Stock, L Series

TR FOW/PH2/74 Traction Engines, Road Locomotives and Road Rollers, W, B and A Series

TR FOW/PH2/75-79 Albums Compiled of Un-numbered Photographs

TR FOW/PH2/75 South African Farm

TR FOW/PH2/76 Gyrotillers

TR FOW/PH2/77 Railway Locomotives and Rolling Stock

TR FOW/PH2/78-79 Tractors







E. RAILWAY LOCOMOTIVES

Order registers

Reference: TR FOW/MP1/5

LOCOMOTIVE REGISTER.

Creation dates: 1923 - 1947

Extent and Form: Bound volume

Scope and Content

Petrol and diesel locomotives. Engine Nos. 16038 - 23012; also early entries in 39, 41 and 42 series. After No. 23012 in 1945 subsequent engines were registered officially in a different register, TR FOW/MP1/6 below. However certain entries continued to be made in this volume up to 1947. Entries up to No. 23012 are in order of engine number. Those in the 39, 40, 41 and 42 series are arranged with the series intermingled, though each series is in its own numerical order. Format per entry is; engine number, h.p. and method of powering, type, gauge, approximate weight, special fittings, customer, delivery date and remarks. There is a customer index at the rear of the register for entries up to 23012.

Reference: TR FOW/MP1/6

LOCOMOTIVE REGISTER.

Creation dates: 1945 - 1968

Extent and Form: Bound volume

Scope and Content

Diesel locomotives. Locomotive Nos. 39, 41 and 42 series. Arranged with each series in its own numerical order but with the series intermingled. Format per entry is; locomotive number, h.p. type, gauge, weight, delivery date, customer and customer to whom locomotive allocated.







Building Specifications

Reference: TR FOW/MP2/16

LOCOMOTIVE BUILDING BOOK No. 2.

Creation dates: 1928 - 1937

Extent and Form: Bound volume

Scope and Content

Diesel, petrol and steam locomotives. Engine Nos. 18095 - 21843. A record of the individual stages in the erection of particular locomotives. Arranged in order of engine numbers. The format per engine number is a heading, stating engine type, power and customer, followed by details of the different components in order of assembly, giving assembly dates and drawing number references. There is a contents list of engine numbers at the front of the book, including page references, locomotive types and customers.

Reference: TR FOW/MP2/17

LOCOMOTIVE BUILDING BOOK No. 3.

Creation dates: 1936 - 1941

Extent and Form: Bound volume

Scope and Content

Diesel locomotives. Engine Nos. 21908 - 22897.

Arrangement, format and contents list as TR FOW/MP2/16 above.

Reference: TR FOW/MP2/18

LOCOMOTIVE BUILDING BOOK No. 4.

Creation dates: 1939 - 1943

Extent and Form: Bound volume

Scope and Content

Diesel locomotives. Engine Nos. 22898 - 22942.

Arrangement, format and contents list as TR FOW/MP2/16 above.





