



# British Steam Tram Locomotive Builders 2

between 1878 and 1898

Charles Burrell & Sons | Dick, Kerr & Co  
Henry Hughes & Co | Falcon Engine & Car Works  
Manning Wardle & Co | Merryweather & Sons

## Contents

Charles Burrell & Sons	- A Brief History 1885-1886	Page 3
Dick, Kerr & Co	- A Brief History 1885-1887	Page 6
Henry Hughes & Co and Falcon Engine & Car Works	- A Brief History 1874-1888	Page 9
Manning Wardle & Co	- A Brief History 1880-1885	Page 15
Merryweather & Sons	- A Brief History 1876-1885	Page 18

---

Cover Illustration: A Thomas Green locomotive of the Rossendale Valley Tramways Company towing a Milnes trailer car. The company was acquired by Rawtenstall Corporation in 1908 who continued to operate the tramway until 22 July 1909, the last regular use of steam traction on a street tramway in Britain. (LTHL collection).

---

© The Local Transport History Library 2023. ([www.lthlibrary.org.uk](http://www.lthlibrary.org.uk))  
For personal use only. No part of this publication may be reproduced, stored in a retrieval system, transmitted or distributed in any form or by any means, electronic, mechanical or otherwise without the express written permission of the publisher. In all cases this notice must remain intact. All rights reserved. First Published 2023.

## **Charles Burrell & Sons**

(Charles Burrell 1817-1906)

**1885-1886**

The company of Charles Burrell and Sons is generally regarded as being founded by Joseph Burrell (1759-1831), who in 1793 took over the business of his father Benjamin (1725-1793). In partnership with his brothers William (1766-1832) and James (1770-1837), he turned the firm into a small engineering business. From repairing agricultural implements, they moved to making them.

James Burrell managed the business alone after his two brothers died, and on his death in 1837 control passed to his second son Charles Burrell (1817-1906), aged only 20. Charles turned what was a modest country engineering firm into one of the leading agricultural and steam engineers of the nineteenth century.

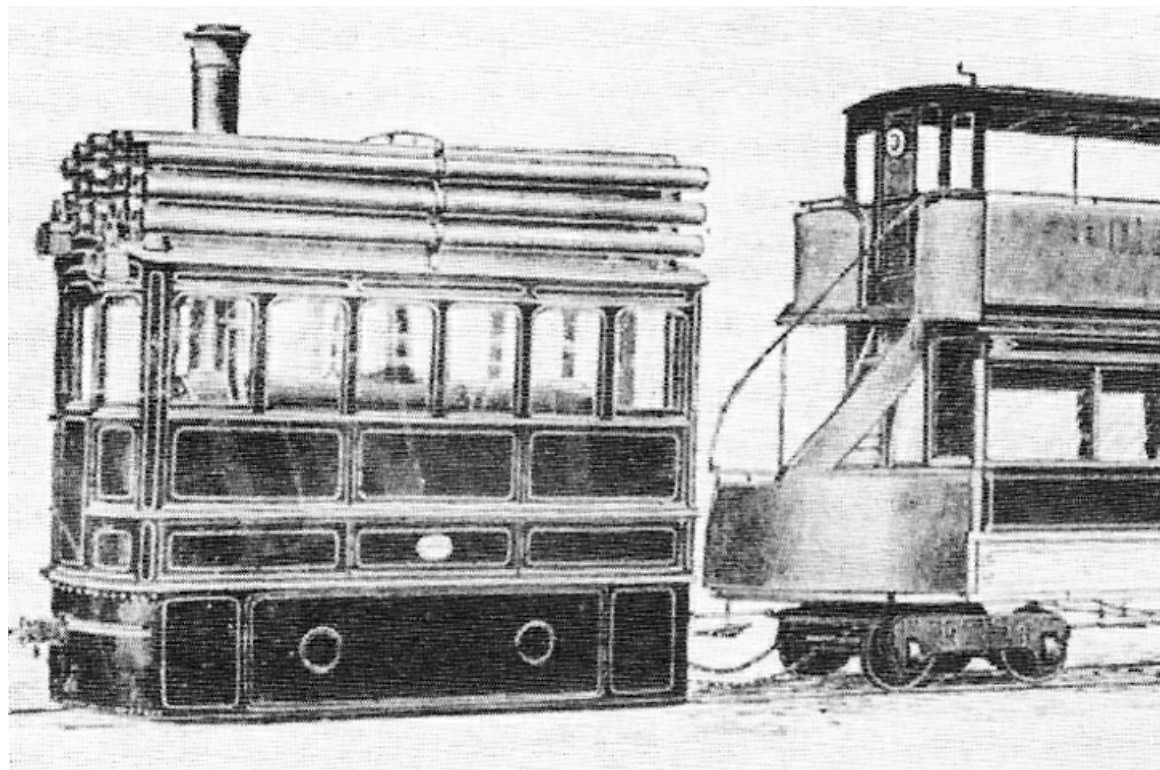
He changed the name of the business to Charles Burrell, engineers and agricultural machinists, and this later became Charles Burrell and Sons, as his sons Charles (1847-1929), Robert (1849-1904) and Frederick (1865-1927) became actively involved in the 1870s.

Charles Burrell's main business was the manufacture of Traction Engines, Rollers and Showman's Engines. (329 are known to be preserved), however they did manufacture a couple of steam tram locos in the mid-1880's.

An improved type of condenser for tram locos was patented consisting of a series of double longitudinal tubes one inside the other. This type of condenser was also used by Thomas Green on their later tram locos. Although they performed well further orders did not materialise and they remained just a minor part of the business.

#### **Known British Steam Tram Locomotives built by Charles Burrell 1885-1886**

Year	Number	New to	Fleet No	Gauge
1885	1	Bradford & Shelf Tramways	No. 6	3ft 6ins
1886	1	Birmingham Central Tramways	No. 71	3ft 6ins
Total	2			



Artists impression of a Burrell narrow gauge steam tram loco dating from 1885. (LTHL collection).

## **Dick, Kerr & Company**

(William Bruce Dick 1830-1905, John Kerr b.1852)

**1885-1887**

Dick, Kerr & Company was formed as an offshoot of W. B. Dick & Company of Kilmarnock in 1883 by combining the railway and tramway activities of the company under the control of John Kerr.

William Dick had been born in Maybole, Ayrshire, Scotland in 1830 and by 1854 had established a business manufacturing rivets in partnership with James More. The partnership was dissolved in 1859 and the business renamed W.B. Dick & Co, becoming Dick, Kerr & Company in 1883.

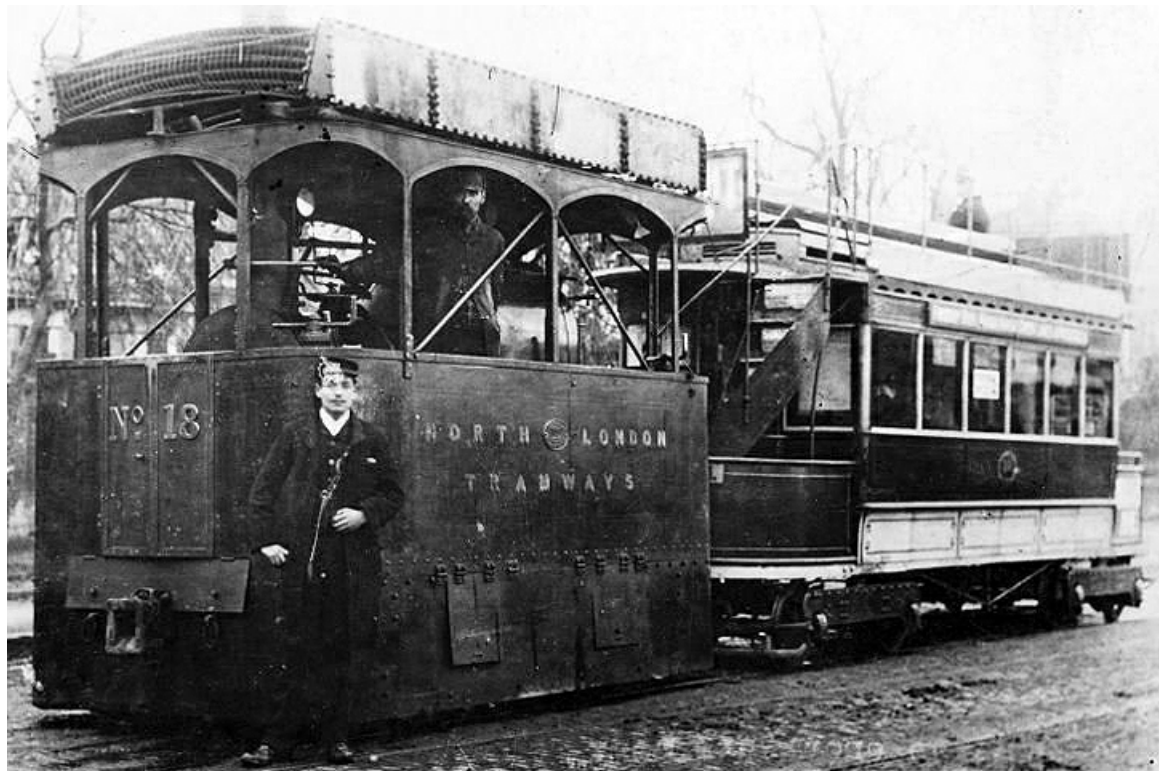
John Kerr was born in Glasgow, the nephew of William Dick, becoming a senior employee in the company. He took charge of the railway and tramway activities of the new company from 1883.

Dick, Kerr & Co were the sole manufacturers of the Morrison and Kerr patent tramway engines. They were not a prolific producer of tram locomotives but produced a small number for the home market between 1885 and 1887.

**Known British steam tram locomotives built by Dick, Kerr & Co 1885-1887**

Year	Number	New to	Fleet No	Gauge
1885	1	Sutton & Alford Tramway	No. 3	2ft 6ins
1886	9	North London Tramways	Nos. 16-24	4ft 8½ins
1887	1	North London Tramways	No. 25	4ft 8½ins
Total	11			

In addition 7 steam tram locos were exported.



Dick, Kerr tram locomotive No. 18 of the North London Tramways Company, dating from 1886. (LTHL collection).



## **Henry Hughes & Co & Falcon Engine & Car Works**

(Henry Hughes 1834-1896, Norman Scott Russell 1839-1929)

### **1874-1888**

Henry Hughes was an engineer and timber merchant who, in 1865, founded the Falcon Works on seven acres of land alongside the Midland Railway at Loughborough. He commenced building railway locomotives almost immediately and one was shown at the Paris Exhibition in 1867.

The enactment of the Tramways Act 1870 provided another market for locomotive builders and following the building of an experimental steam tram loco for John Downes of Birmingham, Hughes subsequently developed and patented his own steam tramway loco which was operated by Leicester Tramways commencing service on 6 March 1876. It ran in service for a few months but did not find favour with the company and was returned. It was added to the order of the Vale of Clyde Tramways Company who had ordered 10 tram locos with which to commence their steam operation. Subsequent orders for tram locos came from the Swansea & Mumbles Railway, Bristol Tramways and Wantage but the Hughes locos did not perform well and most were taken out of service after 2-3 years. A few locos were exported notably to Guernsey and Paris.

In the late 1870's and early 1880's the Company suffered financial

difficulties and in 1883 was reconstructed as The Falcon Engine & Car Works and taken over by Norman Scott Russell and Henry Hughes left the company. It is said he emigrated to New Zealand where he passed away in 1896.

Norman Scott Russell was a Scottish Naval Architect, born in Edinburgh in 1839, who became chief manager at Henry Hughes & Co in April 1882 and acquired control of the company in 1883. He developed an air condensing tram loco which also had a speed regulating governor driven by a fifth wheel which ran along the rails and was kept in position by a spring.

Around 61 'Russell' designed locos were manufactured under the Falcon name up until 1888 as well as some earlier 'Hughes' designs.

The assets of the Falcon Engine & Car Works were acquired by the Anglo-American Brush Corporation in 1889 and a new company - The Brush Electrical Engineering Company - was formed.

Norman Scott Russell is recorded as passing away in Rapallo, Italy on 23 April 1929.

---

**Known British steam tram locomotives built by Henry Hughes & Co and Falcon Engine & Car Works 1874-1897.**
**Henry Hughes & Co Locos**

Year	Number	New to	Fleet No	Gauge
1874	1	John Downes	-	4ft 8½ins
1877	1	Swansea & Mumbles Railway	'Pioneer'	4ft 8½ins
1877	6	Vale of Clyde Tramways	Nos. 1-6	4ft 7¾ins
1877	1	Wantage Tramway	No. 4	4ft 8½ins
1878-79	4	Vale of Clyde Tramways	Nos. 7-10	4ft 7¾ins
1880	7	Bristol Tramways Co	Nos. 1-7	4ft 8½ins
1882	2	Swansea Tramways	Nos. 1-2?	4ft 8½ins
Total	22			

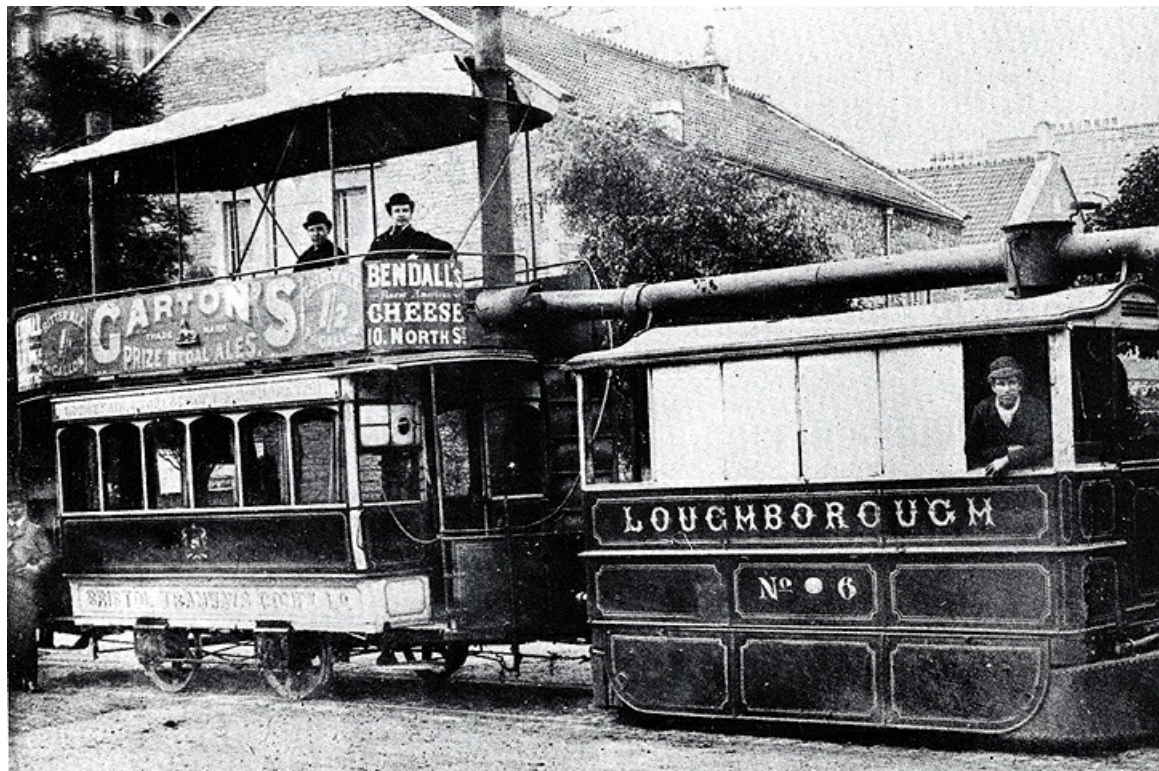
The loco supplied to John Downes was ordered by him to his own design and carried out public trials but did not enter regular service.

One of the locos supplied to the Vale of Clyde was previously on trial at Leicester Tramways in 1876.

Records of Hughes locos are incomplete but it is suggested that together around 103 Hughes and Falcon locos were completed.

## Falcon Engine &amp; Car Works Locos

Year	Number	New to	Fleet No	Gauge
1883	4	Burnley & District Tramways	Nos. 6-9	4ft 8½ins
1884	4	Hartlepoons Steam Tramways	Nos. 1-4	3ft 6ins
1884	1	Burnley & District Tramways	No. 10	4ft 8½ins
1884-85	25	M.B.R. & O. Steam Tramways Co	Nos. 40-64	3ft 6ins
1885	3	Burnley & District Tramways	Nos. 11-13	4ft 8½ins
1885	1	Hartlepoons Steam Tramways	No. 5	3ft 6ins
1885	8	Birmingham Central Tramways	Nos. 27-34	4ft 8½ins
1885	14	Birmingham Central Tramways	Nos. 37-50	4ft 8½ins
1885	2	Coventry & District Tramways	Nos. 5-6	3ft 6ins
1885	5	M.B.R. & O. Steam Tramways Co	Nos. 55-59	4ft 8½ins
1886	7	Birmingham Central Tramways	Nos. 51-57	4ft 8½ins
1886	1	Hartlepoons Steam Tramways	No. 6	3ft 6ins
1889	1	Burnley & District Tramways	No. 14	4ft 8½ins
1892	4	Wolverhampton Tramways	Nos. 21-24	4ft 8½ins
1896	1	Burnley & District Tramways	No. 15	4ft 8½ins
1897	1	Burnley & District Tramways	No. 16	4ft 8½ins
Total	82			



Hughes loco No. 6 of the Bristol Tramways Company one of 7 delivered in 1880. Note the exhaust arrangement via the trailer car. (LTHL collection).



Falcon loco No. 8 of the Burnley & District Steam Tramways Company hauling trailer car No. 6. (LTHL collection).

## **Manning Wardle & Company**

(Alexander Campbell 1806-1876, Charles Wetherell Wardle 1821-1888, John Manning 1830-1874)

### **1880-1885**

Alexander Campbell was born in Greenock, Scotland and was employed by Scott Sinclair & Company of Greenock as Works Manager, but in 1856 he moved to England and joined E. B. Wilson & Company at the Railway Foundry, Leeds as Manager following the departure of the founder Edward Brown Wilson over disagreements with shareholders. In 1858 the firm closed down and he decided to set up his own business helped by the financial assistance of Charles Wetherell Wardle. In time more capital was needed and was provided by John Manning who became a partner and in 1859 the business became Manning Wardle & Company.

Charles Wetherell Wardle was the son of a local vicar and was born at Rothwell, Yorkshire and had also been employed by E. B. Wilson at the Railway Foundry as Chief Engineer.

John Manning was born in Wellingborough, Northamptonshire and by 1846 had been apprenticed to W&J Galloway at the Knott Mill Iron Works in Manchester and in 1859 joined Campbell and Wardle as a partner to form Manning Wardle & Company.

Manning Wardle were better known as manufacturers of steam locomotives although they were pioneers of the 'dummy' tram loco, where the engine was independent of the passenger cars, and as early as 1866 built two 0-4-0 saddle tank tram locos for the 4ft Pernambuco Tramway Company in Brazil with bodywork suitable for street running, the exhaust steam being passed back into the saddle tank. A total of eight such tram locos were built between 1866 and 1870. In 1870 three units were built for the Buenos Aires Tramways consisting of loco and articulated carriage.

In the 1880's steam tram locos became popular in Britain, although Manning Wardle produced relatively few compared to other manufacturers preferring instead to concentrate on their railway locomotive output, building around 1500 units by 1900.

#### **Known British Steam Tram Locomotives built by Manning Wardle 1880-1885**

Year	Number	New to	Fleet No	Gauge
1880	2	North Staffordshire Tramways	Nos. 1-2	4ft 0ins
1881	4	North Staffordshire Tramways	Nos. 6-9	4ft 0ins
1882	4	North Staffordshire Tramways	Nos. 12-15	4ft 0ins
1885	3	M.B.R. & O. Steam Tramways Co.	Nos. 52-54	4ft 8½ins

Total 13





Built in 1885 was Manchester, Bury, Rochdale & Oldham Steam Tramways Company's No. 54, a Manning Wardle steam loco one of just 3 standard gauge locos built. (LTHL collection).

## **Merryweather & Sons**

(Moses Merryweather 1793-1872)

### **1876-1885**

Moses Merryweather was born in 1793 in Welbury, Yorkshire and in 1807 was apprenticed to the firm of Hadley & Simpkin, fire engine makers of Long Acre, London. In 1836 the business was acquired by Moses Merryweather with financial assistance from Henry Lott whose daughter Sarah he married that year. Lott was the son of a wealthy landowner and lived on 'independent' means. Moses Merryweather died in 1872 by which time the firm had become Merryweather & Sons, whose primary business continued to be fire engine manufacturers.

In 1870 the company was asked by John Grantham to manufacture the steam power unit for a combined locomotive and carriage which eventually operated on the Wantage Tramway from c.1876 to 1881. This prompted the Company to offer steam tram locos and in April 1875 Merryweather patented their own locomotive design. Much of Merryweather's tram loco production was exported and relatively few found their way onto the home market.

The last steam locos for the British market were 15 for the North London Tramways in 1885.

**Known British Steam Tram Locomotives built by Merryweather 1876-1885**

Year	Number	New to	Fleet No	Gauge
1876	1	Wantage Tramway	No. 3	4ft 8½ins
1876	1	Wantage Tramway	-	4ft 8½ins
1880	1	Dewsbury, Batley & Birstal	No. 1	4ft 8½ins
1881	8	Dewsbury, Batley & Birstal	Nos. 2-9	4ft 8½ins
1881	6	Stockton & Darlington	Nos. 1-6	4ft 0ins
1881	2	North Staffordshire Tramways	Nos. 3-4	4ft 0ins
1882	2	North Staffordshire Tramways	Nos. 10-11	4ft 0ins
1883	1	Alford & Sutton Tramways	No. 2	2ft 6ins
1885	15	North London Tramways	Nos. 1-15	4ft 8½ins

Total 37

No. 3 of 1876 for Wantage Tramway was the Grantham car and the second in 1876 was an experimental loco on trial only; it also spent time on trial at other tramways including North London Tramways.

In addition 143 steam tram locos were exported.



A Merryweather steam locomotive on trial with the North London Tramways in 1878. (LTHL collection).

If you found the information in this booklet helpful please consider making a donation towards the cost of producing future booklets.

Donate



© Local Transport History Library 2023

Additional information, corrections and photographs are always welcome.  
Our general email address is: [lth.library@gmail.com](mailto:lth.library@gmail.com)

---

*In producing this booklet reference has been made to the following publications; Graces Guide (website); British Steam Locomotive Builders, James W Lowe, Pen & Sword Transport, 2014; The Directory of British Tramways, Turner, PSL, 1996.*

*Series Editor: Peter Gould (secretary.lthl@gmail.com)*