



# THE ROCKET

The Newsletter of the Robert Stephenson Trust - Autumn 2014

## The Robert Stephenson Trust

The Trust has completed the move of its collection to the Mining Institute and work continues to make this more accessible for research purposes. Display materials being made available for loan to third parties along with exploiting opportunities for the Trust to participate in exhibitions. Surplus furniture is being identified and sold or gifted to other charities.

Whilst the main part of the Trusts work is focused on the North East England support is given to many organisations and individuals both nationally and internationally.

Efforts are being made to persuade the Clouston Group, owners of 20 South Street and the Boiler shop, of the need to improve the historic interpretation of the

buildings. The development of the "Stephenson Quarter" is well under way and it is understood that the 251 bedroom Stephenson hotel will open in the next twelve months.



Two editions of The Rocket are currently being published annually and individual papers are regularly researched and published as appropriate. The series of lectures and talks promoting the life and legacy of Robert Stephenson are ongoing with an average of at least one per month being achieved.

### 1st International Early Main Line Railways Conference

Held at the Galeri, Caernarfon, North Wales from 19th to 22nd June 2014 the conference Built on the success of the International Early Railways Conference series, pursuing the origin and development of mainline railways between 1830 and 1870.

On Sunday afternoon, 22 June, an excursion, arranged by members of the Menai Bridge Community Heritage Trust, was made to see the Menai Straits and Stephenson's Britannia bridge and Telford's Menai bridge.

Papers presented at the conference included Julie Stone's paper "The ironworkers of the Britannia Bridge 1846-1850"

Julie Stone is also conducting further research on the building of the Britannia Bridge and would be interested to hear from others: [julie@butterworth00.fsnet.co.uk](mailto:julie@butterworth00.fsnet.co.uk) So far, she has begun collecting the names of anyone involved with the building of the bridge (held for viewing at the Two Bridges Exhibition, Telford Centre, Menai Bridge).

There is a memorial in St Mary's Churchyard, Llanfairpwll to those who died during the bridges



construction as well as the names of the contractors for the masonry. the list includes many names in the engineering field attached to its construction. The stone for the masonry was brought by sea from Penmon, Moelfre and from further afield at Runcorn. Robert Stephenson drove the first engine across the bridge accompanied by key personnel. The iron tubes were constructed with skills learnt in the shipbuilding industry and men came from the London shipyards to work on the bridge. The masonry contractors were from Dewsbury in Yorkshire and stonemasons and brick makers came with their families to work. Irish 'navvies' were also employed. Over half the workforce came from the local area. Unemployed farm workers and copper miners saw an opportunity to earn some money, as did the farmers who loaned out their horses. People turned out in their thousands at the opening ceremony and more than 700 passengers were taken over the bridge in the first crossing.

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C/O The North of England Institute of Mining and Mechanical Engineers, Neville Hall,  
Westgate Road, Newcastle upon Tyne, NE1 1SE  
Email: [rstrust@robertstephensontrust.com](mailto:rstrust@robertstephensontrust.com)  
Website: [robertstephensontrust.com](http://robertstephensontrust.com)

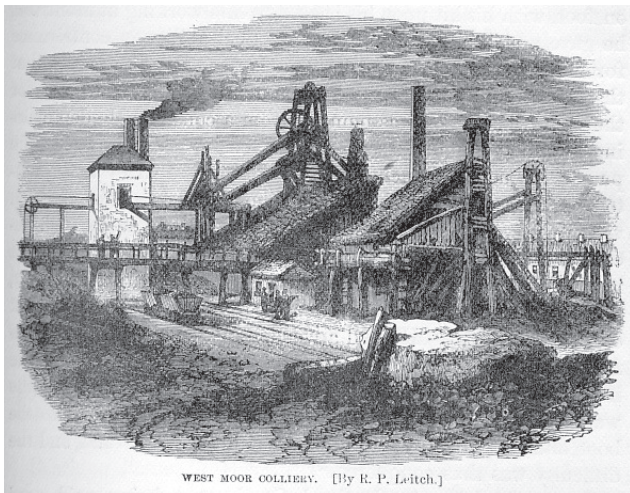
# THE ROCKET



## Locomotive Blucher Bicentenary

A number of events and activities have taken place during 2014 to celebrate the bicentenary of George Stephenson's steam locomotive Blucher, the steam locomotive built by George Stephenson in Killingworth in 1814 in the Colliery workshop behind Stephenson's house, Dial Cottage.

The engine was named after the Prussian general Gebhard Leberecht von Blucher who fought in the battle of Waterloo, helping to defeat Napoleon. It pulled coal trucks along the wagonway from Killingworth to the coal staithes at Wallsend. Blucher made Stephenson's reputation and over the next five years he built 16 more locomotives (many of which were built by recycling Blucher's parts) at Killingworth, some for the Colliery and some for the Duke of Portland's wagonway between Kilmarnock and Troon, which improved on the earlier engine, and this led to him being commissioned to build the Liverpool and Manchester Railway, establishing him as an engine designer and laying the foundations for his major role in the development of railways.



In July a community play, "Stephenson 200", celebrating the bicentenary of George Stephenson's locomotive 'Blücher' was performed in Killingworth. Written by Janet Plater and directed by Robert Webb the performance featured Chris Connel as "George Stephenson" together with children from George Stephenson School, volunteers from the local community and Backworth Colliery Brass Band.

The story tells of how George Stephenson built his prototype engine "Blucher", its first journey on tracks in Killingworth, much to the amazement of his friends, family and workmates and also the story of George as he overcomes personal challenges to change the world forever through charm, ingenuity and sheer determination.

In September the Stephenson Railway Museum on North Tyneside held a week a week of train inspired free family events to celebrate the occasion.



The North East Meccano Society displayed their train inspired creations at the museum and Technology Tom held creative engineering workshops and helped little visitors make their own Stephenson's Rocket train to take home. On permanent display in Stephenson Railway Museum is George Stephenson's 'Billy', a forerunner of the world-famous Rocket, built in Newcastle around 1826 and used for hauling coal. Other locomotives on display were diesel locomotives used on Tyneside and elsewhere from as early as the 1880s; an electrically-powered parcels van of 1904 from the pioneering Tyneside suburban electric railway system; an electric locomotive - built in 1909 for use on a colliery lines and a fleet of passenger coaches from the 1950's.



The last edition of "The Rocket" contained an item about Charles Sansbury's sculpture of Blucher which was first erected in Killingworth town centre in 1971 to symbolise the town's association with George Stephenson. The sculpture was removed and put into storage during the regeneration of the town centre in the 90's and has not been on public display since. North Tyneside Council, with the active support of Killingworth Local History Society, has restored the 25ft-long metal artwork for the bicentenary of Blucher. Known locally as 'The Killingworth Engine', the sculpture was placed above the entrance to the town's pool and community building. When that was bulldozed in 1994 to make way for a shopping development, it was taken down and chopped in half for easy storage. Now the artwork, which had been kept at the Stephenson Railway Museum in North Shields, has been restored and placed at the Southgate roundabout near the town centre.





## Euston Arch



The 'Euston Arch', was in fact a Doric 'Propylaeum', built in 1838 as the grand front entrance portico to the 'London and Birmingham Railway' Station on Euston Road, London. It was the first great monument to the Railway age, standing 72 feet high (22 metres) and 44 feet deep (13 metres), the diameter of each of the columns were 8 feet 6 inches (2.59 metres). On each side of the Arch were two 'lodges' or pavilions in the classical style, being separated by decorative and imposing cast iron gates.

Redevelopment in 1881 removed the westernmost pier and lodge of the Arch to make way for offices, and soon afterwards a hotel extension blocked the clear view from Euston Road. By 1938 there were further threats to the arch when the 'London, Midland and Scottish Railway' [LMS] investigated the removal of the Arch to enable the building of a new railway terminus. However a Georgian Conservation lobby group managed to persuade the LMS Railway that removal and rebuilding of the Arch on Euston Road was possible. But the Second World War intervened and by 1948 LMS had become part of British Railways. However by 1960 Euston station was considered 'inconvenient and outdated' and in spite of a massive opposition the station along with the Euston Arch were demolished. The 'Euston Arch' had acted as the grand entrance to this major London Railway Terminus for almost a 123 years.

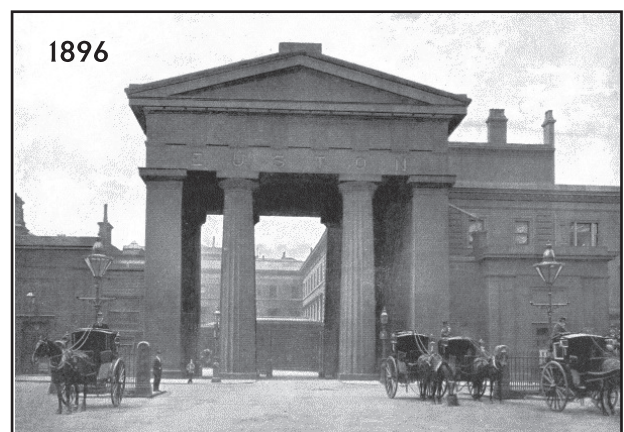
The demolition contractors offer to store the stones at his own expense for a future rebuilding was turned down but the two side 'lodges', which formed part of the original Railway Station, were rebuilt facing Euston Road with an entranceway to the new Station in between.

In 1994, the Architectural Historian and TV presenter

Dan Cruickshank, discovered that about 4,000 tons of Euston Arch stone had been used by British Waterways to fill part of a channel of the River Lea in East London. Cruickshank arranged for a section of one fluted column to be raised up from the river and it was shown to have weathered little and by 1996 he had set up the "Euston Arch Trust" to raise public awareness, to raise the necessary funds to rebuild the Arch, and also to attempt to restore the early nineteenth century Euston Square which had also fallen victim to the re-development of Euston Station.

It is intended that Euston Station will become the terminus for HS2 but should not affect the proposals to rebuild the Arch fronting Euston Road between the two rebuilt 'lodges' and would again serve as the grand railway "Gateway to the North"

Network Rail support the idea of rebuilding the Arch but with the rebuilding costs estimated at £10 million there will be a need for the arch to generate some revenue to recover costs, perhaps including a 'banqueting hall' at the top of the Arch and a 'night-club' in the basement. Steel would replace the original brick shell of the Arch to increase space.



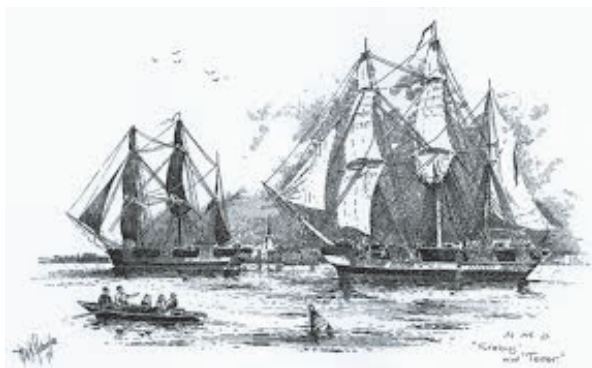




# THE ROCKET

## The Franklin Expedition

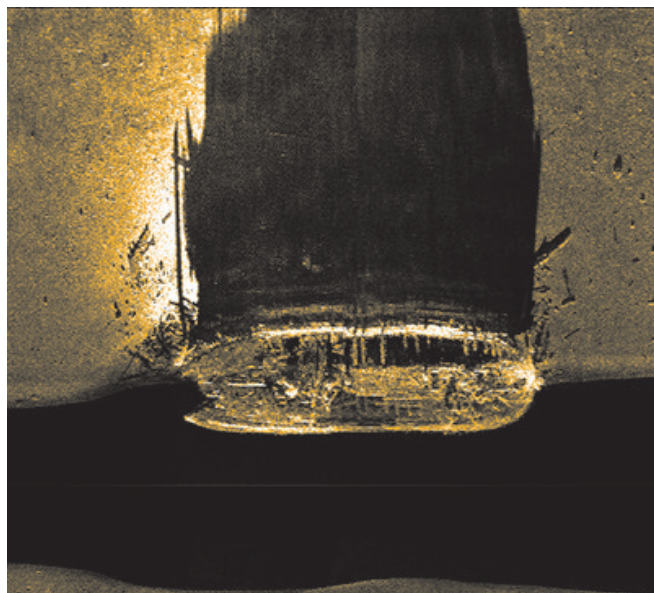
In the Autumn 2013 edition of THE ROCKET the item "Products of the Works" gave details of HMS Erebus and HMS Terror and in September 2014 Canada's Prime Minister, Stephen Harper declared that "one of Canada's greatest mysteries" has been solved. He went on to say: "I am delighted to announce that this year's Victoria Strait Expedition has solved one of Canada's greatest mysteries, with the discovery of one of the two ships belonging to the Franklin Expedition lost in 1846. Although we do not know yet whether the discovery is Her Majesty's Ship (HMS) Erebus or HMS Terror, we do have enough information to confirm its authenticity. This find was confirmed on Sunday, September 7, 2014, using a remotely operated underwater vehicle recently acquired by the government agency "Parks Canada".



HMS Erebus and HMS Terror

The Prime Minister went on to say "This is truly a historic moment for Canada. Franklin's ships are an important part of Canadian history given that his expeditions, which took place nearly 200 years ago, laid the foundations of Canada's Arctic sovereignty. I would like to congratulate and pay tribute to all partners involved in this year's momentous Victoria Strait Expedition, including Parks Canada, the Royal Canadian Geographical Society (RCGS), the Arctic Research Foundation (ARF), the Canadian Coast Guard (CCG), the Royal Canadian Navy and the Government of Nunavut. This discovery would not have been possible without their tireless efforts over the years, as well as their commitment, dedication and the perseverance of the many partners and explorers involved. Our Government has been deeply committed to finding HMS Erebus and HMS Terror, which were Canada's only undiscovered national historical sites. Since 2008, there have been six major Parks Canada led searches for the lost Franklin Expedition ships, painstakingly covering many hundreds of square kilometres of the Arctic seabed. It is gratifying that the ship's remains were found during

the Government-supported 2014 Victoria Strait Expedition. Finding the first vessel will no doubt provide the momentum – or wind in our sails – necessary to locate its sister ship and find out even more about what happened to the Franklin Expedition's crew."



So one of the most famous ships lost in the 19th century has been located in the Arctic, The shipwreck marks the final resting place of one of two vessels that disappeared mysteriously nearly 170 years ago, when a British naval expedition led by Sir John Franklin was attempting to navigate and map the Northwest Passage.



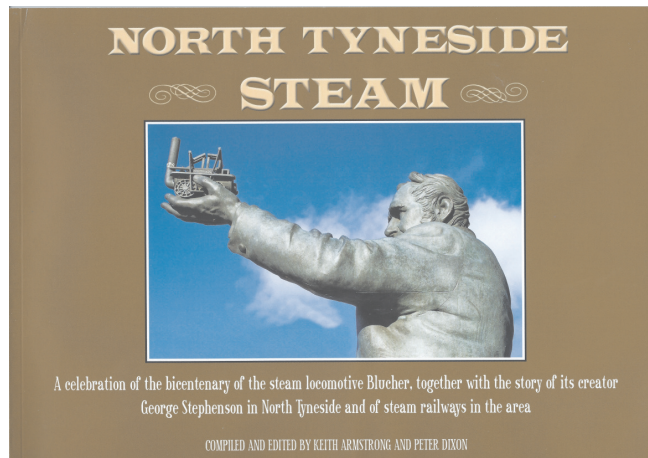
HMS Erebus.

The ships, the H.M.S. Erebus and H.M.S. Terror, were lost in 1846 and both crews perished. Although the graves of a few of the men were discovered later on land and a local Inuit reported seeing one of the ships sink, exactly what happened to the ill-fated voyage has been a source of intense debate and speculation over the years. But now Canadian authorities have released sonar images of what appears to be a largely intact ship near Nunavut's King William Island.





## North Tyneside Steam



Compiled and Edited by Keith Armstrong and Peter Dixon for North Tyneside Council

A celebration of the bicentenary of the steam locomotive Blucher, together with the story of its creator George Stephenson in North Tyneside and of steam railways in the area.

This new book from Northern Voices Community Projects, commissioned by North Tyneside Council, with the support of the Heritage Lottery Fund, has been published to mark the bicentenary of George Stephenson's steam locomotive Blucher.

Blucher was built by George Stephenson in Killingworth, North Tyneside in 1814 in the Colliery workshop behind Stephenson's house, Dial Cottage. The engine was named after the Prussian general Gebhard Leberecht von Blucher who fought in the battle of Waterloo, helping to defeat Napoleon. It pulled coal trucks along the wagonway from Killingworth to the coal staithes at Wallsend. Blucher made Stephenson's reputation and over the next five years he built 16 more locomotives (many of which were built by recycling Blucher's parts) at Killingworth, some for the Colliery and some for the Duke of Portland's wagonway between Kilmarnock and Troon, which improved on the earlier engine, and this led to him being commissioned to build the Liverpool and Manchester Railway, establishing him as an engine designer and laying the foundations for his major role in the development of railways.

With historical documents and images, alongside poems, songs, stories, photographs and drawings by local people, the book is intended to ensure that the story of steam in North Tyneside is not forgotten.

Published by Northern Voices Community Projects  
ISBN 9 781871 536218  
Price £7.99

### Review

This book was commissioned by North Tyneside Council has been produced by Northern Voices Community Projects to mark the bicentenary of George Stephenson's locomotive engine "Blucher" in 2014.

However the 64 page book covers far more than the story of George Stephenson's locomotive with lavish illustrations and containing chapters on Dial cottage, Killingworth Colliery, Waggonways and the early railways. The book also contains items on Robert Stephenson, early public railways, Blyth and Tyne Railway and the Riverside branch.

There are pieces on monuments and medals, the sculpture "Killingorth Engine" by Charles Sansbury and Stephenson Railway Museum. A section entitled "photo album contains steam images from North Tyneside and the book concludes with "Inspired by Stephenson and Blucher" - a section of songs, poetry and new writing relating to George Stephenson, his life and work.

I certainly found it an enjoyable read and no doubt will go back to it time and time again. It will be of interest not only to railway and history enthusiasts but also to those curious about this aspect of North Tyneside history.

The illustrations and photographs are excellent, with the whole publication well set out and readers will find the supporting text accessible for all ages and knowledge background. The songs in the poems section is already becoming one of my favourite references as they not only reflect the mood of a bygone age but go to highlight what an important part the area played in the railway revolution.

The numerous contributors are acknowledged at the end of the book and they together with, Keith Armstrong and Peter Dixon as editors, Northern Voices, North Tyneside Council and the Heritage Lottery Fund are to be congratulated for producing an excellent publication to mark the bicentenary of this important international event.

*Editor*





## FRIENDS OF THE ROBERT STEPHENSON TRUST

Friends of the Trust are reminded that the subscription of £15 becomes due on 1st January

Payment should be sent to :-

The Treasurer, 31 The Green, Hurworth, Darlington, Co. Durham, DL2 2AA, United Kingdom

Those Friends who are taxpayers and have not yet signed a Gift Aid Declaration, are asked to consider doing so, to enable the Trust to reclaim tax.

A form is reproduced below or can be printed by visiting :

<http://www.robertstephensontrust.com/giftaid.htm>

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Some of the Trustees prepare for the Board meeting held at the Mining Institute in room furnished with Trust furniture.

Left to right, Michael Brown, David Crockett, Jim Coulson, Trust Chairman Bob Longridge and John Jeffrey



Restored Boilershop Stephenson Works  
one of the Trust's major achievements

## "Friends"

One of the aims of the Trust is the promotion of Robert Stephenson, his works and associates. "Friends" can continue to play a key roll in this activity. Unfortunately our number of Friends has been in decline in recent years and perhaps those reading this newsletter who are not already members would consider joining us. Those who are already members could pass "The Rocket" to others and ask them to join us.

It would be wonderful if new Friends were now able to join us as we create a vibrant and visual memory to Robert Stephenson and his world-wide achievements, from which we all benefit in our modern age.

Becoming a "Friend" through an annual donation of £15 is an ideal way to support the work of the Trust.





## Constantine Richard Moorsom

Constantine Richard Moorsom (1792–1861) was a Vice-Admiral in the Royal Navy. He commanded HMS Fury a Hecla-class bomb vessel which saw wartime service in the bombardment of Algiers, an attack on Barbary pirates at Algiers by HMS Fury in August, 1816. Moorsom was the son of Admiral Sir Robert Moorsom, a veteran of Trafalgar. Moorsom was on the roster of HMS Revenge, his father's ship, when it was at the Battle of Trafalgar. However records show that Constantine was actually at school at the time of the battle. Moorsom rose to be chairman of the London and North Western Railway.

### Early life

Moorsom was born on 22 September 1792, the son of Admiral Sir Robert Moorsom who was to be a Knight Commander of the Bath and a veteran of Trafalgar.

### Royal Navy

Moorsom entered the Royal Navy College in Portsmouth where he was awarded a first medal and three prizes for mathematics. His service was noted by not only his progression but the record of his innovation. Moorsom's younger brothers also joined the navy. Henry Moorsom was killed in 1826 whilst in command of the sloop HMS Jasper. His other brother William Scarth Moorsom left the navy in 1832 and became a successful railway engineer after training with Robert Stephenson. It is said that the brothers inherited their fathers talent for drawing and poetry. His sister, Maria Margaret, married in 1815 and had seven children with the Rev. Longueville Massell. His naval career started with his first posting to HMS Revenge which at the time was in the Atlantic off Portugal. The ship was involved in the defence of Cadiz. He became a lieutenant in 1816 after returning to England on board HMS Warspite.

He commanded HMS Fury, a Hecla-class bomb vessel, in the bombardment of Algiers, an attack on Barbary pirates at Algiers in August, 1816. As a result of the bombardment slaves were released and Moorsom's use of his vessel was put under investigation. It was found that the Fury had fired twice as many mortars as any other boat and that this was due to the fitting which Moorsom had devised. His methods were adopted as standard practice.

Moorsom became a post captain in 1818 and in 1822 his innovation skills came again to notice when he was put in command of HMS Ariadne. Ariadne had been a problem vessel after she was converted into a corvette



Conference of engineers at Britannia Bridge'. An oil painting by John Lucas, c. 1850. Admiral Moorsom stands on the extreme left. Robert Stephenson is seated in the centre surrounded with Charles H Wild, Joseph Lock and I K Brunel to the right. to right of Moorsom stands Latimer Clark, Edwin Clark, Frank Forster, G P Bidder, Hemmingway the masonry contractor and Captain Claxton.

with the addition of a quarter deck to her original frigate frame. This increased her draught and made her difficult to manage, however Moorsom redistributed the storage and not only reported that she was now seaworthy, sailed her around the Cape of Good Hope to prove the point.

### Abolitionist

In 1840, Moorsom attended the World Anti-Slavery Convention in London. It was held at the Freemasons Hall on 12 June 1840 The meeting was attended by leading abolitionists from around the world.

### Railways

Constantine also went into the railway business as company secretary at the same company where his brother, William, was engineer. He was elected to the board of the Birmingham and Gloucester Railway in 1841 and almost immediately became its chairman. He remained in this position until his resignation just before the company became part of the Midland Railway in 1843.

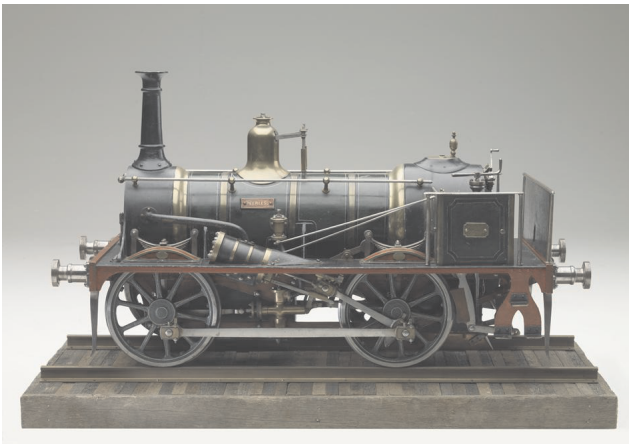
He served as a director of the London & Birmingham Railway from 1837 to 1839. He was promoted on 29 August 1851 to be a Rear-Admiral of the Blue. From 1852 until the time of his death on 26 May 1861, he was chairman of the London & North Western Railway. During this time he also chaired a committee for the British Association on Steamship Performance. He died at Russell Square in London after becoming a vice admiral in 1857 and having fathered a large family with his wife Mary Maude of Silaby Hall in Durham.



# THE ROCKET

## PRODUCTS OF THE WORKS

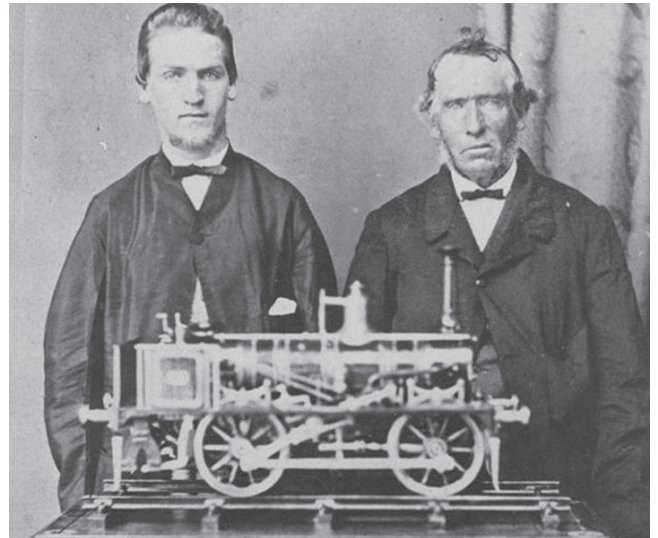
Hobson's Bay Locomotive No.5, a pier shunting locomotive.



Working steamable scale model of Robert Stephenson & Co. 0-4-0 well-tank type 5-ft 3-in gauge steam locomotive engine of 1857, known as the Hobson's Bay Locomotive No.5. Pier shunting locomotive. Approx 1:8 scale.

John Satchell built the model while working as an apprentice mechanic at Langlands Foundry and was awarded a medal when it was displayed in the Intercolonial Exhibition of Victoria, 1866-67. His father, James Satchell, was a foreman at Langlands and had previously worked for the Hobson's Bay Railway Co. John later sold the model to Professor Kernot of the University of Melbourne in 1887 and used the proceeds to buy a block of land at Caulfield.

The original engine on which the model was based was built by Robert Stephenson & Co., in 1857, for the Melbourne & Hobson's Bay Railway Company and was an 0-4-0 well-tank type 5-ft 3-in gauge steam locomotive used for shunting goods trucks on Railway Pier at Sandridge (now Port Melbourne). In 1876 it

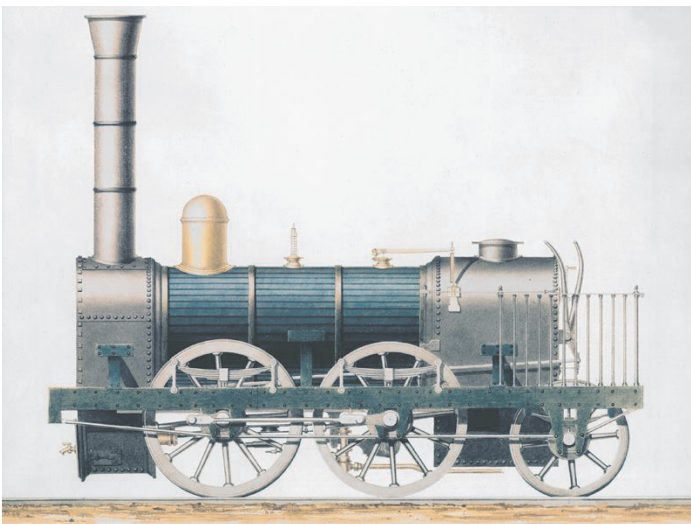


Modelmaker John Satchell (1845-1938) at left, and his father James Satchell (1813-1870) at right, with a model of the Hobson's Bay Railway Company pier shunting locomotive.

The photograph was taken by an early Melbourne commercial photographic studio in about 1868.

was acquired by the Victorian Railways along with all other assets of the Hobsons Bay Railway Company and was retained in service until 1904.

The Hobsons Bay company was founded on 20 January 1853 to build Australia's first railway, the line from Melbourne to the port of Sandridge (now Port Melbourne). It was constructed in the broad gauge of 5 ft 3 in (1,600 mm), as the result of an agreement between the then Australian colonies to adopt that gauge.



### Standard Goods Locomotive 'John Buddle'

This watercolour by William Parsley painted in 1836 is a 1 to 19.2 (5/8" to one foot) scale of 0-4-2 standard goods locomotive built by Robert Stephenson & Co., 1833 and presented to the National Railway Museum by Robert Gladstone Esq. The locomotive is Stephenson's works no. 50, delivered to the Stanhope & Tyne railway in 1834 and named 'John Buddle'.

John Buddle (15 September 1773 – 10 October 1843) was a prominent self-made mining engineer and entrepreneur in North East England. He had a major influence on the development of the coal mining in north East England.