



THE ROCKET

The Newsletter of the Robert Stephenson Trust - Spring 2014

Honorary Curator, Alan Clothier retires



The Chairman and Board of the Robert Stephenson Trust would like to thank Alan for the magnificent work he has done on behalf of the Trust as Honorary Curator since 1999. Whilst he has recently retired as a Trustee he continues active in his support of the work of the Trust.

Alan Clothier

Alan, born in Bristol 1928, joined the Great Western Railway at Swindon in 1944 to serve a 5-year premium apprenticeship in the Locomotive Works afterwards serving in the Drawing Office until 1953. He studied at the College, Swindon and was later elected a Chartered Engineer and Fellow of the Institution of Mechanical Engineers and also a Fellow of the North of England Institute of Mining and Mechanical Engineers.

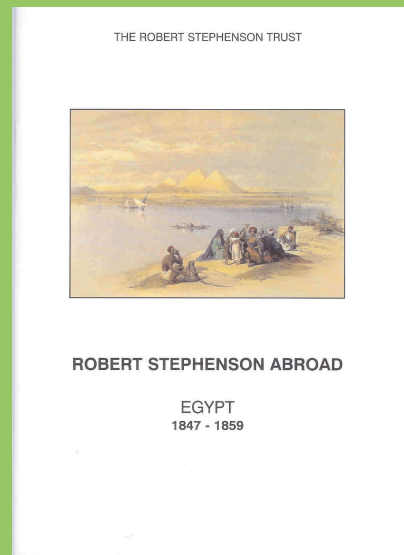
In 1953 he was selected as a British Rail Special Trainee and underwent experience in every facet of the work of the Chief Mechanical & Electrical Engineer's Department subsequently occupying a number of Management posts within British Rail. He was appointed Divisional Maintenance Engineer at Newcastle Division in 1965, a senior officer appointment which he held until 1977 when he joined Transmark, a wholly owned subsidiary of BR engaged in world-wide transport consultancy, where he was Senior Consultant until his retirement undertaking assignments in numerous countries. He was invited to join the Trust in 1999 and was its Honorary Curator from 2001 until his recent retirement.

Alan was a member of the Northumberland County Archives Consultative Committee and is a member of a number of railway related societies both national and local. He authored the Trust's publication Robert Stephenson's Work Abroad - Egypt 1847-1859.

A Message from Alan

Vicky Haworth, a Trustee and founder of the Robert Stephenson Trust, invited me to join the Trust in 1999 which I was both honoured and pleased to do having held that eminent engineer in high esteem for many years and anxious to see that his world wide work was not forgotten. Strangely it was whilst working in Egypt, 1977-1988, that I had got to learn much more about him as he was the man selected by the Pasha to be the Engineer in Chief of the proposed Egyptian Railway its main route at the time being that from Alexandria to Cairo. I had also seen the interesting material displayed in the Egyptian National Railways Museum at Cairo Main station and on my return from working abroad began to broaden my researches into the various relevant archives in this country. Following the restoration of the residual building of the Robert Stephenson & Co's works in South Street, Newcastle upon Tyne, I was pleased in 2002, to take on the role of its curator and had many happy times escorting interested parties around the museum set up there as Stephenson's Works, 20 South Street until its forced closure in 2008.

Alan Clothier, March 2014



This 44 page book written by Alan Clothier charts Robert Stephenson's work in Egypt.
ISBN 0 9535 16229 Price £5.45 including postage

Rocket is published by The Robert Stephenson Trust
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Letters to the Editor

Dear Editor,

My gr/gr/gr/gr grandfather Edward Hutchinson was born 24.04.1789. His parents were John and Ann Hutchinson. Because of limitations to birth records pre 1837 I cannot find any siblings however I was wondering whether William was his brother? Edward had 10 children – one of which was a William Hutchinson and one was George Hutchinson. Looking at the naming of children in the past, it was practice to name children after the grandparents, parents and parents siblings therefore I wonder if William Hutchinson was the brother of Edward.

George Hutchinson (born 1831) was my gr/gr/gr grandfather. He moved over to Liverpool from Newcastle to work as a railway engineer before returning to Newcastle. I know that Stephenson also had links to Liverpool railways. George's son was named William (my gr/gr grandfather) which again is a family name.

I'm in contact with a man in Canada who is also a Hutchinson and related to Edward (1789). He has a glass which he thinks was presented to Edward with an engraving of Stephenson's Rocket on it

which leads me more to the connection with Stephenson's chief engineer William. I attach a photo of the glass.



Michelle.

Dear Michelle,

The Hutchinson family and particularly William played an important part in the early days of Robert Stephenson and Co. Robert was assisted by William during the period when he undertook a programme to systematically improve the dynamic and thermodynamic characteristics of locomotive design between 1828 and 1831. most notably with the winning of the Rainhill Trials in 1829.

William eventually became works manager and a Partner in the company positions he held to his death. Good luck with your further research and please let us know your findings.

Editor

Robert Stephenson Trust's Patron

Sir William M^cAlpine now invites you to celebrate

LADY M^cALPINE's 70th BIRTHDAY

WITH ANOTHER

**FAWLEY HILL VINTAGE
EXTRAVAGANZA**

FUND-RAISING FOR SMALL CHARITIES

**Friday 16th, Saturday 17th and Sunday
18th May 2014**

starting with

ROCK on THE HILL !

A BIG CHARITY GALA on Friday evening £150 ticket.

to benefit: The Wilderness Trust, Row2Recovery, The Chiltern Centre, The Ways and Means Trust, Child Bereavement UK and the Kenton Theatre.

Champagne reception, Buffet by award-winning chef: Paul Clerehugh, good wine, a lot of surprises and

**MIKE READ
VINCE HILL**

If interested, please e-mail
events@fawleyhill.com
then all the usual fun and music:

10.00 a.m. – 11.00 p.m. Saturday
10.00 a.m. – 6.00 p.m. Sunday

There is a programme of
entertainment ALL DAY each
day WITH STARS on Friday and



Saturday evenings. Many bands and performers wanting to come and play: Opera, Folk, Jazz, Rock.... VINCE HILL, ELVIS (really!), Sam Brown with 100 Ukeleles! Fire-dancers, Steel band, Morris Dancers, HAODS, Celebrities from all walks of life: a surprise at every turn!

By all means bring a picnic: BUT catering provided on site as well.

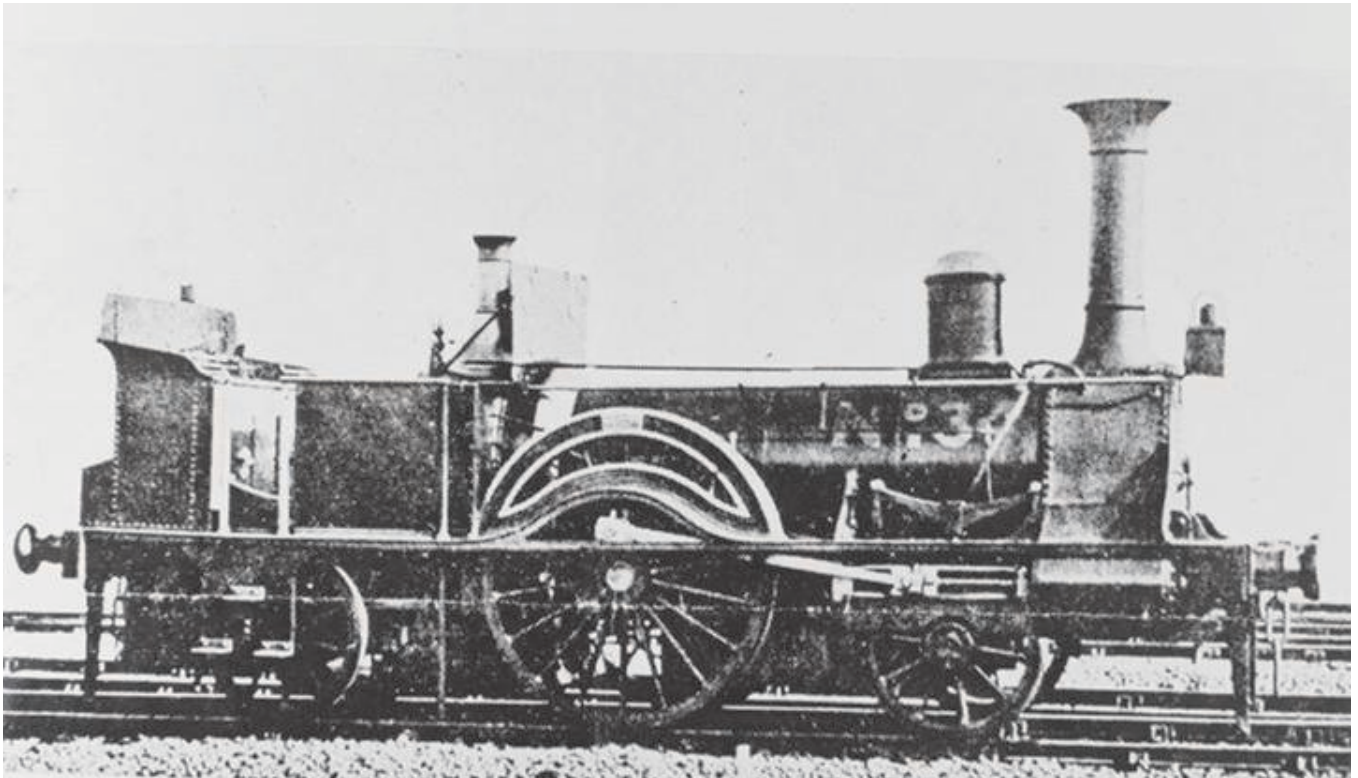
Lot of really interesting entries in all categories: and: why not dress "in period" either with No.31 (Edwardian) or with your vehicle? or Rock'n Roll or wear flowers in your hair and remember Woodstock! PRIZES will again be awarded for outstanding effort.

COME BY TRAIN! FIRST GROUP HAVE OFFERED BUSES FROM HENLEY STATION

FLYING SCOTSMAN ENTERPRISES Ltd.
for the Flying Scotsman Trust Registered Charity No.
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Another Titania



During his lifetime Robert Stephenson owned two ocean going yachts named Titania but here we have Titania, The Locomotive.

The Geelong and Melbourne Railway Company's first yard shunter, No 34, was originally named Titania built in Newcastle Upon Tyne in 1855.

The Geelong Railway Company imported from England a batch of ten tank engines, and opened the Geelong line with them in June, 1857. The custom that now prevails of numbering engines was not then in vogue, and two of this batch, the 'Titania' and the 'Oberon' (passenger engines), were eventually numbered 34 and 36 respectively when the Government took over the company's (Geelong) line in 1860.

It is a fact that 34 and 36 had 6ft. 6in. driving wheels, but these were not the largest wheels used on locomotives in Australia. The other four passenger engines of this batch had either 7ft. or 7ft. 6in. single driving wheels.

During Mr. Meikle's regime as locomotive superintendent, '34' was converted in the early 70's into a six-wheeled coupled, about 3ft. or 3ft. 6in. diameter, and was used in running the Essendon trains, after the Essendon company's line had been taken over by the Government. A peculiar feature of these engines was the transverse midfeather in the firebox and forked connecting rods. The safety valves were

covered with a long funnel-shaped polished brass cover, which carried away the waste steam, and, to make room for this, might account for the position of the 'spectacle-plate.' They were fitted with two pumps, injectors not being known at this time. The wheels, forged out of wrought iron, were a masterpiece of workmanship.

As originally, imported, none of these engines had either dome, cab, or tender, but they ran for years like this on the Geelong line, provisions for coal and water being made at Werribee. A neatly engraved name plate, to be seen over the driving-wheel splasher in your photo., read 'R Stephenson' and Co., Engineers, Newcastle-upon Tyne, 1855.

It was later sold to Shire to work as a pumping engine but went on to work on Koondrook tramway before being aquired by the Sunshine Harvester Works in 1904.





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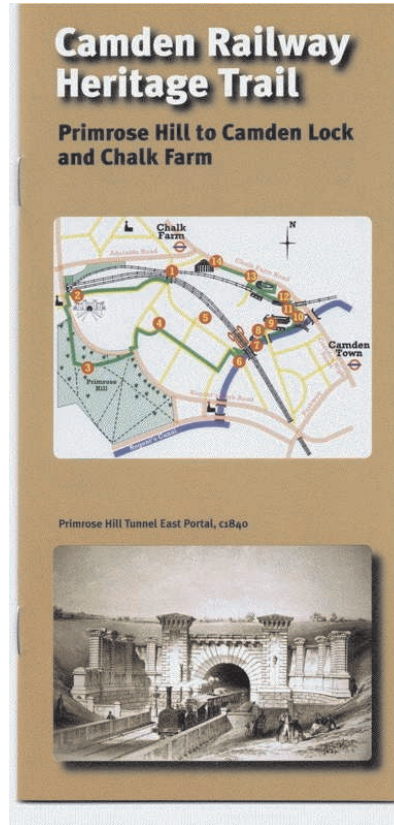
Book Review

Camden Goods Station through time is a lavishly illustrated history of the industrial area surrounding this important interchange on the London Birmingham Railway. The author, Peter Darley, is well qualified to write on the subject being a founder member of the Camden Railway Heritage Trust, and currently Secretary and Treasurer. He is chartered civil engineer, economist and local resident.

The book covers 200 years of history of the area from the Regents Canal, the building of the London Birmingham Railway, the importance of the Camden Goods station and the industry which grew up as a result of the coming of the railway. Each of the eight chapters commences with an introductory page followed by pages mainly containing two full colour, fully described images which illustrate a particular aspect of the story. Historic paintings are reproduced as well as old and modern photographs. Particularly outstanding are the maps, plans and diagrams which portray the significance of the area so vividly.

A thoroughly enjoyable read for those interested in railway and industrial history or even for those who just enjoy good picture and illustrations.

At only £14.99 - highly recommended.

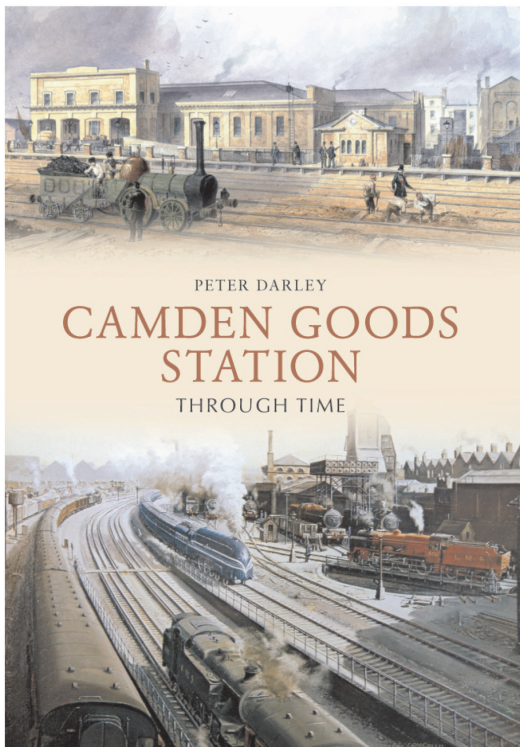


The Camden Railway Heritage Trail is a long-term project of the Trust with the aim of linking heritage sites to create a fascinating walk through our social and industrial past.

The Trail is two miles in length and takes 1.5 - 2 hours, not allowing for stops for refreshments. The Trail can be followed from any starting point and in clockwise or anti-clockwise senses. It can also be

truncated if time available is too short to follow the full trail. Leaflet available from Camden Railway Heritage Trust.

Explore the remarkable heritage of London's first main-line railway and associated features in this new lavishly illustrated book



978-1-4456-2204-0 £14.99

The London & Birmingham Railway was the major project of its day, designed by Robert Stephenson, one of the great railway pioneers, who also supervised its construction and its opening in 1837. Camden Goods Station became the goods terminus and Euston Station the passenger terminus. For a few years trains were hauled by rope from Euston up the incline to Camden before the intensification of both passenger and goods services rendered such technology obsolete.



This fascinating selection of photographs, drawings and images traces some of the many ways that Camden Goods Station has changed and developed over almost two centuries

The L&BR left a strong footprint on the landscape from Euston to Camden Town and Primrose Hill. The story moves from rapid economic growth to eventual decline and then to the recent regeneration. The historic features around the former Goods station are providing the basis of Camden's transformation through its markets, media, music, food and entertainment into a global brand. Join Peter Darley in unfolding this story from 1837 to the present day.



Available from all good bookshops and direct from: Amberley Publishing

www.amberley-books.com tel: +44 (0)1453 847800



The Robert Stephenson Trust

Since the last newsletter the Trust has moved its collection to the Mining Institute with the Board Room table (with chairs) the double kneehole desk, the two historic mahogany bookcases and some other items used to furnish "The Buddle Room". Ten stacking chairs and three tables have been donated and gratefully received by the "Smile for Life" children's charity for their new centre. Another 40 stacking chairs and 4 trestle have gone to "Hadrian Special School" for handicapped children.

A suitable place to store and ultimately display the 18 Westinghouse signalling panels has yet to be found. Trust Patron, Sir William McAlpine has been contacted to see if he would like to display the 5' x 3' panels at his Railway museum.

Bob Longridge continues his work on Robert Stephenson's Columbian letters and agreement has been reached with Indiana University about publication. The Trust is also investigating the possibility of incorporating copies of the Charles Empson Columbian paintings in the publication. No one has yet been identified that is willing to give an overview to mining and associated conditions in Columbia in the early part of 19th century.

During 2013 over 650 people attended various talks delivered by Michael Taylor on Robert Stephenson and associated subjects.



Stephenson Quarter

Work stopped when Silverlink failed to secure funding during the financial crisis, but restarted last spring with backing from Aviva and Royal Bank of Scotland. Phase one of the development includes a four-star Crowne Plaza Hotel and conference centre and 35,000sq ft of Grade A office space. There will also be a 357-space multi-storey car park and an innovative sedum green roof.

The Glenfield Tunnel



The Glenfield Tunnel on the Leicester & Swannington Railway, opened on 17th July 1832 with the first locomotive through the tunnel, Comet, losing its 13 foot high chimney due to the track being packed too high. Trial borings indicated that rock would be present but that proved incorrect and towards the western end, running sands extending for 500 yards were encountered.

No surprise then that at 1,796 yards long, the final cost was £7,326 over budget, a little over £500,000 in today's money and Glenfield's tight clearances demanded lower, narrower carriages, with bars over the windows to prevent decapitation.

Passenger services came to end in 1928 and final closure in 1966 when coal and oil traffic ended and Marconi Radar moved in, taking advantage of the tunnel's straight mile to test military lasers but the eastern portal was soon lost beneath infill as its approach cutting made way for housing.

In 1969, Leicester City Council acquired the tunnel for £5 and by 2004 serious distortions in profile were observed. Remedial works were undertaken to install 38 concrete supporting rings each between 1 and 5 metres wide. Originally 14 air vent shafts had been installed and looking after them has proved increasingly difficult with many in private gardens.

Further works were carried out in 2007 with shafts' brickwork being repaired and all were fitted with new grills.

Now, the council has arranged for it to be reopened for visits guided by the Leicestershire Industrial History Society. The first took place recently when 20 visitors were able to tour 100 metres of the tunnel from its entrance off Stephenson Court, Glenfield.

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FRIENDS OF THE ROBERT STEPHENSON TRUST

Friends of the Trust are reminded that the subscription of £15 became 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>

GIFT AID DECLARATION

Charity name:- The Robert Stephenson Trust Ltd.,

Charity Number 700647

Details of Donor:-

Title: Forenames:

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Postcode:

I want the charity to treat all subscriptions and donations made by me to the Robert Stephenson Trust Ltd after 6th April 2002 and until further notice as Gift Aid. I have read the notes below and agree to notify you of any material change in my circumstances.

Signed:

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Notes: You can cancel this declaration at any time by notifying the charity. You must pay an amount of income tax and/or capital gains tax equal to the tax that the charity reclaims on your donation/subscription in the tax year. If in the future your circumstances change and you no longer pay tax on your income or capital equal to the tax the charity reclaims, you should cancel your declaration. If you pay tax at the higher rate you can claim further tax relief on your Self Assessment tax return.

William Allcard

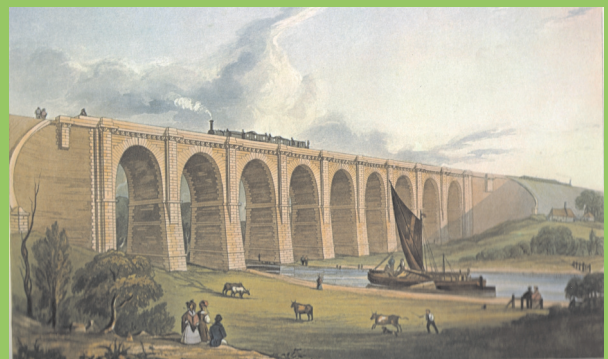
William Allcard (1809-1861) was given the responsibility by Stephenson of designing the Sankey Viaduct and came up with a nine arch structure

At an early age he was placed as a pupil under the late George Stephenson, at the Steam Engine Manufactory at Newcastle-upon-Tyne, which has since attained such a high reputation. He was there occupied in the Drawing Office, and occasionally assisted in levelling and surveying on the projected lines for the Leeds and Selby and the Newcastle and Carlisle Railways.

Early in the year 1828 he was appointed the Resident Engineer, for the middle portion of the Liverpool and Manchester Railway, including the Sankey Viaduct, consisting of nine arches, each of 50 feet span and about 70 feet in height, and the Kenyon Cutting, containing about 400,000 cubic yards of excavation. At the opening on the 15th of September, 1830, at which he assisted, and took charge of the 'Comet' locomotive engine at the procession from Liverpool to Manchester.

In 1834 he was appointed the Resident Engineer to the Birmingham end of the Grand Junction Railway, his district extending from Birmingham to Stafford, and he remained in charge of those works till their completion, and the opening of the entire line in July, 1837. He also worked on the Lancaster and Preston Railway Company, as well as the Manchester and Sheffield Railway.

In 1841, on the commencement of the Paris and Rouen Railway, Allcard, Buddicom, Brassey and William Mackenzie, contracted with that Company for the construction of their locomotives and rolling stock, and established the large and well-known engine-works at Rouen. Allcard's association with French railways continued with the Rouen and Havre, the Dieppe, the Paris and Caen, and the Cherbourg Railways until the middle of 1861.



Sankey Viaduct



Plaque at Bank House, 88 Sankey Street, Warrington.

Transcription.....

WILLIAM ALLCARD AND BANKHOUSE Railway pioneer
William Allcard (1801-61) was appointed a Chief Engineer on the Liverpool to Manchester Railway by

George Stephenson and drove the "Comet" at the opening in 1830. Heavily involved in the construction of the Grand Junction Railway, linking Warrington to Birmingham, Allcard went into partnership with William Buddicom to build locomotives. He also built carriages in a factory behind Bank House where he lived from 1839-1854. He was twice Mayor of Warrington before retiring to his native Derbyshire.



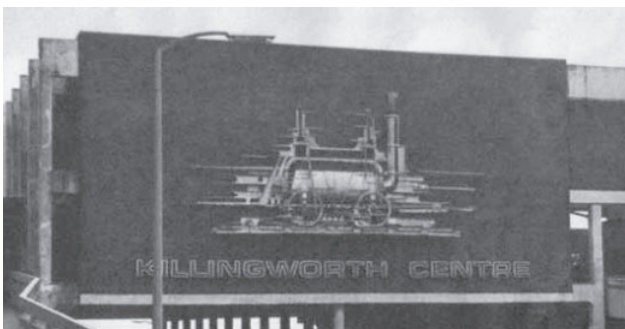
Full Steam Ahead For 200th Anniversary

Thanks to a grant of almost £55,000 from the Heritage Lottery Fund (HLF); the council, its partners and community groups are now on track to mark the bi-centenary of the George Stephenson's first steam locomotive built in Killingworth.

A full programme of community activities is planned for this anniversary year with one of the highlights being the refurbishment and installation of the iconic steel sculpture of the Blucher on a prominent roundabout in the town.

The artwork by Charles Sansbury was first erected in Killingworth town centre in 1971 to symbolise the town's association with George Stephenson who lived there from 1804 and designed the Blucher - his first locomotive - in 1814. The sculpture was removed and put into storage during the regeneration of the town centre in the 80s and has not been on public display since.

This is also excellent news for Sheila Martin and Joe Wilkes of the Killingworth Local History Society. Sheila, who is Secretary, said: "I can't believe that this wonderful sculpture is finally going to be restored and brought back home to Killingworth. It's been six years since I first made enquiries - this is a great day! Joe added: "I'm over the moon at this announcement! We've been working with the Council, the Robert Stephenson Trust and George Stephenson High School to put the bid together and show young people how Stephenson's invention 200 years ago has had such a huge impact on our lives."



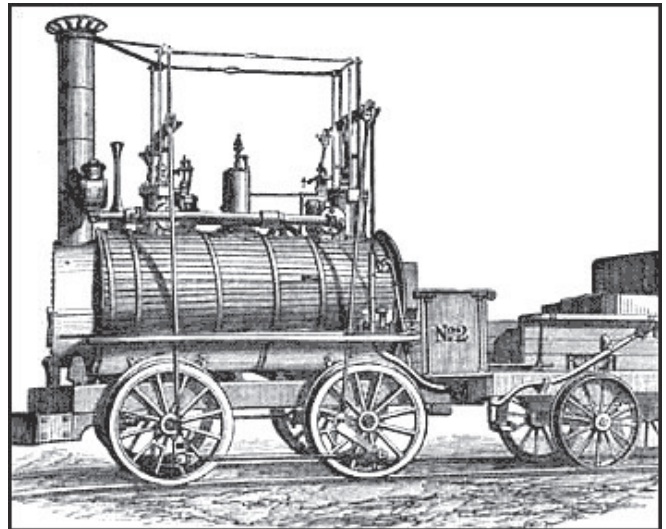
Other activities made possible by the HLF funding include:

- Installation of a new Heritage trail interpretation board telling the story of the Stephenson's time in Killingworth and the history of the sculpture and its relationship to the development of the Killingworth township.
- A programme of educational activities aimed at

engaging local schools and promoting learning about the Stephenson legacy.

- Publication of a new book compiled by the Northern Voices Community Projects that tells of the story of steam locomotion in North Tyneside.
- Production of a touring exhibition that will be available for display in community and educational venues.

The 'Blucher' 200th anniversary is on 25th July 2014



Blücher

George Stephenson was appointed as engine-wright at Killingworth Colliery in 1812 and immediately improved the haulage of the coal from the mine using fixed engines. But he had taken an interest in Blenkinsop's engines in Leeds and Blckett's experiments at Wylam colliery. By 1814 he persuaded the lessees of the colliery to fund a "travelling engine" which first ran on 25 July.

Blücher (often spelled Blutcher) was that "travelling engine" ; the first of a series of locomotives that he designed in the period 1814–16 which established his reputation as an engine designer and laid the foundations for his subsequent pivotal role in the development of the railways. It could pull a train of 30 tons at a speed of 4 mph up a gradient of 1 in 450. It was named after the Prussian general Gebhard Leberecht von Blücher, who, after a speedy march, arrived in time to the battle of Waterloo and helped defeat Napoleon.

George improved the design the following year by making the connecting rods drive the wheels directly, coupling each pair of wheels together by a chain. Over the next five years he built 16 more locomotives at Killingworth, some for the colliery and some for the Duke of Portland's wagonway between Kilmarnock and Troon.



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PRODUCTS OF THE WORKS

Dorchester

From 1837-1847 the Champlain and St. Lawrence was the sole steam railway in British North America. Running 16 miles from La Prairie on the St. Lawrence to St Johns on the Richelieu river, it provided a route from Montreal to Lake Champlain on the way to New York. Construction was begun in 1835, and the road opened for traffic in July 1836. At first horses were used for power, but the proprietors purchased an engine from Robert Stephenson and Co. England for £1,500 and the Dorchester arrived at Molson's Wharf in Montreal in June 1836. This was Stephenson's 127th locomotive, it was 13 ft 6" in length, had four driving wheels 48" in diameter and weighed 12,544 pounds.



The locomotive had a high centre of gravity and the short wheel base earned it the nickname Kitten for its skittish behaviour. During the initial attempts at operation it is said that due to inexperience and small water capacity the boiler was run short of water, causing the flue tubes to rupture. When the locomotive was repaired and the train was finally started for its first run, the locomotive would not budge an inch. Finally an engineer, borrowed from the Baltimore and Ohio Railroad, reported that all that was needed was "more wood and water." and given these the Kitten gambolled along at twenty miles an hour. During operations in the next year or two it was found that the leading truck of the second locomotive gave superior tracking compared to the 0-4-0 arrangement so the Dorchester was converted to the same wheel arrangement in 1839, by substituting a leading truck for its forward pair of drivers.



Baghdad, Mosul, Basra and Kirkuk

The PC class was a type of standard gauge passenger steam locomotive on Iraqi State Railways. In 1940 the ISR completed the Baghdad Railway between Baghdad and Tel Kotchek on the border with Syria, enabling the Taurus Express to start running between Istanbul and Baghdad. In 1941 Robert Stephenson and Hawthorns built four Pacific locomotives for ISR to haul the new through service on the Iraqi section of its route.



RSH streamlined the PC class to resemble British passenger express Pacifics, with a nose rounded with 5-foot-9-inch (1,753 mm) driving wheels: a size akin to those on mixed traffic locomotives in Great Britain. The tender was mounted on bogie trucks for smooth riding. The PC class tender was equipped with a tender cab in case the locomotive needed to run tender-first.

The PC class were named after Iraq's four principal cities: Baghdad, Mosul, Basra and Kirkuk. 502 El Mosul was the first to be delivered, in March 1941. Thereafter the April 1941 Iraqi coup d'état installed a government allied to Fascist Italy and Nazi Germany and delivery of the remaining members of the class was delayed until after the British invasion of Iraq in May 1941 and invasion of Vichy-ruled Syria and Lebanon in June and July. 501 Bagdad was delivered in October 1941 and 503 El Basra in December. 504 Kirkuk was lost en route and did not enter service. Early in 1948 Iraqi State Railways renumbered its locomotive fleet and 501-503 became 1501-1503. From 1961 onwards diesel locomotives were introduced on standard gauge lines in Iraq and steam locomotives including the PC class were withdrawn.

