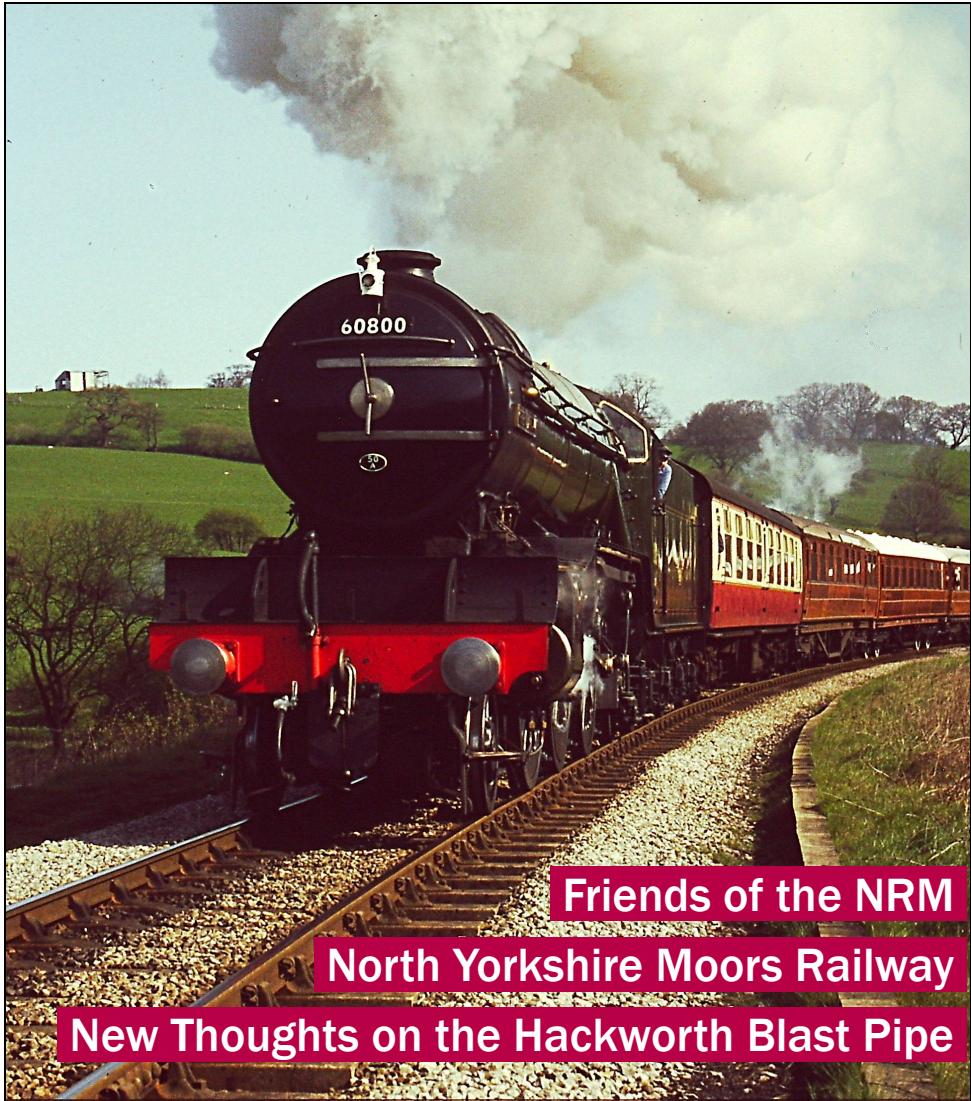


Friends of Darlington Railway Centre and Museum

Newsletter

Spring 2013

Free



Friends of the NRM

North Yorkshire Moors Railway

New Thoughts on the Hackworth Blast Pipe

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Introduction

After the last issue, which was something of a place-holder, the Newsletter is back to its usual format. I had actually hoped to do some catching up but I fear that time and a few technical issues have conspired against that ambition however this issue does at least round off last year's series of talks. All the meeting reports have been written by me which is not ideal- partly because I'm not a fluent writer by any stretch of the imagination but mainly because it's rather hard on any reader who should dislike my style. I know I keep saying this but please consider offering to write up meeting reports especially if the talk is on a subject you are interested in. You will certainly know more about it than I do.

Tim Ruffle, Editor

Front Cover: Gresley V2 *Green Arrow* gleaming in BR livery as 60800 on the North Yorkshire Moors Railway. Photo Ian McInnes (page 15).

Contacts

If you have material for the newsletter, be it an article, photo' or a short anecdote to fill the last few lines on a page, do send it- it might not get in but it will be considered. Information and announcements for members may well end up here and on the website, which I also look after, but such things should be sent to the Committee.

I much prefer to be contacted by e-mail, especially if it saves me some typing, but you can reach me by post. Note that, In a desperate attempt to be organized, the web-site has its own e-mail address. Material for both can go to either address as long as that is clear.

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TALK:

Friends of the National Railway Museum

5 July 2012

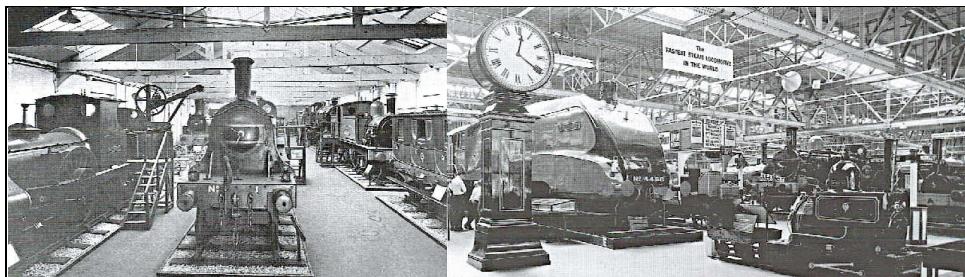
Frank Paterson was a life-long railwayman who started his career with the LNER in Scotland. He went on to work all over Great Britain becoming Manager of the Eastern Region of BR in 1978 based at York when he joined, and remains on, the Advisory Board of the NRM. On retirement in 1986 he was "inveigled" into an active role at the Friends of the NRM. He is a Trustee of the Friends and was its Chairman until recently. All pictures furnished by Frank Paterson unless otherwise credited. Report by Tim Ruffle.

Frank began his well received talk with an introduction to the NRM. Railway museums had opened in Norway and Germany in the 1890s prompting talk of one in Britain. At this time piecemeal efforts were made to save items largely through the efforts of enthusiastic individuals but preservation of redundant rolling stock was a matter of luck. The last two GWR broad gauge locomotives were cut up at Swindon in 1906 just to free the space and anything on public display was likely just to be left on a plinth as *Locomotion* and *Derwent* were for so long.

The case in favour of a railway museum was strengthened in 1925 by the Stockton and Darlington Centenary. A cavalcade of 53 locomotives (including *Locomotion*, pushed by a concealed petrol engine, and *Derwent* in steam) and display of rolling stock, relics and documents at the new Faverdale Wagon Works was organized by the LNER gaining world wide publicity and igniting general interest. Not too surprisingly the LNER was quick off the mark creating a museum at York in the old station buildings with rolling stock in the Locomotive Erection and Repair Shop of the York and North Midland Railway. Its collection was dominated by GNR and especially NER items largely thanks to J.D. Harper and other officers of the NER who had been actively collecting since the 1880s.

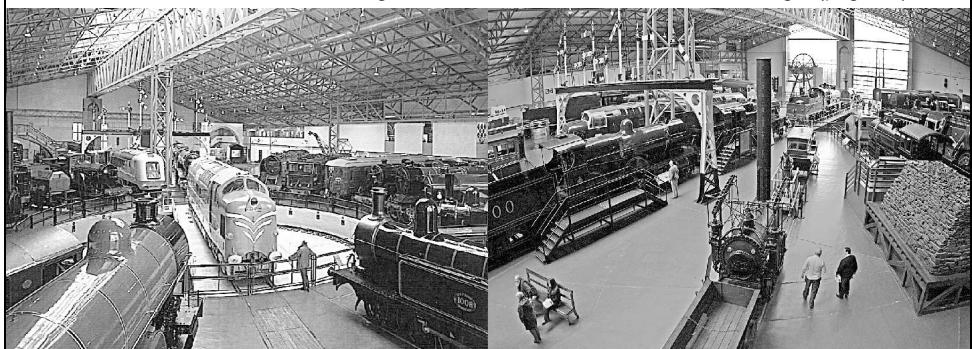
The Southern had no preservation policy (although three Bodmin and Wadebridge Railway carriages had somehow made it to York) but the GWR and LMS had a go, the LMS in particular building up a collection of rolling stock though three preserved locomotives were cut up in 1932 after a change of policy. The York museum was the most concerted effort by any railway company to preserve and show items. The Big Three had little interest in contributing although a locomotive from each did go on display there.

Following nationalization a British Transport Commission report developed a more comprehensive approach favouring the retention of the York museum and a large London collection at Nine Elms but the Museum of British Transport that did eventually open in 1961 was housed in a former 'bus garage in Clapham. The BTC also compiled a list of locomotives recommended for preservation but the emphasis was on historic machines



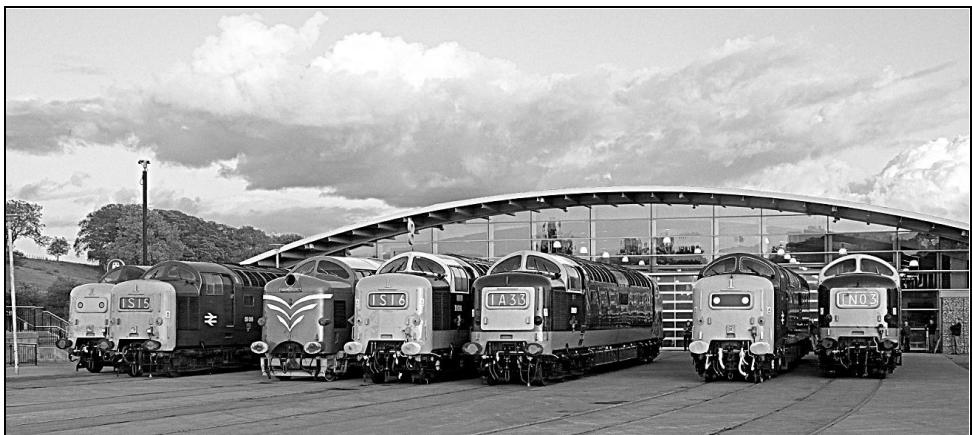
Left. The LNER opened a railway museum at York in 1928. Right. The state backed Museum of British Transport at Clapham opened in 1961 and represented all forms of transport. At both the approach was to put vehicles on a plinth for visitors to admire- not necessarily a flawed practice but a static presentation for a dynamic subject.

Two views of the NRM's Great Hall. *Agenoria* is in the centre of the view on the right (page 13).



and it did not prevent the extinction of several classes. A few years later Dr. Beeching successfully argued that the railways were not in the museum business but provision was made for a new National Railway Museum in the 1968 Transport Act to be a part of the National Museum of Science and Industry. BR, divested of the responsibility of running museums, was charged with finding a location and selected York roundhouse- rebuilt in 1951 but redundant come the end of steam. The museums at York and Clapham closed (and were demolished) in 1973 and exhibits moved to the new site and the London Transport Museum in Covent Garden. The NRM, the first English National Museum outside London, was opened by HRH the Duke of Edinburgh on 27 September 1975- the 150th anniversary of the S&DR's opening. He had opened Darlington Railway Centre and Museum the same morning.

It had over a million visitors in 1979 dropping to a mere 390,000 in 1997 when admission was charged- an idea since dropped for National Museums and visitor numbers were back to 800,000 in 2010. The NRM has an international reputation and fruitful relationships with other museums, it was European Museum of the Year in 2001- a first for any transport museum and opened an annex in Shildon, Locomotion, in 2004. Locomotion was originally intended as a storage facility but soon became a museum encompassing the



In your editor's opinion the seven track apron in front of Locomotion was put to particularly good use in 2011. The Magnificent Seven weekend celebrated the 50th anniversary of the introduction of Deltics on the ECML by bringing together all six preserved Class 55s and the prototype- a unique gathering. Was there ever a railway event more aptly named? Photo' Tim Ruffle.

Timothy Hackworth Victorian Railway Museum. It was estimated that 50,000 visitors might attend in its opening year- 200,000 came. Though a peripheral facility with S&D buildings, S&D rolling stock stored in the Soho shed and a seven track apron in front, which York cannot match, Locomotion is a valuable museum in its own right hosting its own events and stock is moved between York and Shildon for display and special events. On two weekends in 2011 a popular steam shuttle service linked the two locations.

The Friends of the NRM was established in 1977 to help the Museum much as Friends organizations do for many museums and is organized as one would expect. Members derive benefits such as discounts at the Museum's shop, restaurant and car park. There are talks at regular meetings, exclusive Friends' events and a magazine- the quarterly NRM Review. If someone does nothing but join and enjoy the perks the Friends, and ultimately the Museum, will benefit from their subscription but the membership is also a pool from which knowledgeable volunteers, including current and retired railway employees, may be drawn to assist visitors, help in the restoration of exhibits and assist in the transcribing of documents and cataloguing of the many photographs, drawings and other items in the Museum's collection. So far so usual then but, with about 2,000 members and an internationally renowned Museum with several exhibits that even the most casually interested member of the public holds dear, the Friends of the NRM is able to fulfil its purpose on a grand scale.

The preservation of LMS Princess Coronation 6229 *Duchess of Hamilton*, for instance, is one of many ongoing commitments particularly dear to a subset of the Friends called The 229 Club. She was retrieved from static display at Butlin's in Minehead by the NRM in 1975 on 20 year loan for restoration to running order which was overseen by the Friends, toured as the Museum's flagship from 1980 to 1985 and was bought outright in 1987. In 1988 the Friends took advantage of Frank's background putting him in charge of a series of rail tours celebrating the 50th anniversary of *Mallard*'s speed record. The tours raised some £60,000 which, with money raised from tie-ins and elsewhere, went towards the recertification of 6229. (You might think that would give an LNER/Eastern Region man pause for thought and you'd be right.) Such is the expense of restoring locomotives today the Friends are unlikely to pay for a third boiler ticket but in 2009 they did restore her to as-built streamlined state at a cost of £180,000. Expensive for a cosmetic restoration but care has been taken that, if returned to running order, she can run streamlined. When running



Heard the one about the Duchess and the Kings Own Yorkshire Light Infantry? LMS Princess Coronation Class 6229 *Duchess of Hamilton* arrived with a Coronation Scot coach (but no connecting rods) at Shildon on a wet Wednesday November 21 last year. Her cosmetic restoration including re-applied streamlining was paid for by the Friends of the National Railway Museum. Having completed escort duties 55002 *KOYLI*, also in the National Collection, returned to York that afternoon. Photo' Tim Ruffle.

Patrick Stirling's 1870 GNR "Single" number 1 is a very fortunate early survivor. Since its first restoration (in 1910!) the locomotive has usually been paired with an inauthentic small capacity Sturrock tender but a better match was found in the '60s being used as a sludge carrier. It is seen with the loco' at Shildon where it is finally being restored at a cost of £30,000.



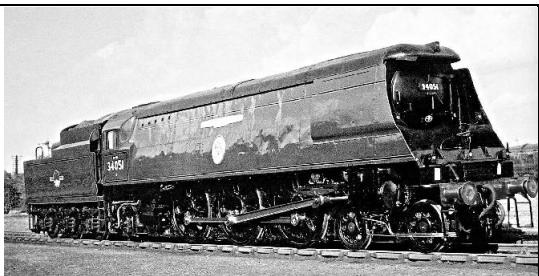
in the '90s, incidentally, the Friends purchased a coach to provide accommodation and some working facilities for volunteers travelling with 6229- the Support Coach is now a common feature of steam operation.

Other locomotive projects concern GNR Stirling Single Number 1 which has had a tender earmarked for her and awaiting restoration for some 50 years. The locomotive has been starring in an ambitious staging of *The Railway Children* which has helped attract donations for the restoration which the Friends have undertaken to raise the money for. The Friends are also committed to raising approximately £35,000 for the cosmetic restoration of Bullid West Country Class Pacific 34051 *Sir Winston Churchill* and contributed to the purchase of 4472 *Flying Scotsman* for the National Collection but their main effort was the administration of the £2.3m campaign. Over 6,000 individual donations of widely varying amounts came in including £10 from a girl who had made biscuits to sell to school friends. Over £600,000 was donated by the public with the rest coming from Richard Branson and the Heritage Lottery Fund.

The Friends has purchased items for the Museum, including a painting by Frederick Spencer Gore of the GNR station at Letchworth Garden City (see back cover) and organized the auction of artefacts. In 2011 the Friends directly donated about £26,000 to NRM projects which is actually below average. Throughout its existence the Friends has contributed over a million pounds to the Museum but perhaps the more valuable contribution the Friends make to the NRM is the time of its members in voluntary capacities throughout the Museum. This was easier said than done- when the Museum opened the trade unions, based in Kensington, utterly opposed the presence of volunteers. Eventually an information point to answer general questions from visitors, manned by volunteers, was accepted by the unions. Today some 260 members regularly donate their time in various areas and activities just at York.

Volunteering might involve informing and guiding visitors, cleaning exhibits or playing an active part in their restoration or helping to organize the collection. In 1999 the Museum began an oral history project. Interviews with 500 people who had worked on the railways,

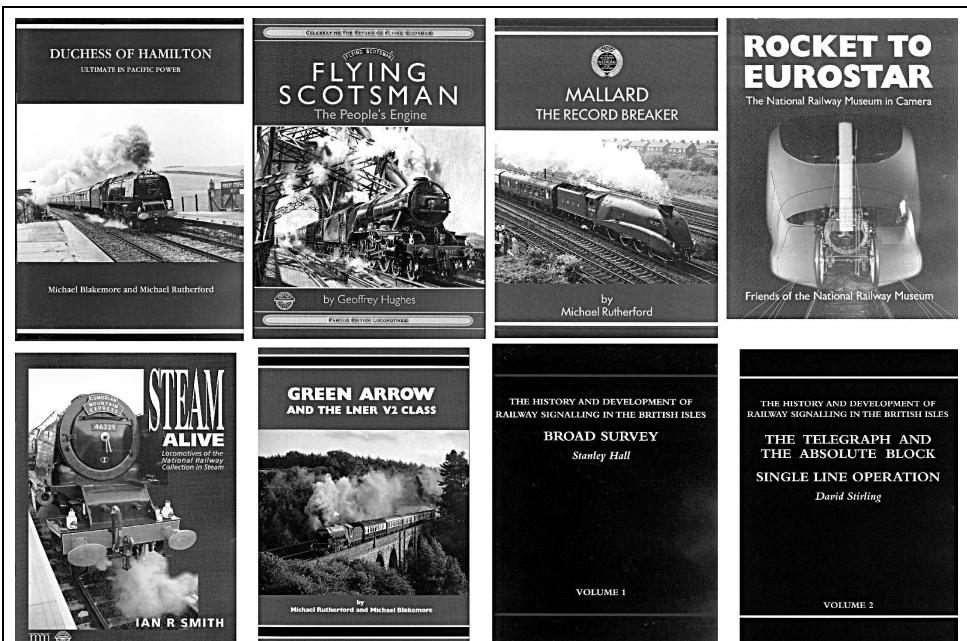
Bullid West Country Class Pacific 34051 *Sir Winston Churchill*, the locomotive that hauled Churchill's funeral train in 1964. The Friends have undertaken to raise £35,000 for her cosmetic restoration in time for the 50th anniversary of his death.



Can you tell what it is yet? A volunteer works on the NER snowplough at Locomotion.



in posts from Rat-Catcher to Chairmen, were recorded- over 1,600 hours of reminiscences about operations, practices and indeed occupations that no longer exist. Further interviews are being recorded with engineers and crew who actually worked with some of the locomotives in the collection. The Friends' part in this project is to catalogue and annotate the recordings. Some excerpts will be matched to suitable photographs in the Museums' collection (there are 1.5m to choose from) and made available on the Web. Over the years the Friends has published popular commemorative and souvenir books about the Museum



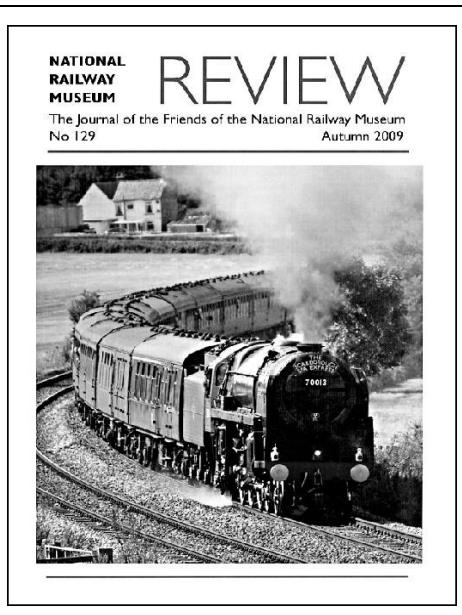
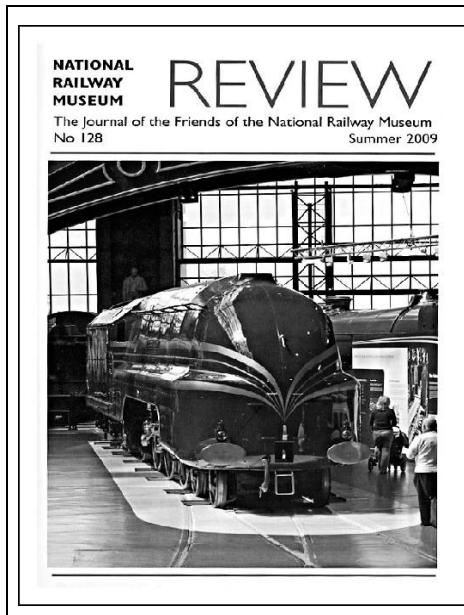
Some of the books published by the Friends of the National Railway Museum. They range from populist monographs about locomotives and general railway history to scholarly works. The Friends recently recognized a dearth of information about signalling and has recruited a group of experts to produce a series of four volumes on the subject. For even the most ardent of enthusiasts a book about absolute block signalling operations on single lines would be a considered purchase but it will further the academic study of railways.

of course, individual locomotives and classes and other subjects. More academic volumes cover such, arguably esoteric, topics as signalling and marshalling yards. The mechanization of marshalling yards only really started in the 1920s and now, with the prevalence of block freight trains and containers, they have practically disappeared. A new book will record information about marshalling yards all over the kingdom while it is still available. The glossy, full-colour quarterly magazine, NRM Review, is laid out, edited and written entirely by Friends members. It won an award from the British Association of the Friends of Museums. The Friends also produces a line of replica railway crests and other souvenirs all, with the publications, through FNRM Enterprises- since the Friends is a registered charity there are restrictions on the amount of money it can make in trade.

There are two local branches of the Friends. The Friends of the NRM (NE) associated with Locomotion and the South of England Group based in London are not distinct organizations although they run their own programs of meetings and, in the NE branch's case, organize volunteers locally but joining either makes you a fully paid up member of the Friends. As you might expect the NE branch has a particular interest in the Stockton and Darlington Railway and Shildon Wagon Works and has purchased MGR coal wagon number HDA 368459 and brought it to Locomotion. Not as exciting perhaps as a locomotive but significant- HDA 368459 was the last MGR wagon (of over 11,000 HAA and HDA hoppers) built at the Works.

All in all the Friends of the NRM is an asset for the Museum as well as a rewarding organization for rail enthusiasts. The usual post-talk opportunity for questions raised nothing about the Friends, Frank had covered them quite comprehensively and enjoyably, but he was asked if he was looking for a career today would he still join the Railways. His answer was a qualified yes- there are still great opportunities but he does not believe that there is the same commitment and pride in the job and service that there used to be at every level when railways were run by railwaymen rather than businessmen. In particular he noted that he would have died of embarrassment if he had to lay on a replacement bus.

6229 Duchess of Hamilton is currently on display at Locomotion. The Friends website is www.nrmfriends.org.uk.



TALK:

The Art of Boiling Water 4 October 2012

Ray State has fifty years experience on railways including work as an accident investigator from 1979 to 1986 and is compiling a comprehensive record of railway accidents. He is also a railway historian and this is his latest talk to the Friends. Report by Tim Ruffle.

The full title of Ray's talk was *The Art of Boiling Water: New Thoughts on the Hackworth Blast Pipe*. The main title was derived from an uncredited comment that boiling water was all that steam engines were good for (please address responses to anyone other than the Editor). The central subject, the blast pipe, might seem limiting and even esoteric but Ray easily kept his audiences attention presenting the principle, notes about the debate surrounding its origin and new information.

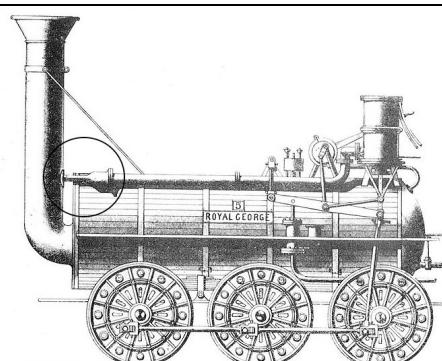
Boiler houses for stationary steam and atmospheric engines had high often tapered chimneys it having been observed that this improved the draught. High pressure steam engines exhaust steam from the cylinders and Richard Trevithick had the idea of piping the spent steam through to warm the chimney. In 1804 he wrote, "The steam that is discharged from the engine is turned up the chimney about 3ft from the fire. The fire burns much better." Trevithick's "educator pipes" proved particularly useful where chimney height was limited and were well established come the arrival of steam powered vehicles. All of even the earliest devices had educator pipes.

For a steam engine to be useful the boiler has to produce steam as quickly as the engine uses it. A stationary engine that runs out of breath can be given a bigger boiler but, for a mobile engine, the boiler must be small enough to carry around creating an upper size limit. Early locomotives were cursed with small poorly steaming boilers which, paradoxically, were prone to explode. Crews, having striven to raise steam, were loath to waste it so it became common to weigh down safety valves preventing any hard won steam from escaping. Of course the safety valves are there to stop boiler pressure rising above the design limit and keeping them from working is asking for trouble. Many early locomotives suffered boiler explosions for this very reason. Two loco's exploded on the Stockton and Darlington in 1828 including *Locomotion* herself.

Timothy Hackworth had been a temporary manager at Forth Street Works when *Locomotion* was being built and, on George Stephenson's recommendation, was Locomotive Superintendent on the S&DR from its opening. He identified improving the draught through the fire as a solution to poor steaming and did so by turning the educator pipe into a blast pipe which he introduced on *Royal George* in 1827. *Royal George* was heavier than her predecessors with a bigger boiler which would have given her some advantage, as would other mechanical enhancements, but her tireless performance was

Timothy Hackworth's *Royal George* of 1827 (shown without tenders) was the first locomotive to have a blast pipe- the tapering of the steam pipe as it reaches the chimney is picked out in the detail. Even with an inefficient single flue boiler she easily out performed her Stephenson shed-mates.

John Rastrick of Stourbridge was among visitors to the S&D taking notes (see page 13) but, remarkably, Robert Stephenson was slow to recognize the advance *Royal George* represented.



The Rainhill Trials

History records *Sans Pareil* as the only serious rival to Robert Stephenson's *Rocket* in the Liverpool and Manchester Railway's 1829 competition and that she was denied her chance by a failed cylinder supplied by RS&Co. In fact *Sans Pareil* would not have won the £500 prize-although allowed to show what she was capable of she exceeded the qualifying weight. A cylinder did crack (Hackworth had selected those used himself from twenty or so and never uttered a word of blame against his supplier) but the main problem was caused by the water feed breaking down leading to melting of a fusible plug. Reliability problems might be expected from a machine that Hackworth had scrambled to prepare and brought to Rainhill largely untested.

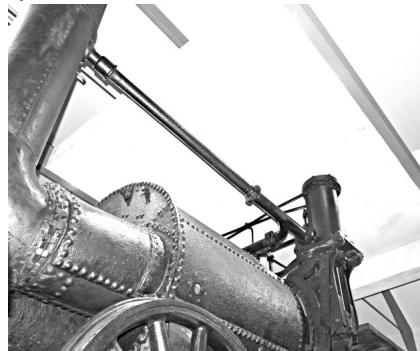
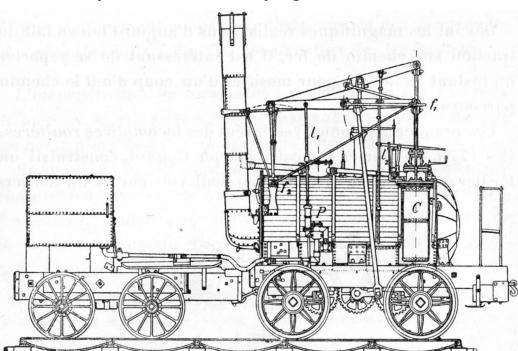
The blast pipe had such a marked effect that even George Stephenson's hagiographer Samuel Smiles mentions "...the sharpness of the steam-blast in the chimney, which blew a large proportion of the burning coke into the air". Smiles, who was not at Rainhill, focuses on this as perhaps the locomotive's major drawback (other than not having been made by Stephenson) and he has a point. *Sans Pareil* had a single flue boiler and a strong draught would whip the top off the fire with a disastrous effect on fuel consumption but the L&M was impressed enough to award a discretionary £50 anyway and bought her for £500 to use on the Bolton and Leigh Railway.

Of course *Rocket* won the Rainhill Trials her multi-tube boiler going some way to make up for the lack of draught. (She was not the first locomotive with such a boiler incidentally leading to some debate about *its* inventor but that's another talk.) *Rocket* still had trouble steaming though and, on the last day of the Trials having already won, Stephenson made a modification. Where two educator pipes (one from each cylinder) had exhausted into the chimney he brought them together into a single tapered pipe and it is in this condition that *Rocket* truly wowed onlookers.

largely due to the blast pipe and she was the first machine to convince observers that locomotives were not just an alternative to stationary engines or horses but preferable.

Hackworth had employed the venturi effect which anyone with a garden hose will be at least partly aware of. Pinch the end of the hose and, if the volume of water flow remains constant, because the same amount is passing through a smaller aperture it must move more quickly becoming a jet. Less obviously the faster flow and increased kinetic energy results in a balancing *decrease* in the static pressure to satisfy the conservation of energy principle. Narrowing the end of an educator pipe turns a waft of steam into a blast reducing pressure in the chimney, carrying the fire gasses up with it and drawing more air through the fire. The process is simple and largely self regulating- the harder the engine works the greater the effect on the fire. Hackworth refined the blast pipe further for *Sans Pareil* built for the Rainhill Trials. Stephenson's *Rocket* may have won the competition but only achieved her best performance afterwards when retro-fitted with a blast pipe.

William Hedley's *Puffing Billy* (left) and Timothy Hackworth's *Sans Pareil* (in a detail of the original on display in Shildon) both have exhaust pipes leading from their cylinders to their chimneys. One has an educator pipe, the other a blast pipe but there is little if any external difference apparent which may explain later argument about its invention even if it does not excuse the wilful ignorance evinced by some factions trying to claim credit for one party or another.



This cartoon *The Battle of the Blast Pipe* appears in *The World's First Railway Jubilee*- an 1876 volume by S.T. Richardson and illustrates, non too subtly, the debate about who should be credited as its inventor. The dominant central figure, laying about himself indiscriminately, is John Wesley Hackworth a tireless and belligerent champion of his father's claim. George Stephenson, hugging an immense blast pipe, his biographer Samuel Smiles and author J.S. Jeans also feature.



In the 1850s a long-running and appropriately heated debate arose about who had actually invented the blast pipe which seems largely based on a failure to understand the key features. Predictably Smiles credits George Stephenson referring to blast pipes on the Killingworth engines and, in 1858, William Hedley's son describes them fitted to the Wylam engines (of which *Puffing Billy* was the first in 1813 and which Hackworth helped build) but both are certainly referring to educator pipes. Also in 1858 Robert Stephenson said, "The blast was in existence 11 years before 1825. In fact the only alteration was the contraction of the orifice made on the S&D between 1825 and 1827." Nearly thirty years after the Rainhill Trials did Stephenson still not appreciate the difference between an educator pipe and a blast pipe? For an engineer of his standing, this failure to understand the venturi effect is surprising. Perhaps the most persuasive counter claim is that of polymath Goldsworthy Gurney who, from the mid 1820s, developed quite practical steam powered road vehicles. His light and powerful engines, with several patented features, used a form of blast and some accounts say it is a copy of his system that was fitted to *Rocket* but his funding ran out and he was forced to sell up. His work, at least in this field, came to nothing but, in 1859, Gurney said he had described his steam jet to Hackworth. Unsurprisingly his daughter Anna was a vigorous supporter of his claim but her letters evince a clear memory and detailed understanding of the principles involved.

Tellingly the debate only really got started after Hackworth's death in 1850. In the end the documentation about *Royal George* and *Sans Pareil* is conclusive enough for Hackworth to be universally acknowledged as the inventor of the blast pipe. At this point though Ray was barely half way through his talk...

Thomas Langstaff

In 1906 *The Langstaffs of Teesdale and Weardale* was published about the Langstaff family of Butterknowle near Cockfield. It was written by George Blundell Longstaff (the spellings seem interchangeable) and it is the section relating to his uncle Thomas Langstaff Jr. that is of interest here but a little background information is required first.

Thomas Langstaff Sr. was a tanner, mine owner and lecturer in philosophy. He opened the Copy Crook mine about three miles from Shildon in around 1826 in partnership with Joseph Pease but was ailing in 1828 and sold out to Pease who did not endear himself to the Langstaff family by driving a hard bargain. (The mine went on to become the Adelaide

pit, the most profitable in the Pease empire.) Thomas had two sons Dr. George Langstaff (the author's father) and Thomas Jr. Thomas went to the U.S.A. to work as a mining engineer and died in Charlotte, North Carolina in 1850 but Dr. Langstaff died in 1892 at 94 and, as recorded in the book, recalled that...

My brother Thomas was a Mechanical Engineer, and for some time Superintendent of the Locomotive Department of the Stockton and Darlington Railway, when he applied the exhaust steam to create a draught in the chimney and thus enabled high and continued speed to be attained. Smiles gives Stephenson credit for this application, but he is in error, Stephenson saw it first in a locomotive constructed at Shildon by Timothy Hackworth under my brother's superintendence.

And a little later...

In 1829 he occupied an important position in the once famous engine works of Timothy Hackworth at Shildon, near Bishop Auckland. Thence he was sent by Hackworth in charge of the locomotive *Sans Pareil* to the great trial at Rainhill, near Liverpool, in October 1829. Dr. Longstaff always claimed that his brother, not George Stephenson was the real inventor of the "Steam Blast," which made the locomotive a practical machine.

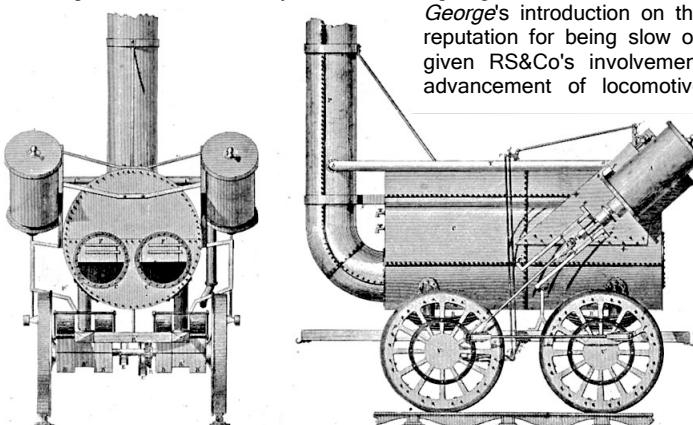
Prior to the simple device of turning the exhaust steam-pipe into the smoke stack and directing it upwards, it had been found impossible to maintain for long, a sufficient "head of steam." He said that Thomas though urged to do so, would not patent his invention. When the morning of the trial came the *Sans Pareil* was always blowing off steam. Its handy little rival, Stephenson's *Rocket* ran

Lancashire Witch (1828) was the first Robert Stephenson designed locomotive built at Forth Street Works. She was clearly a step towards *Rocket* - inclined rather than vertical cylinders made her more stable and her two flues foreshadow multi-tube boilers. Pipes from the cylinders to the chimney are evident but, crucially, these are educator pipes not blast pipes.

She was built for the Bolton and Leigh Railway but moved to the Liverpool and Manchester when it opened swapping places with *Sans Pareil*. Like most contemporary locomotives she steamed reluctantly especially on the L&M's coke and Stephenson added a blower in the tender driven from the wheels. This was no more than partially successful and crews were reported to have tied down her safety valve. Other Stephenson loco's, built before the Rainhill Trials, fared no better. *Pride of Newcastle*, built for the Delaware and Hudson Canal Company, which used a wagon-way to move anthracite to its canal, was a white elephant partly due to poor steaming. No 15 *Britannia* suffered a boiler explosion at Tredegar in 1830 probably due to interference with the safety valve.

If Stephenson's ignorance regarding blast pipes seems surprising one should note that he had not long returned from three years as a mining engineer in South America so did not witness *Royal*

George's introduction on the S&D. He hardly has a reputation for being slow on the uptake though and, given RS&Co's involvement with the S&D and his advancement of locomotive design in many other respects, one would expect him to embrace such an improvement. He did adopt the use of blast pipes eventually, RS&Co. could hardly have continued to make locomotives if he had not, but did he fully understand them even then? See his comment quoted in the main text.



splendidly for a certain distance, but lacked steam to keep it up. The story goes on to say that at midday Mr. Longstaff went away to his dinner leaving the *Sans Pareil* in charge of engine driver and fireman. On his return the latter said, "We have had Mr. Stephenson's man here, Sir,"

"Well, what did he want?"

"He wanted to know how we kept up such a supply of steam,"

"Of course you did not tell him?"

"Why no, I only opened the door in front and pointed to the exhaust pipe."

The Doctor did not tell what his brother said, but added that, restraining himself sufficiently not to strike the man, he struck the locomotive with his fist, breaking all his knuckles!

The *Rocket* was taken off that day, on some pretext or another, but turned up the next morning with as much steam as its rival, and by virtue of its lighter weight and multi tubular boiler, easily won the prize of £500.

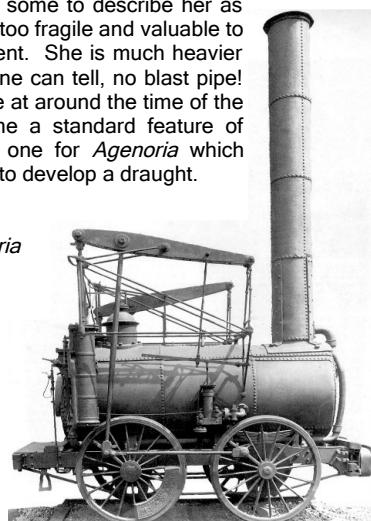
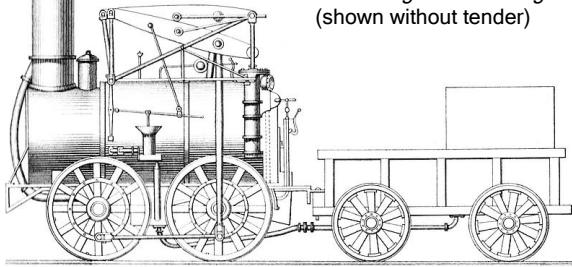
Such is the story as the writer heard it from his father's lips.

Presumably, this account is recorded in good faith and, before picking holes, it is fair to note that it does come second or third hand, was published over 75 years after the events and 14 years after Dr. Langstaff's death and whether the author (in his 60's) is recalling stories he had heard as a boy or more recently from his elderly father is not clear. There is no record of a Langstaff, Longstaff or any other variation working at Shildon (in any

John Urpeth Rastrick, at the short lived firm Foster, Rastrick and Co. of Stourbridge in the West Midlands, made only four locomotives all with vertical cylinders driving coupled wheels via grasshopper beams but two are historically significant. *Stourbridge Lion* and two sisters were built in 1828 for the Delaware and Hudson Canal Company. With Robert Stephenson's *Pride of Newcastle*, which was built and shipped earlier, she was one of the first two locomotives to run in the U.S.A. As noted in a previous talk by Ray State the 1829 trials were a débâcle, both were far too heavy for the flimsy track, but observers noted a marked difference in performance. Naturally they were expected to run on anthracite which is a perfectly good fuel but demands a strong draught. *Pride of Newcastle* could barely raise steam but Rastrick, although not involved with the S&DR, had visited the railway and seen *Royal George*. He clearly appreciated the significance of Hackworth's work and fitted a blast pipe to *Stourbridge Lion* which coped well with the fuel.

The firm's last loco' was *Agenoria* built in 1829 for the Earl of Dudley's Shutt End industrial railway- the first in the West Midlands to employ steam locomotives and the only F,R&Co loco to survive (at the NRM). The mechanical similarities have led some to describe her as essentially identical to Rastrick's other machines but, though too fragile and valuable to take apart for curiosity's sake, differences are readily apparent. She is much heavier with mechanical axle lubrication (a first) and, as far as anyone can tell, no blast pipe! In an odd footnote to this article although she entered service at around the time of the Rainhill Trials just as the blast pipe was about to become a standard feature of locomotives Rastrick appears to have forgone one for *Agenoria* which seems to have relied on her remarkable chimney to develop a draught.

Stourbridge Lion and *Agenoria*
(shown without tender)



capacity), in Hackworth's papers or present at Rainhill. *Sans Pareil* does not have a hatch in the chimney that gives access to the blast pipe and the account is internally inconsistent saying that Langstaff/Longstaff was in charge but then that Hackworth sent him to the Trials. In short the statements that can be checked are in error (although this is not the only account of Team Stephenson sniffing around *Sans Pareil* at Rainhill) and Ray sees no merit in the claim but he does suggest a way in which Langstaff could have been involved with Hackworth and *Sans Pareil* and yet overlooked by historians.

The author writes that he...

...possesses several letters from Timothy Hackworth to Thomas Longstaff, written in the Autumn of 1829, shortly after the trials. Those dated Oct. 30 - Nov. 20, are written from New Shildon to Manchester or Rainhill, but the last, dated Nov. 26, from Rainhill to Manchester.

In one of them, Hackworth says: "Perhaps it is not so very wrong to copy as for men to claim the merits of other men's labour, but this we may expect; however we will attempt something more."

Other letters, none of which can be found now, reportedly suggest improvements and urge secrecy which, if anything, tends to reinforce Hackworth's position. None of the quotes actually supports Dr. Langstaff recollection that his brother invented the blast pipe. Rather they seem to form one side of an extended exchange about a mutual exploit.

Hackworth erected *Sans Pareil* at the S&D's works and entered the Rainhill Trials with their permission, which was not ungenerous on their part, but she was his private venture and he still had to pay for the whole project when he had a large family to provide for on a small salary. The accepted story is that he used money from the sale of his mother's property but records indicate that the overall value of the estate was in the low hundreds of pounds. Hackworth had seven siblings though that included six sisters so he might well have shared the inheritance only with his brother but whether it would have covered *Sans Pareil's* construction is still open to question. When he accepted the L&M's offer to buy her he noted, "...you will pardon me when I honestly add that 550 pounds does not by any means compensate me for the expenses and labour bestowed." Whatever value he placed on the labour bestowed the expense of building *Sans Pareil* would have been hundreds of pounds. How else might Hackworth have raised the money (in today's terms estimated to be all but £50,000) in fairly short order? Ray suggested that he could have had a backer-one whose involvement was best kept quiet.

Thomas Langstaff Sr. had died in 1828 leaving £1,000 to each of his sons largely as a result of the sale of his interest in Copy Crook since neither the tannery nor lecturing were lucrative. George, a surgeon, set himself up in Hull. Little is known about what Thomas Jr. did with his money but he was an engineer, knew George Stephenson's brother Robert and visited Shildon several times where he could well have made Hackworth's acquaintance. Could Thomas have paid for *Sans Pareil*? Any involvement with Hackworth could be misremembered as him working at Shildon while the bad blood between the Langstiffs and Joseph Pease would be some reason for Hackworth to mask the identity of his investor.

Jane Hackworth-Young has found no record of association between Langstaff and her great great grandfather- if Hackworth wrote to him it seems he did not keep replies. She notes that Hackworth's daughter, Prudence Nightingale, specifically recalled that he funded *San's Pareil* from his inheritance and sees no reason to disbelieve this. Women were second-class citizens but Elizabeth Hackworth (née Sanderson) was from a Newcastle family of some means. Prudence became something of a family historian and helped settle her father's estate but would have just turned eight at the time of the Rainhill Trials.

There is no conclusive documentation to support either version and both Ray and Jane Hackworth-Young can point out that absence of evidence is not evidence of absence. Ray claims only to have brought to light an account with no little curiosity value and suggested a possible basis for it. There things remain for now.

TALK:

The North Yorkshire Moors Railway 1 November 2012

Ian McInnes has been photographing the North Yorkshire Moors Railway for over thirty years. He brought 200 slides dating from 1986 to 2006 to show to the Friends in November with comments on their content and the development of the Railway that they recorded. It was a fine selection which, if anything, can only be faulted for running long but Ian was kind enough to return for the Christmas get-together. Inevitably the Newsletter can hardly do justice to a largely visual presentation but here are some of the pictures and a bit of history. Report by Tim Ruffle, all photo's Ian McInnes.

By the 19th Century Whitby was becoming isolated. The port was an important centre for whaling and shipbuilding but always difficult to reach by land even after the turnpike opened in 1759. It lacked Stage and Mail Coach services until 1795 and 1823 respectively. A Whitby to Pickering canal was suggested around the turn of the century but was still no more than a suggestion by 1825 when the Stockton and Darlington Railway opened. Some S&D backers were from Whitby and its success prompted serious proposals for a railway with arguments for and against routes to Pickering and Stockton. In 1832 George Stephenson was consulted and recommended a horse-worked railway to Pickering which was accepted at a meeting on 14 September. A bill received royal assent on 6 May 1833 and the Whitby and Pickering Railway Company invited tenders to construct the first section (Whitby to Sleights) in August with Stephenson as engineer. By October 1834 tenders for the last 8.5 miles (Pickering to just short of Newtondale Halt) were invited- the "Central Division" of the railway so called because the aim was to reach York eventually. In September 1834 a delegation from the W&P, including Stephenson, had attended a pro-railway meeting in York which may have introduced Stephenson to George Hudson.

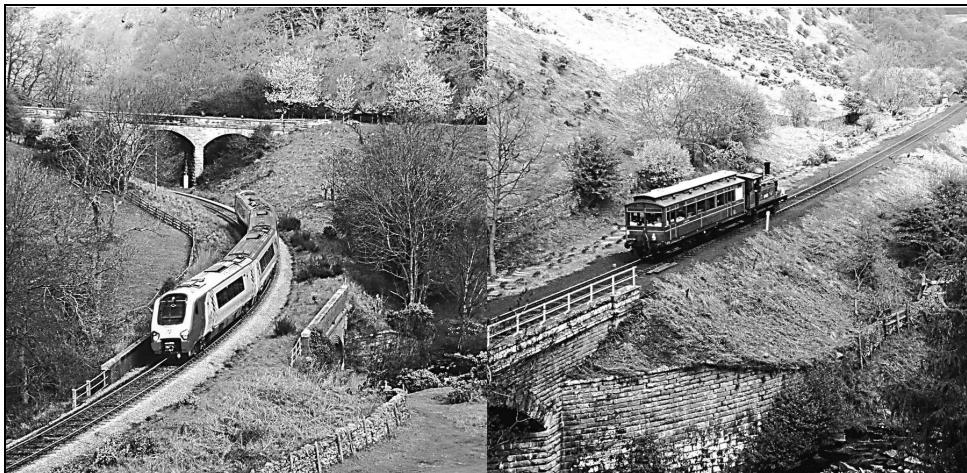


LNWR G2 Class 0-8-0 (the first built and the only preserved example) in BR livery numbered 49395 departing Grosmont.

Number 29, an 0-6-2 tank locomotive built in 1904 by Kitson and Company of Leeds for Lambton Collieries, hauls BR Maroon Mk 1 coaches on a wintry day.



Most construction materials arrived by sea with rails, then in high demand, from Bedlington, Stourbridge, Birmingham and Monmouthshire. Although expecting to benefit chiefly from freight traffic on completion the W&P opened the line from Whitby to Tunnel Inn (Grosmont) for passengers on Monday 8 June 1835 with the coach *Premier* leaving Whitby at 2:00pm and returning about 8:00 inaugurating a twice daily service (not



Left. This photograph, which fell through a space-time wormhole from 2052, shows the only preserved Class 220 "Voyager" unit just north of Goathland in Virgin Trains livery. This one-off run celebrated the 50th anniversary of a Voyager's first visit to the line on a special excursion. Smoke generators and a multi-speaker sound system stood in for the unit's original Diesel engines.

Right. Also nearing Goathland Class J72 0-6-0 tank engine number 69023 known as *Joem*, built by BR in 1951 to a Wilson Worsdell NER design from 1898, is more appropriate to the Railway's branch-line atmosphere. Here she approaches the old Bridge 30.

Sundays). *Premier* was one of three first class coaches, with *Transit* and *Lady Hilda*, supplied by Beeston & Melling of Manchester (essentially stage coaches with railway wheel sets) with open "market" coaches probably bought locally. The opening was just in time for the Ruswarp Fair in July which the Company took advantage of by running sixteen trips per day probably to Whitby about 1.5 miles away. In the meantime construction continued on the rest of the line. Stephenson made the climb to Goathland by a rope worked incline at Beck Hole averaging 1:15 gradient and crossed Fen Bog using the same solution he had employed at Chat Moss on the L&M floating the line on fascines.

The line opened throughout its length on 26 May 1836 with a regular passenger service connecting to the York-Pickering Stage Coach fulfilling its aim. One instance is recorded of a ship's captain who docked at Whitby and found orders to proceed to Liverpool. This he did in a few hours, taking the Stage to York but mostly by rail, a journey which would have taken days only a decade earlier. As hoped new industries were quick to take advantage of easy access to the sea one way and Pickering the other especially near Grosmont. Quarries at nearby Lease Rigg had their own incline working to the line on opening day. Lime kilns used limestone brought from Pickering and coal from Whitby whilst ironstone, discovered during the line's construction, was mined before richer and more accessible deposits were found in Cleveland.

In 1845 George Hudson's York and North Midlands Railway reached Pickering, via a branch from Rillington Junction on its new York to Scarborough line, and promptly took over the W&P upgrading it for locomotive use in stages and replacing the incline's water balancing system with a steam engine. Steam ran between Pickering and Levisham in September 1846 with a second track coming into use in early June 1847 but the line from Levisham to the top of Beck Hole incline was not passed by the Railway Inspector Captain (RE) Coddington and he had reservations about the rest of the route to Whitby permitting only one locomotive to operate at a time. He was more impressed on a second inspection a few weeks later passing the line for steam use throughout on 30 June. Whitby was now easily accessible to visitors from all over the country and a Hudson company was building



The NYMR has a few Southern Railways loco's. SR built and liveried Class S15 4-6-0 number 825 (built at Eastleigh to a Robert Urie LSWR design updated by Maunsell) pulls into Goathland. The village is best known as the location for ITV's *Heartbeat* and 825's sister 30830 made a number of guest appearances in the show. Take that authenticity!

roads and hotels in the West Cliff area to take due advantage at the time of his downfall in 1849. Almost all of the remaining railway buildings date from the Y&NMR era- so comprehensive was the upgrade that the only W&P structure to survive intact is the single bore tunnel at Grosmont now used by pedestrians to reach the works.

The Y&NM was one of three companies that merged to form the North Eastern Railway in 1854 the others being the York, Newcastle and Berwick and the Leeds Northern. The NER replaced the Beck Hole incline engine at least once but decided to bypass it entirely in the 1860s and laid a deviation about four miles long starting from just south of the Grosmont tunnel through a new station at Goathland. The new stretch opened on 1 July 1865 allowing locomotives to work through although the climb from Grosmont remains a challenging 1:49 and the incline was kept open for another three years. Also during the NER's tenure Grosmont became a junction with a link to the Northallerton-Eaglescliffe Line at Picton. (The section from Battersby to Picton closed in 1954 leaving Battersby its odd Y layout forcing all trains continuing along the Esk Valley line to reverse.) In 1908 the NER replaced timber bridges and reinforced those on the deviation but the story becomes one of slow decline. The flurry of industry along the line had been short lived, posts were merged or abolished and the double track between Levisham and Pickering, singled "temporarily" in 1918, was never restored. BR removed disintegrating over-all roofs at Whitby and Pickering in the '50s and Dr. Beeching passed sentence on all lines in the area. The Esk Valley line, including the original Whitby to Grosmont section of the W&P, escaped the axe but all Pickering lines closed to passengers on 8 March 1965 and altogether a year later.

There had been voluble opposition to the closures and, in 1967, the North Yorkshire Moors Railway Preservation Society was formed gaining permission to maintain the line and run occasional steam galas (for members only to fulfil insurance terms). The society grew and became a charity, the North York Moors Historical Railway Trust Ltd. It reopened the line as the North Yorkshire Moors Railway with works at Grosmont running its first public trains on 22 April 1973 and has become the country's most visited heritage line with 85 full-time staff. Goathland was the setting for ITV's long lived 60's nostalgia wallow *Heartbeat* and the station itself was used as Hogsmeade in the first Harry Potter film which,



J27 0-6-0 number 2392 is the youngest of her class and the only preserved example. She emerged from Darlington North Road Works in 1923 making her an early LNER locomotive. The fussy might grumble about the NER livery but the LNER built J27s were essentially the last batch of P3s- another enduring Worsdell design. She rests at Levisham with teak coaches.

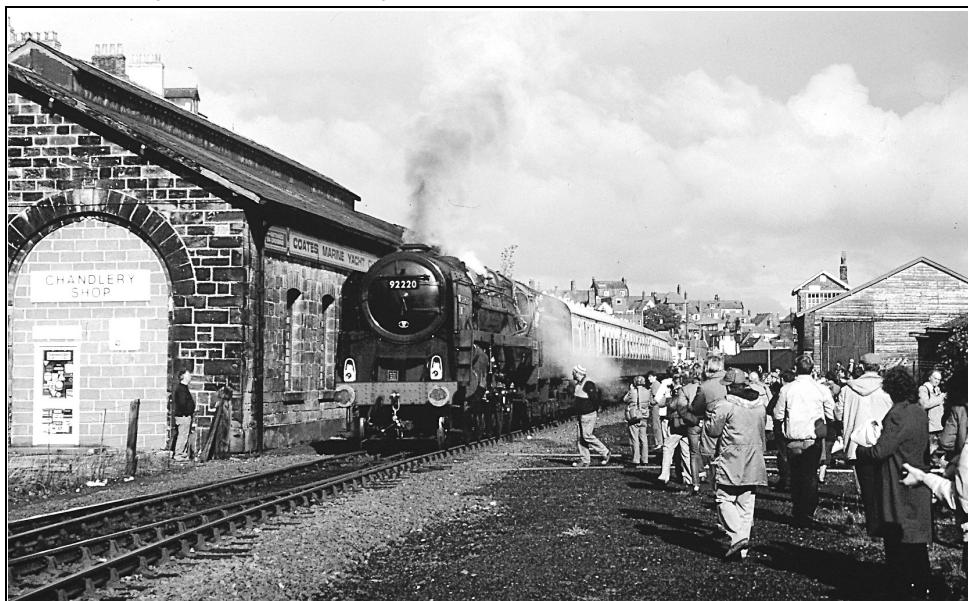
with other film and TV productions, increased interest. In 2007 the NYMR entered into an agreement with Network Rail to run on the Esk Valley Line- a first for a UK heritage railway. Through trains run to Whitby again and other services reach Battersby.

In the last few years the Railway has undertaken a couple of ambitious projects either of which would be beyond the scope of many preserved lines. Bridge 30 between Grosmont and Goathland was an NER structure that had served its purpose well but in 2009 it was 145 years old and had decayed to such a state that it would soon become unfit for use. Replacement at a cost of £750,000 was the only alternative to closing the line. Grants from North Yorkshire County Council and the LEADER+ programme (an EU rural development initiative) made up about half of that with the rest coming from the public. The old bridge was torn down and the new 80ft span, from Mabey Bridge in Chepstow, put in place on time and on budget in spite of the major work being done during the bitter winter of 2009/10 at a location with no nearby road. The project received the The Heritage Railway Association's Large Groups Award.

The latest big project has been a redevelopment of Pickering Station replacing the overall roof and adding a visitor's centre at a cost of £1.7m. Even with National Lottery and Yorkshire Forward support the railway had to raise about £500,000 but the station is now restored as far as possible to its condition c.1937. The other original stations on the line (so not including Newtondale Halt) also aim to recreate a specific era- Levisham is in the guise of a small NER country station c.1912, Goathland (probably the station least changed since 1865) the inter-war years and Grosmont BR c.1952.

The NYMR's Ruby Jubilee sees a typically full programme including steam and Diesel galas and exhibitions in the new visitors centre. For the future it supports in principle a North Yorkshire County Council proposal to reinstate the Pickering-Rillington Junction link allowing steam to run to Whitby from York. The swathe this would cut through Pickering makes it a fanciful scheme but one that will clearly not be held back by lack of ambition.

The Railway's website is: www.nymr.co.uk



BR Standard Class 9F 92220 *Evening Star* draws a crowd as she departs Whitby. The NYMR's unique agreement with Network Rail allows it to run services along the entire route of the Whitby and Pickering Railway Company.

The meeting on 4 April 2013 began with the Friends' Annual General Meeting. In the absence of our Chairman Gillian Wetherell due to ill health the meeting was chaired by Archivist Don Whitfield. There were no surprises as the various Committee members either reported on their field or, *in absentia*, had reports read.

Membership remains steady. Your Editor made the usual excuses about the Newsletter which, in spite of everything, attracted some words of appreciation which were, in turn, appreciated. Financially the Friends is in good shape. Apart from sub's there is a small but reliable income from the continuing sale of books and magazines, usually duplicates from the archive, in the Museum or occasionally at auction. The Museum benefited from two major outgoings the Friends contributing 80% of the cost of new software and paying outright for the restoration of several clocks. More details on both below.

No-one has joined the Committee since the the last AGM so it is still spread desperately thin. There was some good news to report- membership was taken over by June Palmer last year who Gill knows from a number of other societies in which she serves in the same capacity. There is still no Vice-Chairman, no Programme Secretary and no Secretary. We only have our monthly talks thanks to Gill who arranged a full programmed for 2013 and has made some bookings for next year but she cannot be expected to do double-duty indefinitely. The point was made that actually finding speakers need not be a job for one person. Someone would have to be in overall charge of course but anyone who knows of a speaker could effectively become Programme Secretary for a given month liaising with the speaker and Museum to make the necessary arrangements.

Incumbent officers on the Committee were re-elected *en masse* so its members remain Chairman Gillian Wetherell, Treasurer John Carter, Archivist Don Whitfield, Newsletter Editor Timothy Ruffle, Membership Secretary June Palmer, Member Without Portfolio Derek Reeves. The second half of the meeting was taken up with Chris Lloyd's talk *Rockliffe and the Railways* which will be reported on next issue.

Modes Collection Management Software

Modes is the most commonly used collection management software in UK museums for cataloguing and classification etc. It has been used at North Road for some time- the Friends has helped pay for an update to the new version which, in short, makes information easier to put on the Museum's systems and easier to access once it is there.

The update includes output formatting so if captions are needed for an exhibition of items in the collection for instance a standard layout can be selected or created from scratch, the items selected in the database and the set of caption cards printed from there. Previously information would have to be cut from Modes and pasted into another program item by item. Similarly media items can be linked to the records and played by the software so if there is a photograph or video clip listed in the database it can be viewed directly rather than looking it up elsewhere from a reference. The inclusion of a spelling-checker will help the accurate entry of data (apparently the number of different ways there are to spell "Darlington" defies belief) and multi-user access will relieve a significant bottleneck in its use.

Clocks

The Friends has paid for the restoration of two clocks in the Pease Room, the Ticket Office clock and the long cased clock in the entrance hall. The last required particular care partly to make a proper job of some make-do-and-mend repairs it has undergone in the past and partly because it is actually a two-faced clock- the second face is on the platform driven by

a rod that runs through the wall. During the big refurbishment a few years back the platform face was raised a couple of inches to accommodate a sliding door. Happily the hole in the wall through which the drive rod passes was quite large enough to accommodate the movement and the rod is connected by flexible joints at each end to allow for imperfect alignment so it has not suffered although the platform face has been lowered as much as possible as part of the restoration.

Chairman's Report 2012

This has been a busy and fruitful year for our organisation, although it started rather badly with the resignation at the A.G.M. in April of Chairman, Membership Secretary and Speaker Finder. Our small committee, originally four of us and now, thankfully, five, have managed to produce Newsletters and a programme for the whole of 2013 and we have reinstated the Anniversary Talk in September. Sadly, we have not managed to do very much to help the Museum in person, with the exception of Don Whitfield who, with Arthur Peacock, manages our archive store and has raised funds for us from the sale of books etc. Richard Wimbury has also led some walks and conducted tours in The Museum and we have concentrated on helping out in other ways.

We lost our President, John Leng early last year and so we are also without a President, but we have had made a lovely bench for The Museum in his memory, so he will continue to be with us at the Museum whose interests he served so well over very many years.

During 2012 we had the benefit of an excellent and varied range of monthly talks, organised by Brian Denham before his resignation from the Committee and we would like to thank him for that, as our audience has been maintained and has in fact grown from time to time as we have had quite a few visitors.

We have paid for the repair and restoration of three of the clocks the Museum owns, and I am delighted to say that these are now all working well. The two-faced clock with faces on the platform and in the reception area is working, after complicated engineering, because the two faces are not actually level! To add to the puzzle, the faces are also facing in opposite directions on either side of the wall! In addition we have funded the greater part (80%) of the cost of expensive software for the Ken Hoole Centre for the Archivist, Leona White.

Our 2013 Talks programme, which I have booked, has started well with talks on railways in Australia, and on *Tornado* and an interesting talk on the proposed Tees Valley Metro. The programme is complete until the end of the Year.

We are having a visit from one of Darlington's twin towns, Amiens in France in June, and three of us are returning their visit in October, as they are holding a Railfest there. The Council cannot afford to send many representatives and none from the Museum itself so we will be representing them. We are also involved in a local forum to discuss and plan a revitalisation of Darlington's Railway Heritage for the bi-centenary of the Stockton and Darlington Railway in 2025.

I am under medical advice to cut back on my activities, so the future of the organisation beyond the end of 2013 depends whether we can get a Vice Chairman and/or a Speaker Finder within the next few months. We could cope with a group of people finding Speakers at a push, but, although I will book speakers for 2014 I will not book any after that and I cannot guarantee to be at all the meetings throughout the next two years. We must, therefore, ask for your support. I have managed to recruit a new Membership Secretary from outside the organisation, but surely there must be someone in our membership who could join us. We are in a healthy position, but only because of a great deal of work by a very few. This is a worthwhile organisation and it should have within it the impetus to chug along the rails a while longer!

Gillian Wetherell. Chairman. 4 April, 2013.

Devid Tetlow Resigns

David Tetlow has given notice as manager of the Museum to take up the post of Cultural Assets Manager at Astley Hall Museum and Art Gallery in the North West. He will leave Darlington at the end of June before going to Canada for a two week holiday starting his new post on his return. David has been the Museum Manager for Darlington Council since the Museum's major renovation also running Piercebridge Roman Fort and this news is hardly welcome but I am sure we all wish him well.

He writes, "The last five years have certainly flown by at a dramatic speed but it's been a very enjoyable five years I must say and I feel that the museum is in a better position now than it was previously. My first job on taking up the post was to sort out the finishing touches of the refurbishment project. Builders tend to leave a blank canvas, always great fun for a manager! It allowed me to start from scratch and I was able to introduce new things to the museum including the Edward Pease Room, the new temporary exhibition gallery, conference facility and new shop stock. I also sorted out orientation and marketing issues, united the staff and volunteers behind the re-branding of the museum (always unsettling for everyone) and wrote a new forward plan. I then worked hard to sort out the museum's catering offer and took the lead in franchising out the Café and introducing the new 'refreshment stop' for our quite periods.

"Other projects that I'm proud to have completed at the museum have been the Darlington Rail Trail panels, allowing our visitors to explore the eight-acre site and other buildings for the very first time. I also project managed the replacement of lead on the museum roof with a fake substitute, working closely with our Conservation Officer, the Police and English Heritage.

"I then turned my attention to building up the museum's temporary exhibitions and events programme. Visitors and income have steadily risen over the last five years and I believe that the exhibitions and events have been responsible for this.

"I have also worked hard to build up a good relationship with the many museum stakeholders and have had to work diplomatically at times to try and make things work. I think that there is little more I can do at Darlington's Railway Museum but feel that I have done a reasonable job considering the financial constraints of the current climate. I move back to the North West to take up the post of Cultural Assets Manager looking after Astley Hall country house and its museum, art gallery, gardens and coaching house- a new challenge with lots of opportunities. The move back to the North West is also a good move for personal reasons, allowing my two children to grow up near to my family.

"I have always felt that the Friends of Darlington Railway Centre and Museum to be extremely supportive and passionate, funding several projects over the years including paying for the design and print of the new guidebook, clock restoration in the Pease Room, Booking Office and Main Entrance and purchasing the MODES database package for cataloguing our collections. Your lecture programme has also been extremely popular and assists the museum academically. May I take this opportunity to thank you for supporting the museum and making my job more enjoyable!

"Best Dave Tetlow."

Westbrook Heritage Trail Walks

Remaining dates for the free guided walks, exploring the history of the Westbrook area of Darlington and its links with railways, are Thursday 4 July and Sunday 15 September. Walks start from the Museum at 2pm.

Railway Themed Evening of Telly

There is to be an evening of rail related programmes, "Beeching Night", hosted by Nicholas Owen on Sunday 9 June from 7:00 to 11:00 on the BBC's Parliament channel for some reason (It's there somewhere- channel 81 on Freeview, 201 on Freesat, 612 on Virgin and 504 on Sky). There are few details but much of it will be archive programmes covering the big developments of the last 50 years plus a new documentary *Politics on Track*.

Guided Walk

Locomotion's series of walks led by Derek Newby, of the Friends of the NRM(NE) who guides walks for Durham County Council's Countryside Service, concludes with *Men, Mines, Inclines and Railways around Shildon* (Saturday 8 June, 7 miles). It described as "medium difficulty" and starts at 10am from the Collections Building. There is a fee with concessions for family groups etc. All details may be found on Locomotion's website under "What's on/ talks" or call Durham County Council's Countryside Service on 0191 3729100.

Corrections

Where do I start? Most of the errors occurred in the Diary pages and had various causes including misread e-mail, not-yet-proofed files and plain old cack-handed typing for all of which your editor apologises. The Friends' website and the on-line version of the Newsletter were corrected as soon as these errors came to light.

I failed to note that the Christmas quiz had been set by John Dodds. His contribution was credited in the website and the on-line Newsletter but apologies for delaying the printed acknowledgement until now.

As you might have realized the last edition was rather thrown together and Atkinson Print, the usual printers in Hartlepool, were unable to oblige. When the Newsletter was completed I did not know where they would be printed but credit can now go to Newton Press in Newton Aycliffe (newtonpress.net- no "www") who ran the lot off while I waited to, I hope you agree, a quite satisfactory standard. The usual disclaimer applies.

Rail Tours in the Region

This information is taken from www.uksteam.info, www.railtourinfo.co.uk and various railtour operators own websites. How much information there is available about rail-tours varies from operator to operator. The information here is repeated in good faith but do check nearer the time. There are links to uksteam and railtourinfo in the Friends' website.

Saturday 8 June. The rail tour arm of the Princess Royal Class Locomotive Trust PMR Tours' *North Eastern* will run from Sheffield to Newcastle and return behind LMS Princess Coronation Class 46233 *Duchess of Sutherland* stopping at York and Durham.

York 11:25, Durham 12:30, Newcastle 13:00

Newcastle 16:00, Durham 16:30, York 17:35

Saturday 8 June. West Coast Rail's *Cumbrian Moorlander* is listed as running from Ayr, down the WCML and Settle-Carlisle, across to York and back up the ECML topped and tailed by WCR Class 47s on various sites but not West Coast Rail's so good luck with that.

Saturday 8 June. Pathfinder Tour's *York, Moors and Scarborough Explorer* will run from Bristol Temple Meads to Scarborough behind two DRS class 47s. Arrival at Scarborough is "around 12:30", return departure from York "around 17:00" (better than nothing I suppose- York-Scarborough should be an hour or so).

Tuesday 11 June (rescheduled from the 8th). The A1 Steam Trust and Pathfinder Tours' *Elizabethan* will run from King's Cross to Edinburgh behind A1 Class 60163 *Tornado* and return in the charge of Deltic D9009 *Alycidon*. Stops in the region will be at York, Durham and Newcastle.

York 10:02, Darlington 10:50, Durham 11:08, Newcastle 11:31

Newcastle 18:14, Durham 18:58, Darlington 19:20, York 19:58

Saturday 15 June. UK Railtour's *Yorkshire and the Moors 125 Special* will run from St. Pancras to Scarborough and return stopping at York and Malton transport provided by an East Midlands Trains IC125 set. No timings are listed.

Steam Dreams' *Cathedrals Express to Scotland* rail tour will leave King's Cross on Friday 14 June at 08:30 to arrive at Edinburgh for 18:00 with A4 Pacifics 4464 *Bittern* and 60009 *Union of South Africa* sharing duties. Passengers will have a weekend in Scotland before departing on Monday 17 June at 09:30 for a 20:00 arrival at King's Cross behind 4464 and 60007 *Sir Nigel Gresley*. No other timings are available.

Saturday 22 June. The Railway Touring Company's *White Rose* will run from King's Cross to York and return behind 60009. York arrival 13:10, departure 17:10

Wednesday 26 June. Compass Tours' *Highland Clansman* will run from York to Aviemore and return behind WCR Class 47s. It will stop at Thirsk and Chester-le-Street and...

York 06:15, Northallerton 06:50, Darlington 07:10, Durham 07:35, Newcastle 08:00

Newcastle 21:15, Durham 21:40, Darlington 22:05, Northallerton 22:25, York 19:58

Saturday 29 June. Vintage Trains *Scarborough Flyer* will run from Tyseley to Scarborough and return behind 46233 stopping at York. No timings are listed.

Saturday 29 June. Locomotive Services and Steam Railway Magazine's *Ebor Streak* will run from King's Cross to York and return behind A4 4464 which is cleared for 90mph on this and the two other Locomotive Services tours listed here all of which are being handled by Pathfinder Tours. Pathfinder's website is the place to look for further details. York arrival 12:30, departure 19:00

Wednesday 3 July. Steam Dreams' *Cathedrals Express* will run from King's Cross to York and return behind 60163. York arrival 13:30, departure 17:30

Saltburn Railtours' *Saltburn Riviera* will run from Saltburn to Torquay on Friday 5 July and return the following Monday topped and tailed by WCR Class 47s. No timings are listed.

Saturday 6 July. The Railway Touring Company's *Yorkshireman* will run from London Victoria to York behind WCR Class 47s returning with BR Standard 7P *Oliver Cromwell*.

York arrival 13:45, departure 17:10

Saturday 6 July. UK Railtours' *Mallard 75* will run from St. Pancras to York and return with an EMT 125 diagrammed but nobody seems to know when.

Saturday 13 July. Steam Dreams' *Cathedrals Express* will run from King's Cross to Scarborough and return behind 60163 stopping at Beverley.

Beverly 13:30, Scarborough arrival 14:15, departure 16:45, Beverly 17:30

Saturday 13 July. The Railway Touring Company's *Coast to Coast Express* will run from Liverpool Lime Street to Scarborough and return. The Preston to Scarborough legs will be in the charge of 70013 stopping at York. York 11:20, Scarborough arrival 12:20, departure 16:55, York 18:15

Saturday 13 July. Compass Tours' *Lakeland Moorlander* will run from Bishop Auckland on to Carlisle via the S&C for a two hour stop (from about 12:40) then a circular route back to Carnforth and return. Traction TBC, the following are all stops:

Bishop Auckland 07:00, Shildon 07:15, Newton Aycliffe 07:30, Darlington 07:45

Darlington 20:50, Newton Aycliffe 21:05, Shildon 21:20, Bishop Auckland 21:35

West Coast Railway's *Scarborough Spa Express* will start from York to Normanton, Wakefield and Castleford, back to York thence to Scarborough and return on Tuesdays, Wednesdays and Thursdays from 16 July to 29 August plus plus Bank Holiday Monday 26 August. Traction will vary.

York 10:14 and 12:43, Scarborough arrival 14:11, departure 16:55, York 18:18 and 20:40

Friday 19 July. Locomotive Services' *Tyne-Tees Streak* will run from Bristol to Newcastle and return with A4 4464 in charge north of York.

York arrival 11:30, Newcastle arrival 13:00, departure 17:00, York 18:30

The Railway Touring Company's *Waverley* will start from York stopping at Leeds, Shipley, Keighley and Skipton on its way to run the length of the Settle-Carlisle line before returning on Sundays from 21 July to 25 August. LMS locomotives Class 5 44932, Royal Scot 46115 *Scots Guardsman* and Jubilee 45699 *Galatea* will share duties. York departure 09:15, return 20:30

Wednesday 24 July. Compass Tours' *Pennine and North Eastern Explorer* will run from Milton Keynes to Durham and return double headed by DRS Class 37s. Timings from Milton Keynes to Stoke are listed but the following seem to be a best guess.

York 13:00, Durham arrival 14:15, departure 15:00 (very approximately), York 18:30

The Railway Touring Company's *Scarborough Flyer* will run from Crewe to Scarborough and return on Fridays from 26 July to 13 September. 46233 and 70014 will share duties.

York 12:00, Scarborough arrival 13:05, departure 16:55, York 18:00

Friday 27 July. Locomotive Services' *Capital Streak* will run from King's Cross to York and return with A4 4464 in charge of the return leg only. York arrival 11:30, departure 16:30

Saturday 10 August. Steam Dreams' *Cathedrals Express* will run from King's Cross to Newcastle and return behind 60163. York 13:00, Newcastle arrival 14:15, departure 16:45, York 18:00

Saturday 10 August. Compass Tours' *Forth and Tay Bridges Scotsman* will run from Saltburn to Dundee via the Durham Coast line and return. Traction TBC, the following are all stops as are Redcar Central, Thornaby, Billingham and Hartlepool.

Saltburn 08:05, Middlesbrough 08:35, Stockton 08:55, Sunderland 09:50, Newcastle 10:15
Newcastle 20:35, Sunderland 21:00, Stockton 21:55, Middlesbrough 22:15, Saltburn 22:45

Saturday 17 August. Compass Tours' *Edinburgh Festival Express* will run from Crewe to Edinburgh via the Durham Coast line and return double-headed by DRS Class 37s. The following are all stops as are Eaglescliffe, Billingham, Hartlepool and Seaham.

York 07:30, Northallerton 08:00, Stockton 08:25, Sunderland 09:30, Newcastle 09:55
Newcastle 18:45, Sunderland 19:10, Stockton 20:05, Northallerton 20:30, York 21:00

Wednesday 21 August. Compass Tours' *Edinburgh Festival Moorlander* will run from Darlington to Edinburgh via York and the Settle-Carlisle Line and return via the ECML. Traction TBC, the following are all stops- no other timings in our area are listed.

Darlington 07:45, Northallerton 08:00, Thirsk 08:10, York 08:30
Darlington 20:55, Northallerton 21:10, Thirsk 21:10, York 21:40

Monday 26 August. UK Railtours' *Harrogate and The Pirates of Penzance* will run from Finsbury Park to Harrogate (for a Gilbert and Sullivan matinee in case you were wondering) via York and stopping at Knaresborough. Just don't ask me when. Traction TBC.

Wednesday 11 September. UK Railtours' *North Yorkshire Moors and Heartbeat* will run from Finsbury Park to Scarborough and return. No timings or traction details.

Saturday 21 September. Compass Tours' *Cumbrian Lakelander* will run from Scarborough to Castlisle via York and the Cumbrian Coast route and return via the Settle-Carlisle. Traction TBC, the following are all stops.

Scarborough 07:15, Seamer 07:25, Malton 07:45, York 08:10
York 21:35, Malton 22:00, Seamer 22:20, Scarborough 22:30

Saturday 28 September. Steam Dreams' *Cathedrals Express* will run from Southend Central to York and return behind 4464. York 13:45, departure 17:00

Friends Meetings for 2013

Meetings are at the Museum usually taking place in the Conference Room on the first Thursday of the month. The times vary taking advantage of the long evenings in Summer with Winter meetings in the afternoons when the Museum is open allowing it to save considerably on lighting, overtime, etc. and attendees to travel in daylight.

All the dates listed are Thursdays but note that there are *two* exceptions to the usual first Thursdays schedule in the remainder of 2013. The second September talk near the anniversary of the S&DR is reintroduced on the 26th which, in turn, pushes the October meeting back avoiding meetings on consecutive weeks.

This list is offered in good faith but misprints can occur and plans can change. The Events page of the Friends web-site (www.friendsofdrcm.org) is kept as up-to-date as possible. Non-members are always welcome to meetings but we do ask for a donation.

4 July, 7:15 **Steam in and Around Darlington**
Chris Nettleton

5 September, 7:15 **The Advanced Passenger Train from a Different Slant**
Kit Spackman

26 September, 1:45 **The Role of Railroads in America's Civil War.**
Ray State

10 October, 1:45 **George and Robert Stephenson.**
Geoff Hughes

7 November, 1:45 **The Origins of the North Eastern Railway**
Charles McNab

5 December, 1:45 **Christmas Get-Together**

Museum Programme

See the Museum's own programme or website (www.head-of-steam.co.uk) for details and updates. For details of the Museum's educational workshops for schools contact the Museum's Access and Learning Officer Sarah Gouldsbrough (01325 734128 sarah.gouldsbrough@darlington.gov.uk) or, again, see the Museum website or programme for information.

Exhibitions

Cleveland Bridge Company in Photographs: Tuesday 7 May to Sunday 9 June. Photographs from the Cleveland Bridge Collection to celebrate the Festival of the North East. The Darlington based Cleveland Bridge and Engineering Company was established in 1877. The display will document projects including Middlesbrough's Transporter Bridge.

Darlington's Forgotten Branch Lines. June. A display curated by NERA with photographs from NERA's collections.

The British Wildlife Photography Awards Exhibition. 7 June to 1 August. Winning entries from 2012 celebrating British Wildlife the country's leading nature photographers.

Details not yet available. www.bwpawards.org.

Saving a Century. Tuesday 2 to Wednesday 31 July. Curated by architectural historian, Gavin Stamp with archive photographs and material from the Victorian Society's fifty years changing public attitudes towards the best of nineteenth century architecture.

The Art of Steam. Saturday 10 August to Sunday 6 October. An exhibition by the renowned artist David Noble, a member of the Guild of Railway Artists.

North Eastern Signal Boxes. September. A display curated by NERA with photographs from NERA's collections.

Track Across Time. Monday 14 October to Monday 31 March. A 'Cluster' exhibition by Durham based artists and sculptors.

Events and Activities

Where prices are not mentioned entry will be covered by the Museum's usual charges. Year pass holders or Friends of DRCM members are free unless otherwise noted.

Festival of the North East- Darlington Folk Club. June 2013. Details not yet available.

A Grand Day Out. 21 July (£1 entry throughout the Museum and Gardens- family members free). Come along to the museums Grand Day Out, entertainment includes flea circus, curiosity shop, coconut shy, operatic society Victorian arts and crafts, Victorian bicycles, Punch and Judy, swingy boats.

Bookstart Bear Fun Day. Wednesday 31 July 2013, 12.30-3.30pm. Join Bookstart Bear for an afternoon of all things teddy bear! Stories, face-painting, crafts - why not bring your bear to join in the fun?

Heritage Open Days & Darlington Model Railway Club weekend. 14 and 15 September (free). Enjoy free access to the Museum as we participate in the national Heritage Open Days including guided tours by the Friends. Plus, To celebrate their long connection with The Museum, Darlington Model Railway Club will exhibit their working layouts and open their club rooms for tours. There will also be modelling demonstrations and traders.

Scooby Doo & Little BOO!!!! Halloween Fun Day. 27 October. Come along to our specially decorated museum and meet the canine crime-solver!!

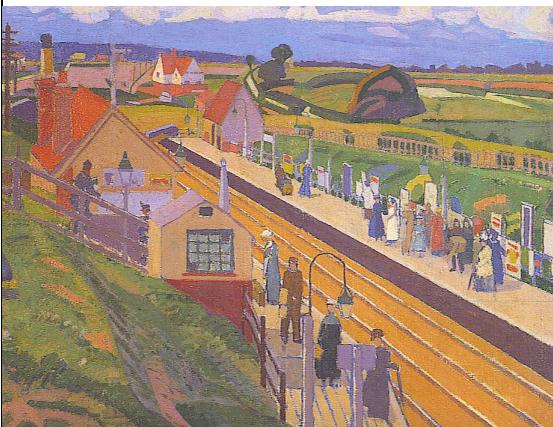
Santa at the Station. Sunday 8, Weekend 14 and 15 and Saturday 21 December. Meet Santa in our magical grotto and receive a Christmas present, entertainment includes mini train ride, arts and crafts. The Museum's standard entrance charges apply but book ahead if you... if your children want to meet Santa.



NYMR stalwart LNER Class A4 60007 climbs towards Goathland as Autumn starts to colour the trees. *Photo' Ian McInnes (page 15).*



Three record breakers. *Mallard*, *Deltic* and the experimental Advanced Passenger Train (which will be the subject of a future talk) at Locomotion in 2010. *Photo' Tim Ruffle.*



Frederick Spencer Gore's 1912 painting in oils of the GNR's Letchworth Garden City Station in Hertfordshire. It was closed in favour of a new station in 1913 but the LNER used the painting to illustrate a poster in the 30s. The original was bought for the National Collection in 1984 with money raised by the Friends of the NRM- over £33,000 including an Art Fund grant of £5,000. *(page 3)*