

Friends of Darlington Railway Centre and Museum

# Newsletter

July – September 2010

Free to members



The Museum annual report

Chris Lloyd on Edward Pease

A Life on North Eastern Railways

# **BOILERPLATE:** Intro', index and other stuff you probably won't read

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## Introduction

This is the first issue of the newsletter since I inherited the editorship from Vic Branfoot. I'm still not quite sure how I got talked into it but I have to concede that there is a good deal of overlap between this and the web-site which I set up at the end of last year.

I hope I can maintain the standard you are used to. On the "if it ain't broke don't fix it" principle the content remains a mix of articles, reports of the evening talks, announcements, etc. If you have any notes, criticisms (preferably tactful) or praise (preferably unstinting) contact details are below.

Timothy Ruffle, Editor.

## Contact

If you have material for the newsletter, be it an article, photo' or just 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 end up here and on the website too but such things are best sent to the Committee.) I much prefer to be contacted by e-mail, especially if it saves me some typing, but, if you lack Internet access, you can reach me by post:

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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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*Museum Manager David Tetlow gave his summary of the Museum's aims and achievements somewhat later than intended. Usually presented at the January meeting those plans were doubly foiled when the Museum was closed by snow and David himself was snowed in at home. Report by Vic Branfoot.*

If any good came from the appalling January weather which caused so much misery and inconvenience- including the postponement of David's intended Annual Review on 7 January- it was that the rearranged presentation took place on such a lovely mid-summer's evening.

After a few words of introduction in the Meeting Room- which was neatly set out with tables and chairs, cabaret style- David led the group outside in order to discuss, amongst other things, the hoped-for new gates to the site, the main entrance to the Museum building, the lighting and the roof of the Museum buildings. This could hardly have taken place on a dark and cold January evening!

Then it was back indoors for a tour of the Museum. But it wasn't a tour in a conventional 'tourist' manner, but it was to show and explain to the group recent, forthcoming and hoped-for developments. Of particular interest, perhaps, were the Edward Pease Memorial Room and, in the former station waiting room, the temporary tattoo display. David explained that it is the museum policy to have three or four temporary non-railway displays per year in the waiting room in an attempt to attract non-railway orientated visitors.

The group then returned to the Meeting Room for David to display a short series of digital slides which, amongst other things, (i) showed several recent distinguished visitors to the Museum, (ii) outlined recent and future events at the Museum and (iii) provided interesting numerical data involving such as numbers of visitors and financial income and outgoings.

David then discussed such issues as live steam events, opening times (which will be six days per week during the summer and five days per week during the winter), the danger of possible future cuts and the museum collection.

The final part of the evening comprised a visit to the café where a splendid and substantial buffet awaited us. Whilst enjoying the fare on offer, members of the group entered into a most interesting, perceptive and rigorous question and answer session which, if I may say so, brought great credit to members of the group and to David himself.

Whilst, on the face of it, it was disappointing that only fourteen members should have attended this event, it may also be said that it was an ideal size for the nature and content of the evening. And, what's more, 'the fourteen' had all the more food to themselves! To be more serious, however, it has to be said that those present experienced a most fascinating and enlightening

evening. Huge thanks must go to David for planning a full, in-depth and varied evening together with thanks to the Museum for providing such a splendid supper. And the weather was terrific!

## The Edward Pease Room



Mayor of Darlington Councillor Jim Ruck and Captain Nigel Pease at the opening of the new Edward Pease Memorial Room. At this modest occasion the drinking of healths and toasts, unmeaning speeches and maddening huzzas were kept to a minimum. The Captain's great-great-grandfather might have approved.

*Photo': Furnished by  
Darlington Railway Museum.*

The new permanent exhibition at Darlington Railway Museum was formally opened on the evening of April the 7<sup>th</sup> 2010 by Edward Pease's great-great-grandson Captain Nigel Pease with his family and the Mayor of Darlington Councillor Jim Ruck amongst those attending.

Museum Manager David Tetlow began by describing how the opportunity to create the room had sprung from a minor crisis- a leaking skylight was threatening to damage some of Pease's furniture where it was on display. Rather than shove everything into storage in a spare room it became the basis of an exhibition in that room. David then handed over to *The Northern Echo's* Chris Lloyd who gave a brief but entertaining and informative talk about Edward Pease (see the feature starting opposite). It included facts, figures, anecdotes and quotations and left all present in no doubt as to his importance in the history and development of railways in general and the Stockton and Darlington Railway in particular.

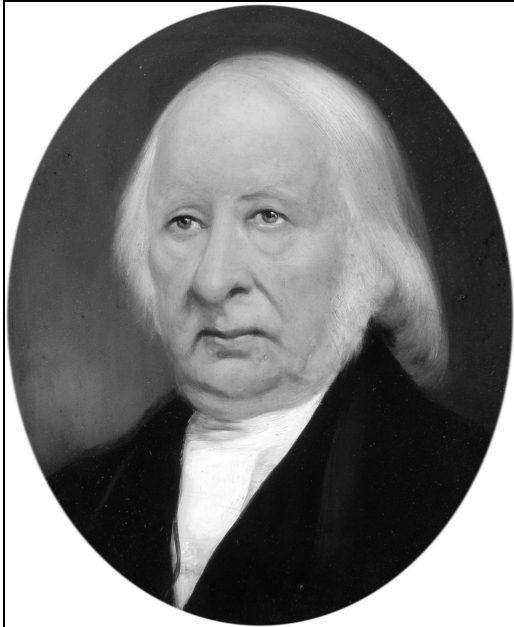
David thanked those organizations which had helped: the North East Railway Association who paid for a plaque, the National Railway Museum who loaned some of the objects and the Friends of Darlington Railway Museum who bought and donated a Harrison & Sons Silver Pocket watch (enamel face with detailed painting of Loco No 1 in centre) dated 1893. David then invited Captain Pease to cut the ribbon before all present explored the room and, in most cases, the rest of the museum.

Tim Ruffle

# FEATURE:

## Edward Pease: The first Friend of Darlington's Railways

*Chris Lloyd is the Deputy Editor and Political Editor of The Northern Echo and writes Wednesday's Echo Memories column. His talk at the opening of the Edward Pease room formed the basis of his column of 14 April. It is reproduced with assistance from and thanks to Chris and The Northern Echo.*



In 1817, Edward Pease was considering retiring. He was 50 and could look back on a life prosperously, if arduously, lived. The third of five children he'd been born in 1767 in The Grove in Bull Wynd (near the Dolphin Centre) into both the wool trade and the Quaker sect. Educated locally until he was 11 he boarded for three years at a Quaker school in Leeds. He returned "well-educated in English with a fair knowledge of Latin, proficiency in French and able to draw and paint a little", to start as an apprentice in his father's mills.

The Pease family were big players in provincial Darlington, having overseen the first phase of the Industrial Revolution in the town.

Previously, wool sorting, combing, washing, spinning, weaving and dyeing had been performed by individuals in their own homes. The Peases had industrialised these cottage industries, bringing them all together under the roof of mills full of the latest technology- the Low Mill where TK Maxx is today and the Bishop's Mill next to St. Cuthbert's Church on the site of the Town Hall.

Yet, because no one had invented the railway, there was plenty of old-fashioned horsing about still to be done. Young Edward rode as far south as Lincolnshire, as far west as Carlisle and Penrith, and as far north as Edinburgh and Glasgow, buying fleeces to be spun in his mill and sold on lucratively to cloth makers.

It was probably the Napoleonic Wars that made him- ironic, really, given that as a Quaker he was a pacifist. In 1853 he refused to accept one of his companies' profits made by building engines for the King of Sardinia's warships. At this stage of his life, though, he was a businessman first and foremost and his mills provided the yarn out of which 15 years of military uniforms were made to fight the French.

An example of his improving fortunes was that in 1798, newly-married, he rented a substantial but plain house at the end of Northgate. Within ten years, he was able to buy it outright for £367 10s and within another ten, he was contemplating retirement in which he would devote his life to God, the anti-slavery movement and contented pootling in his gardens. They stretched

down to the River Skerne and featured Darlington's largest acacia tree plus, where Garden Street is today, his greenhouses in which he grew peaches, nectarines, cherries, apricots, plums, pears and several varieties of apple. The gardens are gone but the house remains accommodating Best Kebab 1, Cuisine Marmaris, Domino's Pizza and the Army and Navy Careers office.

Despite his contemplation, he didn't retire. He was probably jolted back into harsh reality on February 2, 1817, when his Bishop's Mill in Leadgate burned down, throwing all hands out of work. Edward wrote in his diary: "The first of consolations (for these are only left to flee to) is the humble, thankful acknowledgement that no life has been lost, nor any personal accident befallen anyone; to us the loss is heavy, but feelings dwell less on that than the thought of 600 persons, poor men and women, so suddenly thrown out of employment or livelihood at a time so difficult." It was indeed a blow to Darlington at a time when the population was 6,551.

Edward's insurance paid out £650 for the building and £3,000 for his lost stock but the fire sparked something more in him. He began taking an interest in a project to connect the south Durham coalfield with the sea at Stockton- something his grandfather had been involved in (in 1767- the year of Edward's birth) when the proposal was a canal. Edward's cousin, Jonathan Backhouse, was in favour of both a canal and horse-powered tramway, but Edward couldn't see the logistical sense in having to transfer from one mode of transport to another. Having won that argument he faced men of Stockton who were in favour of by-passing Darlington, but Edward thought that the town needed to be involved and, once he'd put that argument forward, realized that the project needed money if it were ever to progress.

In 1818, his family bought £6,200 worth of shares in the Stockton and Darlington Railway project, an amount only overshadowed by the Backhouse's £20,000. Twice in those early years- 1820 and March 1821, when the railway was in financial crisis, Edward dipped deep into his own bank account to bale it out with £10,000 and £7,000. Francis Mewburn, the first railway solicitor, said: "Without slightest fear of contradiction, if Mr Pease had not subscribed this amount, the railway would never have been made in Darlington." Almost by accident this most careful and prudent of Quaker businessmen had £1.6m in today's terms invested in this crackpot scheme. He realized that, to protect it, he had to take the helm.

"It was almost Edward Pease's line," said The Northern Echo in 1875 (the S&D's 50<sup>th</sup> anniversary). "He was supreme; what he could not do by influence he effected by sheer weight of votes; and hence for many a long year he was regarded as the King of the Railway, whose sovereignty extended over every department. From choosing an engineer to buying a hundredweight of nails- everything was carried to him for decision."

The most famous decision was taken on April 19, 1821, when two men turned up uninvited on his Northgate doorstep. It was 5pm so his manservant turned them away but Edward heard the commotion and came downstairs. He

invited the two men in, ushered them into his kitchen and let them speak. One of the men was Nicholas Wood, the Viewer (in charge of operations) of Killingworth Colliery. The other was George Stephenson, the Killingworth Colliery Engineer.

Perched on that kitchen table, Stephenson persuaded Edward that it should be the Stockton and Darlington *Railway*, not a tramway; the rails should be made of wrought iron, not wood or brittle cast iron; it should be powered by steam locomotives, not horses; those locomotives should have wheels, not the weird legs that Edward imagined... At least, that's how the story goes and it is a well-illustrated story: a huge mural in Darlington library showing Stephenson and Wood fiddling with their shoelaces on Bulmer's Stone prior to knocking on Edward's door. But it is just a story: there is other evidence to suggest that Edward and Stephenson were acquainted prior to this meeting and it would be a surprise if Edward, this careful, prudent Quaker, changed absolutely everything on a mere whim after one meeting.

Yet these decisions do appear to have been made at this meeting which concluded with Edward- apparently unilaterally- appointing Stephenson the line's first engineer on £300-a-year plus travelling expenses. After visiting Killingworth he burred enthusiastically: "Don't be surprised if I should tell thee, there seems no difficulty in laying a rail road from London to Edinburgh on which waggons would travel and take the mail at the rate of 20 miles an hour. When this is accomplished, steam vessels may be laid aside!" Edward became principal investor in Robert Stephenson and Company, the world's first locomotive manufacturer ostensibly headed by Stephenson's son, where the engines were being built in Forth Street, Newcastle.

It was a meeting that changed the railway. In fact that meeting at Best Kebab 1 changed Darlington, the Tees Valley, County Durham, Great Britain, the Empire, even the world.

The collaboration was also the start of a long friendship between the two men, sensible Edward steering headstrong Geordie. "He is a clever man but he must have leading straight," he wrote. "He should always be a gentleman in his dress, his clothes real and new, and of the best quality, all his personal linen clean every day, his hat and upper coat conspicuously good, without dandyism." When Stephenson wanted to straighten the course of the railway so it avoided Edward's home-town, Edward reminded him: "George, thou must think of Darlington, thou must remember it was Darlington that sent for thee." When Stephenson failed to deliver the locomotives on time, Edward angrily said: "His talent and ingenuity is great, his execution is torpid, defective and languid as to promptings."

When the Stephensons did finally deliver Locomotion No 1, on Monday, September 26, 1825, Edward was among those who boarded the Experiment coach and was pulled from Shildon to Darlington- the first time anywhere in the world that a steam loco' had pulled a passenger carriage on a public railway. A moment of history. The formal opening was the following day and the Durham County Advertiser (1st October, 1825) wrote, "The scene, on the

moving of the engine, sets description at defiance. Astonishment was not confined to the human species, for the beasts of the field and the fowls of the air seemed to view with wonder and awe the machine, which now moved onward at a rate of 10 or 12 mph with a weight of not less than 80 tons attached to it.” Edward was one of the few people in Darlington who did not bear witness to the triumph. He was at home in Northgate, grieving.

Four months earlier his eldest daughter, Mary, 23, had died of tuberculosis, while his favourite son, Isaac, 19, displayed the same symptoms. Edward wrote: “The final separation came upon us as a flood overtaking us before we were aware. I scarcely know how patiently to bear up or to sustain the possibility of a second bereavement awaiting us.” Isaac died on the morning the railway opened, and so Edward missed the crowning moment of all he had worked for since his failure to retire eight years earlier.

His next retirement was more successful. In 1827, aged 60, he stepped down “with a resolution never to enter a railway meeting again”.

In this real retirement, we have time to get to know the real Edward. He was a “plain Friend”, orthodox in speech and dress. He’d married Rachel Whitwell of Kendal in 1797, a serious Quaker who persuaded him to give up his youthful pursuits of hunting, fishing and the reading of “pernicious books of novels”. She died in 1833, following a fall when they were visiting friends in Manchester, and Edward said his “greatest earthly treasure” had been taken from him.

After her death, he became more reclusive and his diaries more morbid, agonising about what industrial riches were doing to his family. He hated the idea of Joseph standing for Parliament in 1832 because Quakers just didn’t do that sort of outward-going thing, he was haunted by the prospect of the family being bankrupted by the bursting of the railway bubble in the late 1840s and he was dismayed by the money Joseph lavished on his mansion of Southend. He lamented: “The pure simplicity of Jesus is in degree departed from.” He detested the opulent and extravagant luxury in which his youngest son Henry lived in Pierremont, “the Buckingham Palace of Darlington”, which Edward dismissed as “that showy mansion”, and deplored the antics of his grandchildren. When he heard his grand-daughters were planning to attend a Mechanics Institute tea soiree he warned them about its “unfeminine vulgarity”.

He sounds, and looks, like a great big old misery-guts- a Grumpy Old Man long before there was a wryly amusing TV series of that name. For example, he condemns Henry’s habit of launching every project with great fanfare, and what he called “the drinking of healths and toasts which is followed by unmeaning speeches and those maddening huzzas which better become the Lunatic than the man of sober sense”. I rather like him for that. If you’ve ever read a report of a late Victorian railway opening, with dense screeds of self-congratulatory speechifying, you’ll know exactly what he meant.

One of the reasons he seems such a grumpy old man is that he refused, as

a good Quaker, to have any photographs or paintings done of him until he was well into his eighties yet in his prime, he was as tall and as dominant as his son Joseph is on his statue. It is hard to find any light motifs in his character but all who knew him testified that his cheerfulness never deserted him and that they knew him fondly as Neddie Pease. Dinner was served with beer and, afterwards, he liked to get out "his heavy cut decanter of port, Lisbon, Madeira and Bucellas wines" so he wasn't a teetotaler as may be thought although you can't imagine him rolling around drunk. In the mid 1830s, he was extremely ill with jaundice his doctors having given up hope. Out of the blue, he said: "I have a fancy for some cider", and was cured within a fortnight.

Everyone who knew him greatly respected him. He died on July 31, 1858 aged 91. Mewburn wrote of his funeral: "The shops throughout the town were shut, and there was the largest concourse of people in the funeral procession and on the streets ever witnessed in Darlington. It was a proud testimony to the man who, and whose sons, had made south Durham."

In an 1875 book about the S&D author J.S. Jeans ponders at enormous length how history would come to regard Edward: "Edward Pease is the Father of the Railway System. What more honoured or honourable title could a man possess? The man who earned for himself this distinguished appellation will live long in story if not in song during many generations- long, very long, after the heroic and dashing achievements of those who have, in their day, filled the larger space in the world's eye shall have been completely obliterated by the hand of time. The triumphs of the Senate and the Forum may be relegated to the limbo of oblivion, even the greatest names of art and literature may ultimately fade from the memory of Man but no lapse of time and no achievements of merit can take from Edward Pease the pre-eminent position of The Father of the Railways.

"Down to the latest posterity his name may be expected to flourish in immortal youth. When the Railway System has encircled the Earth as a with girdle, when men shall learn the art of war no more and the era of universal peace has been ushered in, when the heroes of Trafalgar and Waterloo shall be regarded as the professors of a wicked and barbarous propaganda and when, perchance, the sun has gone down on the industrial supremacy of England the children of Britain will still turn to their parents and crave for the story of The Father of the Railways."

The people of Darlington were well aware that they had never paid him proper tribute. For his 90th birthday a life-size bronze statue of him was planned, but he modestly declined, saying: "Thou hast done me some injustice in doing me more than justice." By contrast, Stephenson- the man Edward found, financed and steered to fruition- has three statues and a worldwide reputation. Darlington may not have a statue to Edward Pease but, at least, now it has a room that begins to tell the story of The Father of the Railways.

# FEATURE:

## Life on the Railways in the North-Eastern Region: 1939–1984

*Derek Reeves continues his professional autobiography with Newcastle and Middlesbrough Divisions having merged at the beginning of 1967 under Allan Clothier then DME in Newcastle, “a brilliant engineer and a pleasure to work for”. This segment covers a merger, a move to Newcastle, some slacking on the job, and a top breakdown team.*

I was lucky because I was appointed Traction Maintenance Engineer, which was Number Two in the organisation and I therefore deputised for the DME when he was not available. I had an Assistant Maintenance Engineer, who was Jack Wandless, and he had three Technical Inspectors, one of whom was Peter Dawson, an excellent fault finder on locos, and two young graduates who were sent to us as part of their practical training. I was also responsible for Mr Vic Matterface who was the electrical engineer for the Tyne Electrics, including the depot at Gosforth.

The merger was completed at the end of 1966, and the new and enlarged Division operated from the beginning of 1967. I had my own office on the third floor in Irving House with a personal outside phone as well as one through a secretary in the general office who I shared with John Bellwood, the Traction Running Engineer. In those days, all letters had to be dictated to the secretary, who would type it up ready to be signed. John Bellwood, Jack Wandless and I were on call for one week each on a three-weekly cycle, and we all had our phone rental and railway calls paid for on expenses. No mobile phones or laptops in those days. The DME was not on call, but Control informed him of all incidents, and for the big ones, he always appeared, unless he was on holiday.

The Division had two Breakdown Trains, both with full facilities for providing full meals for the crews on long jobs, which might last 12 or more hours. One was based at Gateshead Shed with a 75-ton steam crane and full hydraulic jacking equipment. The other was the Darlington 45-ton crane, also with full hydraulic jacking equipment, which was being transferred to Thornaby due to the imminent closure of Darlington Shed due to the demise of steam. The Sheds and Depots in the division that we controlled were, from north to south: Blyth Loco and Wagon Repair Siding; Gosforth Car Sheds; Heaton Carriage Sidings; Gateshead Loco Shed; Tyne Yard Fuelling Point and Wagon Repair Siding; Tyne Dock Shed; Sunderland Shed; Hartlepool Shed; Simonside Wagon repair Depot; Darlington Shed and Diesel Railcar Depot; West Auckland Shed; Thornaby Shed.

By the end of 1968, with the demise of steam, Tyne Dock, Sunderland, West Hartlepool, West Auckland and Darlington Sheds were all closed, with the main Diesel loco' work centred on the Gateshead and Thornaby Depots, and the railcars on Gosforth and Darlington Sheds. The work allocation in the railcar depot had been revised, so fitters, electricians and mates did all the

work, doing away with any separation of traction and carriage and wagon work. This meant that my work involved both, and that the carriage and wagon engineer, really became only the wagon engineer.

Most mornings we met in Mr. Clothier's office at 09:00, spent half-an-hour going through the Control Log and other correspondence, so we all knew what was going on, and by 09:30 departed to our offices for the day's work. Jack Wandless and his lads concentrated on loco and DMU performance, stopped list and casualties etc., which kept them busy all day. We had six Deltics allocated and if more than one was stopped, HQ usually rang me to see what we were doing about it. This is where the secretary was very useful at times, because she could always say I was out and put them through to Jack!

I made a point of visiting both Gateshead and Thornaby at least once every week dragging the shed Master under or through locos to see work which was in progress, as I learned early on that managers should not spend all their time tucked away in an office and that they should be out and about with their eyes seeing all that is going on.

Gosforth Car Shed was a mixture of Diesel railcars and electrical multiple units. The electrical engineer, Mr. Matterface, was trained on trams before he came to the railway, and he also looked after the substations that supplied the trains. He was a delightful man, but did not know how to negotiate with the railways unions. Several times I had to have meetings with the union organisers to sort out some of his troubles with them.

One Monday morning at the meeting with Mr. Clothier, he gave me a letter from the Civil Engineer and said: "There's a nice little job for you sorting that out". On reading the letter, it was apparent that the Gateshead 75-ton crane had been hired by the civil engineer at Bardon Mill on the Newcastle-Carlisle line, and the crane at the site had not been available when required after the lunch break because the crew were not on the site and it was a good two hours before they returned, and this delayed the job, so it outran the possession. I had had some experience with the Gateshead Crew and had already formed an opinion that they were a poor lot compared to our Thornaby Crew.

I sent for the Gateshead Breakdown Foreman, Mr. Blain, to come to my office at once, and when he arrived I made it quite clear that I wanted to know the truth about what had happened and not a lot of bluff. He said that at 12:00 it was agreed his crew and the civil engineer's men would have an hour's break for lunch. His men had taken the crane train engine and gone down the line to Bardon Mill station and then into the pub there for lunch. He could not tell me why they would not eat in the tool riding van where there was a cook to supply food on long jobs. He had then taken the engine off the spoil train on the other line, and gone down the line to Bardon Mill to find his men. He was lucky, because near Bardon Mill the civil engineers had removed a rail from the track and they managed to stop before they got to this point, otherwise there would have been a derailment. I made some enquiries

about this man and found out that he had been Chief Mechanical Foreman at Gateshead, and that he was brilliant technically, but was unable to control staff. He had been moved to the breakdown job where it was felt he could do less harm, and he only had a year to go before he retired at 65. When I reported back to Mr. Clothier with the sequence of events, I said we could give the whole crew five days off work because they were all drinking on duty. He said that we couldn't do that but that we would take Blain off the job kindly using the fact that his eyesight was not good enough for on track work (he was already not allowed to go on track unaccompanied) and that I should see each member of the crew individually and lay down the law to them that the job had to be done properly.

The first thing I had to do was find another Breakdown Train Supervisor. The most obvious choice was the Relief Breakdown Supervisor at Gateshead, who was one of the Shift Foremen. He was a much younger man and was considered to be a good Shift Foreman. It took me a whole day to persuade him to take the job, even though it was one grade higher than his present job.

Having got that settled, I took the crane off call for one day and arranged for the whole crew to be at the shed at 09:00. The first man I had in was the Senior Fitter who I had seen 'with the whistle', i.e. directing the crane driver. His explanation of the events showed an obvious complete lack of control by the Foreman and that this had developed over the years since Blain had been in charge. I enquired why the men did not eat the meal in the riding van, and was told the quality was exceedingly poor. He agreed that they should not have gone to the pub and that drinking on duty was a very serious matter. I told him that they all should be disciplined for it, but that this time no action would be taken, but if it happened again, a very serious view would be taken. I told him that Gateshead breakdown train had a very bad reputation, and with the crew's help, I was going to make the train the best in the region.

The next man I had in was the cook, and he was asked why the meals were regarded so badly by the men when the food expenses showed that good materials were being purchased. He hummed and haa'ed, and it was apparent that the real reason was that the men wanted to go to the pub for drink. This had happened for some time and this was why he had stopped preparing proper meals. He was told to start preparing proper meals in the future as the crew would be eating in the van.

All the rest of the crew were seen one by one, and the same picture emerged from each one and they were all told the same as the senior fitter.

I wrote a four-page job specification for the new Foreman and spent a day going through it with him, and then said I will leave you to get on with making Gateshead the best crew in the region. After one or two surprise visits when they were not expecting me, it was very apparent that the crew had taken notice of what I had said, because their work had become much better. I reckoned after two years that they had turned into a top-notch breakdown crew, equal to or better than the Thornaby lads.

The first two years after the merger, 1967 and 1968, were years in which the Railway changed quite a bit. With the demise of steam, all our steam sheds closed, most of the managers were in their sixties and retired, and both Gateshead and Thornaby had to be altered to deal with Diesels which required quite a different series of inspections from steam engines. This also applied to Darlington Diesel Railcar Depot and Gosforth Car Sheds.

After the Beeching closures, there was a surfeit of Diesel railcars, and the substation equipment feeding the Tyneside Electrics was outdated and due for renewal. It was decided at HQ that Tyneside Electrics would be replaced by the surplus Diesel railcars based at Gosforth Car Sheds. This would enable all the electric substations and the EMUs to be scrapped. This happened in 1969, with the result that Gosforth became an all-Diesel shed and Mr Matterface's job disappeared and he retired.

It was interesting to find that the Diesels required an extra ten minutes in the timetable to get around the Manor-Coast-Manors Circle due to their slower acceleration from each stop than the EMUs.

An example of how good the Gateshead Breakdown Crew had become was when Control rang on a Friday afternoon and said that we had a big problem on the Newcastle-Carlisle line at Corbridge. A freight train with 16-ton loaded iron ore wagons had derailed and all 24 wagons were off the track and spread about. This route was to be used to divert Newcastle-Edinburgh trains on Sunday while engineering work at Alnmouth was taking place. They had called out the Gateshead crane which would be on site in about two hours.

I took the office car to the site and estimated that if we had the Carlisle Crane at the other end, we could clear the site by Saturday lunchtime and rang from the signal box to control to order the Carlisle crane as soon as possible.

By about 16:00, the Gateshead crane had arrived, and was setting up to do the first wagon. Around 17:00, the Carlisle crane arrived, and I told the supervisor what I wanted doing, and went back to the Gateshead end. Around 19:00, I went to see how Carlisle was doing and found that they had done one wagon and the whole crew were sitting in their van. On enquiring why, I was told that they were waiting for their relief crew because they only worked eight-hour shifts.

I could not believe what I was hearing, but they insisted it was their practice. About an hour later, a Diesel railcar arrived with the new crew and took the old one away. Our lads at the other end worked through the night with a break every four hours of one hour for a meal and rest, with the result that we cleared 20 of the wagons, and lifted several panels of rails for the civil engineers, while Carlisle managed four! The site was cleared by lunchtime Saturday, and the civil engineers repaired the track sufficiently for the diverted trains to run over at 5mph on the Sunday. I vowed never to ask for the Carlisle crane again!

<b>Notice spotted at Locomotion:</b> Please do not touch the interactive display.
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*Brian Bell started as an engine-cleaner at the L.N.E.R's Immingham Sheds when he was 15 working up to fireman over the next ten years mainly firing freight trains. His career was interrupted by National Service in the Royal Engineers (on Longmoor Military Railway). In an era when firemen could wait 30 years for promotion a lack of vacancies, a surfeit of applicants and the eventual demise of steam conspired to prevent him ever becoming a driver. Report by Don Whitfield and Tim Ruffle*

Mr. Bell began his talk by expressing regret that he had never had a camera to record his own experience so most of his illustrations were drawn from books and magazines but his knowledge and enthusiasm for his subject more than made up for any perceived lack.

Six cleaners were allocated to an engine: two on the boiler; two on the wheels and motion and two on the tender. Conditions and working practices would appal today's Health and Safety inspectors- especially when cleaning boilers. Nominally a team cleaned four loco's during a shift.

The layout of Immingham Shed was illustrated with the note that its inclusion of a triangle meant there was no need for a turntable. Immingham trains were mainly iron ore to the blast furnaces at Scunthorpe. Several trains per day ran from Grimsby loaded with fish caught by U.K. trawlers and Grimsby sidings and harbours were also illustrated as they were in the 1950's. After working at Immingham he moved to Peterborough's New England shed, the largest in the L.N.E.R.

It took eight hours and up to a ton of coal to raise steam in larger engines before they were ready for duty. The location of the coal in the firebox was explained to obtain the best steam raising and sectional diagrams and photographs of firebox, boiler and valve gear were used to illustrate the proper firing of a locomotive and the route of the steam from its generation through the pistons to its exhausting to the atmosphere. The exhaust beats of two, three and four cylinder engines were imitated to illustrate whether and why four or six "chuffs" occurred during one revolution of the driving wheels (see box-out).

Crew opinions of cab layouts and controls, crew comfort and steaming abilities were related in humorous detail. Steaming characteristics varied even between individual loco's but classes A1, A4, V2 and Riddle's heavy freight Austerities and B.R. Standards were considered good steamers whilst Thompson designs at least had large comfortable cabs. An indifferently steaming loco' could be forgiven on freight trains, which never ran to a schedule and were often held in loops giving way to faster trains, where they could rebuild pressure, but passenger trains were a different matter. Long fast runs keeping to a timetable could leave some loco's out of breath although a little steam could be conserved by shutting off the train heating.

Passenger opinions of this measure were not reported.

In a free-wheeling steam locomotive the tender bumped against the loco' dislodging coal and sending it rolling forwards into the cab. Free-wheeling could go on for miles on long down grades at the end of which the footplate could be ankle deep in coal brickettes, shaped like large eggs, rolling about the tender and cab floors. On other occasions a hard-worked loco' could have no coal left in the front of the tender. Although some coal handling tools had 10ft handles this would still leave the fireman running back and forth between the firebox and the rear of the coal space. If a train paused at a shed in this condition the opportunity could be taken to borrow some strong backs to help shift the remaining coal forwards making it more accessible.

Mr. Bell's talk included several entertaining anecdotes including one about a turn firing a Pacific from King's Cross. As steam pressure built up he became concerned that she might blow-off in the station (a cardinal sin) and kept injecting water little by little until, by departure, the boiler was almost full. When the loco' moved forward all the water sloshed to the back of the boiler hitting the safety valves which let go in spectacular fashion blasting a fountain of steam and boiling water from the top of the engine as they left the station and negotiated the approach tunnel which they cleaned from end to end.

At the conclusion of this epic blowing-off they faced the nine miles climb away from King's Cross with an exhausted loco- steam pressure had crashed almost to the point where they could not keep the brakes off and the boiler's water level was perilously low. Sadly washing the tunnel had done little for the cleanliness of the loco', its train, Mr. Bell or his driver who expressed his dissatisfaction unambiguously and at considerable length.

### Complications and conjugations

Throughout the long reign of steam several forms of valve gear varying in complexity were devised to control the flow of steam through the cylinders. The valve gear has to work in time with a cylinder so, in most cases, each cylinder has its own gear but four cylinder loco's have pairs of cylinders working in sync' so two sets of valve gear can each feed two cylinders.

In a three cylinder loco' each cylinder's cycle is 120° out of phase with the other two hence its six exhaust beats per revolution and the middle cylinder's need for its own valve gear. Sir Nigel Gresley attempted to simplify matters with his conjugated valve gear for three cylinder loco's, including his Pacifics and the V2, but Peppercorn's post-war A1 Pacific (recently brought back from extinction by the A1 Steam Trust in the shape of *Tornado*) has a complete set of Walschaert gear for its third cylinder.

Three and four cylinder loco's have their extra cylinder(s) and associated workings between the frames making them difficult to reach for maintenance adding to the labour intensive nature of steam operation which led to its demise. For this reason all BR standard class loco's were two outside cylinder designs.

# TALK:

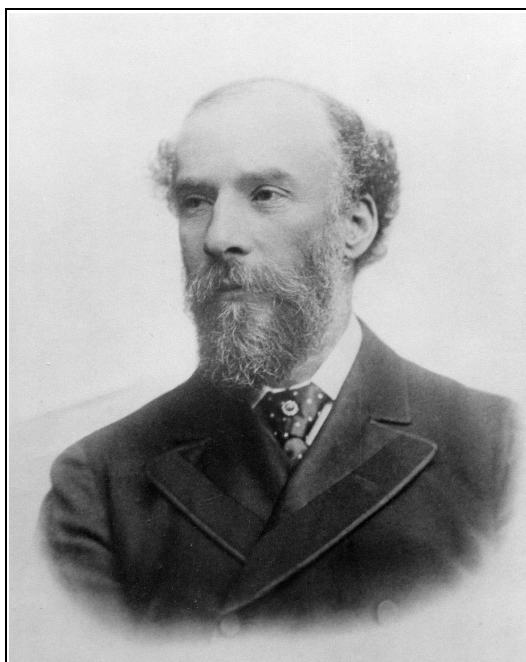
## Lambton Engine Works, 1835-2009

3 June 2010

*Colin E. Mountford M.A., assisted by Malcolm Young, illustrated this talk "The History of Lambton Engine Works and its Loco Sheds, Philadelphia, 1835-2009" to give it its full title, copiously with photo's, plans and maps. This much abridged report of a comprehensive and well attended talk is by Vic Branfoot.*

The earliest written reference which Colin could find to what became the Lambton Engine Works was in an 1835 document originating from Co. Durham mining engineer John Buddle. Prior to 1836 all Lambton and Londonderry railways were rope-hauled by way of gravity and stationary engines and it was only after this date that locomotive servicing and repairs became necessary. By 1877 the Works was large enough to build its first locomotive.

Prior to 1896, the Works were owned by successive Earls of Durham, the family name of whom, of course, was Lambton. It must be understood that the Lambton Works existed not only to service and build locomotives: it was required also to maintain and service colliery equipment and, indeed, some of the coal owners' ships and shipping machinery. The site was indeed a major and



The First Lord Joicey (1846-1936). Photo: courtesy of the 5th Lord Joicey



This is the earliest known photograph of Number 9, the first locomotive built at the Works in 1877, almost certainly alongside the Philadelphia sheds in the 1890s.

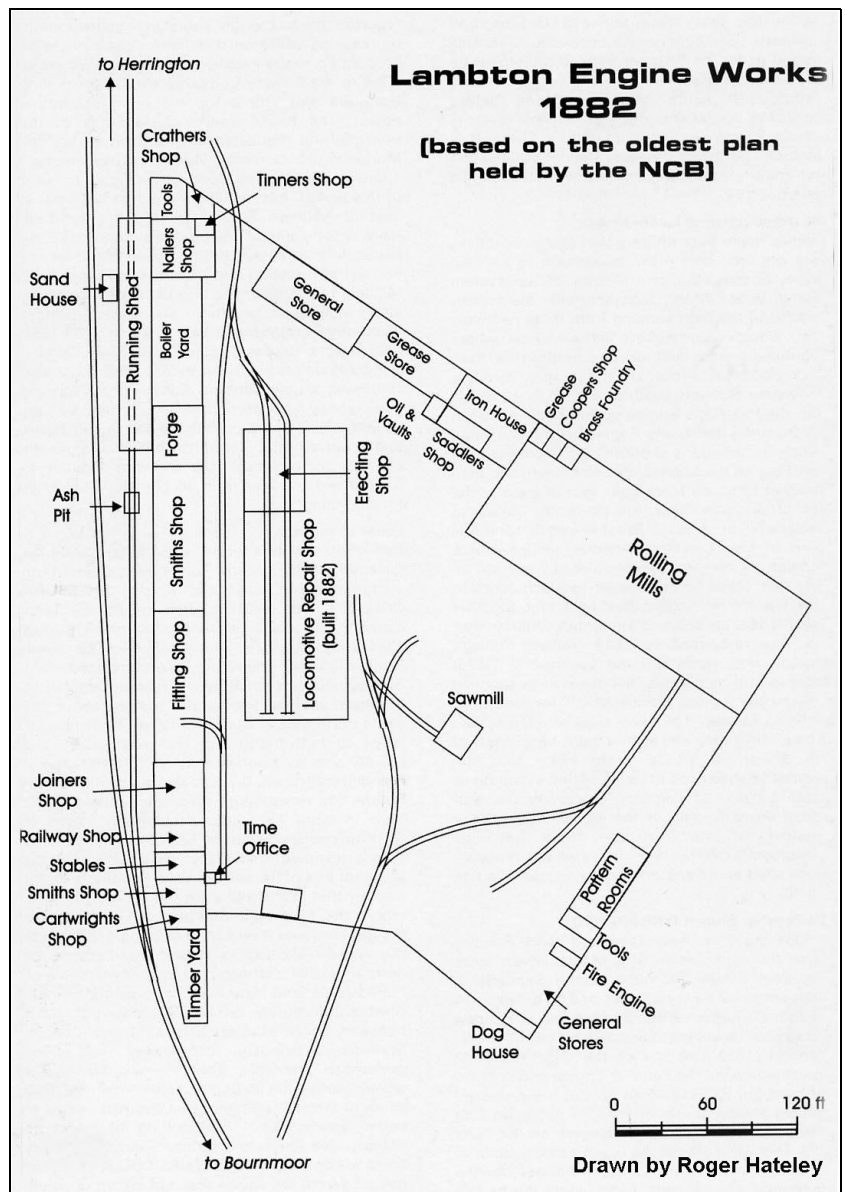
*Photo': The Ken Hoole Study Centre.*

wide-ranging undertaking as evinced, for example, by foundries and rolling mills being included on site.

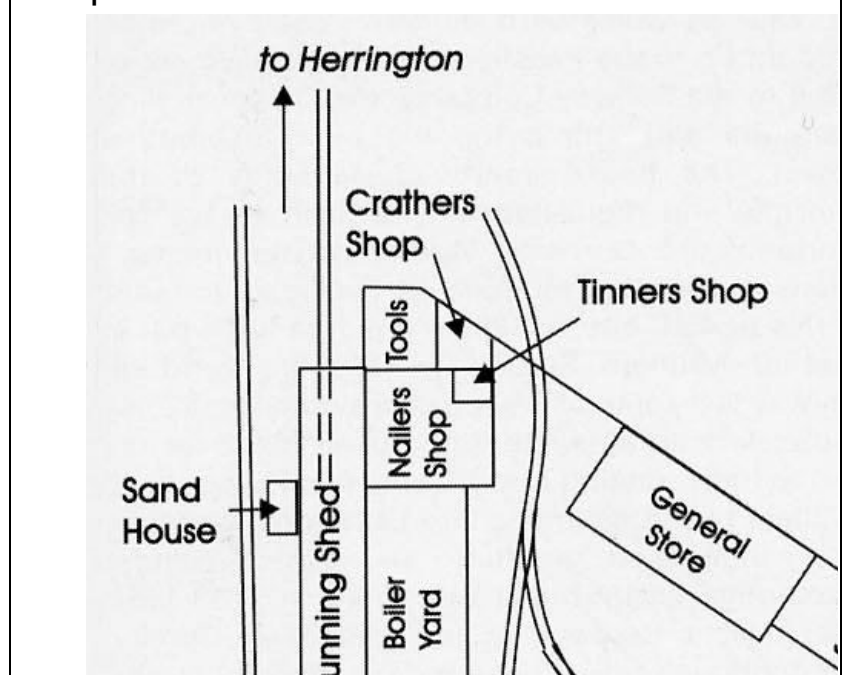
An interesting point of discussion occurred when Colin pointed out the Crather's Shop on one of the diagrams of the site. Nobody in the audience was able to say what a 'crather' did and so Colin had to explain that a crather was a craftsman brass machinist. Meanwhile, the second tender engine to be built at the Works emerged in 1890 and the third and final example was built in 1894.

From 1 July 1896 until August 1911, the site was owned by The Lambton Collieries Ltd, the then Earl having been forced to sell to James Joicey, later the First Lord Joicey, for £800,000 when he had been seeking £1m. The Chief Engineer installed by the new owners in 1897 was a certain Samuel Tulip and he remained in post until 1935 whereupon he was succeeded by his son Winston who held the position until 1961. Father and son therefore 'ruled the roost' for some 64 years!

In 1904, Samuel Tulip introduced 0-6-2 tank engines to work alongside the existing tender engines. From then on, he bought only new and second hand tank engines although, of course, the existing tender engines did not disappear.



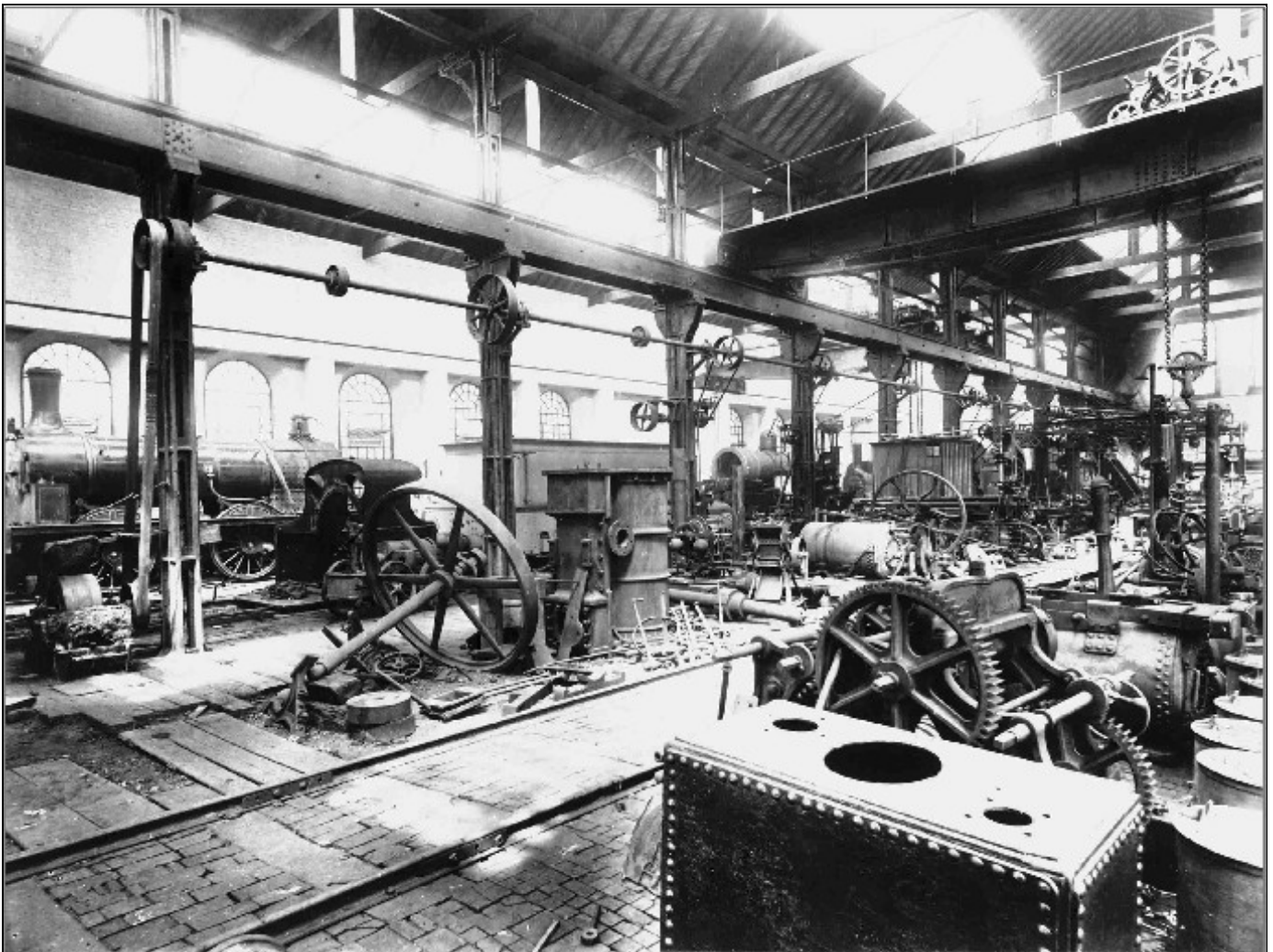
Plan of the works based on the oldest drawings available featuring the mysterious "Crathers Shop"- detail below.



If the Tulips were arguably the most interesting people whom Colin discussed, perhaps one of the most intriguing buildings on the site was the Power Station which began generating in 1907. It is one of several company buildings still standing today. The innovative Tulip introduced a battery electric locomotive in 1918 to shunt the Power Station. The Power Station was to close in 1936 and it later became a bus depot.

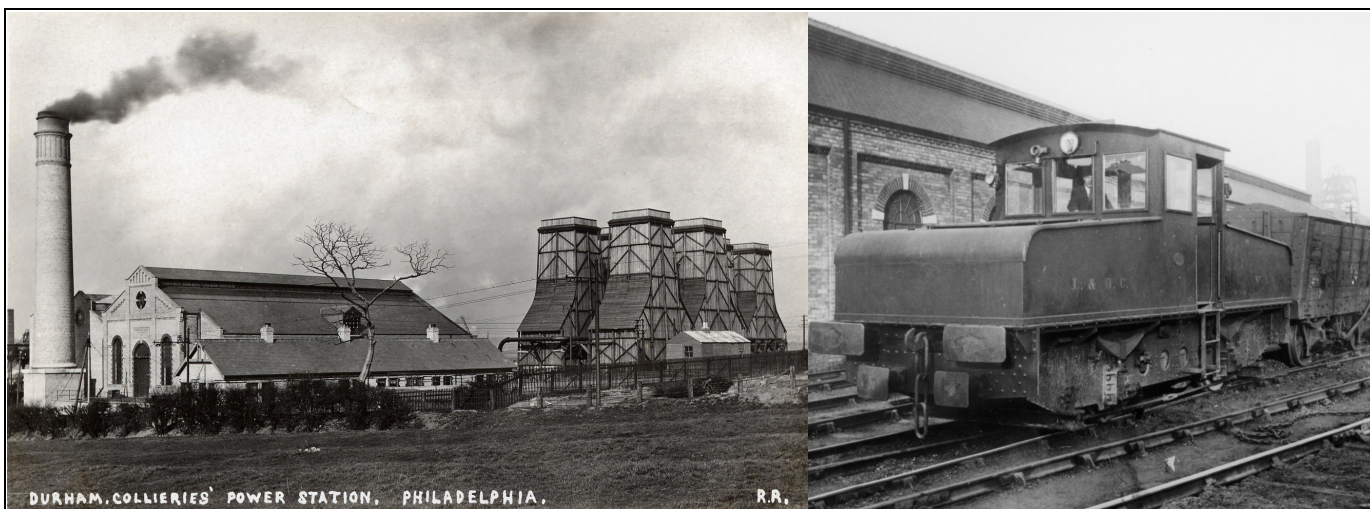
In August 1911, the Company bought the Hetton collieries of Hetton Lyons, Elemore and Eppleton and the railway which served them, the Hetton Colliery Railway. Thus The Lambton & Hetton Collieries Ltd was formed and it owned the Philadelphia site until 26 November 1924. Joicey invested in the former HCR and, for example, in 1920 he built a new locomotive fitting shop on the Hetton Colliery & Engine Works site at Hetton Lyons. Both the Lambton and Hetton Railways had sophisticated signalling systems installed.

The investments which Lord Joicey made in his undertakings was in stark



The interior of the Locomotive Repair Shop, 1891. The layout of this shop remained virtually unchanged for over a century. Note the two small cylindrical pressure vessels in the right half of the picture- these were for tub-hauling underground loco's driven by compressed air and controlled by someone walking alongside. They were successful enough for some thirty to be built but this picture is the only photographic record of their existence.

*Photo: Tyne & Wear Museums, 'Mines de Lambton', A4529/22.*



The Works' power station with wooden cooling towers. Construction began in 1905 and generation began in 1907. One of the first buildings to fall out of use at the Works but also one of those still standing. *Photo': George Nairn collection.*

The Dick, Kerr & Co Ltd built battery loco' bought in 1918 to shunt the Power Station. It was the first battery electric locomotive used in Durham.

*Photo': D. G. Charlton collection.*

contrast to the rather complacent attitude which the Earls of Durham had adopted during the nineteenth century and it was the latter's under-investment which had caused the 1896 sale to go through so 'cheaply'.

From 24 November 1924 until 1 January 1947, the Philadelphia site came to be owned by the newly-formed The Lambton, Hetton & Joicey Collieries Ltd and during this time the Company expanded to own some 26,000 acres. Following Nationalisation of the coal industry, the Works was owned by the National Coal Board until 1989. Of course, the NCB owned all the collieries in the region and it is no surprise that, from 1947, the Philadelphia Works took on repair and maintenance work from other collieries in No. 2 Area. Amongst the changes which took place at Philadelphia after 1955 were that the Works began repairing diesel locomotives and after 1974 it also began the repair of locomotives from other parts of the country.

Another interesting person to emerge from Colin's presentation was one of the post-Nationalisation Works Managers, Tom Lawson. One of his pastimes was modelling and it would seem that he could not resist indulging his fantasies from time to time at work. For example, he undertook a rebuild of the above-mentioned 1877 locomotive whereupon it incorporated a welded tender. On another occasion, he created a pannier tank by combining parts of two tender engines and a saddle tank. He fitted many locomotives with roomy cabs which had angled roofs, some with wedge-shaped fronts.

In 1955, Winston Tulip bought the Company's first diesel locomotive and in 1962 the Company's last tender engine was scrapped. After 1974, Philadelphia came to be responsible for the repair of all NCB surface diesel locomotives in north-east England, including those from Northumberland, together with all underground battery locomotives. However, all underground diesel locomotives were dealt with at Ashington.

As the region's collieries closed one-by-one over the years, Philadelphia Works sought work from outside the north-east and, indeed, from outside the coal industry. In 1985, an illustrated advertising brochure was produced showing prospective clients what was on offer at Philadelphia and even at that time the Works employed approximately five hundred people.

A succession of closures in the second half of the 1980s included the locomotive sheds at Philadelphia in 1985 and in 1986 the two remaining locomotives at the nearby Lambton Coke Works at Fencehouses were withdrawn. The imminent demise of the Works is indicated by the last NCB Plan of Works being produced in 1986 and the Lambton Engine Works finally closed on 22 December 1989.

Since 1989, the site has been owned by Philadelphia Estates Ltd and all of the former Works buildings are now leased to various tenants. Indeed, it is intriguing the extent to which it is now possible to visit the site and readily identify the buildings which were once part of the Lambton Engine Works and Loco Sheds. Poignantly- but with a hint of optimism for the future of the site at least in the medium term- Colin closed with an intriguing series of 'then and now' photographs of various parts of the site. Colin and Malcolm provided a *tour de force*: their presentation covered the subject comprehensively, and it was most efficiently organised and eloquently delivered. The good-sized audience needed little encouragement to show their appreciation with a sustained round of applause.

All illustrations furnished by Colin Mountford and Malcolm Young.



The Works built loco's were much modified throughout their lives especially in N.C.B. ownership. Number 9 ended her long life working as a stationary boiler at Brancepeth Colliery, Willington where she is seen missing her central driving axle, roughly plumbed in and sporting a crude chimney extension. She was cut up here in August 1965.

*Photo': Industrial Railway Society, J. Hill.*

### Friends Meetings

Meetings are at the Museum in the Conference Room usually on the first Thursday of the month at 7:15pm although there are exceptions- there is no meeting in August and a second afternoon meeting in mid-September for instance. Non-members are always welcome to meetings but we do ask for a donation.

This list of forthcoming meetings is offered in good faith but misprints can occur and plans can change. To check visit the Events page of the Friends web-site ([www.friendsofdrcm.org](http://www.friendsofdrcm.org)) which is kept as up-to-date as possible.

Thursday 2 September: **The *Tornado* Story... and now what?**

Mr. David Elliot (the A1 Steam Trust)

Thursday 23 September at 2.15pm: **Green for Danger**

Mr. Roy State

Thursday 7 October: **An Ordinary Hobby- No Ordinary Life**

Mr. Gerald Rivett

Thursday 4 November: **From 1825 to the Battle for the Tees**

Mr. Charles McNab

Thursday 2 December: Christmas Get-together



60163, yet to be named *Tornado*, canters past Preston-le-Skerne on her inaugural passenger run last year. The A1s were much liked by crews (see Brian Bell's talk on page 14) and the Friends will welcome David Elliot of the A1 Steam Trust to speak about her in September.

*Photo': Timothy Ruffle*

### Museum Programme

**Guided Tours.** Conducted by members of the Friends the tours are an excellent introduction to the Museum and its environs for everyone including new members of the the Friends or anyone considering joining.

The tour itself is free- Museum admission still applies. All tours begin at 2:00pm on the following dates (all Sundays) and no booking is required so, if you would like to join a tour, just be at the Museum in good time.

July 11 and 25, August 8 and 22 and September 5.

## Exhibitions

### **Tattoos of the Tees Valley.**

Currently to Sunday 26 September. History and photographs. Cook and his crew were the first European sailors to have tattoos.

### **Flushed- A Short History of Toilets**

Tuesday 28 September to Friday 31 December. Commemorating the 100<sup>th</sup> anniversary of Thomas Crapper's death.

### **Lewis Carroll: Living in Wonderland**

Friday 1 October to Thursday 31 March 2011. Celebrating the life and work of Lewis Carroll who grew up in Croft-on-Tees.

## Curator's Lecture Lunches

Starting at 11am on the first Saturday of the month in the Ken Hoole Study Centre. Attendees will get soup, a sandwich and receive a gift. Places are limited, entrance is £10.

4 September: **Railway Roots.** Railway heritage and the Museum's archives.

2 October: **Hidden Head of Steam.** Go behind the scenes at the Museum.

6 November: **Preserving the Past.** Museum conservation techniques.

## Events and Activities

See the Museum website for details including costs (some activities taking place outside the Museum incur no entrance fee).

**Romans at the Railway Museum.** Sunday 18 July 10am-4pm. All things Roman with Re-enactments and free shuttle to Piercebridge Roman Fort.

**World War Two Day- The Home Front.** Saturday 21 August 10am-4pm. Actors bring the War on the Home Front to life.

**Cool Habitats.** Saturday 16 October. Wildlife activities in the Museum's grounds and Activity Room.

**Kidzone- Autumn and Winter Arts and Crafts.** October to March, Fridays and Sundays during school holidays.

**Little Horrors Hallowe'en Fun-Day/Fright-Night.** Sunday 31 October 11am-3pm, 4pm-7pm. Spooky fun. Note the two opening times for younger and older children.

**Santa at the Station.** December Saturdays and Sundays before Christmas. Get a gift from Santa- booking essential.

## Heritage Open Days

Saturday 11 and Sunday 12 September 10am-4pm. The annual opportunity to explore history. Free entrance.

# ***THE FRIENDS:*** Introducing the Friends and Darlington Railway Museum

I hope you have enjoyed this newsletter and, if you are not a member of The Friends of Darlington Railway Centre and Museum, that it has piqued your interest. Presumably your having read this far is a good sign.

Darlington Railway Museum is housed in the old North Road station building, dating from 1842, on the route of the world famous Stockton and Darlington Railway. The Museum tells the story of Darlington and its central role in railway history. George Stephenson's Locomotion N<sup>o</sup>1 takes pride of place at the head of a line of historic Darlington built locomotives surrounded by other exhibits. Much of the permanent exhibition will fascinate anyone with a general interest in Darlington and its history but visitors unfortunate enough not to have an interest in railways, perhaps accompanying those who do, will discover a varied programme of exhibitions on non-railway subjects and can enjoy refreshments in the café.

The Museums facilities also include the Northern Rail Activity Room, a children's play room for younger visitors, a conference facility and the Ken Hoole Study Centre with its extensive archive.

The Friends is a non-profit organization which exists to help promote and support Darlington Railway Centre and Museum, "Head of Steam", as well as presenting regular talks for members. Whether your interest is focused on the history or future of railways, their engineering or operation, the Friends' programme has something for you. Benefits also include a newsletter (oh-you knew that) and free entry to the Museum. Although there is no obligation members can also help at the Museum- for example leading guided tours, contributing their I.T. or linguistic skills or even appearing in costume at special events adding to the atmosphere.

Space is limited here but you can find out more about both the Friends and the Museum at our web-site. It includes links to the Museum's site amongst many others, directions to the Museum, contacts, membership details and an application form should you wish to join. Remember- if you don't have Internet access your library does.

[www.friendsofdrcm.org](http://www.friendsofdrcm.org)

[www.head-of-steam.co.uk](http://www.head-of-steam.co.uk)

## Friends of D.R.C.M.

Darlington Railway Centre and Museum

[Home](#) [Membership](#) [Events](#) [Links](#) [FAQs etc.](#)

### Introduction

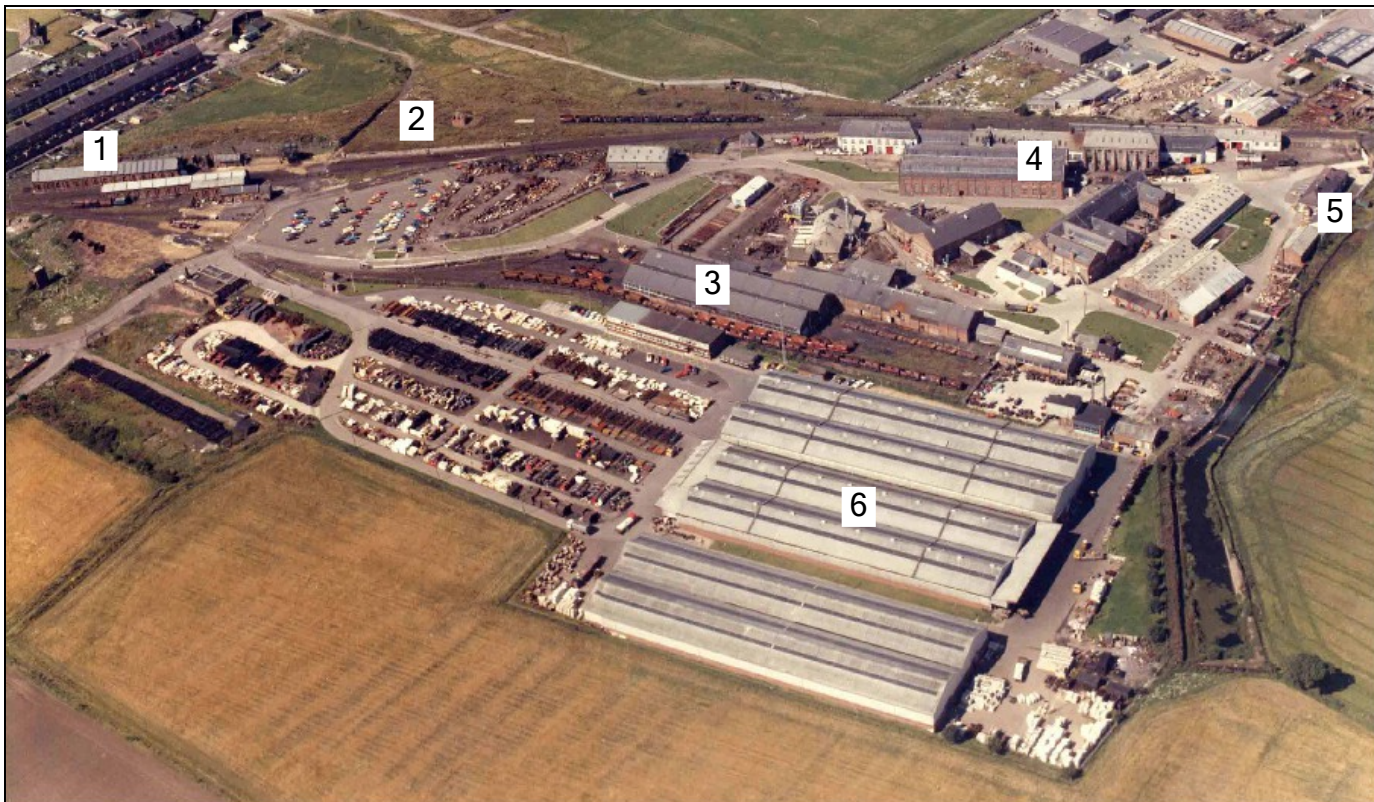


Welcome to the website for The Friends of Darlington Railway Centre and Museum.

Members will find an up-to-date programme of forthcoming talks and events but, if you are not a member, we hope you enjoy this site anyway. You'll find it a useful source of links to other sites that share our interests and, of course, an introduction to the Friends, the Museum and the Study Centre. You might even consider joining us.

The Friends is a non-profit organization which exists to help promote and support Darlington Railway Centre and Museum (currently marketed as "Head of Steam"). Whether your interest is focused on the history or future of railways, their engineering or operation, the Friends'





Lambton Works in the late '70s showing: 1. Locomotive Sheds, 2. Dorothea Pit Site, 3. Wagon Shops, 4. Fitting Machine Shop, 5. Offices and 6. Divisional Stores.  
*Photo': A. Lynn collection.*



More engine-crew favourites (see "Views From the Footplate", page 14). Gresley's A4 Pacific is represented by world steam speed record holder 4468 *Mallard*. The Riddles' BR Standard class 7P Pacific (a.k.a. Britannia class) is 70013 *Oliver Cromwell*. Both are seen at Locomotion.

*Photo's (and front cover): Tim Ruffle.*

