

Old Run

No. 225 December 2014

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Front Cover

Mark Calvert checks out his reflection! Taken on the 7th September 2014 during the Mixed Train running day Sam Shenton

On the Platform Graham Findley

I sometimes wonder if the good folk at the Middleton Railway realise how lucky they are, compared to conditions at some other heritage railways. For example, the amount of covered space we have is extensive - not only is there the magnificent Engine House, but a spacious workshop that will hold at least five locos, plus the old workshop, plus a number of containers for bits and pieces. If all that wasn't enough, we're going to be adding the Running Shed soon. Some preserved railways make do with little more than one shed.

Then there's our huge collection of locomotives. Four steam engines in ticket is more than generous, plus seven others on display, three in the process of being overhauled and another four, politely described as 'static'. We've also got a dozen diesel locos, seven of which are operational to some degree or another. These are unbelievable riches compared to many other lines. But as the season of goodwill approaches, we might reflect that material riches are perhaps less significant than the people who make up the volunteer body. All those locos and rolling stock are no use without the people to look after them and operate them, and we should take pride in the fact that the Middleton is still run on volunteer labour. Not evervone puts in the same amount of effort, but presumably each gives as much as they feel they can. This can sometimes lead to people comparing themselves with others - it's a lot easier to find reasons to consider oneself superior than inferior! But one is just the mirror image of the other.

I well remember someone pointing out to me that if I was going to play the comparison game, I shouldn't look backwards and complain about how far behind me someone else was, look forwards and compare yourself to a person you admire - and think about contributing as much as they do...... Merry Christmas!

Contents

nside Track - A Round Up of Recent Events	4
A Victorian Viewpoint - Michael Barber	3
Postcards from Norway - Kris Ward	9
Moor Road Happenings - Steve Roberts1	1
n BR Days - Mervyn Leah18	3
Why They Were Built Andrew Johnson2	1
People Who Built Them - Kris Ward24	4
Dear Editor, "I must say!"29	9

From The Chairman

Andrew Gill

As we near the end of another financial year, I look back at what we have achieved collectively at Middleton and just wonder if we are at a point where things will slowly change as we move forward over the next few years. It has been traditional in most heritage railways that the money is earned and then spent on the upkeep and renovation of the railway and its rolling stock. I feel we are reaching a point where we are earning more money than we can realistically spend using our own resources. If we were to let this take its own course then we would end up with a huge bank balance and not much else to show for it.

Whilst we continue to recruit new volunteers, we are not getting the skilled engineers in the numbers we need. We have a great bunch of enthusiastic volunteers, but very few who have the necessary engineering skills to manage the projects we would like to undertake.

To overcome this shortfall and to utilise our monies and resourses to the best effect, we have decided to put out to other organisations those projects we cannot at the moment manage.

The locomotive "Picton", acquired some eight years ago with a "Prism" grant, has been slowly deteriorating in our yard. This has troubled me, as it is not in the spirit of accepting grant funding of an artefact.

To remedy the situation we are in final negotiations with an organisation who run an apprentice scheme. They will use their apprentices to do a cosmetic restoration of this locomotive, which keeps them in work, and all we do is pay for the materials and transportation of the loco. To compensate them for their time and effort the loco will remain with them on public display for a further few years. Picton should return to Middleton in around three years time.

A similar exercise is being carried out with the loco John Blenkinsop, jointly owned by Middleton and Mrs Sheila Bye, where this loco is being borrowed for five years by Ribble Steam Railway. Whilst on loan to them the loco will be cosmetically restored, at their expense and also moved from and back to Middleton at their expense.

These two projects will produce Middleton two "museum standard" exhibits in around five years time, when hopefully our site will have settled down after the construction of the Running Shed.

I feel that this is excellent value for money and also leaves our volunteers free to be utilised where they are most needed. My thanks go to Mr Ian Smith, our Vice President, who has been instrumental in brokering these two deals.

With all that now arranged, the Santa season is upon us with the initial booking figures looking very promising. As always this is a very big ask for all our volunteers who put in a huge amount of work to make this happen, and happen very successfully. I just hope that again the weather is kind to us and all those excited children, and adults, can make their visit to us.

Our present wrappers have been very busy, and I think I can safely say we are "almost" ready for the first Santa trains, which this year is the Schools Santa day. May I end by wishing you all the very best for the New Year 2015, and may the Railway continue to prosper.



Experiences of a Duty Manager

Richard Stead gives us the lowdown on some lesser known angles of being a Duty Manager.

As most working members will know, I have recently left the pavilion and gone out into the middle to face the pace attack known as duty managership. Let me say right



away that it's very fulfilling, highly necessary and you're not out in the rain! There is of course a rhythm to the day: frenetic activity setting everything up first thing between nine o'clock and ten (typically including cleaning up after some leaky steam loco that has dribbled all over the floor of the Display Hall), then another hectic spell closing down and locking up at close of play. In between, things can, frankly, slow down a bit so, after you've re-stocked the fridge and other assorted jobs, you can tackle the crossword, catch up with

the Euro-crisis, decide how the railway ought really to be run etc. But my purpose here is to inform readers about one or two aspects of the job that are not obvious.

Arrival

Getting through the front door first thing. The naïve reader might imagine that this is just a matter of turning the key in the lock. There are however complicating factors: the alarm and the umbrellas, - and for me, the reading specs and the rucksack. The burglar alarm



means that, once you've opened the front door one millimetre, the seconds before the alarm goes off are slipping away. In principle, the solution is dead easy - step in and put the code into the control. Here is where the complications come into play. The umbrellas - there are three just inside the door - can, in the manner of inanimate objects the world over - decide to fall over and wedge themselves behind the door, leaving a gap of about nine inches. If your rucksack is still on your shoulders at this point, vital seconds will be lost struggling out of it....The duty manager has to be at this point stripped for action - no impedimenta, no rucksack. Once inside. putting the code in is a trivial matter - but if and only if your reading specs are parked on your nose. If they are outside in the rucksack, well...

Loo roll

Then there's re-supplying the loo roll aka lavatory tissue. Of course it isn't actually roll - the toilets at the Engine House use wads of separate sheets. So what? Well, the thing is that these wads are stored in a kind of paper binding which keeps the wads

- not everybody appreciates this - under pressure. The wads are in fact like coiled springs. If, in all innocence, you open the binding and you're not holding the wad in just the right way, you can (I speak from experience) disappear in a blizzard of 500 sheets.

Giving directions

Another skill to master is knowledge of the Nato Alphabet: Alpha Bravo Charlie etc. This is to help would-be visitors who have Satnav but no A to Z (a common feature of the younger generation I find) ("younger generation" = all those under 65.). They ring up for directions

and have to be told the post-code for the Engine House, which ends "JQ", that is, Juliet Quebec. My "J for Jack, Q for Quack" gave rise to much mirth and merriment (all good-natured of course).

Cashing up

Our takings have to be cashed up (we need the cash of course to buy expensive bits and bobs so the workshop gang have stuff to work on). There are three tills - the ticket office, the guard's ticket-bag and the shop till. Anyway, all the money has to be counted. Leaving card payments on one side, some 90% of the cash comes in notes: this is fairly straightforward. The remaining 10% of the cash - those pesky coins - takes at least 90% of the time to count (and re-count). Usually during cashing-up there is an outbreak of panic when you think you're £19.85 down - oh no!, This may be followed by the realisation that the guard has still to hand in his £20 float, so, relax, you're 15 pence up! Phew! Hurray! Then comes the critical process: the Zedding-off. Unfortunately for you, dear reader, since this is one of the secrets of the craft, I can say no more...



A recent press release caught my eye the other day. It was from a long established Leeds firm, Pickersgill Kaye Ltd. of Pepper Road in Hunslet and it is interesting to know they are making components for the new Hitachi IEP trains in the former steam lorry works...

"PICKERSGILL-KAYE'S RAIL EXPERTISE OPENS THE DOOR FOR MULTI-MILLION POUND IEP ORDER

Pickersgill-Kaye Ltd. has clinched its largest single order to manufacture emergency door handles for the Class 800 and 801 trains being supplied by Hitachi Rail Europe for the multi-billion pound Intercity Express Programme (IEP), one

of the biggest rail projects in the world.

Leeds-based lock maker Pickersgill-Kaye, part of the Joseph Kaye Holdings Group, will manufacture and supply the Emergency Egress Device (EED) and Emergency Access Device (EAD) for the passenger carriage doors of the trains, in the multi-million pound contract through to 2020."

Previous experience in supplying the rail sector clinched the deal for Pickersgill-Kaye, including emergency door release access panels for Siemens' new build Desiro vehicles and the Hitachi-made Class 395 Javelin™ trains for the HS1 line from St Pancras to Kent, plus the ability



to introduce a safety feature that alerts the driver to the operation of the EED but prevents the door being opened while the vehicles are moving."

The company started in 1855 as Joseph Sons & Kave Horsforth, Leeds. Initially involved the manufacture of oil cans, they diversified during the latter part of the 19th and into the 20th century into the specialised design and manufacture of Kaye's patent door locks for the architectural industry and rail industry throughout the United Kingdom.

In 1970 Harry and Pickersgill, David local tooling designers and manufacturers. purchased the Joseph Kave assets and incorporated the new company as Pickersgill-Kaye.

Pickersgill-Kave The premises lies behind former Mann the Works, and though somewhat rebuilt. as you can see from these pictures, it has a steam engine heritage, having previously been the works of Yorkshire Patent Steam Wagon Co.

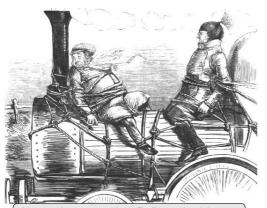






A Victorian Viewpoint

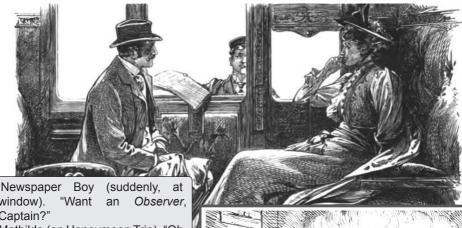
Images from the Internet Archive and the Victorian Web



How to Insure against Railway Accidents. Tie a couple of Directors to every engine that starts a train.



Clerk. "Single?" Lady "Single! What does it matter to you, Sir, whether I'm single or not! Impertinence!"



window). Captain?"

Mathilde (on Honeymoon Trip). "Oh, Freddie, dear! No! No! Do let us be quite alone!"

Railway Official. "You'd better not smoke, Sir!"

Traveller. "That's what my friends say." Railway Official. "But you musn't smoke, Sir!"

Traveller. "So my doctor tells me."

Railway Official (indignantly). "But you shan't smoke, Sir!"

Traveller. "That's what my wife says."



Postcards from Norway

Kris Ward

Dear Graham, Manning Wardle exported 18 class F 0-4-OST locos to Norway, they were mostly used around the docks at Christiana, now Oslo. Two of the locos survive. Previously plinthed on Oslo Sentral station for a number of years MW 576 of 1877 (NSB NO25) is now a static exhibit in the Norwegian Railway museum in Hamar. Note the larger enclosed cab fitted to this example, the typical Manning Wardle open sided cab they were built with being unsuitable for cold Norwegian winters!



The Editor

The Old Run

Middleton Railway

Leeds

ENGLAND



Postcards from Norway (cont)

The other one, MW 1248 of 1892 (NSB No11) survives at the Kroderbanen heritage railway. As the railway's larger engines are currently being overhauled 1248 has seen regular action over the summer, connecting with diesel hauled services that cover. the length of the line from its connection with the mainline at Vikersund. 1248 is now refurbished to as-built condition with its original design of cab. The Norwegian Railways also built two of their own engines to the Manning Wardle designs. See you, Kris



The Editor

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Middleton Railway

Leeds

ENGLAND



Moor Road Happenings

LOCO NOTES

We have managed to get through the main season with no real problems with our operational locomotive fleet. Hopefully, this will be the case with the Santa Specials, the first of which has just been run. For more detailed information, read on.

1601 MATTHEW MURRAY

Had a stint of operation during September generally performing October. satisfactorily. At the end of the season the loco came into the works for a few minor iobs to be done. The main one was to sort out a problem with the mechanical lubricator which serves the cylinders. The drive to this is taken from the valve gear and, as this goes back and forth, it operates a ratchet which slowly rotates the shaft operating the two pumps (one for each cylinder.) However, it has a tendency to stop operating and for the shaft to just oscillate back and forth instead of rotating. This can only be observed by watching the shaft closely whilst the loco moves, although the fact that the reversing lever starts to rattle is a sign that the valves are not being effectively lubricated. Dismantling of the lubricator found nothing amiss. It seems that there is no positive method of preventing the shaft from oscillating, unlike with the better known Wakefield lubricator and it seems that it simply relies on friction to prevent it. We have re-packed the gland on the shaft and tightened it a bit more than we would normally do and this has solved the problem. Subsequent to doing all this, a copy of the manual for the lubricator has been acquired and it seems that this is what is required!

Whilst in the workshops, the firehole doors have received a bit of an overhaul. These had a tendency to jam in the open position, even when liberally oiled, and require persuading with a heavy object (boot or hammer) to free them off. On

dismantling, it was found that the track in which the doors slide was quite worn near the middle, causing the doors to cockle over slightly when being opened. Add to this the fact that both doors were quite worn at the bottom and it was fairly obvious what the problem was. Rather than machine up a new bottom runner, this has been welded up along its length and machined back to what we think are its original dimensions. The door bottoms have also been ground flat so that they run better on the rebuilt track.

1601 is being kept serviceable for the Santa period as standby steam loco.

No. 6

Slow, if steady progress has been maintained on the dismantling work required on the boiler. Many of the necessary rivets and stays have now been removed. Good progress on this came to a stand when our magnet drill decided it wasn't going to play any more and gave up the ghost. However, this has now been repaired, thanks to the efforts of Richard Pike, and was back in use on this job at the weekend gone. Whilst it is important that we keep up progress with this work, it does not have a planned end date and is relatively low priority.

1210 SIR BERKELEY

With the end of the good weather the loco was drained and winterised but, no sooner had we done this than the Vintage Carriages Trust informed us that they would like the loco to spend the winter and spring on the Worth Valley Railway and could we put it back into steam so that they could inspect it. This duly happened and the loco has now moved to Ingrow for the winter period. It was initially planned for it to return at the end of March but negotiations are presently ongoing for it to go on hire elsewhere during April/May.



Before its departure, the steam brake valve received some attention, including re-packing of the valve spindle.

No.11

Work has continued on the rather slow and laborious job of fitting the horn stays.

No.1310 (NER H)

Apart from use at the September gala, 1310 has spent most of the last couple of months on display in the Engine House.

It has now had the boiler opened up and washed out preparatory to its annual boiler inspection. Whilst this isn't due till the new year, this work is being done early to avoid the bunching of boiler inspections that we presently have around March/April.

1544 SLOUGH ESTATES No.3

'Slough' has been in regular service throughout the season with no real problems to report. Prior to coming to Middleton, the loco was fitted with loose shims between the axlebox and the horn

face to take up wear. Whilst not the best of engineering jobs and one we wouldn't do ourselves, it seems to have been working satisfactorily. However, it was noted that the right rear axlebox shim had become damaged and this has been replaced with a similar sized shim. Doing this required removal of some of the brakegear and drain cock operating linkage.

It was planned that 1544 would be the main engine for the Santa services and it was used on the Schools Santa trains on the 3rd December. It did, however have problems with the fireman's side injector failing to work part way through the day. The injector was later removed and pieces of rubber were found to be blocking the cones. Where these have come from, we don't yet know but are probably pieces of gasket material from within the tank. Once the injector had been stripped and cleaned it worked perfectly again so the loco was able to take up its duties on the first weekend of public Santa specials.

Sentinel No.54

It would have been good to report that the repairs to the boiler were well on the way to completion but, unfortunately, I have to report the opposite. It seems that Israel Newton, having got the order, have done little work on the boiler and it is now unlikely that the loco will be ready for the start of the 2015 operating season.

Although most of the outstanding work is dependent on having the boiler in place, there are still a number of small outstanding jobs requiring to be done. The driver's seat has been removed, stripped down and freed off so it tips once more. The seat itself has been cleaned down and received several coats of varnish. The spring which ensures that the seat tips up when you get off it was found to be broken and a new one will be required. The new pipework connecting the water tank to the boiler feed pump has now been completed

and the old pipework connecting the pump to the pre-heater and thence to the boiler has all been annealed and fettled, although it remains to be fitted. Also completed has been the new pipework from the cylinder relief valves. In its previous life the cylinders did not have these and, if the relief valve blew for any reason, the steam would fill the cab. Fortunately, this rarely happened! The new pipework directs this steam downwards towards the track.

The missing bit of guttering over the new piece of roof has now been fitted. The roof sliding ventilator has also been freed off. It is not in the best of condition and it was a marginal decision as to whether to replace it this time but we have decided to keep it, for now.

A recent purchase has been a large number of 1/8" thick 3/4" dia copper washers, specially made for us by Dobson Gaskets of Keighley. These are used to seal the nuts on the studs that hold the two halves of the boiler together. We need about 200 of these and, at 85p each, they aren't a cheap buy!

HE 2387 BROOKES No.1

Work has continued apace on this loco. Much of it has been the cleaning down and needle-gunning of the frames, a slow and laborious job. There's still a lot to do but we are getting there! Most of the holes for the spring hanger pins in the frame were found to be badly worn and all of these have been drilled out to a larger size and fitted with steel bushes. Similarly, the holes in the spring hangers were largely found to be worn and it was decided to make new hangers rather than repair them. Making these has been an interesting learning exercise for some of the younger volunteers. Finally, for this part of the refurbishment, all the spring hanger pins are being replaced with new material. With 24 pins required, we did consider setting up the Ward Capstan

lathe to do this but decided it would be a good learning exercise for people if they were each machined individually.

The reverser has been overhauled. This involved building up the catch with weld and machining back to provide a good fit. The catch rod was found to have been broken and previously repaired so it was decided to make a new one, along with new pins. A new reversing lever pivot pin has also been made. Work then turned to the reversing shaft and it was found that the lever on the end was badly worn and loose. Various methods of repair were considered, including the easy option of sending it away to be done. However, it has been decided to do it ourselves. This has necessitated boring out the lever to true it up and building up the worn shaft with weld and machining it back to a new diameter to suit the bored out lever. However, the shaft would not fit in the lathe with the balance weight in position so this has had to be removed: no five minute job as it involved the making of an extended press frame (our existing one was not long enough) and the application of plenty of heat. All this has now been done. All we have to do it put it all back together, again!

The running plate has also received some attention. A previously repaired and rather corroded piece on the fireman's side has been cut out and a new piece of plate made and fitted. At the front of the loco, both running plates were suffering from active corrosion between the plates and the supporting angles. With active corrosion, the steel turns to iron oxide, which is some six times thicker than the steel, causing significant swelling between the two surfaces and causing the plate to be forced apart. The necessary rivets have all been cut out, the iron oxide removed and the surfaces liberally painted before being re-assembled.

Fowler 42200033 HARRY

Work has started on the revamped vacuum system. However, there was a bit of a setback when a steel ruler accidentally punctured the radiator. You would not believe it was so easy to do! This has now been repaired (hopefully successfully.) Work at the moment involves replacing the radiator fan and cowl, the latter of which is being modified to enable it to be more easily removed and fitted when required.

Peckett 5003 AUSTIN'S No.1

In regular use.

D2999

After further investigation the problems with the water cooling circuit were finally resolved and all the air is now out of the system. Since this was achieved, we have had no further problems with overheating. The loco is in general service and is running well. One fault to be attended to is a small leak on the air brake. If the loco is left with the air brake applied for an extended time it is losing air pressure sufficiently enough for the minimum air pressure switch to operate, preventing you from applying power until such time as the air pressure is built back up.

138C.

Available for traffic.

D577 MARY

Available for traffic.

6981

The owner is continuing with the long and slow progress of bringing this loco up to scratch. Some new (well second hand) oval buffers have been acquired for fitting to the loco.

D631 Carroll

Available if required but generally on

display in the Engine House

All other locos are stored, either on display in the Engine House or awaiting overhaul.

CARRIAGE & WAGON NOTES

Coach No.1074

Apart from a couple of beadings to cover joints, the ceiling is now complete and looks good. Some of it has also has a first coat of varnish and this shows what the end result will be like. The problem with sourcing suitable light fittings was mentioned in the last Old Run. In the end. we have had to go for modern bulkhead fittings, although these do not look too bad and were relatively cheap. They are mounted on Iroko patresses, the wood being mahogany stained and varnished. The whole contrasts well with the pine panelled ceiling. If more suitable light fittings become available, the present ones can easily be replaced.

The droplight windows have now been fitted to the doors. These are a commercial design and will hopefully give a lot less trouble than the ones in the other coaches. Work on the doors currently centres around fitting the panelling and door locks.

Most of the internal plywood panelling has now been cut, stained and fitted. However, as seems inevitable with any Middleton project, the easy bits are being done first, leaving the harder bits to the end (or for someone else to do!)

The new coach heater has now been ordered and should be arriving shortly. The coach heating has been the subject of much consideration. It was originally intended to fit one of the old first generation diesel multiple unit heaters, as used on the other coaches. However, although we have five of them available, they are at least fifty years old and not in the best of health. They tend to smoke intermittently and

don't always fire up when started, leading to more smoke when they eventually do fire. It has therefore been decided to fit a new modern heater instead and, subject to satisfactory operation, convert the other two coaches.

Apart from painting and varnishing, the two other major outstanding tasks are the laying of the floor and the manufacture and fitting of the seats.

Coaches 1867 & 2084

These two coaches have continued in service with little maintenance necessary. With the onset of the damp weather, the doors on coach 1867 have seemingly swelled and jamming in the door frames. This has necessitated their removal and small amounts of wood being planed off to free them up. Hopefully, this will cure the problem. The brakes of coach 2084 have recently been adjusted. During a routine inspection it was found that a bolt holding one of the brake hangers had sheared and a second one was loose. These were replaced and all the other similar hangers checked.

One of the nightmare scenarios we have with the Santa specials is that the coach heater will fail to work. After working with no problem throughout the cold days of October & November, the heater refused to fire up on the first of the Santa services. Alternative heating was rapidly deployed to warm up the coaches and the general heat from the passengers and sunshine was enough to keep them reasonably comfortable. The trouble was eventually traced to fuel starvation, largely due to blocked filters. However, once everything was put back together, the fuel solenoid refused to work and a spare had to be substituted before it would fire up satisfactorily.

Steve Roberts

Chief Mechanical Engineer





Mervyn Leah

In BR Days

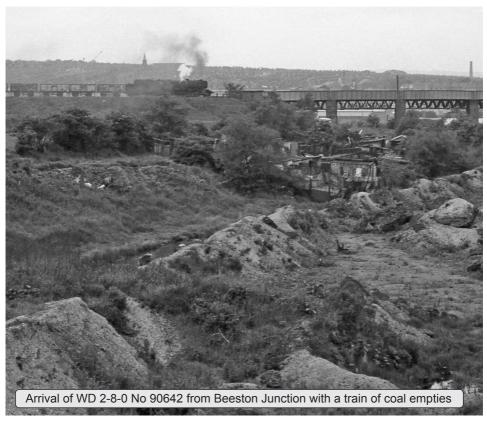
Having seen the recent correspondence in the last Old Run about the period in the 1960s, when Middleton Broom Colliery was served directly by British Railways locomotives, I dug these old photographs out. In my time at Leeds University, I only managed to photograph this on one occasion, which was 9th June 1967.

I just happened to be in the area, with camera in hand, when WD 2-8-0 No 90642 appeared from the Beeston Junction direction with a train of coal empties. The sequence of photos shows the arrival, the reversal down to the colliery, shunting at the colliery, propelling a loaded train up the gradient to Parkside Junction, and departure towards Beeston

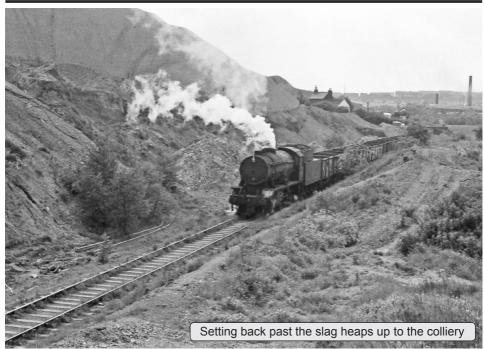
Junction. In the final shot, the trackbed of the Middleton Light Railway - part of the Leeds tramway system - can be seen curving away into the park, having been closed and dismantled only a few years earlier. Another big opportunity missed!

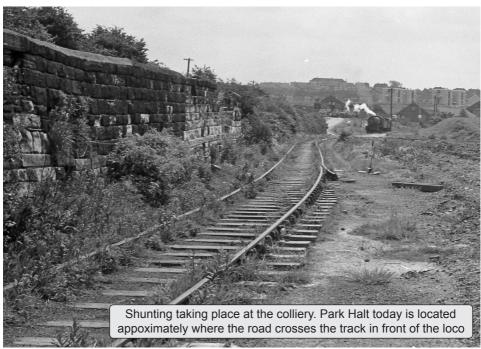
It appears I took these photos just in time, as production ceased at the colliery in the July, and the Dub-Dee was withdrawn in the August. Such was the pace of the decline of our railways at that time.

I was very fortunate to have been able to get these shots, as indeed I was to take part in the freight-carrying era of the Middleton Railway, over 50 years ago. If only we had known what we were starting!

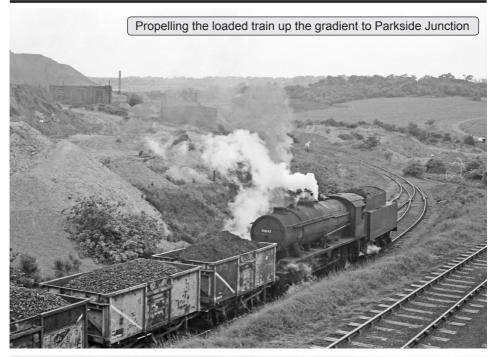


In BR Days (cont)





In BR Days (cont)





Why They Were Built... Andrew Johnson

... or the Industries that used Leeds-made engines

With the research being carried out to accurately determine the initial use of locomotives and cranes built in Leeds, it became obvious that there were a vast array of customers taking the products. An initial thought was to research each of the customers with the intention of adding this information onto the Leeds Engine site, however just taking a look at each of the colliery groups prior to nationalisation would have resulted in more episodes for Old Run than books in a library!

King Coal

Coal (from the Old English term col, which has meant "mineral of fossilized carbon" since the 13th century) is a combustible black or brownish-black sedimentary rock usually occurring in rock strata in layers or veins called coal beds or coal seams. The harder forms, such as anthracite coal, can be regarded as metamorphic rock because of later exposure to elevated temperature and pressure. Coal is composed primarily of carbon along with variable quantities of other elements, chiefly hydrogen, sulphur, oxygen, and nitrogen.

In the geologic past, the Earth had dense forests in low-lying wetland areas. Due to natural processes such as flooding, these forests were buried under the soil. As more and more soil deposited over them, they were compressed. The temperature also rose as they sank deeper and deeper. As the process continued the plant matter was protected from biodegradation and oxidation, usually by mud or acidic water. This trapped the carbon in immense peat bogs that were eventually covered and deeply buried by sediments. Under high



Why They Were Built (cont)

pressure and high temperature, dead vegetation was slowly converted to coal. As coal contains mainly carbon, the conversion of dead vegetation into coal is called carbonization.

The wide, shallow seas of the Carboniferous Period provided ideal conditions for coal formation, although coal is known from most geological periods. The exception is the coal gap in the Permian-Triassic extinction event, where coal is rare. Coal is known from Precambrian strata, which predate land plants — this coal is presumed to have originated from residues of algae. A fossil fuel, coal forms when dead plant matter is converted into peat, which in turn is converted into lignite, then subbituminous coal, after that bituminous coal, and lastly anthracite. This involves biological and geological processes that take place over a long period.

Coal is extracted from the ground by coal mining, either underground by shaft mining, or at ground level by open pit mining extraction. Since 1983 the world top coal producer has been China. In 2011 China produced 3,520 millions of tonnes of coal – 49.5% of 7,695 million tonnes world

coal production. In 2011 other large producers were United States (993 million tonnes), India (589), European Union (576) and Australia (416).

There are different classifications and names for coal depending upon the criterion below.

Peat, considered to be a precursor of coal, has industrial importance as a fuel in some regions, for example, Ireland and Finland.

Lignite, or brown coal, is the lowest rank of coal and used almost exclusively as fuel for

electric power generation. Jet, a compact form of lignite, famously available from shops in Whitby, is sometimes polished and has been used as an ornamental stone since the Upper Palaeolithic.

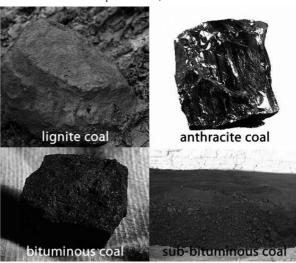
Sub-bituminous coal, whose properties range from those of lignite to those of bituminous coal, is used primarily as fuel for steam-electric power generation.

Bituminous coal is a dense sedimentary rock, usually black, but sometimes dark brown, often with well-defined bands of bright and dull material; it is used primarily as fuel in steam-electric power generation, with substantial quantities used for heat and power applications in manufacturing and to make coke.

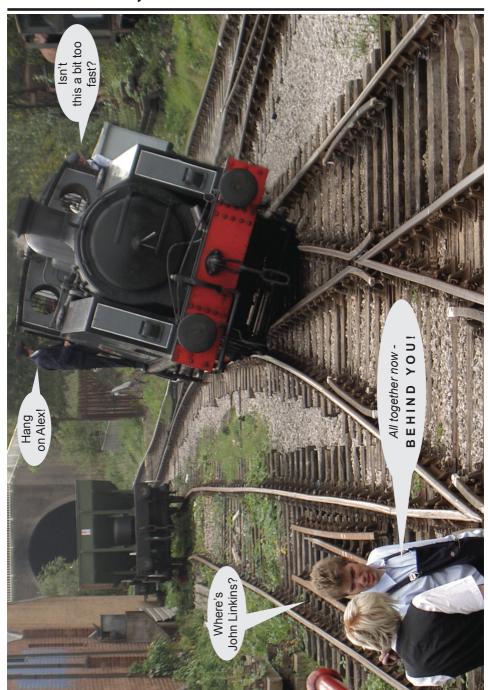
"Steam coal" is a grade between bituminous coal and anthracite, once widely used as a fuel for steam locomotives.

Anthracite, the highest rank of coal, is a harder, glossy black coal used primarily for residential and commercial space heating. It may be divided further into metamorphically altered bituminous coal and "petrified oil".

Graphite, technically the highest rank, is difficult to ignite and is not commonly used as fuel — it is mostly used in pencils and, when powdered, as a lubricant.



Yes, it's Panto Season!



People Who Built Them Kris Ward

Whilst any document about the history of an engineering industry will concentrate on the machinery that was produced, nothing would have been made without the people who worked on it. The workforce was often referred to as 'hands' and Leeds engineering employed many hands over the years. In 1890 an article in the Leeds Mercury gave the following numbers of workers for the Leeds engine making companies:

Greenwood & Batley	c2000
Kitson & Co	1500
John Fowler & Co	600
Thomas Green & Son	250
Manning, Wardle & Co	150
Hunslet Engine Co	150
J&H McLaren	100
Hawthorn, Davey & Co	150

This gives a total of around 4900 workers, though the figures from Hudswell, Clarke & Co are not shown.

The 1930's saw a downturn in the industry and with it the collapse of Manning Wardle and Kitson. This was of course followed

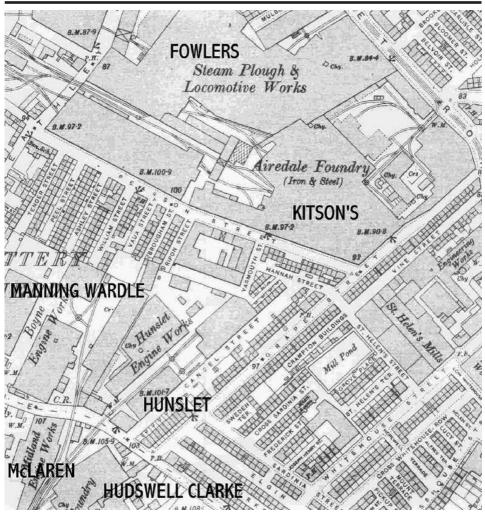
by the Second World War when the factories become bluow important part of the war effort. After the war there was a great deal of reorganisation amongst the companies. McLaren were making diesel engines in the former Kitson works. the success of this company at breaking into the diesel market saw them expand from a work force of 300 at the beginning of the war to 1900 by 1951.

When McLaren moved into the larger ex-Kitson works, Hudswell extended into the former McLaren works and Hunslet Engine were using former Manning Wardle buildings. Despite the turmoil, the industry would carry on employing large numbers of people in Leeds until the decline of British manufacturing towards the end of the 20th Century.

Housing

The map on the next page shows how the works co-existed in Hunslet but note also the rows of back to back houses filling all the spaces between works. Some of these houses would later end up demolished as the Hunslet and Fowler works expanded. Leeds still has large areas of back to back houses in use today, about 23,000 of them in fact. These were ideal for densely populating areas close to the industry with the workers and their families. Often considered to be slums, the surviving back to backs are largely from those built in the





later years of Queen Victoria's reign and beyond. Originally the houses would have had outside toilets in the gaps between blocks of houses that now form the bin yards.

Generally the earlier examples of these houses had to share fewer toilets so have fewer bin yards today. These houses were still an improvement on the workers' houses that were around before them though. Often built without anything like the kind of planning and the number of regulations of later years. Landlords would naturally want

as many rents coming in from a property as possible. With many houses often crammed in to little space there were a number of risks from the waste produced by the households. By 1918 70% of the population of Leeds lived in back to back houses. With many houses often crammed in to little space there were a number of risks from the waste produced by the households. An example of a fire in Hunslet in 1864 highlights the hazards faced, some of the occupants affected would likely have worked in the local engine works.

"On Friday morning week, it was discovered that a row of buildings in Accommodationstreet, Hunslet, belonging to Mr. Taylor, were on fire. There are eighteen houses in the row, which is a new one, and it appears they are built on the refuse which for many years had been deposited from the glass works of Mr.Scott, which are in the immediate neighbourhood. The occupants of the houses have been in the habit of throwing their heated cinders into the backyards; and the heat seems to have been communicated to the old refuse, as the floors and walls of the housed were found vesterday morning to be almost redhot. The Hunslet fire-engine was immediately sent for, and steps taken for removing the furniture from the houses."



Above - Photo of a Leeds fire engine on display at Harewood Traction Engine Rally in 2010. This engine would have been taken to the scene of a fire by horse and steam raised en-route to pump water. It is preserved at Armley Mills, though it is not a local product, coming from Merryweather at London.

Photo - Kris Ward

Recreation

Victorian engineering is often associated with long working days and as such little free time. However, from 1850, firms were required to give so much free time to their workers. Saturday would be a half day and Sunday a day off. Workers were also given six public holidays a year. To provide for this recreation time the era also saw the establishment of art galleries, public parks and seaside resorts.

In industries such as steelworks where furnaces couldn't be shut down for a day or two they would have 'wakes weeks' where the plant would be shut down. Essential maintenance could be carried out and for equally essential staff, leisure could be arranged. This would often be in the form

of train excursions to the popular seaside resorts or spa towns.

There were many social activities available amongst the workforces of the local engineering firms to keep workers amused in the days before television and many of the works had their own sporting clubs. Rugby League has always been very popular and many local people would have supported the local Hunslet rugby team.

As well as sporting activities, another pastime was music and there were a number of works bands with which employees might practice

in their spare time. In 1949 J&H McLaren converted the former Brass Shop of the Kitson works into a ballroom with a bar and two billiard tables. Dances were arranged each weekend with local bands. These events were open to workers from other engineering establishments. Also provided at the works were a practice pitch for cricket and even a shooting gallery.



Food & Drink

Back in the early 1840's David Joy describes in his diary;

"There were three of us apprentices at the works, and, being too far from home to return for meals, we fed in one of the workmen's houses close by. Breakfast, 8 to 8.30; dinner, 12 to 1; afternoon tea, 4 to 4.30; works closing at 6 and opening at 6 a.m. Catering thus together we did it for about 6s. 0d. per week. Saturday closing time was 4 p.m."

Decades later when there were thousands of workers rather than hundreds engaged in engine making, staff would still largely have provided for themselves, or more often than not their wives would have made packed lunches. In later years most factories would have their own staff canteens. In the First World War when women were brought into the works, separate lunch times, or even separate canteens would have been provided for the female staff.

At Thomas Smith's over in Rodley where

Leeds' crane making industry was centred "In 1936 a new canteen was built, complete with the latest equipment. In 1940 it was enlarged by the addition of a women's section and the men's accommodation was greatly extended."

Of course many of the jobs carried out in the local works would have been thirsty work. There were plenty of pubs for the workers to call at on their way home notice how many times the initials P.H. appear on the map!

The Unions

Like all big industries, many of the workers were in a trade union. From time to time the unions and the company management found themselves in dispute. In 1890 a strike across the entire industry in the Leeds area was averted when management backed down and gave workmen a 2s per week pay rise.

"Nearly all the large engineering firms have conceded the demand on the part of their workmen of 2s. per week increased pay. This, in brief, was the information given at a

meeting of the committee representing the several engineering organisations in the town, held last evening in the rooms of the Amalgamated Society of Engineers, Parksquare. Naturally, the news was regarded as most satisfactory by the workmen, and it was generally considered that the masters had met them in a considerate manner."

Had such a strike across the industry gone ahead it would likely have led to a huge loss of orders in the city and would have been disastrous for the companies and their striking workers alike. Strikes did happen from time to time and these created great tension in an area where many were busily engaged in engine making while others were striking. If workers withdrew their labour there would be no shortage of people willing to take their places, so conflict was inevitable.

Women & Children

The local engineering facilities employed a number of women, though in peace time this was nothing like the scale of women employed in the textile industries. One job at Fowler's considered suitable for a women was electrical work.

"The development of electric lighting has opened a new industry for girls, and Messrs. Fowler employ about twenty, who were engaged in work connected with the preparation of the wire."

Both world wars of course changed this when large numbers of men were called up to fight on the front lines and demand on the factories was even greater as they were required to produce materials for the war effort.

Production of shells took place in many of the local works. Fowler produced many traction engines for the military in the First World War and tanks in the Second. Manning Wardle, not generally associated with internal combustion machines.

produced Avro aircraft engines in the First World War as well as a small number of narrow gauge petrol locomotives for battlefield lines. Hudswell Clarke produced many aircraft components in the Second World War and by the end of the war were working on rockets and nuclear bombs. To meet these demands while the men were away women were not only given simple tasks like preparing wire, they were doing skilled tasks such as machining.

After the war the men came back and the women were expected to leave the works. The fact that wartime work showed women could do skilled engineering jobs was important when it came to later calls for equal rights.

This is an abridged version of the original article on the Leeds Engine website by Kris Ward, with thanks to Sheila Bye for providing some of the material.



Dear Editor, "I must say..."

Dear Editor

I wonder if any readers of The Old Run can help with this enquiry? We have a member looking for DVDs or tapes recorded by Alex Hurd at the Middleton Railway. We think Alex Hurd may now be deceased, though we don't have conformation of this.

If anybody has any information or material, they can contact me at the Railway.

Many Thanks
Andrew Gill

Dear Editor....

Following on from my article in the last Old Run, for the record there were a number of other structures associated with the GN goods line worthy of note. In addition to the impressive girder viaduct which traversed the Middleton tramway; as you went westwards along the line there were 2 overbridges, the first of which carried a farm track which passed Wards Farm (in my 1953 Leeds A - Z Geographia gazetteer this is indicated as 'Lockwood Farm'). The farm track, which led to the north perimeter of Middleton park, was a continuation of Middleton Grove.

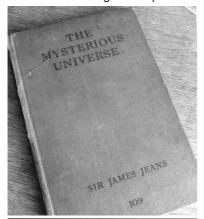
The line continued through a wooded area for about a quarter of a mile; there was another overbridge, an extension of Westland Road, where Beeston Colliery was situated. A siding veered off to the right just here, into the colliery. Around 1972/73 I had a paper - round, delivering newspapers to the various factories built on the site of Beeston Colliery. Ron Jarrett's scrap metal works was one of these; from here, you had a good view of the GN bridges and tip heaps. I also delivered to houses in the Allenby's. Wednesday and Thursdays were the heaviest days for papers; many factories would take three or four broadsheet papers (The Guardian, Telegraph and FT), and you had Radio and TV Times,



Dear Editor, "I must say..." (cont)

but there were compensations - The NME, Melody Maker, Sounds and Disc - classic weekly music papers of the time. I liked to have a sly read, and if it was a good issue I would buy my own copy!

A little further on there was an overbridge, with a lane underneath. I seem to remember a path veering off to the right, going over the line by means of a footbridge, leading to the woods. Above the girder underbridge there was a semaphore distant signal, presumably controlled by Parkside box (by the Cuckoo steps). I remember climbing up the ladder of this signal; it survived a number of years after the closure of the line. The line continued through a cutting for half a mile hemmed in by the 1930/40s Allenby and Southleigh suburban housing developments. The Parkside/Middleton area was an amalgam of





agricultural and industrial; very DH Lawrence, really! There is a photograph of a large haystack just by the woods, near wards farm. Farmer Ward's (Lockwood farm?) was finally demolished in the late 70s; two trees in the farmyard, however, survived into the early 1990s).

All this time I lived with my parents at 75 Cross Flatts Avenue, just over Dewsbury Road .Prior to 1971, the attic of our house was a dusty set of rooms; it was like exploring an undiscovered foreign land. Up there, I found boxes of airmail letters sent from my Dad to my Mother when he was doing National Service in Egypt in the early 50s;as an engineer, he worked on Centurion tanks at Ismailia which lies on the west bank of the Suez canal. I even found a book from the library camp on astronomy, called The Mysterious Universe, by Sir James Jeans. The library label indicates it was due back on 2nd Oct 1952. A little overdue!

The front attic room had a dormer window (the house was pre - Great War); occasionally, if you ventured up there at the right time, you might see the smoke or steam of a train against the trees of Middleton Woods - the GN goods line. If you opened the window, you could hear the crashes and thumps of industrial Hunslet in the distance. The crash of metal; unknown sounds of industrial processes. All very exciting for a 1960s boy!

Best Wishes, John Roberts

Dear Editor....

I wanted to let everyone know that both Andrew and myself will not be sending greeting cards this Christmas. Instead we will be making a donation to the Running shed 'Buy a Brick' appeal.

However we thank all members and friends at the railway for their companionship and friendship and wish the society well for Christmas and the New Year.

Many Thanks

Malcolm Johnson



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