A HISTORY OF THE MIDDLETON RAILWAY LEEDS



SIXTH EDITION

From John Byeto me, Dec. 1991.

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The Sixth Edition is dedicated to the memory of John Bushell, the Middleton Railway Trust's Archivist/Historian, who died in December 1988.

CONTENTS	PAGE
1. THE PRE-LOCOMOTIVE ERA - to 1808	3
2. THE BLENKINSOP ERA - 1808 to 1832	7
3. DECLINE AND REVIVAL - 1832 to 1900	19
4. THE 20TH CENTURY - 1900 to 1959	27
5. THE PRESERVATION ERA - 1959 onwards	32
SOURCES, FURTHER READING & STUDY MATERIAL	41
LOCOMOTIVES USED ON THE LINE BEFORE 1960	42
LOCOMOTIVES FROM 1960 TO MID-1990	43
THE MIDDLETON RAILWAY - Access, Services, Membership	Back Cover

At its fullest extent, the Middleton Railway network had three levels, linked by inclines: the upper level - on the plateau at the southern end; the middle level - site of the Broom Colliery and the present Park Halt; and the lower level - from Hunslet Carr into Leeds. In the text, these levels are used to indicate the sites of various developments (see also centre page map). Original spellings, etc. have been used in all quotations.

Cover Picture: 'The Collier' from George Walker's Costume of Yorkshire, 1814, showing a Murray/Blenkinsop steam locomotive at work in the background. Reproduced by kind permission of the Kirklees Metropolitan Council.

1. THE PRE-LOCOMOTIVE ERA - to 1808

The first known mention of coal-working in the Middleton area was made in 1202, when William Grammary, Lord of Middleton, was described as a coal owner. Later, John of Gaunt (1363) and Simon Symeon of Pontefract (1401) were recorded as being coal owners there, and in 1646, Sir Ferdinande Leigh was the owner of a "cole myne" at Middleton, a term suggesting something more advanced than the traditional shallow bell pits. Sir Ferdinande's mine was probably a "day level" or adit, a largely horizontal tunnel driven into an outcrop, and, unusually for a landowner, he was said to be having it worked himself. In 1669, "Francis Conyers of Middleton in Yorkshire" issued a halfpenny token "for use of ye Cole Pits". Conyers Spring, a copse on the middle level, slightly lower than Day Hole End, may well have been the site of these apparently quite substantial workings.

Ralph Brandling, member of a Tyneside coal-owning family of Felling, County Durham, married Anne, the Leigh family heiress in 1697, in due course amalgamating the fortunes of the two families and bringing Tyneside methods to Middleton. In 1717, it was recorded that he was the owner of "A Wrought Colliery or Coal Mine with a Water Engine and Smithy" at Middleton. Successive Brandlings made their principal home at Felling, and later at Gosforth, employing agents to oversee their Middleton possessions. By 1754, Richard Humble was Agent, and played a big part in developing the estate and coal workings, in competition with those of the Fenton family in the neighbouring Rothwell area. At this time, the Fentons had good access by river transport for marketing their coal in Leeds, whilst Middleton coal had to negotiate miles of narrow lanes and bridle paths, on carts or pack ponies. Waggon-ways were already a familiar sight in the Tyneside coalfield, and would be well known both to Charles Brandling, who had succeeded to the estates in 1749, and to Richard Humble, himself a Tynesider. They must have seemed the obvious answer to the Middleton pits' transport problems, and Brandling began to acquire rights of way between the Colliery and the River Aire at Thwaite Gate. Eventually, this gave him a waggon-way route to riverside staithes, crossing his own land and that of friendly neighbours, except for a 960 feet stretch of public highway on Woodhouse Hill Lane, where, in 1755, he obtained permission to construct a wooden waggon-way.

Attempts to build a waggon-way towards Leeds began in 1757, and Brandling made lease agreements with various owners of land on the proposed route. However, he appears to have been unsure of the permanent validity of some of these, and sought their ratification by Act of Parliament. The Act (31 Geo. 2, c.xxii, 9th June 1758) was the first one authorising the construction of a railway, and was entitled:

An ACT for Establishing Agreements made between Charles Brandling, Esquire, and other Persons, Proprietors of Lands, for laying down a Waggon-Way, in order for the better supplying the Town and Neighbourhood of Leeds, in the County of York, with Coals.

It confirmed Brandling's agreements, which were to become Indentures and be "inrolled in the publick Register-Office" at Wakefield, "obviating and preventing any

Controversies or Disputes that might otherwise arise". He was given wayleaves for at least sixty years, or as long as he continued to supply not less than 240,000 corves (22,500 tons) of coal a year at 43/4d per corf, or c.21p per ton in modern terms. A corf held 210 pounds of coal, and was the term still being used for a coaltub when the Colliery closed in 1968. Each waggon held 24 corves. Delivery was to be made at "a certain field or open space called Casson Close near the Great Bridge of Leeds".

The first agreement to be registered at Wakefield, on 27th March 1758, prior to the Act, was with Joseph Bilton of London, heir of the late Joseph Bilton of Hunslet, owner of five eighths of the Manor of Hunslet. It replaced an earlier agreement, made with the deceased, and gave Brandling the right to build "a Waggon Way or Newcastle Road" across "the wastes or common grounds" of Hunslet. Brandling was to pay £8 an acre a year for the rights, in contrast to £30 a year for 14 acres on another part of the route: both Biltons obviously realised that the vast tract of common could not be avoided easily. Brandling himself owned the other three eighths of the Manor, but there were also numerous "commoners" who usually had rights to use of waste lands. The 1235 Statute of Merton (20 Hen.III c.iv) still governed most encroachments on or enclosures of waste lands by Lords of Manors, allowing them to enclose such portions of the waste as were not needed by their free tenants, far too vague a wording to avoid exploitation. However, a deed of 2nd March 1713, still in the possession of Hunslet Parish Church in 1878, had conveyed six acres of common land to church trustees to endow the Hunslet clergy. It was signed by over a hundred freeholders, and stated that such freeholders had a right and title to the Commons of Hunslet. The Act under which this was done (12 Anne c.i) stated that the Lords of West Riding Manors had to have the consent of three quarters of the freeholders and others with rights of common. This perhaps was thought to have set a legal precedent, and may have been why Brandling petitioned for an Act of Parliament: the Act's preamble states that "some of the Owners and Proprietors of the Lands . . . may happen to have only a limited and not an absolute Interest and Property therein". 120 years later, the rights of way across Hunslet Moor were to cause considerable trouble.

Between 29th June 1758 and 12th December 1759, thirteen Indentures were signed and later registered at Wakefield, where the official copies may still be seen. The first of these was with John Suttell for the lease of the land and buildings at Casson Close, with an adjoining woodyard. Brandling, who had possessed the premises since 1st May, agreed to maintain all the buildings and to pay Suttell an annual rent of £33.10s. A lease for a strip of land 16 yards by 6 yards, giving access into Casson Close, was a further possible cause of concern for Brandling, since the strip had nine separate owners. Might there be others, as yet undiscovered? Jeremiah Dixon leased to him 5 acres and a stable at Rushy Pasture, Hunslet, which Brandling may have intended to use as an intermediate "staging post" for changing and resting horses, and he promised to attend carefully to the disposal of all waste hay, straw and horse dung from the premises. Haulage on the river staithes waggon-way had been sub-contracted out, but the Leeds waggon-way was to be worked directly, and must have involved a substantial number of horses needing stabling etc.

The Leeds Intelligencer of Saturday, 26th September 1758 reported that:

On Wednesday last the first waggon load of coals was brought from the Middleton pits of Charles Brandling, Esq., down the new road to his staithe in this town, agreeable to the Act of Parliament passed last session. A scheme of such general utility as to comprehend within it not only our Trade and Poor, which ought to be the grand objects of our Concern, - but also beneficial to every Individual within this town. On this occasion the Bells were set a-ringing, the Cannons of our Fort fired, and a general Joy appeared on every Face.

The waggon-way gave Brandling an immediate advantage over his competitors, by reducing transport costs for coal brought to Leeds, and the output of the Middleton Colliery doubled within a decade. According to the Act's preamble, the "towns" of Knaresborough, Ripon, Boroughbridge, Aldborough and Ripley also were supplied with coal from Middleton, and would benefit to some extent from the reduced costs.

A second Act of Parliament (19 Geo. 3, c.xi) was obtained by Charles Brandling in 1779. This empowered him to increase the price of coal to 5½ d per corf (c.24.4p per ton), but he undertook to deliver 480,000 corves (45,000 tons) a year. The people of Leeds agreed to this arrangement and increase because the previous quota of coal at a specified price was insufficient to meet demands. When it was exhausted, perhaps well before winter, coal could be sold at any price it would fetch. Brandling was required to supply the new quota in equal quarterly instalments, but was enabled to sell part of the consignment "at any convenient Place or Places near or adjoining to the said Waggon Way, within the said Borough of Leeds, between the said Coal Mines and the said Repository in Casson Close". There are records of sales on Hunslet Moor from 1771, which may have been unlawful. The Act legalised such sales and may have presaged the lawful supply to premises on the route, such as the Leeds Pottery, in which Humble was a partner; as well as receiving a way-leave fee, the Pottery was supplied with coal at reduced price. By the terms of the Act, Brandling was to lose the rights for his waggon-way if he should "permit or suffer any Coals which shall be got or dug out of any Mine or Seam of Coal lying within or under any Lands or Grounds in the said Townships of Beeston or Hunslet, or either of them, to be brought to the said Repository or Coal Yard for Sale there". Beeston and Hunslet coal being of inferior quality.

Jonathan Seal's 1780 map of Middleton, and Teal's 1786 map, reveal the extent of the waggon-ways. The 1780 map shows what appear to be "feeders" extending more than a mile south of the main waggon-way to pits on and around the upper level. A few of these routes still exist as footpaths in Middleton Park and Woods. The "Fire Engine", located on the maps at modern Grid Reference SE 31452895, was

probably the steam pumping engine known to have been built in 1779/80 to the designs of John Smeaton, the engineer of Austhorpe, near Leeds, better known for his Eddystone Lighthouse. Smeaton received payment in 1780 for his design and building instructions. Despite the terms of the 1779 Act, Brandling, formerly a partner in the Beeston New Colliery (location uncertain), acquired the rights of his retiring partner in 1789 and connected the colliery with his waggon-way, offering Beeston coal for sale at Leeds Staithe. No map or plan showing a branch to the township of Beeston has been traced, however. According to the Colliery records, cast iron tram plates were being purchased in quantity in 1790. It seems likely that these were for surfacing the waggon-ways above ground, where each waggon contained 21/4 tons of coal. In 1793, a 60" pumping engine made by Boulton & Watt replaced Smeaton's 72" engine, which was re-erected at an unidentified location.

A third Act (33 Geo. 3, c.lxxxvi) dated 30th April 1793, made reference to "very great Expense in making fresh Winnings in the said Coal Working, and in making additional Waggon Ways therefrom". This probably refers to the development of mining around the site of the modern Middleton housing estate, south of the earlier pits, which seem to have been spread around the northern edge of the plateau. The new Act authorised an increase in price to 61/2d per corf (c.28.8p per ton), apparently because of threats to discontinue the supply and allow the wayleaves to lapse. Since Brandling's coal was good and comparatively cheap, the price increase was conceded, but in future the supply was to be reserved for the people of Leeds. The annual quota remained at 20,000 waggons, but was to be divided into daily quotas of 64 waggons, 6 days a week, with no less than 10 waggonloads a day being sold in small amounts. The Act legalised the sale of Beeston or Hunslet coal, but only when Middleton coal was not available for sufficiently good reasons, and authority for sale of a portion of the daily quota at any place en route was given. To guard against possible deception by either customer or colliery, the Justices of the Peace were to appoint a Superintendent, to keep a record book of sales, to write out "tickets" for purchasers, drivers, etc., and to paint the amount loaded on to carts in white paint on the cart side. Two weeks later, they advertised for "A Steady, Active MAN, who writes a good Hand, to superintend the DELIVERY of COALS at the LEEDS COAL STAITH. The Salary will be upwards of Forty Pounds per Annum."

The last Act (43 Geo. 3, c.xii), dated 24th March 1803, named Charles Brandling as the former owner and Charles John Brandling as the present owner. It referred again to the "great expense in making fresh winnings" and in laying "additional Waggon Ways therefrom", and increased the daily quota to 80 waggons (c.56,250 tons a year). The Act authorised a rise in the price of coal to 16s a waggon (8d a corf, or 35.5p a ton), delivered to "the said Repository at Casson Close aforesaid, or at any other Place near thereto, to be used as a Repository for Coals instead thereof". This clearly indicated an intention to cut back the Leeds end of the line. Though the exact date of the change is not known, Netlam and Francis Giles' map of 1815 shows "Brandling's old Coal Staithes" on the Casson Close site and "New Coal Staithes" slightly to the south.

In 1807, the sale of coal at the river staithes ceased, whilst sales at the Leeds Staithes reached a record 67,000 tons. A detailed Valuation of the Middleton Colliery, dated 28th January 1808, was made by T. Fenwick & J. Watson, and showed that the average annual winning over the past seven years had been 35,000 waggons of 45 cwt, or 78,750 tons, of which an average of 8,464 tons had been for the workmen and engines. The Valuation referred to the two pumping engines, but no steam winding engines were mentioned, only "5 gins and 6 machines for drawing coals". There were 4½ miles of waggon-ways, including main-way and bye-way, one half being of iron. There were staithes at Leeds and at Hunslet, perhaps the disused river staithes, since the evidence is against the existence of staithes on Hunslet Moor at that time. An interesting reference was made to "2 machines on the inclined plane", which were valued at £120, having cost £145 when new. This would be the incline from Belle Isle to Hunslet, worked by self-acting rope haulage.

2. THE BLENKINSOP ERA - 1808 to 1832

John Blenkinsop, born in 1783 at Felling, County Durham, became Charles John Brandling's Agent at Middleton in 1808, probably after spending some time at Brandling's Tyneside collieries.

Ever-increasing costs of horses and fodder, due to the demands of the Napoleonic Wars, caused Blenkinsop to investigate possible alternatives to horse power. Brandling, a Member of Parliament, may well have seen Trevithick's experimental steam locomotive 'Catch Me Who Can' displayed in London in 1808, and told his Agent about it. Whatever brought steam locomotion to Blenkinsop's attention, he obviously realised both its potential and its current drawbacks, mainly that adhesion principle locomotives of commercially useful strength were too heavy for cast iron rails. Blenkinsop devised a rack and pinion method of propulsion, which enabled a light locomotive to have a commercially viable tractive effort. He secured Patent No. 3431 on 10th April 1811, and the firm of Fenton, Murray and Wood, in nearby Holbeck, was entrusted with the design of a steam locomotive incorporating the patent.

Matthew Murray, born in Newcastle-on-Tyne in 1765 and in due course apprenticed to blacksmithing and millwrighting, first migrated to Stockton-on-Tees. Trade declining, he walked to Leeds in 1788. Here he found work with John Marshall, a flax mill owner interested in the improvement of flax-working, and Murray devised for him some revolutionary machinery. At Marshall's he met David Wood, and they decided to set up in business together, first at Mill Green, Holbeck, in 1795, a venture which was so successful that, two years later, they moved to larger premises along Water Lane, Holbeck. Finance for the new works was provided by James Fenton, who attended to the firm's accounts, and William Lister, a "sleeping"

partner only. Wood's interest was the design and making of machinery, and he managed the day to day running of the works, whilst Murray developed stationary steam engines, and obtained orders for the firm. The circular building, from which the works came to be known as the Round Foundry, was erected in 1802. Murray's house in Water Lane, built about 1803 and officially called first 'Spring Field', later 'Holbeck Lodge', was locally referred to as 'Steam Hall' on account of its pioneer steam heating installation. It used to stand in a triangle of railway lines at Holbeck, but was pulled down in late 1959.

There is some evidence that early experiments were made at Middleton with a single-cylinder condensing engine: according to Rees' *Cyclopædia*, of 1819, Blenkinsop first "employed a small condensing engine, but finding the water to grow so hot that he gained but little by the condensation, he applied a high-pressure engine

with a wrought-iron boiler, and two cylinders in it."

A full account of the first practical test of the high-pressure, two cylinder engine, on 24th June 1812, appeared in *The Leeds Mercury* weekly newspaper of

Saturday 27th June 1812:

On Wednesday last a highly interesting experiment was made with a Machine constructed by Messrs. FENTON, MURRAY and WOOD, of this place, under the direction of Mr. John BLENKINSOP, the Patentee, for the purpose of substituting the agency of steam for the use of horses in the conveyance of coals on the Iron-rail-way from the mines of J.C. Brandling, Esq. at Middleton, to Leeds. This machine is, in fact, a steam-engine of four horses' power, which, with the assistance of cranks turning a cog-wheel, and iron cogs placed at one side of the rail-way, is capable of moving, when lightly loaded, at the speed of ten miles an hour. At four o'clock in the afternoon, the machine ran from the Coal-staith to the top of Hunslet-Moor, where six, and afterwards eight waggons of coal, each weighing 3 tons, were hooked to the back part. With this immense weight, to which, as it approached the town, was super-added about 50 of the spectators mounted upon the waggons, it set off on its return to the Coal-staith, and performed the journey, a distance of about a mile and a half, principally on a dead level, in 23 minutes, without the slightest accident. The experiment, which was witnessed by thousands of spectators, was crowned with complete success; and when it is considered that this invention is applicable to all railroads, and that upon the works of Mr. Brandling alone, the use of 50 horses will be dispensed with, and the corn necessary for the consumption of, at least, 200 men saved, we cannot forbear to hail the invention as of vast public utility, and to rank the inventor amongst the benefactors of his country.

The eight waggons of coals brought to Leeds at the launching of the machine,

was by order of Mr. Blenkinsop, presented to the General Infirmary.

The issue for 18th July 1812 carried a small wood-cut illustration, and an abstract of the Patent Specification.

Six or seven locomotives in all were built by Fenton, Murray & Wood to the general designs, though each succeeding one might incorporate variations. The earliest of them had a cast iron boiler of oval section, about 37" high x 32" wide x 9½'

long, made in two halves bolted together. By April 1813, however, Murray was considering making the boilers of wrought iron, and in a letter of 1st June 1813. Blenkinsop also wrote that "You must have a wrought iron boiler with a double iron tube". In the early locomotives, at least, a single flue tube 14" in diameter, passed through the boiler to a chimney of reduced diameter, about 9 ft high. Two cylinders of 8" diameter by 24" stroke (probably 9" x 22" on the first engine, Prince Regent) were sunk into the boiler for half their length, exhausting into the atmosphere. Two small plug-cocks, coupled by a rod, controlled the steam supply from the boiler. Each piston-rod was controlled by two vertical guides, and by a pair of return connecting rods it drove parallel outside cranks on a crankshaft below it. The two crankshafts were connected through gearing with an intermediate shaft, upon one end of which was the rack wheel, gearing with the rack rail. In the Leeds Mercury drawing, and in technical drawings published in 1815 in the French Bulletin de la Société d'Encouragement pour l'Industrie Nationale, the cranks appear to be set at 180°. implying that the cylinders were single-acting at that time. However, a letter from Blenkinsop published in The Monthly Magazine, June 1814, says that the cranks were then fixed at right angles, implying that the advantages of double-acting cylinders had since been considered necessary. The steam distributing valves were large 4-way plug cocks, fitted with wrist plates. These were connected, by horizontal rods above the boiler, to vertical rods at each end of the boiler, pivoted near the centre of the boiler ends. The lower ends of the vertical rods were connected with eccentrics mounted on the crankshafts. Reversing was achieved by attaching the valve rods to points in the wrist plates at right angles to the usual points, to oscillate the cocks by 90°. Short levers, with the valve rods attached to their lower ends, were mounted loosely on the valve stems, and pins in their upper ends engaged with either of two holes in the wrist plates. Forked hand-levers, engaging with collars on the valve lever bosses, slid them into or out of gear. A direct loaded spring safety valve was fitted near each end of the boiler top, and the maximum working pressure of the boiler was 55 pounds to the square inch, though it was tested to 60 p.s.i. The machine was supported on a wooden frame, carried on four 35" diameter wheels with a wheelbase of 7'4"; the rack wheel was of c.43" overall diameter, and revolved at half the speed of the crankshafts. Boiler and cylinders were lagged with wood.

Early in October 1813, Blenkinsop mentioned in a letter that he had now "gotthe noise of the steam taken completely off by fixing a wooden cistern between the
cylinders as a receiver and a discharging pipe fixed on top of it". The drawings and
detailed account supplied by the French engineer Andrieux to the Bulletin, showed a
small water feed tank with a pump activated by the valve gear, on the front end of the
locomotive. M. Andrieux was said to have collected his information on the spot, but
it is not clear how recently before publication he had collected it, though it is most
likely to have been during the lull in the Napoleonic Wars, between Spring 1814 and
Summer 1815, since a French engineer would not have been able to travel freely in
England during hostilities. The feed tank might have been an unused idea or an
optional extra offered to prospective buyers. According to a letter written by Murray
in April 1813, he calculated the locomotives' boiler size according to the length of the

railway, presumably expecting a water supply to be available at both termini. However, in practice Blenkinsop found that he lost steam when filling frequently with cold water, and as early as August 1812 was planning to raise a cistern from which he could fill the boiler with hot water. Many Trevithick stationary engines already had feed pumps, and the Middleton locomotives perhaps may have had them added at some time, though no other known drawing shows one.

The engines cost £380, including a Royalty of £30 paid to W. West, owner of the Trevithick Patent, "for the use of the high pressure steam". Each engine weighed about 5 tons fully charged, and according to Blenkinsop did the work of 16 horses in 12 hours. It drew 27 waggons, representing a load of 94 tons, at 3½ miles per hour on the level. During a demonstration on 16th January 1829, for representatives of the Liverpool & Manchester Railway Company, a train of 140 tons (38 loaded waggons) was hauled at 2-3½ m.p.h. The average consumption of coal was 21.3 pounds per train mile, and each pound of coal evaporated 6.7 lbs of water. In 1812, a horse cost £50 to buy and £55-£60 per annum in upkeep, exclusive of the driver. In a letter of January 1813, Blenkinsop detailed the running costs of 16 horses and 8 men as £1,360 per annum, whilst an engine and man cost £160 per annum - saving £1,200.

The first two locomotives went formally into regular service on Wednesday 12th August 1812. It being H.R.H.'s birthday, one of them was called *Prince Regent*, and the other was soon named *Salamanca* after the great victory there, news of which reached England on Saturday the 15th. *Prince Regent* had been at work since the June trial. The impact made on their then rural surroundings can be guessed at from the account by the King of Prussia's Librarian, Dr. S.H. Spiker, who visited in Summer 1816:

It is a curious spectacle, to see a number of columns of smoke winding their way through the countryside. As they approach we see them more and more distinctly, till at length along with the column of smoke, we also perceive the waggon from which it ascends, dragging a long train of similar waggons hooked to it, which gives it the appearance of a monstrous serpent.

Dr. Spiker was most impressed that he "was obliged to move at a sharp pace, indeed almost a trot, to keep up with" the engine. David Joy, who saw them as a boy much later in their working life, was not at all impressed when the engine he had been told would come by "like a flash of lightning . . . only came lumbering on like a cart." Nearly thirty waggons moving at walking pace obviously took some time to pass by, and during the locomotives' lifetime at least four members of the public were killed trying to cross the line at the last moment, before a train blocked their way.

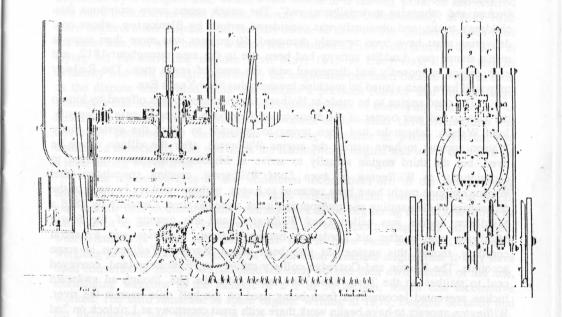
The Repertory of Arts, Manufactures and Agriculture of 1818, printed 'Mr. Blenkinsop's Answers to Sir John Sinclair's Queries respecting the conveyance of coals on Railways by Steam Engines', first posed and answered in 1814, in which Blenkinsop stated that the engines could transport "15 tons up a hill rising two inches in a yard", roughly the rise of the lower incline from Hunslet Carr to Belle Isle. The incline had a self-acting rope haulage system, with a brake-drum mechanism housed at its summit, but it seems to have been intended originally that the engines should negotiate the rise. This was implied in a letter written in April 1813 by Murray, who



Left: Matthew Murray, from an engraving taken from a portrait.

Below: technical drawings of a Murray/Blenkinsop locomotive, published in 1815 in the Bulletin de la Société d'Encouragement pour l'Industrie Nationale, under the title 'Chariot à vapeur de M. Blenkinsop'. They give a fair idea of the workings of the locomotives at the single-acting stage of their development, though they only ever had one rack wheel, not two as pictured.

Illustrations from the M.R.T. Collection.



strongly advocated a central rack for the system. He wrote that "beginning over again" with the engines "will be the case here I believe before they can expect to run to the pits as the oblique action or side pull is very determinal in going up a moderate rise or turning". He added that "The side rack did very well as a cheap method for trying the scheme, but certainly is not calculated for practice." However, the side rack was retained, and in 1818 at least, the incline was being rope-worked, though it is conceivable that locomotives occasionally changed levels via the incline, or took short trains up it if, for instance, the brake-drum mechanism was under repair. A central rack would have interfered with the use of horses in emergencies, but in his Patent Specification Blenkinsop envisaged the possible use of a rack wheel at both sides. The Bulletin drawings show twin wheels, but as well as being more expensive, a rack at each side would have caused considerable difficulty in negotiating even the slightest curve, and even though the accompanying details to the drawing state that there was a rack wheel at each side, it is likely that this was an early design changed during production, or was done merely to show that the rack wheel could be fixed at either side.

Four months after their official adoption, at least one of the locomotives was damaged. Blenkinsop's advertisement in *The Leeds Mercury* of 16th January 1813, offering 50 guineas reward for information leading to the conviction of the perpetrators, says that on Thursday evening, 31st December 1812, large blocks of stone and loose iron rails had been placed on the Railway near to Leeds Pottery and on Hunslet Moor, by which "Part of the Machinery about the said Carriages was . . . Broken and otherwise materially injured". The attack seems more ambitious than children's tricks, and obviously was considered serious by Blenkinsop, whose coal deliveries must have been severely disrupted: 50 guineas was more than many a man's annual pay. Luddite activity had been rife in the area throughout 1812, and each engine supposedly had dispensed with the work of seven men. The Railway may well have been visited by machine breakers that New Year's Eve.

The third engine to be made at Holbeck for Blenkinsop, was offered by him to the viewer and part owner of the Kenton and Coxlodge Collieries near Newcastle, John Watson, whom he had been trying to persuade to adopt the system there. Watson appears to have named the engine Willington, after the village where he lived, but the third engine actually to arrive at Middleton has been referred to occasionally as Willington or even Lord Willington, causing speculation that Watson's engine might have been returned to Leeds, perhaps unlikely because of the difficulties of dismantling and transporting it for a second time. Certainly by 1818 a Middleton engine was called Lord Wellington, and the naming of the fourth Middleton engine after his Lordship's brother Marquis Wellesley was a natural corollary, though this engine has also been called Marquis Wellington in some accounts. The Kenton and Coxlodge colliery railway in Northumberland, conveyed coal to staithes on the Tyne, about five miles from the pits, though an awkward incline prevented locomotives from being used on the half mile nearest the river. Willington appears to have begun work there with great ceremony at 1 o'clock on 2nd September 1813, and according to The Leeds Intelligencer it replaced 40 horses.

George Stephenson witnessed the event, with several other Killingworth men. He told them scornfully that he could "make a better engine than that to go upon legs", and soon started work on *Blücher*, embodying in it many of the Murray/Blenkinsop features. Robert Stephenson, in an appendix to Samuel Smiles' 1862 biography of George, admitted that "The construction of my father's first engine was very much after the same plan as that made by Mr. Blenkinsop; but the combined power of the two cylinders was communicated to the wheels which supported the engine on the rail instead of to the cog-wheel, which, in Mr. Blenkinsop's engine, acted on a cogged-rail independently of the four supporting wheels." The engines differed in another important aspect: *Blücher*, first tried on the 25th July 1814, could draw a 30 ton load at 4 miles an hour, whilst the Murray/Blenkinsop engines regularly hauled more than 90 tons at that speed!

Smiles' biography of Stephenson, relying heavily on the reminiscences of the great man's friends and of his son, states disparagingly that "the Blenkinsop engine at Coxlodge was found very unsteady and costly in its working; besides, it pulled the rails to pieces, the entire strain being upon the rack-rail on one side of the road. The boiler, however, having shortly blown up, there was an end of that engine; and the colliery owners did not feel encouraged to try any further experiment." However, the Kenton and Coxlodge viewer's report of 9th May 1815, stated that "The method of leading coals by the aid of the steam engine lately adopted we certainly think preferable to the former plan of leading by Horses". Certainly he had been so impressed by Willington that, within a few weeks of it starting work, he had ordered two more locomotives from Fenton, Murray and Wood. Unfortunately, in May 1815 there began a bitter dispute with the part owner of the Fawdon Colliery, which used the same line, but with horses. Watson later claimed £2,100 from him for the "loss in laying off the travelling engines from May, 1815 to Lady Day, 1817", and he evidently was well enough satisfied by the engines to put them back to work as soon as the dispute was settled. This was despite a previous rumour that the Coxlodge Managers had decided to adopt "the Killingworth plan of conveying their coals", as mentioned in a letter from Blenkinsop to Watson in November 1814. Blenkinsop was obviously perturbed by the prospect of losing a source of patent royalties, and demanded rhetorically "Do you think the Killingworth engine will travel up hill or on a level during wet or frost".

The instant success of the Middleton locomotives led to the system being adopted also at Orrell Colliery, near Wigan. Robert Daglish, then manager at Orrell, said that the first locomotive there started work at the beginning of 1813, and that he had built it at the Haigh Foundry, of which he was also manager, by arrangement with Blenkinsop. Three locomotives are said to have been built for Orrell, each weighing 6½ tons. One was said to be an adhesion principle engine, but it may have been converted to such. Two locomotives each worked their own section of the line, exchanging waggons at the summit of a 1 in 36 incline, which one locomotive worked. The third remained as spare engine. Writing in 1856, Daglish declared that his locomotives had worked for over 36 years, until the closure of the colliery. Various local accounts are quoted in Dendy Marshall's book, giving "the engine" the

names The Yorkshire Horse and The Walking Horse. One account states that the latter was because of the pronounced snorting effect of the exhaust steam.

Many people visited the Middleton Railway to view the world's first commercially successful steam locomotives, or wrote to Blenkinsop for information. In 1815, German engineers examined them and took the design back to Berlin, where two engines were built, but for various reasons not used. A year later, Grand-Duke Nicholas of Russia, later Czar, visited the Round Foundry and the Railway, and Murray's son, Matthew, subsequently took a model of a locomotive to Russia to present to the Czar. The Blenkinsop system was tried unsuccessfully at the Horlot Colliery, near Liège in Belgium, and may have been used also in Wales, at the Nantyglo Iron Works, near Ebbw Vale. In an age when George Stephenson's work is far more widely known than that of Murray and Blenkinsop, it is strange to observe that Stephenson felt great frustration at the comparative lack of public interest in his own first engine. Smiles wrote waspishly that "Blenkinsop's clumsier and less successful engine . . . excited far more interest; partly, perhaps, because it was close to the large town of Leeds, and used to be visited by strangers as one of the few objects of interest in that place. Blenkinsop was also an educated man, and was in communication with some of the most distinguished personages of his day upon the subject of his locomotive, which thus obtained considerable notoriety". Indeed, Blenkinsop's enthusiastic championing of the rack locomotive appears to have made some observers and historians overlook Murray's role in their design and manufacture. However, the engines, and Blenkinsop's other efforts to improve the Middleton Colliery, must have been highly successful: an all time record output of slightly over 100,000 tons was achieved in the year 1814.

On the 28th February 1818, the boiler of Salamanca exploded, killing the driver. The Leeds Mercury's 7th March 1818 report of the inquest provides some interesting details of the working of trains around the incline at that time. The first

witness, James Hewitt, stated that:

he worked the Engine called the Lord Wellington: the deceased, George Hutchinson, had the care of the Engine which exploded, called the Salamanca. He stated that all the Engine-men had directions from Mr. Blenkinsop, never to have the steam at a higher pressure than fifty-five pounds the square inch, but that the deceased had several times had the steam raised to a much higher pressure. On Saturday, the 28th of February, in the afternoon, witness was at the break-house at the top of the inclined plain, when the deceased arrived there with the Salamanca Engine and a number of loaded waggons. The Engine having been separated from the loaded waggons, was placed, by the deceased, in the usual place for returning with empty waggons, that he then increased the fire under the boiler, and came into the break-house, and remained until the empty waggons came up, which was upwards of an hour. Witness could see the steam issue through the cocks of the boiler, and through the joints of the Engine; and witness is quite sure that the two safety-valves were made fast down with the spring which is used for keeping the safety-valves steady and right when the Engine is going on the road, and which ought to be at liberty when the Engine is not in motion, to permit the steam to escape when it reaches the proper pressure, and which it would do without danger. Witness, on seeing the Engine so high charged, said it was a shame to see it so. The deceased, when the empty waggons came up, moved the Engine to them, to take them out of the way: he then got from the place where he stood to work the Engine, and went to the end of it to mend the fire, when the Engine-boiler burst at the end next the fire, and the deceased was carried, with great violence, into an adjoining field, the distance of one hundred yards.

John Spink corroborated all this, and "also stated that he told the deceased to be sharp, as he had the steam too strong, but that instead of reducing the pressure, he turned the cocks, so as to prevent any steam from escaping". Joseph Speed, an engineer at the Colliery, and Richard Jackson, Murray's son-in-law, then manager at the Round Foundry and later a partner, both testified as to the boiler being sound and good before the accident. Jackson added that it appeared "to have been burst by negligence, in keeping the spring upon the safety-valve, at a time when the Engine was not in motion. The Engine was tried at a pressure of 60lb. on the square-inch, and at that pressure it was perfectly safe". The Jury found a verdict of "Accidental Death, occasioned by the bursting of the boiler, in consequence of the deceased not having taken the precaution of removing the pressure from the safety-valves". The Leeds Intelligencer of 9th March notes that "The Bill for regulating Steam Engines, now before the House of Commons, contains a clause to compel the adoption of boilers for Steam Engines, made of wrought iron only." Salamanca's boiler was of cast iron.

In a strange sequel to the accident, *The Times* of Wednesday 30th March 1825 carried the following in a column of small news items:

On Saturday afternoon last, George Hutchinson, one of the men employed in conducting the steam-engines used in conveying coals from Middleton to Leeds, was blown to pieces by the bursting of the boiler.

The first Bill promoting the Liverpool-Manchester Railway had entered the Committee stage in Parliament nine days previously. The Company proposed to use locomotives, and the seven years old "news" item undoubtedly was sent to *The Times* in an attempt to discredit locomotives as being unsafe. Powerful vested interests prevailed, and the Bill was withdrawn after two crucial clauses were voted out.

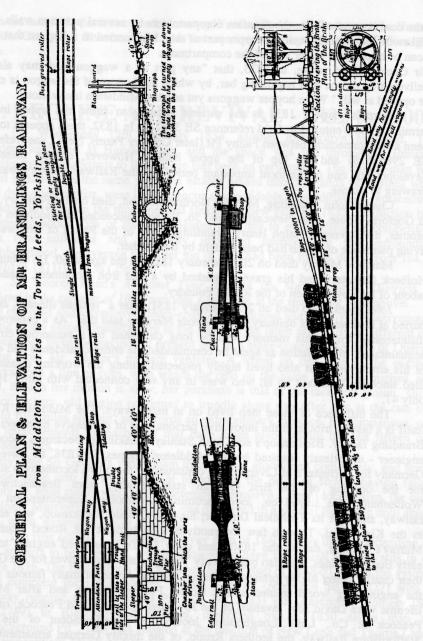
There was a serious accident underground at about 6.45p.m. on Wednesday, 12th January 1825, twenty-three miners being killed outright and two fatally injured by an explosion at "Gosforth Coal Pit, three miles from Leeds". The Leeds Mercury's first report stated that the explosion happened when one of the miners removed the top of his Davy lamp to allow it to cool, it having become red hot - a great fault of the Davy lamp. The exposed flame ignited "fire-damp", which probably had been released by a recent series of minor roof falls in worked-out sections. The inquest revealed that, despite strict instructions not to do so, some miners had often removed the tops from their lamps for a variety of reasons, including the lighting of tobacco pipes from the flame, and Blenkinsop proposed to fit locks to the lamp-guards to prevent this happening in future, and also to have "one or more persons expressly

appointed to take care of the lights in each pit". The list of dead included a boy only five years old.

Gosforth Coal Pit, named after Brandling's Northumberland home, was stated to be 80 yards in depth, sunk at the end of a tunnel 1,400 yards in length because "the estate did not belong to the owner of the coal". This may well have been the Day Hole located on the middle level at Grid reference SE 309288, near the later Broom Pit. At one time there were two shafts, called Gosforth and Woodstar, located close together at SE 312277. The surrounding land, bounded by Sharp Lane and Throstle Carr Beck on the north, east and south, had belonged to a Mr. Armitage and no known map shows a track leading to the site of these shafts, which may have been for ventilation only, the position being not inconsistent with a tunnel of 1,400 yards to the Day Hole. However, though the air furnace system of pit ventilation normally involved having two openings to the pit, for upcast and downcast air, Blenkinsop made no mention of such shafts in his evidence at the inquest. He explained the widely acknowledged excellent ventilation of the pit as being due to "the size of the air furnace, and the width of the tunnel . . . the air furnace is 3 feet 3 inches, by 7 feet 3 inches; that tube is made so large, in order to cause a regular and free circulation of air in the workings". The tunnel was rumoured to be big enough to accommodate a horse and cart.

The disaster led to an immediate and serious drop in the amount of coal for sale in Leeds, during the coldest season of the year. During February, coal was sent from a Lofthouse pit, but the drivers made the mistake of trying to sell it illegally from their carts in the street. According to a letter from James Scholes of Rothwell Haigh, placed as a paid advertisement in The Leeds Mercury of 5th March, they were informed on by someone acting for "some of the Coal Leaders, who supply the Town with Coal at a very exhorbitant Rate", and subsequently they were fined by the Magistrates. An American, William Strickland, who visited Middleton in June 1825. wrote about the Railway in his Reports on Canals, Railways, Roads and other subjects, but commented that "this method is now entirely out of use", which obviously would be as a result of the disaster. Some coal would still be produced by the smaller pits on the plateau, and it perhaps is most likely that the upper incline, from Middleton village down to Belle Isle, was built at this time to improve the transporting of coal from the plateau down to the main waggon-way. Certainly, it was in existence by 1826/7, when two Prussian mining engineers, Von Oeynhausen and Von Deckens, visited the Colliery. They studied the Railway's dimensions and its working methods, giving many interesting details in their report: a locomotive normally made six journeys daily at this time, using 40 cwt of coal; the lower incline. whilst usually self-acting, could also have up to four loaded waggons let down it on the brake; the Brandlings still adhered to the terms of the 1803 Act, by charging 16s per waggon of best coal; the Kidacre Street Staithes were 594 feet long, and had a most interesting working method. Dr. Spiker, in 1815, had seen the waggons overturned for unloading; just over a decade later, his compatriots wrote that:

The wagons have doors in the bottom; the railway runs over masonry-vaulted arches, and in the middle of each vault there is an iron shoot, by means of which



A plan of the Middleton Railway from William Strickland's Reports on Canals, Railways, Roads and other subjects, published in 1826.

the coal is emptied into the separate compartments by several partition walls, and likewise by a middle wall, the upper part of which is formed as a flap, so that coal can be tipped into either side of the compartment.

Sir George Head wrote, in 1835, that "any part of a waggon-load may also be delivered by means of a regulating bar, by which the bottom of the wagon is closed

or opened at will." Were hopper waggons yet another Middleton innovation?

Martin's map of 1831 is the earliest actually to show the upper incline, terminating at Venture Pit, Grid reference SE 306282. In 1832, there appears to have been a rail connection between Fanny Pit (later Colliery Farm), New Lane (reference SE 29862818) and the top of the upper incline. However, despite these new developments, one of the most important periods of the Railway's history was now drawing to a close.

Charles John Brandling, M.P. for Northumberland, died on 1st February, 1826 at Gosforth House, near Newcastle, aged 56. He was succeeded at Middleton by his brother, the Reverend Ralph Henry Brandling, Vicar of the Parish of Rothwell, the

living patronage of which had been bought by their father.

Matthew Murray died on 20th February 1826, at the age of 60. He is buried in Holbeck Cemetery and his grave is marked by a cast iron monument, made as a

labour of love by the men of the Round Foundry.

John Blenkinsop died on 22nd January 1831, after a "tedious illness", and lies buried at Rothwell. His obituary in *The Leeds Mercury* said that "As a generous and disinterested friend, his memory will be long cherished by a numerous circle of acquaintance: in his station as agent he commanded the entire confidence and esteem of his employers, and also lived highly respected among the working classes, and died sincerely lamented by all who were in any way connected with him." He was only 47.

The influence of these men lived on in many ways. The Middleton Railway itself is a lasting tribute to the innovative personalities of successive members of the Brandling family. Blenkinsop's son, John Stanley Blenkinsop, became a locomotive engineer - doubtlessly inspired by the Middleton engines. In 1838, he travelled to Germany for Forrester's of Liverpool, to construct for them two locomotives supplied for the opening of the first German state railway, from Braunschweig to Wolfenbüttel. He stayed on, soon becoming Locomotive Superintendent to the railway, and later its Technical Director; his son, Oswald Blenkinsop, was engineer to the Kiel Canal. Though few locomotives were built at the Round Foundry in Murray's lifetime, during the 1830's and early 1840's it supplied engines to many early European lines, and also built twenty 'Firefly' class locomotives for the G.W.R., their quality being highly praised by Daniel Gooch. Amongst many famous men of the engineering world trained at the Round Foundry during and after Murrav's lifetime were David Joy, inventor of the Joy valve-gear, Richard Peacock, of Beyer Peacock & Co., Luke Longbottom, locomotive superintendent of the North Staffordshire Railway, the brothers Krupp, of the mighty German armaments firm, Benjamin Hick, of Hick, Hargreaves & Co. - builders of mill engines, and Charles Todd, who helped found both Kitson & Co. and E.B. Wilson's Railway Foundry,

from the latter of which stemmed Manning Wardle, Hudswell Clarke and the Hunslet Engine Company. The famous Leeds locomotive building industry had its origins here.

3. DECLINE AND REVIVAL - 1832 to 1900

On Wednesday 12th February 1834, another locomotive exploded. The accident happened at Hunslet Carr, and the shock was felt throughout Hunslet, causing many inhabitants to think there had been an earthquake. The engine-man was killed instantly. In the same year, the estates passed into the hands of trustees who, with dwindling profits, were loath to incur any avoidable expenditure on replacement of locomotives or on the much needed sinking of new pits. By 1835, production had dropped to about 75% of the peak figures and, due to ever-increasing competition from new collieries and generally improved transport in the surrounding neighbourhood, the average price per ton of coal had been forced down from 7s4.3d (c.37p) in 1811/12 to 5s (25p).

Sir George Head's A Home Tour through the Manufacturing Districts of England in the summer of 1835 provides a last look at the remaining locomotive:

The rail-road and locomotive steam-engines are curious and worthy of observation, being of the earliest manufacture in the country; the latter especially as different in appearance from the engines in present use, as a stage-coach in the days of Queen Anne from Mr. Leader's modern vehicles. A wheel on one side of the engine works upon a line of cogs, with which the rails on the same side are furnished, so that, though her motion is slow, her purchase is that of the rack and pinion. This crazy, rickety, old engine continues to trundle along day after day at the rate of about five miles an hour, and affords an extraordinary instance, by comparison, of the improvements in machinery that have taken place within the last fifteen or sixteen years.

Shortly after Sir George's visit, steam traction was abandoned completely, and horse traction came into its own again at Middleton, the price of fodder having fallen sharply. In what surely was the first attempt to preserve a steam locomotive, the only remaining Murray/Blenkinsop engine was displayed in a shed at Belle Isle until about

1860, when, tragically, it was scrapped.

The first edition 1" Ordnance Survey map of 1840 shows the line extending to what appears to be West Pit, which is known to have been sunk to 116 yards in or before 1836. The first edition 6" Ordnance Survey map of 1848-51 shows the system in its complete form via "Venter" Pit to West Pit (reference SE 295277) with a tramway running from Henrietta Pit (SE 29812783) via Glasshouse Colliery (SE 29922749) to Bleachground Engines, described by an 1850 estate map as "Bleachground Pit". This was situated at the junction of New Lane and Thorpe Lane, now respectively Middleton Park Avenue (slightly re-aligned) and Middleton Lane (reference SE 29982705). At the other end of the line, Great Wilson Street was built

some time between 1831 and 1839, necessitating the moving back of the terminus by a further 50 yards, into Kidacre Street. There were various sidings from the Colliery line at its northern end, two short ones being shown on the 50" Ordnance Survey plans of Leeds of 1850. A passing loop is also shown between Moor Road and Hillidge Place, north of Hunslet Moor Staithes.

The Trustees failed to plough back sufficient of the dwindling profits, resulting in decreasing efficiency and increasing financial embarassment; a large scale map was prepared in 1850, probably with a view to selling up. A further map was prepared in 1853 and bears the title 'Brandling v. Plummer'. This shows the following pits and no others: Day Hole Colliery, Henrietta Coal Pit, West Pit, New Lane Colliery (i.e. Glasshouse) and Bleachground Pit. The latter two were connected by tramway to a main line which ran from West Pit to Great Wilson Street, along the original alignment. The estates were advertised for sale on 19th and 20th October, 1853 as a direct result of two Brandling v. Plummer Chancery proceedings, but there is no record of a sale having taken place. In October 1862, a sale was decreed again, this time as a result of three Brandling v. Plummer and one Brandling v. Liddell Chancery proceedings. The Leeds Intelligencer later reported that none of the lots had been sold, and the Trustees limped on until 14th August 1865, when the entire remaining estates, collieries etc. were purchased for £100,000 by Francis William Tetley, one of two partners in the Tetley brewery, some 200 yards north of the Kidacre Street Staithes. The vendors were named as Robert Plummer, merchant, John Clayton, esquire, Ellen Bulmer, widow, and William Bramwell Ferguson, surgeon, all living around Tyneside.

At about this time, Tetley and his brewery partner bought the freehold of their original premises, and embarked on an ambitious programme of expansion and rebuilding. The purchase of the Middleton estate, and the redevelopment necessary there also, may have stretched his resources too far, and within a few months he had mortgaged a substantial amount of the estate, though he retained the right to work the minerals. Most of this property was not redeemed until 1880. Tetley also took three partners, John Rhodes, sharebroker, Joseph Ogdin March, machine maker, and Edmund Maude, timber merchant. After a short time as Messrs. Rhodes, Tetley, March and Maude, the partnership became the Middleton Colliery Company, and then, on 8th June 1867, it was incorporated as the Middleton Estate and Colliery Company. During 1865/6, Marshall Nicholson, mining engineer, moved into Middleton Hall and was soon described as "colliery viewer and manager", both residence and position having once been occupied by John Blenkinsop. Nicholson later became Company Secretary, and eventually Managing Director. Charles Ryder. Tetley's brother-in-law and brewery partner, and the other Colliery partners' sons, Fairfax Rhodes, George March and William Henry Maude, also became directors of the Company, and on 4th April 1868, the estate was officially transferred from the partners to the Company. It is interesting to note that Joseph and George March were, respectively, the son-in-law and grandson of Matthew Murray.

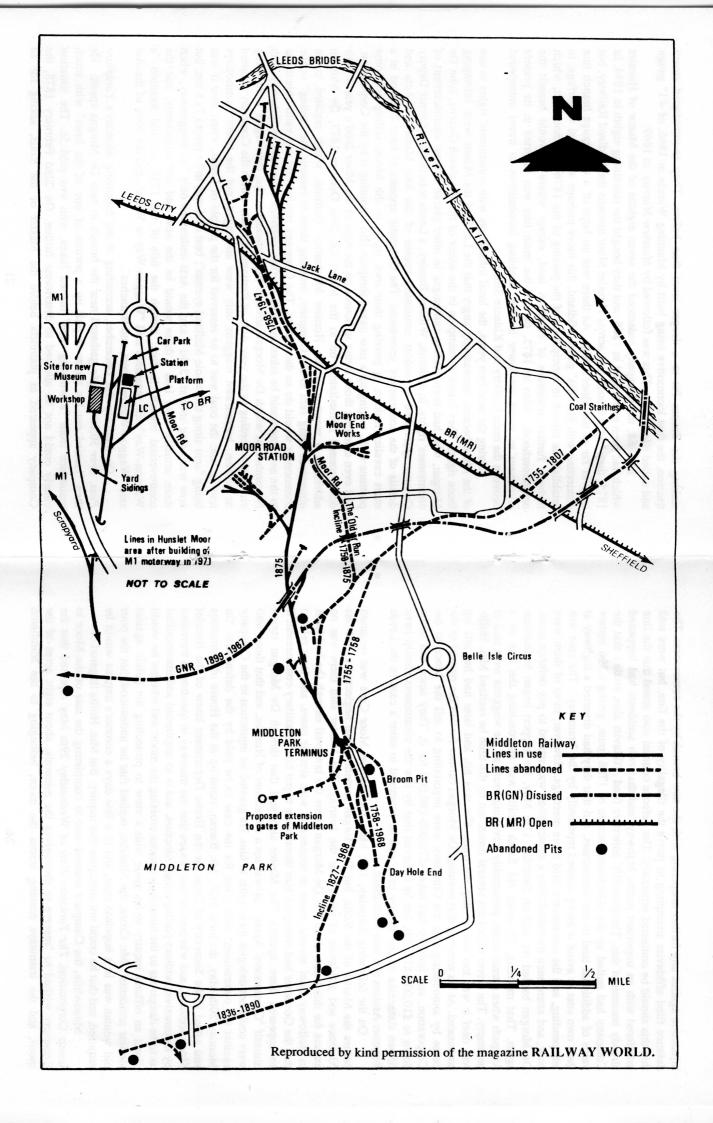
In 1865, only the Dayhole and the Henrietta and West Pits were being worked, but the Company quickly set about the task of making the Colliery profitable again,

sinking the Broom Pit to a deeper level than before. They re-introduced steam traction, the first locomotive being built by Manning Wardle in 1866, of 4'1" gauge and called *Blenkinsop*. This was followed by *Matthew Murray* in 1869.

In 1868, the Company redeemed the seven eighths of the Manor of Hunslet which had been mortgaged in 1865, and they bought the remaining eighth in 1874. In 1875, they laid a branch line across Hunslet Moor towards the Midland Railway, but only as far as the Moor's edge. As there was no hope of a 4'1" gauge branch line connecting with the 4'8½" gauge Midland, this move perhaps was legal subterfuge, to establish the branch in anticipation of the passing of the 1876 Commons Act, which forbade further enclosure of common land, except where it would benefit the neighbourhood. Also in 1875, part of the main line was diverted to its present alignment to avoid the lower incline, enabling locomotives to travel unimpeded between the main Colliery and Kidacre Street.

During the next two years, the local inhabitants with commoners' rights to use of the Moor became increasingly angry that the Lords of the Manor were infringing those rights. They found a champion in the editor of the Woolwich Gazette, John De Morgan, who had been leading campaigns in other places against encroachment of commoners' rights. In addition, William Emsley, a Leeds solicitor and former Deputy Coroner, published a booklet containing copies of the four Middleton Acts and details of the commoners' grievances. The Company appears to have behaved in a most cavalier fashion in proving their own rights to the Moor, selling off some portions of it, tearing up a new paved footpath laid adjoining it by the Corporation, and even charging those living in houses on the edge of the Moor 2s6d a year if their door opened immediately on to the Moor! On 26th October 1877, De Morgan addressed a meeting at the Hunslet Mechanics' Institute, which resulted in an ultimatum being sent to the Company, ordering them to remove the "siding" or the commoners would do so themselves. The Company replied that any valid objections to the new line could be taken to court. Further meetings were held on Saturday 24th November, at which De Morgan advised the commoners that their rights were being violated according to the very Acts of Parliament under which the Company claimed its powers: horsedrawn waggons only were envisaged, not the steam locomotives now in use; the coal was to be reserved for the people of Leeds, when now it was being "sent along the whole Midland system"; best coal was to be priced 7s a ton, but now was being sold at 15s5d a ton; the Acts authorised only "a" waggonway, when three actually were laid - these would be the new and old alignments, and the controversial branch. In fact, though the title of the 1758 Act did mention "a Waggon-Way", the preamble said "Waggon-Way or Ways", and the body of the Act said "Waggon-Way or Ways, and Branches".

On Saturday 8th December, according to the following Monday's Yorkshire Post, over 30,000 people gathered near the branch to hear De Morgan speak. He then "carried out his threat to pull up a portion of one of the lines" with much assistance from "a working man" named Jukes, who was paid 5s. The situation clearly could not be allowed to deteriorate further. On 22nd February 1878, the Company appeared as plaintiffs before the Master of the Rolls, asking for an



injunction against any further tampering with the new branch by the commoners. The defence filed affidavits attempting to prove the illegality of the line, but were told that this should be contested separately. The defence counsel also stated that the line interfered with an important public highway, and that two accidents had happened already because of this. The plaintiffs' solicitors filed affidavits also, stating that the Company had pulled up the abandoned section of 1758 route, giving c.396 square vards of additional land to the commoners, and that they had diverted a highway at their own cost to avoid it being crossed repeatedly by the "tramway". The case was left pending, and the commoners held more meetings. However, most of them were poor, and attendance dwindled after a subscription was started to pay defence costs. De Morgan battled on, and on Saturday 11th May, his support began to increase again. That morning, 75 years old Sarah Hollis was approaching the line on a footpath when a train came, presumably travelling south as the waggons were said to be empty. The driver called out several times, but by the time he realised Mrs. Hollis was deaf it was too late to stop the train. She was hit, and later had her left leg amputated. At his meeting that evening, De Morgan further fuelled the revival of the cause by announcing that the Company were negotiating to sell the Moor to the Corporation, and initially had asked £70,000-£80,000 for it. They since had come down to £10,000-£12,000, but he believed that by law the commoners should have fifteen sixteenths of any money paid, and he promised to enter a case in the Leeds Summer Assizes if a sale went ahead.

On the following Saturday, 18th May, the Hunslet Moor Case was resumed before the Master of the Rolls, but De Morgan somehow had neglected to file his "defence and affidavits of merit" for the hearing. The Master said there was no excuse for this lapse, since Mr. De Morgan knew the law well enough (he had been in Holloway Gaol several times in connection with similar cases, and later related that the Governor had written to him threatening to put him in solitary confinement if he appeared there again!). The Master also said that though De Morgan styled himself "Commoners' Agent", he was not a commoner of Hunslet, and that those who were could not delegate their rights to him. He granted an injunction to the Company against the commoners, with costs for the case to be paid by the defendants. On Monday 20th May, the local M.P., Mr. Barran, stood up in the House of Commons and asked if the Secretary of State for the Home Department knew of the Hunslet Moor accident, and whether he was "aware that the tramway in question is traversed by locomotives without parliamentary sanction, and is so unguarded and uncontrolled as to be dangerous to the numerous persons crossing the moor; and whether he would direct an official inquiry to be made with a view to protecting the public against similar accidents". Mr. Cross, the Minister, replied that he understood that the poor old woman was in a hopeless state, and in a few days a coroner's inquest would be required, and that he could not anticipate that inquiry. But Mrs. Hollis lingered on.

Meanwhile, the Company seemed near to completing the sale of the Moor to Leeds Corporation. The Yorkshire Post of Wednesday 29th May reported that the Company wished to "reserve to themselves the minerals, about eight acres of the moor, and the tramways running across the moor, belonging to the Middleton

Case 6 of the Summer Assize list was S. Wormack v. Middleton Estate Company Limited, trespass, one of several cases still untried at the end of the session. When the Winter Assizes commenced, the plaintiffs were W. Peel, J. Christy and J. Cherrington. Their case, heard on Monday 4th November, was that the inhabitants of Hunslet for a long time had had right of usage of the Moor for recreation, and that the Company had "broken into the land", laying down tramways and roadways, had broken the terms of the fourth Act by planning to send coal out of Leeds and, therefore, had forfeited their rights to operate even the first "tramway". However, the judge directed that the question to be considered was "whether the usage of the Moor could be established as a legal custom", or whether the commoners had used it "as anybody else might have used it", which was not legal custom. The defence counsel called the commoners ungrateful, regarding the Company adding the old alignment to their pasture. He cited a recent decision by the Master of the Rolls, that inhabitants wishing to establish exclusive right of use to a place had to prove that it had been so used since the time of Richard I. He also mentioned the 1712 Act which had enabled common land to be given to the local clergy, and said if commoners' rights had been in existence this would have been illegal. The plaintiffs' counsel unfortunately failed to correct this allegation by giving the full details of the deed regarding the permission of three quarters of the commoners being necessary, presumably because he had not known of the deed and was not told about it even now. After consideration, the verdict was reached that "The jury are unanimously of the opinion that the plaintiffs have failed to prove their exclusive right to the moor, as distinguished from other parties".

On Thursday 14th November, an appeal against the verdict was heard in the Exchequer Division of the High Court, on the grounds that Judge Lindley had directed the jury "in a sense adverse to the plaintiff". It was decided to consult with Mr. Justice Lindley as to his directions, and judgement was reserved. A week later, counsel were told informally that the Court had decided to grant the rule called for, that the defendants should show "cause why there should not be a new trial on the ground of the verdict in favour of the defendants at the Leeds Assizes being against the weight of evidence." However, the purchase of the Moor was still being pursued by the Corporation, and during the first week of December, a local poll was held as to whether or not the purchase should be made. The final result was 19,160 votes in favour of purchase and 16,498 votes against.

The commoners undoubtedly had a good case against the Company on many grounds, but the Corporation forged ahead with its plans, and the Leeds Corporation Act of 23rd May 1879 must have settled the controversy to a large extent. The Act,

which empowered the Corporation to buy Hunslet Moor from the Commoners and the Lords of the Manor, protected the rights of the Middleton Estate and Colliery Company, and forbade all unavoidable interference by the Corporation with their waggon-ways and the traffic thereon. A Commissioner was to be appointed to discover who had rights to the Moor, and the Corporation was to recompense such persons as appropriate, for the loss of their rights. The Act also stipulated that, "for the avoidance of accidents, and for the more safe and convenient use of the moor" the Corporation should "make and erect a good and substantial fence . . . along and on either side of the several waggon-ways . . . together with any necessary gates or stiles". A great iron fence eventually separated the line from the Moor. Saxby and Farmer's gate posts and mechanisms bore the dates 1901 and 1903, and each enormous gate at road crossings was surmounted by a fearsome 'cheval de friese'. Only a short section of fence and one crossing gate now remain. The Corporation purchased the Moor in 1879 for £6,360. The controversial branch remained unconnected for more than ten years, but there is a story that, around the end of the last century, the Company maintained a free coal-pile on the Moor for the commoners, in return for the right to run across the Moor.

In 1881, as planned in 1878, the gauge was changed to 4'8½" and Matthew Murray was returned to its makers for conversion to standard gauge, Blenkinsop already having been scrapped. Two further standard gauge locomotives were supplied by Manning Wardle: Blenkinsop No.2 in 1881 and Niger in 1892. A change of gauge at the time of the 1875 re-alignment might have been a better option, but perhaps would have strained manpower and finances too far. Alternatively, like the branch line, the re-alignment might have been done quickly, in anticipation of the 1876 Commons Act. It is no more than a guess that the connection with the Midland Railway's Hunslet Lane Goods Depot, formerly the North Midland terminus, via a level crossing in Kidacre Street and reversal in the neighbouring Gas Works, was put in at the time of the gauge conversion. It is shown on the 1889/90 Ordnance Survey plans. Bacon's plan of Leeds, c.1889, shows the new alignment of the colliery line, with the old alignment dotted. Presumably because of its uselessness, the controversial branch at Hunslet Moor is not shown; the connection was completed in time for inclusion in the 1895 Handbook of Stations.

On 2nd August 1883, an Act of Parliament was passed authorising the construction of the East & West Yorkshire Union Railway. The ultimate object was to form a main line from the Great Northern Railway at Ardsley, through Rothwell, to meet the proposed Hull, Barnsley & West Riding Junction Railway at Drax. From Rothwell, a branch would go west to join the Middleton Railway, with a "proper and sufficient station for passengers and goods near Broom Pit", and then would use the Middleton Railway's route to gain access into Leeds. The E. & W.Y.U. company had great difficulty raising capital, and the idea of a Leeds branch was abandoned, leaving the E. & W. as a link from the G.N. at Ardsley to Rothwell, and then via the short South Leeds Junction Railway to the Midland line at Stourton. Both E. & W. and S.L.J. were closed in 1966, but the difference the 1883 proposals would have made to the future of the Middleton Railway is almost unimaginable.

By the time the Ordnance Survey explored the area in detail for the second time, in 1890, all the shafts on the plateau had been closed, except for ventilation, the pits being linked underground. The line was cut back to a dead end at a spot nearly enough on the eastern boundary of the later Middleton housing estate. Coal was no longer brought down the incline but was sent up with the aid of a steam winding engine, part of the building of which survived until 1964. There was a return sheave near the defunct Venture Pit, whereby the coal waggons were cable-hauled across Town Street to staithes on the south side of the road. They also could be dropped back into the yard for supply to the engine.

4. THE 20TH CENTURY - 1900 to 1959

The 1905 Ordnance map revision shows the southern end of the line cut back a little further, to a site just short of the present Middleton Park Road.

The steam winding engine at the top of the upper incline was replaced by a humble electric motor about 1930, and the driving pinion was moved to the opposite side of the winding sheave. A turntable was installed as a last phase, to enable waggons of coal to be turned into the yard for bagging. The incline and coal staithes were in use until 1948, after which an explosives store was built on the incline, near its lower end, and the rails were removed. During the next twenty years, the sleepers gradually disappeared and the store was demolished. The upper part of the incline's alignment is now a steps and path pedestrian access to the Manor Farm housing estate, built across the site. All traces south of Town Street have been effaced. Of the development of track and sidings around Broom Pit and New Pit, and the coke ovens, brickworks, clay pits and quarries thereabouts, little factual record remains beyond that shown on the larger scale Ordnance Survey maps and plans. The Park and Woods, former grounds of the Brandlings' Middleton residence, were acquired by a local charity, Wade's Trustees, who, on 6th April 1920, leased them to the City of Leeds for 999 years, for an annual rent of £1. They still form one of the largest parks in Leeds.

Three commercial sidings on Hunslet Moor call for notice in that access to and from the Midland line was obtained via the Colliery line, and the Company dealt with quite a vast amount of traffic for these "customers" over their line. The oldest siding

was that of Wagon Repairs Ltd., later the Acme Engineering Co., on the south side of the Midland connecting line. This dated back to 1913, and was in regular use until the 1958 closure. The second served three premises on the west side of the line which, until re-alignment for the motorway, were reached by a dead-end shunting neck connected with the main Colliery line by a north facing curve. These were laid during 1919/20, and served Clayton, Son & Co. Ltd., the first to receive a train - on 6th August 1920: Robinson & Birdsell, metal merchants: and John King & Co., ironfounders. Of these, only the Robinson & Birdsell siding and a very short length of Clayton's Dartmouth Yard siding still exist. The third connection, first used on 5th March 1921, was to the Hunslet Foundry of Samuel Denison & Son Ltd. which, under Gothard & Salt, cast replacement rack rails to Blenkinsop's patent design. In those days, of course, the line was on Old Run Road and through what is now a recreation ground in front of the foundry. The connection to the new alignment was taken out many years ago, though it was still in the 1956 Handbook of Stations. A later, Colliery Company, siding appears on 1932 and 1949 Ordnance maps. It left the main line immediately north of the G.N.R. bridge at Parkside, and proceeded for a quarter of a mile in a N.N.E. direction upon substantially flat ground, formerly a spoil heap for the New Pit. It is understood to have served a stock yard.

During the first part of the 20th century, work on the line was shared at various times by five locomotives: Matthew Murray 2 was usually deployed as colliery yard shunter, venturing as far as the clay pit near the Great Northern line on behalf of the Fireclay Works, and occasionally joining Niger on spoil train duty; No.6 worked trains down to Hunslet Moor Staithes, and also dealt with traffic to and from the nearby firms; Blenkinsop 2, working from a shed in Kidacre Street with Gladstone as spare engine, took trains over the entire route to the Broom Pit and back. The connected firms varied further the goods carried on what once had been purely a coal railway. Scrap metal travelled in and out of Robinson & Birdsell's, and Clayton's large amount of traffic included special loads such as boilers and gasholder sections. Other non-coal traffic on the line included, during the 1920's, bricks from the Fireclay Works for building the Middleton housing estate, and pit spoil for laying the trackbed of the Middleton Light Railway.

The Middleton Light Railway sometimes is confused with the Colliery line, but it was an electric tramway, built by Leeds Corporation and opened on 12th November 1925. Much of its route from Leeds to Middleton was on reserved track, running alongside the Colliery line from Hunslet Moor Staithes to a point just north of the G.N.R. bridge, and then going south through the woods. Various extensions resulted in a circular route to Middleton being opened on 28th August 1949, via Dewsbury Road/Moor Road in one direction and Balm Road/Belle Isle Road in the other direction. The line was abandoned on 28th March 1959. The original plans brought the tramway close alongside the Broom Pit, and a physical connection of 242 yards length was intended to be made with the Colliery Railway. This is interesting, in view of the fact that until 1930, Leeds City Tramways handled mineral traffic over its system, between the Gipton Pit at Harehills and the Leeds Fireclay Company at Wortley. However, this probably was with waggons made or adapted solely for

tramway use, and operating only on tramways: waggons cannot normally transfer between railway and tramway because of flange differences.

The strikes of 1926 closed the pit for almost a year, and reduced production at the Fireclay Works. The miners eventually went back to work a three-day week, a situation which continued until 1928; New Pit never re-opened for coal production. though the shafts were used for pumping and ventilation until 1968. The Company shared in the general slump of the 1930's. A lot of the estate was sold off gradually in small lots, but the Company was still rumoured to have debts of around £60,000 when increased demand for coal during the 2nd World War brought temporary relief. They are understood to have anticipated post-war nationalisation by separating their coal, fireclay and other interests. The Middleton Fireclay Company Limited took control of most of the remaining non-Colliery property, as well as the Railway's trackbed. From its apparent inauguration as a separate Limited Company, in January 1946, it continued the selling off of superfluous estate which had begun under the single Company. Nine months after the National Coal Board took over the Colliery, traffic north of Hunslet Moor Staithes, latterly known as Whitaker's Staithes, ceased on and from 13th September 1947, and the land was sold by its owners, the Fireclay Company. The bridge over Holmes Street, headroom only 7'6", was demolished by the N.C.B. on 1st February 1948.

About this time, by arrangement with the National Coal Board, John Fowler & Co. used the Colliery line for test purposes. Due to the generally anarchic character of the line's operation, this led on one occasion to a collision at the sharp bend near the G.N.R. bridge, when a northbound Fowler diesel met *Blenkinsop 2* taking a train of empty waggons to the Pit. Despite the diesel having the advantage of downhill impetus, the outcome was a decisive victory for steam! When the northern section of the line was closed in 1958, the arrangement terminated, but subsequent to reopening by the preservation group, Hudswell Clarke, Greenwood & Batley and Hunslet Engine Company used the line for testing purposes. Though the local locomotive-building industry is now all but extinct, the line is still used occasionally by firms repairing works locomotives.

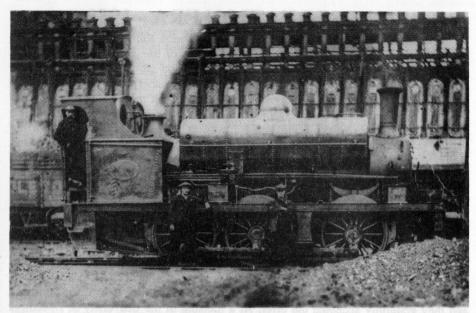
THE END OF THE LINE? - 1958

The Railway's bicentenary year began with a stunning blow. The Yorkshire Evening Post of Saturday 1st February 1958 announced with a front-page banner headline "COAL BOARD IS TO ABANDON PRE-STEPHENSON RAILWAY IN LEEDS - IT'S TOO COSTLY". An N.C.B. spokesman had told the reporter that the line was kept open only by heavy maintenance, and really needed complete renewal. For a colliery which was "a losing concern" this would be too expensive, besides which, the Middleton Estates Company owned the land on which the line stood, and the lease was due to expire very shortly. It would be much cheaper to load coal into lorries at the pit, rather than at "the Middleton depot" (i.e. Hunslet Moor Staithes), as currently happened. However, the Colliery had no real road outlet: the Railway was its lifeline.

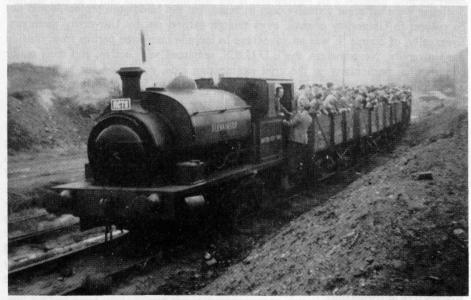
In most directions, Broom Pit was isolated from local roads by distance or by steep gradients, and the only feasible way to take out coal directly by lorry was to build a short road over the low south-east end of the pit heap, to link up with the roads through the Belle Isle housing estate. Naturally, the residents there strongly objected to the scheme, but their suggestion that the Railway should be converted into a road was declared by Mr. Saul (N.C.B. Area General Manager) to be too expensive. The City Council joined their protesting Belle Isle tenants, but the N.C.B. threatened that successful opposition to the road haulage plans might force the closure of the Colliery, which employed 800 men.

Though the Railway's future seemed bleak, its past was not forgotten, and on Saturday 7th June 1958 a 'Salute to Steam' exhibition opened at the City Museum. It was arranged jointly by the Libraries and Arts Committee and members of the Railway & Canal Historical Society and the Railway Correspondence & Travel Society West Riding Branch. On the same day, about 300 members of these societies embarked on a bicentenary journey from Hunslet Moor Staithes in a train of six open goods waggons, loaned by British Railways. A spruced-up Blenkinsop was driven by Mr. George Buckle, a driver for 47 years. He was said by The Yorkshire Evening Post to do all his own firing, shovelling 11/2 cwt of coal on each trip. For safety reasons, the train was followed at a discreet distance by a new Fowler diesel, on test at the line, and Fowler's Locomotive Manager remarked ruefully to the reporter that "If it can stand this line then it can stand anything in the world". Not even Mr. Saul's ill-timed announcement that plans were now complete for the changeover to road haulage could dampen the society members' enthusiasm. Whilst some enjoyed tea and sandwiches in the Colliery canteen, more intrepid members walked the 'Rope Hill' upper incline or swarmed around searching for traces of long-abandoned branches and sidings.

The confident announcement that road haulage would start in August 1959 also failed to daunt the City Council or the Belle Isle residents. They battled on, until the N.C.B. were forced to amend their plans. Some coal would leave by road, but some would still go by rail, using the section of line between the Colliery and the G.N.R. link at Parkside Junction. British Railways was to operate the entire rail traffic, and the reprieved section of track was relaid to their requirements whilst the Colliery was closed for the August 1959 holiday fortnight. At the same time, the yard layout was altered so that B.R. locomotives could run round their trains. For the first time in 201 years, a substantial amount of coal began to leave by road: 55% of the 3,000 tons weekly average in 1960. It was the "thin end of the wedge", and by 1967 a mere 3% of the 5,400 tons weekly average left by rail. At first, up to three trains a day left via the G.N. link, occasionally headed by giant WD 2-8-0 tender locomotives. However, tank locomotives normally were used, at first ex-G.N.R. J50 0-6-0T's, then Thompson L1 2-6-4T's of late L.N.E.R. origin, followed in turn by Stanier and Fairburn ex-L.M.S. 2-6-4T's. When Ardsley Shed closed, Wakefield took responsibility for the Middleton work, using similar locomotives from the old L. & Y. Depot. When this also closed, Healey Mills diesels worked the last few weeks of rail coal traffic in 1967. However, much was to happen before then.



Shortly after its 1912 rebuild, the Colliery Company's No.6 poses beside the coking plant at Broom Pit. Photo: W. Clapham.



Blenkinsop 1953 with the 1958 Bicentenary Special, at the entrance to the Colliery yard. Photo: S. Bye.

5. THE PRESERVATION ERA - 1959 onwards

In September 1959, some Leeds University Union Railway Society members had the idea of acquiring or building a short stretch of line for the preservation of railborne museum pieces. Sites on the University sports ground at West Park were surveyed, but the Leeds University Union consultative panel made it clear that they did not approve of a Union Society running a railway - it must be admitted that in 1959 this did seem rather an outrageous thing to do! Mr. Chris Thornburn, a student. was the first to suggest the Middleton Railway as a suitable site. Apart from the section relaid for B.R. operation of colliery traffic, the Railway was disused and likely to remain so. The Middleton Fireclay Company was then in process of liquidating its assets, and informed the L.U.U.R.S. that the section of line from the Colliery to Parkside was now a B.R. and Coal Board matter, but that the remainder of the line had been sold to Clayton, Son & Co. Ltd., who, like the other firms, had been left without a rail goods service. It was heard later that Clayton's had hoped B.R. would continue traffic to and from their Works, but that B.R. would not agree to this unless the line was relaid at Clayton's expense. An approach to Clayton's by the Society received the reply that they could try out their scheme, but without any formal purchase, rent or take-over. With its outstanding history and current disuse, this section of the Middleton Railway was an ideal choice for the students' project, and they gratefully accepted the offer. At a meeting in the University in December 1959, chaired by Dr. R.F. Youell - then Staff President of the Society, the L.U.U.R.S. unanimously decided to found the Middleton Railway Preservation Society. The Societies were different virtually only in name, but the Middleton project would not be subject to University control, even though carried out by University members. Eventually, of course, it was an advantage to include interested parties from outside the University. Nevertheless, the L.U.U.R.S. remained very active, and their major contribution, particularly to the civil engineering side, continued for a long time. Though their connection with the Middleton Railway lapsed for several years, happily, in 1990, it seems about to be revived.

Negotiations for the use of the line were difficult, due to the antiquity of the line and its accompanying statutes and rights. Though the major owner of the disused section of line was Clayton, Son & Company Ltd., Leeds City Highways Department owned the level crossing sections, and Leeds City Parks Department owned the section where the tram route crossed the line, with the unusual liability of maintaining the crossing and giving way to our trains. Robinson & Birdsell Ltd., John King & Co. (Leeds) Ltd., Acme Engineering, and Parkfield Metals - at the former Hunslet Moor Staithes, all owned their own sidings, and a short section at the Balm Road end of the Midland branch line had been sold in 1881 and was now British Railways' property. None of the owners of the lines north of Parkside placed any restriction on the use of the line, and the Preservation Society was the only common denominator with the prospect of restoring and re-opening the line irrespective of ownership.

Regular operation of the line was not envisaged when the Society was founded, but usable relics were acquired for restoration and display, including several trams from Leeds and other towns, whose tramway systems were being closed down at that time. Hunslet Engine Company loaned, and later sold to us, their 1932 diesel 0-6-0 No.1697, the first to run for a main line company in this country. The closure of the Swansea and Mumbles Railway (built in 1804 as the first passenger railway) made it possible to acquire one of their double deck carriages, which looked like a large electric tramcar. These vehicles ran in trains of up to four units, and it was found that though unwieldy, they had been transported by rail from Brush of Loughborough to Swansea. The Mumbles coach came to Leeds by train, the upper deck, the lower deck, and the motor bogies travelling on three separate bogie waggons. On 18th June, the Hunslet diesel, polished up for the occasion, hauled the Mumbles Coach on to the Middleton Railway. The passenger coach was reassembled, and at 4.45p.m. on 20th June, as part of the University Rag Week charity events, passenger operation commenced: the Middleton Railway became the first standard gauge line to be run by unpaid volunteers. Using the 106 seat vehicle, 'Free rides at your own risk' altogether carried 7,700 passengers between Burton Road level crossing and Parkside G.N.R. bridge, and even earned a small amount in donations. By running slowly and carefully, we stayed on the rails; looking back on the conditions at the time, this was a major achievement. At the end of the week, repair and relaying of the track began.

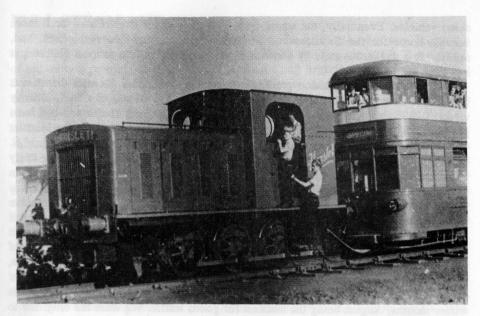
What started as purely demonstration runs gave rise to a further idea - why not run the line as it had always been run, for goods traffic? At a meeting with the firms concerned, two of them - Robinson & Birdsell's and Clayton's - agreed to take rail traffic, in the form of scrap metal and heavy steel raw materials. This was a tougher task than exhibition runs in midsummer, though the customers laid down no conditions other than that the line should be insured, and a reliable daily service provided. The Fireclay Company had run down track maintenance in the expectation of complete closure, and the line was in very bad condition: sleepers were rotten, the chairs on them were a miscellany - Midland from the 1881 relaying, G.N.R., S.E.&C.R., L.N.E.R., L.M.S.R. The prize specimens were stamped Met.& L.N.E., from the short Watford to Rickmansworth line, the only one built by this joint railway. A really far from home pair was a G.W.R. and a G.E.R. on the same sleeper. Our repairs at that stage could only be described as a patching up operation. By running on one of the two tracks from Moor Road to Balm Road, and using the other track for spare parts and later for a short exchange loop at the B.R. end, we were able to give ourselves running conditions with some chance of successful operation.

On 1st September 1960, our first goods train ran. It was three empty 4-wheel waggons to Robinson & Birdsell's, two of which went out the same day loaded with scrap for the steelworks. Clayton's Dartmouth Works traffic started a month later. As we were the first 4'8½" gauge railway to be re-opened in this way, the Ministry of Transport descended on us in our first week, but no offence was being committed, and we had good advice from the inspector sent to investigate our activities. As B.R. had an integral part in the operation, good contact had to be kept with them. Mr.

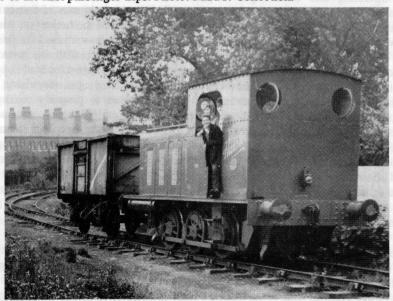
Edward Cowell, N.E. Region's West Riding Traffic Manager, and Mr. Harold Ormiston, then Leeds Area Permanent Way Supervisor, gave much useful support and advice, as did the Balm Road Yardmaster. At the other end of the traffic, the friendly helpfulness of the Messrs. Catchpole - father and son, at Robinson & Birdsell's, deserves particular comment. On the Society's side, Dr. R.C. Lawrence and Dr. R.F. Youell must also be mentioned. Reggie Lawrence became the Society's permanent way expert, drew up its first Rule Book, and was instrumental in acquiring the Sentinel - our first steam locomotive. Fred Youell, as our first Chairman, was the guiding influence for many years; now a Vice-President, he still plays an active part in the Railway's life. It is impossible to name here all the other people who have given time, effort and money during the past thirty years, in order to keep running the world's oldest railway enterprise, but their contributions to the task have been invaluable.

Over the years, the level of traffic varied due to unpredictable industrial needs; we might have only one or two waggons on the line, or, after a bulk order, thirty or more waggons might await unloading. Our traffic relieved the local roads, which were not ideally suited to such giant loads as fabricated steelwork, or steel plates at 10 tons a piece. The largest single loads were a three waggon bogie train with a tare weight of nearly 240 tons from B.R. Doncaster to Clayton's works, and export orders for a New Zealand gas works, which produced a twenty-one waggon train for Birkenhead docks. In general, two trains a day were run, the first leaving Clayton's at 8a.m., returning at 8.47, and the second leaving Clayton's at 1p.m. and, following shunting of the exchange sidings, returning at 2.45. The timetable was fairly flexible, due to lecture commitments, etc., but it worked well, and by the end of 1960, 2.881 tons of freight had been moved. The average annual tonnage was around 7,000, but in 1964 12,000 tons were handled, a quite remarkable achievement for volunteer workers. During University vacations, goods trains were run by the growing number of non-student members with daytime jobs. At these times, and later regularly, as student participation declined, trains were run in the evening, usually taking about fifty minutes if all went smoothly.

Parkfield Metals at Hunslet Moor Staithes did not take advantage of our services, and the last train using this siding ran on 28th January 1961, conveying visitors in open waggons. A short section was used for waggon storage, but was lifted by the firm about 1969. A new curved siding was built at Dartmouth Works in 1961, to avoid using King's siding, and an interchange loop with B.R. was built at Balm Road in 1962. Also in 1962, a branch was laid into Clayton's Moor End Works, which had never before had a connection, though it had an internal rail network. The connection was for inter-works traffic, but a change of policy resulted in only rare usage. The three waggon Midland hand crane and the G.W.R. steam crane were invaluable for these heavier jobs, but steady effort by manual labour dealt with normal relaying work. During these early years, a clash of interests began to develop between the tram preservationists and those members who wished to run the Railway as a working museum. It also became obvious that an easily-entered works yard on the edge of town was not the best place in which to keep a collection of largely glass-



June 1960, Hunslet 1697 tows the Swansea-Mumbles railcar back to Hunslet Moor on one of the first passenger trips. Photo: M.R.T. Collection.



1st September 1960, the first goods train out, on the Balm Road branch, near Moor Road. Photo: C.C. Thornburn.

sided vehicles. Eventually, the trams were moved to other sites. Pleas for a more suitable home for the Swansea and Mumbles coach brought no real offers, and, reduced to a dangerous state by vandalism and easily accessible to local children, it had to be scrapped.

The locomotive situation gradually improved. When our Hunslet diesel was being overhauled by its makers in July 1962, we had the loan of a B.R. Drewry diesel, D2323, but when our Sentinel L.N.E.R. Y1 No.54 from Darlington had been put into working order, we had a useful reserve. On 27th January 1961, the Hunslet diesel had been named John Alcock by and in honour of her designer, and L.M.S. brakevan M158760 was handed over to the Society by B.R. During the ensuing thirty years, the Trust has acquired a collection of locomotives and rolling stock appropriate to its industrial origins; many of the locomotives were built by local firms. With this gradual increase, we at last had the luxury of being able to choose which locomotive to use. In general during the week, the Hunslet, Fowler or Hudswell Clarke diesel locomotives were suitable, as they could start within a matter of minutes. If steam was used for goods traffic, the Sentinel, with its ability to steam within an hour of lighting up, came into its own. At weekends, when we were on display to the public, steam locomotives were in their element, hauling both goods traffic and visitors' trains. Unlike most of the later preserved lines, some of our busiest traffic was in the winter months, August being the slackest for goods traffic. We were the only one to provide a daily service throughout the year on demand.

Operating and motive power problems were more manageable than the unforeseen crises. A small minority of the half million inhabitants of Leeds caused constant headaches. Vandals and drunken intruders smashed the brake van windows; men with horses and carts stole rails and chairs; wooden keys vanished for firewood; small children endangered their safety and ours by playing with the switches at junctions, or by putting bricks and bottles to jam the points; rugby football supporters from the old Hunslet ground threw bricks at our train crew; gas, electricity, water, and telephone authorities dug under the line and failed to properly reinstate the foundations, bringing trains off the rails; "travellers", camping nearby, stole sleepers for firewood and strung washing across the track. On one occasion, our steam crane stopped for water to find that the standpipe had been stolen, leaving a muddy puddle, and local residents with buckets and bowls were called in to fill up the tank in a reallife "Titfield Thunderbolt" effort. Sometimes, in heavy snow, we had to use a shovel to find whether the track was still there, or hard ice had to be chipped away from the level crossings. The obligation to run a "Daily service in all weathers" took a lot of maintaining.

In 1965, our existence was threatened by a B.R. scheme to close the G.N.R. line and take us over to run all Colliery traffic via the Middleton Railway, leaving us there only on sufferance. The closing down of the Colliery took away this nightmare threat. Rail traffic from the pit ceased in July 1967, coal going out by road for the last few months. The last shift at the Colliery was worked on 16th May 1968.

The preservation society, by then entitled The Middleton Railway Trust, had applied for the rest of the line and usable Broom Pit buildings in 1967. The disposal of old mining property is a complicated matter. Long negotiations between the Coal Board and the local authority are usual in such cases, and a historic railway in the middle of the derelict area caused complications, and more delay than normal in reaching a decision. The final agreement for the future of the area was that the City of Leeds should take over and, as a long term scheme, clear away the pit refuse and landscape the area as a public open space, extending to Middleton Park. Some Colliery buildings were to become our offices, museum and rolling stock depots, but the winding gear and unadaptable buildings were demolished, and the pits filled to ground level. The N.C.B. asked the price of £4,000 for the rest of the line and a rent of £100 a year for the buildings, with the property being transferred eventually to Leeds City Council. The Trust would be tenants with a desire to purchase when the future of the area had been settled.

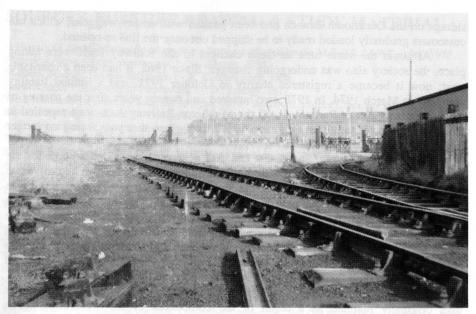
Throughout 1969, the Trust worked very hard to raise the purchase price of the southern end of the line; at £20 per member this was not easy, but other preservation societies had surmounted similar problems and failure was not anticipated. The Coal Board finally left the Broom Pit on 20th February 1970, and on Saturday 21st March 1970 their Chief Engineer, Mr. McAllister, handed over the key to the Rt. Hon. Merlyn Rees, M.P. for the area, acting for the Trust. At once, the task began of repairing the buildings, providing water and electricity supplies, caretaker's accommodation, storage and exhibition space, and generally tidying up. Vandalism cut short the project, and in 1970 the Coal Board demolished the remaining buildings for safety reasons. Some years later, the whole area was filled in with baled rubbish, and grassed over. The Trust had to wait more than a decade longer, before it had the kind of depot facilities which many preservation societies acquired with their track.

Meanwhile, changes in traffic had taken place. The first nine years of the society's existence had been spent running goods trains for the firms along the northern route of the railway, the disconnected southern route still being used by the N.C.B. By 1969, however, freight was becoming increasingly expensive to operate, because of B.R. starting to make demurrage charges (penalties for waggons remaining unattended on sidings) as soon as waggons arrived at the interchange instead of when they arrived on the firms' sidings. Clayton's refused to pay this extra charge, and in future transferred goods from Balm Road by lorry. Traffic continued to and from Robinson & Birdsell's, but rising costs caused a gradual decline of this also, and our goods service died away completely in 1983. In 1969, when the chance came to acquire the southern part of the line, the serious loss of income from Clayton's goods traffic led to a rethink of the Railway's operations. It was decided to operate a weekend passenger train service between Moor Road and Middleton Park, and with this in mind, the whole of that stretch of track was overhauled and brought up to passenger standards, and two gaps in the track were re-railed: one of these was left from the 1958/9 adaptation of the route by B.R. and the other was the result of the theft of nearly 100 yards of track. Work started on 17th June 1969, the first through train ran on 30th June, and at the end of July, during the annual Hunslet Feast' week, *Henry de Lacy II* hauled the first regular passenger service on the line: a new era had begun.

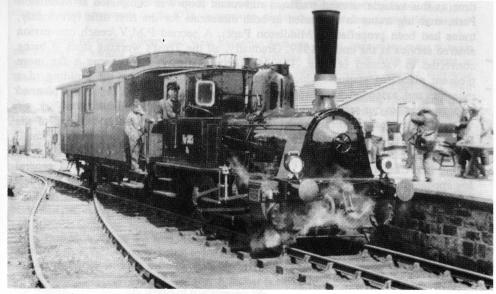
In the first year, the service operated every weekend throughout, but it became obvious that winter traffic at that time was not enough to justify steam trains. The service was soon pruned to being seasonal, at first from March to October, and finally Easter to the end of September, a service which still exists in 1990, but now with a Wednesday afternoon service also during August. Originally, visitors were carried in the L.M.S.R. 20 ton brake van plus an open waggon, without any form of continuous brake. Legislative changes brought about the introduction of an air brake system, which coincided with the introduction of a lighter van than previously used, this one being of L.N.E.R. origin. Passenger facilities were rudimentary - visitors needed help to climb on to the train in the first year! A sleeper platform was soon erected at Moor Road, and a small ex-B.R. container was subsequently adapted as a station building. A stone platform, containing many stone sleepers from the old waggon-way, was built in the mid 1970's, and a further container was added to the original one to make a reasonably sized shop, which served the Railway well for a number of years.

A handicap of our first ten years had been the industrial "scenery", losing us popular esteem and public support which would have brought higher membership and more visitors. Fortunately, our environment was improved by the arrival of the motorway across the line on an embankment, with good lighting, protective fences and landscaping, lowering the risk of vandalism damage. The South East Leeds Urban Motorway brought about some fundamental changes to the Railway. Since 1960, a National Trust Covenant had protected the line as being of historical interest, but in any case, a railway used as seldom as once a year cannot be compulsorily purchased and pulled up without an Act of Parliament, to which the railway company can object; a railway tunnel was duly added to the motorway plans. The retention of the old Dartmouth turnout would have necessitated a second tunnel, but the problem was solved by the construction of a new turnout, about 200 yards south of the original and at the other end of the tunnel, so that the re-aligned branch ran parallel to the motorway, and all traffic - passenger and goods, ran through one tunnel.

In March 1971, the line south of the old turnout was lifted, and visitors' trains ran on the only usable route, between Moor Road and Dartmouth Yard. During the following weeks, the massive paraphanalia of motorway construction lumbered around as the Trust endeavoured to carry on its services. A sectional 'Armco' tunnel was set up over the main line south of the old turnout, and Trust members took advantage of the disruption to full-line service to regrade the stretch between the tunnel and the Parkside G.N. bridge to an average 1 in 47 (originally it varied between 1 in 27 and 1 in 65). Contractors for the motorway construction firm laid in the new Dartmouth Branch, and on 4th October 1971 the new railway link-ups were completed. For only 15 days, in June, had traffic totally ceased. Even then, the



The site of Moor Road Station in 1967, before the regular Visitors' Service began. Photo: S. Bye.



A Scandinavian Special, Danish/German engine with Norwegian coach, at Moor Road Station, mid-1980's. Photo: S.J. Roberts.

sidings on the Dartmouth Branch had been packed with empty waggons, which our customers gradually loaded ready to be shipped out once the line re-opened.

At about the same time as these changes to the Railway itself were taking place, the society also was undergoing changes. Since 1962, it had been a charitable trust; now it became a registered charity in October 1971, and a limited liability company in March 1974. In 1978, two hundred and twenty years after the passing of the first railway Act of Parliament, all the Middleton Railway Acts were repealed in the comprehensive statute law revision which took place that year, being no longer relevant since the Colliery closed.

Since 1960, Clayton, Son & Co. Ltd. had generously provided a home for the Trust, but in 1983 they decided to sell their Dartmouth Works, and we had to vacate our Dartmouth Yard headquarters. In the short space of ten weeks, everything was transferred from there to our new home at Moor Road. This had been virtually a green field site, apart from the main line, and all the trackwork which can now be seen there was laid in by volunteers working long hours during that time. A big bonus for the new site was the erection of a workshop and a station building with the help of a Community Grant made to the Railway that year. At last, the Trust had station and workshop facilities as good as most preserved lines, and better than some.

Further changes to our passenger working came in 1984, introduced earlier than originally planned as a result of the completion of the workshop. Coach No.2084 was converted from a Southern Railway P.M.V., with a guard's compartment, 32-seat covered saloon and a verandah at its northern end. At the same time as this vehicle entered traffic, a run-round loop was completed at Middleton Park, enabling trains to be hauled in both directions for the first time (previously, trains had been propelled to Middleton Park). A second P.M.V./coach conversion entered service at the end of 1989. Gradually, all the Trust's working stock is being converted to vacuum braking. The Middleton Railway has become a far more pleasant place for visitors, which will be improved further by the building of a museum and extended shed opposite the station building, and by other planned improvements to our service, including a proposed extension into Middleton Park.

1990 marks the thirtieth anniversary of the start of volunteer working of the line, and during those thirty years much has been achieved by a comparatively small group of dedicated enthusiasts. When the citizens of Leeds watched the first waggons rolling into Casson Close, in 1758, *The Leeds Intelligencer* reported that "a general Joy appeared on every Face": more than two hundred and thirty years later, the oldest firm in the business still has this aim.

SOURCES, FURTHER READING & STUDY MATERIAL

A History of the Middleton Railway, past editions published by the M.R.P.S./M.R.T., 1960-1973.

Historical Notes for the bicentenary, by D. Garnett, 1958.

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A History of Railway Locomotives Down to the End of the Year 1831, by C.F. Dendy Marshall.

Travels Through England, Wales, and Scotland, in the Year 1816, by Dr. S.H. Spiker.

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A Journey Through the Manufacturing Districts of England in the Summer of 1835, by Sir George Head.

The Watson Papers collection, containing letters from Murray and Blenkinsop quoted in this book. The Engineer magazine, 29.4.1910 pp 432/3 (details of Andrieux' Bulletin report).

do. 24.1.1930 pp 94/5, 31.1.1930 pp 128/9 (details from the Watson Papers).

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Hunslet de Ledes, manuscript by W. Calvert, 1956.

Numerous town directories of Leeds and the West Riding.

The Yorkshire Post Leeds Tercentenary Supplement, 1926.

Various articles published in the M.R.T. members' magazine, The Old Run, 1960 to present date.

Newspapers: The Leeds Intelligencer, The Leeds Mercury, The Yorkshire Post, The Yorkshire Fyraning Post, and The Times

Evening News, The Yorkshire Evening Post, and The Times.

Documents: the four Middleton Railway Acts of Parliament, the Leeds Corporation Act, 1879, copies of lease agreements for the 1758 waggon-way, and copies of sale documents for the estate.

Leeds Reference Library and West Yorkshire Archives, Leeds, have many maps showing the Railway at various stages of its history. The Archives at Leeds also have such items as Middleton Colliery account books and papers relating to John Blenkinsop, and the Reference Library has microfilm files of the above-named newspapers and copies of many of the books. West Yorkshire Archives, Wakefield have the registered copies of Charles Brandling's lease agreements (Vol. B3), and of the various sale contracts, including the 1865 contract which minutely details the Estates and Collieries as they then existed. Bradford Reference Library has microfilm copies of The Leeds Mercury, The Yorkshire Post, and The Times. The Library of the North of England Institute of Mining and Mechanical Engineers, Newcastle, owns the Watson Papers. The project co-ordinator wishes to thank all these establishments and their helpful members of staff.

The Trust is most grateful also to Mr. Handel Kardas and Ian Allan Ltd., Editor and Publishers of the magazine 'RAILWAY WORLD', for permission to use the map of the Middleton Railway which first appeared in their May 1989 issue.

Further details of the locomotives now at Middleton appear in our 'Locomotive Stock Book', on sale at the Station. 'A Guide to the Middleton Railway Leeds', also on sale at the Station, contains details of what to look for from the train, and also the itineraries of several walks connected with the history of our Railway. A further booklet, 'John Blenkinsop of Middleton' by John Bushell, provides more details of Blenkinsop's life.

LOCOMOTIVES USED ON THE LINE BEFORE 1960

Prince Regent 2-1-2 rack loco built Fenton, Murray & Wood (1812)*

Salamanca ditto*

Lord Wellington ditto, built 1813*
Marquis Wellesley ditto, built 1813*,+

Blenkinsop 0-4-0ST built Manning Wardle 220 of 1866 IC
Matthew Murray 0-4-0ST built Manning Wardle 284 of 1869 ++

- Rack locomotives built at the Round Foundry, Holbeck, Leeds, 3 scrapped or exploded by 1835, 1 withdrawn 1835 and scrapped c.1860.
- + There is still some doubt as to the veracity of this name.
- ++ Built in 1869, rebuilt to standard gauge in 1881.

4'81/2" GAUGE

40/2 GACG					
Name/Number	Type	Builder/Works No.	Date	Arrived	Withdrawn
Blenkinsop 2	0-6-0ST IC	Manning Wardle 797	1881	1881 (a)	Nov. 1953 (b)
Niger	0-6-0ST IC	Manning Wardle 1262	1892	1892	Scrapped by 1947
No. 6	0-6-0 IC	N.E.R. ? ?	c.1900	? (c)	Scrapped by 1947
Matthew Murray 2	2 0-4-0ST	Manning Wardle 1752	1909	1909	11.1953. (b)
Gladstone	0-6-0ST IC	Hudswell Clarke 491	1898	1916 (d)	8.1950,
Jean/L.N.E.R.407	0-6-0ST IC	N.E.R. Gateshead ?	1897	10.1947 (e)	Scrapped by 1949
69	0-6-0ST	Hudswell Clarke 1 75	1950	1950 (f)	1959
St. Johns No. 1	0-4-0ST	Peckett 1597?	1921	1952 (g)	Before 1960
St. Johns No. 2	0-4-0ST	Peckett 1763	1922	1952 (g)	Before 1960
Edith	0-6-0ST IC	Hunsiet 1482	1925	1953 (h)	1960
Nostell No. 2	0-6-0ST IC	Hudswell Clarke 328	1889	1953? (i)	Before 1960
Nostell No. 4	0-4-0ST	Peckett 1789	1929	1953 (j)	1960
Blenkinsop 1953	0-6-0ST	Hudswell Clark : 1871	1953	1954 new	1960 (k)

NOTES

- (a) Rebuilt 1910.
- (b) Scrapped by G. Cohen's.
- (c) Rebuilt as an 0-6-0ST in 1912.
- (d) From Price, Wills & Reeves, Workington. Scrapped by Robinson & Birdsell.
- (e) Ex-L.N.E.R. No.407, June 1937; ex-Whitwood Chemical Company, 1943; ex-Briggs Collieries Company, Saville Colliery, October 1947.
- (f) From Appelby Frodingham Steel Company (No.69).
- (g) From N.C.B. St. Johns, Normanton. To N.C.B. Lofthouse.
- (h) From N.C.B. Charlesworth, Rothwell. To N.C.B. Lofthouse after repair at Hunslet's.
- (i) Rebuilt 1934 and 1951. ex Nostell Colliery. Went to N.C.B. Lofthouse.
- (j) Originally Shawcross No.1. Ex-N.C.B.Shawcross,1952; ex-N.C.B.Old Roundwood, 1952; ex-N.C.B. Nostell, 1953. To N.C.B. Lofthouse.
- (k) To N.C.B. Lofthouse. Scrapped 1971 at N.C.B. St. Johns.
- IC inside cylinder locomotive.

LOCOMOTIVES FROM 1960 TO MID-1990

Name/No. Type	Builder/Works No.	Built Arrived	Notes
John Alcock 0-6-0DM	Hunslet 1697	1932 1960	
54 4wTGVB	Sentinel 8839	1933 1961	
Windle 0-4-0WT	Borrows 53	1909 1961	
Swansea 0-6-0ST	Avonside 1569	1909 1962	(1)
1310 0-4-0T	N.E.R. Gateshead 38	1891 1965	Owners: S.P.T. '65.
Matthew Murray 0-4-0ST	Bagnall 2702	1943 1966	
21 0-40ST	Avonside 1671	1913 1966	(m)
0-4-0DM	Fowler 3900002	1945 1967	
Henry de Lacy II 0-4-0ST	Hudswell Clarke 1309	1917 1968	
Courage 4wDM	Hudson-Hunslet 1786	1935 1968	Owners: L.U.U.R.T.S.
Carroll 0-4-0DM	Hudswell Clarke D631	1946 1969	
Chairman 0-4-0ST	Hudswell Clarke 1717	1940 1969	(n)
No. 6 0-4-0ST	Hawthorn Leslie 3860	1935 1971	
385 0-4-0WT	Hartmann, Chemnitz 2110	1893 1972	Owners: S.P.T. '65.
John Blenkinsop 0-4-0ST	Peckett 2003	1941 1972	Owners: M.R.T. and S. Bye.
0-4-0ST	Peckett 2103	1948/50 1981	Owners: A.&J. Bell. (o)
Mary 0-4-0DM	Hudswell Clarke D577	1932 1980	Owner: G. Parkin.
4wDH	Thomas Hill 138C	1964 1982	Owner: P. Nettleton.
0-4-0DH	Fowler 4220038	1966 1983	Owners: J.K. Lee/V.M. Smith.
0-4-0DH	Fowler 4220029	1965 1983	Owners: J.K. Lee/V.M. Smith. (p)
Mirvale 0-4-0ST	Hudswell Clarke 1882	1955 1986	(q)
91 0-4-0DE	Brush/Beyer Peacock 91/7856	1958 1987	(r)
Rowntree No.3 4wDM	Ruston & Hornsby 441934	1960 1988	(s)
Harry 0-4-0ST	Andrew Barclay 1823	1924 1989	(t)
Arthur 0-6-0ST	Manning Wardle 1601	1903 1990	
Hodbarrow 0-4-0ST	Hunslet 299	1882 1990	(u)

NOTES

- (1) ex Llanelli Bynea Steel Works. Sold for private preservation in 1973.
- (m) ex Mersey Docks and Harbour Board. Broken up for spares in 1969.
- (n) ex Yorkshire Tar Distillers, Stourton. Broken up for spares in 1972.
- (o) ex Croydon 'B' Power Station. Went to G.Y.R.P.S., Harrogate in 1986.
- (p) ex Norsk Hydro Chemicals, Immingham, Broken up for spares in 1985.
- (q) Owned by the M.R.T. and a consortium of members.
- (r) On permanent loan from British Steel, Orb Works, Newport.
- (s) Owned by North Yorkshire Moors Historical Railway Trust.
- (t) On loan from Crossley Brothers, Shipley.
- (u) On loan from Hunslet/G.M.T.

T locomotive with side tanks. IC inside cylinder. ST locomotive with saddle tank. OC outside cylinder. WT locomotive with well tank. G geared drive. DM diesel, mechanical drive. VB vertical boiler.

THE MIDDLETON RAILWAY

ACCESS (to Moor Road Station)

- i) By car, via M1 motorway from the south to exit No.45, turn right along Tunstall Road, then right at the roundabout. The Station is on the right.
- OR Via the A653 to Tunstall Road traffic lights, approximately one mile from the City Centre or approximately two miles from the southern City boundary, turn down Tunstall Road to the roundabout and proceed as above.
- ii) By 'bus from Leeds city centre. Ring for details before travelling ('phone number below).

SERVICES

Visitors' trains run afternoon services every Saturday (diesel), Sunday (steam), and Bank Holiday Monday (steam) from Easter to the end of September. Additionally, Wednesday afternoon steam services run throughout August, Santa Special trains run in December, and there are special events during the year for enthusiasts, families, schools and playgroups. Special trains for groups can be arranged. For details of services please send a stamped addressed envelope to The Publicity Officer at the address below, ask at the Station, or - for the 'Talking Timetable' of reguires ring the number given below.

MEMBERSHIP

Apart from occasional, much appreciated help from such schemes as N.A.C.R.O. and Community Industry, the Railway is still maintained and operated by the voluntary labour of the Trust's own membership. If you would like to help the world's oldest railway in its third century of service, or wish to support it by your membership, please send a stamped addressed envelope to The Membership Secretary at the address below, or ask at the Station for a Membership Form.

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