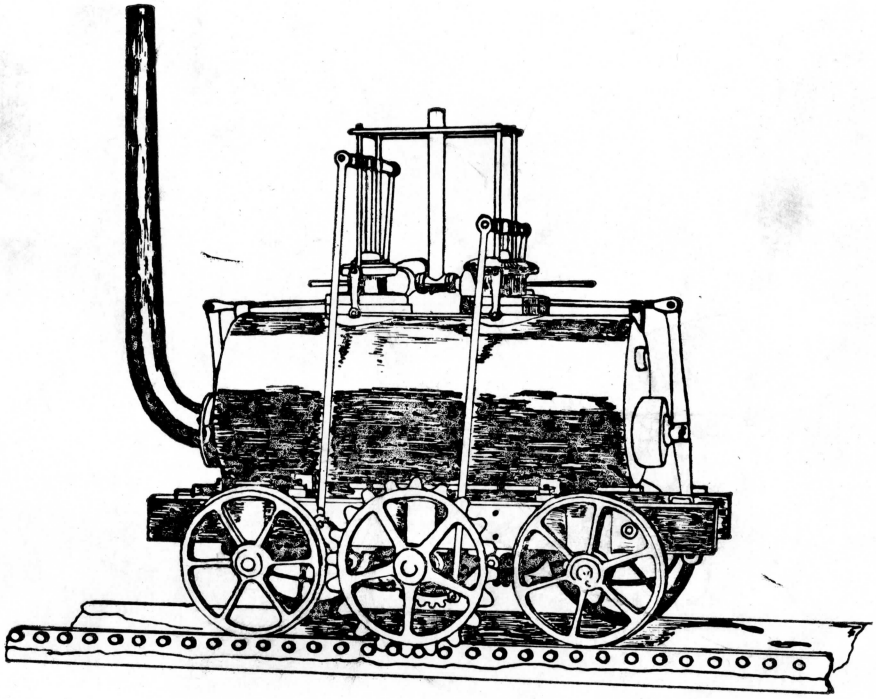
THE MIDDLETON COLLIERY RAILWAY

LEEDS



BUILT 1758 FIRST STEAM LOCOMOTIVES 1812

Middleton Railway Preservation Society

THE MIDDLETON COLLIERY RAILWAY

LEEDS

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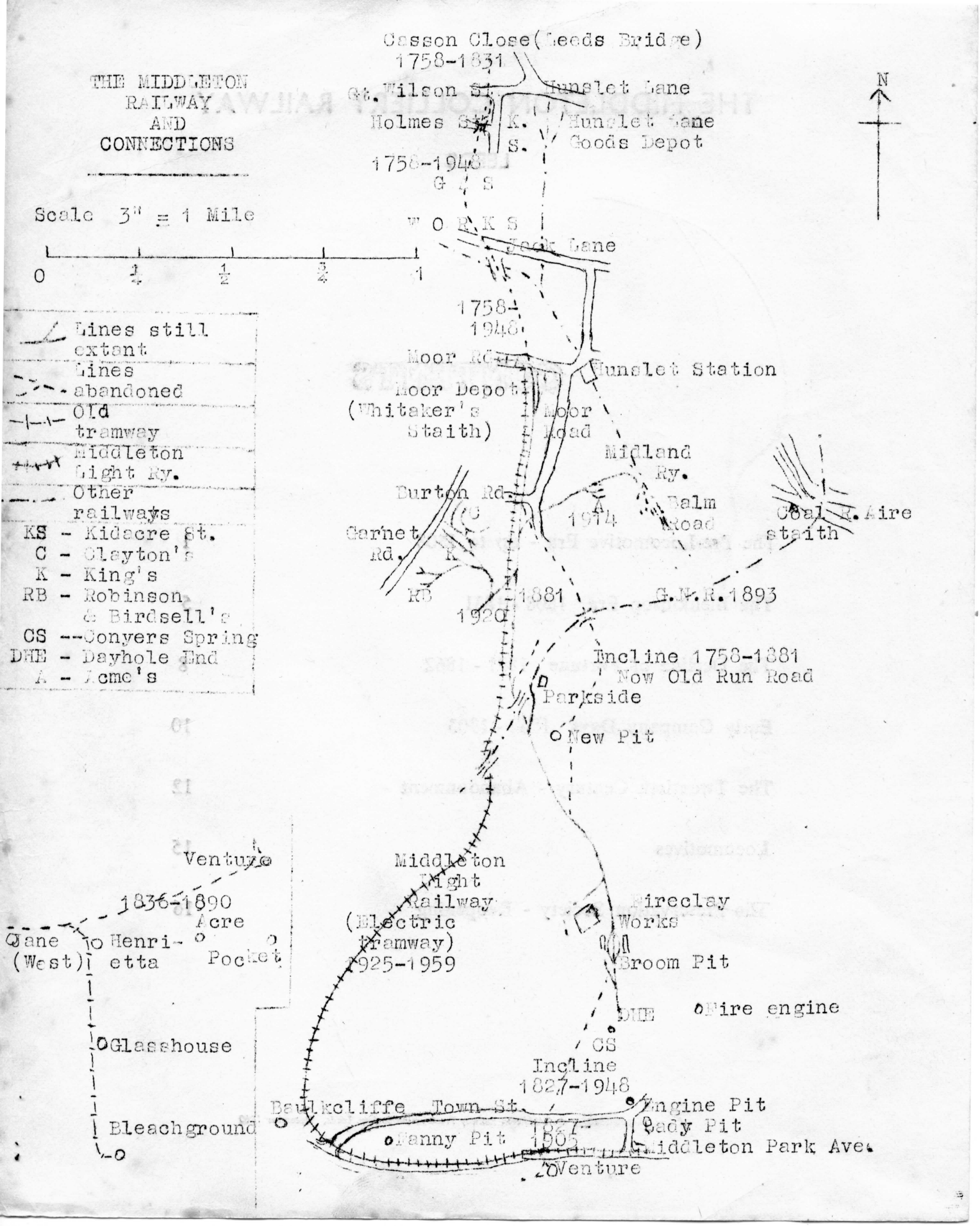
THE MIDDLETON RAILWAY AND CONNECTIONS
Scale 3" = 1 Mile
0
1/4
1/2
3/4
1
N
Lines still extant
Lines abandoned
Old tramway
Middleton Light Ry.
Other railways
KS - Kidacre St.
C - Clayton's
K - King's
RB - Robinson & Birdsell's
CS - Conyers Spring
DHE - Dayhole End
A - Acme's
Casson Close (Leeds Bridge) 1758-1831
Gt. Wilson St.
Hunslet Lane
Holmes St.
K.
S.
Hunslet Lane Goods Depot
1758-1948
G
S
W O R K S
Jack Lane
1758-1948
Moor Rd.
Hunslet Station
Moor Depot (Whitaker's Staith)
Moor Road
Midland Ry.
Burton Rd.
Garnet Rd.
C
K
RB
1881-1920
1914
Balm Road
Coal
R. Aire
staith
G.N.R. 1893
Incline 1758-1881
Now Old Run Road
Parkside
New Pit
Ventuxe
1836-1890
Middleton Light Railway (Electric Tramway) 1925-1959
Acre
Pocket
Jane (West)
Henrietta
Glasshouse
Bleachground
Fireclay Works
Broom Pit
DHE
Fire engine
CS
Incline 1827-1948
Baulkcliffe
Town St.
Engine Pit
Lady Pit
Fanny Pit
1827-1865
Middleton Park Ave.
Venture

The Middleton Colliery Railway - A brief Historical Survey

The following notes are reprinted from the pamphlet issued in the Bicentenary year of the Middleton Colliery Railway (1958) by kind permission of Mr D. Garnett, with additional notes supplied by York Railway Museum and the Leeds University Railway Society.

The history of the Middleton Colliery Railway can conveniently be considered in five parts: the pre-locomotive era; the Blenkinsop era; the decline of fortune; early Company days, and the twentieth century.

THE PRE - LOCOMOTIVE ERA - up to about 1808.

In 1646, Sir Ferdinande Leigh was the owner of a "cole myne" at Middleton. This is one of the earliest records so far traced and suggests something more advanced than the bell pits which had sufficed from the beginning of time to win coal from a depth of but a few yards. Sir Ferdinande's was probably a "day level" or substantially horizontal adit driven into an outcrop.

In 1669, Frances Conyers of Middleton was issuing a halfpenny token "For the use of the Cole Pits". Conyers Spring, a copse near Dayhole End but at a slightsly lower level, may well be the site of these workings.

Ralph Brandling, of the Tyneside coal owning family of Felling, County Durham, married the Leigh heiress in 1697, thereby, in due course, amalgamating the fortunes of the two families and bringing Tyneside methods to Middleton. By 1717 it is recorded that he was the owner of "A Wrought Colliery or Coal Mine with a Water Engine and Smithy" at Middleton.

The Brandlings continued to make their principal home at Felling and later at Gosforth, so they employed an Agent at Middleton. By 1754, Richard Humble was so installed and played a big part in developing the estate and coal workings in competition with those of the Fentons, around Rothwell and elsewhere. At this time Fenton had better access to Leeds and the river side for marketing his coals, as the Middleton coals had to negotiate narrow lanes or bridle paths. Doubtless under Humble's advice, Charles Brandling, who had succeeded to the Estates in 1749, acquired land by the river and elsewhere which gave him a route over his own land and that of friendly neighbours to the river, except for a length where, in 1755, he obtained leave to construct a wooden wagon-way for 960feet on Woodhouse Hill Lane. Thus it appears that Brandling's river staiths, just upstream of where the Great Northern Railway bridge now stands, antedated the wagon-way to Leeds by two years.

The first record of attempts to build a wagon-way towards Leeds wasin 1757 but not until January 1758 was the first agreement signed between Charles Brandling and a landowner for the laying of a wagon-way for supplying Leeds. Further agreements were signed between March 1758 and December 1759 but Brandling evidently became aware of a possible snag in these agreements and sought their ratification by a Private Bill presented to Parliament. He obtained his Act (31 Geo. 2, c. xxii) on 9th June 1758. It was the first Act of Parliament for 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.

The Act confirmed Brandling's agreements and gave him his wayleaves for as long as he continued to supply not less than 24,000 tons of coal a year at 50·3d per ton. (The actual figures are quoted at pence per corfe but have been converted to current terms.) Delivery was to be effected at "a certain field or open space called Casson Close near the Great Bridge at Leeds".

The Act refers to "a waggon-way (such as is used for and about the coal works and coal mines in the Counties of Durham and Northumberland)". These usually consisted of oak rails with a renewable strip of beech on the upper surface. They were cross sleepered at about three feet pitch, the sleepers being covered with gravel or cinders to protect them from the horses' feet. Wheels were usually of beech, small in diameter and broad, with a circular metal plate fastened to the inner face by way of a flange.

The wagon-way gave Brandling an immediate advantage over his competitors in the matter of reduced transport costs for coals brought to Leeds and the output of the Middleton Collieries doubled within a decade.

The 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 58·3d per ton, but he undertook to deliver twice the quantity previously supplied. 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 and when it was exhausted, perhaps well before the winter, coals could be sold at any price they would fetch. Brandling was also 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...". 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 Mr Humble was a partner. By the terms of this Act, Brandling was to lose the rights for his wagon-way if he should "permit or suffer any coals which shall be dug or got 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...". A scale of charges for cartage from Casson Close to various parts of the Borough was also laid down.

Teal's map of Middleton in 1786 is most revealing as to the extent of the wagon-ways at the time. Many of them survive on modern maps as footpaths. The "Fire Engine" mentioned thereon and located at Grid reference SE31452895, is probably the steam pumping engine which is known to have been supplied in 1779/80 to the designs of John Smeaton, the engineer, of Austhorpe, near Leeds, better known for his Eddystone Lighthouse. Mr Smeaton received payment in 1780 for his design and instruction as to erection.

Despite the provisions of the Act of ten years earlier, Brandling, hitherto a partner in the Beeston New Colliery (location uncertain), acquired the rights of his retiring partner in 1789 and connected the colliery with his wagon-way, offering Beeston coal for sale at Leeds staithe. No map or plan of any branch to Beeston has been traced, however.

According to the Colliery records, cast iron tram plates were being purchased in quantity in 1790. These may have been for use underground but it seems likely that they were for surfacing the wagon-ways above ground where individual wagons contained 2¼ tons of coal.

The third Act (33 Geo. 3, c. lxxxvi) dated 30th April 1793, makes reference to "very great Expense in making fresh Winnings inthe said Coal Working, and in making additional Waggon Ways therefrom". This probably refers to the first stage of the development of mining in the area now largely covered by the Middleton housing estate. The early pits seem to have been spread along both sides of Town Street, lying within a hundred yards thereof. The surviving incline was not built at this period.

In 1793, Smeaton's pumping engine was replaced by a 60 inch one made by Boulton & Watt and Smeaton's 72 inch engine was re-erected at a new, but unidentified, location.

The new Act authorised an increase in price of 10d to 68·3d per ton and this was apparently conceded by the people of Leeds under a threat to discontinue the supply and allow the wayleaves to lapse. Since Brandling's coal was both good and cheaper than that from other and less favourably placed collieries, the price increase was conceded but the supply was to be reserved for the people of Leeds, and there was

to be daily quota, six days a week. The Act legalised the sale of Beeston or Hunslet coal, but only when Middleton coal was not available for good and sufficient reasons. Authority for sale of a portion of the daily quota at any place en route was also given. There were also extensive provisions against various rackets and unfair trading practices by all concerned.

The last Act (43 Geo. 3, c. xii), which received the Royal Assent on 24th March 1803, mentions Charles Brandling as the former owner and Charles John Brandling as the present owner. It refers again to the "great expense in making fresh winnings in the said Coal Works and in making and laying additional Waggon Ways therefrom". This Act authorised the raising of the price of coal to 83·4d per 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 the intention to cut back the Leeds end of the line and to build new staiths athwart the site of Great Wilson Street, not then made. Netlam & Francis Giles Map of 1815 shows "Brandling's Old Coal Staiths" on the site occupied from about 1824 by the South Market, and "New Coal Staiths" slightly to the south thereof. The exact date of the change cannot now be traced but seems likely to be before 1807, in which year the sale of coal at the river staiths ceased, whilst that at the Leeds staiths reached a record of 87,000 tons, soon to be eclipsed when steam traction was introduced.

A detailed Valuation of the Middleton Colliery was made early in 1808 by T.Fenwick & J. Watson, dated 28th January. This showed that the average winning over the past seven years had been 35,000 wagons of 45 cwt., or 78,750 tons, of which an average of 8,464 tons had been for the workmen and engines. The Valuation refers to the two pumping engines, but no winding engines are mentioned - only "5 gins and 6 machines for drawing coals".

At the date of the Valuation, there were 4½ miles of wagon-ways, including main-way and bye-way, one half being then of iron. There were staiths at Leeds and Hunslet. The river staiths were referred to as "Hunslet" and even though the last record of sales there was for the year 1807, the evidence is against the existance of staiths on Hunslet Moor. There is an interesting reference to "2 machines on the inclined plane" (singular), which were valued at £120, having cost £145 when new. This incline would be the Old Run incline from Belle Isle to Hunslet Carr.

THE BLENKINSOP ERA - 1808 to 1831.

John Blenkinsop, born in 1783 "near Leeds", became agent to Charles John Brandling at Middleton in 1808, probably after spending some time at Brandling's Tyneside collieries.

Stimulated by the ever increasing cost of horses and fodder, owing to the demands of the Napoleonic Wars, Blenkinsop investigated other possible alternatives, and, doubtless because the adequate adhesion of a smooth iron wheel on a smooth iron rail had not then been proved in regular usage; but possibly also with a blind faith that it might be possible thereby to negotiate the modest incline with empty wagons, Blenkinsop devised his rack rail method of traction, for which he secured Patent No.3431 on 10th April 1811. The firm of Fenton, Murray and Wood, of nearby Holbeck, was entrusted with the design of a steam locomotive using Blenkinsop's patent.

Fenton, Murray and Wood was formed in 1795, and the circular building, from which the Works came to be known as the Round Foundry, was erected in 1800.

Matthew Murray, born in Newcastle-on-Tyne in 1765 and in due course apprenticed to blacksmithing and millwrighting, migrated to Stockton-on-Tees. Trade declining, he walked to Leeds in 1789 and found work with John Marshall, a maker of flax spinning machinery. Here he met David Wood and they hatched their plans for setting up in business together. Finance for the business was provided by James Fenton. Wood's first interest was the design and making of machinery whilst Murray developed steam engines, stationary and otherwise.

Murray's first locomotive must have been substantially complete before the end of 1811 as plaques were made at the Leeds Pottery which depict a locomotive and bearing that date. It is possible that the plaques were back-dated, though that would seem pointless.

A very full account of the first practical test, on 24th June 1812, appears in The Leeds Mercury of 27th June 1812. The issue for the 18th July 1812 carries a minute wood-cut illustration, surely the first newspaper illustration of a steam locomotive ?

Apart from incorporating Blenkinsop's rack patent, the locomotive was unique in having two cylinders. Many and varied have been the descriptions thereof, but few, alas, bearing any stamp of authority. C. F. Tendy Marshall reviewed all known accounts and his findings were published posthumously in "A History of Railway Locomotives down to the year 1831". Five or six locomotives were built to these general designs, but each succeeding one might incorporate variations and artists were neither as scrupulous nor as able as the camera upon which so many later records depend. It seems fairly certain that the earlier

locomotives had a cast iron boiler of oval section, about 37" x 32" and 9½ ft. long, made in two halves bolted together and having a single flue, 14" in diameter, passing through to a tall chimney of reduced diameter. Two cylinders of 8" diameter by 24" stroke were sunk into the boiler for half their length. They exhausted into the atmosphere, though a silencer was later added. Steam was controlled by two plug cocks, coupled together, and was distributed by larger 4-way plug cocks which were oscillated through about 60 degrees. The rack wheel was on the left side only, despite pictures and descriptions to the contrary. Murray, as an Engineer, did not like this lop-sided arrangement. He probably never ceased to advocate twin rack rails, since central racks would interfere with the use of horses for shunting. The locomotive had two spring-loaded safety valves, but it is not now certain whether it originally had a feed pump which proved unsatisfactory and was discarded, or whether this was a later innovation. The latter seems more likely though Dendy Marshall was not so convinced and the Kirkstall Abbey Museum model of SALAMANCA, built in 1928 after careful research by the late E. Kilburn Scott, has been given a feed pump. The only known reference to the boiler pressure gives this as 55 lbs. "on every cubic (sic) inch". The price has been variously quoted at £350 and £400, and included a Royalty of £30 paid to a W. West, the owner of the Trevithick Patent "for the use of the high pressure steam.

Blenkinsop is reported to have stated that the engine weighed 5 tons and did the work of 16 horses. It drew 27 wagons, representing a load of 94 tons, at 3½ miles per hour on the level, or 15 tons up a gradient of 1 in 18. It could travel at 10 m.p.h. when lightly loaded. The consumption of coal was 21·3 lbs. per train mile, and each pound of coal evaporated 6·7 lbs. of water. At that time, a horse cost £50 to buy and £55 per annum in upkeep, exclusive of the driver.

The reference to a gradient of 1 in 18 is interesting. Could it be that the locomotive negotiated Belle Isle incline ? William Strickland in his "Report on Canals, Railways, Roads and Other Subjects" in 1826 gives the plane as being 350 yards long and the gradient "about half of an inch to the foot", or about 1 in 24. He also gives the rise as 44 feet. The first edition Ordnance Survey 25" plan of 1893 shows a bench mark of 112·4 feet near the foot of the incline and one of 171·9 feet at the top. They are about 1300 feet apart and can be assumed to be nearly enough the same distance above ground surface, thereby giving a gradient of about 1 in 21. Certainly the locomotives did not regularly work the incline, and a self-acting system with brake drum was installed.

The first two locomotives went into regular service on 12th August 1812. It being H.R.H's Birthday, one of them was called PRINCE REGENT and the other SALAMANCA after the victory thereat three weeks earlier. These two are presumed to have operated on the lower level, and there is considerable confusion both as to the number of additional engines

suppliedand their names. The third engine to be made was sent to Willington, Northumberland, for use at a colliery owned by a man who partnered Brandling in another of his colliery enterprises. It had been ordered by Blenkinsop for Middleton, but he forewent it for the time being. Whether it came back as "the Willington Locomotive" or whether its replacement was referred to as the "Willington Replacement" is not now clear (vide Dendy Marshall supra). It would be easy enough for this to become "Wellington" with that name on everyone's lips. The prefix "Lord" and later "Marquis" would be natural if the name was adopted officially, whilst the naming of a fourth engine after Marquis Wellesley, Wellington's illustrious brother, would seem a natural corollary. The dates of appearance of these two additions are given as 4th August and 23rd November 1813, respectively.

Blenkinsop's efforts to improve the colliery must have been highly successful, and in the year 1814 they achieved an all time record output of slightly in excess of 100,000 tons in the year. That was the first year when George Stephenson's BLUCHER, the first successful flanged adhesion locomotive, was put to work at Killingworth colliery. One of the engines blew up in 1813, killing the driver and scalding a number of children. Nevertheless, collectively they outlived their creators.

Giving evidence about this explosion before a Committee of the House of Commons, George Stephenson said, "the driver had been in liquor, and had put a considerable load on the safety valve, so that upon going forward, the engine blew up and the man was killed. But", he added, "that if proper precautions had been used with that boiler, the accident would never have happened".

There was a serious accident between 6.0 p.m. and 7.0 p.m. on 12th January 1825, 24 men being killed by an explosion at "Gosforth Coal Pit, 3 miles from Leeds". The explosion was caused by the removal of the top of a safety lamp, for which, in future, Blenkinsop proposed to provide a lock. The list of killed in the Leeds Mercury for 15th January 1825 includes one boy of five, two of eight, three of ten, and two of twelve years of age. Gosforth Coal Pit, doubtless named after Brandling's Northumberland home, was stated to be 80 yards in depth, sunk at the end of a tunnel 1400 yards in length because "The estate did not belong to the owner of the coal". This may well have been the Day Hole located at Grid Reference SE 309288, near the later Broom Pit. At one time there were two shafts, one called Gosforth and the other 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 any track leading to the site of these pits, which may have been for ventilation only, the position being not inconsistent with a tunnel of 1400 yards to the Day Hole. The tunnel was said to be big enough to accommodate a horse and cart, which pit pundits now interpret as pony and tram !

Matthew Murray died on 20th February 1826, at the age of 61. 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 at the Round Foundry. The grave and monument have recently been restored to their original condition as a memorial to Matthew Murray.

Murray's house, built about 1803, and officially called "Holbeck Lodge" though shown on early maps as "Spring Field", was popularly 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 to make way for the new junction outside Leeds City Station.

John Blenkinsop died on 22nd January 1831 after "a tedious illness". He was barely 48 and lies buried at Rothwell.

THE DECLINE OF FORTUNE 1831 to 1862

By 1835, production had dropped to about 75% of the peak figures and the average price per ton had been forced down by ever-increasing competition from new collieries in the surrounding neighbourhood and improved transport, from 88·3d in 1811/12 to 60·0d.

In 1834, another engine blew up, and in the same year the Estate passed into the hands of Trustees, who, with dwindling profits, were loath to incur any avoidable expenditure, either on replacement of locomotives or the much needed sinking of new pits. Steam traction was abandoned completely in 1835, and horse traction came into its own again, the price of fodder having fallen sharply.

The precise date of building the incline from Belle Isle (not of course the modern circus of that name) up to Middleton Village cannot now be traced. It appears to have been in existance by 1827 when two Prussian mining engineers visited the colliery, though it is not mentioned by Strickland, whose report of 1826 includes a detailed drawing of the lower incline. Martin's Map of 1831 is the earliest to show it, terminating at Venture Pit, map referene SE 306282. Priestley also refers to it - tantalisingly briefly - in his "Historical Account of the Navigable Rivers, Canals and Railways of Great Britain" published in 1831.

In 1832 there appears to have been a rail connection between Fanny Pit, now Colliery Farm, New Lane (SE 29862818) and the top of the incline. The route it followed was along a field boundary line to the South side of Town Street, opposite the school, where it turned parallel with the road, but remaining on the South side, as far as the known crossing place at the top of the incline. The twin hedges at Nova Scotia are a prominent feature of all large scale maps, and bounded the wagon-way from the suppoesd engine to the main wagon-way

at Day Hole End.

The first edition 1" Ordnance Survey map of 1840 shows the line extending to what appears to be the 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" (sic) Pit to the West Pit, SE 295277, with a tramway running from Henrietta Pit, SE 29812783, via Glasshouse Colliery, SE 29922749, to Bleachground Engines, whish the 1850 Estate Map described 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, SE 29982705.

At the other end of the line, Great Wilson Street was driven through at some time between 1831 and 1839, necessitating cutting back the terminus by about 50 yards and probably necessitating some staith reconstruction.

Christ Church, Meadow Lane, was built only shortly before the well known picture drawn by N. Whitlock and engraved on steel by T. Owen appeared in 1829. This picture, which shows one of the Blenkinsop engines in the middle of a train of wagons on a viaduct with Christ Church in the background, has two curious errors of draughtsmanship. The inclination of the crosshead guide tie bars is impossible and a mill chimney, one of several in the background, has been swept round and incorporated in the locomotive in addition to its own chimney !

Doubtless the lack of Blenkinsop's guiding hand and certainly the failure to plough back sufficient of the dwindling profits, resulting in decreasing efficiency, caused the Estate to be increasingly embarrassed and 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 Bleach Ground Pit. The two latter were connected by tramway to a main line which ran from West Pit to Great Wilson Street along the original alignment now called "Old Run Road". The Brandling Estates were advertised for sale on 19th and 20th October 1853 as a direct result of the Brandling v Plummer Chancery proceedings, but there is no record of a sale having taken place, or any change of ownership, before 1862.

EARLY COMPANY DAYS 1862 to 1903

The Brandling Estates were sold in 1862, together with all rights and responsibilities of the wagon-way. The new owners, Tetley & Company, formed into the Middleton Estate and Colliery Company. They set about the task of making the colliery profitable again and sunk the Broom Pit to a deeper level than heretofore. 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.

William Emsley, a solicitor of Leeds, wrote a booklet in 1877 (HUNSLET MOOR:The Four Acts of Parliament) in which he sought to demonstrate that the Company had no authority to run locomotives upon the unfenced line across Hunslet Moor. He also declaimed against "the new siding or branch line which the Owners of the Collieries have lately made on the Moor - for the purpose of forming a junction with the Midland Railway"(1875). According to a little booklet with the imposing title "The Commons Question: Report of Chancery Proceedings in the Hunslet Moor Case, Friday, February 22nd 1878, with the affidavits filed on both sides: and an introduction by John de Morgan, Commoners' Agent", the line was altered in 1875 to eliminate the lower incline and "the new siding or branch line"was put in before the re-alignment on to the present route. The 4' 1" gauge branch line "for the purpose of forming a junction with the Midland Railway" must have been legal subterfuge. The Company acquired seven eighths of the Manor of Hunslet in 1868 and the remaining eighth in 1874. The shortly afterwards laid the branch line as far as the limits of the Moor, apparently with no immediate prospect of completing the connection until they could buy the land thence to the Midland, or persuade the Midland to obtain powers to do so. Meanwhile, it seemed as though they were not entirely happy about the extension on the Moor and hoped to acquire rights of ancient usage by the time they had acquired the remaining land.

Meanwhile, a certain John de Morgan had set himself up to champion the Commoners and, in the presence of a company estimated variously between 30 and 40 thousand, he solemnly lifted a rail of the branch on 8th December 1877 though "no violent speeches were made nor were any acts of violence committed." Chancery proceedings were duly instituted on 22nd February 1878 and a hollow victory secured for the Colliery Company. The first edition 25" Ordnance Map of1890 still shows the branch turning across the Moor and terminating nowhere !

In 1881 the gauge was changed to 4' 8½" and MATTHEW MURRAY was returned to the 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.

It is no more than a guess that the connection with the Midland Railway's Hunslet Lane Goods Depot, via a level crossing in Kidacre Street and reversal in the 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, circa 1889, is interesting in that it shows the new alignment of the colliery line, with the old alignment, on what is now Old Run Road, dotted. Doubtless because of its uselessness, the branch is not shown. According to the 1890 Ordnance Survey, the line was fenced except on the Moor. The great iron fence which separates the line from the Moor now, could only have been put up after a decisive victory over the pretentious commoners by the Colliery Company. It would have done credit to a wartime hush-hush factory, each of the enormous gates at a road crossing bearing a fearsome cheval de frise. How they survived the Second War scrap metal drive when a simple wire and post fence was considered adequate for the fast and frequent tram route alongside, is beyond conjecture. Saxby and Farmer's gate posts and mechanism bear the dates 1901 and 1903, which may not have been the first enclosure. They have long been disused.

The Midland connection was completed in time for inclusion in the 1895 Handbook of Stations but by that date there was already the connection with the Midland Goods Station (former North Midland terminus) via the level crossing in Kidacre Street.

There had been various sidings from the colliery line at its Northern end before the gauge conversion and two short ones are shown on the 50" Ordnance plans of Leeds of 1850. A passing loop is also shown between Moor Road and Hillidge Place.

In 1893 The Hunslet Railway Company was incorporated to build the line from the Great Northern at Beeston, to Hunslet or more specifically to Knowsthorpe, in Hunslet but across the river. This was taken over by the Great Northern under its Act of 1894 and duly opened on 3rd July 1899, including a new connection with the Middleton Colliery line near New Pit.

By the time the Ordnance Survey explored the area in detail for the second time, in 1890, all the pits on the plateau had been closed and the line cut back to a dead end at a spot nearly enough on the Eastern boundary of the Middleton housing estate. Coal was no longer brought down the incline but was sent up bt the aid of a steam winding engine, some of the buildings of which still survive. There was a return sheave near the defunct Venture Pit, whereby the coal wagons were cable hauled across Town Street to staiths on the South side of the road. They could also be dropped back into the yard for supply to the engine.

THE TWENTIETH CENTURY

Little of interest has emerged from the early part of the century.

The 1905 revision of the Ordnance maps show the South end of the line cut back a little further, to a site just short of the tramway, a spot it had reached about 80 years previously. The coal staiths there were in use until 1948 as was the incline itself, and all traces South of Town Street have but recently been effaced.

The steam winding engine was replaced by a humble electric motor in about 1930 and the driving pinion moved to the opposite side of the winding sheave. A turntable was installed as a last phase, to enable wagons of coal to be turned into the yard for bagging.

Now, an explosives store has been built on the incline near its lower end, and the rails have been removed, though most of the sleepers remain.

The upper incline is not the only feature of the enterprise to suffer a reversal of traffic. A gas main, laid alongside the railway to convey gas from the colliery coking ovens to the gas works near the Northern terminus is now used to supply gas from the gas works to the ever-increasing population in the Belle Isle area !

By arrangement with the National Coal Board, John Fowler & Company used the colliery line for test purposes. When the Northern section of the line was closed in 1958 this arrangement terminated.

Of the developement of the 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. Three commercial sidings on Hunslet Moor call for notice in that access to and from the Midland line is obtained over the colliery line and the National Coal Board or their predecessors have dealt with quite a vast amount of traffic for these "customers" over their line.

The oldest is that of Wagon Repairs Limited, now Acme Engineering Company, on the South side of the Midland connecting line. This dates back to just before the First War and was in regular use until the 1958 closure. The second serves three premises on the West side of the line which are reached by a dead-end shunting neck connected with the main line by a North facing curve. These were laid in during 1919/20 and served: Clayton, Son & Company Limited, who were presumably the first so connected as the crossing of this connection with the tramway is called "Clayton's Crossing"; Robinson & Birdsell, Metal Merchants and John King & Company, Ironfounders. All these are still intact though now disused. The third connection to the Hunslet Foundry of Samuel

Denison & Son Limited, appeared officially at about the same time as the Clayton connection, though it is difficult not to believe that there must have been a connection many years before to the foundry which, whilst in other hands, cast the iron rails to Blenkinsop's patent design. In those days, of course, the line was on Old Run Road and through the recreation ground in front of the premises. The modern connection to the new alignment was taken out a few years ago and had not been deleted from the 1956 Handbook of Stations.

One more siding appears on 1932 and 1949 Ordnance maps. It left the main line immediately to the North of the bridge carrying the Great Northern branch to Hunslet and proceeded for a quarter of a mile in a N.N.E. direction upon substantially flat ground which was formerly a slag heap for the New Pit. This is understood to have been a stack yard. Like Conyers Spring, it is now better contemplated upon the map than in reality.

The visitor to the neighbourhood of Day Hole End and Conyers Spring will find disappointment indeed. The little covert has become a public rubbish dump and the spring is encumbered with the rejects of civilisation at its lowest. No trace remains of the Day Hole and the present dead-end shunting neck terminates against virgin rock, affronted by more of civilisations cast-offs.

The Middleton Light Railway is sometimes confused with the colliery line. Built by contractors for Leeds City Tramways under the Leeds Corporation Act of 1919, it was an electric tramway laid mainly on a reserved track and built to serve the Middleton housing estate. The first section from Dewsbury Road was laid in the highway along Moor Road until it reached its reserved track parallel and adjacent to the colliery line. From Clayton's Crossing both routes were together within the same fences as far as the point of divergence just short of the Great Northern Railway bridge. Here the tramway struck off through the Woods by Middleton Lodge, quite away from any public road until it reached the Ring Road on the plateau. The line was opened for passenger traffic to its original terminus at Middleton Park Circus on 12th November 1925, and was extended to Lingwell Road just short of the old Venture Pit on 26th November 1927.

The existing tramway to Balm Road was extended to serve the Belle Isle housing estate and tracks were laid along Belle Isle Road to the Belle Isle Circus and opened for traffic on 22nd July 1940. Under the Leeds Corporation Light Railway Extension Order of 1945, this was extended to Middleton Road on 24th February 1946. A further extension to the junction of Belle Isle Road and Middleton Park Road was opened on 6th March 1949 and the final length to the Middleton Light Railway at Lingwell Road was opened on 28th August 1949. The whole of the tramway was abandoned on 28th March 1959.

It is interesting to note that the original plans brought the tramway close alongside the Broom Pit and a physical connection of one furlong and one chain in length was intended to be made with the colliery railway. This plan, of course, antedates the Belle Isle housing estate but is interesting in view of the fact that Leeds City Tramways used to handle mineral and goods traffic over its system. A heavy mineral traffic between the Gipton Pit at Harehills and the Leeds Fireclay Company at Wortley survived until late in 1930.

The Middleton Estate & Colliery Company is understood to have anticipated Nationalisation and to have separated its coal, fireclay and other interests in the early days of the last war. Thus, it would be about this time when the Middleton Fireclay Company came into existance.

Traffic north of Moor Depot, now known as Whitaker's Staiths, was discontinued on and from 13th September 1948, the bridge over Holmes Street having been demolished by the National Coal Board on 1st February 1948. The bridge was barely high enough to walk under, being of 7' 6" headroom. However, not all traces of the bridge have disappeared, as the capstones are still in place on each side of the road.

Most of the line, except that portion between Parkside Great Northern Junction and Middleton Broom Pit, has been closed for two years, but at the time of writing (April 1960) it is hoped that the line will be given a new lease of life by the Middleton Railway Preservation Society, whose aims are summarised at the end of this booklet.

APPENDIX I

LOCOMOTIVE STOCK

As far as can be determined, the locomotive stock of the railway has been as follows.

Gauge 4' 1"

SALAMANCA	2-2-2 rack loco	built F.M.W. in 1812	
PRINCE REGENT	2-2-2 rack loco	built F.M.W. in 1812	
LORD WILLINGTON	2-2-2 rack loco	built F.M.W. in 1813	*
MARQUIS WELLINGTON	2-2-2 rack loco	built F.M.W. in 1813	*

Notes: F.M.W. - Fenton, Murray & Wood of The Round Foundry, Holbeck
* These locos may be two different names for the same loco.
All these locos were scrapped by 1835

Manning Wardle 0-4-0 Saddle Tanks -

BLENKINSOP	Inside cylinders	Works No. 220 of 1866	scrapped
MATTHEW MURRAY	Outside cylinders	Works No. 284 of 1869	rebuilt

Gauge 4' 8½"

MATTHEW MURRAY	rebuilt from above in 1881			
BLENKINSOP NO.2	0-6-0ST	IC	MW.797 of 1881	rebuilt 1910 Scr 1953
NIGER	0-6-0ST	IC	MW.1262 of 1892	scrapped
NO.6	0-6-0ST	IC	rebuilt from a North Eastern Rly 0-6-0 in 1912	scrapped
MATTHEW MURRAY NO.2	0-4-0ST	OC	MW.1752 of 1909	scrapped 1953
GLADSTONE	0-6-0ST	IC	HC.491 of 1898	bought from Price, Wills & Reeves in 1916, scrapped 1950
BLENKINSOP	0-6-0ST	OC	HC.1871 of 1954	now under repair

Notes: MW - Manning Wardle HC - Hudswell Clarke
IC - Inside cylinders OC - Outside cylinders

Other engines there at various times were:
JEAN which was an 0-6-0 tank built at Gateshead in 1897 scrapped in 1948/49
Appleby Frodingham Steel Company No.99 - a Hudswell Clarke 0-6-0 tank, Works No.1175 of 1916.
EDITH - an 0-6-0 tank built by Hunslet Engine Co. in 1925
ST. JOHNS NOS,1 & 2 which were Peckett 0-4-0 Saddle Tanks built 1931 and 1922 respectively
NOSTELL NO.2 - a Hudswell Clarke 0-6-0ST of 1889 rebuilt in 1934 and 1951

At present the only locomotive to be left at Middleton is BLENKINSOP (H.C.1871 of 1954) which appears to be undergoing a heavy repair pending transfer to another colliery.