The Middleton Railway

GUIDE

FOREWORD

"The general aspect of the place is strangely uncouth, and perhaps a more dismal scene cannot be presented than the tract of mud and marsh called Hunslet Moor on a rainy day".

So wrote Parsons in his 'History of Leeds' in 1831, yet it was in such an unpromising environment that history was being made. Between 1812 and 1835, the original steam locomotives of the Middleton Railway hauled coals across Hunslet Moor from Middleton to Leeds. They were the first locomotives which were commercially successful, and ran along a waggonway authorised by an Act of Parliament in 1758. The locomotive building industry of Leeds grew from the success of the Murray-Blenkinsop prototypes.

Today, although this area of the city has been transformed through urban renewal and road development, the Middleton Railway maintains its long tradition of serving the needs of industrial Leeds.

Only the Hunslet Engine Company and Greenbat Ltd produce railway locomotives in Leeds today, but examples of our engineering tradition can be seen hard at work on the Middleton Railway and throughout the world. The scenery, alas, remains "strangely uncouth" for the most part, although changes are at hand, but for the present we can make no claim beyond that of preserving the world's oldest railway.

Some dates to remember

1202 First record of a coal owner at Middleton, William Grammary.

1697 Ralph Brandling became coal mine manager at Middleton.

1755 A waggonway was constructed between Middleton and staithes on the River Aire at Thwaite Gate.

1758 FIRST ACT OF PARLIAMENT AUTHORISING THE CONSTRUCTION OF A WAGGONWAY (RAILWAY), FROM MIDDLETON TO HUNSLET MOOR AND CASSONS CLOSE, NEAR LEEDS BRIDGE.

1765 Matthew Murray born near Newcastle.

1781 George Stephenson born at Wylam, Northumberland.

1783 John Blenkinsop born (? near Stockton).

1786 Murray apprenticed as blacksmith at Stockton.

1788 Murray came to Leeds seeking work. Employed at Scotland Flax Mills, Adel.

1797 Engineering firm of Fenton, Murray & Wood established in Water Lane, Holbeck.

1801 Incorporation of the Surrey Iron Railway (Wandsworth-Croydon), first public goods line to be sanctioned by Parliament.

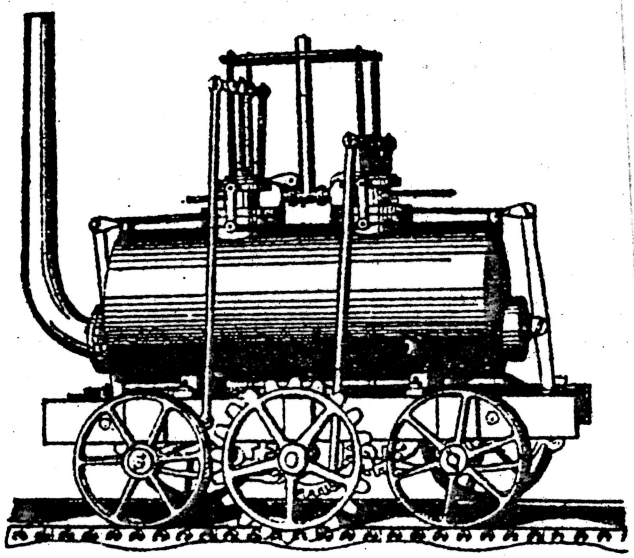
1802 Round Foundry built in Water Lane for Fenton, Murray & Wood. James Watt junior came to Leeds to discover the reason for the superiority of Murray's engine building.

1804 First experimental use of steam traction on the Penydarren tramroad, Merthyr Tydfil, with a Trevithick locomotive.

1808 Blenkinsop appointed overseer at Middleton colliery.

1811 Blenkinsop patented the rack and pinion method of propulsion.

1812 FIRST COMMERCIALLY SUCCESSFUL STEAM LOCOMOTIVES COMMENCED OPERATION ON THE MIDDLETON RAILWAY. INCLUDED IN THE DESIGN WAS THE BLENKINSOP RACK AND PINION DRIVE, AND TWO CYLINDERS (EARLIER LOCOS HAD BEEN SINGLE-CYLINDER). THIS WAS THE FIRST REGULAR REVENUE-EARNING USE OF STEAM TRACTION, AS DISTINCT FROM EXPERIMENTAL OPERATION, IN THE WORLD.



1812 "Salamanca"

1813 George Stephenson visited the Middleton Railway to view the locomotives. A Murray steamboat commenced regular operation between Norwich and Great Yarmouth. Hedley's 'Puffing Billy' entered service, the first locomotive to use adhesion for traction purposes.

1814 The first Stephenson locomotive entered service on the Killingworth colliery railway.

1816 Grand Duke Nicholas of Russia inspected Murray's locomotives.

1818 The streets of Leeds first lit by gas. Plant made by Murray.

1825 Opening of the Stockton & Darlington Railway. The first railway to be built for the use of steam traction, although passenger services reverted to horse traction after the opening ceremony!

1826 Death of Matthew Murray.

1829 Stephenson's 'Rocket' won the Rainhill trials, Liverpool & Manchester Railway.

1830 Stephenson's 'Invicta' hauled the first regular steam-hauled passenger service in the world, Canterbury & Whitstable Railway.

1831 Death of John Blenkinsop.

1834 Opening of the Leeds & Selby Railway, the first main line to reach Leeds. Locomotives built at the Round Foundry.

1835 Last of the Murray-Blenkinsop locomotives withdrawn from service on the Middleton Railway.

1866 Steam traction reintroduced on the Middleton Railway, using conventional industrial locomotives.

1875 Gauge of the Middleton Railway changed from 4'1" to 4'8½".

1881 First link established between the Middleton Railway and the

Midland Railway, at Hunslet Lane.

1947 Section of Middleton Railway north of Hunslet Moor staithes closed. Middleton colliery nationalised.

1951 Railway enthusiasts commenced operation of the Talyllyn Railway. First amateur-operated narrow-gauge railway.

1958 Bicentenary of the Middleton Railway observed. Remainder of line threatened with closure.

1960 THE MIDDLETON RAILWAY BECAME THE FIRST STANDARD GAUGE RAILWAY TO BE OPERATED BY AMATEURS (20TH JUNE PASSENGER SERVICE, 1ST SEPTEMBER FREIGHT SERVICE) ON SECTIONS OF THE LINE ABANDONED BY NCB.

1967 Last coal left Middleton by rail.

1968 Middleton Broom colliery closed, the last pit in the Middleton area.

1969 The Middleton Railway Trust took over the remaining section of the Middleton Railway. Hunslet Moor-Middleton Park Gates passenger service established.

1971 Construction of motorway tunnel, and route alterations.

1977 Major landscaping programme at the southern end of the line.

WHAT TO SEE

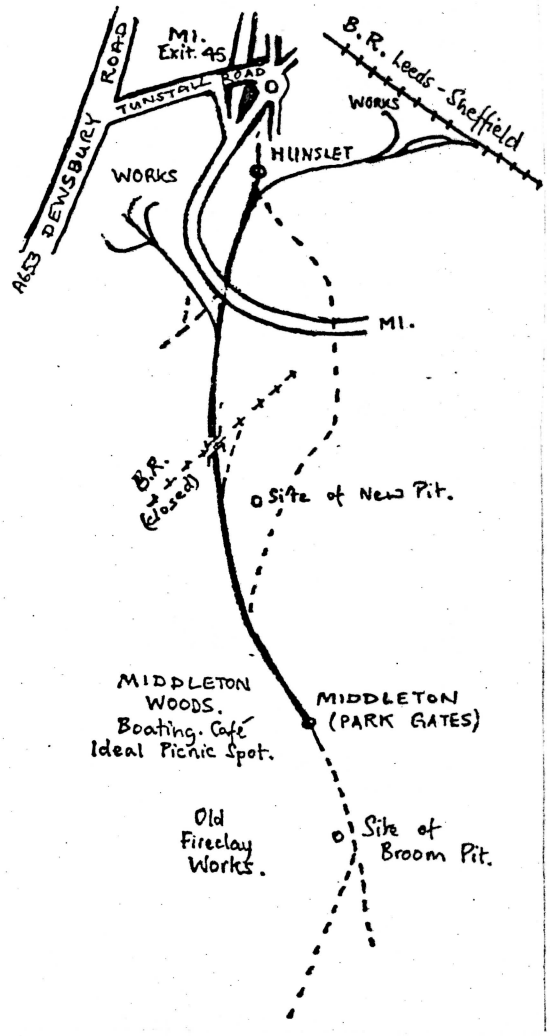
1. Locomotives

NAME/NUMBER	YEAR	BUILDER	TYPE
1310	1891	North Eastern Railway	0-4-0T
385	1893	Hartmann, for Danish State Railways	0-4-0WT
Windle	1909	Borrows	0-4-0WT
Henry de Lacy II	1917	Hudswell Clarke	0-4-0ST
John Alcock	1932	Hunslet	0-6-0DM
59	1933	Sentinel	4wVBT
Courage	1935	Hudson-Hunslet	4wDM
6	1935	Hawthorn Leslie	0-4-0ST
	1941	Peckett	0-4-0ST
Matthew Murray	1943	Bagnall	0-4-0ST
	1945	Fowler	0-4-0DM
Carroll	1946	Hudswell Clarke	0-4-0DM

Notes: DM: Diesel Mechanical. ST: Saddle Tank. T: Tank. VB: Vertical Boiler. WT: Well Tank.

Further details of the Trust's locomotives can be found in 'The Middleton Railway Stockbook', available from the railway shop.

2. From the train



Your journey commences at Hunslet Moor Halt, Tunstall Road. Hunslet Moor was once common ground, and a popular open space. The line originally continued northwards across the Moor, where there were some coal staithes, and into Leeds, terminating just short of Leeds Bridge. In 1947 the line north of Hunslet Moor staithes was closed, and regular traffic north of the present Halt ceased in 1958, the final train running in 1961. The unusual iron level crossing gates, surmounted by revolving spikes, were installed at the turn of the century, and have been derelict for at least fifty years.

The platform, built by volunteers in 1975-76, contains many stone sleepers from the original waggonway, discovered in walls in the area. It is hoped that funds will ultimately permit the construction of a locomotive depot between the platform line and the motorway.

The scene has changed considerably since the constuction of the motorway and tunnel in 1971. The 1920 branch line to several factories to the west of the main line followed the line of the pedestrian tunnel, trains then reversing over a sharply curved and heavily graded line. The new alignment, with a junction to the south of the tunnel, offers easier access, and avoided the construction of a second rail tunnel.

The engine starts to work hard south of the tunnel, as it climbs gradients as steep as 1 in 27 on its way to Middleton Park. To the west can be seen the trackbed of the Middleton Light Railway. This was part of Leeds City Tramways, and opened in 1925 to offer a swift, congestion-free service to the new Middleton housing estate. Closed on 28th March 1959, it now forms a pleasant footpath through the woods. At one time, special trams for Rugby League supporters terminated here; the ground of the Hunslet club was situated beyond the poplar trees, on the site now occupied by an industrial estate.

Little now remains of the Great Northern Railway branch from Beeston Junction to Hunslet East, which crossed the tramway and railway on viaduct and bridge respectively. Opened in 1899, a connection to our line was made at Parkside Junction. The GN branch closed after the last Middleton coal train left in 1967, part of the trackbed being later occupied by the M1 motorway. The earthworks in the vicinity of the Middleton Railway were erased by landscaping work in 1977. Just to the south of Parkside Junction was New Pit, which never reopened after the 1926 General Strike, although coal was removed by opencast working in 1977.

The upper section of the line has been completely transformed by landscaping, and it is difficult to imagine the scene of earlier days. The railway used to run on the east side of the valley of Belle Isle

Beck, at roughly the chimney level of the colliers' cottages. Additional smoke effects would be provided by three or four shunting locomotives, and the chimneys of the fireclay works and Broom Pit. It was here in 1835 that one of the earliest attempts at rail preservation took place, when the last of the 1812 Murray-Blenkinsop locomotives was placed in a shed. Unfortunately, a later scrap metal drive deprived us of this example of the first commercially successful steam locomotive.

The valley has now been filled in, however, the colliery village, along with the colliery and fireclay works, has vanished, and even the mighty pit tips, which once towered above the railway to the east, have been levelled. The whole area, once the scene of so much heavy industrial activity, is being transformed into parkland, in which the Middleton Railway will be a major attraction and amenity.

Middleton Park Gates Halt is the starting point for walks into the parkland and the woods beyond. Broom Pit was situated a short distance to the south of the line's present terminus.

3.History walks

THE OLD RUN (10 minutes)

From Hunslet Moor Halt, proceed southwards along Moor Road. On the right is Lake Terrace, reminding us that for many years the park on the left was known as Hunslet Lake. Before it was drained in the 1920s, it was a favourite spot for skaters in the winter.

Denisons Foundry, on the right, is a modern development of a very old-established firm. Denisons took over the business of R Kilburn & Sons in 1899, and used the works for the production of weighing machines. The earliest record of the foundry goes back to 1772, but it is thought that it was operational as early as 1742. In 1811, the rack rails were cast in this foundry for use on the Middleton Railway. No doubt there were many breakages, and a continuing demand for rail over the years. The rails were of two kinds--one three feet long with hollow teeth, the other six feet long with solid teeth. Rails of wrought iron, introduced in about 1820, were greatly advantageous, and, although steam rack locomotives ceased operation in 1835, it was 1862 before they were returned to the same foundry for scrap.

The Engine Inn, on the right, is connected with an unfortunate event in the earliest years of steam operation. The original route of the 1758 waggonway ran roughly on the line of our walk. At the Engine Inn, an incline ran up the site of Old Run Road to join the present rail route close to New Pit. The Locomotive Engine, as the inn was then called, thus marked the point at which the rope haulage, used on the incline, gave way to locomotive haulage for the remaining two miles into Leeds. In 1818, a locomotive exploded, killing the driver and scalding a number of children (no doubt the novelty of a steam locomotive was as fascinating to children then as it is now). George Stephenson was called upon to investigate, and told a House of Commons committee, "The driver had been much 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". If proper safety precautions had been taken, the accident need never have occurred, he concluded. Many of the stone walls in this area are built of old stone sleepers from the original waggonway.

THE LOCOMOTIVE-BUILDING AREA (40 minutes)

Leaving Hunslet Moor Halt, follow the rails eastwards towards BR. This line originally ran along the southern edge of Hunslet Moor, and was laid in 4'1" gauge in c1874. It was the subject of much legal wrangling between William Emsley, a Leeds solicitor, and John de Morgan, a commoners' agent. In 1877, Morgan ceremonially lifted a rail of the branch before a crowd estimated at 30,000 strong. They were protesting at the use of common land for railway purposes without adequate compensation for the townsfolk.

The works on the right, now Acme Engineering, was originally Wagon Repairs Ltd, and was rail-connected. Main-line wagons were repaired here between 1914 and 1958, the colliery company having its own shops at Middleton.

On the left beyond the level crossing, a branch, now little used, runs into Claytons' Moor End works. It was laid by the Trust in 1964 for an inter-works traffic that never materialised. Proceed between the wire fences alongside the interchange sidings. Here the MRT goods trains meet BR and, since the Trust took over operation in 1960, thousands of tons of freight and hundreds of wagons have been exchanged. This is the sole survivor of three exchange points with BR, and was connected in c1895.

Follow the footpath round to your left beside the wire fence, following the main line northwards towards Leeds. This is part of the former Midland Railway route from London to Scotland, and was opened in 1840. The original Hunslet station (1854-1873) was situated here. About a quarter of a mile northwards is the site of the second Hunslet station (second bridge), closed to passengers in 1960. Continuing north, the footpath is now roughly on the edge of Hunslet Moor, and on the 1758 alignment of the Middleton Railway. Cross the Midland line by turning right at the third bridge. Turn left into Jack Lane, the heart of the locomotive-building area.

Leeds probably built more steam engines, rail and road, than any other British city. On your left, only the offices remain of Hudswell, Clarke & Co., who ceased locomotive work in the 1960s, the firm having been originated by two former Kitson employees in 1860. Kitson & Co., situated behind the Hunslet Engine Co. works on the right, was founded in 1847 by a pupil of Matthew Murray, and closed in 1948. Undoubtedly the most successful of the Leeds builders is the Hunslet Engine Company, which still builds locomotives for world markets, and is still willing to build a new steam engine if you can afford it (the last was in 1971 for Indonesia). The works has also repaired many preserved steam locos in recent years, including 'Flying Scotsman', and has supplied parts for many others. If you look through the gate on the right of the first crossing, you may be fortunate enough to see a locomotive under test on the multi-gauge test track. It is possible to run locomotives of virtually any gauge up to the 5'3" Irish gauge on this track, and Hunslet diesels are to be found in many parts of the world today. Their very first main-line diesel, built in 1932 for the LMS, is owned by the Middleton Railway Trust.

Continue across the second level crossing, linking the works with BR, to the third gate on the right. If the gate is open, you will see the Hunslet 0-4-0ST, 'Hodbarrow'. This nineteenth-century industrial locomotive is preserved as a static exhibit, and came from Millom, Cumbria. Note on the gatepost the title 'Boyne Engine Works 1858'. This was the entrance to the Manning Wardle works, which closed down in the slump of 1927. The goodwill went to Kitsons, but the works became part of Hunslets. Many Middleton colliery locomotives were built here between 1866 and 1909; it is said that the first were placed on the tracks at the level crossing a hundred yards west of the works.

After the closure of Manning Wardle, the Middleton Railway used Hudswell Clarke for heavy repairs, and they built the last new locomotive for Middleton colliery, 'Blenkinsop' in 1953.

Continue across the bridge over the Midland Railway. If you look northwards, you can see the old goods station. This was once the second railway terminus in Leeds for passengers, the first being the 1834 Marsh Lane terminus of the Leeds & Selby Railway. The Hunslet Lane station was the terminus of the North Midland Railway, opened in 1840. Joined by the Leeds & Manchester Railway in 1841, it was closed to passengers in 1851, trains being diverted to Leeds Wellington (later Leeds City). To the left of the warehousing ran the 1758 Middleton Railway route to Leeds. From 1851 to 1947 there were coal staithes, coal being transferred by gravity to road vehicles. Though nothing remains of these today, it is possible to see where there was a devious connection to the main line system. This was the earliest link, laid in c1881, and involved three reversals and use of the gasworks railway. The site is reached via Kidacre Street (right).

Cross to the south side of the railway bridge. Here is the present main line into Leeds City. The Middleton Railway crossed this, having passed between the 'Craven Gate' pub and the main line, on a single track steel bridge. After rail operations ceased in 1947, the bridge continued to carry a gas main until 1973, but was subsequently demolished. Walk further along Jack Lane, and you will see quite clearly where the line passed northwards from the bridge, crossing the road on the level, and disappearing between the factories before entering the city. On the right at this point was the famous Leeds Pottery, and in 1811 they produced special plaques depicting a Murray-Blenkinsop locomotive.

Buses from here run to the Middleton Railway (74 and 76 Belle Isle/Middleton--stop on the right) or to Leeds (various routes--stop on the left).

MIDDLETON PARK AND VILLAGE (30 minutes)

From Middleton Park Gates Halt, follow the path to the west. Little remains of the narrow gauge rope-worked clay railway which the cart track bridged.

On entering the woods, bear left. It is probable that this, like many of the pleasant woodland paths, was originally a waggonway. The remains of bell pits (an early form of shallow coal mine) may be seen in several places as shallow, round depressions, sometimes containing small ponds. The best examples are to be found in the lower Beeston Woods, where a coal outcrop occurs close to the site of the GNR branch. Sometimes when traffic did not warrant a waggonway, horses with pannier baskets would be used along the rough tracks.

Continue along the path until in ½ mile you will reach a clearing. A cottage serves refreshments, and a boating lake, children's playground and sporting facilities make this an ideal venue for a family outing. Across the golf course is Middleton Lodge, now the clubhouse. This was the Brandling family home, Charles Brandling being the colliery owner responsible for our first Railway Act of 1758.

Follow the main drive up to Middleton Town Street. Turn left, passing the church (paid for in part by the colliery agents) to the school. You are now at the top of Rope Hill, the highest of the three levels of the Middleton Railway. Numerous horse tramways once linked the many pits in the area now occupied by the housing estate to this point. Only one wall now remains of the old winding house for the

rope-worked incline down to the Broom Pit level. There is a panoramic view of the railway and the city from here. Originally the pit was on the right and the fireclay works on the left in the hollow.

ROUND FOUNDRY SITE AND MURRAY OBELISK (20 minutes)

Walk down the main approach road from City station, make a right U-turn and pass through Neville Street arches. As you cross Victoria Bridge, notice on the right the point where the 1777 Leeds & Liverpool Canal joins the River Aire. Both pass beneath the station, which is built on arches said to contain 18 million bricks. It was here that Matthew Murray, rightly called the father of Leeds engineering, experimented with a pioneer steam boat in 1813. Originally a French privateer, he converted it with a high-pressure steam engine into a paddle passenger vessel. She went under steam to Yarmouth, and entered service on 9th August 1813, running from Norwich to Yarmouth, surely the first example of regular steam-hauled passenger transport.

Turn right into Water Lane. About two hundred yards on the left is the plaque marking the site of the Round Foundry. This area of the city contains much in the way of fine industrial monuments, particularly the Giotto tower chimney on your right, and the 1840 Greek Temple style flax mills in Marshall Street on your left. Continue straight ahead, bearing to the left along Water Lane. Pass beneath the railway viaduct, built for the LNWR line to Manchester, but now used by trains for Wakefield Westgate and Kings Cross.

Continue beneath the lower bridges, carrying the triangle of lines outside Leeds City. The home of Matthew Murray, known as Steam Hall because of the central heating system, was situated in the centre of the triangle, and was demolished in 1959. Turn left, passing beneath the LNWR viaduct again, and bear right along the wall of Holbeck engine shed. Once the main Midland Railway shed, it is now the principal depot for diesel locomotives in the Leeds area.

Straight ahead, in St Matthew's churchyard, is a cast iron obelisk, built as a labour of love by the men of the Round Foundry, in memory of their revered boss, Matthew Murray. This and the Round Foundry plaque are the only memorials to Murray in Leeds. Strangely, James Watt, who engaged in industrial espionage, and was so jealous of Murray that his firm bought land alongside the Round Foundry to prevent extensions, has his statue in City Square!

Buses on route 54 (Meanwood) run into the city from here. Take route 86 (Belle Isle/Middleton) from the church to the Middleton Railway.

ROTHWELL

To reach Rothwell, leave Leeds on the A61. About four miles from Leeds, at the top of a hill, Rothwell is signposted to the left. The village is a 20 minute ride from the Central Bus Station in Leeds, on West Riding services 491/2/3/4.

In the parish churchyard at Rothwell is the tomb of John Blenkinsop. Born in County Durham in 1783, in 1808 he became the manager of the Middleton colliery. If it was Murray's invemtive genius that made the locomotive, it was the Blenkinsop patent that made it into a success commercially. Patent No 3431, of 10th April 1811, describes the rack and pinion method of propulsion, which enabled the tiny five-ton locomotives to haul trains of up to 90 tons. The inscription on the tomb describes him as "inventor of the Rack Railway", and goes

on, "On a line he built from Leeds to Middleton, 4 Matthew Murray locomotives ran from 1812 to 1835. His system was adopted at Newcastle on Tyne[1] and Wigan[2] in 1814. These railways were the first on which steam locomotives were a commercial success." His death on 22nd January 1831 was "sincerely regretted by all who knew him".

The tomb is to be found by walking up the main path as if to enter the church. Turn left towards the fifteenth-century tower, and the tomb is to be found close to the tower, on the north side.

1. Kenton & Coxlodge Railway. 2. Orrell Colliery Railway.

Train services

The Middleton Railway is today run by railway enthusiasts as a working museum. During the week it carries goods for local firms, and at weekends and on Bank Holiday Mondays a steam-hauled visitors' service is operated. Trains leave Hunslet Moor (Tunstall Road) on these days every half hour from 2pm to 4.30pm, running to and from Middleton Park Gates. The service operates from Easter to the end of October, and is an inexpensive and popular way of reaching one of the largest parks in Leeds. Schools Steam Days and other special events are held at the line from time to time, details being announced in the local press and the railway enthusiast magazines in advance. Special trains can also be arranged for parties at other times.

How to find us

Hunslet Moor Halt is immediately to the south-east of Junction 45 of the M1 motorway. Tunstall Road connects the motorway junction with the A653 Dewsbury Road from the city centre. Metrobus routes 74 and 76 leave from Park Row in the city centre (just off City Square and close to the BR station), and pass Hunslet Moor Halt. A frequent service is operated.

About the MRT

The Middleton Railway is now maintained and operated by the Middleton Railway Trust Ltd, which is a company limited by guarantee and a registered charity. All work is carried out by volunteer labour, and additional support, in the form of new members, is always welcome. For those wishing to become involved in the running of the railway, there are jobs to suit all interests, and the opportunity to learn new skills, or to practice existing ones. All members are kept in touch with progress at the line through the illustrated members' magazine, The Old Run. Those under the age of 18 are members of an affiliated body, the Middleton Railway Association.

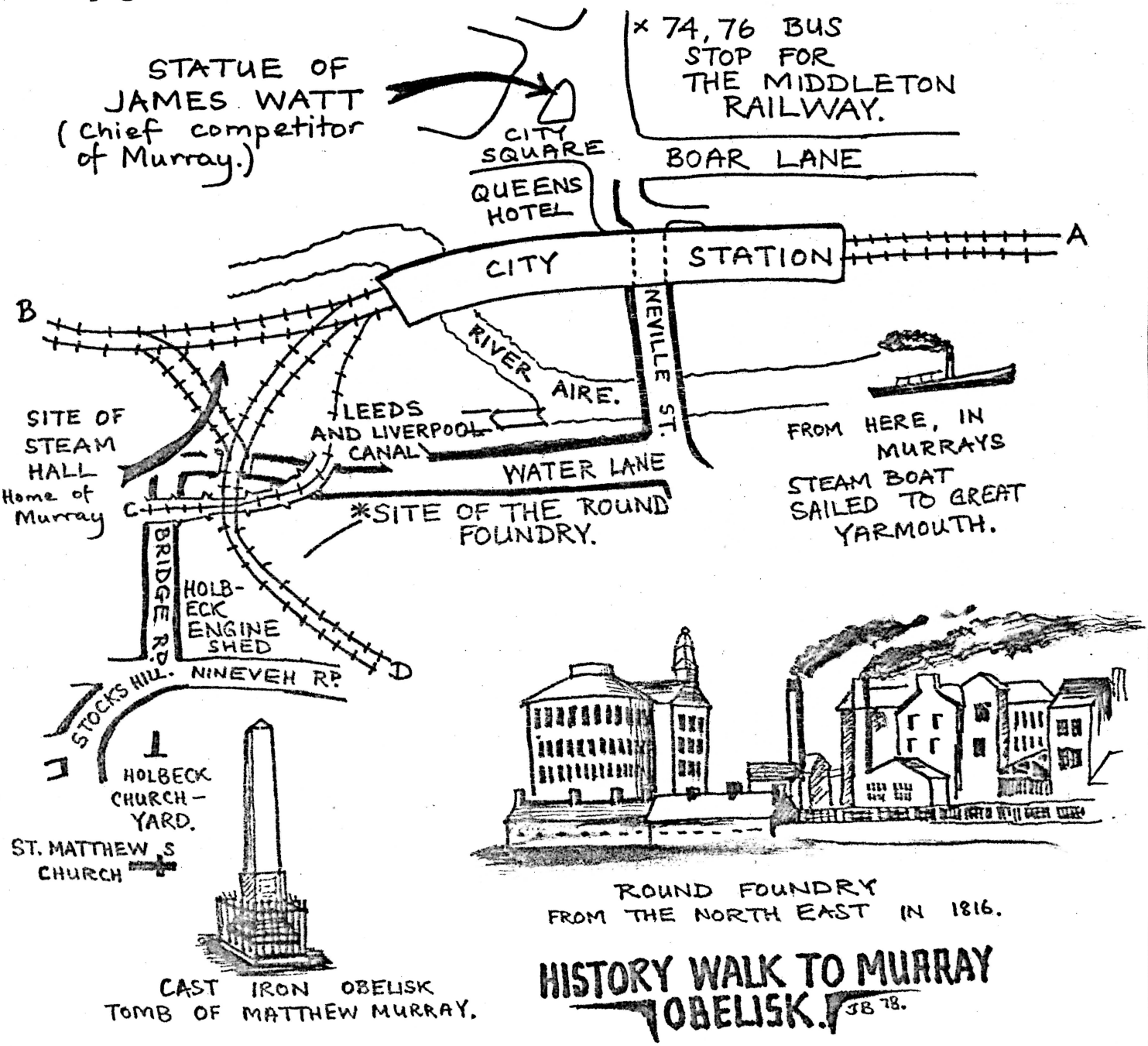
Further enquiries about membership, or any other aspect of the Middleton Railway, should be sent to: The Middleton Railway Trust Ltd, Garnet Road, Leeds LS11 5JY.

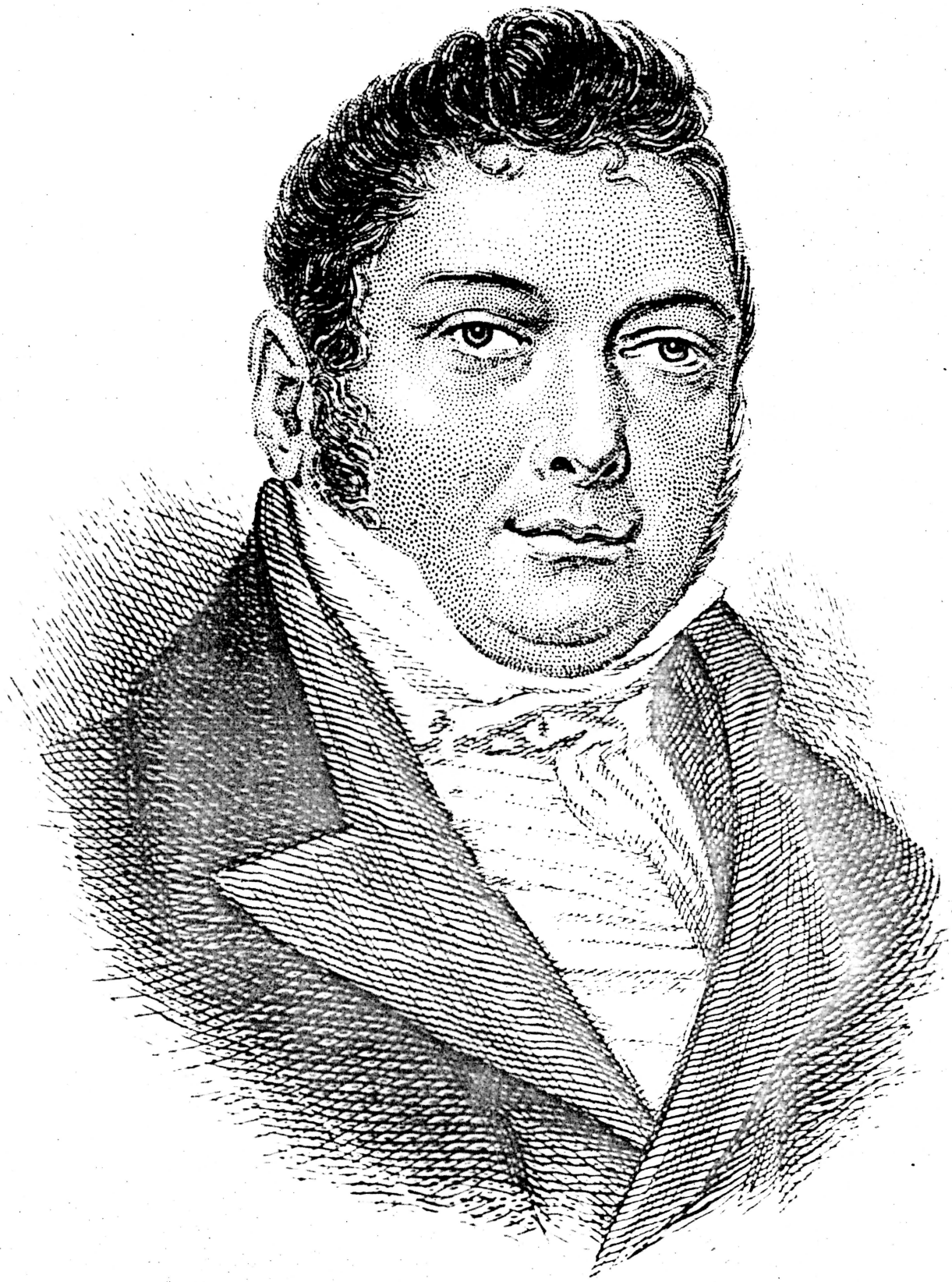
Now read on...

'The Middleton Railway Stockbook' gives a full account of all locomotives on the Middleton Railway at present, including photographs, technical details and history. Details of wagons and other rolling stock are also given.

'The World's Oldest Railway' by John Bushell (Turntable Publications) is an illustrated history of the Middleton Railway from its earliest days to the present, and includes a detailed map of the railway and its surroundings, and a list of all locomotives known to have worked on the line since 1812.

These books, along with a good range of souvenirs and other items of interest, are available from the railway shop at Hunslet Moor Halt. Mail order enquiries should be sent to the address given on the previous page.





Matthew Murray.

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