The Hunslet Engine Company built Nº 1697 as a prototype in 1932. It was tested at the London, Midland & Scottish Railway’s nearby goods yard and performed so well that the railway company bought Nº 1697 and it became LMS 7051.

Other makes and designs were tested by the LMS and diesel became the first choice for shunting locomotives. Nº 1697 heralded the dawn of this new era.

Following exhibition at the British Trade Fair in 1932, Nº 1697 was tested at the Waterloo Main Colliery, near Leeds and then went to the LMS Railway goods yard at Hunslet Lane, Leeds, for a week of trials.

These trials impressed the Railway managers who agreed to an extended trial of six weeks when 1697 did the work of a steam locomotive almost twice its power and weight. 1697 performed admirably, working six days out of seven and only stopping to be refuelled and for maintenance checks.

The LMS Railway was so impressed with this small locomotive that it was purchased and became LMS 7041. Almost immediately, it was renumbered 7051 as it appears today.

The LMS Railway ordered a further eight diesel shunters, three from the Hunslet Engine Company and the rest from other makers. Seven were to have mechanical transmissions like 1697 whilst the last was a diesel electric, the type later to be widely adopted for shunting work throughout the world.

Following service at a munitions depot during the war, 1697 returned to the Hunslet Engine Company where its original German engine was replaced by a McLaren one built in Leeds. It was hired out to various customers and was bought by the fledgling Middleton Railway in 1960.

It was named after its designer, John Alcock and has been exhibited at the National Railway Museum at York. Today, it can be seen working passenger trains at Middleton and doing the task it was designed for – shunting.

1697 weighs 21 tons and is fitted with a six cylinder, twenty three litre McLaren diesel engine producing 150 hp at 1000 rpm. This drives a four speed gearbox made by David Brown through a patent Hunslet multi plate clutch. The gearbox is power operated by a Hunslet designed gear change mechanism. Vacuum brake equipment has been fitted at Middleton so that the locomotive can work passenger trains.

Although changing gear smoothly is an acquired art, 1697 is a fine locomotive to drive even though it lacks the creature comforts of later designs.

Did you know that in 1932 diesel fuel cost 1/4p a litre
Middleton Information Kiosk

Please select a topic using the buttons to the right.

- Middleton Railway 1758 to 1900
- Middleton Railway 1900 Onwards
- Vanished Tracks - A Nostalgic Look at the Middleton Railway
- Our Locomotives & Other Vehicles
The Brandling Family

The Brandling family originated in the Tyneside area, first on the County Durham side of the river and later on the Northumberland side, near to Newcastle.

They owned coal mines in the Tyneside area, and by the end of the 17th century they had 2 waggonways there, for taking coal in horse-drawn waggons from the pits to the banks of the Tyne.

In 1697, Ralph Brandling married Anne Legh, the heiress to the manorial estates of Middleton, where coal had been mined since at least 1202.

This is CHARLES BRANDLING, painted in 1760 by Joshua Reynolds. Charles, born 1733, died 1802, was the Great-nephew of Ralph Brandling the husband of Anne Legh, and he inherited the Brandling empire in 1746.

Leeds had a growing need for coal, as most townsfolk used coal fires for heating, water heating and cooking purposes.

Charles Brandling decided to improve the income from his Middleton property by building a waggonway to make the transporting of coal both quicker and more efficient.

In 1755, a waggonway was built to the riverside at Thwaite Gate, Hunslet, and coal was sent out from there by boat. This waggonway lay chiefly on Charles Brandling's own land.

By the end of 1757, he was engaged in a 'price war' with 2 rival coalowners, all of them trying to secure a larger share of the growing local market for coal.

Charles Brandling emerged the victor, but the low price he was offering depended on him being able to build a waggonway to Leeds, and this waggonway would have to cross land owned by other people. He was promising to maintain the low price (in modern terms about 21p per ton!), for a period of 60 years, and to make sure that any agreements he made with other landowners would last, despite future changes of ownership, he obtained the first railway Act of Parliament.
Hudswell Clarke & Co. built D577, Mary, in 1932 for use on the extensive railway network at the Beswicks Lime Works at Hindlow, Derbyshire.

With the look of a steam locomotive but a state of the art diesel engine, D577 set new standards for reliability and running costs over a working life of 40 years.

Mary is an early diesel locomotive from Hudswell Clarke & Co.

Built in 1932 and given Works No. D577, Mary was built at the same time as the Hunslet Engine Company was building LMS 7051 at the other side of Jack Lane.

D577 was despatched to Beswicks Lime Works at Hindlow, Derbyshire on the 30th November and cost £1875.

Beswicks must have been impressed with Hudswell Clarke products as they already owned some narrow gauge diesel locomotives and a standard gauge one delivered in 1930. The latter was affectionately known by the quarry staff as T'Old Lizzie.

D577 was fitted with a 120 hp Mirlees Ricardo sleeve valve engine which was at the forefront of engine design at the time. This design claimed much higher efficiency due to better combustion of the fuel than other engines of the day and trials were conducted at Hindlow to see if this was true. The results were impressive. T'Old Lizzie, with only a 90 hp engine, cost 37% more to operate than Mary with its more powerful 120 hp engine. Not only that, Mary was much more reliable, running 2259 hours in the course of the trials compared to only 776 hours for its older partner. These results were very useful to Hudswell Clarke when seeking orders from new customers as the diesels were proving far cheaper to operate than steam locomotives and had much less down time for maintenance - a very strong selling point.

Unlike the Hunslet designs, Hudswell Clarke locomotives were built with the gearbox at the front and were given steam locomotive style chimneys. Even the engine throttle control is like a steam locomotive's regulator handle and perhaps the designer did this to make the locomotives a little more user friendly for steam crews who were unfamiliar with this new technology.

Mary worked at the lime works for nearly forty years and was then preserved on the Severn Valley railway where she saw little use due to her small size.

In 1980 Mary came home to Leeds and was restored to working order. The Mirlees engine was worn out and replaced with a Gardner 4L3 one of 100 hp. When built the locomotive had only a hand brake but was fitted with vacuum brakes so that it can operate passenger trains. It is the only locomotive in the Middleton fleet to have vacuum brakes for both the locomotive and train.

Do you know who Mary was? If you do, please tell us.