

THE ROUTE OF THE S&DR 1825:

THE SHILDON CIRCULAR:

DO THE LOCOMOTION!

SELF GUIDED WALK BOOKLET No.3



Friends of the Stockton & Darlington Railway.
WWW.SDR1825.co.uk



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The Friends of the Stockton & Darlington Railway were formed in 2013 to bring together all those with an interest in the S&DR to ensure that by the bicentenary in 2025, the 1825 Stockton and Darlington Railway line will have received the recognition and the protection it deserves as the birthplace of the modern railway. This booklet is part of a series along the 26-mile stretch of line from Witton Park to Stockton and represents the first stage in improving the interpretation and access to the line. We also aim to ensure that the standing remains are conserved and have proper legal protection by 2025.

Other booklets in the series include:

-  S&DR Walk No.1 Witton Park to West Auckland
-  S&DR Walk No.2 West Auckland to Shildon
-  S&DR Walk No.4 Shildon to Heighington
-  S&DR Walk No.5 The Darlington Circular
-  S&DR Walk No.6 Darlington to Goosepool via Fighting Cocks
-  S&DR Walk No.7 Preston Park to Stockton

Front Cover. The former Masons Arms, now The Crossings Public House, Shildon.

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Ordnance Survey "Explorer" Map 304 is a very useful resource for exploring the remains of this part of the S&DR. Ordnance Survey Grid References are used in this booklet.

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Your walk starts and ends at the National Railway Museum at Shildon, where there is ample free parking. There are several car parks, and the route is well served with bins for dog waste.

This walk starts at the car park off Dale Road, near the modern museum building housing the locomotives (at NZ 23908 25465 or the post code for sat nav DL4 2RE). In the museum there are toilets and a café available (dogs not allowed inside).

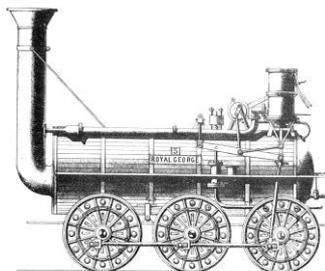
However, you can shorten the walk by starting at car park B (NZ 23261 25733, or sat nav post code DL4 1PF) where the Goods Shed is (walk point (4) with views to the Coal Drops and the Soho Shed.

The National Railway Museum at Shildon (Locomotion) opened in 2004 at a cost of £11million. There are often free tours, which last about an hour, looking at the historic buildings at the western end of the museum site. The distance covered is less than a mile and incorporates the historic coal drops, the plate layer's cabin and site of the stables on the Black Boy Colliery branch, as well as the 1857 goods shed and parcel office, Soho Shed and Hackworth's House. There is a chance to see the original '**Sans Pareil**' locomotive, built by Timothy Hackworth in 1829, to compete in the Rainhill Trials.

Access to the interior of these buildings will be available only during the heritage tours, although access to the modern museum building at the east end of the site is freely available during opening hours.

Tours are at 11am and 1.30pm from the Collection Building, subject to availability. Please call the museum on 01388 771439 before you travel to check that tours will be running on the day of your visit.

Alternatively, this leaflet will help you explore the wider area and parts of the National Railway Museum.



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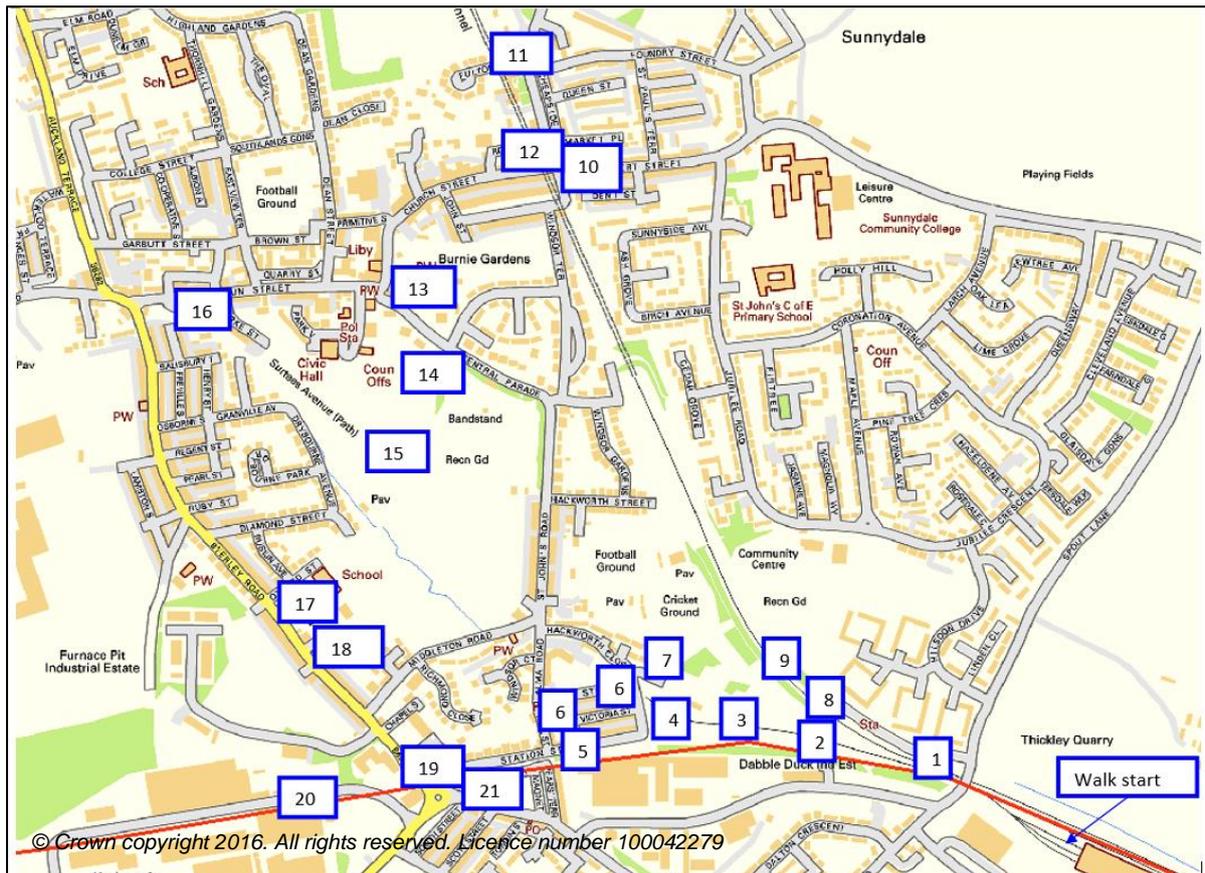


Figure 1. the walk route and stopping points

Shildon has a special place in the history of the railways and was the location of an important stopping point during the opening ceremony of the Stockton & Darlington Railway on the 27th September 1825, where the waggons were transferred from the rope pulled incline at Brusselton to the power of 'Locomotion No.1'.

A few days previously, on the 20th September, the passenger coach 'Experiment' arrived at Shildon from Newcastle where it had been built, and was coupled to 'Locomotion No.1'. 'Experiment' was described by a reporter at the time as being fitted like a long coach with passengers sitting face to face along its sides. It was designed to carry 16 or 18 passengers inside and from the start was intended to travel daily between Darlington and Stockton.

On the evening of the 26th September, several members of the Committee travelled down from Shildon to Darlington in the passenger carriage pulled by Locomotion No.1. Those Committee members were Edward Pease (senior), Edward Pease (junior), Joseph Pease, Henry Pease, Thomas Richardson, William Kitching and George Stephenson. James Stephenson, George's younger brother, drove the engine (Heavisides 1912, 55). This group, dominated by the Pease family, was not to be repeated on the grand opening day of the 27th. Edward Pease's son Isaac, aged twenty-two, died at home in Northgate, Darlington after a long illness on the 27th (see the Darlington Circular Walk) and so no members of the Pease family attended the opening of the line, despite their being pivotal in the creation of the railway. However, the passenger coach 'Experiment' was retained for other Committee members to use on the grand opening day.

Shildon was also the location of a major railway engineering works, initially established by the S&DR in 1825 under the supervision of Timothy Hackworth. In 1833, he went on to set up his

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own Soho Works, while still managing the S&DR Works until 1840, with his brother, Thomas, co-ordinating the works at Soho. ¹

Shildon was to be dominated by the Railway Works until 1984. The railway thus created New Shildon, south of the original Old Shildon and this walk includes both settlements, which today are collectively called Shildon. The walk looks at early and later railway features, together with other places of interest along the way.



Plate 1. Locomotion on its inaugural journey, 27th September 1825.

- 🏠 From the car park, walk down to the front of the modern museum building and head left (west) along the path that runs parallel with the railway line, and under the road bridge which carries Spout Lane over it. This line is on the route of the 1825 S&DR.
- 🏠 After nearly 300m from the museum shed you will see a signal box and buildings on your right on the opposite side of the line.

(1) Signal Box and Railway Cottages/ Weigh House

- 🏠 The **signal box** dates to 1887 but was modified in 1928 and 1984 – various alterations are apparent in the brickwork. This was built for the Central Division (covering the former S&DR routes) of the North-Eastern Railway Co. Ltd., possibly designed by Thomas Prosser, architect to the NER. This box is a variant of the Division's Type C2 signal box. The interior retains its McKenzie & Holland pattern 16 frame lever system installed in 1928, and reduced from 55 levers to 42 levers in 1984.
- 🏠 There are two other railway buildings here, one of which was the **signalman's cottage**. The other may have been a **weigh house with weigh machine**. This was probably not the original weigh house that was home to Joseph Anderson and his wife, who was appointed on the 14th May 1827 as the first railway accountant. He also had responsibility for timekeeping at Shildon works, and dealing with tickets for trains passing over Brusselton bank (Holmes 1975, 18 and Slack and O'Neill 2015, 25). Anderson was listed as a weighing machine keeper in the local trade directory for East Thickley in 1828.²

¹ Soho was a hunting cry meaning 'Go to it!' and was apparently suggested by Joseph Pease (Young 1975, 338).

² White's Directory 1828

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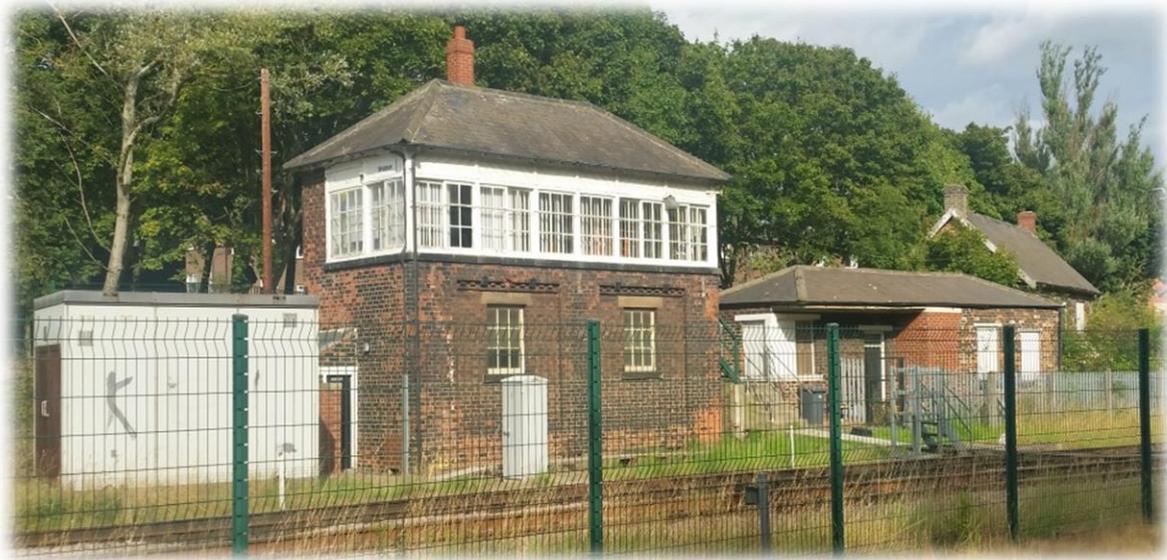


Plate 2. The 1887 signal box, signalman's cottage and possible weigh house to the right.

🚂 Continue along this path. The modern Shildon Railway Station is on the right and trains can be caught here for Darlington, Aycliffe Heighington, Dinsdale, Eaglescliffe and Thornaby; all offering access to other parts of the line. Just past the station level crossing, you will see the **coal drops**.



Plate 3. An undated photograph of the signal box and adjacent buildings and the coal drops in the distance in British Railway days

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(2) The Coal Drops

🏠 These stone arched structures on the right are **coal drops** dating from 1846/7 and are thought to be the largest surviving examples left in the country. They were used for fuelling the tenders of railway locomotives. Waggon loaded with coal were shunted up the ramp on the far side and along the top of the coal drops, where the coal would be released into a wooden hopper and then an iron chute which directed the coal into a waiting tender below.³

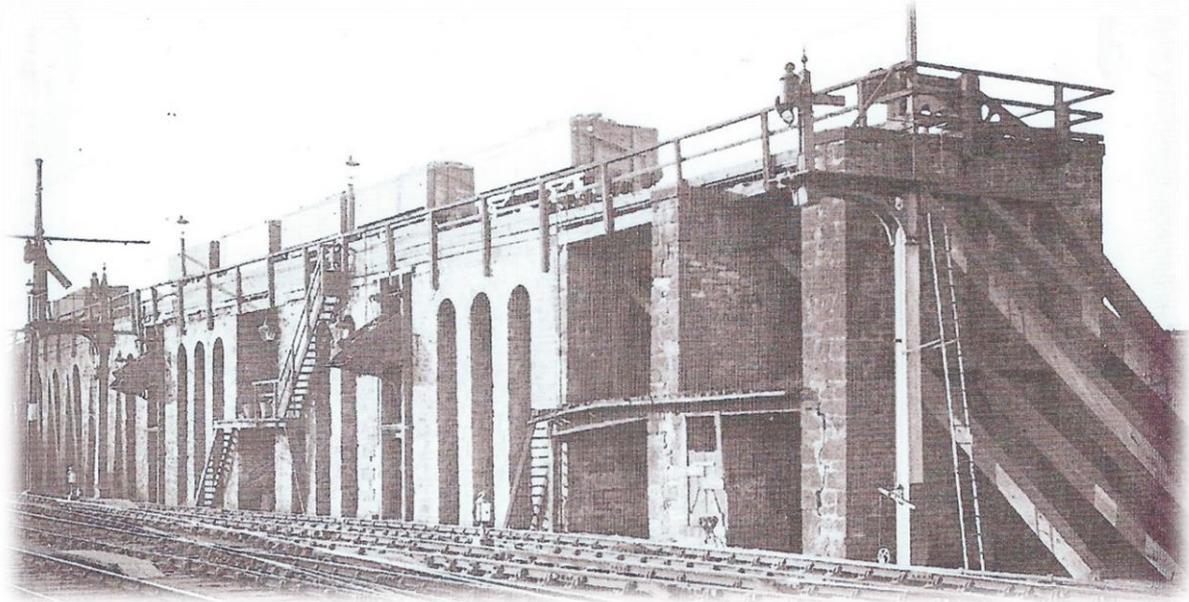


Plate 4. Undated photograph, possibly dating from the 1920s of the coal drops. (photo copyright Friends of the S&DR/John Proud collection)



Plate 5. The near end of the coal drops has since been demolished to create the access to the present day station (photo the National Railway Museum)

³ Information from Simon Smalley, Locomotion

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- 🏠 There was enough capacity to load four tenders at once, because this was an extremely busy loading area; once the loading was complete, the empty waggons were shunted backwards and replaced with the next set of laden waggons.
- 🏠 There were four coal drops in the rectangular spaces, but one was subsequently adapted as an office space. Other narrower arches, some of which are blocked, are engineering arches designed to strengthen the structure and minimise the use of materials.
- 🏠 If you look carefully you will see that some of the materials were old four-hole stone sleepers used from the 1830s by the S&DR, but here split and reused. The pale coloured bricks were a mixture of local bricks including Bolckow and Vaughan Company bricks.

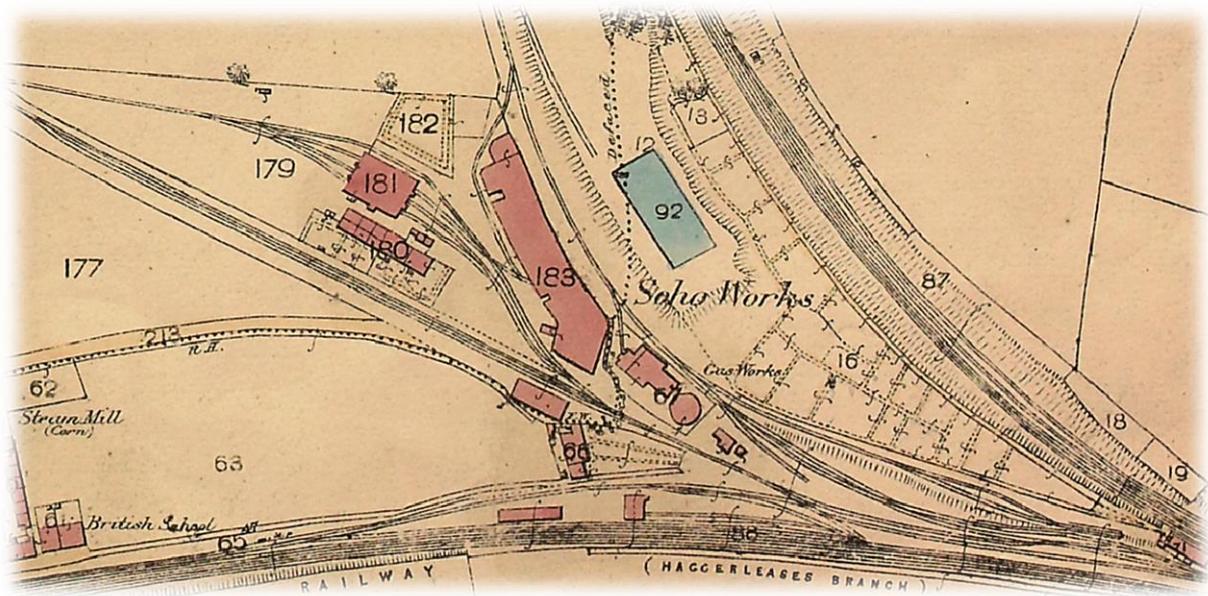


Figure 2. The 1st ed OS map dating to 1855 showing the extent of the Soho Works by that time, and the gas works.

(3) Black Boy Platelayer's Cabin and Outbuildings

- 🏠 Continue along this path past the coal drops.
- 🏠 On the other side of the line you will see three small roofless buildings. This is where the S&DR (1825), The Surtees (1831) and The Black Boy (1827) branch lines all met. The function of the central building with the door and windows on either side is unknown, but may have been a **meter house** associated with the gasworks that were once located to the rear (Walton pers comm).
- 🏠 The building to the right was a **platelayer's⁴ cabin**. It now has a sloping roofline, but was built with a castellated roof that soon lent to it being called the 'castle cabin'.

⁴ A platelayer is a railway employee whose job is to inspect and maintain the permanent way of a railway installation. The term derives from the **plates** used to build plateways, an early form of railway.

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- 🏠 The small building to the left may have been a **lineman's cabin**. The buildings were vandalised in 1985 and have remained roofless since then.
- 🏠 It is likely that the stables were located to the rear where horses that pulled the early waggons were accommodated.
- 🏠 The site also featured its own gas works built in 1841 to provide for both the Soho Works and the railway. This provided the town with gas lighting, the only other area to be afforded such luxury at the time being Grey Street in Newcastle. A section of wall to the southwest of Black Boy Stables probably dates to the first phase of the Soho Works sometime between 1833 and 1866.
- 🏠 Continue along the path towards the Goods Shed on your right, just opposite Car Park B.



Plate 6. Black Boy platelayer's cabin when it still had its roof, with gas works to the rear, built in 1841 and adjacent outbuildings

(4) The Goods Shed with Coal Depot and Parcel Collection Hut

- 🏠 The older stone building in front of you is the **Goods Shed**. It was built in 1857 from old stone sleeper blocks, presumably taken from the 1825 line.

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- 🏠 If you look at the front elevation you will see many of them split in half and some have even been re-carved to form ornate dressed quoins on the edges of the building. The Goods Shed was the hub of the distribution network operated by the railway. The parcels office administered the movement of goods in and out.
- 🏠 At the back there is a ramp to bring waggons up for unloading coal. Laden waggons would tip the coal from the elevated ramp into coal cells below for the local domestic market. Other goods would be taken into the shed for distribution and horse-drawn carts would arrive at the arched door on the front to take them away.



Plate 7. The Goods Shed and detail of reused two hole sleepers in the fabric of the building



Plate 8. The elevated ramp to the rear for dropping coal into waiting carts for domestic sale, known as 'landsale' (as opposed to being taken to the port for export) (The photo shows Ken Hodgson who is a leading light in raising the profile of Shildon's railway heritage)

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- 🏠 Over to your left, the small wooden shed is a parcel collection hut, possibly a LNER one from 1923 (Jane Hackworth Young pers comm).
- 🏠 The original 1825 line continued along what is now a grassy path in front of Station Street.
- 🏠 Veer left and walk along Station Street with the houses on your right and the large stone wall on your left (the 1825 line was on the other side of this wall and you will return this way). When you get to Cross Street, the small garden area on the corner of Cross Street and Station Road, is on the site of the **British School**.

(5) The British School

This is the site of the **British School** which has since been demolished. The school was founded in 1841 by the Stockton & Darlington Railway Company. Mr John Pickering, a mechanic in Shildon Engine Works was appointed as the first schoolmaster.⁵The building was maintained by the Railway Company and the management was carried out by a committee of railway officials and employees. All railway employees at Shildon had one penny per week deducted from their wages towards meeting expenses, and those who sent their children to be educated contributed a 'school pence' (Bainbridge 1933, 8).

- 🏠 Walk along Cross Street – the large building with stained glass windows at the end is the **Wesleyan Chapel**. Just around the corner into Soho Street is the **Sunday School**, currently housing Timothy Hackworth's '*San Pareil*' locomotive, which took part in the Rainhill Trials in 1829.

(6) Wesleyan Sunday School (now the Welcome Building) and Chapel

Timothy Hackworth, who lived, worked and established the Soho Works here, was a devout Wesleyan Methodist. He was originally converted to Methodism with his wife-to-be, Jane Golightly, in 1810/11. Indeed, his strong religious beliefs had resulted in his leaving his job in Wylam, when he was asked to work on Sundays. This job change was to result in his moving first to Walbottle Colliery in Northumberland and then to work for the Stockton & Darlington Railway. Jane and Timothy were to have considerable influence in spreading Methodism in their new community. They joined railway workers and enginemen in a congregation at Toft Hill and became preachers there.⁶ Hackworth was responsible for having two chapels built in Shildon, providing no less than 30 preachers to edify the people there; so the traditions of Wesleyan Methodism continued long after his death.

- 🏠 The chapels Hackworth worshipped in have now gone, but this large Wesleyan Chapel was built on Soho Street in 1865. In 1888, the red brick Sunday School was built at the other end of the row using bricks from either the Shildon Brick and Tile works further west on the

⁵ Pickering was distantly related to the Hackworths by marriage

⁶ Information from Jane Hackworth-Young

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Surtees Line, or the New Shildon Brickworks adjacent to the S&DR Works at New Shildon. It consisted of a large hall and seven classrooms.

- 👉 Walk down Soho Street, named after Hackworth's Soho Works, past the Sunday School and cross the road towards the grassy area and a row of cottages with red pantiles on the roofs to the left. This is where Timothy Hackworth lived from 1831 until his death in 1850.



Plate 9. Soho Chapel and adjacent Manse built in 1865 (above left) and the red brick Sunday School of 1888 (above right)



Taking you further....Timothy Hackworth.

Timothy Hackworth was master of ceremonies at the opening of the S&DR and also acted as the first guard, during the momentous journey on the 27th September 1825. He was born in Wylam near the River Tyne in 1786 and at fourteen left school to take an apprenticeship before following his father (who died in 1804) as foreman of the smiths at the nearby colliery in 1810. Whilst at Wylam, he worked with Hedley and Forster on the design and construction of a number of steam engines, including Puffing Billy and Wylam Dilly, and was responsible for all maintenance and improvement work. In 1815 he left Wylam, having refused to work on the Sabbath, and in 1816, he became foreman of Walbottle Colliery. Eight years later, in 1824, George Stephenson invited Hackworth to oversee his newly built locomotive works at Newcastle upon Tyne, where Locomotion was in the process of construction. During his time at the Newcastle Works, Hackworth had considerable influence on the design of Locomotion (he subsequently rebuilt the engine three times with a succession of modifications and improvements including the system of coupling the wheels with outside rods and a return crank rather than chains). Hackworth was appointed as the Superintendent of Permanent and Locomotive Engines for the Stockton & Darlington Railway in May 1825. It fell to Hackworth to keep all the locomotives, whether stationary or mobile, running which, given the embryonic nature of these machines, was no mean feat.

“Locomotive engineering owes more to Timothy Hackworth, after George Stephenson, than to any other man” (Jeans 1875 (1974)269).

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Later he designed the first reliable engine to withstand the rigours of everyday commercial use. This was the Royal George (1827), a powerful six-coupled locomotive which is seen as the first in the world to establish steam power as a viable and economic alternative to horse power. The Royal George was a far superior machine, and the first engine in which the cylinders drove directly onto the wheels and employed a correctly aligned and valved steam blast-pipe which ensured that boiler pressure was always maintained; thus curing the lack of steam found in Stephenson's earlier engines. This concept was applied to all later engine designs, including Robert Stephenson's Rocket. Other improvements, conceived by Hackworth, included the characteristic plug wheel (which inspired the street furniture you will see later on this walk) and the prototype 0-6-0 mineral engine which was to become the standard wheel arrangement for goods and mixed traffic engines right up until the last days of the steam locomotive in the late 1960s (Walton, pers.com). In 1829, another of Hackworth's engines, the Sans Pareil competed against the Rocket in the Liverpool to Manchester Rainhill railway trials. This was a six-day trial during which the engines had to run ten trips over a length of track at Rainhill in order to assess whether they were fast and reliable enough to make regularly the return journey between Liverpool and Manchester. Five engines competed for the £500 prize; however, the Sans Pareil burst a cylinder and lost out to Stephenson's Rocket. Local feeling has it that the cracked cylinder, which was cast and bored at Stephenson's works had been deliberately sabotaged by the rival company.

(7) The Soho Works and Hackworth's House

When the new Stockton and Darlington Railway opened in 1825 Hackworth was appointed the first locomotive superintendent and set up his headquarters in New Shildon. The choice of the site was a logical one, being close to the Brusselton incline where he was responsible for the maintenance of the stationary engines as well as the locomotives which left for the east from Shildon; they were not generally used to the west where the inclines were. By the terms of his contract he was to receive a salary of £150 per annum and the Company was to *'find a house, and pay for his house, rent and fire'*.⁷ Four new houses, including a manager's house, were commissioned, but until they were ready, Hackworth moved into temporary accommodation first at Brusselton in 1824 while working for George Stephenson and then in Darlington in 1825 before finally setting up home in Shildon in 1826.⁸ The house he and his extended family lived in from 1826 has since been demolished, but he moved into these larger premises in 1831 with his wife Jane and eight surviving children.

 Hackworth's house was known as Soho House or Cottage and was the one on the right, although the family may have used both sides for a while. His extended family occupied the house adjacent and the smaller cottage. The cottages on the left were built later. The S&DR black and white ceramic plate still *in situ* on the front of No. 3 Soho Cottage is one of many placed on terraces or individual houses owned by the S&DR in 1857 and in which its employees lived.

After Hackworth's death in 1850 of typhus, Jane his wife stayed on at the house until she died two years later. The sale documents described the house as *'An excellent Dwelling House, containing on the Ground Floor Three Sitting Rooms, Kitchen, Dairy, and Store Pantries, over*

⁷ *ibid*

⁸ Jane Hackworth-Young pers comm

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which are Seven Bed Rooms and a Lobby.⁹ The S&DR bought the house and works from the Hackworth family in 1855, when William Bouch¹⁰ moved in, and it continued to accommodate each of the Work's Managers at Shildon until about 1905 – including Ronald Smith, John Mackay Wright and Robert Pick.¹¹ The house has also been subdivided over the years, on one occasion being split into six. The house became derelict in the 1970s and was saved by the District Council and opened as the Timothy Hackworth Museum in 1975, later becoming part of Locomotion, the National Railway Museum at Shildon.



Plate 10. Hackworth's House (on the right)

In 1833 Hackworth renegotiated his contract and took over the workshops, starting his own engineering works with his brother Thomas and colleague Nicholas Downing; creating the trading name Hackworth-Downing. Although Timothy owned the works, it was his brother Thomas who managed them. When Downing left in 1837, the works became known variously as Thomas Hackworth & Co until 1840 and Soho Engine and Foundry Works (Hopkin 2010, 284-6). Timothy Hackworth acquired more land and set about erecting workshops, forges and sheds, providing facilities for the repair and the building of engines.¹² These works were located just behind his house and consisted of a foundry, machine shop, blacksmith's shop, coal-drying ovens and an adjacent gas works – all now gone.

During its operation, Soho Works produced a large number of influential locomotives such as the Lord Brougham, Shildon, Magnet, and Arrow. However the Royal George was built at the nearby S&DR Works and Hackworth obtained permission to build his Sans Pareil there too. It was at his own works that Russia's first locomotive was built and it was Timothy's 16-year-old son John Wesley Hackworth (who also lived here) who travelled to Russia in September, 1836 to unpack the crates containing the locomotive built for the Tsar and the Tsarkoye-Selo Railway. Later in 1838 three 0-6-0 engines were commissioned by the Albion Mining Company and shipped to Nova Scotia, Canada. The company ran into financial difficulties in the 1840s, yet in 1852, after Hackworth had died and the business was about to be sold, Timothy Hackworth (junior) wrote to his sister:

⁹ Copies of the sale documents and inventory courtesy of Jane Hackworth-Young

¹⁰ Brother of Thomas Bouch who was disgraced after the collapse of his designed Tay Bridge

¹¹ From Graham Tunbridge's account on Timothy Hackworth dated 27th November 1945

¹² Hutchinson 2003, 114.

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'There is quite a mania for our patent engines. Mr Fletcher is wild about his. He tells nearly everybody he meets with that it is the best Engine in the world. I quite believe if we had a few more put down that we shall plenty of work and grow charmingly.'

In 1855, five years after Timothy Hackworth's death, the S&DR bought out the Soho Works and the cottages and they became an extension of the main S&DR Works at New Shildon. Engines still continued to be built at the Shildon Works until 1866 when the North Eastern Railway (NER), which had amalgamated with the S & DR in 1863, moved production to the Darlington North Road Works. The Shildon Works continued to operate, but shifted their focus to the repair and construction of waggons, expanding in 1886 and again in 1899; although the former Soho Works remained largely unchanged.

(8) The Soho Shed

🏠 This is the oldest surviving industrial building in New Shildon. It was built as an iron merchant's warehouse in 1826 by Messrs Kilburn of Bishop Auckland, presumably sited here because of its proximity to the railway, for bringing in and transporting out merchandise. It must have been acquired by Hackworth's Soho Works, because it was sold as part of the works after Hackworth's death (Hackworth-Young pers comm). At that time it may have been used as a Pattern Shop and for storage (Young 1975, 313). It was later reused by the NER from 1863 as a paint shop for locomotives. Underfloor heating, modelled on a Roman hypocaust, helped the paint dry, and two locomotives a week were painted here during the 1870s. In the twentieth century it was used as a practice room for the Shildon Works Silver Band and as a boxing gym.¹³ It now houses the NRM's collection of chaldron waggons, the beam engine used by the Hackworths from 1833 and the locomotive, Braddyll (or Nelson as it may have been called) which was built, or rebuilt, by Fossick and Hackworth (Thomas Hackworth, Timothy's brother) at Stockton.



Plate 11. The Soho Shed

¹³ Information from Simon Smalley, NRM

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- 🏠 The **Platelayer's Cabin** and possible **meter house** are a little further on, on the right.
- 🏠 On the left there is a path heading uphill towards the Black Boy Branch Line (cycling not permitted on this path). In 1852 a reservoir was built above the Soho Works (see figure 2) at the top of this hill by the S&DR and Timothy Hackworth (junior) wrote to his sister in Brussels where she was being educated:

'I have just had a walk on the spoil bank for a few minutes. It is becoming quite a place of attraction. The men are now getting their gardens put into order and besides the Company have commenced making a reservoir on the top of the hill just opposite the works and hope they do not mean to drown us out of the place. It is such a splendid afternoon. There are hundreds of people walking out in the fields round our City, quite reminds me of the London parks on a Sunday' (Hackworth Collection, NRM).

(9) The Black Boy Branch and the Tunnel Branch Line

The Black Boy branch was opened in July 1827 to serve the Black Boy Colliery. The S&DR had originally planned to open three branch lines, but only had funding for one. This branch line was therefore opened by various individuals associated with the S&DR, but was not a S&DR line. A stationary engine at the summit was used to haul coal waggons up the steep incline. Elsewhere the line was worked by horses which later rode in dandy carts while feeding on hay when going downhill. The branch line should have been made redundant in 1842 when the Shildon Tunnel was blasted underneath the ridge, but it survived into the twentieth century [probably the 1920s]. One of the reasons for its survival was as a relief route should the tunnel become blocked (The Northern Echo, 21.5.2016, p.31). The tunnel branch line at this point is in a deep cutting which gets deeper further along as it approaches the **Shildon Tunnel**, also known as the Prince of Wales Tunnel.

Taking you further....Shildon Tunnel

Getting coal from the south west Durham coalfields was tricky, because the waggons had to pass over substantial natural ridges that cut across the landscape. The Brusselton and Etherley Inclines had been Stephenson's technical solution to this problem in 1823-5, and the Black Boy Branch Incline was constructed in 1827 to haul waggons over the ridge between Eldon and Shildon. But as the demand for coal increased and the capacity to ship it out improved with the construction of Port Darlington (Middlesbrough), the slow rope-hauled inclines were causing bottlenecks. The solution was to build a tunnel to bypass the Brusselton and Black Boy Inclines.

Work on the construction of the Shildon Tunnel commenced in April 1839 and it was brought into use on the 19th April 1842. The tunnel was 1,300 yards long, and ran under the Black Boy Branch Line and the town of Shildon, and connected the S&DR Railway with the coal field around Bishop Auckland, continuing further to provide railway access to the minerals of the Crook basin and Weardale.

Irish navvies were brought in to Shildon to carry out much of the work, funded by the Peases,

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Backhouses, Kitchings and Meynells – all familiar S&DR backers. It cost £50,000 to dig. Seven shafts were sunk to a maximum depth of 36m, and in due course these shafts were made into ventilator shafts. Its ceiling was lined with seven million locally made bricks.¹⁴

- 🏠 You will quickly spot a small three arched stone aqueduct through the fencing to your right. It was built in 1839-42 to carry a stream across the railway line cutting leading to the tunnel.
- 🏠 Continue along this path until it joins a residential street with a grassy area – by now the line is in a very deep cutting on the right as it approaches Shildon Tunnel.
- 🏠 Continue alongside the line and, where the safety fencing stops, you might be able to see the **Shildon Tunnel** through the trees to your right. The tunnel passes under the path that you are following and you might hear water draining through the manhole covers in the path surface.
- 🏠 Continue along the path until it terminates at five bollards and, ahead, you will see a bus terminus and a roundabout. Just before the bollards on a grass verge, there used to be a **ventilation shaft** that ensured a good airflow into the tunnel and allowed steam to escape. Such ventilators were positioned along the 1,300 yards (1188.72m) of tunnel at regular intervals. These ventilators consisted of cylindrical brick structures, ranging from the size of a shed to a small house; the last four were demolished as recently as 2008 by Network Rail (The Northern Echo 10.4.2008).

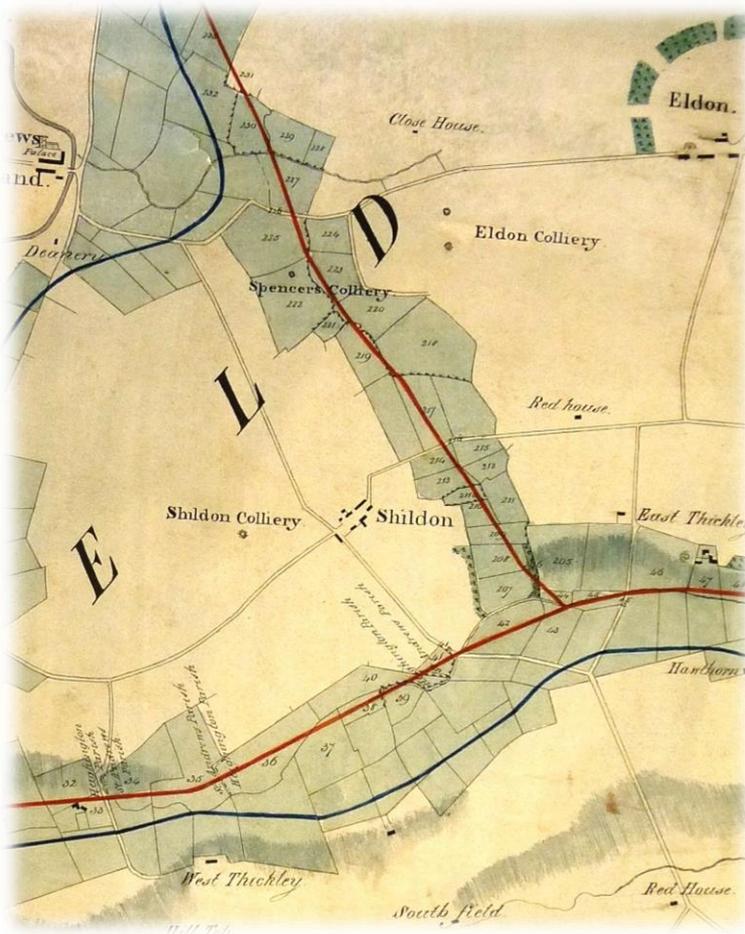


Figure 3. From the outset, the S&DR planned the Black Boy Branch Line and it featured on Stephenson's proposed route (surveyed in 1822) extending northwards from the mainline just east of Old Shildon, as shown here but shortened. There were already three collieries in the area, Shildon, Spencer's and Eldon and the creation of the line would open more opportunities to extract coal and export it from this rural area.

14

http://www.redorbit.com/news/business/796002/echo_memories_where_mighty_steam_trains_rumbled_far_below_the/

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NORTH ENTRANCE OF SHILDON TUNNEL.

Plate 12. The North Entrance of Shildon Tunnel prior to 1915 from Tomlinson, William Weaver, 1858-1916 (1915) The North Eastern Railway; its rise and development, p. 435



Plate 13. The ventilator shaft (on the right behind the tree) behind Windsor Terrace in 1962 adjacent to the footpath.

🚶 **The Black Boy Branch Line** ran along here and continued ahead up Cheapside (where the grass and trees are) while the **Shildon Tunnel** runs below your feet, heading slightly to the left of Cheapside up ahead. Indeed, it runs under the housing to the left, and former residents remember hearing the trains pass below their bedrooms!¹⁵ The junction was a crossing point for rail and traffic and so was gated.

🚶 Head towards the junction, at the bus terminus. The modern green railings here have been designed to reflect **Hackworth's plug wheel** used on the early railways.

¹⁵ Susan Nixon, Friends of the NRM, pers comm

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Taking you further....Hackworth's Plug Wheel

From the outset, there had been problems with the robustness of the wheels on locomotives; Locomotion No.1 itself broke a wheel within a month of the opening. Hackworth's new plug wheel was used on the Royal George, also in nearly every other engine on the S&DR and on other railways for many years (Young 1975, 159). This was a cast iron wheel with wrought iron 'tyres' shrunk on - Hackworth was the first to apply a wrought iron tyre to a wheel (ibid). It was made in two parts and held together by wooden plugs and iron wedges; the use of wood for the plugs reduced the weight but also helped to ensure that the castings were sound. Interestingly, the wheels were made in parts because there were no lathes in the Shildon workshops large enough to turn up the rims when fixed upon the axle (ibid). The adjacent sketch was made by Timothy Hackworth in his notebook and was dated 26th February 1828 (NRM HACK 1/3/2/1).

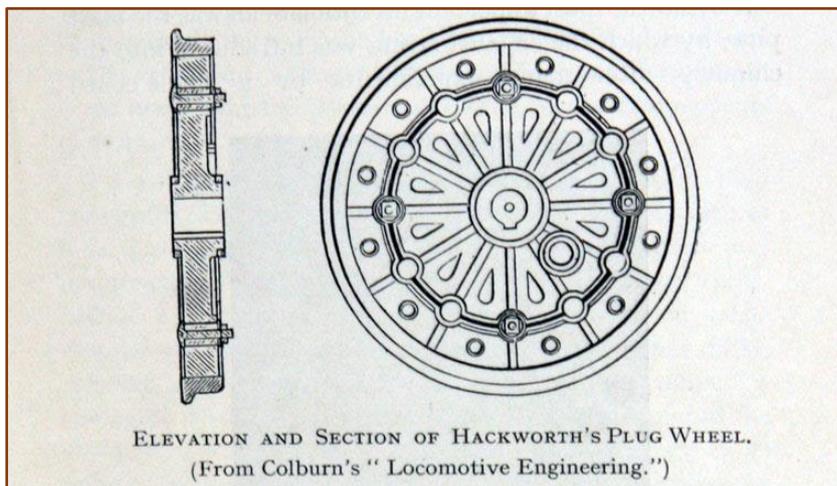


Plate 14. Detail of Hackworth's Plug Wheel from Colburn's Locomotive Engineering

(10) The New King William

🏠 Cross over Church Street towards the **New King William IV** public house and walk up Cheapside, which follows the line of the Black Boy branch. The King William Inn was opened in 1831, one year after William IV became King (Chapman 2005, 25) and must have provided refreshments for railwaymen using the Black Boy line as well as the growing population of Shildon. The word 'New' appears to have been added to mark the addition of bay windows, an ornate wooden door surround and a corner doorway which made the frontage more fashionable in later Victorian times. The inn originally had iron railings on top of a dwarf wall in front, but must have lost them to the war effort in the 1940s.

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- 🏠 Further up on your right is a modern stone built house (no. 6) on the site of the Cross Keys Inn. This was where a banquet was held for the opening of the Shildon Tunnel in 1842 (Colin Turner pers comm).

Taking you further (to the wild district of Crook)...Shildon Tunnel opens

At 10am on Monday, January 10, 1842, a ceremonial procession set off from the Cross Keys Inn, in Cheapside. It was led by a Union flag, with the resident engineer, Luke Wandless, directly behind. On his right was Henry Booth, the principal contractor, and on his left, Thomas Dennies, the principal brickmaker. Accompanied by banners and a brass band, they went in through the southern entrance. *"The darkness was relieved by innumerable candles, and a platform had been erected at which a ceremony took place"*, said the North Eastern Railway (NER) Magazine, in 1913. Mr Dennies ceremonially presented the last brick. Mr Booth ceremonially sprinkled it with wine. Mr Wandless ceremonially cemented it into place with a suitably inscribed silver trowel - that very same trowel is now on display in the nearby Locomotion museum.

The gentlemen then ceremonially named it the 'Prince of Wales Tunnel' after Prince Albert Edward, Queen Victoria's first son, who had been born two months earlier and, in 60 years time, would become King Edward VII. *"Simultaneously cannon were fired in the open air, and the band struck up the favourite tune, Merrily Danced the Quaker's Wife"*, said the NER Magazine.

The procession wandered on through the darkness to the northern end of the tunnel. Then dinner was laid on for the workmen in six pubs in Shildon and 50 VIPs tucked in at the Cross Keys. They were joined by engineer-in-chief Thomas Storey and the company secretary, Thomas MacNay. He said *"he hoped the time was not far distant when they would see locomotive engines and trains passing through the wild district about Crook where the people had never seen such a thing before"* (Taken from an article by Chris Lloyd of the Northern Echo written 10.1.2007).¹⁶

(11) The Black Boy Engine House and Rose Cottage

- 🏠 At the top of the hill on Cheapside there is a grassy area with trees on the left – cross over here and there is a parking area for a couple of cars.
- 🏠 There is a row of single storey cottages on the other side of the track. These are now pebble dashed and so their historic interest is well hidden. However, '**Rose Cottage**', on the left, still bears its S&DR plaque allocating the terrace number G12. The house must have been built to accommodate railway workers operating the incline. Such ceramic plaques were added to all groups of S&DR residential properties in 1857.

¹⁶ Read more at:

http://www.redorbit.com/news/business/796002/echo_memories_where_mighty_steam_trains_rumbled_far_below_the/#kvSddA74RaqQ4sic.99.

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Plate 15. Rose Cottage – a S&DR house with S&DR plaque above the porch



Plate 16. S&DR boundary wall near the site of the Black Boy Engine House

- 👉 Walk along the track a little towards the fields. The stationary steam engine that hauled the waggons up the Black Boy Incline was located just beyond the cottages on your left, but presumably carried a winding drum over the track where the incline rails ran. The engine turned the winding drum so that waggons could be hauled up the hill using ropes. In this case, the waggons were hauled up on the far side of the hill, fully laden, from the Black Boy Collieries and then were allowed to run downhill, without any rope attachment and a rather primitive form of brake that must have been hair-raising (Colin Turner pers comm). However, in 1827, when the branch was opened, the engine was not ready and the hard work had to be carried out by horses until 1828. Like the other winding engines at Brusselton and Etherley, the engine proved troublesome and had to be replaced with another, better one in 1835 designed by Timothy Hackworth.
- 👉 If you look carefully amongst the trees and bushes behind you, you will see a sloping stone wall with triangular coping stones – this is a **typical S&DR boundary wall**. There is also a

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number of architectural fragments lying amongst the vegetation on the other side, which may be some of the remains of later buildings shown on maps dating to 1855.

-  If you like, you can continue along this track until you reach a field with fine views and a fence line made of **old wooden sleepers**. To your left there is a pony yard area set out with jumps – this is the site of the **reservoir** that fed the steam engine house.

Taking you further....place names

This street called **Cheapside**, is quite a common Old English (Anglo Saxon) name for a market place, while just after the New King William, there is a street called **Market Place** which forms around an open area resembling a market square. However, this may be an example of old names being reused for more modern places as this Market Place does not appear on maps until the 19th century!

The name **Shildon** is also Anglo Saxon meaning a hill with a plateau or peak (Ekwall 1987, 417), or alternatively a level area between hills (Watts 2002, 112).

Cheapside, as you can now see is on a hill, which plateaus at the top, and so this suggests that there was a settlement here in Anglo-Saxon times.

Black Boy takes its name from the Black Boy coalfield which also lent its name to the Black Boy pub at Canney Hill, at the top of the Dene Valley. The name was used for a variety of coal pits going back at least to the 18th century and referred to the state of the boys who went down the mines when they emerged after a day's toil.¹⁷

Near the top of the hill you might notice a street name on the right called **Foundry Street** and another leading off it to the left called **Phoenix Place**. These are both named after an iron foundry called the Phoenix Foundry which was already disused and demolished by the end of the 19th century. It was owned by Nicholas Downing who also set up the engineering works with Hackworth.

-  Head back down Cheapside – the grass areas down the centre mark where the Black Boy branch line once ran. About half way down there are public toilets. Towards the bottom of Cheapside there is a modern doctor's surgery. This was the location of another S&DR building - the **Engineman's house**, now sadly demolished, and which was given the number and plaque G11 by the S&DR. In its early years the engine man was Nicholas Greener, who must have been related to the enginemen at Etherley, also called Greener.¹⁸ Another S&DR building (G10), which accommodated railway workers who monitored the movement of rail traffic on the line, was located nearer the junction of Church Street and Fulton Terrace. It is

¹⁷ Read more at

http://www.redorbit.com/news/business/796002/echo_memories_where_mighty_steam_trains_rumble_d_far_below_the/#kvSddA74RaqQ4sic.99

¹⁸ Jane Hackworth-Young pers comm

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not certain which building this was and none of the surviving historic buildings here have a S&DR plaque.



Plate 17. Chaldron Waggon

(12) The Chaldron Waggon

At the foot of Cheapside there is a **chaldron waggon** on the corner of Church Street. Such waggons were used on the railway to transport coal to Stockton for export. The County collection of chaldron waggons is now held in the old Soho Shed seen earlier on this walk (Jane Hackworth-Young, pers comm).

- 👉 Turn right on to Church Street – look out for the inscriptions on the pavement of former jobs that people in Shildon used to have in the 19th century. Continue until you reach Millennium Square with its statue of Timothy Hackworth. The walls here, which also form the perimeter to the churchyard, include designs reflecting Shildon's railway heritage.
- 👉 Just beyond Millennium Square is St John's Church on your left.

(13) St John's Church

- 👉 This is the burial place of Timothy Hackworth, his wife Jane and second son Timothy (whose letters we have seen to his sister in Brussels) and a number of other notable railway people.

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- 🏠 **Hackworth's grave** with its classical urn on top can be seen on the left just through the gates. When he died in 1850, the church was only sixteen years old and quite a bit smaller – it was extended in 1882. The church was built in response to the population reaching about 800 and the need to carve out a new parish from what had been St Andrews Auckland. However, there must have been a graveyard here before as some of the gravestones are 18th century. Sadly, the graves have been 'tidied up' in the past, but we know that some familiar Hackworth family members, S&DR officials and engineers are buried here including Kitchings, Grahams, Downings and Greeners.



Plate 18. Timothy Hackworth's grave

- 🏠 Head out of the churchyard and turn left along Church Street past the war memorial which was unveiled on 13 October 1923. The grand red brick and stone building on the corner was the Midland Bank and dates to 1899.
- 🏠 Before you turn left down Central Parade take a quick look along Main Street where you will see **The Royal George** on the right. This pub was called the Dun Cow but was renamed the Royal George, after one of Hackworth's best known locomotives built in 1827, as part of the 150th anniversary celebrations of the S&DR (Chapman 2005, 16, 36).

Sid Chaplin Library

Opposite the churchyard, the modern red brick building is Shildon Library, built in 1987 and renamed after Sid Chaplin. Chaplin ((20 September, 1916 – 11 January, 1986) was an English writer whose works were mostly set in the North East of England of the 1940s and '50s. He was born into a Durham mining family and, as a teenager, worked in the pits. His early writing career was interspersed with mining until he became a full time writer. His work, which spans novels, television screenplays, poetry and short stories, has been credited as an influence on the late 50s/early 60s 'kitchen sink' dramas. In 1968 playwright Alan Plater based his play and musical production *Close The Coalhouse Door* on Chaplin's early writings, set to songs by Alex Glasgow. The musical was revived in 2012. In 1976 Chaplin contributed to the writing of the TV series *When The Boat Comes In*. In 1977 he was awarded an OBE for services to the arts in the North East.¹⁹

¹⁹ https://en.wikipedia.org/wiki/Sid_Chaplin

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(14) Hackworth Park

- 🏰 Half way down Central Parade, turn right into the **Hackworth Park**. Ahead you will see an ornate drinking fountain. The drum has eight roundels, between dragon's heads, depicting the Royal George locomotive designed by Timothy Hackworth. One roundel, to the west, is inscribed: PRESENTED TO THE INHABITANTS OF SHILDON BY THE MEMBERS OF THE OLD SHILDON WORKMEN'S CLUB. NOVEMBER 1914.
- 🏰 Head left along the perimeter path, past the Rest Building and on the left you will see a **statue of Timothy Hackworth**. The original statue was unveiled as part of the S&DR's centenary celebrations in December 1925 (Holmes 1975, 43), but sadly it was vandalised and the bust transferred to and preserved at Locomotion. This replacement statue dates to 2003/4 (Jane Hackworth-Young pers comm).



- 🏰 Head right along the perimeter path and through the park fencing on the opposite side of the road where there is a row of low white bungalows. These **North Eastern Railway Cottages** of 1929 are testament to Shildon's more recent railway heritage.

- 🏰 Continue down towards the park gates at St. John's Road, but don't leave the park (but if you wish to shorten the walk, you can follow the signs from here back to the Soho Works and Timothy Hackworth's house). Instead head right along the path heading towards the playground. Turn left towards the tennis courts and at the bollards turn right along the **Surtees Rail Trail**.

Plate 19. Statue of Timothy Hackworth

(15) The Surtees Line

This **private railway line** was named after the main landowning family in Shildon, the Surtees, and was designed to reach collieries owned by the Surtees family. The 1821 Act of Parliament allowed private individuals to construct branch lines to the 1825 line at their own expense, providing they were within five miles of the line (1821 Act para LXXXVI). The land to build the line was acquired from Josiah Smithson in 1831 by the Surtees family.²⁰ This private line was also used for passenger traffic and linked up with the main S&DR line at New Shildon.

- 🏰 The Surtees Trail heads out to Harker Street and on to Main Street where there is a stone bus shelter. Turn left here and on your left at a mini roundabout you will see a stone building with arches. This is **Daniel Adamson's Coach Shed**.

²⁰ Private papers held by Jane Hackworth-Young referring to an indenture held by solicitors Proud, Roddam and Robson of Bishop Auckland dated 23rd June 1831

(16) Daniel Adamson's Coach House

The Adamson family lived in Old Shildon before the railway was built, and, in 1827, Old Dan Adamson was the landlord at the Grey Horse Inn (on the opposite side of the road now). The present building inn appears to be later in date.²¹ The building next to the coach house appears older and so it is possible that this might have been the inn or Adamson's private house before 1831.²² In the early days of the railway, Old Dan Adamson ran a horse-drawn passenger railway coach service to Darlington along the S&DR, initially from New Shildon and then from 1831, along the Surtees Line and the S&DR line. The Surtees line ran immediately on the left of the building as you face it, on what is now Main Street. He is reputed to have built this building c.1831 to house his coach 'Perseverance'. Passengers may have boarded here, as well as other regular stopping points. The two archways have been blocked at a later date; they presumably had doors in place when Adamson stored his coach here.

Taking you further....passenger coaches in Shildon

From 1st April 1826, Richard Pickersgill, the Darlington booking agent, took over the S&DR's coach 'Experiment' with seating for 12 passengers on top, and a contract to run it at £200 a year. Later that month, a new coach 'Express' started work between Darlington and Stockton, and the more cumbersome 'Experiment' was relegated to the Darlington-Shildon run. With increasing coach traffic, the S&DR reduced its tolls in October 1826 on the Darlington–Brusselton section from 3d to 2d and three months later – January 1827 – to 1d per mile. This also coincided with the S&DR attempting to open public houses at Stockton, Heighington and Darlington for the benefit of passengers and railway staff. In November 1827, Dan Adamson's 'Perseverance' took over from the original 'Experiment' on the Shildon-Darlington section, and so in December 1827, the first passenger coach was reduced to the role of a shed, used by bank riders at the foot of Brusselton bank, where it remained for a few years until accidentally destroyed by fire when two enginemens spent the night inside (Tomlinson 1987, 129 and Holmes 1975, 20).

An account of how many journeys were made by Old Dan Adamson's coach service survives for the year 1st October 1831 to 1st October 1832. At that time, he ran a coach between Shildon and Darlington, providing 12 journeys, carrying about 74 passengers a week. That worked out at an average of six passengers per journey (Jeans 1975, 85). The coach was horse drawn (one horse) along the railway, and seating was provided inside the coach for six, and outside on the roof for twenty, with fares being 1 ½ d per mile or 1d a mile respectively (ibid). The approach to charging fares by the mile originated with the transportation of goods, and was quickly applied to passengers. Adamson would have taken out a licence with the S&DR to run the coach service and would have paid duties to the government, but there was little accountability to the S&DR on the number of passengers travelling. It is therefore possible that the accounts under played how many passengers were carried, in order to incur lower charges to the S&DR and the government Treasury.

²¹ However William Adamson was listed as a victualler at the Grey Horse, Shildon Lodge in White's Trade Directory of 1828

²² When John Dixon recounted his time surveying the line in 1822 he said that here was nothing in New Shildon and that the nearest house was Dan Adamson's. As this house is older and nearer New Shildon, it would suggest that this was Adamson's house.

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Then and now...



Plate 20. The Coach House today

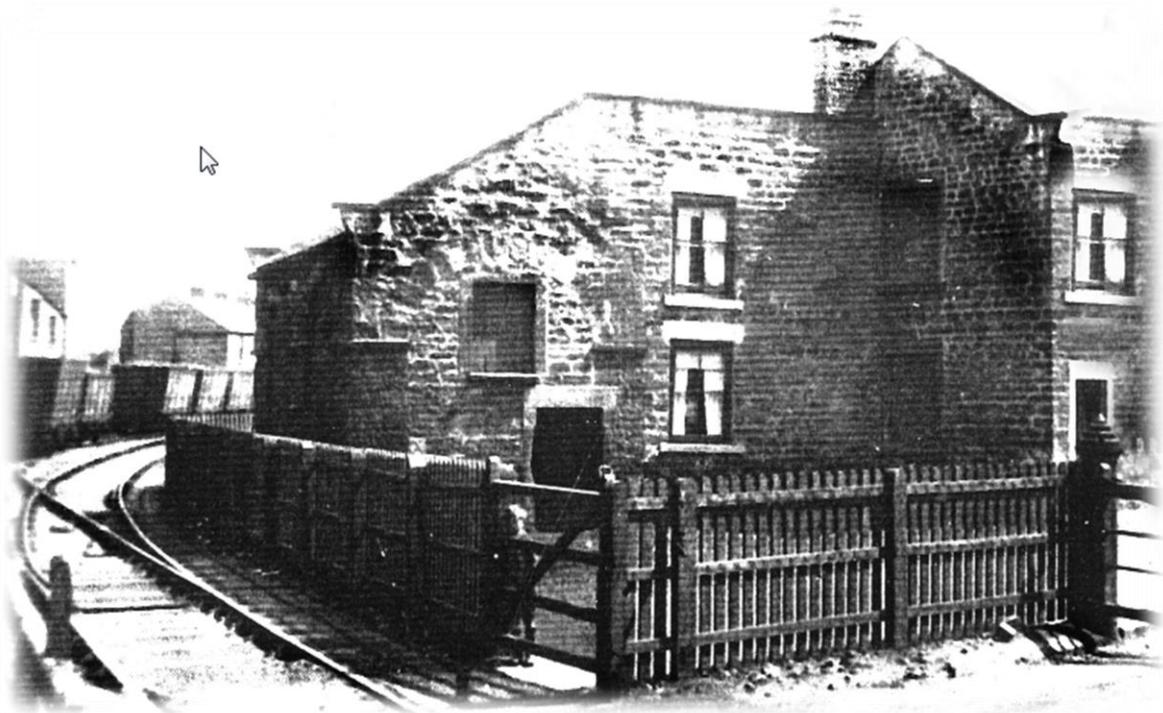


Plate 21. An undated photo of the Coach House with the Surtees Line running alongside, complete with waggons

Taking you further.....Dan Adamson junior

One of Old Dan's fifteen children, also called Daniel Adamson, was born in 1820 – he could just remember being present at the opening day of 1825. In 1833 at the age of 13, after attending a Quaker school in Old Shildon, Adamson was apprenticed to Timothy Hackworth, with whom he later (1841) served as a draughtsman and engineer. Afterwards, he served under Hackworth's successor, William Bouch, as draughtsman and superintendent of stationary engines at the Shildon Engine Works, until when, in 1847 at the age of twenty seven, he became general manager of the works.

In 1850, Adamson became manager of Heaton Foundry in Stockport, near Manchester. A year later, at Newton Moor near Dukinfield, he established an iron works, Daniel Adamson and Co, specialising in engine and boiler making. Initially, he followed designs created by Hackworth, but he improved the design and manufacturing process over the next 36 years, exporting 'Manchester Boilers' worldwide, and building a business, the Newton Moor Iron Works, which by 1890 employed some 600 people. He had many other business interests across the north of England and he championed the Manchester Ship Canal (1890 Institute of Mechanical Engineers Obituary and Grace's Guide to British Industrial History.)²³

 From Dan Adamson's Coach House, turn right down Byerley Road. After 470m. there is a large school building with attractive bicycle sheds on the left.

(17) Timothy Hackworth School

This school was built in response to the ever-increasing population of New Shildon and was originally called the 'Shildon and East Thicketley New Shildon Council Schools'. The building was designed by Mr R. Holt of Liverpool to accommodate 1,100 children and the total cost to build the school was £21,467, which included the land, buildings, furnishings and equipment. The opening ceremony was performed by Councillor M. Watson JP on Saturday, 12 February 1910 at 3.30pm, which was followed by a free afternoon tea for invited guests. The school officially opened two days later; its first head teacher being Ethel M. Robinson.

In 1925, as part of the centenary celebrations of the S&DR, the school was renamed the Shildon and East Thicketley Timothy Hackworth Council School in honour of the late rail pioneer and 'father of New Shildon,' Mr Timothy Hackworth. The school went through a number of changes as the population continued to grow and the name was shortened to the Timothy Hackworth School.

Further down Byerley Road, the red brick building on the left is the Quaker Meeting House.

²³ http://www.gracesguide.co.uk/Daniel_Adamson [accessed 200316]

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(18) Quaker Meeting House

This **Meeting House** replaced an earlier one which had been built in 1862 on Cross Street. Quaker families were hugely influential in the growth of the railways, particularly in Darlington where the Pease family were the major financiers and motivators, followed by the Backhouses. The Pease family also had some property and mining interests in Shildon.²⁴

Beyond this, where there is now housing, the area was once criss-crossed with railway sidings joining the S&DR line to the S&DR works, which included engine houses and furnaces.

 Continue towards the junction at the bottom of Byerley Road and you will see a pub on the left, now The Crossings. In 1825, this was The Mason's Arms.

(19) The Masons Arms (now The Crossings).

This was an important point in the 1825 journey....

In preparation for the opening ceremony of the Stockton & Darlington Railway on the 27th September 1825, *Locomotion No.1*, initially called *Active*, had been transported from Newcastle where it was made, by horse-drawn waggon and put on the rails at what later became the station of Aycliffe Lane at Heighington. From there it was brought to this point which would become the Mason's Arms crossing (Corkin, 1977).

The railway, as conceived by George Stephenson and George Overton, started near Witton Park Colliery. At 8 o'clock the ceremony proper convened at Brusselton where waggons filled with sacks of coal and flour (and quite a few passengers) loaded at West Auckland were hauled up the incline by the stationary engine located at Brusselton – a journey of eight minutes. These were then lowered down to the east, a journey of five minutes, and coupled to *Locomotion* at this spot. Hundreds of onlookers lined the track to witness the spectacle and see George Stephenson at the controls of his steam engine pulling the 36 waggons, which also included a passenger coach, *Experiment*, filled with local dignitaries and investors. Three hundred tickets in all were issued for the journey but over 700 people were thought to have, pushed, scrambled and elbowed their way on board for the momentous journey. There was some debate and confusion about the order of the procession, but in the end it consisted of:

- *The Company's Locomotive Engine No. 1*
- *The Engine's Tender, with water and coals*
- *Five waggons, laden with coals and passengers*
- *One waggon, laden with flour and passengers*
- *One waggon, containing surveyors, engineers etc.*
- *'The Experiment', containing the Committee and other Proprietors*
- *Six waggons, with workmen and others standing*
- *Six waggons, laden with coals and passengers*

²⁴ Tithe Map Apportionment 1838

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The Durham County Advertiser later reported:

The scene, on the moving of the engine, sets description at defiance. Astonishment was not confined to the human species, for the beasts of the field and the fowls of the air seemed to view with wonder and awe the machine, which now moved onward at a rate of 10 or 12 mph with a weight of not less than 80 tons attached to it (1st October 1825)



*Plate 22. The former
Mason's Arms and site of
the Mason's Arms Crossing*

The steam-hauled public train began its historic journey here by letting off steam, resulting in a scattering of the remaining on-lookers, who feared an explosion. Timothy Hackworth shouted 'All ready!' and the procession headed towards Stockton with a blue-scarfed man positioned between each waggon, ready to apply the brakes whenever required (Heavisides 1912, 61). It would reach Darlington, nine miles away, after two hours, at 12 o'clock following an eventful journey requiring three stoppages totalling 55 minutes (Heavisides 1912, 65)

In the absence of a railway station (no such thing had been invented in 1825), tickets to use the track, or purchase a ticket to ride, could be bought at the Mason's Arms. The S&DR Company had taken over the available rooms at the Mason's Arms to be used as a railway station booking office and a directors' committee room. A waiting room was built on the opposite side of the railway, and the first railway clock was placed in the wall of a house near the end of Redworth Road. This became the new station, and opened in 1833. The one near Dan Adamson's Grey Horse Inn, which had been in use since 1831, was utilised as a goods station (Bainbridge 1933, 4).

The closing of the Mason's Arms Crossing Station in 1842, when the new station was built near the Shildon Tunnel, freed up the waiting room and so a reading room and library were installed there for the Mechanic's Institute, who rented it from the S&DR. The railway furnished the room with a large cupboard for the library, two deal tables which were purchased and a chandelier was presented and hung in the centre of the reading room. Hat pegs were also put up. W. Kitching, of the ironworks in Darlington, donated a fender and fire irons. T. Hines presented roller blind fittings and W. Bouch and R. Corner presented blind rollers and blinds (ibid). A number of these

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names had strong management and engineering links with the S&DR. The new institute opened in April 1843.

🏠 If you are facing the Mason's Arms, the path behind you leads to Hackworth Industrial Park and heads towards the Brusselton Incline (see walk no.2). The area on either side of the road was the site of the S&DR Shildon Works.

(20) The Shildon Works

***'With engines built in Shildon shed. These engines gave the town this bread'*²⁵**

🏠 With the Mason's Arms behind you, peer into the trees on your right and you will see the exit from the S&DR Works, still guarded by a semaphore signal. This is much later than 1825, but in time this crossing point became very busy and so there was frequent rail traffic. Consequently, the road was gated, the gates not being removed until 1985 after the Works closed. You can see another signal on the nearby roundabout – this has been relocated here as a reminder of Shildon's railway heritage.

The Shildon Works were originally located down the path behind you; the same area where stationary engines gave way to locomotives from 1825. The works initially consisted of a single engine shed with space for two locomotives and another narrow shed for joiners and blacksmiths. Its role was to maintain the locomotives for which it employed twenty men by 1825 and fifty by 1827. Boilers, cylinders and wheels were made by outside contractors and apart from the 'Royal George' of 1827, it was not until 1829 that the first complete locomotive (0-6-0 No.8 'Victory') was built at Shildon (Holmes 1975, 11). It became the headquarters of the S&DR locomotive department and in 1855 absorbed Hackworth's Soho Works after Hackworth's death (see stop 7/8).

The opening of Darlington's Engineering Works on North Road in 1863 resulted in Shildon's works concentrating on waggons rather than engines – these waggons were exported all over the world.

By the 1960s Shildon's waggon works employed nearly 3,000 people, but the closure in 1984 resulted in the loss of 2,500 jobs.

²⁵ From 'Father of the Railways' by Thomas Ronald Spedding, appearing in Corkin 1977, 2

**THE ROUTE OF THE S&DR 1825:
SHILDON CIRCULAR WALK FROM NRM LOCOMOTION.**

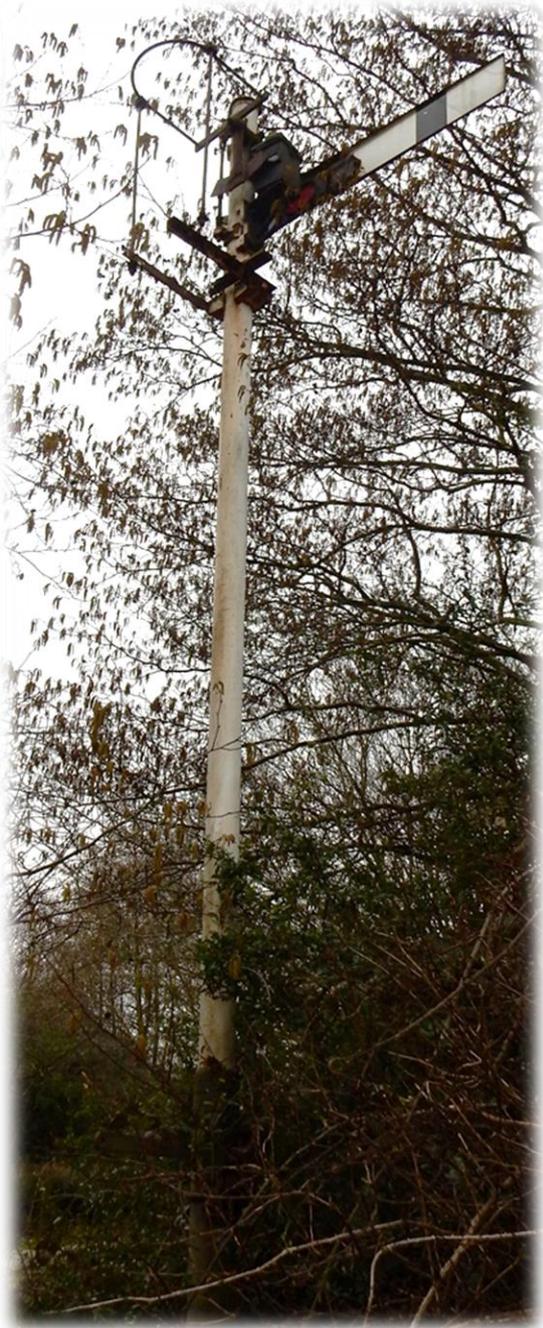


Plate 23. The railway semaphore signal opposite the former Mason's Arms (The Crossings). The S&DR Works were located just beyond it.

🚧 If you wish to walk down to the site of the Shildon Works, you will see some older buildings – but none dating to the 1820s.

🚧 The premises of Triple T Engineering (on your left) still has rail tracks in the grounds.

🚧 On your right, further ahead, is the brick shed of Shildon Engineering, now Magneco/Metrel UK, with some associated industrial units behind; these buildings are much later, dating to the second half of the 19th century, but the parts nearest Shildon are on the site of the Shildon Works set up by the S&DR in 1825 and included a round engine house called Sebastopol, built in 1851.

🚧 This route will also take you to Brusselton and the Brusselton Incline (covered in S&DR Walk No.2).

🚧 If you do explore down here, you will need to return to the Mason's Arms to finish your journey.

(21) Commemorative gardens

To the right of the Mason's Arms (now the Crossings) is a garden area with a commemorative stone recounting some of the historic significance of this area.

🚧 The path continues along the route of the 1825 line, bounded by a large stone wall (with Station Street on the left).

🚧 On your left behind some bushes just before you rejoin the National Railway Museum, you might notice a small archway in the wall, partially replaced in brick. This is a refuge for plate workers.

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- 🚶 Just after this, the path rejoins the National Railway Museum at car park B, from where you can walk back towards the modern engine sheds towards your right, or embark on the next walk in the series from Shildon to Heighington (S&DR Walk no. 4).

- 🚶 Alternatively, from here you can walk to the modern Shildon Station and catch a train to Heighington, Darlington, or Thornaby, near the end of the 1825 S&DR.

Taking you further....the growth of Shildon

The impact of that day, 27th September 1825, was to have a profound effect on this area. There had been just a small village called Shildon to the north, but New Shildon sprang up around the Mason's Arms in response to the railway, and transformed the landscape. In 1821 the hamlet of Shildon had a population of just 115 people, mostly employed in agriculture but with some in coal mining, and in the burgeoning textile industry. However, within the next fifty years, the population was to rise to 2,631 by the census of 1841 and 11,759 by the end of the century.²⁶ At this time the Age of Steam was at its peak, and Shildon for a time, was at its heart.

In 1854 a journalist from the Darlington and Stockton Times observed the changes when he took 'a run among the Auckland collieries' starting in a horse drawn coach at Shildon.

Going at a quiet pace there is time to observe the country which, between this place and West Auckland, is essentially a coal district. On every hand are to be seen steam engines, puffing and sobbing as they bring to the surface the results of the labour of those who are toiling below" (Northern Echo 03.08.2005; courtesy of Chris Lloyd)

This was a radical change from the more rural landscape which had existed before September 1825:

"I have known Shildon for fifty years when there was not a house of any sort at New Shildon, much less a Mechanics Institute. When I surveyed the lines of the projected railway in 1821, the site of this New Shildon Works was a wet, swampy field – a likely place to find a snipe, or a flock of peewits. Dan Adamson's was the nearest house. A part of Old Shildon existed, but 'Chapel Row', a row of miner's houses, was unbuilt or unthought of."

(John Dixon, Company Engineer in the Bishop Auckland Herald, 3.9.1863)

²⁶ Hutchinson 2003, 8

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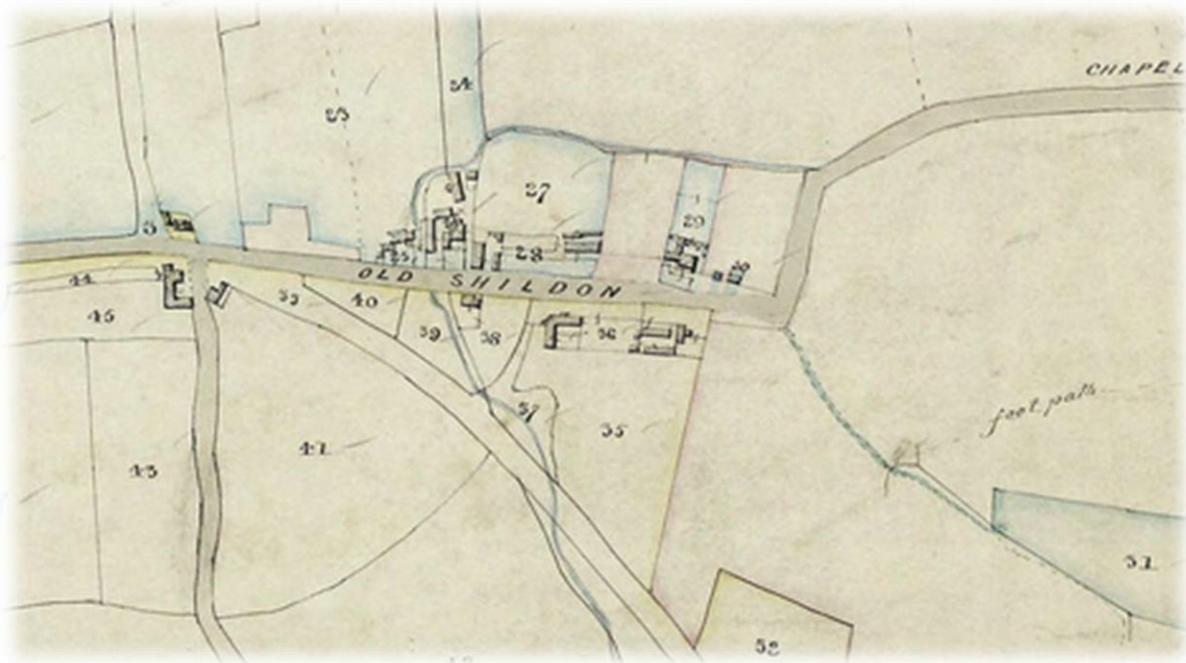


Figure 4. Old Shildon in 1839 (tithe map DDR/EA/TTH/1/211). Plot 45 on the left belonged to the landowner Robert Surtees but was rented by Ann Adamson, Daniel Adamson's widow. Daniel provided the early passenger service. The curved line running down the centre is the Surtees Line – a private branch line used by Adamson to join with the S&DR. The building on the corner of the Surtees Line and what is now Byerley Road is Daniel Adamson's Coach House with the older building adjacent and the public house opposite.

This is the end of the Shildon Circular Walk. You can now continue your journey by exploring other stretches of the S&DR as follows:

- 🚂 S&DR Walk No. 1 Witton Park to West Auckland
- 🚂 S&DR Walk No. 2 West Auckland to Shildon
- 🚂 S&DR Walk No. 4 Shildon to Heighington
- 🚂 S&DR Walk No. 5 The Darlington Circular
- 🚂 S&DR Walk No. 6 Darlington to Fighting Cocks and Goosepool
- 🚂 S&DR Walk No. 7 Preston Park to Stockton

This guided walk leaflet was compiled using the following sources of information:

- 🚂 Bainbridge, Coun. F. F. 1933. *Centenary of Shildon LNER Institute. A Record of its Rise, Progress and Activities.*
- 🚂 Chapman, V. 2005. *Around Shildon.*
- 🚂 Ekwall, E 1987 *The Concise Oxford Dictionary of English Place-names*
- 🚂 Fawcett, B. 2001. *A History of the North Eastern Railway Architecture. Vol 1: The Pioneers.*
- 🚂 Hackworth-Young, J and George Smith for additional information on Hackworth's House, the Soho Works and the S&DR Works and the Hackworths (Hackworth Collection)
- 🚂 Heavisides, M 1912. *The History of the First Public Railway*
- 🚂 Hopkin, D. 2010. 'Timothy Hackworth and the Soho Works, Circa 1830-1850' in *Early Railways Vol. 4*
- 🚂 Hutchinson, T. 2003. *Shildon and District.*

**THE ROUTE OF THE S&DR 1825:
SHILDON CIRCULAR WALK FROM NRM LOCOMOTION.**

- 🚂 Ordnance Survey historic mapping 1855-1974.
- 🚂 Jeans, J.S. 1875. *Jubilee Memorial to the Railway System – A History of the Stockton & Darlington Railway and a Record of its Results*
- 🚂 Lloyd, C. 2007. 'Where Mighty Steam Trains Rumbled Far Below the Ground' in Echo Memories, The Northern Echo. January 10 2007.
- 🚂 McLaurin, S. 2006. 'Stockton Railway History – Part One. St. John's Crossing, Bridge Road' in Stockton on Tees Local History Journal No. 11 Spring 2006
- 🚂 Simon Smalley, Locomotion, the NRM for additional information on the Coal Drops
- 🚂 Slack, G and O'Neill. 2015. *The First Five Miles*
- 🚂 Watts, V.2002. *A Dictionary of County Durham Place-Names.*
- 🚂 Young, R. 1975. *Timothy Hackworth and the Locomotive.*
- 🚂 Fieldwork and additional information by Kenneth Hodgson, Charlie Walton and Jane Hackworth-Young from the Friends of the NRM, Colin Turner and the Friends of the 1825 S&DR including Peter Bainbridge, Roger Murdock, Chris Sowerby, Alan Townsend, Jonathan Ratcliffe and Ian Gray.
- 🚂 Original text by Caroline Hardie, Archaeo-Environment .
- 🚂 Editing by Niall Hammond and Yvonne Ramage, Friends of the S&DR.
- 🚂 Professor Alan Townsend, Friends of the S&DR, proof reading

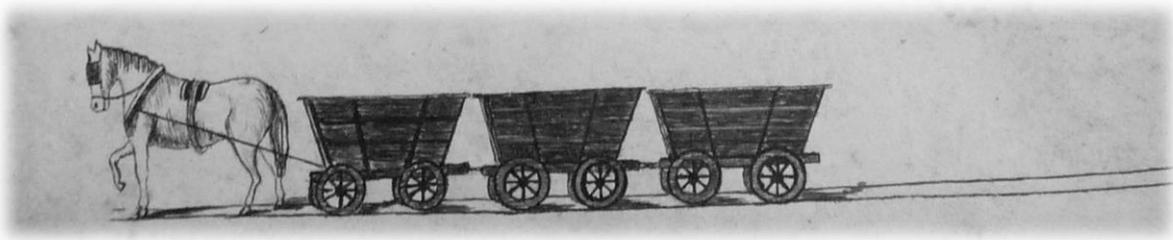


Plate 24. A sketch by Timothy Hackworth dated 1827 in his notebook now at the NRM HACK 1/3/2/1)

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