Hetton-le-Hole Herald

The Newsletter for Hetton Local History Group

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Information & Calendar

Next Meeting

Monday 26th September:-

Visit to Houghton Church 7 p.m.

Members to meet at the church:

We are currently hoping to have John Cook as the visiting speaker for the October meeting. He will talk about the Elemore pit disaster of 1886.

Part 3 Getting the Job Done—Moving the Coal

We saw in Parts 1 and 2 how the movement of coal from the coalfield depended largely upon the ability to transport it down to the banks of the River Wear and then carry it down river to the estuary where it could be loaded on to colliers from the small keel boats. Also it was necessary to ensure that the estuary was deep enough to enable the colliers to enter the river safely and then sail away when fully loaded. Difficulties with the river channel had finally been overcome as new engineering developments allowed the river flow to be controlled and much larger ships were now able to come into the river.

To the coal owners however this was not the end of their problems. As the years rolled by through the two decades of the eighteenth century, coal production had continued to rise. Demand from Europe was at an alltime high and the south of England was continually asking for more Wallsend coal as it was called. With every chaldron of coal carried along the waggonways the coal owners were reliant upon third parties to ensure a free flow of coal. Men and companies were needed to pull the coals along the waggonways the load them on to keels then carry them down river and finally load them on to the collier brigs. Costs were particularly high for coal which arrived at the river bank well up river on the waggonways around Penshaw and Fatfield, since they had further to travel. It was estimated that Frances Anne Vane Tempest was losing as much as £10,000 per annum in wages, payments and port taxes based on the six shillings per chaldron, the going rate in 1813, when she took over the running of the Rainton Royalty pits from her father. Lord Lambton shipping coal

from as far away, as Sherburn, Pittington and Cocken along his waggonways was subject to the same payments and was unable to gain an edge on his competitors because of it. By 1826 Hetton Colliery and its associated mines of Eppleton and Elemore had become the largest mining complex in the country producing 318,000 tons of coal worth almost £175,000. They had gained a distinct advantage over their competitors when they opened the Hetton Railway. By taking the coal down to the port directly where it could be loaded straight into ships saved the owners an inordinate amount of money as well as making the process of trans-shipment more efficient. The Third Marguess of Londonderry and Thomas Bradyll who mined at Haswell and Ludworth took note of the advantages a direct railway to the port gave when they began to tap into the deep mining prospects through the

magnesian limestone.

During the period from 1813 till 1819 and her marriage to the Third Marquess of Londonderry Frances Anne was a minor and she was restricted to some extent in what she could do with her inheritance since she was guided by trustees. However following har marriage new collieries were open in the Rainton area and it



was thought that the waggonway would become overloaded.

John Buddle, chief viewer for Londonderry advised that a small waggonway belonging to the Nesham (Neasham) family should be purchased since it would get the coal nearer to Wearmouth and soon reduce costs. Londonderry could not be persuaded as he believed he was still dependent upon others and as a consequence Lord Lambton stepped in and bought up the waggonway. This shrewd purchase enabled Lambton to put himself in the same position as the Hetton Coal Company and saved him a lot of money for the future. Thus Londonderry was left out in the cold and this fact probably forced his hand in building the port of Seaham Harbour.

It took Londonderry until 1828 before he was able to make a start on the developments at Seaham. Throughout the 1820s he was saddled with cash problems following the purchase of the Seaham Estate from the Millbanke

family. He was in debt to his brother having spent £63,000 on buying the Seaham Estate and money had been spent on a rash of new collieries in the Rainton and Pittington areas. Had he been able to cut out the Wear middle men the savings made would have been sufficient to make him a fat profit from his activities.

The decision to build a port at Seaham was a sound one given that competition was developing continuously throughout the region. New ports were developing at Port Clarence and Stockton on the Tees and at Hartlepool the dock company was looking at joining in to support a growing coal trade coming from Thornley and the Trimdons. New docks were being thought about for Sunderland and this was becoming a reality as the railways continued to develop and exploit the

transport of coal.

By 1828 Londonderry's money problems were almost insurmountable and after trying to go it alone he found it necessary to accept a loan of £17,000 from Bradyll on the basis that Bradyll would be able to ship coals from his collieries at Haswell and South Hetton from the port.

He also found it necessary to contract out the construction of the Rainton waggonway running to the port, to Shakespeare Reed of Thornhill. He was to get his money back through charging a fee for each chaldron of coal which ran along the line set out as 3 shillings (15P) per chaldron based on an estimated 50,000 chaldrons each year for three years.

The line eventually cost £20,000 to build and it was only in 1840 that Lord Londonderry was able to exercise his option to buy out Shakespeare Reed at a cost of

£22,721.

Started in 1828
the first dock was
complete and ready to
accept vessels by 1831.
On July 25th 1831 the
first coal ran along the
line to the port. The
Rainton to Seaham line
officially only 5 miles
long had connected to
it 18 miles of other
lines. From this time
on, the Londonderry

industrial empire had come of age and continued to flourish. His portfolio of mining ventures was impressive, the largest in England in the hands of a single individual. Over a million tons of coal were being produced from an area which stretched from the coast inland to Durham City. By the mid 1840's Seaham Harbour had reached saturation point and the harbour was at times clogged with the coal craft using the port. Additionally the size of ships was growing and it had



Pencil drawing of the cove where Seaham's harbour was built done by Paul Macreth for Lord Londonderry in 1824

been found necessary to expand the port with a new and enlarged dock known as the South Dock in 1835. Londonderry continued to buy and open more collieries. By the start of the 1850's Londonderry realised that he needed, another outlet for his coal shipments other than Seaham Harbour, His last great public act in connection with his empire occurred in February 1853 when he cut the first sod for the building of the Seaham to Sunderland

railway. This was a necessity to alleviate the bottleneck of ships loading coal at Seaham. The railway line which opened in August 1854, five months after the death of Lord Londonderry, to carry the mineral traffic to the South Dock area on the Wear which had opened for business in 1850. Essential because the Lambton and Hetton staithes at this time were overloaded there was a need for a large docking elsewhere on the river; thus the South Dock came into being.

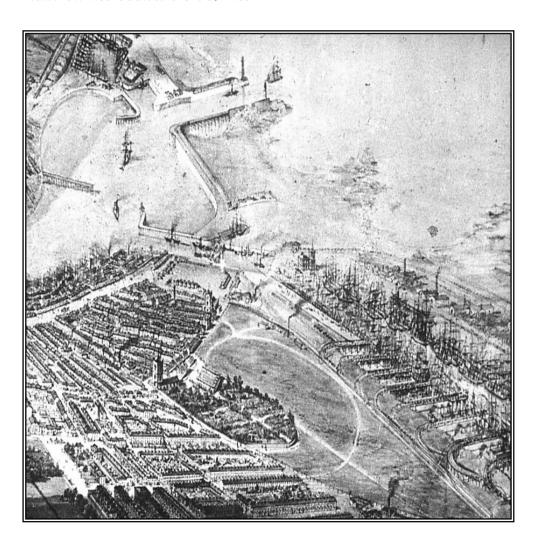
South Dock Developments

Various solutions had been put forward to resolve the situation including the closure of the existing sea entrance and diverting the river further to the south where there was land sufficiently wide enough to build a dock area. There was widespread opposition to the plan not least because it meant flooding part of the lower town. A new and more acceptable solution was suggested in 1845 by George Hudson, Sunderland's M.P. known for his major railway interests in the previous decades when there had been a railway boom.

The South Dock developments were a massive project and with Robert Stephenson as its consultant it seemed assured of success. In order to create the dock size as planned it was necessary to promote the foreshore by dumping large amounts of soil and rubble over the sea wall and so build up a new strip of land adjacent to the seashore. This new land would thus provide a foundation for warehouses, dock offices and other port facilities. The 1850 drawing on the following page shows the remarkable developments which were to take place in the area. The dumping of soil to make extra land allowed for a bigger wet dock which was to become the Hudson Dock. Extension of

the land was to be maintained by the building of seven groins faced with stone into the sea, so preventing erosion and the rock and stone which came from the excavation of the Hudson Dock was then dumped to consolidate the land on the seaward side. The picture shows a packed Hudson Dock with the entrance from the river in the centre of the picture. The coal staithes with rail connections can be seen backing on to the town moor.

The foundation stone



was laid by Hudson in February 1848 and by the end of the year the wet dock was dug, a phenomenal piece of construction.

Entrance gates were built from the river using three water-tight gates. They were however restricted to only high tide opening to pre-

vent draining the dock when the tide was at low water. The gates were operated by manual capstans.

The South Dock sea entrance in 1914 with the lock gates and a road bridge across the lock and Bartram's shipyard in the background

1914 - Hudson dock opened in 1850; the lock in 1880

The Wear ship-

yards at the time were building larger ships and the dock entrance was not deep enough for them, and it was soon apparent that a new deeper entrance was required for the dock.

By 1853 Hudson Dock was being enlarged. As with the original plans and the rest of the dock , the extensions had jetties and coal staithes along the south side together with rail connections. The 13 staithes built provided for the coal from more than 20

collieries feeding them.

The new docks were so busy with ships coming from the river basin that

in 1856 a direct access from the sea

was made by digging a sea channel. The channel cut through the south-east corner of the extended docks. This also had to be gated it was not until 1880 a further

gate was constructed and a lock was produced which raised and lowered ships to sea or dock level.

The channel also was deepened on the seaward side and in doing so created a small harbour or tidal basin about one mile south of the original river mouth. This deepening had an unassumed advantage for in 1871 the shipbuilding firm of Bartram and Sons, located at Hylton moved on to the reclaimed land at this new entrance and built a launching area for newly built ships. The company thus claimed they were the only shipbuilder launching directly into the North Sea. A further advantage allowed them to build larger oceangoing vessels than they would have been up river at their Hylton site.

The final dock development occurred in 1868 when a further extension southward was undertaken, namely the building of the Hendon Dock. This too had a gated entrance into the small sea harbour.

As mentioned previously following work which began in 1877 a proper sea lock was constructed and opened by the Earl of Durham in October 1880. This concluded the work on the South Docks with changes and developments done throughout the decades to meet the needs of increasingly large sea-going vessels and the cargoes they carried.

The coal staithes above the river bridge close to Sunderland continued in operation until the late 1960's. A few loading points built across the river on the bank below Monkwearmouth Colliery continued in operation while the colliery still operated but by the first years of the 1980s these were gradually closed as the river trade diminished. The staithes in the south dock also continued in operation until the mid 1980s, relying on

coal from the few coastal collieries and the Murton Complex which were still in existence. By 1986 the coal trade from the port had stopped completely and the final collieries closed in the early 1990s. The end not of a chapter but a book lasting for more than 200 years.

Sunderland as a port has declined over the last thirty years. Gone are the shipyards which once lined the river. The south dock complex handles a few coasters carrying general cargo. The north dock although never a commercial success has become a haven for pleasure craft. Even Corporation Quay, the only deep water berth on the river handles fewer and fewer ships as the years roll by. We must wonder what the great initiator Robert Hudson would think of things if he were still alive today.

Robert Hudson 1800-1871

Robert Hudson, born in 1800

the son of a farmer at Howsham, a small hamlet near to York. In 1827 a relative left him £30,000 which he invested in the North Midland Railway



Co. By 1833 he formed his own company to build lines to West Yorkshire towns but he paid bribes to MPs to get his permis-

sions. In 1845 he was elected MP for Sunderland. Hence the connection with the town in building the docks.

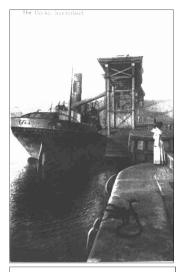
By 1850 his business interest included coal mines, iron ore works and quarries. He was a good friend of Robert Stephenson as well as the Duke of Wellington for whom he made a fortune by selling railway shares. He was found guilty of manipulating share prices and was imprisoned in 1859. Disgraced, on his release in 1866 he died in 1871 with big debts.



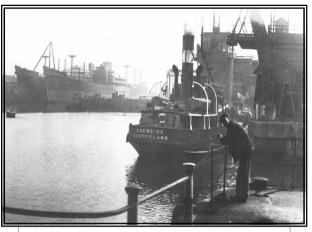
This picture shows the official opening of the south inlet into the Hudson Dock



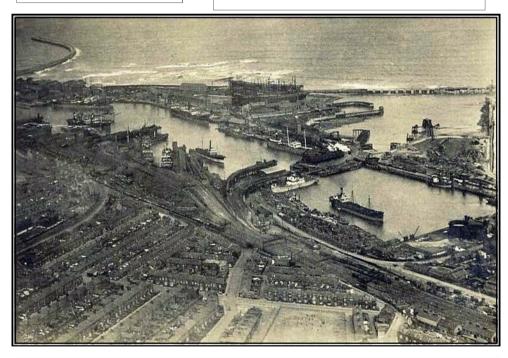
The opening of the Hudson Dock in 1850 by Prince Albert looking out through the open gates to the river basin



An early photo of coal staithes in the South Dock



A small coaster, the Edenside loading coal at the Hudson Dock staithes in the 1950s. In the background two ocean-going cargo ships being built in Bartram's shipyard



The South Docks in 1931 showing the Hudson Dock, Hendon Dock and Bartram's shipyard close to the sea. Running from the bottom right corner to the middle ground is the rail connections serving the coal staithes.