

The
Industrial Archaeology
of
PRESTON

by
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When Arkwright revisited Preston, his birthplace, in 1768 in the company of the toolmaker Kay of Leigh, the established industry was that of linen weaving, with a tradition of flax imported from the Baltic through harbours on the River Wyre during the previous one hundred and fifty years or more. Smalley, a merchant of the town, was prepared to back the ideas of the two inventors for a machine for spinning cotton yarn, and they took their models to the back room of a house at the bottom of Stonygate. In 1882 this room, in its restored condition, was described by Hewitson as located on the eastern corner of the first floor of the Arkwright Arms. (1) For reasons which have been described elsewhere, (2) the factory system in cotton textiles was not immediately established in Lancashire, and it was not until 1777 that Preston's first cotton mill – that of Messrs. Collinson and Watson – was set up on Moor Lane Brow at the bottom of Friargate, on a corner of the yard at the site of the Preston Gas Company.(3)

In 1791, J Horrocks, a jenny-spinner from Edgworth near Bolton, later one of the founders of the firm of Horrocks and Jackson of Avenham Street, built his first mill, the so-called Yellow Factory at the south-east end of Church Street – a three-storey building in which the first seven hundred spindles were said to have been originally horse-powered. From 1802 the firm developed five mills in various locations including Dale Street, Friday Street, Frenchwood, Spitalis Moss and Canal Street (1825).

The 'New Preston' district was a direct creation of this concern, laid out in New Hall Lane fields and containing many weaving sheds and workers cottages. The founder of this empire became MP for Preston but died at the age of 36 and is buried in Penwortham Churchyard. He was *succeeded by his brother Sam (died 1842) who built and lived in Lark Hill House*, which was later to become a Roman Catholic convent and girls' boarding school. Sam Horrocks was described as an employer of over four thousand people, to be master of some forty factories which were powered by forty-one steam engines totalling 885 h.p., and which produced 70,000 lbs of yarn a week.(4)

The firm was succeeded by Millers and Herman among others, but the full history has yet to be written.* Messrs Calvert and Sons India Mill in New

(1) Hewitson, A. *History of Preston* (Preston 1883, reprinted Wakefield 1969).

(2) e.g. Aspin, C. and Chapman, S. D. *James Hargreaves and the Spinning Jenny* (Preston, 1964) pp. 46–51

(3) The first works of the Preston Gas Co. was in Glover Street at the east end of Cross Street. The site of the old waterworks adjoining was purchased and in 1834 the erection of gasholders began in Walker Street and Moor Lane. The company owned 574 retorts and nine gasholders. The old offices stand on Glover Street, the new (1872) on Fishergate on the east side of the G.P.O.

(4) Baines, E. *History, Directory and Gazetteer of the County Palatine of Lancaster – II* (Leeds 1824, reprinted Newton Abbott 1970).

* For an introduction see Lett, C. *The Cloth of the World* London 1906.

Hall Lane, put up in 1864, was the last cotton factory built in Preston for some time, although weaving sheds were constantly being added. The cotton famine caused a number of mills to be pulled down or converted to other uses. A table given by Hewitson, however (Pages 185-6) shows over eighty concerns in existence in 1882-83 comprising 2.2 m. spindles, 48,000 looms and employing 37,000 people.

Owen Ashmore observes⁽⁵⁾ that the majority of Preston textile mills were not of the Fairbairn-type fireproof structure (iron framed with brick arches supporting the floors), but were built with wooden floors and beams except in the blowing rooms where brick arches were used because of the greater danger of fire.⁽⁶⁾ The Centenary Mill, on the other hand, built by Horrockses 1895, was one of the first to have steel beams and concrete floors. Here steel lattice girders were used to give bays 90 ft. square in the weaving sheds instead of the 10 ft. by 12 ft. common earlier. The final flourish is represented by Cliff Mill (1904), which has a series of Doric columns supporting an elaborate cornice. The Joint field secretary for the Manchester Region Industrial Archaeology Society lists the following as notable examples:

- (a) The five-storey Arkwright Mill 1854. Weaving shed and Engine House 1916.
- (b) Five-storey Brookhouse Mill 1840 and weaving shed in Parker Street, with mill shop and office in Old Lancaster Lane.
- (c) Four-storey Greenbank Mill 1837 (Birtwistles) Gordon Street.
- (d) Centenary Mill (1895) New Hall Lane (Steel-framed).
- (e) Cliff Mill, Fishwick View, four-storey 1904, iron columns and steel beams.
- (f) Embroidery Mill - a weaving mill of 1910/3 built around a courtyard with warping, weaving and warehouse sections. Separate engine and boiler house. The Stocks bridge Mill on Eldon Street - Parker Street is similar.

(5) Ashmore, O. *The Industrial Archaeology of Lancashire* (Newton Abbot 1969) pp. 49.

(6) Mr. V. Taylor, however, retired millwright of Chadderton in a lecture (April 1974) to the Manchester Region Industrial Archaeology Society, doubted whether any mills were strictly speaking fireproof, and produced photographic evidence to prove his point.

- (g) Tulketh Mill four-storey (1905) flat-roofed, large engine house, chimney and ornamental water tower.
- (h) Hanover Mill, Fylde Road (circa 1800), five-storey with many early alterations including warehouse and shop front on east end.

The Lancaster Canal and the Preston tramroad

The Lancaster Canal was authorised over a seventy-five mile line from Westhoughton near Wigan to Kendal in 1792. Two years later, Rennie made an estimate of the cost of an aqueduct to carry the canal over the River Ribble at Preston which was to be bridged by three arches of 116 ft. span each. Jessop and Rennie argued the case in a further joint report (1801) but a tramroad from Preston to Clayton Green was adopted as a 'temporary' expedient two years later, with the consequent loading/unloading of coal, lime etc., from wagon to barge. By 1798/9 the south section of the canal was open to Johnson's Hillock (near Chorley) and was almost ready to Clayton Green, one mile from Walton summit, except for Whittle Hills tunnel not completed until 1803.⁽⁷⁾ Incidentally, although the northern section of the canal had also been completed about the same time through Lancaster to Tewitfield locks, it did not finally reach Kendal until 1833.⁽⁸⁾ From Wharf Street, Preston, to the summit level near Bamber Bridge ran the 4½ mile tramroad connection between the northern and southern sections of the canal, a difference in levels of 222 ft. Two lines of rails carried horse-drawn wagons along the route except on Avenham Brow, where there was a stationary haulage engine which ceased to operate in 1859; the engine house was demolished in 1868.⁽⁹⁾ (The LNWR finally closed this tramway in 1879). The tramroad tracks ran round the two arms of the isolated canal basin at Walton. Below this was a 600 yd. incline to Summit Farm where some stone blocks survive of the 4 ft. 1 ins. cast-iron L-shaped plateway, traces of which may be seen on either side of Station Road, Bamber Bridge. A 1200 yd. long tree-lined embankment carried the tramroad from Penwortham Mill to the Ribble which was crossed by a wooden bridge. The bridge still exists in a re-cast form as a footbridge.

- (7) The outline history of the Lancaster Canal is given in Doerflinger, F. *Slow Boat Through Pennine Waters* (London, 1971).
- (8) For a description of this extension and the terminus of the canal, see Wilson, P. N., Canal Head, Kendal. *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* LVIII (1968) pp. 132-50.
- (9) A similar installation has been preserved at the Middleton incline of the Cromford and High Peak Railway near Wirksworth, Derbyshire, by the joint efforts of the Derbyshire Archaeological Society and the Derbyshire County Council.

An illustration drawn by C E Shaw for Hewitson's history shows a stone-built two-storey warehouse at the Preston basin with two loading bays facing the yard and two shipping holes on the basin side. The passenger wharf is shown as a rough stone quay with few amenities. An extension of Harris College, Preston Polytechnic now occupies the site. About a mile of the canal in the centre of the town has been levelled, but the Boatman's Arms, The Lamb and Packet, Canal and Wharf Streets are reminders. (A little further on are the canal cottage and stables at Swillbrook Basin). On the north side of Aqueduct Street from where the first navigable stretch now runs, a small basin exists opposite the Shelley Rd. Mills. South of Fylde Rd., the dry bed is discernible as far as the Polytechnic. Below this in Heatley Street stands a stone-built three-storey mill/warehouse, and at the west end of Wharf Street at the original entrance to the basin, is a five-sided two-storey building which was probably a canal office.

The Port of Preston

When Baines was writing his account about 1825, navigation on the Ribble was at a low ebb. Occasional cargoes of timber were brought from Canada and Russia but the trade was mainly of coasters of up to 150 tons which could steer as far as the quay on Preston Marsh with the Spring tides. There were forty-five registered vessels but mostly sloops of sixty-seventy tons, totalling 2574 tons and giving employment to one hundred and forty seamen. Harbour improvements were sorely needed, but the first River Navigation Act (1806) appears to have become a dead letter. Baines envisaged steam packets sailing to Lytham and Southport and commented in these terms:—

'Nothing has been done towards the improvement of the navigation, except the fixing of a few buoys at the entrance to the channel, elevating a wooden perch about 10 ft. high and setting up a pole near the mill at Lytham, upon which an oil lamp is occasionally hoisted. It requires little skill in nautical affairs or in modern engineering to see that this river is capable of great improvement, and that by the combined efforts of the steam dredging machine, and a judicious system of embankment, the channel might be confined and deepened so as to admit vessels capable of navigating the Atlantic Ocean up to the quay at Preston Marsh.'⁽¹⁰⁾

If only these improvements were to be carried out he believed, the port could come to rival Glasgow, Port Glasgow and Greenock as similarly situated.⁽¹¹⁾ The fear was that the new Lancaster Canal Branch to Glasson Dock would capture the trade,⁽¹²⁾ and so it was essential to excavate a dock

(10) Baines History, pp. 501.

(11) These kind of aspirations were expressed on behalf of Barrow-in-Furness by Mr. Gladstone when the docks were being developed in the 1860s, the comparison being with Liverpool on this occasion!

(12) Described in Biddle, G. J. and British Waterways Board, *Cruising on the Lancaster Canal* (London, 1965).

on the south point of Preston Marsh and join it to the Lancaster Canal Basin. Further proposals for a ship canal and improvement schemes were suggested in 1834/6/7. In 1838 the Corporation-backed Ribble Navigation Company was formed. The Channel to the west was dredged, walls formed and a new dock opened at Lytham in 1841 comprising a railway and 400 yd. long wooden wharf.⁽¹³⁾ In 1843 a new quay was at last constructed opposite the Marsh and the Victoria warehouses erected on the west side of the strand where they may be seen near the present dock close to Strand Road. Further reclamation followed from 1853, whilst an 1866 survey proposed an even deeper channel for 500 ton vessels and two docks of 36 acres and 60 acres with a graving dock. Nothing further was to be done until in 1881 the Corporation bought out the Navigation Company and employed Coode who suggested deepening and a single dock of 30 acres. By 1881-2 the grain boats and iron imports seem to have ceased and the former china clay traffic. All that were left were a few coasters of between fifty and two hundred tons carrying grain or timber.

By 1888 however, the Ribble had been diverted south through Penwortham Marsh and a 1500 ft. long stone quay wall built along the north side. At last in 1892 came the new dock, 3000 ft. by 600 ft. of concrete faced with Longridge stone 40 ft. high. The south side was reclaimed with a long embankment and west of the dock a semi-tidal basin was constructed with three new sheds, hydraulic cranes etc. By 1908, 1700 vessels per annum were entering the port.

Just as Preston does not seem to have developed a textile machine trade even after 1840, so shipbuilding had difficulty in taking root. A few wooden vessels had been built on Strand Road in the early days and in 1892, J Mackern of Liverpool opened a yard on Ashton quays near the western corner of the marsh. There were similar activities on the Ribble at Freckleton Pool and at Lytham old dock. In 1863-4 the North of England Railway Carriage and Iron Company opened a large works on the east side of the marsh, but this had collapsed by 1879.⁽¹⁴⁾ Opposite the Victoria Warehouses on Strand Road a cement works also existed for a time.

Railway Developments 1838-49

The building of lines to Wigan, Lancaster, Parkside, Bolton, Fleetwood, Blackburn, Blackpool and Liverpool have been outlined by Hewitson and others and the vicissitudes of some of the early companies described by

(13) Even this scheme was not without its competitors, for a year earlier the Preston and Wyre Docks Railway and Harbour Co. had begun operations at Fleetwood.

(14) It was probably not helped by the opening of the Lancashire and Yorkshire Railway's new carriage and wagon works at Newton Heath, Manchester in 1877.

railway writers.⁽¹⁵⁾ The Industrial archaeologist may note that the lower portion of the tower of St. Walburge's R.C. Church is constructed with stone blocks from the Lancaster and Preston, and that there is much evidence of the pre-grouping companies in the shape of abandoned passenger stations. The Longridge line stations were in Deepdale Road and Maudland Road and the West Lancs. station at the bottom of Fishergate Hill – a plain stone structure with one covered platform. The new central station on the south side of Fishergate was opened in 1880 between Butler Street and Charles Street. The front faces on to Fishergate and it consists of four parallel connected sections, a centre island platform 450 yds. long by 36 yds. wide, which houses the passenger facilities. The original station of the Preston and Lancaster was on the north side of Fishergate near the Victoria Hotel. The remnants of at least four earlier stations may be inspected:

- (a) Maudland Road Goods – the former Preston and Wyre terminus – where a small derelict warehouse survives.
- (b) Deepdale Street – the Preston and Longridge (West Riding Junction) Railway terminus – now a coal depot.
- (c) Deepdale Road – Fleetwood and Preston terminus of 1850. Station house, porch and passenger building.
- (d) Fishergate – Preston to Southport (West Lancs) terminus of 1882, closed 1900.

The Engineering Industries

In conclusion, reference should be made to the two well-known engineering works associated with the district which established themselves from small beginnings at the end of the nineteenth century to become in the one case a firm of international repute and in the other, one of the world's multi-national corporations. It was in the neighbouring village of Leyland in 1884 that Lancashire's first steam wagon was constructed by the local blacksmith. Here, out of a steam lawn-mower business owned by Sumner and Spurrier, the Lancashire Steam Motor Company was formed to build a tiller-steered steam vehicle with a rear wheel drive (1896). Petrol-driven lorries followed in 1902–4 and considerable factory expansion. By 1907 the firm became known as Leyland Motors.⁽¹⁶⁾ The principal product was soon to become the motor buses of the 35 h.p. 'X' type and 50 h.p. 'U' variety. A steel works was opened at Farington nearby and further developments followed during World War I. Between 1917–20, the firm developed the famous 'straight-8' car, foreshadowing the growth of a world-wide combine.

(15) e.g. Greville, M. D. and Holt, G. O. *The Lancaster and Preston Junction Railway* (Dawlish 1961).

(16) Anon. *The Leyland Motor Corporation; its growth, constitution, factories and products* (Leyland, 1967).

Dick Kerr and Company – English Electric were established on the site of the East works of the North of England Railway Carriage and Iron Company (1863) (see above) as the Electric Railway and Tramcar Works (1898). The new company occupied about 4–5 acres, but the office building, campanile and two-storey building with long-arched windows situated on the West Strand were taken over from the original firm. The buildings then faced an open space once the course of the Ribble. Body-building of horse tramcars was commenced in the 1863 shops. These workshops were very similar to the Beyer-Peacock locomotive works in Gorton, Manchester, but were later partitioned to form separate joiners, forge and blacksmiths shops. The West works was begun about this time (1900) on the reclaimed land by a tramway equipment syndicate to make the electric gear for traction. By 1903, Dick Kerr and Company of Kilmarnock, makers of ships, locomotives and rails, had absorbed these interests and controlled both the east and west works at Preston. During 1914–8 seaplanes and flying boats were built at the east works, but the main products were tramcars, locomotives and trolley buses for a large number of municipal systems until about 1930 when the popularity of trams began to decline. Reconstruction began in 1938–9 for aircraft production as part of the re-armament drive.⁽¹⁷⁾

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(17) Pearson, F. K. (Ed.). *The Dick Kerr Album (Glossop, 1972)* contains photographs and plans of the tramcar works including machine tools used in the shops and many of the vehicles built there.