CHAPTER 2 THE FORMATION OF THE SURREY IRON RAILWAY COMPANY

Map showing comparative routes of proposed canals and railways [207.2kb]

The River Wandle rises at South Croydon, flows north to the neighbourhood of Croydon parish church, and then west and northwest via Wallington to Hackbridge, where it is joined by a tributary one mile long rising at Carshalton. It then flows northwards through Mitcham, Merton, Sumrnerstown and Earlsfield, and discharges into the River Thames at Wandsworth. The length from Croydon is about nine miles, and it falls an average of 15 feet a mile.

The fast-flowing water of the Wandle made it ideal for powering mills. The Domesday survey of 1082 listed at least 13 corn mills on the river. In 1610 there were 24 corn mills at work, and by that date other industries had been established there. The spread of calico bleaching and printing concerns along the length of the river is attributed in part to the influx of Huguenot refugees from France and Holland who fled to England after the revocation of the Edict of Nantes in 1685. other industries which grew up included dye milling, gunpowder making, snuff milling, paper making, oil milling, and iron and copper foundries.

In 1805, James Malcolm thus described the River Wandle:

"During its progress, its various ramifications and windings supply works to an incredible extent; and, for its length and size, perhaps no river in the world does at this time furnish so many valuable and various manufactories "[1]

These manufactories included processes which used the water of the Wandle but were not powered by it. Malcolm went on to mention 41 industries on the river, which comprised l2 calico-printing works, 4 bleaching grounds, 9 flour mills, 5 snuff mills, 3 oil mills, 2 dye works, one leather mill, one paper mill, one logwood mill, one iron works, one copper works, and a brewery.

There were, in fact, a number of' establishments which Malcolm failed to record, and the total number at this time was nearer 50. Malcolm concluded:

"It is computed that this river, small as it is, certainly as compared with other rivers, and during the short distance of about ten miles, furnishes employment for upwards of 1700 people; and when the whole of the manufactories are in full work, the number will be little, if at all, short of 3000; and the capital employed to be fluctuating between half a million and one million sterling."

According to Ralph Dodd, there were in 1800, "200 horses constantly employed by the mills and other works on the River Wandle, passing goods to and f'rom the metropolis."[2] The mill owners and manufacturers were particularly concerned about the means of transporting their products to London and of obtaining the delivery of raw materials. There were wharfs at Wandsworth providing for transfer of goods and materials via the Thames to and from London, but these were difficult of access from further up the Wandle. Malcolm's comment about the state of the roads in Surrey has previously been mentioned, and after reproving the turnpike trustees for their negligence, he went on to enquire:

"is it not owing to the badness of the roads, to the want of system, and to that fickleness and instability of conduct on the part of the trustees, that the Croydon Canal and Iron railway have been undertaken? Was it not one of these reasons that induced Mr.Shepley and the other great manufacturers along the river Wandle, to prosecute the canal and the railway to the very great loss of revenue to the trust?"

The iron railway he referred to had developed from a scheme proposed in 1799, when a number of Wandle valley manufacturers and mill owners, together with interested

landowners and businessmen, conceived a plan for forming a canal from Wandsworth to Croydon, running near to the course of the Wandle. They engaged William Jessop to survey the proposed route and report on its feasibility.

William Jessop (1745-1813) was the leading canal engineer of his time. He was born in Plymouth, the son of Josias Jessop, a shipwright in the naval dockyard at Devonport. After the destruction of the second Eddystone lighthouse in 1755, the engineer John Smeaton was commissioned to design a stone replacement, and he engaged Josias Jessop to be resident engineer on the construction works. When Josias died in 1760, Smeaton took on his son as a pupil. William Jessop worked with Smeaton until 1772, when he set up on his own as a consulting engineer. Under Smeaton's direction, Jessop planned remedial works to the Calder & Hebble and Aire & Calder Navigations. The first large undertaking for which Jessop had major responsibility was the completion of the Grand Canal of Ireland. He was appointed as principal engineer in 1772, and was chiefly occupied on this work until 1787. In 1788 he was engaged to survey the Sussex Ouse, and later supervised the building of a new cut and locks there. In 1789 he surveyed the upper Thames and made recommendations for improving its navigability.

In July,1789, an Act authorising the construction of the Cromford Canal in Derbyshire was passed, and Jessop was appointed as consulting engineer. One of the promoters of this canal was Benjamin Outram (1764-1805), a land surveyor from Alfreton, who was appointed as resident engineer. A fruitful partnership between the two men later developed.

In June,1790, whilst the Cromford Canal was under construction, Francis Beresford, a lawyer from Ashbourne, bought the Butterley Hall estate adjoining it. He and Outram formed a company to mine coal and ironstone on the estate, and they started trading as Outram and Company. An ironworks was later established to produce pigiron and various castings, and in 1791 they purchased land at Crich nearby, for limestone quarrying. At that time John Wright, a Nottingham banker, together with William Jessop, joined the partnership, which was formally established on 10 December,1792. The opening of the Cromford Canal in the autumn of 1793 enabled Outram and Company to enter fully into production. The significance of Jessop's association with Outram to the story of the Surrey Iron Railway will emerge later.

Later works engineered by Jessop included the Nottingham Canal, the Leicester Navigation, the Ashby-de-la-Zouche Canal, the Barnsley Canal, the Ellesmere Canal, and sundry dock and drainage undertakings. At the time he was engaged to report on the Wandsworth to Croydon canal project, he was occupied in supervising the construction of the Grand Junction Canal.

William Jessop's report to "the chairman of the meeting convened for the purpose of considering a proposition for making a navigable canal from the River Thames at Wandsworth, to Croydon," was dated 9 December,1799.[3] A meeting of the subscribers was held at the Wheatsheaf Inn, at Tooting, with John Hilbert in the chair, on 12 December, to receive and consider Jessop's report.

Jessop wrote that he had surveyed "the line pointed out to me", which commenced on the east side of the Wandle at Wandsworth, ran south along the east side of Garratt Lane to Lower Tooting, then on towards Mitcham, along the east side of Mitcham Common and through Waddon Marsh to Croydon.

He suggested a variation to this route, by running it to the west of Mitcham and along the west side of Mitcham Common, because "I understood that accommodation to the valuable and numerous establishments on the River Wandle was a principal object."

Such a canal would require about 22 locks and would need to be lined to make it waterproof, but notwithstanding, he thought that it could be constructed for less than £.50,000, "which I am informed has been proposed to be subscribed."

However, there was a serious objection: there would be a problem with supplying the canal with water. Having examined the neighbourhood for possible sources, he had ascertained that by whatever means the water could be obtained, "every drop of water so taken would be taken from what supplies the River Wandle. He concluded that, "unless therefore, the owners of the mills can with propriety consent to the Canal being supplied from the sources of the River Wandle, I am sorry to say that I must consider it as impracticable."

He went on to suggest an alternative. "But there is another way of obtaining the object in view; if not quite so effectually as by a canal, it will, under all circumstances, be not much inferior to it; this is by the adoption of an Iron Railway."

The cost of such a railway he estimated at £24,000 maximum; and assuming a toll of 3d. per ton per mile, and a total carriage of 30,000 tons per year, it would pay a 10 per cent dividend on the capital, leaving £600 for maintenance and running expenses. The cost of the canal being about double, a corresponding increase in tonnage or toll rate would be needed to provide a 10 per cent dividend. Although on a railway there would be the inconvenience of unloading from wagons into barges on the Thames at Wandsworth, there would be the counter advantage that branches could be made from it to the individual manufactories, thus obviating the need there for unloading from wagons to barges.

Jessop mentioned that railways had been in use for many years in the north of England, chiefly at coal mines, and "it is but lately that they have been brought to the degree of perfection, which now recommends them as substitutes for canals" This simple introduction gives no hint of the revolutionary nature of Jessop's suggestion. The conception of a self-contained public railway, not for private use in connection with mines or quarries, or as part of a canal system, was quite novel, and marks an important stage of railway history.

The story of the development of the railway in Britain up to this stage is a long one, in which William Jessop and his business partner Benjamin Outram played significant parts. The following brief account traces the main steps in the progress from privately-operated wooden rail ways to iron railways for public use.

The earliest railways, wooden tracks to guide four-wheeled trucks, originated in the mineral mines of central Europe in the 15th. century. The first on the surface in Britain of which there are records was one in Nottinghamshire built by Huntingdon Beaumont to carry coal from collieries he had leased at Strelley to Wollaton, a distance of two miles. This was built some time between October,1603, and October, 1604. Soon afterwards, Beaumont moved to Northumberland, where he leased coal mines near Bedlington and built three railways there between 1605 and 1608. These inspired the building of many similar railways, during the 17th. century, to serve coal mines in Durham and Northumberland.

Meanwhile, in 1605, a railway was built by James Clifford at Broseley in Shropshire, and it is generally held that it was copied from Beaumont's line at Wollaton. This was followed by railways throughout Shropshire and South Wales.

In May,1662 the Stour and Salwarpe Navigation Act was passed, which also authorised the making of railways to carry coal to those rivers. This was the first of many navigation and canal Acts which contained clauses permitting the construction of feeder railways from quarries or other works. The first Act of Parliament to authorise a specific railway was one obtained by Charles Brandling in June,1758. This ratified wayleave agreements he had made with landowners, to enable him to build a railway from his colliery at Middleton, to Leeds.

In 1767 came the first use of cast-iron, where in Coalbrookdale flat iron plates were fixed to the top of timber rails. An early use of this technique was employed on a railway built by the Trent and Mersey Canal Company from their canal at Froghall to Caldon Low lime stone quarries, in Staffordshire.

The first use of rails entirely of cast-iron seems to have been in 1792, on railway lines from Beaufort and Blaenavon to the Monmouthshire Canal. These were the first "edge-rails",

rectangular in section, deeper than they were wide, to guide flanges cast on the wagon wheels. Soon afterwards, this type of rail was used on the Forest Line of the Leicester Navigation, engineered by William Jessop. This line, opened in 1794, consisted of an isolated canal, with railway connections at both ends, and embodied the first use of railways as an integral part of a transport system.

Meanwhile, another type of rail was being developed: the L-section plate rail, consisting of a flat plate with a vertical flange on the inner edge, to retain flangeless wagon wheels. This was devised by John Curr, who built a plate rail line at Sheffield in about 1787. In 1788 Joseph Butler built a railway with plate rails similar to Curr's pattern from his iron furnaces at Wingerworth to the Woodthorpe End ironstone mines in Derbyshire, and in the same year rails of this type were used on the Ketley inclined plane on the Shropshire Canal.

Benjamin Outram enters the story with the next recorded use of plate rails, on a line built from his company's quarries at Crich to the Cromford Canal, a distance of about 1½ miles, which was completed in 1793. It was on this railway that Outram introduced stone blocks as sleepers instead of the timber cross-sleepers hitherto used. He also modified Curr's design, using shorter and heavier rails.

Shortly afterwards, Outram engineered the Little Eaton Gangway, a railway extension of the Derby Canal, on the same principle.

In 1794, Outram was appointed engineer of the Peak Forest Canal, which incorporated a railway extension seven miles long from Bugsworth to quarries at Loads Knowl. The rails were cast by Outram and Company, and this was probably the first order of any size for cast-iron goods to be supplied by the company. On this railway was introduced the final characteristic of what was to become Outram's standard specification: a gauge of 4 feet 2 inches.

During the next few years Outram engineered a number of railways on the same principle, and it was his standard model of plate rails about 3 feet long supported on stone sleeper blocks and laid to a gauge of 4 feet 2 inches, that William Jessop had in mind when he made his suggestion to the promoters of the proposed canal from Wandsworth to Croydon.

In view of Jessop's conclusions, the canal subscribers resolved at their meeting on 12 December,1799, that the idea of a canal be abandoned, and that a subcommittee, accompanied by the engineer, clerk, and surveyor, should visit some railways in use, and report their opinion thereon to a general meeting to be held on 19 June,1800.

There was evidently some delay in making the arrangements for visiting the railways, for the deputation did not set out until 8 July,1800. The members were John Hilbert, Richard Fleming, George Shepley and George Tritton, and they made their report on 22 July.

On 9 July they had met William Jessop at Nottingham. The following day they visited Beggarlee Colliery in Derbyshire with him, and examined a 1½ mile long railway there owned by a Mr.Walker. They then went to view the railway built by Benjamin Outram at Crich in 1793, mentioned previously.

Two days later they were joined at Buxton by another member of the committee, Alderman Thomas Skinner, and two days after that they inspected the Peak Forest Canal railway, engineered by Outram, also mentioned earlier. This included an inclined plane 500 yards long where full wagons passing down pulled up empty ones by means of an endless chain winding around an 18 feet diameter' wooden drum. This line had been opened on 31 August,1796.

The subcommittee were favourably impressed by the operation and carrying capacity of the railways they saw, and gave their opinion that "an Iron Railway will be attended with more advantages than those mentioned by him (i.e. William Jessop)". Their report was presented at a "General Meeting of the Subscribers to the Plan for constructing an Iron Railway from Wandsworth to Croydon", held at Tooting on 24 July, 1800, with John Hilbert again in the chair.

The subscribers resolved that an iron railway should be built as soon as possible, and that the sum of f.30,000 be raised in shares of £l00 each, no more than five shares to be held by any one person. One hundred shares were to be reserved "for the accommodation of proprietors of lands through whose estates the said Iron Railway will pass." Walter Powell, of a firm of London bankers, Castell, Powell and Company, was appointed treasurer, William Bedcott Luttly, a Wandsworth solicitor, was appointed clerk, William Jessop was to be the engineer, with John Foakes and George Wildgoose as surveyors. An application was to be made in the next session of Parliament, for leave to bring in a Bill to authorise the construction of the railway, and to incorporate the subscribers under the name, "The Surrey Iron Railway Company." A deposit of £3 was ordered to be made on each share subscribed for.

Eight of the subscribers were elected to be a committee "for taking such steps as may appear to them necessary for carrying this measure into effect." John Hilbert, appointed as chairman, lived at Wandsworth, and owned a great deal of property at Wandsworth, Carshalton, Croydon and elsewhere, including two mills on the Wandle. In 1801 he became Lord of the Manor of Merton and thereby acquired more property. Thomas Skinner was alderman of the ward of Queenhithe, was Lord Mayor of London in 1794-95, and a leading auctioneer. He had a country house at Colliers Wood, near the proposed line of the railway, which may account for his involvement. John Barchard operated a dyeing works by the Wandle at Wandsworth, and Richard Rush was the corn miller at the Lower Mills, Wandsworth. Colonel Richard Fleming lived at Wandsworth, and was at that time the senior Justice of the Peace presiding at the West Brixton Petty Sessions court; probably he supported the railway as a financial speculation. Walter Powell was probably also attracted by the financial possibilities. There were two Walter Powells, father and son, and it was most likely the son who was involved in the project. He joined the banking firm in 1795, and no doubt his father relinquished active participation in the bank's affairs thereafter, dying in in 1802. George Tritton owned the Wandsworth Brewery (later named the Ram Brewery), situated near the terminus of the future railway, and stood to gain from improved transport facilities.

It seems likely that George Shepley, the eighth member of the committee, was the prime mover in the undertaking. It is probably significant that James Malcolm, in the passage previously quoted, relating to the bad state of the Surrey roads, specifically named "Mr. Shepley" as being one of the Wandle manufacturers who had promoted the railway. George Shepley (1738-1807) was an oil leather dresser. He went into partnership with Hugh Mears at Horsley Down, Southwark, in about 1763. In 1765 he and Mears took the lease of three mills at Carshalton, near Hack Bridge, previously copper mills, which they converted to the use of leather dressing and oil pressing. A few years later they also took over the Upper Mills at Wandsworth, and subsequently the Middle Mills at the same place. In 1789, after the retirement of Mears, he bought the premises at Carshalton previously held on lease, and subsequently he bought a great deal of adjoining land. He was thereby enabled to build a road from Hackbridge Road, near the bridge, to his mills about 450 yards to the south.

Shepley was much interested in communications relative to his mills. In 1781 he instituted legal proceedings to force the Carshalton Vestry to repair Wrythe Lane, adjoining his property, after they had declined his offer to pay £20 towards the cost. During 1794-96 he entered into negotiations with the Vestry concerning the widening of Strawberry Lane, which bordered his estate, in return for the closing of a public footpath which crossed his land. And in 1793 he offered to build a new bridge to replace the medieval Hack Bridge. At Wandsworth he was in long-continued contention with the Vestry there over the matter of his persistent blocking up of a public footpath that ran past his Upper Mills.

John Smeaton was involved in the carrying out of sundry improvement works to the Wandsworth Upper Mills between 1768 and 1789, and from 1770 to 1778 he was also

engaged on various alterations to Shepley's mills at Carshalton. It is possible, therefore, that Shepley had earlier met William Jessop, who was Smeaton's chief assistant until 1772.
A notice of intention dated 11 September, 1800, to apply to Parliament in the following session for leave to bring in a Bill to authorise the construction of a railway from Pitlake Meadow, Croydon, to near Ram Field, Wandsworth, was published during September[4]. It referred to two features which had not previously been mentioned, namely, a dock or basin at Wandsworth, communicating with the River Thames, and a branch from the railway near Mitcham Common to Hack Bridge in Carshalton. The inclusion of the latter can reasonably be attributed to George Shepley's influence. Although there were bleaching grounds in the vicinity of Hack Bridge, and a number of mills on the Carshalton branch of the Wandle, he had the most to gain from this branch of the railway, terminating near his mills. (In fact, he built a private railway from the terminus of the branch to his oil mill.)
A plan of the intended railway was deposited with the Clerk of the Peace for Surrey on 29 September, 1800. [5] The route as shown thereon included the basin and the Hack Bridge branch, and was followed fairly closely by the railway when built.
A second report by William Jessop, dated 10 December,1800, re-stated some alleged advantages of a railway, and mentioned three other railways under construction. These were a railway extension from the Ashby-de-la-Zouche Canal (then being built under Benjamin Outram's supervision); one on the Grand Junction Canal at Blisworth (a temporary railway link whilst Blisworth Tunnel was being constructed); and a branch from the same canal to Aylesbury (which was planned but never built.
Jessop gave a description of the proposed route as shown on the Deposited Plan. In an obvious reference to the contemporary schemes for the Croydon Canal and the Grand Surrey Canal, which both connected with the Thames at Rotherhithe, he wrote:
"The communication with the Thames at Wandsworth will be attended with one essential advantage, in preference to any other which has been proposed in the lower parts of the River; and that is, its contiguity to the termination of the Grand Junction Canal at Brentford; for as this Canal communicates with nearly all the Canals in the North-west of England, and will bring to the Metropolis the Manufactures of Birmingham, Manchester, the Iron Manufactures and Pottery of Staffordshire, Salt, &c. and above all it is probable that Public encouragement will be given to the bringing of coal by Inland Navigation, the County of Surrey will receive the benefits of this Communication under circumstances peculiarly favourable."[3]
The minutes of the meetings held on 12 December,1799, and 27 July, 1800, together with Jessop's reports of 9 December,1799, and 10 December, 1800, were printed and published, presumably as part of a prospectus circulated to prospective investors. Jessop's second report was probably written especially for this purpose; it is difficult to think of any other reason for it to have been made. By the date of this later report, preparations were well in hand for proceeding to the application to Parliament, judging by the only information relative to this period that has come to light. This concerns the Surrey Iron Railway committee's dealings with the City of London Corporation Court of Common Council[6].
The making of cuts into the bank of the River Thames in the London area required the approval of the Corporation of London, which controlled the navigation on the river. On 6 October,1800, William Bedcott Luttly, on behalf of the railway committee, signed a petition seeking such approval, which was presented to the Court of Common Council on 14 October. This was referred to the Navigation Committee which on 6 November referred it to a subcommittee. This subcommittee met with John Hilbert, John Barchard, George Wildgoose, and Luttly at Wandsworth on 24 November, and inspected the site of the proposed connection from the basin into the Thames.

On 26 November the subcommittee agreed that the proposed cut "will not be prejudicial to the navigation" of the Thames, and resolved to ask Luttly to make an offer in respect of the amount of compensation to be paid for the loss of the Corporation's tolls. Thomas Skinner, with Hilbert, Barchard and Luttly, attended at a meeting of the subcommittee on 3 December, and said they were unable to make an offer for the compensation until a general meeting of the subscribers was held, which would not be possible until January.

The Bills in respect of the Surrey Iron Railway, and the Croydon and Grand Surrey canals, were all examined by Parliament concurrently, between February and May 1801. The first petition for leave to bring in a bill [.....]

notice of the petition, introduced a clause requiring the Grand Surrey Canal to be carried over the intended railway where it crossed by an aqueduct, sufficiently high above the railway to permit loaded wagons to pass. The same clause required a similar aqueduct to be erected over the River Wandle. The committee also removed from the Grand Surrey Bill the proposed branches to Croydon and Epsom, and later on the stretch from Mitcham to Kingston, so that the aqueduct requirement then became non-applicable. It would have spanned the Surrey Iron Railway about 200 yards south of the junction of Church Road with Western Road at Merton.

The petition for leave to bring in a Bill for making the Croydon Canal was presented to the House of Commons on 18 February, and the Bill received the first reading on 23 February. On 4 March a petition was submitted by "Mill Owners and Occupiers of Mills and Manufactories on the River Wandle", opposing the Bill on the grounds that the proposed canal would divert water from the Wandle and thereby interfere with the operation of their mills. Many of the petitioners were supporters of the Surrey Iron Railway, and while their concern for the continuance of the water supply was genuine, one suspects that their opposition was strengthened by their interest in the railway scheme. Their petition resulted in some clauses being introduced into the subsequent canal Act, to prevent the company from taking water from the sources of a tributary of the Wandle near Croydon.

On 27 February the Surrey Iron Railway promoters presented their petition, seeking leave to bring in a Bill to authorise the making of the railway and ancillary works. The petition was referred to a committee, which reported on 5 March that the "Standing Orders of the House, relative to Navigation Bills, and Bills for making Railways", had been complied with. George Wildgoose had been examined as to the feasibility of' the route, and William Bedcott Luttly as to the alleged advantages of' the railway. The f'irst reading of' the Bill was heard on 11 March, and the second on 18 March, when it was referred to a committee.

On 16 March the Corporation of London navigation subcommittee had considered a letter from Luttly, dated 7 February, in which the sum of f.5 per annum had been suggested as the amount of compensation to be paid. They decided that the amount should be £10 per annum, together with an initial "fine" of one guinea for permission to cut the bank of the Thames. Luttly, having been informed of this decision, replied on behalf of the railway committee on 24 March, accepting the terms. He also asked that delegates should attend with him at a Commons committee meeting on 26 March, to confirm their consent, and agree the clauses to be added to the Bill to ratify the arrangements. These clauses duly appeared as sections LXXXVII and LXXXVIII in the Act. On 18 April the Bill was returned to the House, with some amendments, and further amendments were then made, and a clause added "for preventing injury being done to certain mills" , and. another directing that the commons and waste lands to be taken for the purposes of the railway should be conveyed by the local Lords of the Manor.

The Bill was read for the third time on 22 April, when it was passed to the House of Lords. The second reading there was given on the following day, when it was referred to a committee.

On 1 May, William Jessop was examined by the Lords committee, and stated, among other things, that this railway would differ from those made hitherto, in that there would be no flanges on the wheels of the wagons, thus allowing them to also run upon roads. (In fact, as we have seen, all of Benjamin Outram's railways were of this type.)
On 7 May, the committee reported to the Lords that they had made two additions to the Bill. First, that where the railway was to cross public roads, the flange on the rails should not exceed one inch in height above the road surface; and secondly, that any branch built to the manufactory of Richard Howard at Phipps Bridge, Merton, should not be carried beyond that manufactory. These provisions were duly included in the Act, the first as an addition to clause I, and the second as clause LXXXV. The third reading was given on 8 May, and the Bill was returned to the House of Commons on 12 May, when the Lords' amendments were agreed to[7].
The Royal Assent was given on 21 May,1801, and the Company of Proprietors of the Surrey Iron Railway thereby incorporated. The full title of the Act was, "An Act for making and maintaining a Railway from the Town of Wandsworth to the Town of Croydon, with a Collateral Branch into the Parish of Carshalton, and a Navigable Communication between the River Thames and the said Railway at Wandsworth, all in the County of Surrey." (41 Geo.III, cap.33).
This was the first Act to sanction a really public railway, independent of a canal, and to incorporate a railway company.

References

1. James Malcolm, A Compendium of Modern Husbandry, Vol.1, 1805..

2. Ralph Dodd, Introductory Report on the proposed Canal Navigation from Croydon to the River Thames at Rotherhithe, 1799.

3 ."Minutes of a Meeting held on 24th. July,l800, for an Iron Railway from Wandsworth to Cr oydon with the Report of the Committee and Mr.Jessop's Report thereon.".

4. The London Gazette, 9-13 September,1800..

5. Surrey History Centre, QS 6/8/4..

6. Minutes of the Thames Navigation Committee of the Court of Common Council of the City of London. (Port of London Authority Library, Museum in Docklands; microfilm copy in City of London Record Office.).

7. Information on the Parliamentary proceedings extracted from the Journals of the House of Commons, Journals of the House of Lords, and Proceedings of the Lords Committees on Private Bills (House of Lords Record Office).