

THE FIRST LONDON RAILWAYS

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This article is concerned with the first railways constructed to deal with London's own traffic, not about those which carried passengers and freight *between* London and places quite outside it. In respect of the chronological "first", the London & Greenwich of 1836 (the date here and hereafter given is that of first opening to public traffic, not that of promotion or authorisation or completion), the description "the first railway in London" or "the first London railway" suits equally well, for it was both at once; but the second London railway, the London & Blackwall, was not the second to reach London but the seventh. (This is counting the London & Croydon of 1839 as a line whose traffic was not wholly pertaining to London itself.) This is, therefore, a brief sketch of the origins and fortunes of the Greenwich and Blackwall railways, followed by an indication of some of their features which appear to have been characteristic and significant, either in themselves as features of railway undertakings or in respect of their impact on London.

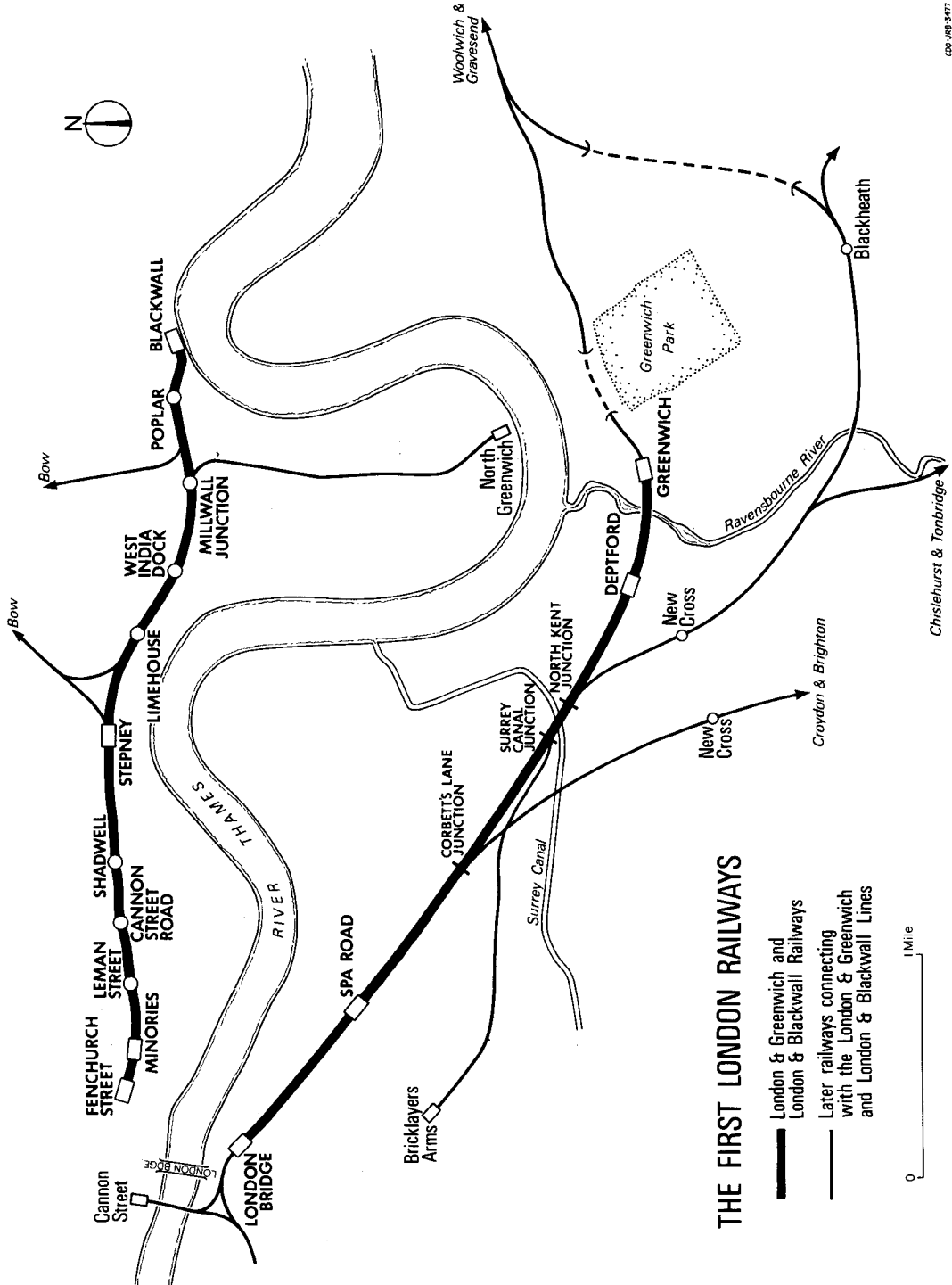
The claims of certain earlier installations to count as "first railways" must be disallowed, being excluded by the definition originally put forward by Mr Charles E. Lee, and slightly expanded by myself a few years ago, as follows:

"Broadly, the modern railway may be regarded as a combination of the following main features, namely:

- (a) specialised track;
- (b) accommodation of public traffic;
- (c) conveyance of passengers;
- (d) mechanical traction;
- (e) some measure of public control."

This list contains a mixture of technical, economic, and political elements; and I have argued elsewhere that all five elements have to be present together to form the real Railway — with a capital R — which was the agent of immense social change and one of the principal economic detonators of the 19th century.¹

If however only the first feature in the list were to be required to qualify — the technical device of a specially-formed track consisting of parallel rails which can be used only by vehicles having wheels of appropriate shape at the right distance apart — then the London area (without defining that too narrowly) can show some examples earlier than the Greenwich and Blackwall railways. Such railed ways, to use that term to distinguish them from the Railway as earlier defined, were most fully developed in the English north-east, on Tyneside, as adjuncts to the business of getting and marketing coal; they were usually called "wagonways", sometimes "tramroads".² Such a line was the Surrey Iron Railway, from Croydon to Wandsworth, built under an Act of 1801 for conveyance of public freight traffic and brought into operation in 1803, with a branch to Hackbridge in the next year. It was extended by the Croydon, Merstham & Godstone Railway which, like so many later promotions, failed to reach one of the places mentioned in its title — it got as far as the Greystone Lime Works at Hooley, fairly near Merstham, in 1805 but never Godstone. A short connecting line at Pitlake (West Croydon) to the Croydon Canal was laid about 1811.³



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Quite a different sort of thing was the demonstration of Richard Trevithick's steam locomotive *Catch me who Can* on a circular track in Euston Square, put on in 1808 like a side-show in an exhibition or a fair-ground roundabout, not a serious transport proposition. (It is a curious parallel that the first practical electric locomotive was similarly demonstrated on a circular track, by Werner von Siemens at the Berlin exhibition of 1879.)⁴ It is suggested that underground railroad tracks were used for the clearance of spoil from the so-called Thames Archway (really a driftway or tunnel) in 1807, which was partially built under Richard Trevithick's direction and then abandoned.⁵ There must also have been short lengths of railed way in the Thames dock system, rapidly expanding after 1800, and in the dockyards (a tramway with engine is recorded at Deptford Victualling Yard in 1810),⁶ and perhaps in Woolwich Arsenal.

There was certainly a stone tramway from the West India Dock gates along the Commercial Road to Whitechapel, constructed by James Walker and completed in 1829;⁷ and a quaint device, something like a suspended mono-rail though rather a continuous trestle, invented by H. R. Palmer, the principal founder of the Institution of Civil Engineers, was used inside the Royal Victualling Yard at Deptford, as well as between Cheshunt in Hertfordshire and the Lea Navigation.⁸ But all these were mere adjuncts to other processes and not Railways in their own right.

The first two real railways built to meet London's own transport requirements were the London & Greenwich and the London & Blackwall. Both of them started close to the City's boundary and ran, one north of the river and the other south of it, to points of significant riverside development some miles downstream. Why were these the first lines to be chosen for London railway development? One has to look back a few years behind the 1830s, and to another form of transport, to find the answer.

The first commercially successful application of steam power to the propulsion of ships — or at any rate, to river and estuary craft — in Europe took place on the River Clyde in 1812. A steamer began to ply on the Thames in 1815, and there was rapid growth thereafter: first up-river to Richmond and Twickenham, then with larger vessels down to Gravesend, Margate, and Ramsgate.⁹ In 1831 a member of Parliament declared (with a degree of exaggeration not unique in Parliamentary debates) that these places had been ‘recently built to accommodate the citizens [of London], a great majority of whom took advantage of steam communication’. Students of Robert Surtees' works will not need to be reminded of Mr. Jorrocks's aquatic excursion to Margate in William IV's reign on board the *Royal Adelaide* steamer. Not only Gravesend but Greenwich and Woolwich provided traffic to sustain half- or quarter-hourly services, which ran after dark in winter; and in 1837 the secretary of the Woolwich Steam Packet company, which had carried 250,000 passengers in twelve months, claimed: ‘Nearly the whole of the Government departments and I should say nineteen persons out of twenty in the town who want to come to London for business, use this mode.’ At holiday times traffic was very heavy; the Greenwich fair at Easter and Whitsuntide was an attraction for all classes, and hair-raising examples of overloading came to light. There were other shortcomings: boarding was hazardous, there were alarming navigational accidents, and in bad weather river travel was unattractive, if not positively repulsive.

Thus by the early 1830s a highly favourable opportunity presented itself to enterprising promoters to carry passengers in fairly large numbers between the City and a point down the river by some method superior to the steamboat services in point of speed, comfort, and reliability, if not of cost as well. An overland route, avoiding the difficulties and hazards of

weather and navigation, could take a shorter course than that imposed on the steamboats by the windings of the river in the reaches between London Bridge and Woolwich. On the south side, relatively open country extended to within a few hundred yards of the south end of London Bridge; on the opposite bank, although settlement was fairly dense in the East End districts, there was no high-class development by estate owners such as made acquisition of land for railways in the northern and western districts so difficult. Enough had been demonstrated by steam railways in the north of England to encourage certain groups of commercial men to try their hand at the first promotions of essentially local passenger railways in Great Britain.

The London & Greenwich,¹⁰ which emerged as London's first railway when it began operations in 1836 (to Deptford only — throughout to Greenwich in 1838), was indeed a purely local railway for the conveyance of passengers; but this was not its original design. The first scheme for a railway to cover this ground, which was one of those spawned in the so-called First Railway Mania of 1824-5, before even the Stockton & Darlington was opened, was called the Kentish Railway (sometimes referred to as the London & Dover), to run from London near the Bricklayers Arms at the top of the Old Kent Road via Deptford, Greenwich, and Woolwich on to Gravesend, Chatham, Canterbury, and Dover, with branches to the principal towns in Kent. It was proposed to build the London end first and to open as far as Woolwich as soon as that portion was completed, the expected receipts (based on observations of the existing short-stage coach traffic) being very considerable. It was of this proposed railway that the *Quarterly Review* for March 1825 wrote: "We should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's *ricochet* rockets, as to trust themselves to the mercy of such a machine, going at such a rate . . . We will back Old Father Thames against the Woolwich rail-way for any sum."¹¹ The Kentish Railway was premature, and it disappeared from view, as so many of the 1825 mania schemes did, after the issue of a couple of prospectuses (the first bearing Thomas Telford's name as engineer,¹² the second H. R. Palmer's) and a single mention in Parliamentary records. But the very formulation of the scheme at so early a date indicated that the proposed line of route was one that had evident attractions; and, like most of the 1824-5 schemes, including the London & Birmingham, for example, it emerged again after only a few years.

Late in 1831 a group of City men and a retired Lieutenant-Colonel of the Royal Engineers, George Thomas Landmann, launched a scheme for a railway to run from the foot of London Bridge (Rennie's new bridge, opened in August 1831) practically straight to Deptford and then with a north-east curve to Greenwich. It was to be carried entirely on a viaduct of brick arches, almost wholly through open, in places marshy, country except in the Bermondsey area close to the London Bridge terminus which was a teeming and insanitary slum. A footpath along each side was to be provided at ground level, for use of which a toll would be charged. These were referred to as "dainty boulevards" or an "esplanade".

There was lively opposition, particularly from coach and omnibus proprietors, among them the unlucky pioneer of London omnibuses, George Shillibeer, who was concentrating on the London, Greenwich, and Woolwich route after giving up his original Paddington-Bank service. Navigation interests, not on the Thames but on the Surrey Canal and the Ravensbourne River which both had to be crossed, insisted on extensive measures of protection; and the two turnpike trusts in south-east London, the Bermondsey, Rotherhithe & Deptford and the New Cross, could apprehend serious abstraction of their revenues.

But it appears that none of the opposing interests felt that there was any serious danger of the railway being built, even if authorised, and the Bill had a smooth passage through Parliament in 1833. It was more difficult to raise the £400,000 of capital authorised — and some of the methods adopted were found afterwards to be of dubious propriety; but in the event the viaduct of 878 arches, carrying two lines of railway practically level throughout, was opened to passenger traffic in three sections — from a temporary terminus at Spa Road to Deptford in February 1836, into the London Bridge station in the presence of the Lord Mayor of London in December, but to Greenwich only in December two years later, owing to difficulty in securing agreement about the crossing of the Ravensbourne. It was always hoped by the promoters that the line would be prolonged to Woolwich and farther into Kent. The Astronomer Royal was hesitant about the effect of any railway close to the Royal Observatory, but even after his doubts were removed there was still opposition from the Admiralty and the vicar and churchwardens of Greenwich, and these authorities managed to delay eastward extension beyond Greenwich station until 1878; Gravesend had meanwhile been reached round the back of Greenwich Hill through Blackheath and Woolwich in 1849.

The Greenwich railway, with a fifteen-minute train service, was highly successful in carrying large numbers of passengers (there was no goods traffic), and overcrowding at holiday times was notorious. The viaduct approach to London Bridge, so close to the City, was an enormously valuable asset, which the company used (or abused, in the view of some other railways) to the full by charging tolls on the trains of the London & Croydon Railway which came on to its line at Corbett's Lane junction, in south Bermondsey, from June 1839, followed by those of the London & Brighton from 1841 and the South Eastern in the next year. After much unpleasantness between all the parties, involving the building by the South Eastern of a line and new terminus at Bricklayers Arms in order to avoid use of the L. & G. tracks altogether by their trains, the L. & G. property was taken over by the South Eastern in 1844 in consideration of a 999-year guaranteed rental. The London & Greenwich company remained in existence until the Southern Railway was formed in 1923, simply in order to receive the annual rent of £45,000 and distribute it as dividend. Almost all the arched structure of the viaduct remains, now mostly hidden by later arches carrying additional tracks on either side of the originals. At London Bridge a very few features of the old Greenwich station survived until the recent reconstruction. There are some remains of the footpaths, especially near Deptford, where one portion is named 'Mechanic's Path'. The Greenwich end of the viaduct was totally reconstructed for the descent to the lower level required by the 1878 extension in tunnel, and the present station there, though similar to that of 1838, was wholly built at that time.

The story of the London & Greenwich has been admirably covered in Mr R. H. G. Thomas's book *London's First Railway* (1972); there is no call to go into it further here. But some facts, derived from this book, may be mentioned, not only for their anecdotal interest but as showing some enduring features of London's urban railways which were already present in the first manifestation. The method of construction, on viaduct, is one which became highly characteristic of lines in inner south and east London. It had been hoped to use the arches for shops and for dwelling-houses; a very few were so adapted and let in the earliest days, but the arches were not watertight and the experiment was unsuccessful. Nevertheless, almost every one of the arches is occupied today with scrap depositories, sawmills, and timber stores, a few modern factories, and many of those activities such as light-metal working

especially for motor-car repairs which, though apparently essential to the functioning of a city, today's planners do not provide for.

In 1839 the board, having run trains all day on Sundays since 1837, decided to suspend them during morning church service — a practice which became normal on local London railways and which could be detected in the timetables of the Metropolitan District and North London railways, for example, some way into the twentieth century. The Greenwich engaged two pews at St. George's church, Bermondsey for the accommodation of their men, which did not become a normal railway company practice, though several railways urged on their staffs the propriety of attending places of worship on Sunday and one, the Taff Vale, stated that such behaviour would be "the means of promotion when vacancies occur".¹³

Smoking in certain carriages was allowed by the L. & G.R., originally it appears in first-class carriages only and later in second class as well; when the South Eastern took over in 1845 they tried to put an end to the practice. Quarterly season tickets, quaintly described as "free tickets", were sold from the opening to London Bridge in December 1836, for all three classes: not however, as Mr Thomas suggests they were, quite the first railway season tickets ever issued — the Canterbury & Whitstable certainly had them in 1834, though they were quite specifically for a season only, from Lady Day to 1st November. Children's fares, at second-class rate for children between the ages of four and nine inclusive, were introduced in 1842. Only children travelling first-class benefited. Again, the Canterbury & Whitstable had been first with reduced fares for children under 12, from 1830.¹⁴ London's railways entered this tricky field of commercial policy with hesitation, and the fare tables were changed several times in the Greenwich's short life.

The business of running a railway called for skills, especially in the mechanical department, that London itself, with all its available labour, found it difficult to provide. The L. & G.'s first driver, Thomas Millender, came down from the north, where he had been on the Liverpool & Manchester for seven years (i.e. since before its opening for traffic), and it is said that all the first engine drivers came from the L. & M. similarly. Certainly the locomotive superintendent, Simon Fenwick, had been a driver on the L. & M.¹⁵ The engineer, Colonel Landmann, has already been mentioned; he died in 1854 and left memoirs of his military career but not of his connection with the Greenwich railway. The only other railway project that he appears to have been connected with was in Lancashire; he prepared plans for the Preston & Wyre Railway and the first dock at Fleetwood in 1835-6. George Walter, Secretary of the company from 1831 and "resident director" from 1835, resigned in 1837 in a cloud of financial distrust, but was presented with a handsome medal by a committee of supporters late in 1839. J. Y. Akerman, his successor as secretary, stayed in the service of the South Eastern Railway until 1847. He had previously been William Cobbett's secretary. He was a noted antiquary and numismatist, secretary (or assistant) to Lord Londesborough (the first president of the London & Middlesex Archaeological Society), founder of the *Numismatic Journal*, and secretary of the Society of Antiquaries from 1848 until 1860.¹⁶

The London & Blackwall Railway's history may be briefly outlined as follows.¹⁷ An Act of 1836 incorporated the Commercial Railway Company with power to build a line from a terminus at the Minories to a station alongside Brunswick Wharf, Blackwall, a distance of 3¾ miles. A further Act, of 1839, changed the name to the London & Blackwall Railway and authorised a short extension from the Minories to Fenchurch Street. Operation began on the original section on 6th July 1840 and to Fenchurch Street on 2nd August 1841.

This bald account conceals a number of interesting matters. Two competing lines were originally promoted, planned to cover more or less the same ground: the Commercial Railway, for which Sir John Rennie was engineer, and the London & Blackwall Railway & Steam Navigation Depot Company, with George Stephenson's engineering advice, but under the more direct supervision of his son Robert Stephenson and of G. P. Bidder, once well known as the "calculating boy", a mathematical infant prodigy. The former company won the Parliamentary contest but proved unable to raise the necessary capital, and the rival took over the undertaking — hence the change of name in 1839. The delay in securing powers for the extension to Fenchurch Street was due to an altogether more interesting complication: the Corporation of London decided in March 1836 to petition Parliament against both the Commercial and the London & Blackwall Railways (then in competition for the powers to build), and indeed against the establishment of all railways whatever within the City boundaries.¹⁸ The Corporation was moved in the matter largely by a petition that had just been presented to it by fourteen householders of the parish of St. Botolph-without-Aldgate. They alleged that the projectors of the Blackwall Railway were seeking powers to buy and demolish 120 houses, inhabited by more than 850 people; the Commercial Railway wished to pull down 177 houses, besides warehouses and other buildings, and to remove a population of up to 2,000 people. The Corporation in its petition to Parliament added two other arguments: that the formation of railways in the City would prevent the completion of plans for street-widening in order to relieve congestion in the streets, and that the constant passing of steam engines and trains would make the occupation of nearby houses scarcely endurable.

These "environmental" arguments, as they would be called today, were perfectly respectable; but some members of the Corporation had more commonplace commercial considerations in mind. They were afraid for the trade of the Pool of London if the new West and East India Docks were presented with an easy access from the City, cutting out in the latter case the river passage round the Isle of Dogs. In 1837, indeed, when having been curtailed at the Minories in 1836 the Blackwall company was back in parliament again, this time for an extension of 600 yards to Leadenhall Street ("bringing to the very threshold of the Royal Exchange the quickest, safest, and cheapest mode of conveyance known in the world"), the City's debate was dominated by the question whether or how far this would injure the trade of the Pool. In the end, the City agreed to a 415-yard extension as far as Fenchurch Street, and this was built at a cost of a quarter of a million pounds — and the Blackwall Railway's traffic was reckoned to have been increased by 50 per cent as the result.¹⁹ The extension was completely covered in, though this feature disappeared in subsequent widenings of the line. William Tite was the railway's architect; his Fenchurch Street station was replaced in 1852 by the present structure, but the good-looking building at Blackwall lasted until the Second World War.

As Sir John Clapham observed, "the locomotive engine did not win an altogether easy victory: nor, in its early form, did it deserve one".²⁰ On Robert Stephenson's advice (which showed remarkable openness of mind in the great exponent of steam locomotive traction whose *Rocket* had been the winner of the Rainhill contest on the Liverpool & Manchester Railway, in 1829) the London & Blackwall was opened with a peculiar form of traction — by cable, wound in one direction by stationary steam plant at Blackwall and in the other by engines at Minories. The last few yards into and out of Fenchurch Street were not equipped with cable; trains started by gravity (assisted by a push from the porters) and completed their

inward journey by the momentum they had acquired while attached to the rope. The two lines were not “up” and “down” but were worked separately, alternate trains using the northern and southern tracks. The intermediate stations were originally Shadwell, Stepney, Limehouse, West India Docks, and Poplar; Cannon Street Road came later, to be replaced in turn by Lemn Street; Millwall Junction was added much later, in 1872, after the cable was given up. Carriages for certain stations were dropped off the main train and braked to a stop; they started again when the rope began to move in the opposite direction, and arrived at the terminal from which they had started singly, not as a train. Thus passengers could travel throughout, or from or to certain intermediate stations, but not between any pair of intermediate stations. The arrangements are not wholly clear from contemporary descriptions, and there were probably variations of practice. The signal to start was transmitted simultaneously by electric telegraph on Cooke and Wheatstone’s patent; the Blackwall was the first British railway to be so worked from end to end.

There was a good train service, every quarter of an hour from 8 a.m. until 9.45 p.m. (the first London railways did not cater for early-morning workmen’s traffic, nor did the omnibuses), interrupted on Sunday between 10.45 and 1, being the hours of church service. Trains were not operated between Minories and Fenchurch Street on Sundays until a clause in the 1839 Act was repealed in 1842.

The original fare was 6d. first class, 4d. second class, with through bookings to Woolwich for an additional 2d., though there were later changes. Steamboats named *Railway*, *Blackwall*, and *Brunswick* were operated to Gravesend in conjunction with the railway from 1841 onwards; these were apparently the property of certain directors of the railway company, in their personal capacity. There had been no difficulty in making arrangements for Blackwall-Greenwich services by existing steamboat lines, but the Gravesend boats had all boycotted Blackwall. Traffic on the line was heavy — over 1¾ million passengers in the second six months of 1846; and in June 1844 well over half of the steamboat passengers arriving at Gravesend were from Blackwall, most of these presumably having arrived there by the railway. But the line in its first form with cable haulage was only a moderate commercial success; freight traffic was not carried during this period.

By 1849 the Blackwall had had enough of cable haulage, and of the peculiar 5ft. gauge which it had adopted at the outset. The Eastern Counties Railway (nucleus of the later Great Eastern), originally a 5ft.-gauge line, had been converted to standard in 1844; and as the Blackwall was beginning to sense the advantage of its City terminus and the possibilities of linking with other lines, in the first place by a link of its own promotion from Stepney to Bow on the Eastern Counties line, it changed over to standard gauge and steam traction in April 1849. Sir John Rennie complacently observed that his rivals had at length, after expensive experience, adopted his original ideas; and the Blackwall began to derive a large part of its revenue from tolls paid to it by the Great Eastern, North London, and London, Tilbury & Southend companies for the valuable access its line provided into the City at Fenchurch Street. Its own line was leased to the Great Eastern after 1866, but the company continued in existence until 1923. It seems that roofless third-class carriages were run on this line until the early 1860s — if so they must have been the last, or among the very last, in Britain.

The only persons of note to be connected with the Blackwall railway were the engineers Rennie, Stephenson, and Bidder, already mentioned. Included in the earliest printed membership list of the London & Middlesex Archaeological Society, dated December 1857,

was the name of F. W. Spooner, Esq., Blackwall Railway, E.; he was the company's accountant.

Some features of these two railways were particularly characteristic and significant; and some of their activities foreshadowed lines of development for the greatly intensified railway activity in the London area which was to take place in the decades following the 1840s.

First, physical alignment and construction. Both railways demonstrated the advantage of entering London by an approach which was not already occupied by high-class and expensive property, and also the significance for the future of their most precious asset. This was not, as it turned out in both cases, their value as lines earning revenue from the traffic they were designed to carry but the access they provided for trains from longer distances to get in to reasonably well sited London terminals. After the findings of the Royal Commission on Metropolis Termini of 1846, which virtually declared an embargo on future railway construction within an area roughly bounded by the Edgware Road, New (now Euston) Road, City Road, Bishopsgate Street, and Lambeth Road (the South-Western's authorised extension to Waterloo excepted), the value of London Bridge and Fenchurch Street as terminals rose very high, and the fortunate owners sat back to enjoy their toll revenue without the fatigues and less certain return of being in the business of operating. The Blackwall directors allowed themselves the hope that "Fenchurch Street would at no distant date become the London terminus for all the lines north and east of the Metropolis".²¹ But the dam burst in the late fifties and early sixties, when Victoria, Charing Cross, Blackfriars, and Cannon Street, with their river bridges, were approved; Broad Street came in the sixties and Liverpool Street in the seventies.²² The lesson had been pointed by the pioneers — a remote terminus like Euston, Paddington, or Nine Elms was no good for regular daily London rail journeys, even if the long-distance passenger might put up with the omnibus or cab journey. Similar extensions nearer to the heart of cities were seen at Liverpool (1836), Birmingham (1854), and Glasgow (1876 and 1879).

Construction on viaduct became a feature of most south and east London approaches; a close pattern of streets could not be crossed continually on the level. So London railways had to go up above the streets level with the chimney-pots, or, as the Metropolitan of 1863 showed could be done, down underground. One other technical point: the Greenwich, with standard gauge and ordinary steam locomotives, presented no special difficulty in becoming assimilated to the main system of the country; the Blackwall had to scrap its wider gauge and cable haulage before it could reap the benefit of its location. Non-conforming railways have hardly ever been successful, except on mountain-sides.

The Greenwich, and later the Blackwall, began to face the perennial problem of railway managers with city terminals — how to allocate a limited line capacity between trains from the inner area and those from farther away. Echoes of the arguments arising from this dilemma are still frequently heard.

In the commercial field both lines began to face some of the problems in the fixing of fares and provision of services which have persistently bothered railway managers ever since. How many classes? What fares for children? What through bookings to other operators' services? What trains to run on Sundays? How to deal with great influxes of traffic at holiday periods? Since, with all the benefits of information available to modern managers from sophisticated marketing techniques, it cannot be asserted with any confidence that the last word in railway commercial policies has yet been said, it is no surprise that the two railways under notice changed their minds about some of these things in the 1840s.

Financially and economically the two companies concerned were rather outside the usual run of English railway experience at the time. Construction costs were exceedingly high, and compensation claims on the Blackwall turned out to be very high. The directors, it was reported, had daily to submit to demands for compensation, compared with which the exactions of county gentry were liberal arrangements. One recent scholar has gone as far as to write: "There were very obvious advantages, in terms of speed and simplicity, to negotiations with great proprietors; and the railways always, for preference, dealt with them rather than with a multiplicity of small owners." If this was so, it was partly because of the Blackwall's early experience, which permanently strained the finances of the company. It was one of the two railway company accounts which gave the London & Westminster Bank "much trouble" — the bank eventually had to accept debentures to pay off the overdraft. For a time it had a loan of £25,000 from the Globe Insurance Company.²³ The capital of both railways was raised, as far as I can discover, wholly within the City of London, and until the lease and rent-charge arrangements were made, it did not receive any large return in interest. After that it was secure but modest, away below the high dividends of some of the freight-carrying lines like the Taff Vale in South Wales or the Maryport & Carlisle in north-west Cumberland. Investors in the public transport of London have on the whole done much more for the public than for their own pockets. There were financial scandals about both lines. The case of Walter on the London & Greenwich has already been referred to; one of the Blackwall's directors, Mr Alderman Humphery, was loudly accused of improper trading in the company's shares in 1841, but was able to show that his actions were rather indiscreet than dishonourable.²⁴

There are some curious parallels between the London & Greenwich and the first railway in Paris, the Paris and St. Germain, authorised in 1835 and opened in 1837.²⁵ The French pioneer suburban railway was soon followed by two more lines in the south-western sector of Paris, to Versailles (*rive droite*, 1839; *rive gauche*, 1840). As on the Greenwich, the St. Germain's traffic was highly seasonal, with little regular commuting; and the great hope of Emile Péreire, its principal promoter, was that his entry into the city would become the Paris railhead for all of northern and western France. There were four tracks, partly in tunnel, in the Batignolles area leading to the station at the Place de l'Europe to provide adequately for other companies' trains; and in the result, though the Nord made its own entry, St. Lazare (not the Madeleine, as Péreire had hoped) did become the terminus of the Ouest system established in 1855. The St. Germain company, like the Greenwich, did very well out of tolls charged on other owners' trains.

The physical impact of these two railways on the topography of London was obvious; but their independent lives were too short to allow any conclusion to be drawn about their effect on the communities in the places that they served. The L. & G. must almost certainly have promoted residential development which would not otherwise have taken place at Deptford and Greenwich, but this cannot be proved. It was, however, without doubt very helpful in providing facilities for the development of Mr. J. Stone's business from that of a Deptford coppersmith to that of a large general engineering firm, for Mr. Stone, who rented two Greenwich railway arches in 1842, proceeded to occupy more arch space until 1881, when he built a factory beside the line. We can be sure that the railways continued and enlarged the familiar process of immigration into the capital from other parts of the country, as with the Liverpool engine drivers; and indeed from Ireland also — the original L. & G. contractor, McIntosh, employed many Irish navvies and lodged them separately off Tooley Street;

English Ground is the name of an alley off Battle Bridge Lane, Irish Ground is (or was until recently) not far away, segregation being required in the interests of good order.

The City's original opposition to the Blackwall railway had raised certain questions of policy as between the legislature and the railways, which were to be settled, on the whole in the railways' favour, in the ensuing decades. But clearance of working-class property, although not much was said about it in the 1830s (indeed, in some ways it was regarded as a beneficial activity), became an increasingly difficult point for the railways to meet as Parliament's requirements in this regard became stiffer. In the early sixties the institution of cheap workmen's tickets was hit on and adopted as a supplementary obligation, in addition to the original payment of compensation, to be borne by the railways benefiting from large metropolitan clearances.²⁶

It is to be noted that these two railway schemes secured Parliamentary authority without serious difficulty; even the Blackwall, with its audacious proposal to penetrate the City, got virtually all it was seeking after only a year's delay. There had been opposition to both, with a considerable amount of outcry from vested interests; but the significant thing is that, although the squawks of protest were loud, the railways did get what they wanted. Historians of railways have sometimes confused loudness of protest with effectiveness of opposition; but in London at any rate, and also I suspect throughout Britain (except perhaps in Wordsworth's Lake District, and in other areas of national beauty which, on second thoughts, seemed not to promise much in the way of revenue returns), the loud noises did not have much, or very lasting, effect. As the railway companies projected their developments in the London area in the ensuing years and decades, the results turned out very similar to those of the thirties; sometimes they did not get all they wanted at the first time of asking, and sometimes they had to pay amounts that seemed to them extortionate, but generally they got where they wanted to. It was *opposition from another railway*, not from other kinds of interests or from public bodies, that was to be feared, for that could be very effective.

The contrast with the experience of tramway promoters in London is striking.²⁷ Parallel rails were successfully prevented from appearing in the streets of the City, Westminster, Marylebone, Kensington, and Chelsea, not only at the first attempt but always. If the railways had been subject to local authorities' veto, as tramways were, the railway map of London might have looked very different; but they were able to obtain their sanction from Parliament, and there they usually prevailed (at a cost).

Finally, a few words from a passenger of the past proclaiming a heartfelt grievance that is not absent from the London railway scene today.²⁸

“Greenwich Railway

“Sir, I went yesterday by the above Railway, and as they profess to go every quarter of an hour, I was at their London entrance at about 35 minutes after four, hoping to leave at the quarter to 5. I bivouacked about 5 minutes over a coke fire, when the person who received the checks said (alluding to the engine) ‘Here she comes’, and I was directed by another person to get into a carriage. I did so. It soon filled, and it was presumed that the train would have started. Five o’clock came — a quarter after passed — still we were all kept at London. On asking the cause for not going, no satisfactory reason was given. Passengers were still arriving; sixpences were taken; continued application was made for seats in the overloaded carriages, and, at half-past-five we moved. Having proceeded

about 200 or 300 yards, the whole train returned to hook on to the half-hour train (the half-past-five), and we got to Deptford, after a very slow passage, at a few minutes before six.

“It is understood that an accident occurred by the breaking down of an up-town train; and what I complain of is, that knowing that assistance was sent off, no intimation was given to those who might be in a hurry, no explanations, no apology for the delay, except, on arrival at Deptford an assistant accounted for the delay by the train being overloaded.

“. . . the concern has got your money, and then they laugh at you. Should this be? . . .”

This is the authentic voice of the London passenger: “At least tell me how long the delay is going to last, then I can decide what to do”. The management of 1838 had a lot to learn about him. Nearly 140 years later, he still runs true to the form set by his ancestors and is rarely reticent in informing the managers how they could improve the running of their railways. Even if we don't retire into the escapist cliché “plus ça change, plus c'est la même chose”, we can still accept that some fundamental attitudes and principles persist over centuries with surprisingly little real change.

NOTES

1. C. E. Lee, *The Evolution of Railways* (1943), 104; M. Robbins, *The Railway Age* (Penguin ed., 1965), 12-17.
2. C. E. Lee, “Tyneside Tramroads of Northumberland”, *Transactions of the Newcomen Society*, 26 (1947/8/9), 199-229; B. Baxter, *Stone Blocks and Iron Rails* (1966); M. J. T. Lewis, *Early Wooden Railways* (1970).
3. C. E. Lee, “Early Railways in Surrey”, *Transactions of the Newcomen Society*, 21 (1940-1), 49; C. E. C. Townsend, “Further Notes” on the same, *ibid.*, 27 (1949-51), 51.
4. H. W. Dickinson and A. Titley, *Richard Trevithick: the Engineer and the Man* (1934), 105-13; F. J. G. Haut, *History of the Electric Locomotive* (1969), 23; J. Pécheux, *L'Age d'Or du Rail Européen* (1975), 84.
5. Dickinson and Titley, 93.
6. E. A. Forward, “Simon Goodrich and his work as an Engineer”, *Transactions of the Newcomen Society*, 18 (1937-8), 16, 27; but the 1810 railroad can hardly have been of Palmer's suspended type which was not patented until 1821.
7. F. Wishaw, *The Railways of Great Britain and Ireland* (1842), 256; “the granite blocks of which tram remain to this day”, J. C. Jeaffreson, *Life of Robert Stephenson* (1864), i, 227.
8. C. von Oeynhausen and H. von Dechen, *Railways in England 1826 and 1827* (1971), 75-7; M. Robbins, “H. R. Palmer: a forgotten railway pioneer”, *Railway Magazine*, 99 (1953), 658 (reprinted in *Points and Signals* (1967), 36); J. B. Ashby, “The First Suspension Railway”, *ibid.*, 96 (1950), 270; C. F. D. Marshall, *History of British Railways down to the Year 1830* (1938), 171-4.
9. H. P. Spratt, *The Birth of the Steamboat* (1958), 87, 95-6; G. Body, *British Paddle Steamers* (1971); for the whole paragraph, T. C. Barker and M. Robbins, *History of London Transport*, i (1963), 40-3.
10. R. H. G. Thomas, *London's First Railway* (1972), is an admirable study, with full references to original sources; see also T. C. Barker and M. Robbins, *History of London Transport*, i (1963), 44-8.
11. *Quarterly Review*, 31 (1825), 362.
12. A. Gibb, *Story of Telford* (1936), 320; not mentioned in L. T. C. Rolt, *Thomas Telford* (1958).
13. D. S. Barrie, *The Taff Vale Railway* (1939), 29.
14. R. B. Fellows, *The Canterbury & Whitstable Railway* (1930), 46.
15. R. H. G. Thomas, *London's First Railway* (1972), 102 and 254 n.21, citing “Veritas Vincit”, *Railway Locomotive Management* (1847), no page given; Simon Fenwick, driver of L.M.R. Goliab, *ibid.*, 30.
16. On Landmann, see *Dictionary of National Biography* (in which his connection with the Greenwich railway is not mentioned); Preston & Wyre, J. Marshall, *Lancashire & Yorkshire Railway*, i (1969), 81, 83; on Akerman, D.N.B. and J. Evans, *History of the Society of Antiquaries* (1956), 255-6.

17. There is no published study of the London & Blackwall Railway similar to Mr. Thomas's on the London & Greenwich. The subject is well worth detailed treatment, from archives and contemporary printed sources. Particulars in the text have been drawn from scattered secondary sources, as follows:
 F. Wishaw, *Railways of Great Britain and Ireland* (1842), 255-69; J. C. Jeaffreson, *Life of Robert Stephenson* (1864), i, 227-31; *Autobiography of Sir John Rennie* (1875), 293-4; H. G. Lewin, *Early British Railways* [1925], 46, 89, 117; *id.*, *The Railway Mania and its Aftermath 1845-1852* (1936), 22, 99-100, 112, 133, 143; G. A. Sekon, *Locomotion in Victorian London* (1938), 143-5; *id.*, "1825-1925: a Centenary of Railway Steamships, Docks, Hotels, etc.", *Railway Magazine*, 57 (1925), 469; E. Course, *London Railways* (1962), 117-36; T. C. Barker and M. Robbins, *History of London Transport*, i (1963), 48-52; G. Body and R. L. Eastleigh, *London & Blackwall Railway* (1964); J. R. Kellett, *Impact of Railways on Victorian Cities* (1969), 41-2, 259-60, 269-72; A. A. Jackson, *London's Termini* (1969), 128-30; T. R. Powel, "London's Loneliest Line", *Railway Magazine*, 79 (1936), 47; C. E. Lee, "The London & Blackwall Cable Railway", *ibid.*, 87 (1941), 424; anon., "Some Notes on the Blackwall Railway", *ibid.*, 94, (1948), 185; the roofless thirds, A. R. Bennett, *The First Railway in London* (1912), 24.
18. J. Simmons, "Railway History in English Local Records", *Journal of Transport History*, 1 (1954), 163. This article has been cited by later writers in support of the incorrect assertion that the houses of 2,850 people were jeopardised by the railway; in fact, it was either 850 or 2,000: H. J. Dyos, "Railways and Housing in Victorian London", *Journal of Transport History*, 2 (1956), 12, wrote "2,850 people were threatened"; F. H. W. Sheppard, *London 1808-1870: The Infernal Wen* (1971), 134, followed this wording; H. J. Dyos and D. H. Aldcroft, *British Transport* (Penguin ed., 1974), 191, "the L. & B.R. threatened nearly three thousand houses in 1836".
19. A. Wightman, traffic superintendent, L. & B.R., to Royal Commission on Metropolitan Railway Termini (1846), Q.1123, cited by J. R. Kellett, *The Impact of Railways on Victorian Cities* (1969), 40-2; H. G. Lewin, *The Railway Mania and its Aftermath* (1936), 133.
20. J. H. Clapham, *Economic History of Modern Britain*, i (1926), 381.
21. Half-yearly report, 1847, quoted by H. G. Lewin, *The Railway Mania and its Aftermath* (1936), 142.
22. For some observations on this turn of events, M. Robbins, "London Railway Stations", *London Journal*, 1 (1975), 240.
23. J. C. Jeaffreson, *Life of Robert Stephenson* (1864), i, 278; J. R. Kellett, *Impact of Railways on Victorian Cities* (1969), 272, 333; M. C. Reed, *Investment in Railways in Britain 1820-1844* (1975), 232, 245, citing T. E. Gregory, *The Westminster Bank through a Century* (1936), i, 267.
24. J. Francis, *History of the English Railway* (1851), ii, 13.
25. P. Dauzet, *Le Siècle des Chemins de Fer en France 1821-1938* (1948), 38-42, 47-8; *Histoire des Chemins de Fer en France* (1963), ch. 2, (by J. Falaize); B. M. Ratcliffe, "Origins of the Paris-St. Germain Railway", *Journal of Transport History*, n.s. 1 (1972), 197; *id.*, "The Building of the Paris-St. Germain Railway", *ibid.*, n.s. 2 (1974), 20; *id.*, "Railway Imperialism", *Business History*, 18 (1976), 66.
26. H. J. Dyos, "Railways and Housing in Victorian London", *Journal of Transport History*, 2 (1956), 11, 90; *id.*, "Some Social Costs of Railway Building in London", *ibid.*, 3 (1958), 23; J. R. Kellett, *The Impact of Railways on Victorian Cities* (1969), esp. ch. 2 and pp. 324-36; on workmen's fares, C. E. Lee, *Passenger Class Distinctions* (1946), ch. 7.
27. T. C. Barker and M. Robbins, *History of London Transport*, i (1963), 178-97; ii (1974), 15-34, 88-9.
28. *The Times*, 17 February 1838.