

◆ Brighton's railway workers in the 1850s

by June A. Sheppard

The arrival of the railway in 1840/41 led to many changes in Brighton, including the provision of new employment opportunities on the trains, in the station, and in the workshops. Most of the railway workers lived in streets close to the station and workshops. The approximate numbers and types of workers in the 1850s are identified using both the records of the railway company itself and the 1851 Census Enumerators' Books. Birthplace details in the latter source show that many of the less-skilled jobs were filled by Sussex-born men, while engine-drivers and workshop artisans had frequently migrated from more distant parts of the country. In a small sample of Sussex-born men, a smaller percentage appear to have come from an agricultural background than might have been expected.

The arrival of the railway was a major event in the history of Brighton. It brought about an increase in the number of visitors and a change in their character, added new features to the townscape, and provided new forms of employment.¹ It is the latter aspect that will be examined in this article, with particular reference to the number of workers employed during the early years of the railway era, and the areas and backgrounds from which they were drawn.

The London Brighton and South Coast Railway Company (hereafter LBSCR) came into being in 1846 by the amalgamation of the London and Croydon with the London and Brighton Railway Company, and by 1849 the main elements of the local railway network were in place. Brighton was the meeting place for three lines: the main line to London, opened in 1841; the west coast route to Shoreham (1840), extended to Worthing in 1845 and to Portsmouth in 1847; and the east coast route via Lewes to Hastings (1846) with branches to Newhaven (1847), Eastbourne (1849) and Hailsham (1849). Brighton station building, designed by the architect David Mocatta and the largest outside London on the LBSCR, was opened in 1841. Both passenger and freight traffic grew steadily during the 1840s and 1850s, and during the early years there were limited maintenance and repair facilities for locomotives and rolling stock on the site, though the main workshops were located at New Cross, near the London end of the main line. When it was decided in the late 1840s to expand Brighton's repair facilities and to commence building locomotives there, room for the new workshops had to be found on the

station land. Manufacturing activity expanded during the following years, and this relatively small site became the major focus of industry in Brighton.²

A significant role in the workshop development was played by John Chester Craven, appointed LBSCR Locomotive Superintendent in late 1847, following experience in Yorkshire and Stratford (Essex). He produced the first Brighton-built locomotives in 1852, using the existing repair facilities and buildings. An enlargement of the passenger station in 1853 led to a reorganization of the approach tracks and the provision of space to build a workshop between the goods and passenger tracks, as shown in Figure 1. No description is known of the precise activities in this building in the 1850s. It would appear to have housed smiths who shaped iron purchased from local foundries into parts for locomotives and rolling stock, brass and coppersmiths who prepared fittings, boiler-makers, and engine-makers and engine-fitters who built the parts into working locomotives. Almost every locomotive produced in the 1850s and 1860s was different, each taking several months to complete; Craven was also noted for rebuilding locomotives to individual patterns. Each part was prepared as required, and production-line systems were not introduced until much later.³

Between them, the stations, the trains and the workshops offered a wide range of employment. On the management side, there were the stationmaster, senior clerks, inspectors and superintendents. General clerks were also needed in all departments. Signalmen and switchmen controlled the tracks around the station, and the passenger station

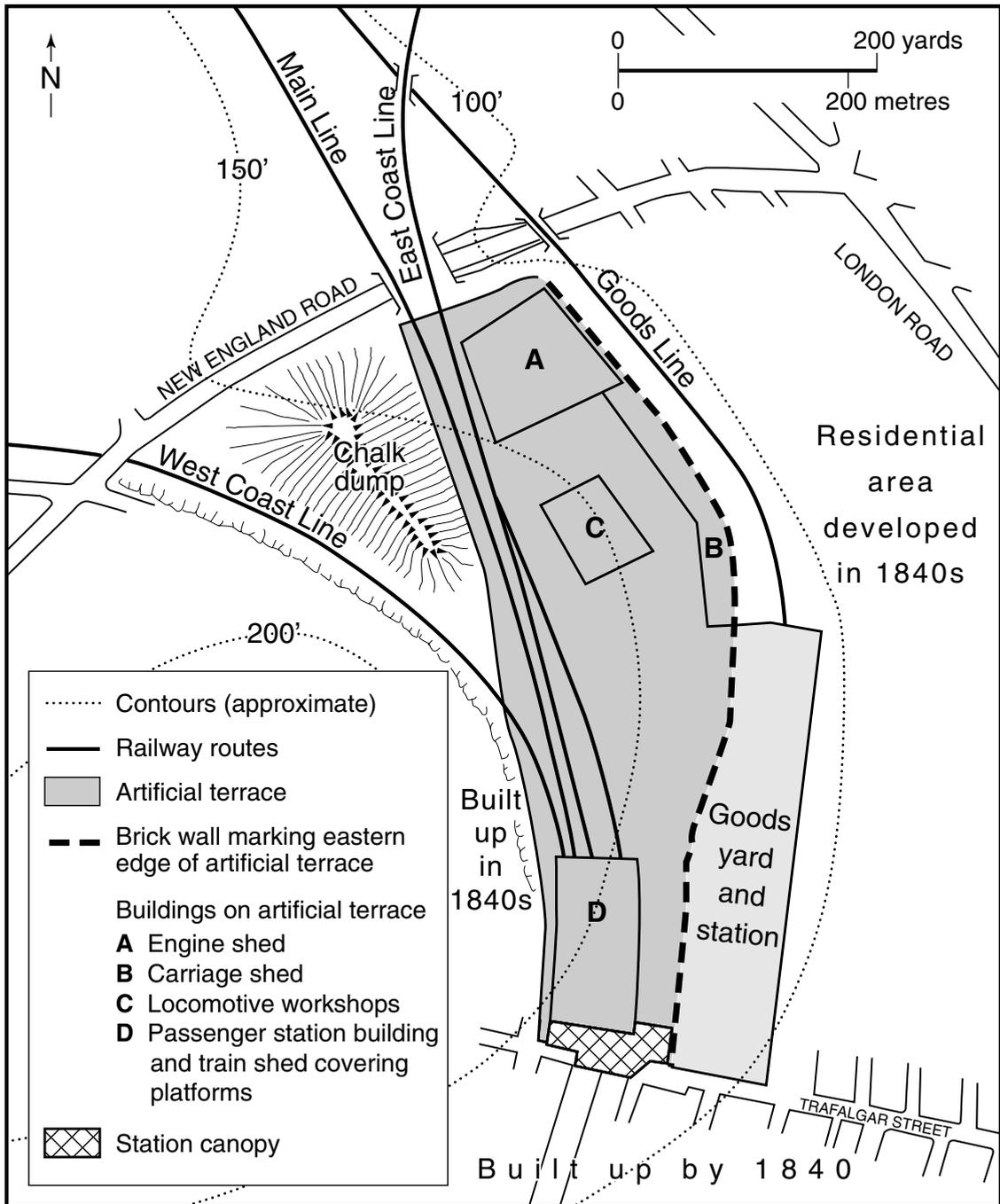


Fig. 1. Brighton stations following changes to the tracks 1853-54 (see Fig. 2 for location within the town). The artificial terrace, about 130 ft (39.6 m) O.D., was produced by excavation on the west side and building up on the east side against the 30 ft (9.1 m) brick retaining wall. The chalk dump was removed gradually during the 1850s.

employed a number of porters. The goods station and yard required goods porters to handle the freight, watchmen, and carters for delivering the goods. An army of labourers with their gangers provided for track and general maintenance, and cleaners were needed for the stations and carriages, this being almost the only grade of railway employment open to women. The working locomotives required drivers, firemen and specialized cleaners, and each train had a guard. The workshops employed artisans such as engine-fitters, smiths and carpenters, as well as a number of less-skilled assistants, labourers and apprentices. It is not surprising, therefore, to find that railway employees were drawn from a variety of backgrounds.

NUMBER OF EMPLOYEES IN THE 1850s

It is not known exactly how many people were employed by the LBSCR in the 1850s. The first extant ledger for the Traffic Department, covering the whole network, was drawn up in 1857, with each employee listed under the station where he worked; the passenger and goods stations at Brighton were listed separately. For each employee, the information provided included age, year of first employment by the company, the name of the sponsor who supported the initial application, and the weekly wage (or occasionally the annual salary) in 1857. Subsequent wage increases to 1861 (when a revised ledger was drawn up) were also noted, as well as misdemeanours, resignation or dismissal, or transfer to another station. The entries for those who left the station after 1857 are ruled through in red. The grades covered include inspectors, clerks, signalmen, switchmen, porters, guards and carters; there were also two women waiting-room attendants, widows of former company employees. These were all members of the permanent staff; those employed on a casual basis were not included, so there is no record of cleaners or general labourers. Another limitation for the present study is that the ledger does not indicate when each man began work in Brighton. In some cases this may have coincided with the date of first appointment, but in other instances a man was first employed at a local small station before subsequent promotion to Brighton.⁴

A separate ledger was kept by the Locomotive Department, covering engine-drivers, firemen or stokers and engine-cleaners.⁵ The Traffic and

Locomotive Departments were separate concerns, and only one case was encountered of transfer across the divide, when John Egan, an engine driver, lost an arm in an accident and was subsequently made stationmaster of the small station at Hove.⁶ The locomotive ledger appears to be incomplete for this period, with very few men listed as employed in Brighton.

There is no extant employment record for the LBSCR workshops in the 1850s and 1860s. Perhaps this was because the workshop employees were paid on a daily basis, as was the case in the 1870s; more likely it can be attributed to the newness of the workshops together with the suspicion that Craven was not the sort of man to be bothered with keeping records. Taken in conjunction with the other limitations of the LBSCR records noted above, this makes it necessary to look for an alternative source of evidence on employee numbers.

Such an alternative source is provided by the 1851 Census of Population. The printed reports include a table of male occupations in Brighton, but few of the categories used are relevant to an enquiry on railway employment.⁷ Far more informative are the Census Enumerators' Books (CEBs), which tell us not only each person's occupation, but also his family status, place of residence and place of birth. Coverage was comprehensive, hence casual as well as permanent employees can be identified. However, the census authorities did not request any information on the place of employment, and this is the main problem encountered when using the CEBs to identify railway workers. Some occupations cause few difficulties, because the terms 'railway porter', 'railway guard' and 'railway labourer' were used, though we cannot be sure that those who described their occupation as simply 'porter' or 'labourer' were not employed by the LBSCR. Engine-drivers and firemen were almost certainly railway men. The absence of other heavy industry in the town also suggests that the vast majority of those who listed their occupations as engineer (i.e. mechanical engineer or engine-maker), engine-fitter, boilermaker and carriage maker were employed in the railway workshops. Occupations such as 'smith', 'blacksmith' and 'wheelwright' are more problematic; some of these men had jobs in the workshops, but there would have been others who catered for the general needs of the town.⁸

The 1851 CEBs are thus a far from perfect source for the present purpose, but they are the best

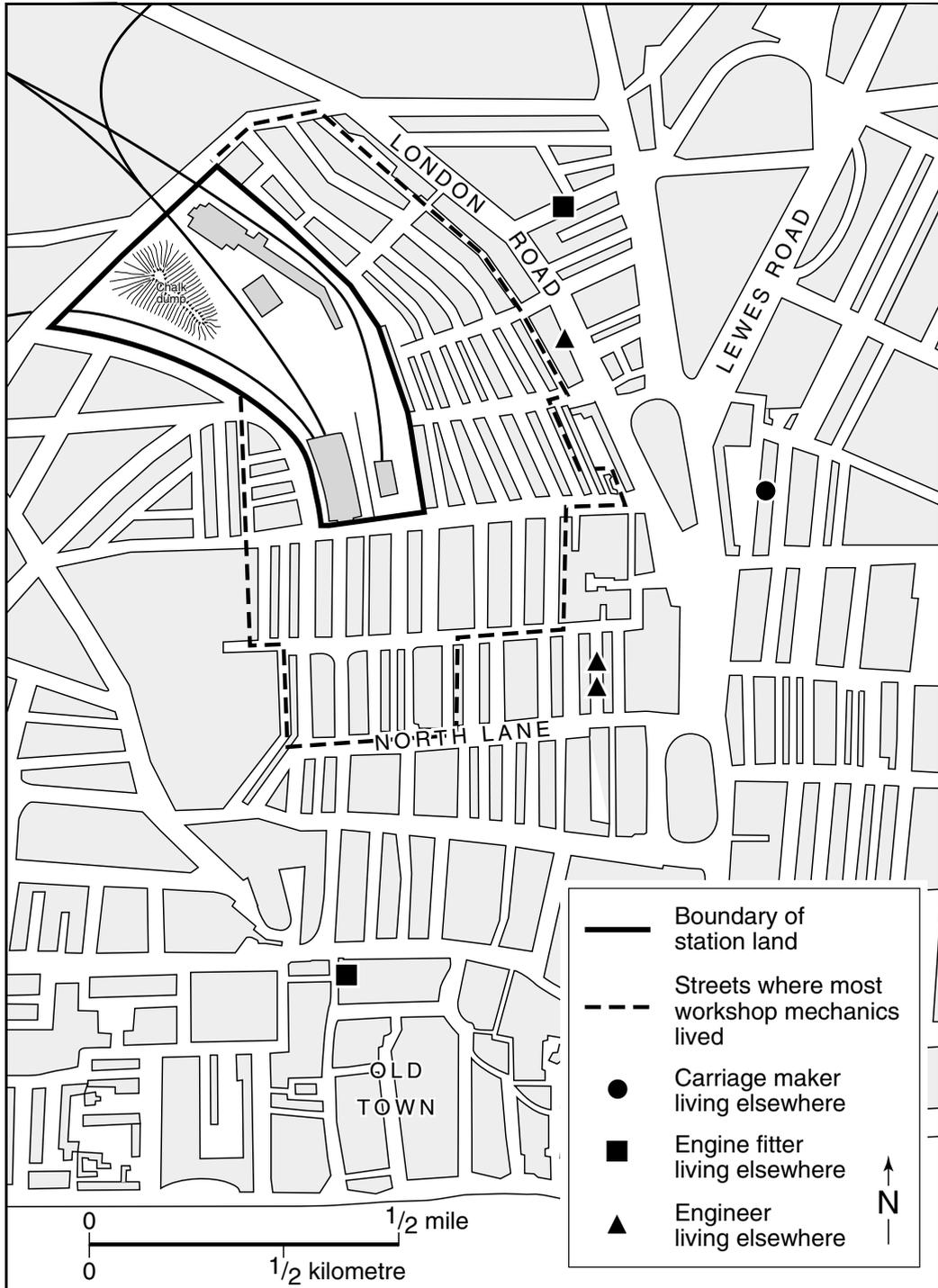


Fig. 2. The area of Brighton where most railway workers lived in 1851. The street plan is based on an undated (early 1850s?) map by J. Rapkin in Brighton Reference Library.

available. They provide details of at least some of the workshop employees and some of the casual workers. When the LBSCR records and the CEBs were compared for porters, it was found that only two men employed by the company failed to describe themselves as 'railway porters', which suggests that the term is a reliable guide to the number of LBSCR employees. The problem posed by smiths and wheelwrights is more difficult to overcome, as it is only rarely that non-railway workers can be identified from directories. The only method available was to work on the assumption that the railway workers would have lived close to their workplace. When the dwellings of engineers, fitters, boilermakers and carriage makers were plotted on a street plan, the vast majority were shown to have been living within the area demarcated in Figure 2. Smiths and wheelwrights living in the same area were therefore also assumed to have been workshop employees. This assumption may introduce an element of inaccuracy into the studies that follow, but is not thought to distort the results seriously.

On this basis, it is possible to calculate that in 1851 the LBSCR employed around 550–600 men in Brighton. Both passenger and freight traffic increased during the 1850s and the Traffic Department records show a steady growth in the number of employees. At the same time, workshop output and employment expanded. A limited measure of the employment increase is provided by a comparison of the 1851 and 1861 figures from the printed census volumes relating to the few categories of worker which were undoubtedly LBSCR employees: railway labourers increased by 76%; traffic department employees (or railway servants) by 84%; boilermakers by 117%; engine-makers by 100%. Brighton's industrial era had begun.⁹

LOCALS OR MIGRANTS?

By the mid-19th century, Brighton had long been attracting migrants from the surrounding area to work in its hotels, boarding houses and services.¹⁰

Table 1. Birthplaces of Brighton's railway workers.

	Brighton	Rest of Sussex	London & Surrey	Elsewhere	Total
Labourers	23	54	4	23	104
Porters (a)	14	21	11	14	60
Guards (b)	1	14	3	7	25
Clerks	11	11	7	8	37
Engine-drivers (c)	7	7	7	25	46
Smiths (d)	12	17	14	55	98
Engineers (e)	8	12	21	126	167
Carriage makers	6	7	7	10	30
Total	82	143	74	268	567
	14.5%	25.2%	13%	47.3%	

(a) including carters, watchmen and lamplighters; (b) including signalmen and switchmen; (c) including firemen and engine-cleaners; (d) including blacksmiths, hammermen, brass and copper smiths; (e) including fitters, mechanics and pattern-makers. (Source: 1851 Census Enumerators' Books.)

When the railway arrived, news of this additional source of employment would have spread rapidly. Some of the new jobs were within the capacity of ordinary working men with limited education or training, while others required more skill. For this reason, it is useful to examine separately the backgrounds of each type of railway worker.

Just over 100 Brighton residents listed their occupation in the CEBs as railway labourer, and we can assume that these men were fairly regularly employed by the railway company on a day-to-day basis. No record is known of their rates of pay at this time, but a figure around 2s. 6d. per day seems likely.¹¹ Table 1 shows that three quarters of these men were born either in Brighton itself or in the rest of Sussex, many of the Brighton-born being teenagers living in the parental home. Several of those born outside Sussex had been living in Brighton for some time (judging from the birthplaces of their children) and had wives born locally. Figure 3a shows that most of the Sussex-born came from places within a radius of about 20 km of Brighton and close to either the main line or the east coast line. Since many other migrants had moved to Brighton from the same districts, it seems likely that the railway labourers had been attracted by the general availability of labouring employment in the town, and just happened to have a LBSCR job at the time of the census. The same may have been true of the carters employed at the goods station, since alternative carting jobs were readily available in Brighton and most carters remained in railway employment for only a few years.

When we turn to the employees of the Traffic Department (except carters), a different pattern

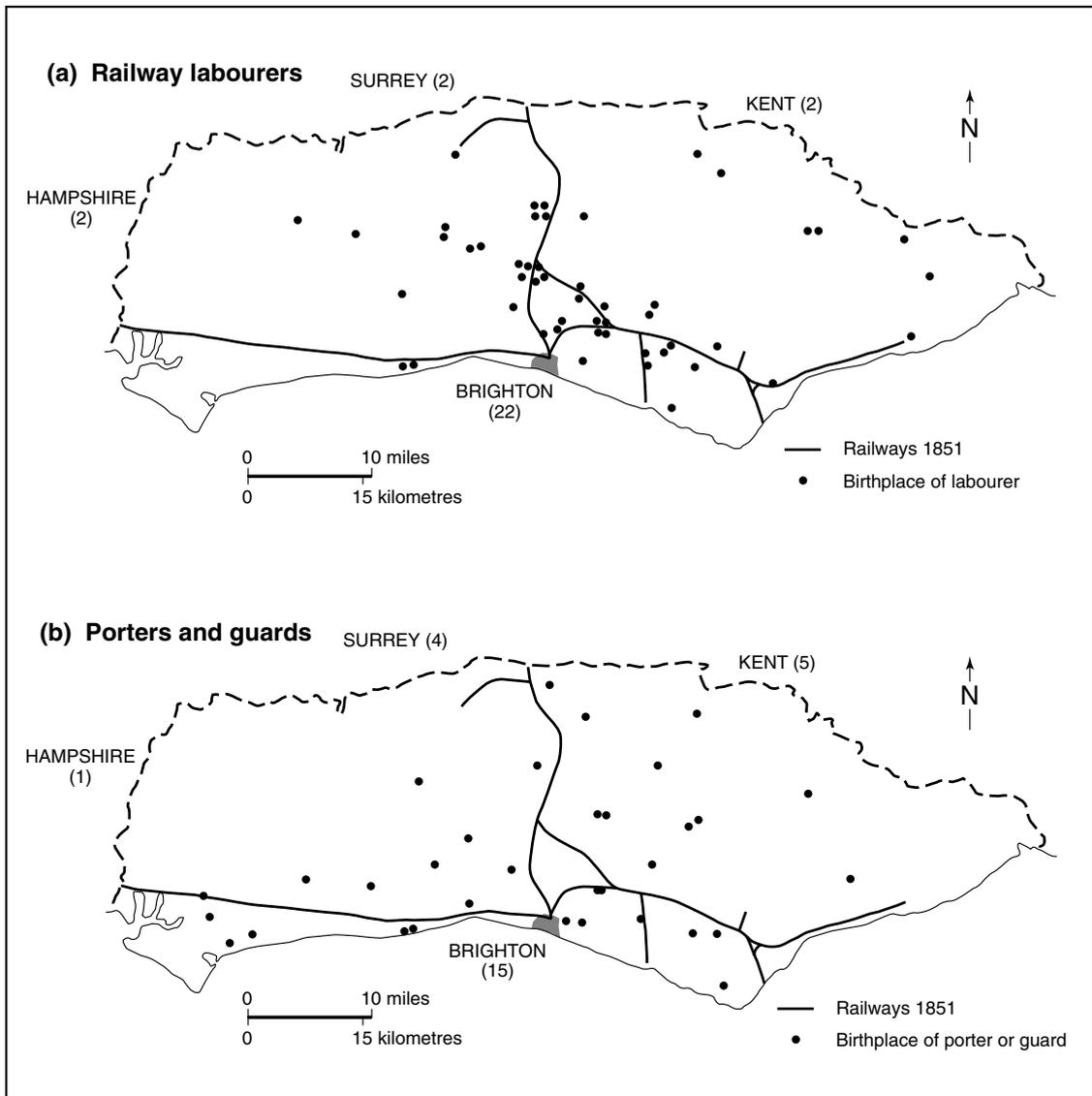


Fig. 3. Birthplaces of Sussex-born men employed by the LBSCR in 1851: a) railway labourers; b) porters and guards.

emerges. Employment as a railway porter, guard, signalman or switchman was much sought after because of the rare advantage for working-class men of the considerable security of employment. Recruits were not expected to possess any particular skills (apart from being able to read and write), but were required to be healthy, reliable and honest.¹² All applicants needed a sponsor whose name was recorded in the ledgers; some sponsors were relatives

already employed by the company and others were company directors, but the majority appear to have been either landowners or clergy in the applicant's home parish or previous employers who were willing to vouch for the applicant's good character. The lowest paid of the group were the porters, whose wages in 1857 started at 10s. per week for teenagers, and rose to 18s. for most of those over 23, a fairly standard working-class wage for the period. Few

porters ever resigned or were dismissed, and after several years of service a good man could achieve promotion to guard or head porter. Brighton together with the rest of Sussex provided over half (58%) of the 60 porters listed in the CEBs, and Figure 3b shows that those born in the county came from a wider scatter of places than was the case among railway labourers. There was also a sizeable group from London and Surrey (Table 1), almost certainly a result of the company policy of moving men on promotion from small to larger stations such as Brighton.¹³

Guards, signalmen and switchmen were slightly older and had greater responsibilities, and consequently were paid between 22s. and 28s. per week. They had usually worked for the company for several years, in some cases starting as porters. Turner suggests that signalmen and switchmen were often former soldiers and sailors accustomed to accepting strict discipline, but there is no evidence to tell whether this was true for the seven Brighton men.¹⁴ Roughly 60% of guards, signalmen and switchmen were born locally (Table 1 & Fig. 3b).

Clerks included a number of 12- to 16-year-old apprentice lads paid between 7s. 6d. and 12s. per week, while men over 21 earned 20s. to 30s. For these jobs, higher educational standards in arithmetic and handwriting must have been required. Once again, about 60% of clerks were local-born (Table 1), but in this case the emphasis was on Brighton itself. Clerks, like porters, were liable to be moved from station to station on promotion, which may explain the 19% born in London or Surrey.¹⁵

When the Traffic Department employees are considered as a whole, it is clear that the majority were Sussex-born men, with the proportion born in Brighton itself highest where the age of recruitment was low or educational standards were important. The type of reliable and honest man required for most jobs could be found without difficulty from within Sussex; many of those not born locally had been recruited to work initially at LBSCR stations in London or Surrey, only later moving to Brighton.

A different birthplace pattern emerges when we turn to the 46 Brighton-based engine-drivers, firemen and engine-cleaners (Table 1); only 30% were Sussex-born, while over half came from distant parts of the country. Engine-driving was a far more skilled job than any of those considered so far, and when a new line was opened during the early years of the railway era, drivers were sometimes enticed

from existing companies. The LBSCR may well have acquired its first drivers in this way, only later training other men to join them. The system by the 1850s involved an untrained recruit, usually in his teens, starting as an engine-cleaner at 16s. per week. After a few years, he could hope to be promoted to fireman on a wage of 3s. 6d. a day (21s. per week, assuming six-day working). After another five years or so, a fireman might be promoted to driver at 5s. to 8s. per day (30s. to 48s. per week). This was a good wage for a working-class man, although the long hours (10 to 12 per day) and heavy responsibilities were a drawback.¹⁶

The remaining group for consideration comprises the maintenance and construction workers, including both skilled men and their assistants and apprentices. There is no evidence among the LBSCR records relating to the level of their wages in Brighton in the 1850s, but the skilled men would certainly have been well-paid by contemporary working-class standards and would also have had reasonable security of employment. Because Brighton was a terminus, engine and carriage sheds had been provided early in the development of the station, and a limited amount of maintenance work had been undertaken.¹⁷ Thus there were already a few skilled men employed in the 1840s, but the scale of activity began to increase after John C. Craven was appointed as Locomotive Superintendent in late 1847. By 1851, two locomotives were under construction, and manufacturing on a larger scale became possible from 1854 when the new workshop building was erected (Fig. 1).¹⁸ Here, all the processes necessary to convert the raw materials of cast and wrought iron, copper and brass into locomotives were undertaken, and many older locomotives were almost completely rebuilt. Carriages were repaired and maintained in the carriage shop (Fig. 1).¹⁹

The first group of skilled workers to be considered are those who described themselves in the occupation column of the CEBs as smith, blacksmith, hammerer, smith's assistant, brass worker, and coppersmith. In 1851 there were 98 men with these occupations living in the area delineated in Figure 2. Of these, 44% were born in Brighton, the rest of Sussex or London, and 56% elsewhere (Table 1). Some of the latter group were from major metal-working districts like Tyneside, but most came from smaller places such as Berwick-on-Tweed and Liskeard (Cornwall). Many of the Sussex-born were from one of the small towns in the county. The pattern of distribution may

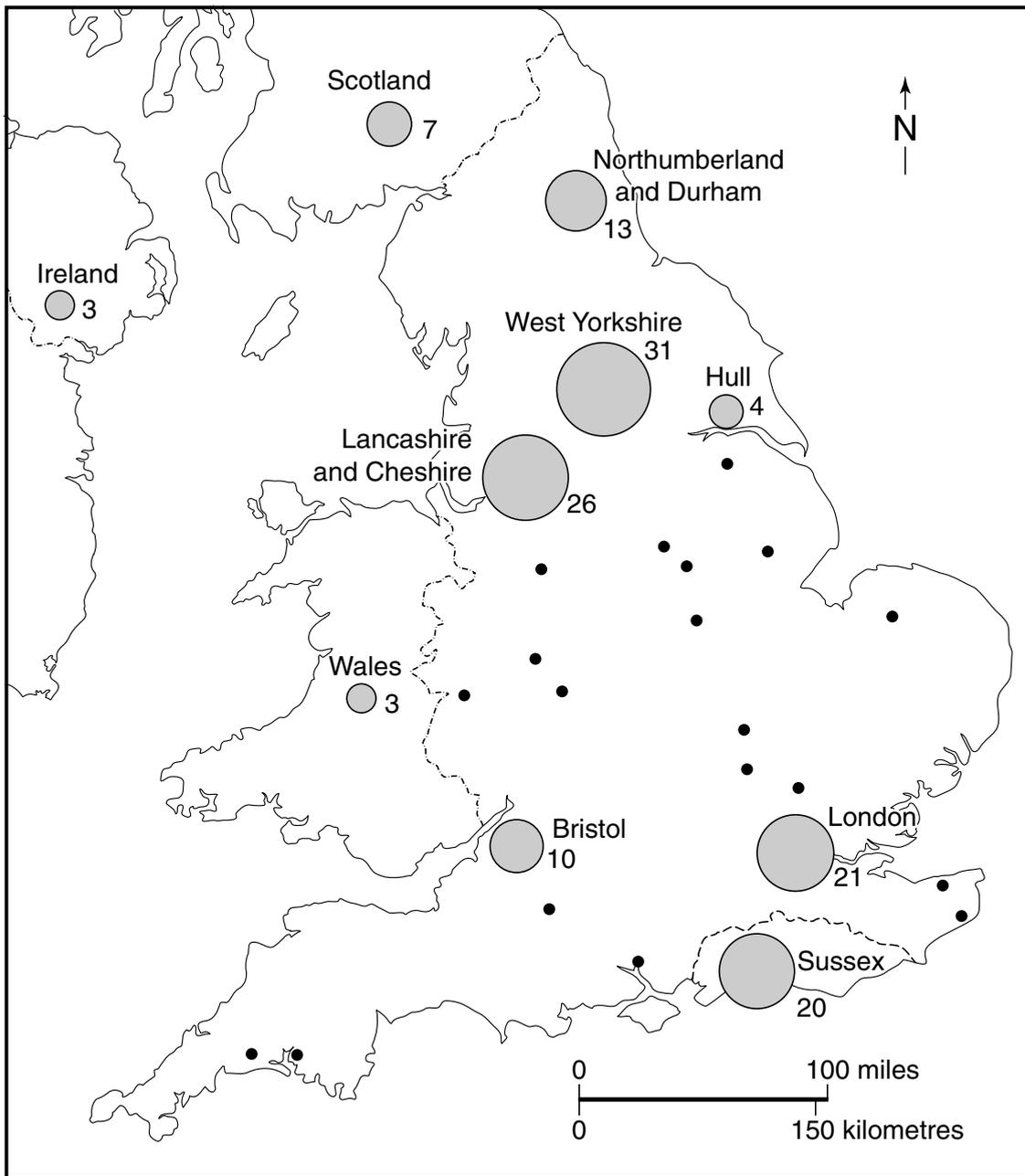


Fig. 4. Birthplaces of engineers, engine-fitters and boilermakers employed at the Brighton railway works in 1851. Each dot represents one man, circles are proportional.

largely reflect the contemporary distribution of blacksmithing activities, whereby young men, trained in country or small-town smithies, moved on to a job in the Brighton works.

The other group of artisans employed in the locomotive workshops comprised those with more specialized skills, who described themselves as engineers, engine-fitters, pattern-makers,

boilermakers and mechanics. In 1851, 167 such men lived in the streets demarcated in Figure 2. These skills were hardly represented in Brighton or elsewhere in Sussex before the establishment of the railway workshops, and when Craven began to expand manufacturing activity, he would have needed to attract men from a distance. Relevant skills were to be found in existing railway workshops such as those of the Eastern Counties Railway Company at Stratford in Essex from which Craven had just come, in marine engineering districts such as Tyneside and Bristol, and in textile engineering regions such as the West Riding and Lancashire. It is not surprising, therefore, to find that 75% of this group of workers had been born in distant parts of the British Isles (Fig. 4 & Table 1).

The third group of skilled workshop employees were the carriage makers. At this time LBSCR carriages were purchased from outside contractors, but carriage makers were required for maintenance and repair. Railway carriages were constructed largely of wood, and the skills involved differed little from those required to build coaches used on the roads. Since coachbuilding was an industry present in many towns in the 19th century, suitably-skilled employees would have been relatively easy to recruit. The pattern of birthplaces among the 30 carriage makers identified in the 1851 CEBs is thus not surprising, each of the four areas distinguished in Table 1 provided a significant share. The Sussex-born came from towns such as Lewes, Billingshurst and Storrington, while those born 'elsewhere' were largely drawn from towns in southern and eastern England such as Sevenoaks (Kent), Richmond (Surrey), and North Elmham (Norfolk).

In summary, while the 'railway servants' and railway labourers were largely drawn to Brighton from Sussex itself or neighbouring counties, a significant proportion of the workshop employees were from farther afield and this latter group injected a new population element into the town. In the 1850s this group was still small, but it marked the beginning of a significant change in Brighton's social character.

FAMILY BACKGROUNDS AND INTERMEDIATE MOVES

Among the many questions thrown up by the facts presented above are those concerned with the family backgrounds and work experience of the men

recruited. It is hoped to examine these matters more fully in a later study, but in the meantime a few of the more obvious features are outlined here.

In the case of the skilled workers born in distant parts of the British Isles, there is often evidence of intermediate moves between leaving their place of birth and arriving in Brighton. This comes from the CEB details of the birthplaces of their children. For example, Thomas Roche, a boilermaker aged 33 born in Ireland, had one child aged 14 born in Ireland, two aged 9 and 7 born in Birkenhead, one aged 5 born in London and one aged 8 months born in Brighton. William Berlinson, an engine-smith aged 34 born in Hexham (Northumberland), had a child aged 12 born in Liverpool, two aged 11 and 8 born in Hull and one aged 3 born in Brighton. Other similar moves had probably occurred prior to marriage. Such patterns of migration were common among mid-19th-century skilled engineers, giving those involved wide experience of industrial workplace conditions and practices.²⁰ In spite of Brighton's isolation from major industrial centres, the recruitment of such men would have ensured that work organization and practices came to resemble those elsewhere.

There is little evidence for such intermediate moves among the less-skilled workers, apart from those arising from the LBSCR's promotion policy. But since many of these men were born in Sussex, it is possible to discover something about their family backgrounds and the type of work they themselves may have been engaged in before being recruited by the LBSCR. It would have been feasible to seek 1851 employees in the 1841 CEBs of their birthplaces, but the general use of this approach was rejected because of the limitations of the 1841 CEBs.²¹ A more practical method was to note the names of men recruited between the date of the 1851 census (30 March) and the writing of the 1857 LBSCR Traffic Department ledger, then seek these names in two easily accessed sources, the 1851 CEBs for Brighton (on fiche with name index) and the 1851 CEBs in print (alphabetical order in each district volume) for East Sussex.²²

A small group for whom 1841 CEB evidence was sought comprised seven smiths employed in the locomotive works in 1851 who had been born in East Sussex. Four were found working as blacksmiths in their birth parishes in 1841, three of whom had blacksmith fathers living nearby who had no doubt provided their training. Two were not traced, and

Table 2. LBSCR recruits 1851–57.

Place of birth	LIVING IN BRIGHTON 1851		LIVING IN EAST SUSSEX 1851	
	Independent	Parents	Independent	Parents
Brighton	8	11	0	0
Rest of Sussex	11	1	10	10
Elsewhere	8	3	0	1
Total	27	15	10	11

Table 3. 1851 occupations of LBSCR recruits 1851–57.

Occupation	LIVING IN BRIGHTON 1851		LIVING IN EAST SUSSEX 1851		Total
	Independent	Parents	Independent	Parents	
Labourer	14	1	4	6	25
Trade/craft	7	0	4	0	11
Servant	4	0	0	0	4
Transport	2	0	2	0	4
None/helping father	0	5	0	0	5
Scholar	0	9	0	5	14
Total	27	15	10	11	63

Table 4. Occupations 1851 of fathers of recruits living in the parental home.

	LIVING IN BRIGHTON		LIVING IN EAST SUSSEX	
	Son clerk	Son porter etc.	Son clerk	Son porter etc.
Labourer	0	2	0	5
Trade/craft	4	3	1	0
Transport	3	0	0	1
Small farmer	0	0	0	1
No father	1	2	1	2
Total	8	7	2	9

one was a ten-year-old living in the home of a labourer, presumably his father. Though small, the sample supports the suggestion that country smithies were a significant source of smiths for the locomotive works.

The men listed as recruited by the LBSCR Traffic Department in Brighton between 1851 and 1857 were principally porters, guards or clerks. Many of their names were not found in the 1851 CEBs for Brighton and East Sussex, and these men must have come from other areas; in addition, a few names were too common to ensure correct identification. Sixty-three definite identifications were made, and the CEB details for these men provide clues to the type of person being recruited.

Table 2 shows that 37 of the men were living apart from their birth family in 1851, 27 in Brighton and 10 in East Sussex; some were lodgers or living-in servants, others were heads of households. The majority of this group were in their twenties, while most of the 26 still living in the parental home were younger. Nearly all those living in East Sussex in 1851 had been born there, while those living in Brighton were fairly evenly divided three ways among those born in the town, in the rest of Sussex,

and in other places. Occupations in 1851 varied with place of residence (Table 3).

Of those living in the parental home, few Brighton-resident recruits had any recorded occupation other than 'scholar' or 'helping father', while all those living in East Sussex who were not scholars, were labourers. In total among those recruits living independently, eighteen were labourers and eleven engaged in small-scale trading or craft activities; four were involved with transport (flyman, coachman, carrier) and four in Brighton were personal servants in the homes of middle- or upper-class families. Only six were working on the land, of whom five were living with their parents in East Sussex.

It is also possible to identify the occupations of the fathers of the 26 recruits who were still living in the parental home in 1851 (Table 4). Of the ten recruits who became clerks, the majority of fathers were living in Brighton and were either traders or employed by the LBSCR. Since clerks were frequently recruited when in their teens, Brighton lads could start in these jobs without having to leave home; they may also have been better educated than their country cousins. Among the sixteen who became porters or guards, the Brighton- and East Sussex-born were more evenly represented; seven had fathers who were labourers and four were fatherless, including one who was in the Brighton workhouse in 1851.

In the sample as a whole, only 6 out of the 42 men already employed in 1851 (14%), and only 6 out of the 20 fathers whose 1851 occupation is known (30%), were then working in agriculture. This Brighton evidence therefore appears on the surface to support the view of Kingsford that railway workers were drawn from a variety of backgrounds, and not predominantly from agriculture as some 19th-century commentators had suggested. Nevertheless, it is feasible that many others from an agricultural

background had worked for only a short period in a non-agricultural occupation before being recruited by the LBSCR. Until a fuller study has been undertaken, the matter remains unresolved.²³

CONCLUSION

By the 1850s the LBSCR was beginning to play a major part in the economy of Brighton. It provided employment for some men who were already living in the town, and others who were drawn from the town's traditional hinterland in rural Sussex. The stable character of this employment, combined with the sponsorship system for recruitment of railway servants, ensured that many of those employed belonged to what has been termed the 'respectable' working class. In addition, the locomotive works

attracted highly-skilled metalworkers to the town, mostly from the older industrial areas of the country, and these men brought with them some of the customs and working practices of the longer-established industries. The families of the Sussex men and of distant migrants lived side by side in a new working-class district close to the station and workshops, forming a community that in the 1850s must have appeared raw and alien to the inhabitants of 'old' Brighton, but which by the late 19th century came to represent a significant element in the town.

Acknowledgement

The maps were drawn by Edward Oliver, cartographer in the Department of Geography, Queen Mary (University of London).

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NOTES

- ¹ S. Farrant, K. Fossey & A. Peasgood, *The Growth of Brighton and Hove 1840–1939* (Brighton: CCE Occasional Paper **14**, 1981).
- ² B. K. Cooper, *Rail Centres: Brighton* (London: Ian Allen 1981). C. Hamilton Ellis, *The London Brighton and South Coast Railway* (London: Ian Allen, 2nd edn 1971). K. Lancaster & R. Martin, 'Brighton station: an architectural and historical appraisal', *Sussex Industrial History* **28** (1998), 3–11. C. D. F. Marshall, *A History of the Southern Railway* (London: Ian Allen, 2nd edn revised by R. W. Kidner 1963). J. T. Howard Turner, *The London Brighton and South Coast Railway*, vols 1 & 2 (London: Batsford 1977). E. J. Tyler, 'The centenary of the Brighton works', *The Railway Magazine* **98** no. 613 (May 1962), 291–3.
- ³ C. Hamilton Ellis, *Twenty Locomotive Men* (London: Ian Allen 1958), 21–33. Ellis described Craven as 'harsh and bigoted' but as an engineer 'enthusiastic and of tireless energy'. Standardization 'was the last thing likely to appeal to him. He designed as many engines as he could, for the love of it'.
- ⁴ Public Record Office (hereafter PRO), RAIL 414/770.
- ⁵ Staff Register No.1, PRO, RAIL 414/863.
- ⁶ Traffic Staff Histories 1856, PRO, RAIL 414/767.
- ⁷ *Census of Great Britain 1851*, [C 1691, I], H.C.(1852–53), Occupation Tables Southeastern Counties.
- ⁸ PRO, HO107/1645 and 1646. I used the transcripts on fiche produced by the Sussex Family History Group, 1997–98.
- ⁹ *Census of Great Britain 1851. Census of England and Wales 1861* [C3221], H.C. (1863), Occupation Tables South-

eastern Counties.

- ¹⁰ M. Ray, 'Domestic servants in a superior suburb: Brunswick Town, Hove', *Sussex Archaeological Collections* **131** (1993), 172–84.
- ¹¹ Terry Coleman gives the weekly wages of railway navvies in 1851 as 14–15s., in *The Railway Navvies* (London: Penguin Books 1968), 67.
- ¹² P. W. Kingsford, *Victorian Railwaymen: the Emergence and Growth of Railway Labour 1830–1870* (London: Frank Cass 1970), xv and 1–12.
- ¹³ Kingsford, *Victorian Railwaymen*, 129.
- ¹⁴ Turner, *The London Brighton and South Coast Railway* **2**, 24.
- ¹⁵ There was one female railway clerk in 1851, but as she does not appear in the LBSCR register, we do not know what she was paid.
- ¹⁶ 'Regulations adopted in 1840 for the first appointment of an engineman' in Turner, *The London Brighton and South Coast Railway* **1**, 168.
- ¹⁷ Marshall, *Southern Railway*, 442.
- ¹⁸ Turner, *The London Brighton and South Coast Railway* **2**, 233.
- ¹⁹ Marshall, *Southern Railway*, 442.
- ²⁰ E. J. Hobsbawm, *Labouring Men* (1964), 34–63. H. R. Southall, 'The tramping artisan revisits: labour mobility and economic distress in early Victorian England', *Economic History Review* **44** (1991), 272–91.
- ²¹ E. A. Wrigley (ed.), *An Introduction to English Historical Demography* (London: Weidenfeld & Nicholson 1966), 229–31.
- ²² For Brighton CEBs see note 8. *East Sussex Census 1851 Index*, 23 vols, compiled by C. J. Barnes (Hastings 1988–94).
- ²³ Kingsford, *Victorian Railwaymen*, 2–5.