

LEICESTER FOUNDRIES IN THE EARLY NINETEENTH CENTURY

by

G. T. Rimmington¹

During the last decade of the eighteenth century and the first decade of the nineteenth the English metal industries were expanding at a faster rate than any other group of industries.² To some extent this was because of the increase in demand for armaments arising from the Napoleonic Wars, but another factor was the construction of canals, which had reached its peak during the later eighteenth century. The new inland waterways made possible a continuous supply of cheap coal, iron and other heavy commodities to towns which hitherto had had their development hindered by the lack of nearby sources of such raw materials.

It was soon after 1790 that the inhabitants of Leicester were becoming excited by the possibilities of canalisation of the River Soar. When the town was linked by waterway with the Trent it was realised that this would make available at relatively low prices coal from the largest coalfield in the country as well as bar iron from the furnaces of the Chesterfield area, thus increasing the industrial potential considerably.

As early as 1792 the Radical newspaper of Leicester commented that "the banks of the Soar in the vicinity of this town, already wear the appearance of increasing commerce. Speculations are increasing, Wharfs are preparing, and Manufactories are erecting to welcome the approach of our expected Navigation".³ It was in this same year that the first foundry appeared.

Edward Arnold had obviously been a prosperous watch and clockmaker, as well as a bell-founder. Earlier he had been bell-founding at St. Neots, but by the last decade of the eighteenth century he was working in Horsefair Street. It was not a very great step from bell-founding to general iron and brass-founding. So it was that he announced that he had built an iron foundry near the West Bridge, where he was intending to commence "prosecuting the Branch of Casting Iron to its utmost extent".⁴ Arnold had in fact been experimenting in general iron-founding at his Horsefair Street premises, for in beginning this new venture he made it clear that he was *continuing* to make "Engines to extinguish Fire, Garden Engines, Weighing Machines for Turnpike-Roads, Electrical Conductors for defending Churches, Houses, &c. against the destructive effects of lightning".

Arnold's foundry appears to have been established prematurely, anticipating the arrival of the canal and launched in the optimism of a boom period. There had at that time been a national expansion of the constructive industries for the making of canals, roads, ships, and factories. This had encouraged an expansion of those industries which supplied them, which included some of the metal industries. The whole movement had reached its climax in 1792.⁵ In the following year Revolutionary France and Britain went to war. This precipitated a financial crisis of short duration, but of great severity. Even at Coalbrookdale the Darbys were experiencing financial

embarrassment, for there was an emergency call by the partners for a loan of £4,000.⁶ Since "over a hundred British banks were obliged to close their doors" it would have been surprising if the Leicester banks had not restricted loans.

It is certain that the foundry must have failed in 1793, for in the following year we find Arnold described as a watch and clockmaker, but not as an iron founder.⁷

The first successful iron foundry in Leicester was established in 1799 on the canal bank at the Public Wharf in Belgrave Gate.⁸ This developed out of the ironmongery business of James Cort, who had moved into the town in 1784 from Smeeton Westerby to become apprenticed to Alderman John Price, an ironmonger and cutler.⁹ By 1793 Cort had become established as a master ironmonger, having purchased the business of T. Cotchett in the Market Place.¹⁰

For a short time Cort's business did not differ in any way from that of other local ironmongers, but within two years he was beginning to emerge as an engineer of promise. In 1795 he began to sell his own "patent winnowing machine".¹¹ Soon he was making a wider range of ironmongery to sell in his shop. By 1799 he had probably opened the Britannia Foundry, and two years later still four apprentices were being bound to the business, one at least of whom was to learn to be a moulder.¹² During the first decade of the foundry's existence no fewer than fifteen apprentices became bound.¹³ In order to extend his business and become a substantial iron founder Cort had had to take in partners, these being William Watts and Benjamin Cort, his brother.¹⁴ Watts was probably the victualler who apprenticed his son to a framework knitter in 1799.¹⁵

The Britannia Foundry was the principal foundry of the town during the first half of the nineteenth century, but there were others which came into existence during this period. By 1827 there were five firms described as iron and brass founders in Leicester.¹⁶ All of these were general founders, the demand being small and localised. One foundry was producing "spouting, window frames, railings, &c." at a cost of £21 for the enlargement of the Friar Lane Baptist Meeting House in 1818.¹⁷ Some ironwork was supplied to St. Margaret's church from the Britannia Foundry in 1828.¹⁸ The same foundry had made the first gas lamps for the town in 1821.¹⁹ William Keightley, described as a millwright and patent axle manufacturer, also made iron fencing.²⁰ Harvey Jordan, who opened his iron and brass foundry in Highcross Street in 1825, announced that he was "erecting a Furnace for the purpose of smelting Lead Ashes" and that among other things he manufactured ovens, boilers and stove grates.²¹

Of the early foundries only two were located on the banks of the canal or the river. The Britannia Foundry was at the Public Wharf; that of Glover, Mercer & Co. was at the West Bridge. But Harvey Jordan in Highcross Street, William Keightley in Colton Street, and Richard Willson in Charles Street were nowhere near the waterways. It is probable that social factors were more important than economic factors in these three cases. Jordan had probably lived in Highcross Street for some time, for there was a hairdresser bearing the same family name also living in the street. In the case of Richard Willson there was a firm of brickmakers of the same family name nearby.²²

Although social factors are frequently more important than economic and geographical factors in the location of small foundries, the latter are

more important in the long run. With regard to the foundries in existence in 1827 there was a tendency for those located away from the canal to disappear, while the others tended to remain for much longer. Jordan's business did not last longer than four years, while some others similarly located were bankrupt much sooner. The Britannia Foundry, a large business, perfectly located from the point of view of the receipt of raw materials at minimum cost, competed very successfully with others in the town. Although Glover, Mercer & Co. disappeared from the West Bridge they had their successors in Jarratt & Co.,²³ who remained in business for many years.

The Rutland Foundry of Richard Willson was a notable exception to the rule. Willson ran his business successfully until his death in 1847, although it was located at some distance from the canal. That the business was a comparatively large one is indicated by the number of apprentices bound. There were as many as thirteen recorded between 1824 and 1833, suggesting that the Rutland Foundry was second only to the Britannia.²⁴

With the construction of the Leicester & Swannington Railway in 1832 there was an increase in the demand for castings, which was partly met locally. Cort had a tender accepted for the supply of malleable iron rails and keys.²⁵ "One hundred tons of rails were delivered early in October and arrangements made for 40 tons to be received on the 1st of each month from December [1830] onwards until further notice." This must have resulted in considerable expansion of the Britannia Foundry; during the months of May and June in 1829 eight new apprentices appeared.²⁶ Although no local foundry had the facilities for making locomotives, Cort was able to help George Stephenson to remedy a defect in the celebrated *Samson*, by making and fitting two trailing wheels.²⁷

One foundry owed its existence to the demand for castings in railway construction. Jonathan Ride appeared in Leicester round about 1827 at the Vauxhall Wharf, where he had been described as a millwright.²⁸ By 1835 he had taken Edward Coleman into partnership, and the business became known as Ride, Coleman & Co. of the Vauxhall Works. They were then known as iron and brass founders, engineers and millwrights.²⁹ For some reason Ride stepped out of the business after a short time and Coleman was left as the sole proprietor. Unfortunately for him there was soon to be a reduction in the rate of railway construction. Also there came considerable competition from Scottish cast products which, with the adoption of the hot blast process, now had an advantage in cost in spite of the long southward journey.³⁰ Furthermore there was increasing competition from South Wales. The production costs at Ebbw Vale and Dowlais were so low in 1835 that wrought-iron rails weighing 42 lb. per yard could be transported as far north as Hexham.³¹ Thus it was not surprising that in 1837 Coleman was "declining the Engineer, Millwright and Boiler Trades of the late firm of Messrs. Ride, Coleman and Company". Among the effects which he offered for sale were "a few sets of Railway Wheels and Axles fitted".³² When, in the following year, his bankruptcy was declared there were some railway keys among his effects.³³

With the coming of the railways there were no significant locational changes among the foundries of Leicester, although there was an obvious advantage, as far as raw materials were concerned, in acquiring sites alongside the railways.³⁴ To some extent this was due to the continuing competition from the canals. Canal profits were considerably reduced, but still

the navigation companies competed for a few decades. The almost completely local demand for Leicester castings influenced many of the smaller foundries to remain in apparently bad locations rather than move to other sites alongside the railways where there would be advantages in the ability to serve distant markets as well as in the lower cost of transporting raw material. Furthermore the difficult economic circumstances of the late 1830s and the early 1840s prevented the expansion of local foundries. There is a tendency for the *status quo* to be maintained during depressions and for the relocation of large businesses to take place during boom periods. In any case Leicester, during the late 1830s, had few iron founders of great ability. The most able men were those who controlled the Britannia and Rutland Foundries. These were both nearing the end of their careers, and in neither case were there any sons eager and able to continue the work.

Leicester was far the greatest centre of foundry work in the county. This may be illustrated by the figures given for males over twenty years of age employed in foundries in 1831.³⁵ In that year there were, in the whole of Leicestershire, ninety foundry workers. No less than eighty-seven of these were working in the county town. Loughborough, which had become a canal town a few years earlier than Leicester, and might therefore be expected to have developed a thriving foundry industry, possessed no more than a one-man business. The county town, with its large and rapidly expanding population, had a considerable market within itself. A greater supply of free capital, moreover, was available for investment of this kind in such a large centre. Outside the immediate area of Leicester the markets seem to have been controlled by the foundry industries of the North and West Midlands, and this prevented the development of foundries in the rest of the county.

NOTES

1. The substance of this essay is taken from chapter two of the author's thesis ("The Historical Geography of the Engineering Industry in Leicester") for the degree of M.A. in the University of Leicester.
2. W. H. B. Court, *Rise of the Midland Industries* (1938), 143.
3. *Leic. Herald*, 23 June 1792.
4. *Ibid.*, 12 May 1792.
5. W. W. Rostow, *British Economy of the Nineteenth Century* (1948), 41.
6. T. S. Ashton, *Iron and Steel in the Industrial Revolution* (1951), 142.
7. R. Weston, *Leicester Directory* (1794), 1.
8. In 1870 it was believed by the then owner that the Britannia Foundry was established in 1799 (*Leic. Journal*, 13 May 1870). Certainly it was thriving in 1804 (Susannah Watts, *A Walk through Leicester*).
9. H. Hartopp (ed.), *Register of the Freemen of Leicester* (1933), 465.
10. *Leic. Herald*, 27 Apr. 1793.
11. *Leic. Journal*, 23 Jan. 1795.
12. Hartopp, 516-8.
13. *Ibid.*, 516-544.
14. *Ibid.*, 516.
15. *Ibid.*, 511.
16. T. Combe, *Leicester Directory* (1827), 63.
17. D. Ashby, *Friar Lane Baptist Church* (1951), 46.
18. *Leic. Journal*, 25 July 1828.
19. *Victoria History of the County of Leicester*, iii. 26.
20. Combe, 71, and advertisement pages.
21. *Leic. Journal*, 26 Aug. 1825.
22. Combe, 26, 53.

23. T. Cook, *Leicestershire Directory* (1842), 59.
24. Hartopp, 586-609.
25. *Trans. Leics. Arch. Soc.*, xxx. 97.
26. Hartopp, 600.
27. *Leic. Illustrated* (1891), 105-6.
28. J. Pigot, *National Commercial Directory* (1828-9), 487.
29. Pigot, *National Commercial Directory of Leicestershire and Rutland* (1835), 131, 133.
30. A. D. Gayer, W. W. Rostow and A. J. Schwartz, *The Growth and Fluctuation of the British Economy, 1790-1850* (1953), 290.
31. J. H. Clapham, *An Economic History of Modern Britain*, i. 382-3.
32. *Leic. Journal*, 1 Sept. 1837.
33. *Ibid.*, 2 and 16 Feb. 1838.
34. Leicestershire rail-borne coal was, in and after 1832, being sold in the town at less than 10s., while Derbyshire canal-borne coal had been about 18s. per ton: F. S. Williams, *Midland Railway* (1880), 32; W. Gardiner, *Music and Friends*, i (1838), 93.
35. Census Report, 1831.