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paths, some of which still exist among the hills. The first coke-heated furnace was built by Francis Hurt in 1780, and other blast furnaces were erected near Chesterfield and at Wingerworth and Staveley in the following year. In 1855 there were thirty furnaces, with an annual output of 158,000 tons, out of 746 in Great Britain producing 4,400,000 tons.¹ The great modern successors of the old Derbyshire ironmasters abandoned the local ores in the sixties, when Northamptonshire oolitic ironstone took their place. In 1875 Lincolnshire stone was introduced and used with great advantage as a fluxing agent, mixed with the more silicious Northamptonshire ore, of which it is now an important rival; for not only is it used in the Derbyshire furnaces, but large blast-furnace plants have been erected in the midst of the mines themselves, notably at Scunthorpe, thereby saving the heavy carriage rates on the ore.

The coal worked almost exclusively until recent years was that of the valuable "Top Hard" seam, known in Yorkshire as the "Barnsley Bed," great quantities of which are taken by railways and steam-users in the Midland

¹ The number and capacity of blast furnaces in the Derbyshire district in 1855 were as follows :---

Name of works.	No. of furnaces.	Weekly make per furnace. Tons.	Annual production of furnaces. Tons.
Staveley Codnor Park Alfreton Butterley Hall Wingerworth Staunton Morley Park Renishaw Clay Cross Adelphi Newbold	4 3 3 3 3 3 2 2 2 2 2 2 2	90 110 90 100 120 120 70 110 100 100	18,720 17,160 14,040 15,600 18,720 18,720 7,280 11,440 10,400 10,400 10,400
Total	30	100	5,200