

lord keeping a clerk to check the produce, which is also tested by the receipts from the mines at the railways and canals.

It would appear that the most improved methods of working coal practised in this country are also adopted at the great coal mines of Pennsylvania. The descent is often by shafts, with an inclination of 55°. They have, as with us, a subterranean road, called the highway, to which the coal is brought by branches, and it is raised by the methods which we adopt.—The price of the anthracite is \$6½ in Philadelphia and \$7½ in New York, per ton of 2000 lbs.; but wages are rising at the collieries, and labourers, who three years ago only received from 87½c. to \$1, are now paid from \$1 to \$1½ per day.

Great quantities of the coal of this region are carried by the railway from Pottsville, through Reading, to Philadelphia, generally known as the Reading Railway. Much English capital is invested in this company, and as it is believed that the present floating debt will be absorbed by the profits in about a year, the stock has recently advanced from 31 to 36½. The details respecting a railway almost entirely dependent for its prosperity on its coal traffic are curious. Its working stock consists of 105 locomotive steam-engines; general freight cars, 684; passengers' cars, 40; coal cars, 4792. The receipts from the road, in 1853, were \$2,688,283, of which passengers contributed \$225,783; merchandise, \$180,612; and coal, no less than \$2,254,694—a state of traffic contrasting strangely with the railway returns of England. We are assured that recently no fewer than 2500 cars, each containing 4½ tons, were in one day sent down the road from Pottsville and Schuylkill Haven to Philadelphia, Richmond. The present freight to Philadelphia is \$2½ per ton, and the receipts are frequently \$20,000 per day.

Railways in America necessarily possess vast advantages over canals for the carriage of coal, railways being open and in action all the year, while canals are closed by ice all the winter. and as the coal railways of the American Union promise well, we are glad to learn that a large proportion of their stock and bonds is held in England. The Reading Railway has been the cause of converting the upper part of the city of Philadelphia, called Richmond, into an American Newcastle-upon-Tyne, and a fleet of coal vessels is now to be constantly seen lying there.

The canals communicating with the Pennsylvania coal field appear to be also highly prosperous, and the details which we have thus in a condensed form presented to our readers, must satisfy them that, however great and rapid the general advance of the United States has been, the singular increase, within a limited and defined period, of the anthracite coal trade, is probably the most striking and remarkable feature which it presents to our consideration.—*Mining Journal*.

The Report on Railways for 1853.

BY CAPTAIN GALTON, R.E.

The length of new lines of railway sanctioned by the legislature in the United Kingdom during the year 1853, was 940 miles, which amount is very considerably greater than that sanctioned during any year since 1847. Of this amount 589 miles were in England, 80 miles in Scotland, and 271 miles in Ireland.

Among the most important of the new lines in England appear to be the following, viz:—A line from Strood to Canter-

bury, by which the communication by railway along the south bank of the Thames will be rendered continuous as far as the North Foreland. The Portsmouth railway by which a direct communication will be afforded between Portsmouth and the metropolis. An extension of the Midland railway from Leicester to Hitchin on the Great Northern Railway, by which a second line of communication will be afforded from the Midland districts to the metropolis, and the Worcester and Hereford Railway, by which a more direct road will be opened between the Midland Counties and South Wales.

In Ireland the most important line would appear to be the Londonderry and Coleraine Railway, by which a direct route will be afforded between Belfast and Londonderry; and the Londonderry, Coleraine, and Sligo Railway, which will afford a direct railway communication from Sligo to Londonderry and to Dublin.

The total length of railway which has been authorised by Parliament to the end 1853 is 12,688 miles. Of this number of miles 7686 have been opened for traffic, leaving 5002 miles to be completed; but the compulsory powers of 2838 miles have expired without being exercised, or the railways being opened to the end of 1853. The length of railways for the construction of which Parliamentary power exists is 2164 miles. The length of railway opened previously to December 1843, was 2036 miles. The length opened in the year 1844 was 204 miles; in 1845, 296 miles; in 1846, 606 miles; in 1847, 803 miles; in 1848, 1182 miles; in 1849, 869 miles; in 1850, 625 miles; in 1851, 269 miles; in 1852, 446 miles; in 1853, 350 miles; making the total length then opened 7686 miles; of which 5848 miles are in England, 995 in Scotland, and 843 in Ireland. The length of narrow gauge railway, including the Irish gauge of 5½ feet, is 6965 miles, of the broad gauge 626 miles, and of the mixed gauge 95 miles. The number of railway companies having single lines of railway at the end of 1853 was 97, the length of single narrow gauge lines, including the Irish gauge, 1543 miles, of broad gauge, 112 miles, and of mixed gauge 53 miles—total, 1768 miles; of which 1135 miles of single line are in England, 132 miles in Scotland, and 441 miles in Ireland.

Of the single lines opened at the end of the year 1852, 32 miles 46 chains in England, and 41 miles 76 chains in Ireland, have been made double during the year 1853.

The total length of new lines which were opened during the year 1853 amounted to 350 miles.

Of the lines opened in England, the principal ones are—the Oxford, Worcester, and Wolverhampton railway from Wolvercote to Evesham, by which the manufacturing districts near Birmingham, the town of Worcester, and the important agricultural districts between Worcester and Oxford are accommodated with a direct route to London; the Newport, Abergavenny, and Hereford Railway, by which a direct route is afforded from Birkenhead to South Wales; and the Thirsk and Malton, and Malton and Driffield Railways, by which railway communication is afforded to an important district in Yorkshire.

In Scotland the only line of importance opened for traffic was the Deeside Railway. In Ireland the most important lines are the Waterford and Kilkenny, and Waterford and Limerick Railways, by which Waterford has been connected with the Irish railway system; and the railway from Killarney to the Great Southern and Western Railway.

- All these lines of railway were inspected, previous to being