

opened out in the Westport district, and works are in progress for opening out a fourth one at Granity Creek; there are also two mines now being worked in the Grey Valley, and an English company have recently commenced to construct a railway and open up another mine at Coal Creek.

It is only in bituminous mines that we may ever expect a large coal trade to be developed; the brown coal that is found in this part of the country is only used for local consumption in the immediate vicinity in which it is raised; and, although there is a very large extent of this class of coal in the district, it will not be of any very great value so long as our bituminous mines are supplying the demand. The class of coal on the West Coast is equal to that found in any part of the world, and there are few places, if any, where superior coal can be obtained.

The difficulty which is now experienced by some of the coal companies is in getting a market for the coal, and very little has yet been done towards the construction of a class of vessels capable of entering West Coast harbours, and carrying large cargoes of coal from there to the foreign markets. The class of vessels at the present time employed in this trade are utterly unsuitable for this purpose. They are only fitted for coastal trade, and until such time as we have vessels having a moderate draught and large carrying-capacity we need not expect any considerable development in the coal industry.

Mokihinui.—Some years ago a company was formed to construct a railway and open out a mine at Coal Creek in the Mokihinui district, and when a commencement to open out the mine was made coal to the extent of 30ft. in height was found, with only a few feet of cover upon it. The latter was stripped and the coal quarried, as it were, for some distance into the cutting. On opening out a main level to work the mine, the coal was found to be of a soft character, and several faults were met with at different points, so that by the time the company had got their railway constructed, failing to find coal of a sufficient quality to open up a profitable trade, they got into financial difficulties, and eventually suspended operations. Previous to the suspension of operations, however, a fire broke out in this mine, but prompt action was taken, stoppings were put in, and the Westport Fire-brigade, which turned out, pumped water into this section of the mine, and succeeded in extinguishing the flames. The output for the Mokihinui for the year ending December last was 10,742 tons.

Recently this mine, known as the Mokihinui, has been taken on tribute by a co-operative company, which has extended the main level, and is said to have found hard coal of excellent quality, so that the undertaking is likely to prove a profitable venture for the tributers. Numerous faults and rolls will be found in this vicinity, but as the workings are extended under the centre of the range, going through into Chasm Creek, they are likely to open up a good field, without so many breaks and faults as there are at Coal Creek.

A new mine has recently been opened out at Mokihinui by the Westport-Cardiff Company, who were very successful at first in finding an unbroken area of good coal. During last year, however, two or three faults were met with, but did not prove very serious obstacles to the method laid out for working the field. It is by no means to be expected that an unbroken seam of coal will be found in this locality, dislocations and faults will have, more or less, to be contended with as the workings extend.

The incline-tramway leading from the mine to the bins, being only 46 chains in length, is on very good grade, and the coal, so far, easily obtained. Should the company be successful in finding a market for its output, the property ought to prove a valuable one, inasmuch as it has cost a comparatively small expenditure of money to open up the mine, including the erection of storage-bins, tramways, sidings, and plant, the total expenditure not exceeding £12,000; the whole of the works being laid off by Mr. Brown, the present manager of the mine. The faults met with last year, however, have been the means of considerably curtailing the output, which amounted to only 4,500 tons.

Westport Colliery Company.—This company carries on the most extensive coal-mining operations there are in the colony, and during last year were employing about 356 men. The mine is at an elevation of about 1,800ft. above the level of the sea, and the workings are connected with the railway by an incline-tramway, 85 chains in length, made in two divisions, the upper being 35 chains, having a maximum grade of 1 in $1\frac{1}{2}$, and the lower incline 50 chains, having an average grade of 1 in $2\frac{1}{2}$. These grades are worked with hydraulic brakes, the railway-wagons holding 6 and 7 tons of coal, and running up and down this incline at a speed which would enable 1,000 tons of coal to be sent down per day.

On the top of the plateau where this incline-tramway stops, the storage-bins, screens, and haulage machinery are placed, and to this point all the coal from Coalbrookdale, which is from three to three and a half miles distant, is brought by means of an endless-rope haulage, nearly a mile and a half of the latter being conveyed through a tunnel carried on the same floor from which the coal was taken, following the dips and rises met with in the strata above and below the coal. This endless-rope haulage is worked by a steam-engine, having a cylinder 20in. in diameter, 4ft. stroke, and thirty-three strokes per minute, which with the pressure of steam used, gives 83 indicated horse-power. The method adopted for loading the railway-trucks from the bins is as follows: Underneath the bins there are two different lines of rails, and plenty of head-room between the bottom and the rail, to admit of the railway-wagons going right under the bins from one end to the other. In the bottom of these bins there is a line of doors directly above the centre of the railway, and when coal is required to be delivered into the wagons a bar of iron is placed in a slit in the door, and by means of a small lever connected with a hydraulic press, worked by hand, the door which lies horizontal at the bottom of the bins slides along and opens an aperture sufficiently large to fill one of these wagons in about half a minute. As soon as the required quantity of coal is in the wagon, the same hydraulic press closes the door, the wagon is removed, an empty one takes its place, and the same process is repeated.