

The mine was at one time the principal one in the colony containing bituminous coal. In carrying on the workings numerous faults have been met with, and after getting past the largest of the dislocations it was expected that a better field would be found under the range going in the direction of the Seven-mile Creek, but in prosecuting the work in this direction the sandstone overlying the coal became broken and disjointed, showing that some disturbance has taken place, and on continuing some of the levels, the coal, which had for several chains before this been very irregular in thickness, wedges out to a narrow band. In all the different levels from the dip-incline the same disturbance shows itself, and this was also found in the dip-workings. About two years ago when examining this mine my impression then was that the thinning-out of the coal in the dip-workings was only a heavy roll, and that the seam would be found to resume its original thickness at some distance further on. This opinion was shared by Messrs. McKay and Cochrane, the Mining Geologist and the Inspector of Mines, who were with me at the time. Since then the dip-incline has been carried on for a distance of about 900ft., and no improvement in the coal met with, but, on the contrary, it varied considerably in thickness and in some places cut out altogether, and at the end of the present dip there is only a small band of coal.

It is evident, from the amount of prospecting-work which has now been done, that there is little hope of the present seam being worked for any great length of time. Prospecting operations require to be carried on from some of the gullies further to the north than the present workings; if a workable seam of coal be found, then it might pay to connect the workings with the present levels by a stone drive. If, after prospecting, it is found that there is not a field of coal of any extent beyond that already known, then the position of this mine is, that its output in the future is limited to pillar-workings and the new section which was opened up sometime ago. There is still a considerable area of coal in this section; but, from what is now known of the old workings, there is a great possibility of the coal-deposit lying around the segment of a circle (crescent-shaped) wedging out, as it is known to do to the eastward of the new mine mouth at the face of the range, and curving round to where the thinning-out takes place in the dip-workings in the old mine. The coal from the new mine is of good quality but of rather a soft nature. The output from this mine last year was 121,185 tons, and the average number of men employed in connection with the works was 308.

EAST COAST, MIDDLE ISLAND.

There is still a large quantity of coal consumed, the produce of the mines on the East Coast, the principal ones being in the Otago and Southland Districts, where the total output last year was 185,032 tons, or an increase of 10,796 tons over that of the former year. There are no less than one hundred and thirty-two mines in this district on the list, but the majority of them are lignite pits, in which from one to four men are employed; and some of these pits are merely opened by the owner to supply fuel for his own use. The principal mines are: Shag Point, Allandale, Walton Park, Kaitangata, Castlehill, Hokonui, and Nightcaps.

None of the coal from any of these mines is suitable for ocean-going steamers, it being too light, and does not possess sufficient body to resist a high draught. It is, however, a splendid, clean, household coal, and, where the transit does not add considerably to the original cost at the mine, it is used in preference to either the bituminous coal from the West Coast or imported coal from New South Wales.

A shaft has been sunk to a depth of 450ft. at the Shag Point Mine, from which a main level has been carried to the seaward for a distance of 727ft., where it cut No. 2 seam of coal, which had a thickness at this point of 2ft. 6in. The next seam below No. 2 was intersected in the main level at about 430ft. from the shaft; and, again, No. 4 seam was cut at about 170ft. from the shaft. The coal is of good quality for the class to which it belongs—brown coal—and the company have recently erected a pumping plant to drain the workings at the 450ft. level. The output from this mine last year was 15,082 tons, while eighty-nine men were employed.

The Allandale Mine adjoins the Shag Point Mine, having a similar description of coal. The coal from this mine is highly spoken of for household purposes; and considering the economical manner in which it has been opened out, it is a property which should give fair returns for the capital invested. It would also seem from the returns that it worked more economically than any of the other large mines previously referred to in this district, as the output shows 474 tons of coal for every man employed in connection with the works, as will be seen on table annexed. The output last year was 19,442 tons, while forty-one men were employed.

At Walton Park the workings are confined to the new extension to the eastward from the shaft in a direct line of about 16 chains, where the coal is about 15ft. in thickness, and of a hard compact character. The output from this mine last year was 19,282 tons, and there were fifty-three men employed in connection with the works.

At the Kaitangata Mine the output is more than three times as much as from any other coal-mine in Otago, it being 67,091 tons for the last year, and there were 173 men employed in connection with the works. These workings are carried on from the dip-incline and from the shaft at the 600ft. level. There is a great thickness of coal in this mine, in some places as much as 40ft., but in the present workings it is about 25ft. thick, and of good quality. There were a number of faults met with, which threw down the coal going from the dip-incline towards the shaft. Recently the mine-manager, Mr. Shore, informed me that some of those faults show that there has been a large block of the strata gone bodily down on both sides, and that the No. 1 fault, which had a downthrow of about 200ft., has entirely disappeared, and that the seam of coal was again met with on the line of its original inclination. This is the first dislocation of this character that has come under my notice in any of the coal-mines on the East Coast that has yet been proved. There is a similar dislocation in the Wallsend Mine on the West Coast; but whether the coal will be found there by following the same inclination of its bed in the workings from the first