

## SECTION IV.—GENERAL REMARKS.

## MINING OPERATIONS.

At the H. kurangi Colliery a new dip heading has been driven on an extensive area of coal, upon which the Waro limestone rocks outcrop. From this heading levels have been driven. The seam, which is of good quality, is from 9 ft. to 11 ft. in thickness. It is expected that the old workings at this colliery will be exhausted during 1912.

At the Kiripaka Colliery pillar-extraction only was carried out during the year. Exploration to the dip by driving headings and by surface boring proved the coal to be too thin to be profitable.

The Taupiri Coal-mines (Limited), at Ralph's Mine, have confined their operations to the dip underlying the Waikato River to the west. The main haulage-road has been extended. A special heading has been completed connecting the company's Taupiri West and Ralph's Collieries. This heading will eventually serve as a main haulage-road, in addition to being a necessary safety precaution.

At the Extended Mine, the property of the same company, the main dip headings have been advanced, and a considerable amount of development has been carried out. Extensive alterations have been made to the surface and underground arrangements.

The company's Taupiri Reserve Mine was closed owing to a fire breaking out which could not be extinguished. The affected area was isolated. It is proposed to work the coal to the dip of the present isolated workings by sinking a shaft near the Kimihia Railway-station.

The Waipa Railway and Collieries (Limited) do not propose to commence mining operations until their branch line of railway connecting with the Main Trunk line near Ngaruawahia is further advanced.

At Retaruke, situated on the hills a few miles to the westward of Waimarino, a Government prospecting party of the miners, under Mr. J. Mason, certificated mine-manager, was engaged for several months driving on outcrops of coal exposed in the gullies of the Retaruke River and its tributaries, Coal Creek and Dandy Gully. Four drives were put in, aggregating in length 124 ft. The results were disappointing. In each instance bands were found to be continuous, the following section occurring at all faces: Roof, claystone, inclination slight; top coal, 12 in.; band (shale), 4-5 in.; middle coal, 12 in.; band (sandstone), 5 in.; bottom coal, 16-18 in.; shale, 12-15 in.; floor of seam, under clay. The coal is of poor appearance, containing excessive water, ash, and sulphur—all defects. In quality it is an inferior brown coal (lignitous). The exploration was discontinued owing to the results not warranting further consideration.

In the West Coast Inspection District the prospects in the lower levels at the Puponga Mine considerably improved during the year, but as no boring operations have been carried out to test the ground in advance of the dip workings, the continuity of the coal is unproved. The workings in this mine expose considerable faulting. Coal-cutting machines of Radialaxe type are successfully employed in the lower levels at this colliery. The stone band which occurs in the seam enables economical holing and the production of a good percentage of round coal.

On the Buller Coalfield, at Seddonville State Colliery, operations were chiefly confined to pillar-extraction. During 1910 a considerable demand for slack and soft coal existed, owing to the strike at the New South Wales collieries, which was favourable to the disposal of much fuel of the above class from New Zealand mines.

Operations at the briquette-works at Westport, carried out in conjunction with this colliery, have been suspended owing to the high cost of production not permitting of any profit on the manufacture of briquettes and eggettes.

A considerable amount of boring by hand and diamond drills was and is now being carried out within the Charming Creek area of the State Coal Reserve. The result of such exploration has hitherto been but moderately satisfactory. Two seams of coal have been proved to occur, about 40 ft. to 70 ft. apart (vertically), the upper seam being from 10 in. to 18 in. thick and the lower seam 20 ft. Both are of high-class bituminous quality. The upper seam covers a considerable area, but the lower is not so extensive, the maximum width from west to east of the lower seam hitherto proved by boreholes being only 40 chains. As boring operations are now in progress, and the locality is under survey by the Director of Geological Survey, it is premature to express an opinion on the extent of the workable coal existing within the Charming Creek Valley.

The Westport-Stockton Colliery had a very successful year, nearly doubling its output for 1909. An alteration has been made in the haulage system originally proposed, it having been found expedient to install endless-rope haulage in the upper C and D sections in preference to electric traction. In common with several other West Coast collieries, a considerable extent of soft coal has been met with in the workings from B and C sections, and in D section the seam varies much in thickness and is not of superior quality. It is hoped by the management to discover a lower seam, but the evidence of the existence of such appears very small. This property is equipped with the most complete electrical mining outfit in the Dominion.

The Millerton Colliery (Westport Coal Company) has increased its annual output by 20 per cent., and development of the Mangatini section has proved extensive areas of high-class hard bituminous coal. In the Mine Creek section a seam of superior class has been discovered below the seam hitherto worked.

At the celebrated Coalbrookdale Colliery (Westport Coal Company) considerable developments have been carried out; notably in the Dip Cascade section, where a large area of virgin coal has been proved; also in the Wareatea section, which it is now proposed to connect with the main surface and underground endless-rope-haulage system of the property. In the Ironbridge section the development of Nos. 2 and 7 dips has proved an extensive area of excellent coal from 10 ft. to 12 ft. thick, which