

SECTION IV.—GENERAL REMARKS.

MINING OPERATIONS.

Coal-mining operations on the fields north of Auckland have during the year been unimportant, and a small decline in the output of coal therefrom has occurred. Underground developments on some of those small coalfields have proved the coal-measures to be both fragmentary and considerably faulted, which is unfortunate, as the coal therefrom—of semi-bituminous class—is the best steam coal in the North Island.

Further discoveries of coal-outcrops have been made in the country between the Northern Wairoa River and Hokianga, which appear to indicate that an extensive area of coal-measures exists in that locality.

On the Waikato Coalfield (a map of which accompanies this report) the Taupiri Colliery has increased its annual output to 192,827 tons, and the satisfactory developments at this mine, together with the demand for Taupiri coal, are favourable evidence that the increase in the annual output will be continued.

A new company, the Waipa Railway and Collieries (Limited), with a capital of £80,000, is being formed for the purpose of working an extensive area on the southern portion of the Waikato Coalfield, near the Akatea Settlement, where formerly a small mine was opened upon the land of Mr. T. Runciman. The seam of coal to be worked is exposed by outcrops at altitudes varying between 390 ft. and 630 ft. above sea-level, evidently a continuation of the seam worked at the Taupiri Colliery, which consists of a high-class brown coal. As the coal-measures on this field rise generally to the southward, this new company will have the advantage over its northern neighbour, as the drainage, haulage, and ventilation of the mine may be effected from adits, thereby reducing working-costs; the coal-pillars likewise may be extracted without fear of inundation by surface-waters. A branch railway of about six miles in length will be required to connect this mine with the Auckland-Wellington Main Trunk line at Ngaruawahia, distant sixty-eight miles from the former city.

Towards the end of 1909 a discovery of coal of lignitious class was made upon Crown lands in the country adjoining the Main Trunk Railway, about three miles to the westward of Waimarino Station. A reconnaissance survey of the locality has since been carried out by Dr. J. M. Bell, M.A., F.R.G.S., Director of the Geological Survey of New Zealand, who reports that a somewhat extensive coalfield exists in that locality upon country which physiographically may be considered to form part of the Wanganui coastal plain. The confines of the coalfield are not yet known, but it is believed to be an extension of the Mokau coal-bearing series. Several outcrops of coal have been located, varying from 3 ft. to 8 ft. in thickness, in rocks of Tertiary age, dipping to the south or eastward. Dr. Bell pronounces the coal to be of fair quality, suitable for household use, though not of value for steaming purposes. The following is an average analysis of five samples of the outcrop and consequently weathered coal made by the Dominion Analyst, Dr. J. S. MacLaurin, F.C.S.: Fixed carbon, 38.49 per cent.; volatile hydrocarbons, 40.71 per cent.; water, 11.87 per cent.; ash, 5.99 per cent.; sulphur, 2.94 per cent.; practical evaporative power (60 per cent. efficiency), 6.35 lbs.

The Inspector of Mines at the Thames, Mr. Bennie, reports improved ventilation and safety precautions on the North Island coalfields, and no fatal accident occurred thereon during 1909, although 782 persons were employed.

On the West Coast coalfields considerable activity prevails. The principal collieries have maintained their output, and two new mines—viz., the Westport-Stockton and Paparoa Collieries, both equipped on a scale of magnitude—have been added to the list of producing mines.

Extensive plants and surface arrangements are being laid down by the North Brunner Coal-mining Company, near Stillwater, and by the Government at the Seven-mile Creek, Point Elizabeth, both on the Grey Coalfield.

On the Buller Coalfield an important discovery of a 20 ft. seam of high-class bituminous coal has been made on the State Coal-mines Reserve covering the Charming Creek Valley, extending from the Ngakawau River to the Seddonville State Colliery. Systematic boring operations by means of a diamond drill are now being carried out to prove the extent of this favourably situated discovery.

On the coalfields of Canterbury, Otago, and Southland, which embrace the southern inspection district, the year's work has been somewhat uninteresting, the demand for the brown coals and lignite obtained on those coalfields having slightly declined.

The Inspector of Mines at Dunedin, Mr. E. R. Green, reports favourably upon the improved ventilation and general efficiency obtained in the southern district; and the fact that only one fatal accident has occurred during two years in this extensive district, where over a thousand persons are ordinarily employed at the coal-mines, is extremely creditable both to the inspection and the management.

EXPORTS OF COAL.

The quantity of coal exported during 1909 amounted to 201,790 tons, the greater part of which consisted of West Coast bituminous coal for use on ocean-going steamers. In addition to the above, a considerable quantity of Coalbrookdale (Westport) coal was used by the Admiralty, for consumption by the Australian Squadron.

UNDERTAKERS' AND FIREMEN AND DEPUTIES' CERTIFICATES.

Regulations under the Coal-mines Act, 1908, and its amendments, have been made providing for the qualification by service or examination of all colliery undertakers and firemen and deputies, which I believe to be an innovation in coal-mining legislation in the British Empire. The results of this legislation will therefore be watched with interest, and if the proportion of mining accidents is reduced