

extensive and valuable properties, no pillar-extraction having been conducted at this colliery. During the year a slight subsidence gave some temporary anxiety to the management of the mine.

Operations at the Drury Colliery have been discontinued owing to the unsatisfactory quality and extremely faulted character of the coal.

The extensive holdings of the Taupiri West Company, which adjoin the property of the Taupiri Company, have not been very actively worked, owing to the flooding of the mine during the early part of the year.

At the Millerton Colliery of the Westport Coal Company (Limited) the usual all-round high efficiency in management has been maintained, and an annual increase of 33,753 tons in output has to be recorded. The principal operations at this mine other than the actual extraction of coal from the proved areas consists of the development of the Mine Creek, western section, and the extensive area south of the Mangatini Creek on the northern slopes of Mount Frederick.

At the well-known Denniston Collieries, also the property of the Westport Coal Company (Limited) (of which company Mr. Jonathan Dixon, M.E., is now district manager), in addition to the winning of a large coal output, extensive operations for the further development of the collieries have been carried out during the year. The Coalbrookdale haulage section is being connected by drifts with the extensive Whareatea section; another tramway bridge has been constructed across the Waimangaroa River, at a point below the old Ironbridge, which will thus connect the Kiwi section of the property, situated on the north side of the river adjacent to Deep Creek, with the main haulage system of the mine. At the Ironbridge section drifts have been put through connecting the upper with the, so far but little-worked lower seam, thereby further increasing the productive capacity of the property. Extensive alterations and additions have been made in connection with the screening and storage arrangements at the top of the upper incline, where the extremely limited space has necessitated the exercise of considerable ingenuity to enable the large output to be handled at a minimum cost and in such a manner as to avoid the production of small coal. Attached to the plant are storage-bins of 2,000 tons capacity for unscreened coal, to which are connected the gravitation tumblers by shaking screens. To utilise the limited space, travelling belts and elevators are considerably employed.

During the year boring operations for the purpose of ascertaining the extension or otherwise of the Buller coalfield under the coastal plain have been carried out on the coal-mining lease of Mr. Jonathan Dixon, and it is understood that a considerable depth has been attained, the strata pierced consisting chiefly of the later Tertiary marls and clay; but, as the results of such operations are not published, no further information is at present available.

Excellent progress has been made by the Westport-Stockton Coal Company (Limited) in the construction of their inclined and other tramways, surface arrangements, and other works necessary to enable them to enter the lists of producing collieries on a large scale at an early date. Tunnels of considerable length have been driven in the coal adjacent to and parallel with the eastern boundary of the Millerton lease of the Westport Coal Company, on that lengthy but narrow area of the coalfield which protrudes beyond the Millerton boundary. It is stated by the company's expert that an extensive area of coal has been proved to exist on the property in the section contained between the south branch of the Ngakawau River and the headwaters of Mangatini Creek. This area is referred to in the maps and reports of the Geological Survey, 1877 (Hector), on the Buller Coalfield, as Area 8, Mid Level A, and is of considerable geological interest.

On the Grey Coalfield (a plan of which accompanies this report), at the Blackball Colliery, a considerably increased annual output of coal has to be recorded, but the capabilities of this mine will never be proved until the completion of the Government railway now in course of construction to Blackball. Work is much retarded by the limited capacity and unreliable character of the aerial tramway, which is at present the only means of transport for the coal between the mine and the railway at Ngahere. Considerable proved reserves of coal exist within this company's lease.

The Paparoa Coal-mining Company (Limited) is actively engaged upon the construction of inclined tramways and surface arrangements preparatory to the opening-up of an extensive colliery. The inclined tramway for endless-rope haulage which will connect the mine with the screening and storage arrangements is being constructed in two sections, which, owing to the configuration of the country, are for the greater distance in tunnel, the lower section, having an average gradient of about 1 in 3, being in length 44 chains, the upper section 1 in 11 and 50 chains. The sectional measurement of the tunnels is 11 ft. by 7 ft. in the clear. Hydraulic brakes will control the haulage from the head of each section. The upper tunnel terminates at its junction with the coal seams, two of which are intersected by it. Recent developments have proved the existence of three seams, situated approximately 110 ft. and 120 ft. apart by vertical measurement. It is proposed to install compressed-air drills, a 70 ft. single-inlet Sirocco fan, and electric lighting.

On the Otago coalfields the Kaitangata and Castle Hill Collieries of the New Zealand Coal and Oil Company (Limited) have increased their annual output, and, notwithstanding quite exceptional conditions requiring extreme caution, have been remarkably free from mining accidents during the past year.

Operations at the Nightcaps Colliery, in Southland, have been retarded by an underground fire in section 1 of the mine. This, however, having now been sealed off, and a fan of the Hayes type erected on section 2, which was previously ventilated by natural means, a substantial increase in the annual production of coal may be anticipated.

Owing chiefly to the cessation of many gold-dredges in Otago and Southland, a decrease of 3,425 tons of brown coal and lignite has taken place during the year.