

feature of this colliery is the absence of mine-water in a number of the sections driven some distance to the dip under a roof-cover of 400 ft. of limestone, and apparently the seam does not contain any moisture other than that which is combined in the coal. To provide adequate security against the dangers from dust accumulations, all accessible open roads have been efficiently stone-dusted and maintained with incombustible dust up to the standard required by the regulations. Several boreholes have been put down during the year, and attention is being given to the advisability of providing a third escape at a selected point of the workings. Preparations are being made to install an additional generator for the production of electricity in order to satisfy the increased mine demand for power.

*Graham's Colliery (Co-operative Party).*—Operations during the year have been confined to pillar-extraction, and the workings have been maintained in good order. Two jigs, one on the surface and another in the mine, are properly equipped and in good running-order. A new return airway has been driven parallel to the horse haulage-road. A connection to the east side outcrop has been made by way of the main heading, which has followed the dipping floor to the outlet. Nineteen men are employed for an output of 60 tons per day.

*Pukemiro Junction Colliery (Crown Lease: Co-operative Party).*—This colliery is being worked in two sections. In No. mine section a high percentage of the available coal is being won from the pillars near the outcrop. The dust on the roadways has been frequently treated with ground limestone. The bords in No. 2 mine section have reached the boundary, and preparations are being made to extract the pillars. Eighteen men are ordinarily employed, and the output averages 50 tons per day.

*Waipa Colliery.*—This well-known colliery, situated at Glen Massey, and connected to the Government railway at Ngaruawahia by seven miles of branch railway, continues to maintain its average output. There are three working-sections branching off from the terminus of the main endless-rope haulage-road. In No. 1 section, while a line of pillars contiguous to a fault was being removed, a crushing movement, influenced by the break in the roof-cover at the fault, settled over Kelly's dip section and crushed the roadways to the extent of blocking the passages to the pillar area. The area was subsequently sealed off pending the construction of other approaches to the dip. In No. 3 section, through the fault, the coal-seam averages a thickness of 11 ft. and is on an almost level floor. The main dip heading has not been actively worked during the year; its direction has been turned to an angle of 30° to the east in order to escape the thinning of the seam proved on the west side. Extensive alterations have been made in connection with the electrical installation. The cables have been carried over the surface on poles to the farthest point of the underground workings, and an armoured cable has been let down the return shaft to connect with the system underground. A subsidiary haulage plant (electrically driven) has been installed to more advantageously cope with the output from the main dip section. The mine-dust has been efficiently sampled and tested, and the roadways replenished with approved stone-dust.

*Waikato Extended Colliery.*—During the year operations in this colliery have been confined to the extraction of the remaining pillars. A second escape drive has been constructed near to the rise of the present workings. The coal-dust has been sampled and tested. The company has recently acquired, by lease from the Taupiri Mines, Ltd., the right to mine the remaining coal in the Old Waikato Mine, abandoned by the company during the year 1906. The output of 10,000 tons was conveyed by several river-steamers to Hamilton, Cambridge, and to the Waikato Heads, where the coal is in use for bunkering the Northern Steam Shipping Co.'s west-coast steamers.

*Huntly Brickworks.*—The opencast quarry of fireclay is situated within the boundaries of Huntly Town District. An output of 50 tons of fireclay is mined daily, and manufactured into bricks and tiles. Operations have been safely conducted during the year.

*Taupiri East Colliery (Auckland University Council Endowment Lease).*—This small colliery is opened out in the vicinity of the south shore of the Kimihia Lake. A drive has been driven to reach a block of rise coal to the south of the old mine dip. The coal-seam is much broken by outcrop intrusions of ash and surface clay. The output is carried by motor-lorry to Huntly Station, a distance of three miles.

*Campbell Colliery, Whatawhata (Crown Lease).*—The main heading has been advanced about 4 chains in a westerly direction, and a short rise heading affords means of access to a block of coal which can be opencast mined in a gully. Preparations are being made to extend the workings to the dip, where machinery will be required for water-drainage. The output is conveyed over the County Road by motor-lorries to Hamilton, a distance of eleven miles.

*Renown Colliery, Waikokowai.*—During the year sixty to seventy men have been employed in development work, and excellent progress has recently been made with the construction of the company's endless-rope haulage tramway to Rotowaro, and the opening-up of the extensive coal-seam. The sidings for the screens, taken off the main railway at Rotowaro, are almost completed. The formation work in connection with the two miles and a half of surface tramway is almost completed. The permanent rails have been laid down over two miles of the track. One viaduct, 10 chains in length by 40 ft. high at the highest point, has been completed, and two others in close proximity to the mine are in process of erection. Four tunnels—4, 6, 7, and 8 chains in length respectively—have been driven through spurs in the hills. Sixty acres of land have been surveyed into sections and set aside as sites for workmen's cottages. From a point 6 chains from the mine-entrance, where the coal-seam was intersected, six headings have been turned off the main drive—two in an easterly direction, two in continuation of the main haulage-road, and two westerly for the purpose of affording means for ventilation. One-and-a-half chain pillars have been formed between the respective headings, and the headings do not exceed 10 ft. in width. The requisite machinery for operating the mine and tramway has arrived at the mine and is being rapidly assembled in order to enable the management to place the output on the market at an early date.

*Old Stockman Mine, Mokau.*—An output of 520 tons of coal has been produced during the year and conveyed thirty miles down the Mokau River by motor-launches. The output is necessarily limited by the depth of water in the river-channel, which is seasonally obstructed by snags and overgrown willows.

*Fougere's Coal-mine, Tatu.*—Prospecting operations have been conducted by a party working co-operatively on Section 4, Block IV, Pouatu Survey District. There is a clearly exposed coal-seam of 2 ft. 6 in. outcropping between beds of sandstone. Owing to the configuration of the surrounding hills and thickness of roof-cover, the continuity of the seams can only be ascertained by means of driving from the outcrop. The outcrop lies at a distance of eleven miles by road from Tahora, the terminus of the Government railway. Operations to date have been confined to the construction of 10 chains of aerial tramway from the outcrop to the County Road.

*Tangarakau Colliery (Crown Area).*—The colliery is situated approximately three miles north of Tahora. Operations have been conducted on a Crown lease of 11 acres granted to the Public Works Department, which Department later transferred its right to a syndicate comprising William Shanks and several business men of Stratford. The syndicate has also obtained the coal rights over 300 acres of Crown lands surrounding the Public Works area. The exposed coal-seam does not vary in thickness to any marked extent. It is 5 ft. in thickness, measuring from the sandstone roof to the fireclay floor, but contains a band of 6 in. of shaly unmarketable coal occurring about 1 ft. from the floor of the seam. The Tangarakau Gorge is the natural outlet for the coal in this district, and access could be obtained by the construction of three miles of tramway from the terminus of the Public Works Department's tramway at Tangarakau. Developments consist of an aerial ropeway over the Tangarakau River, a 130 ft. span of travelling overbridge constructed over the river, and two headings driven 110 ft. northward under the sandstone cover. Several buildings have been erected to accommodate the workmen. The output is conveyed by road to Tahora, from whence it is railed five miles to the Public Works Department's power-station at Tangarakau.