

*McInnes's Coal-mine* (Crown Lease: Mackie and Party).—The party experienced some difficulty in disposing of the output as the coal was dirty and shaly. The Northern Coal Co.'s old workings were tapped, but, as the visible pillars contained inferior coal, the party's prospects were not promising.

*Northern Co-operative Colliery* (Crown Lease: Cunningham and Party).—As a result of heavy rainfall in the district two short drives collapsed due to the overburden being washed over the entrance. The party (father and three sons) subsequently prospected for another opening, without success, as the roof cover was too much disturbed by a former working over the area.

*Rosedale Coal-mine*. (Crown Lease: Nesbitt and Party).—Mining operations ceased during the year due to the extraction of the available coal.

*Glen Nell Coal-mine* (Crown Lease: Sublease from McIntyre and Party to S. Foot).—During the year this mine was taken over by Mr. H. Tipton and party. A small stone drive has been completed for the purpose of shortening the trucking and providing better means of access to the pillar coal, which varies in thickness from 2 ft. to 4 ft. Almost the whole of the output was sold to the Railway Department.

*Phœnix Colliery* (Crown Lease: McKinlay and Party).—Prospecting revealed an area of thin coal lowered by reverse faults, and three drives have been commenced from a lower level into a narrow area of coal. Narrow places, 5 ft. to 6 ft. wide, are being driven, as a first working, in a seam 4 ft. in thickness, and the coal appears to be of good quality. The party has also been engaged in boring for coal on part Section 9, Block XVI, Hukerenui Survey District, without any measure of success.

*New Kamo Coal-mine* (Kamo Collieries, Ltd., Owners).—The coal-seam being worked lies approximately 100 ft. below the surface near Kamo Railway-station. The average daily production is 170 tons, got from two separate mine sections. The seam was followed to the rise in No. 1 mine section, and the pillars are now being removed there, commencing from a faulted boundary. A borehole drilled to the east of the main fault on part Section 51, Felix Freehold, located two coal-seams, the first 7 ft. thick at a depth of 287 ft., and the second 10 ft. thick, at a depth of 298 ft. A stone dip, at 1 in 3, has been set away from the surface to connect the seams to the established mine-machinery.

No. 2 Mine Section: A section of the old Kamo rise mine-workings, situated under Kamo Township, has been recovered (by dewatering the workings) from a separate drive set away from the surface at a grade of 1 in 3 for a distance of 270 ft. Inspection of the old workings revealed that a first working of the seam had been carried out under Carruth, Wakelin, Grant, and Station Road streets, and also under the railway reserve, for a distance of 17 chains north of Kamo Railway-station. The recovered workings were in fair order. The remaining pillars are only 40 ft. square and are too small in size for a secondary working. A portion of the workings lying under the railway and station road was found sealed off, due to crushing and the collapse of the roof, as recorded in the Mines Statement of the year 1893. A shaft was sunk 110 ft. for effecting adequate ventilation in old workings. A Sirocco fan was also installed. The original workings were carried to a fault on the west side, and only isolated pillars of coal remain along the fault-boundary. The seam is 20 ft. to 30 ft. thick.

*Nikau Coal-mine*.—A small amount of pillar coal was won from the mine during the beginning of the year, and operations are now suspended.

*Waiatanga Colliery*.—A stone dip, at 1 in 3, was set away from the surface for the purpose of opening out an area of solid coal left under a farm property by a former working of the old Kamo mine field. The area is drained of water by the drainage operations conducted by the Kamo Coal Co. at Kamo. The seam, 5 ft. to 8 ft. in thickness, was proved at a depth of 70 ft. Faults have been encountered to the north, east, and south, and only a small area of unworked coal apparently remains within working distance of the new drive.

*Whareora Coal-mine* (Foot and Fox, Owners).—The coal in the old mine is almost worked out. A new drive, set away lower down the hill, has been equipped in maintenance of the output. The seam is thin, faulty, and stoney.

*New Kiripaka Coal-mine*.—Several small parties failed to make a success of the mine, and operations were suspended.

*Avoca Coal-mine*.—This small coal-mine, situated on freehold land, seven miles east of Tangowahine, has been worked during the past year by W. Tunstall. A new drive has been driven for the purpose of opening out a proved thin coal area lying ahead to the rise of the old workings. Output was also obtained from an opencast working.

*Glenbervie Coal-mine* (A. Pollock and Party).—The party has been engaged in cleaning up the roadways preparatory to the early resumption of output from a seam, 4 ft. thick.

*Turnbull and Party*.—Four men have been engaged on Belton's Freehold in extracting pillars left by the Hikurangi Coal Co., Ltd. A small dip has been commenced in a seam, 4 ft. in thickness, which is to be followed to the Marua Road towards a prospect proved by boring.

*Whau Whau Valley Mine* (R. Fox and Party).—Operations on this area have been assisted by a grant from the Employment Board, and consist of the driving of a stone-dip drive and the installation of a pump, winch, and steam-boiler. Prospecting-operations have proved a seam, 4 ft. to 5 ft. thick, on the west side of an area which was worked fifty years ago.

#### Waikato District.

*Rotowaro Collieries* (Taupiri Coal-mines Ltd., Owners).—No. 1 Colliery: The average daily output of this mine section is 500 tons, and operations are almost entirely confined to the extraction of the pillars formed in the first working. The seam is 14 ft. to 16 ft. thick, and the pillars are 30 ft. to 40 ft. square. They are removed by splitting and by the working-off of the side ribs. A fair percentage of the top coal is recovered, by leaving stumps and ribs of coal of sufficient strength to carry the weight of the roof cover until the top coal is shot down. Strong timber is used at the lip ends for breaking the roof into the excavated spaces, thus ensuring a quick settlement of the roof and the prevention of undue weight on to the adjoining pillars.

A stone drive, at a grade of 1 in 4, has been driven a distance of 7 chains to the bottom seam lying ahead of the farthest inbye cast workings approximately 90 chains from the entrance to the mine. Blowers of inflammable gas were encountered following the cutting of the new seam, and resultant accumulations caused a delay to the development.

In No. 3 mine section (bottom seam) the first working is being carried over a wider area than obtains in the top seam, and sections turned to the south from the main east heading are proceeding in thick, clean coal of excellent quality. The formed pillars are 60 ft. square, and barriers are provided within the panel system of mining.

The stone-drives, proceeding through troubled ground to the south-east of the main haulage road, have reached the seam proved ahead of adequate thickness for normal working, and preparations are being made to install modern haulage.

The thickness of the bottom seam ranges from 12 ft. to 18 ft. The seam appears to be faulty and disturbed along the western outcrop. The overlying strata to the top seam, 100 ft. above, are sandy fireclays with intervening bands of thin coal-seams and shales from which inflammable gas is given off following fractures in the roof cover.

This is an extensive coalfield, and the seams have been proved to exist for a distance of approximately four miles from the Rotowaro Mine entrance.