installed. Timber is systematically set, and a plentiful supply is always on hand. The output is conveyed by motor-lorries to Hikurangi, a distance of three miles. A second-class mine-manager is in charge. Safety rules are posted.

Northern Co-operative Mine (Cunningham's Crown Lease).—Three men find employment in this small colliery. Bands of fireclay and water tend to restrict the easy extraction of the remaining pillars, and much time is lost in dealing with these difficulties. The output is conveyed to Hikurangi by motor-lorry.

Christie's Colliery (Freehold).—The mine ceased producing coal at the end of the year. All the shallow pillars have been extracted to the opening, and the plant and machinery were removed to a neighbouring field, over which the co-operative party has secured a right to mine a proved small area of outcrop coal. Boring operations conducted over Christie's flat failed to disclose a workable seam.

Glen Nell Colliery (Crown Lease).—Work was discontinued about eighteen months ago, owing to the thinness of the seam and the lack of orders for the output; but the party owning the property has again returned to the mine in order to give it another trial. Subsequent to the flooding of the Hikurangi Colliery a shortage of coal existed locally, to the benefit of the small mines operating in the district. The coal-seam is 3 ft. in thickness, and lies almost level. Rules are posted and inspections recorded, as required by the Act.

Hillside Coal-mine (Cummings and Party).—Four miners leased an isolated piece of coal-bearing land from the Hikurangi Coal Co., Ltd., and they have contracted with the company to mine the available coal and convey it by road to the Hikurangi Railway-station at an agreed rate per ton. A drive and shaft have been completed to the coal-seam, and operations have been conducted safely by an experienced manager in charge. The coal-seam is badly faulted, and much stonework requires to be done to keep roadways at the faces.

McKinlay and Party (Freehold).—The miners comprising the party have agreed with Kerr and Co. to extract a few thin coal pillars in the abandoned Rocks Colliery. The drive is water-free, and the road has been relaid to the abandoned faces. The remaining coal consists of pillars on each side of the roadway. The miners appear to be competent men. The timbering is satisfactory, and the ventilation of the old workings is effected by means of a small shaft.

Belton's Coal-mine (Freehold).—Mr. Belton purchased a piece of abandoned coal land from the Hikurangi Coal Co., Ltd. Boring revealed a workable block of coal along the fringe of the outcrop, and the proprietor subsequently arranged with a party of coal-miners to work the coal upon a royalty basis. Two level drives from the surface have been driven into the seam, which is friable, but thick enough to return a fair profit if properly managed. A surface jig of 6 chains and a ground tramway of 10 chains have been constructed in order to remove the output to the County Road, from where it is carted to Hikurangi Station. Rules are posted, and due consideration is paid to the requirements of the Act.

Ruatangata Colliery (Freehold).—The main dip has been extended 12 chains through the old Kamo Mine workings. Boreholes are kept in advance in order to drain off the water accumulation in the old bords. Crushing of the small pillars necessitated the removal of the plant and rails from a portion of the mine. The dip and connecting-drives are being driven narrow with the view of obtaining good pillar-extraction. The haulage dip is properly equipped and well timbered with sets. Output, 30 tons per day.

Harrison's Waro Colliery, Whangarei (Freehold).—The mine-workings are in good order. The dip has been advanced 4 chains in faulty coal, and the seam is apparently thinning towards the southern boundary of the property. Three electric pumps, operating in stages, are employed to drain the mine-workings. The lining of the upcast shaft has been repaired during the year, and the pit-head structure, for the support of the winding-pulleys, has been strengthened with four additional uprights. Boring is in progress in order to determine the existence and thickness of the seam at a point 30 chains in advance of the face of the dip underground. The whole of the mine property, including plant, branch railway, and leases, is under offer to a new cement company at present in process of formation.

Rotowaro Colliery.—During the year marked progress has been made with the installation of new machinery for the more economic handling of a larger output. New screens, electrically driven, capable of screening 1,000 tons of coal per eight hour day into three sizes, have been erected, and the preparatory work, necessary to connect the roadways from the company's three mines, is proceeding apace. Within the company's area there is an aggregate thickness of 40 ft. of workable coal in three seams. The seams all dip to the south and are moderately inclined. The workings are reached by three separate mines and haulages. Endless ropes are installed in No. 1 and No. 2 mines, and in No. 3 mine direct haulage will soon be supplanted by an endless rope, electrically driven. No. 1 mine continues to produce the largest output from pillars formed by the first workings. A high percentage of the coal has been obtained under a roof-cover of about 100 ft. In No. 3 dip section a concealed coal area is being prospected by a stone dip turned at right angles to the main haulage-road. Boreholes drilled in the roof through a compact mass of fireclay tapped blowers of inflammable gas when approaching the seam. No. 2 mine appears to be within a measurable distance of exhaustion. The pillars have been removed from the top seam, and operations are now confined to the development of the bottom seam by a steep dip, which has disclosed troublesome faults. No. 3 mine (bottom seam) is being developed very rapidly, and is now producing 150 tons of coal per day from places mined entirely by a Sullivan coal-cutting machine. The machine has been in operation at the faces for eighteen months, and the management report satisfactory results from its use. The coal is obtained in a better commercial condition, and, notwithstanding a reduction of 9d. per ton on the hewing-rate, the miners appreciate the lessened labour required of them at the machine cut places and earn more than in ordinary working-places. An extensive undulation was located by an advance heading in the main dip, and a stone drive is now in course of being driven through the stone bank in order to keep the grade uniform for the endless-rope haulage later on. The electrical installation has been reconditioned throughout the mine, and Oldham's electric safety-lamps have been introduced into the section. Surveying operations for the purpose of ascertaining the depth of a second outlet shaft for No. 1 mine have been conducted on the surface.

Pukemiro Collieries.—The total output for the year was 147,545 tons, an increase of 14,254 tons over the returns of the previous year. The Pukemiro field is fortunately situated in the centre of the Waikato coal area. There is only one defined seam of coal, which occurs under the limestone formation and extends at low angles of dip over a wide area. Faults and other disturbances are frequently encountered in the coal-seam, and each displacement or thinning of the seam is utilized to provide a barrier between the respective sections in the mines. There are two separate mines, each accounting for half of the output. In the north mine the pillars are being extracted in two sections. The removal was commenced from the outcrop boundary in both sections under conditions favourable to the release of roof-weight from the working-pillar. The bords of the first working follow the shallow seam to the outcrop, thus providing means for drainage of the workings. Boreholes from the surface have proved an isolated but workable area of coal westward of the underground north-west headings, and the management is preparing plans for the development of this area by way of a stone dip, 1 in 2, from the surface to the seam, and thence a stone level of 400 ft. in length, required for a connection to the mine haulage-system. In the south mine a considerably increased output has been recorded from bords and headings of the first working. The main west headings have been extended 60 chains from the main dip. The seam maintained the ordinary thickness throughout that distance, but has since thinned to 4 ft. 50 ft. pillars are now being formed between the headings and bords on the west side, and the larger pillars should tend to prevent a crushing movement when the pillars are being removed. Development is proceeding in the east mine section, the operations being confined to the driving of headings, thus providing reserve working-places. Electricity, with its attendant economies, is permanently established as the motive power throughout the mine, and steam is only used for generating purposes.

Glen Afton Collieries.—This colliery reached the producing stage three years ago. The output for the past year was 145,464 tons. The location of the mine in respect to its proximity to the Government railway has been an important factor in the development and production from the mine. Only one coal-seam has so far been discovered,