roofs have been difficult to support, due to the splintering of the top coal after the roofs have been formed. The affected roofs require heavy sets of timber and packing to fill the cavities, which afford spaces for the accumulation of firedamp. Electric safety-lamps of an approved type are in use in this mine section, where the presence of firedamp has been frequently reported by the examining deputies. A high standard of ventilation is maintained by a sirocco fan producing 70,000 cubic feet of air per minute. Two coal-cutting machines are in use in the bord sections. Each bord cut produces 20 tons, and eight bords are usually cut per eight-hour shift. An accident causing a double fatality occurred in No. 4 pillar section, No. 1 Mine, due to the premature collapse of a roof whilst the miners were engaged in removing the inside remaining stump of a pillar. From evidence adduced at the inquest it would appear that the working-place had been adequately timbered with a double row of props on one side of the roadway, and a single row on the goaf side of the place. It was an ordinary working-pillar place, and had been examined and reported safe by the underviewer and shot-firer shortly before the accident. No convincing explanation of the cause of the fall was advanced by the officials of the mine or the workmen in adjoining places. Accepting the view that the accident could have been caused by too large an area being under support by props, so that the weight became too heavy for them, I subsequently impressed upon the management the importance of reducing the roof area under timbers by turning away the splits through the pillars at points as close as possible to the pillar ends. The management also agreed to reduce the height of the first working from 14 ft. to 10 ft., thus increasing the strength of the formed pillars.

Pukemiro Collieries (Pukemiro Collieries, Ltd., Owners).—The mining system followed from the inception of operations has not been changed to any great extent, with the exception that pillars 60 ft. to 70 ft. square are formed and provided for depths over 400 ft. Two separate mine sections produced 127,205 tons. In the North Mine section the seam has an average height of 12 ft. The cover varies from 50 ft. to 100 ft., from under which the pillars are being successfully removed from the boundaries and panels to the main haulage road. In some parts near the outcrop in Shank's Spur section a fire following the collapse of the roof involved a number of partially worked places. Measures taken to erect brick stoppings ahead of requirements with doorways open for haulage and ventilation were always in readiness for quick sealing, and were effective in arresting the progress of the fire. In the South Mine section the seam has been followed westward from the outcrop to attain a roof cover of 500 ft. under Hangipipi Trig. Station. In the advanced headings under this roof-cover the coal is of soft structure, fracturing easily under roof-weight conditions. During the year the roadways in the west section were under repair for a considerable time due to a crushing movement of the roof, which caused a creeping of the floors in the main haulage-road and return airway. Owing to the friability of the coal and to the fact that it was liable to heat under conditions consequent to the movement, the management decided to withdraw the plant from the affected part and reinstall it along headings 5 chains to the rise of the crushed area in order to reconnect Horne's No. 2 section to the mine haulage-system. The roadways and workings were adequately stone-dusted during the year.

Glen Afton No. 1 Colliery (Glen Afton Collieries, Ltd., Owners).—During the year the production of coal from the mine reached 177,244 tons, got from bords and headings in the first mining of the seam. The working seam has an average height of 12 ft. of hard compact coal overlain by a soft fireclay roof, which is rarely exposed, as the places are only worked to a height of 9 ft. The seam is moderately inclined, with local undulations which are troublesome in maintaining even gradients. The roof-cover in the advanced K section is now fully 600 ft., but is only 400 ft. on an average over the area so far mined. Bords are driven 9 ft. high by 14 ft. in width with formed pillars 70 ft. square in all the new workings since 1925. These conditions are conducive to the extraction of the remaining pillars later on. Towards the end of the year 60 per cent. of the available working-places were double-shifted for a daily output of 1,000 tons. In order to effectively seal off several leaking stoppings in the return airway near D section, a continuous wall of concrete, 4 chains in length, was erected to face the pillars between the stoppings.

Glen Afton No. 2 Colliery (McDonald State Coal-mine Reserve under lease to the Company).—A new colliery is being vigorously developed to produce an output at the end of the year. From Glen Afton Colliery screens, 160 chains of formation work for an endless-rope roadway was completed to connect three separate mine sections in course of development. The area has been systematically bored, and proved to contain at least 4,000,000 tons of workable brown coal of an average thickness of 14 ft. It is proposed to equip the mines and roadways with modern machinery to produce a daily output of 600 tons. The future prospects of this field are promising, and this may yet prove to be the most productive colliery in the district.

Graham's Colliery (Party of Miners, Owners).—An output of 60 tons per day has been maintained from the above colliery, which is situated on rise ground half a mile from Glen Afton Railway-station. The pillars have been successfully extracted from the outcrop boundary. The bords are 6 ft. wide. Pillars, 30 ft. square, under a roof-cover of 40 ft., have been found sufficient to prevent the roof-weight carrying over into adjoining pillars. The seam to be worked in the future averages 4 ft. of coal from floor to soft roof.

Pukemiro Junction Colliery (Crown Lease).—The remaining coal in this mine is soft and inferior in quality, and some difficulty is experienced in marketing the output. The impurities occur near the floor, and narrow high places capably timbered with long props are excavated upwards to reach the top portion of clean coal. The daily average output is 50 tons.

Waipa Colliery (Waipa Railway Collieries, Ltd., Owners).—This colliery ceased mining operations on the 8th November after reaching the 1,000,000-ton mark of output for a life of seventeen years. The daily output during the last months of operation had fallen from 300 tons to 160 tons in consequence of competition for trade among the established Waikato coal companies. In addition to operating upon a reduced output, many other mining difficulties were encountered in recovering pillar coal from weight-affected sections. The company's railway from Ngaruawahia to Glen Massey, a distance of seven miles, together with bath-house, surface machinery, and skips, were subsequently purchased by the neighbouring Wilton Coal Co., Ltd.

Waikato Extended Colliery (Roose Shipping Co., Ltd., Owners).—Operations at this river-side colliery were confined to the mining of a solid area of coal lying to the south of the Waikato old mine-workings. Ten brick stoppings were erected to effectively seal off the pillared workings, where a fire had been troublesome during the early months of the year. The output was transported by river steamers to Mercer and Waikato Heads.

Huntly Brickworks.—A daily output of 50 tons of fireclay was produced from an opencast face for use in manufacturing bricks at Huntly. The quarry and endless-rope tramway were maintained in good order.

Taupiri East Coal-mine (Auckland University Council Endowment Lease).—This small coal-mine, situated near the southern shore of the Kimihia Lake, produced coal from the pillars of the dip drive. Boreholes drilled on the adjacent hill proved the existence of an isolated area of thick coal. Preparations are being made to drive into this seam and connect it to the road formed by the mine-owner.

Campbell Colliery (Whatawhata Crown Lease).—A daily output of 20 tons had been won from this coalfield, situated ten miles from Hamilton and accessible by a good motor-road. The seam has an average height of 8 ft. of clean bright coal. A band of fairly hard shale on top of the seam forms a good roof. The seam slightly dips to the Raglan Road, and preparations are being made to install machinery for drainage and haulage. The output is conveyed to Hamilton by motor-lorries.

Renown Colliery (Renown Collieries Ltd., Owners).—During the year the bottom seam was exclusively worked, for an output of 88,790 tons. Much idle time was suffered by the miners during the summer months due to lack of orders. The seam varies in height from 10 ft. to 17 ft., but only 9 ft. is worked in the bords of the first working. Three separate ventilating districts are provided with approved coal-barriers, stoppings, and air-crossings. An interesting feature of spontaneous combustion in the first solid coal-pillar between the intake and return air-ways was manifested by the appearance of fire in the breaks of the pillar. There were