

of the mine to the dip of the present third level. The available coal in this part of the mine will probably be rapidly exhausted. The ventilation of the mine has been excellent, the quantity of air circulating on my last visit being 57,200 cubic feet per minute. Systematic timbering of the roadways and working-places has been adopted in order to protect the roof, while the provisions of the Coal-mines Act have been strictly adhered to. Safety-lamps are exclusively used for lighting in the workings. The number of men ordinarily employed above and below ground was 112.

No. 2 section: In the top seam, which varies in thickness from 10 ft. to 13 ft., operations have been confined to pillar-extraction. A good percentage of coal has been won. This seam is rapidly becoming exhausted. The bottom seam, which varies in thickness from 3 ft. 6 in. to 6 ft., is still being developed by the longwall system in the westerly rise-workings. The coal ahead is thin and dirty. To the extreme rise the workings are still in solid coal, but the area is rapidly diminishing between two convergent faults. The whole of the workings in this seam will shortly be confined to pillar-extraction. The extended dip-workings are nearly exhausted, the strip of pillars left to protect the haulage-road being the only coal remaining. Preparations are at present being made to extract the bottom seam lying between the Nos. 1 and 2 levels.

During the year the top and bottom seams were connected by a shaft, and a new return airway was opened in the bottom seam between the dip and rise workings, greatly improving the ventilation around the working-faces. Good ventilation has been maintained during the year, a current of approximately 50,000 cubic feet circulating through the mine. The timbering of the roadways and working-places has been found satisfactory. Systematic propping of the roof, supplemented by the erection of substantial timber chocks, has been carried out, while every care has been exercised to comply with the provisions of the Coal-mines Act. The workings are fault-bound on every side. Almost the whole of the output is being won from pillar-extraction, the pillars being won from the faults homewards, consequently the area on pillars in both sections is rapidly diminishing. This necessitates a reduction in the number of colliers employed, with a corresponding decrease in the output.

*Point Elizabeth (Liverpool) State Colliery.*—Contrary to expectations, this colliery has not yet reached the output stage. Considerable advancement has, however, been made during the year, and the various surface arrangements are nearing completion. The haulage-tunnels have been constructed and the permanent-way laid. The middle hydraulic brake to control the load on the lower incline has been installed, while the foundation for the top brake is nearing completion. Substantial progress has been made with the storage-bins. A stone tunnel, driven through a "roll" in the main level, to connect the workings eastward of Seven-mile Creek, has been completed, and a considerable amount of driving has been done in the coal, which shows signs of faulting. The seam of coal at Garvey's Creek, near the storage-bins, has been opened up for a distance of 6 chains, and it should not take long to work up a fair output from this seam. This colliery before the end of 1913 should be dealing with a substantial output.

*Paparua Colliery.*—Operations in this colliery were resumed during the latter part of the year, work having been suspended for a period of a year. The output of 6,347 tons was obtained from No. 2 seam, principally from developing levels. The coal proved, although of good quality and thickness, is very friable, and necessarily will produce an excessive percentage of small. The ventilation and general conditions of the mine are satisfactory. Safety-lamps are exclusively used in the workings. An appreciable amount of methane is given off by No. 2 seam, and every effort is made to thoroughly dilute the same to render it harmless. A Sirocco fan, producing a ventilating-current of approximately 60,000 cubic feet per minute, is installed.

*Brunner Mine.*—St. Kilda section: This section is situated on the north side of the Grey River, about a quarter of a mile from the old Brunner Mine workings. The output for the year amounts to 24,340 tons, a decrease of 7,126 tons from the previous year's winnings.

Top-level drive (horse-road): This level, which was formerly driven a distance of approximately 38 chains between two parallel faults, is running north-east and is nearing exhaustion. The percentage of small coal won from this level has been great, but, being of good quality, no difficulty has been experienced in finding a market, owing to its suitability for coking, and gas, and smithy purposes.

Free-drainage level: This level has been driven a distance of 30 chains. It has been found however, that the area to the rise is restricted by a fault running parallel to the level. Firedamp is met with in this level, and great care is necessary to keep the ventilating-current well up to the working-faces.

Dip section: A heading has been driven a distance of approximately 6½ chains in an easterly direction upon the dip of the seam which it is now proposed to work. The coal passed through proved to be of variable hardness, but of good quality. Bords driven to the north all struck what appeared to be a formidable, but proved to be only a local, fault, bearing north-and-south. A moderate area of good saleable coal may be available in this portion of the lease.

A quantity of excellent fireclay is being got from the rise-workings in the old Brunner Mine. The ventilation has at all times been adequate, but owing to neglect on the part of those responsible a firedamp ignition occurred, resulting in four men getting slightly burned. A prosecution followed, and convictions with severe fines were imposed.

*Blackball Colliery.*—The development of the mine continues satisfactory, the output for the year being 202,878 tons, an increase of 46,056 tons above the previous year's. One shift of miners was employed for the first four months, and for the remainder of the year two shifts.

No. 17 section: The C level to the west of No. 17 incline has been extended 250 yards, and the coal throughout the whole of this distance averages about 12 ft. in height, and is of excellent quality. Towards the end of the year the D level, which is 150 yards to the rise of the C level, was started, but did not go more than 60 yards before the whole of the bottom seam pinched out, and the level is now being driven in the top seam to prove this part of the field.