

*Loughnan's Coal-mine.*—(14/10/1902): Construction of dray-road and tram-line has been continuous, to admit of working the coal-seam on the new leasehold, conditions and quality being favourable.

*Burning Coal-seam at Boatman's.*—The Mines Department having granted authority to extinguish the fire, the drainage of the *pakihi*s and Flower's Creek was speedily effective, and the full supply of water turned into the burning mass, which when visited (26/1/1903) was practically extinguished. Owing to the excessively dry season the water-supply has not been constant.

*Blackball Colliery* (owners, Blackball Coal Company, Limited; James Leitch, mining manager).—(25/11/1902): Notwithstanding the disadvantages incidental to the removal of pillars under soft friable roof, coupled with the varied difficulties experienced in the early part of the year from underground fires resulting from spontaneous ignition, the output has been exclusively from the extraction of pillars. This is the highest recorded for any annual period, showing an increase of 20,446 tons over the preceding year, and a proportionate excess of tonnage as compared with the original calculations for area exhausted. Previous to the removal of pillars, outbreak of fire in the solid working was suppressed generally by water under heavy pressure; but subsidence of the strata eventually cut off all means of water-supply as the exhausted areas gradually retreated homeward. Under these conditions a continuous system of walling was necessarily enforced, whereby the heated areas were effectually sealed, these precautions being effected by crib-log and stone-built stoppings packed between the walls with loose clayey matter to a width of 15 ft. Fortunately, the system adopted has not only proved effective in suppressing further spread of fire, but any resultant gases exuding through the stoppings are diffused without any perceptible detriment to the ventilating-currents.

Dip Area: Mechanical and other preparatory works in connection with the development of the dip areas are now engaging the attention of the management, in order to maintain the output as the pillars in the rise workings become exhausted. These works are now in a progressive stage of efficiency, and a coal-seam of splendid quality has been exploited to a distance of 350 yards to the dip of the main level. In addition to the progressive works stated, increased facilities for haulage and ventilation will be provided by a duplicate rock tunnel 10 ft. by 7 ft. in the clear—driven on an angle of 10°—to strike the coal-seam at a calculated distance of 9 chains, at a point half a chain west from the parallel of the present haulage-tunnel. On completion of the haulage, pumping, and ventilation installations the dip headings will be vigorously driven to the boundary, on 1-in-12 gradients, to a distance of 110 chains, whilst the upper developed top-seam section will be opened out and worked on long-wall principles. This projected line of development will enable the company to work the field homeward from the dip boundary, and thus provide approved precautions against the possibility of fire from spontaneous ignition. The endless-rope-haulage installation, capable of raising 500 tons per day of eight hours, is early expected from England. These engines comprise 15 in. diameter double cylinders, with 30 in. stroke, fitted with all the latest devices and improvements relative to modern haulage. Boiler and electric pumping installation are complete. Reports to date and other requirements of the Act are strictly enforced. Systematic timbering is made a special feature in the workings. Seven inspections were made during the year. No serious accidents reported.

*Brunner Mines* (R. Alison, mining manager).—Although these mines have worked single shift during the whole year under gradually exhausting pillar areas, output has been steadily maintained, showing a gross tonnage of 116,714 tons. John Coulthard is now responsible mine-manager for the whole area.

*Brunner Mine* (14/11/1902): Apart from the ordinary routine of operations in opening out the old disused headings in order to exhaust the pillars effectively, fresh developments at this colliery are events which practically belong to bygone days, as output is, and has been for several years past, exclusively from pillar-extraction. In fact, the question arises, how has the mine kept going so long? The colliery has certainly had a longer life than it was credited with some years ago, but this is due principally, if not entirely, to the fact that soft coal, which was originally left standing in pillars for want of a market, has within the last few years attained a commercial value. It is owing to the careful extraction of these pillars and sending out loose coal and slack formerly left in that the output has been so long maintained.

To further extend the present dip working and win the pillars direct to the goaf of the original dip, a low-level water-channel was driven from the edge of the river, by which the desired area has been efficiently unwatered to a depth within easy access of the haulage; also, in the rise districts facilities have been further provided to carry out the continuous exhaustion of the Lady-smith and Coolgardie districts conjointly. The bank-head, with the usual brake appliances, was recently shifted down to a lower level on the self-acting incline. The timbering of this incline tunnel has been thoroughly overhauled and put in good repair. Ventilation, induced by a "Scheile" fan over the whole areas, gives an average reading of 20,000 cubic feet per minute. Reports are kept to date, and there were no serious accidents. Seven inspections were made.

*Tyneside Colliery* (James Armstrong, mine-manager).—This old pit was recently unwatered and opened out, the workings standing in the same good order as when shut down. Screening, loading, and other surface plant are nearing completion. There were six colliers getting coal when the mine was last inspected. Travelling-road to the workings is provided by adit tunnels. Coal is raised through a brick-lined vertical shaft 90 ft. in depth.

*Point Elizabeth State Coal-mine* (A. B. Lindop, manager).—The operative mining developments comprise the driving of Nos. 1, 2, and 3 rock tunnels in view of winning the main or exhibition coal-seam; while the No. 4 tunnel started recently on the north bank of the Seven-mile Creek is calculated to win the upper seam. Regarding the regularity of thickness and quality of the last-named seam, reliable data are afforded in the coal-tunnel opened and worked by Kane on the