

large amount of faulting is observable. With a view to opening up a section in this area, the usual bords have been turned away, and in nearly every instance the same faulting that crosses the main heading and levels has been encountered. The mean thickness of coal is about 5 ft. 4 in. Every preparation has been made for the rapid development of the mine by opening out on the coal some distance in advance of the main heading-face. The driving of the main level is vigorously carried out by three shifts of workmen. Ventilation throughout the workings of the mine is well maintained by a "Sirocco" fan (25 in. diameter), belt-driven, and actuated by a 5-horse-power Ackroyd oil-engine. With the exception of the adjusting of the various screens to suit requirements, nothing of importance has been done at Stillwater. The coal won from the mine is exceptionally clean, and is in demand by the gas companies, producing from 12,840 to 13,400 cubic feet of gas per ton of coal. It is also valuable as a smithy coal. Rules posted, and reports to date.

*Brunner Mine, St. Kilda Section* (R. Alison, mining engineer; J. Armstrong, mine-manager).—(6/12/10): Main north heading: At a driven distance of 30 chains a large fault has completely cut out the coal; all solid workings were thereby exhausted, and the extraction of the pillars was undertaken.

East level: Pillar-extraction in this section also continues to be carried out. Owing to the soft nature of the bottom in such pillar areas, which in some instances has lifted or swollen to such an extent that some of the pillars are completely buried, the cost of production is greatly increased. On several of my inspections the ventilation of these sections has not been satisfactory. This in a measure must be attributed to the large amount of black damp, which is freely given off from the goaf (with a low barometer), where pillars have been withdrawn, and at times the volume of air entering the mine proved inadequate to dilute these gases. However, this unsatisfactory state of the ventilation has been entirely overcome, and the mine is now well ventilated.

No. 1 low-level tunnel: All operations have been suspended here for some time, as the coal on being driven on remained soft and unmarketable.

No. 2 low level: This level continues to be driven on practically the same bearing as the Rise section of the mine, but at a much lower level, and has now been driven a total distance of 10 chains. The coal in the face is of good quality, and gives every indication that a block of coal may be won in this direction.

Rules posted, and reports to date.

*No. 1 Point Elizabeth State Colliery* (James Bishop, mining manager).—The net marketable quantity of coal produced from this colliery for the year ended the 31st December, 1910, was 212,888 tons 12 cwt., a decrease of 3,336 tons 6 cwt. compared with the year 1909. This decrease of output is attributed partly to labour troubles during the early months of the year, and partly to extra stoppages owing to weather-conditions interfering with the shipping.

No. 1 section (J. Coulthard, mine-manager).—(7/12/10): To the west of the main dip, only two places are now working in solid coal. Upon completion of these two places the whole of the area on this side of the dip will be standing on pillars, many of which, owing to the bad nature of the roof and a water zone immediately overlying same, it will be impossible to totally extract, and recourse to splitting only must be adopted. No. 3 west section: In this section the pillars are already being split and robbed to the fullest extent, with due regard to the safety of the workmen and the prevention of influx of water. East side Extended dip: A few solid places have yet to be completed in the top levels, but the pillars are being split in the bottom levels. In order to maintain the stability of the roof, and prevent any heavy falls from taking place, it has been considered necessary to leave a small block of coal of inferior quality along the main fault-line. No. 2 east level: As the coal here is rapidly thinning, work has been temporarily suspended until such time as the present longwall work has been completed, when it is intended to again resume work in this section by longwall method. No. 1 east level: All coal won here is mined on the longwall advancing principle. It ranges from 3 ft. to 5 ft. in thickness, and is overlain by a strong sandstone roof. The mine is well timbered throughout, and excellently ventilated. Quantity of air entering the mine, 46,870 cubic feet per minute. Although this section could not be classed as fiery, all parts are worked by safety-lamp, thus providing in a practical manner against the chances of accident from this source. In order to relieve the strain on the compressors, preparations are well in hand for the installation of a steam haulage-engine (to be placed on the surface) to supersede the present air-winch now used for hauling from the extended workings, all available air being required for pumping purposes. Rules posted, and reports to date.

No. 2 section (J. Herd, mine-manager).—(8/12/10): The whole of the output from the top seam in this section is solely derived from the extraction of pillars. In Nos. 2 and 3 east levels the coal ranges from 10 ft. to 13 ft. in height, and is mined in two operations (in mining parlance, caunching or benching). The top part, to a height of 5 ft. to 6 ft., is first won, and short punch props used until such time as enough of the bottom coal is removed to allow of the setting of the longer permanent timber. From No. 1 east level the output is also maintained by the withdrawal of pillars, the coal being about 6 ft. in height. The pillars are kept well in line, and form a creditable section of pillar-work. Throughout the Extended dip the few remaining solid places continue to be double-shifted. The most satisfactory feature in connection with the working of this section is that the bottom seam, which is separated from the top seam by sandstone from 20 ft. to 30 ft. in thickness, is proving more extensive than was anticipated, and should provide work for a number of miners for some considerable time. The total volume of air circulating in this section was 48,000 cubic feet per minute. Rules posted, and reports to date.

For some time past the pumps in both sections of this colliery have been dealing successfully with the water in the dip workings.