

together with the practical and systematic order in which the pillars are removed, the risk to life and property, and the loss of coal, are reduced to a minimum. Timber is plentifully and freely used. Big Dip: The coal from this district is exhausted, and all movable material is removed. Alexander Nicol, an authorised shot-firer in the Cascade east district, met with an accident, which terminated fatally, from an explosion of blasting-powder that he was carrying loose in a tamping-box, although this was strictly against official orders. Five inspections were made.

*Ironbridge Colliery.*—(22/12/98): Since the Flat-seam and Gentle Annie pillars were abandoned, operations have been confined to the solid workings of the Cedar seam, from which the total output is produced by Morgan and Gardiner's electric coal-cutting machinery of the percussion type. As a proof of the satisfactory results obtained from the coal-cutting machines in use at this colliery the company has lately doubled the number of machines of their working-plant. This has removed a disadvantage that was attended by loss of time in shifting the machines from face to face. To meet the requirements of the output the work of the machines is distributed over three shifts—namely, six on afternoon- and night-shifts and four on day-shifts. The work is now of a more simple character, the men having become better educated to it. Owing to a number of faces being cut off between a reverse fault and the outcrop the management has decided to extend operations across Cedar Creek. To facilitate and vigorously push forward the work a heading is being driven in three shifts by means of machinery. The outcrop will be cut at the most advantageous point to the bridge, and will at the same time form an approach. The ventilation system has recently undergone a complete renewal by the erection of a Schiele fan driven from a 4 ft. diameter Pelton under a pressure of 90 ft. It is built on Cedar Creek, at the outlet of a heading that connects with the working-faces. Thus a direct air-current, measuring 16,500 ft., is circulated. The timbering and spragging of workings of this district are entirely carried out by the company's officers, and it is strictly and carefully done. No accidents reported. Reports up to date. Five inspections made.

*Langford Coal-mine.*—Since the No. 1 Buller dredge was laid aside for repairs operations at this mine have ceased. The supply of coal to this dredge was the chief outlet of the mine.

*Whitecliffs Coal-mine.*—Work has ceased at this mine.

*Flaxbush Coal-mine.*—Work at this mine has also ceased.

*Coal Creek Coal-mine.*—This mine has been worked very irregularly, employing only one man. The coal is mined to supply the Exchange dredge, Three-channel Flat.

*Golden Treasure Coal-mine.*—(9/12/98): This lease, held by John Davidson, employs two men, who sluice off the top and break out the coal in the open face.

*Murray Creek Coal-mine.*—(9/12/98): This lease, held by James Sara, adjoins the Golden Treasure. The coal is of good quality as a household fuel, and is worked in a very satisfactory manner.

*Phoenix Coal-mine.*—(9/12/98): The workings of this mine have been confined to the rise boundary of the lease. The coal being of great thickness, the workings are safe, and little timber is required. Ventilation good. Reports kept. Four men employed. Four inspections.

*Murray Creek Coal-mine.*—(10/12/98): William Lamberton, the owner, has ceased work at the Rise Mine. He is extending a prospecting drive along the line of a main fault, where the coal is of a harder nature. A second outlet provides good air. Reports to date. One man employed. Four inspections made.

*Inkerman Coal-mine.*—(7/2/99): The Inkerman Gold-mining Company employ two miners to supply coal for their rock-drill machinery at the low-level tunnel, Rainy Creek. During my visits to the gold-mines work had ceased, and, in consequence of the water being up on the bottom levels, no inspection was made.

*Devil's Creek Coal-mine.*—(7/12/98): This mine, situated on the Progress Road, has recently been opened from an outcrop. The seam has a vertical position, and measures 8 ft. in thickness.

*Breen's Coal-mine.*—(8/12/98): The coal was chiefly won by the splitting of small pillars; but, as the owner is not an experienced miner, and the work is of a dangerous character, I gave him instructions to cease operations in that part of the mine, which was accordingly done.

*Progress New Mine.*—(8/12/98): The Progress Mines Gold-mining Company has recently opened out a 6 ft. seam from an outcrop on the opposite side of the terrace from the old mine, to supply coal for the machinery at the Progress Mines. Thomas Cochrane has contracted to supply the coal at a certain rate per ton. The quality is well suited for steaming purposes.

*Beckford Coal-mine.*—(8/12/98): Work has ceased at this mine.

*Bourke's Creek Coal-mine.*—(8/12/98): This mine, owned by Cairns and McLever, is situated on Midland Railway reserve, about two miles inland from the main road. The coal being a favourite domestic fuel, it is loaded into bags at the mine, and conveyed on an open trolley over a tramway to a siding, where it is loaded into drays. The seam is opened by two levels about 150 ft. in, which are connected at regular intervals, and provide good air. Reports to date. The coal is 14 ft. in thickness, and part of it is left for a roof. The work is safe.

*Waitakere.*—Coal for household purposes is still dug from this open deposit of lignite.

*Blackball Colliery.*—(12/12/98): At this colliery the output steadily increases, but as the carrying capacity of the aerial tramway is limited to about 230 tons per day of eight hours, the developments are confined to the production of this supply. Since mining operations were commenced this coalfield has borne an almost unbroken character with respect to faults; thus facilities are afforded to carry on operations on a regular and systematic basis. The principal difficulty to contend against is a weak roof; but, notwithstanding this difficulty, owing to the strict discipline, together with the regular system of timbering that is adopted throughout the mine, its safety may be classed as one of the first in this district. Attention has of late been directed towards winning the coal from the top seam, which is a hard bright coal 4 ft. in thickness, with a strong sandstone roof. As it was not practicable to work the two seams separately, owing to the thinness of the intervening strata, it was ultimately decided to draw the timber in the bottom-seam bords after they were holed on the