

150 ft. of it. When reached stoping back will be the plan of operations till the mouth of the drive is reached. The air at the northern end of the present workings was very bad on the day of my visit, and Mr. Archer promised to remedy this as early as possible by making a second connection with the air-shaft.

*McCready and Combes's Pit, Kyeburn.*—(22/1/96): I found Mr. Combes at the pit, and learned from him that during the winter the old workings had been stoped back to the mouth of the tunnel, and allowed to cave into that level. Quite lately a shallow shaft has been sunk to the coal-seam, which crosses the gully near the mouth of the old tunnel. The coal in the shaft has been driven on to the south for a distance of about 80 ft. The drainage is at present being hoisted in a bucket by a hand windlass.

*Cooper's Creek Pit, Clyde.*—(18/5/96): The stone tunnel has at last reached the coal and the hanging-wall, which stands at a very steep angle—almost vertical. The seam is said to be about 20 ft. thick, and of fairly good quality. The tunnel, after passing through the schist-rock, had to be driven through many yards of soft schist and clay, nearly all of which swells up from the bottom, and caves in from the sides and roof to such an extent as to require the renewal of timber at very short intervals of time. I pointed out to the man in charge that I did not consider the timber heavy enough for the work. Had the timber first put in been very heavy and close lathed, it would have prevented any material movement and saved much trouble. The only coal-hewing yet done is the driving across the seam to the hanging-wall.

*J. Pryde's Pit, Bannockburn.*—(20/6/96): All the working-places were inspected, also some of the old workings, all of which are in good order and safe condition. In the present workings south of the dip-drive there are 2 ft., or perhaps 3 ft., of shale overhead, between the seam being worked and the next 7 ft. seam of coal. This shale, after a time, gradually flakes down till it leaves a smooth coal roof of the best kind. The shale, as it indicates separation, is pulled down and stacked at the sides of the bords. This shale roof requires careful and close attention till it is all down immediately over the travelling-road. The workings are dry, and the air is very clear.

*Goodger and Stronach's Pit, Cromwell.*—(27/1/96): A shaft 8 ft. 6 in. by 3 ft. 6 in. in the clear, having timber 2 ft. by 8 ft. throughout, is being sunk about half-way up the terrace on the west side of the Kawarau River and on the west end of the Town of Cromwell. At the time of my visit the shaft was down 134 ft., and the work was proceeding rapidly to finish at an early date. I understand several small seams of coal have been passed through, including one of 8 ft., but sinking is being continued to reach a seam supposed to be 13 ft. thick, in which it is intended to commence mining operations. I am told the coal-seams have a steep dip to the westward. This dip will, at an early date, necessitate one of two things—viz., sinking the shaft some depth through the coal-seam, or additional winding and pumping plant to follow the dip of the seam. There is a considerable quantity of water making in the shaft in the bottom gravel lying on the coal-measures. This water is not likely to get any less in quantity. (18/6/96): The shaft was sunk to a total depth of 153 ft., at which level coal-hewing was commenced, and is being continued by the removal of 7 ft. of coal, leaving 1 ft. or more overhead to strengthen the roof, which appears, so far, to be in first-class order. The present floor is said to be coal, but I did not record the depth of it. The coal is generally hard, but there are old soft places which do not improve the quality. The walls of the bords are quite solid, and show no signs of cracking. There is quite a quantity of water flowing down the shaft from the floor of the open gravel on top of the coal-measures. I fear the quantity of the water will not get less. The pump used is a common lift, and is being driven at too high a speed. A small Tangye pump would do the work quite easily, and would be no trouble to keep in good working-order. It would be a decided advantage, and a saving to all concerned, to remove the present pump and to do the winding only with the engine. At the present time the coal is being hoisted in bags, several at a time. I found only one man working in the mine. The dip of the seam is 1 in 3 to the west. I have requested the mine-owners to provide proper cages at an early date.

*Gibson's Excelsior Pit, Bannockburn.*—(18/9/96): This is the Excelsior seam, which was reached here by a short adit from the west side of the Bannockburn Creek. The coal was followed only a short distance to the west, when it was found to be cut off by a fault. It is the intention to abandon this as soon as the pit on the west side of the creek is fairly opened.

*Parcel and Gibson's New Pit, Bannockburn.*—(18/9/96): This pit is situated on the east side of Bannockburn Creek, near its junction with the Kawarau River. A shaft was first sunk 30 ft. deep from the floor of an old sluicing claim, where a great depth of terrace was in the early days sluiced off. The shaft passed through two seams of coal, the lower one being 7 ft. thick. A dip-drive, 3 to 1, is now being put down to the lower seam, and is said to be within 30 ft. of the coal. The covering in the coal is thought to be good standing-ground.

*Wilson's Pit, Kawarau, Bannockburn.*—(27/1/96): A new adit has lately been put in to the coal, at a higher level than the old workings, and on the same side of the river. The adit is of considerable length, and is at present following the contour of the coal. The dip of the seam is to the west. At the mouth of the pit a wire rope is suspended across the Kawarau River to the Cromwell side, and on this wire rope a cage is made to run, carrying five bags of coal at a time. There is a dray-road on the delivery side down the face of the high terrace to the bag landing, from which the coal is carted away. The coal-seam is about 6 ft. thick, and the roof is not very good. I had to find fault with the air in the mine, and a promise was made to remedy this by sinking an air-shaft at an early date. (18/9/96): I did not find any one there, and from what I saw I do not think there has been any coal-hewing for some days past. Having found a pit lamp, I examined the south workings to the end of the main heading, where the coal is about 5 ft. thick, and not a good roof. Notwithstanding the working-places being very narrow, the roof flakes down in places, and some timber is used.

*Anderson's Pit, Bannockburn.*—(27/1/96): The old pit was abandoned a short time ago in