

The 30ft. of tunnel driven is also paved with flags. This class of stone is plentiful in the creek and tunnel, and the sides are walled with stone to the roof, between and outside the sets of timber. The width between the props is 5ft., and the height 4ft. 6in., but the width of tunnel is reduced by the stone walls to 2ft. 6in., thus making it a very strong piece of work. The nature of the ground driven, so far, is heavy wash in the sides and soft clay in the bottom. The floor of the tunnel is said to have a full 3in. to the 12ft., which, with a head or two of water always available at the side of the pit, will carry away the small useless coal and the *débris* when stripping.

SOUTH OTAGO.

53. *Saddle Hill (Christie's) No. 2.*—(24/8/93): All the workings are in first-class order; but the air-current was not as strong as it should be. Mr. Christie, however, stated that he had this matter under consideration, and pointed out to me where he intended sinking an upcast shaft at an early date, by which the whole of the workings will be well ventilated. There is a strong coal roof throughout the mine. I did not see any roof down anywhere in the mine.

54. *Glenochiel, Saddle Hill.*—(19/8/93): Seven feet of coal is taken out, leaving a large body of coal overhead for a roof. The lower end of the dip-drive has been deepened to reach the floor of the seam, which admits of 5ft. of coal being taken out all over the floor of the old workings. The mine is in good order, and the air-current is very strong.

55. *Walton Park, Green Island.*—(25/8/93): All the working-places (thirty-one) were inspected where there are thirty-six men employed, and the faces were found to be in fair working-order, but most of them require the unfailing attention of the manager, to see that the most friable of the working-places are kept narrow to prevent the coal roof chipping up to the sand and water, and to see that other places are timbered, with the same object in view. Some places require close timbering overhead to keep the main roads open. Careful attention to the nature of the coal and its requirements in the main headings as they proceed, and a little while after, saves a lot of coal and labour, since it is found that after these headings have had a rest for a time the chipping overhead ceases. In several of the working-places there was a chalk mark of even date, showing that the Deputy had done his duty, so far as clause 23 of the special rules is concerned. The quantity of air was tested that was passing through the mine.

56. *Fairfield, Green Island.*—(26/8/93): A large block of coal supposed to exist in the old mine was not found, and after taking out a few pillars the old mine was abandoned. Mr. Harris is now preparing to open a new mine, in ground between Saddle Hill Pit and Bryce's mine, where there is a very thick seam of coal.

57. *Abbotsford, Abbotsford.*—(26/8/93): The working-places are numerous, but most of them cramped for room overhead for the workmen. The fact is the ground crushes in in every direction as soon as an opening is made into it; therefore pillars have to be taken out quickly, following the other working-places, to avoid a considerable loss of coal. A gang of men is employed every night to renew the timber in the main roadways to keep them open. One of the working-places was decidedly warm, but this was where a solitary pillar was being taken out before closing that part of the mine. The air-current into the mine is greater than is required by the Act for the number of men employed in the mine. The crushing of the timber is now as bad as it was last year, and the floor and roof come together in a very short time, notwithstanding a large amount of timber and labour to prevent it.

58. *Chain Hills, Abbotsford.*—(26/8/93): There was no one at the pit at the time of my visit, and since then the owner states that it is abandoned.

59. *Fernhill Chain Hills.*—This mine has again started to send out coal. A few miners are scattered through the old workings, getting down "tops" in places, and in others hewing in the solid coal beyond the old workings. The air-current was very sluggish, and, after speaking to Mr. Gray about it, we visited the furnace and found very little fire in it. I did not think the furnace in very good order, and suggested a few bricks and some mortar would improve it, which Mr. Gray promised to get done.

60. *Brighton Mine, Brighton.*—(22/8/93): Walker has abandoned his old pit, and has started a new one on the opposite side of the gully, where the coal is reached by a dip-drive, at about 30ft. from the surface. The seam is 4ft. thick, and dips slightly south, toward the sea. A portion of the workings is wet overhead, but the drainage is not heavy, and is lifted by a hand-pump. There is not much work done yet, and the coal is hoisted by a horse. The roof is good, and the seam is not thick enough to allow a coal roof being left. An upcast shaft is to be sunk at an early date.

61. *McColl's, Brighton.*—(22/8/93): The new dip-drive is completed, and the coal followed some little distance, having a wet roof all the way. The seam is 4ft. thick, with a soft roof generally, which will require careful timbering till it improves. The man working in the mine is of opinion that the roof will be better as the work proceeds under the high terrace close by. Where the roof has come down in one or two places it has exposed a second seam 5ft. overhead, and from 5ft. to 6ft. thick. The top seam does not appear to be so good a coal as the one being worked. The drainage and coal is being hoisted by a horse. It is McColl's intention to put down a second dip-drive shortly to act as an airway.

62. *Mosgiel Mine, Mosgiel.*—(24/8/93): The section on the east side of the mine will be worked out in two or three weeks. The men will then be shifted to the west side of the engine-plane. The coal does not look so solid on that side, but is considered fairly good. The seam is supposed to extend south considerably beyond the end of the engine-plane, but that part of the mine is not likely to be tested for some time yet, because of the extra distance to pump the water, which might necessitate some additional pumping-plant. The airway to the upcast shaft is in good order, and the air is good throughout the workings. The main travelling road to the east workings shows considerable weight on the timber in places, but is being well looked after and made secure by placing in extra sets. The coal is from 8ft. to 10ft. thick, of which from 5ft. to 8ft. only is being taken out.