

96. *Smith's Mine*.—(12/10/93): The open-face work was discontinued as advised at the time of my previous visit, about twelve months ago. Since then a tunnel has been driven some distance into the coal from the old open face, and is following the dip to the south, where the coal seam is found to be gradually thickening to 14ft. or 15ft. This thickness of seam admits of about 10ft. being hewn out, and leaving from 4ft. to 5ft. overhead for a roof. The working-faces are being made rather wide when so near an open face. A promise was, however, made not to make them so wide in future, so as to leave the open face very strong. The young men in the mine recognise the advantages of the underground workings compared with the old opencast and deep-stripping system of getting out coal. The coal is hard, and makes a good roof.

97. *Richard Smyth's Mine*.—(12/10/93): This is a new pit, at Gore, a little to the north of Green's. The stripping is from 8ft. to 10ft., and 6ft. of coal close to the outcrop. It is likely to get much thicker under the rise of the hill going south.

98. *Pacey's Pit, Chatton*.—(19/10/93): For some reason not very clearly explained to me, the output of coal has been very small compared with that of previous years. There has been nothing done since my visit last year to lift the bottom coal to the floor of the seam in the old open pit. The small quantity sold was taken from the old working-face, so that the pit is much the same as it was when last visited. Mr. Pacey hopes to show more work done by the end of next year.

99. *Pemble's Mine, Chatton*.—(13/10/93): The seam (vertical) is being followed by an opencut south, where the stripping is at present about 12ft., but will be much less 40ft. further ahead on reaching a depression at the head of a small gully. From 10ft. to 14ft. of coal is being taken out of the 20ft. seam. There are several bands of clay, from a few inches up to 1ft. thick, in the coal removed. A new drain is being cut up the gully referred to, where £6 has already been expended on it. It is estimated to cost another £10 to finish it up to the coal seam.

100. *Hunter's Mine, Chatton*.—(13/10/93): Hunter has started to get coal in the northern end of the seam where first opened by Pemble, who followed it to the south. Hunter had simply to remove a landslip to get on the coal, which he is now following to the north, where the terrace rises very quickly. The deepest stripping is 18ft., but it will be less some little distance in the terrace away from the gully where the start was made. The thickness of the seam here is from 26ft. to 28ft., but has a band of clay in it 9ft. from the west side. There appears to be plenty of coal to admit of its being mined 10ft. high through the hill with safety, without timbering, by leaving a strip of coal on the sides to keep back the clay walls. A very good prospect of fine gold was obtained from some smooth quartz-wash lying in the coal by washing a small quantity in a shovel. Hunter's old pit, Otama, was not working during 1893.

101. *Irvine's, Knapdale*.—(13/10/93): This mine, although a mile and a half from Pemble's pit, is, no doubt, a continuation of the same seam. It can be traced some distance south of this mine, especially where it crosses the Mataura River, where it forms a "bar" standing out of the water in places, causing a rapid. The thickness of seam is 30ft., of which from 14ft. to 16ft. are being taken out in the centre of the seam by 26ft. in height, taken out in benches. Quite lately a shaft has been sunk from the top of the terrace to the roof of the present workings, a depth of 58ft., of which 27ft. were in coal, and the balance through water-worn gravel. In this shaft was placed a square box, or tube, to the coal, and the space filled in round it. The box stands some feet above the surface, and can be added to if necessary to assist the air-current. Previous to the upcast shaft being made the powder-smoke used to remain in the roof of the workings for four hours. Since the upcast has been finished the smoke clears away in fifteen minutes. The height of coal overhead at the present workings is 27ft., and there is no indication of it being any less while following the seam to the north. It is more than likely that shores will have to be placed at intervals in the mine in case of any unevenness in the thickness of the seam and coal walls being discovered when too late. The shores would give warning and prevent a collapse of the mine. The adit is about 10ft. above the Mataura Flat.

102. *G. H. Evans, Wendon*.—(18/10/93): The pit is in much the same condition as when visited last year. The coal is from 12ft. to 14ft. thick, and the stripping 25ft., and getting deeper as the face advances into the hill. There are now about 3 chains of an open face of coal, and the stripping is very neatly sloped back, and not the least likely to cave into the pit. The open drain, which was being deepened last year, is now completed, and will drain the mine to a level that will admit of several years' work being done without bailing or lifting any water. There is a second seam of coal 10ft. thick quite convenient on the east side of the gully, and from 14ft. to 15ft. above the one being worked, but it is said the coal is not so good.

103. *Edge, Waikaka Mine*.—(18/10/93): The opening extends to both sides of the gully. On the north side the stripping is from 12ft. to 14ft. of clay. The face of clay had caved in so much as to prevent the coal being seen to the floor. On the south side of the pit the stripping does not appear to be so deep. The pit is not properly drained, which could be done at a small outlay of labour, and to the great advantage of the coal-hewer.

104. *McDonald's, Wendon*.—(18/10/93): This pit is in a small gully, convenient to the house, and where coal has been obtained from it for home use for some years past. The stripping is quickly getting deeper as the coal is followed into the hill-side, and the seam appears to be 4ft. or 5ft. thick. A good road is being made, but very slowly, to the pit.

105. *Ayson's, Waikaka*.—(19/10/93): This is a new pit on the west side of the Waikaka Township, and probably two miles from it. The seam is tilted on edge, and where exposed is about 25ft. thick, with a 5ft. band of shale near the centre. The spot chosen to open the pit is at the side of a small gully, where the stripping is from 5ft. to 6ft. Not much as yet has been taken out. It is not a seam that can be extensively or easily mined out, nor satisfactorily worked as an open pit, to compete with others in the locality. It is very convenient to supply coal for his own use.

107. *Waimca (Smith's) Mine*.—(19/10/93): Smith has shifted 200 yards to the north from the working-place of last year. The stripping is from 12ft. to 15ft. of stiff clay, and the coal is 8ft. thick. The coal shows the action of a rapid stream having flowed over it for ages, carrying sand and gravel,