

purposes of ventilation and as a second outlet. Underground the opening-out has been vigorously pushed ahead. On the south side the coal retains a good average thickness and quality, but going north it is thinner and not so good, owing to the occurrence of bands of stone and numerous small faults. This latter condition causes areas of bad roof, necessitating the use of a good deal of timber, and naturally the places so affected are necessarily rough; but I have no reasonable cause for fault-finding as regards the safety or otherwise of these places. I travelled through the entire workings and out by the old tunnel. In connection with the new tunnel there are a few conditions of a somewhat temporary character which it would be desirable to have put on a better footing, and about which I wrote the company on the day following my visit. Mr. McIntosh, the managing director, afterwards informed me, in the course of conversation, that he was attending to my wishes as quickly as circumstances would permit.

(5/5/98): Mr. J. C. Campbell having accepted the position as manager of the Burnwell Colliery, Lovell's Flat, is succeeded by Mr. Alexander Gillanders.

(15/11/98): I again inspected the mine, and found it splendidly ventilated. The workings have been considerably extended since my last visit, and present much the same features as before. The coal varies from 3 ft. to 9 ft. thick.

J. HAYES, Inspector of Mines.

DEAR SIR,—

Office of Inspector of Mines, Dunedin, 29th September, 1899.

Re ventilation of mine: If you read Wardle's book, you will find authenticated instances of increased ventilation being obtained (where the upcast has a larger area than the downcast) by partially closing the outlet at the top of upcast. You might try the effect of a canvas stopping, which would close off, say, half the width of your dip at the top set of timbers, and let me know the result. If this shows an improvement, then you could augment it by carrying light exhaust-pipes up the dip, and boxing a continuation of the haulage-road for 20 ft. to 30 ft. above top of drive, and letting your exhaust-pipes terminate in this wooden tunnel or box. This, and a good trimming up of your intake air-road, should meet your needs.

Mr. Alex. Gillanders, Allendale Colliery, Shag Point.

Yours faithfully,
J. HAYES.

SIR,—

Office of Inspector of Mines, Dunedin, 29th September, 1899.

I would suggest (in the interests of general safety) that you fasten rubbing-boards, say, 8 ft. by 1 ft., on the legs on each side of the rails in your main dip, and compel all persons travelling on the incline to do so on the pipe side of middle legs. A notice to this effect should be posted.

Yours faithfully,
J. HAYES, Inspector of Mines.

Mr. A. Gillanders, Allendale Colliery, Shag Point.

EXTRACT FROM COAL-MINES REPORT, 1900.

Mines Department, Wellington, 11th April, 1900.

Allendale Colliery, Shag Point (A. Gillanders, manager).—(19/4/99): Continued work in the seam proves that the coal is still variable in thickness, the minimum, so far as yet seen, being 3 ft. 6 in. and the maximum thickness 8 ft. Taken as a whole, the roof is rather bad, and the coal-field disturbed by numerous small faults. In the new mine the solid workings are approaching the old mine-workings, where the coal is still standing in pillars. The ventilation is very fair. The attention of the manager was drawn to some minor matters in connection with the working of the mine verbally, and also by letter under date of the 22nd April, 1899. A fatal accident occurred at this mine on the 13th April, 1899, the particulars of which will appear under the head of "Accidents."

(26/9/99): There is now a considerable area of ground opened out, and the work of extracting the pillars near the rise of the field has commenced. A cross-measures tunnel, driven from the bottom level, has cut an underlying seam 4 ft. 6 in. thick, so far as proved. This seam is from 30 ft. to 40 ft. (vertical) below that hitherto worked, and as yet very little has been done in it. Ventilation very fair on the whole, although near the old workings the air was slightly charged with black-damp. This was perhaps all the more noticeable on this date in consequence of the ordinary work of the pit being suspended for the day owing to falling-off of demand, and advantage being taken of this to effect needed overhauls to the pumping-plant. The steam was necessarily cut off, and, as the ventilating-power is largely augmented by the heat from steam-pipes, the decreased ventilation for the time being is easily understood. Mr. Gillanders subsequently informed me that he had improved the ventilation generally throughout the mine.

J. HAYES, Inspecting Engineer.

EXTRACT FROM COAL-MINES REPORT, 1901.

Office of Inspector of Mines, Dunedin, 11th March, 1901.

Allendale Mine, Shag Point (A. Gillanders, manager).—(11/5/1900): The trucking-roads and airways in the section worked from the bottom of the main incline are under considerable pressure, a partial creep having set in. This district is intersected by numerous small faults carrying water, and the roofs and sides have to be supported, entailing large expenditure for maintenance and renewal of timber. The working-places, however, at present being opened are in an area of splendid coal. The roof is good and very little timber is required. The air is not what it should be in some of the far-in places. I drew the manager's attention to the state of the air at several of the working-faces, more especially at No. 2 north level face. The intake airway (old mine) is very circuitous and small in area, and the air become more or less stale before it reaches the working-