

places. We then passed into the upper seam, through a stone drive, at the end of which the coal is 3ft. 6in. thick. Going north a distance of about 3 chains, a 3ft. 6in. seam of coal comes in overhead, and gradually the shaley clay between the seams cuts out, and the two seams coming together make a good 7ft. seam of clean coal. This has been followed for 10 chains, along which distance there are three jigs placed 40 yards apart. Returned through a stone drive to the middle seam, and then through the trap-door to the main haulage road. The roof is generally very good, and the air is good throughout the mine.

## SOUTH OTAGO.

26. *Fernhill Mine, Abbotsford*.—(14/8/94): The manager was in Dunedin at the time of my inspection. I examined all the working-places. The work simply amounts to splitting some of the larger pillars in parts of the mine, some distance apart. I did not think one of these places very safe for the workmen, and on visiting the mine again the next day I found that the men had been removed to another place. I understand it is the intention of the owners to push on a prospecting tunnel—already driven some distance—through the large body of soft coal known to exist in the north side of the present workings, with a view of finding good hard coal some distance ahead in a large block of land not yet tried, many places in the old workings were being made secure with very strong timber.

28. *Freeman's Mine, Abbotsford*.—(14/8/94): The manager, Mr. Green, was in Dunedin at the time of my visit. With the overseer I went through all the workings, and found, as usual, most of the working-places and some parts of the main roads crushing in at the sides, or being considerably reduced in height by the floor rising, which has to be continually dressed down for some chains in length to keep the mine open. A part of the mine took fire a short time ago, and was prevented from spreading through the workings by a spray of water from a jet on a long line of pipes laid into the mine from the surface. The locality of the fire was then quickly bricked off from the main road and the working-places, and is now being examined several times during the day-and night-shifts. I found the brick-stopping very warm. I did not find the air-current as good as it should be, but the work now in progress, which will be completed in about nine days, is to remedy this defect. Since my inspection of the mine I have written to the manager about the insufficient air at the time of my visit. Some of the pillars in the furthest workings from the pit-mouth are now being taken out, and the roof allowed to settle down behind the men.

29. *Walton Park Mine, Green Island*.—(13/8/94): Examined all the working-places in the mine. The principal part of the work just now is on the new extension, going east from the shaft, and equal to 16 chains in length in a straight line. The seam here is 15ft. thick, and the last 2 chains driven is nearly on a dead level, which is something new in this mine. The coal is very hard to hew in this part of the mine, and, with the thickness of coal roof left, should stand well. The air-current I found to be 8,100ft. per minute, for thirty-four men in the mine. Everything appears to be in good order.

30. *Saddle Hill (Christie's) No. 2*.—(10/8/94): A new air-shaft has been sunk in the solid coal near the present workings, and an airway driven to it. The air-meter registered over 3,000ft. per minute, which is much more than is required by the Act for the number of men employed. The shaft went through over 30ft. of good coal, of which there are only from 10ft. to 12ft. being taken out. The pillars are 14ft. square, and very solid. All the old workings throughout the mine are in splendid order; no roof down anywhere, and the sides are nearly in the same state as they were when the coal was first hewn out, many years ago. The new working-places are in good order. A new dip-drive is now being driven from the old workings to the south-east to test the value of seam in a new district. There will be a little water to contend with in following the dip.

31. *Burnwell Mine, Green Island*.—(10/8/94): This is a new mine, situated between Christie's and Bryce's pits. The coal is from 60ft. to 70ft. below the surface, and is reached by a dip-tunnel driven into the hill, and going to the westward. The seam dips to the south, and has a good hard floor. There appears to be 15ft. of good coal, of which from 6ft. to 7ft. only are being taken out. This leaves a very strong roof. The working-places are dry, and the little drainage coming into the mine is from the incline. The workings are in good order.

32. *Glenochiel Mine*.—(10/8/94): Most of the coal-hewing is now being done in the east side of the incline. A drive going eastward and following the contour of the floor of the coal has nearly reached the outcrop. There is a large body of coal left overhead for a roof, and only from 6ft. to 7ft. of coal is being taken out. The air-shaft is in good order, and the air is good throughout the mine.

33. *Brighton Mine, Brighton*.—(11/8/94): The workings have been much extended during the past twelve months, and the coal has increased in thickness from 4ft. to 9ft., going to the eastward. A strong coal roof is now being left in that direction. The pumping and haulage is being done by horse-power.

34. *McCull's Mine, Brighton*.—(11/8/94): I did not find any one at the pit. I, however, went through the mine, and found only one place where coal had been lately hewn. The seam is only about 3½ft. thick, with a very bad roof. In some of the old workings the roof has fallen in. The incline is very drippy overhead, and the roof is very soft.

35. *Mosgiel Mine, Mosgiel*.—(9/8/94): The present workings are on the east side of the engine-plane and about 6 chains from same. A portion of this section of the mine is found to be soft coal of little value; but, so far as is yet known, it is confined to the immediate vicinity of a roll in the seam. The useless area may be estimated roughly at 30 yards wide by the length of the fault. Good coal is found at the other side of the fault, where the seam varies from 10ft. to 15ft. thick, and of which there are about 7ft. taken out. The working-places are about 10ft. wide, and the pillars are 14ft. by 48ft. A copy of the regulations is posted up in the mine. The air is good, and the workings are dry.