

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 Burnweil 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.

SOUTH OTAGO.

Fernhill Colliery, Abbotsford (James Gray).—(20/7/98): In company with Mr. Gray, I examined all the working-faces, &c. As mentioned in my last report, the Silverstream water-race crosses above the workings, and a little soakage takes place, which finds its way into the mine. As a result of this a lot of *débris* became heated, and eventually fired. A portion of the mine is therefore sealed off on account of this fire, and at my visit I noticed the smell of smoke pervading almost all the workings. Under date of the 22nd July I wrote Mr. Gray calling his attention to this, and to the necessity of maintaining a more brisk ventilation, to carry off any smoke which it is not possible to prevent escaping into the workings.

Abbotsford Colliery (Freeman's Coal Company; E. R. Green, manager).—(13/7/98): Since my last visit the workings have advanced in solid coal. The old workings are sealed off, and no traces of fire-stink are observed at the stoppings. Workings generally in good order, and a very fair ventilation is maintained. The new pumping-engine has been started; it is a compound condensing Tangye duplex, with steam-cylinders 5 in. by 8 in. diameter by 12 in. stroke. Water-pistons are 5 in. diameter, and delivery-pipes 4 in. diameter. Steam is conveyed in well-covered pipes down the main incline, and an extra boiler and new brick chimney is in course of erection at surface.

Walton Park Colliery (John Kenyon, manager).—(30/6/98): Since Mr. Kenyon took charge a roadway has been opened up from the tunnel entrance to the far end of the workings, and preparations made to bring back the pillars in a systematic manner. The hauling-engines (which used to work the dip-rope at the shaft) have been placed at the tunnel-mouth, and will shortly be set to work. Ventilation and general arrangements are well attended to, and report-books properly kept. As the Walton Park branch line of railway runs through the colliery property arrangements have been made with the mine-owners to leave an area of pillar-coal at each side of the railway reserve for the protection of the line. In order to see that this is done I have made several visits to the mine, and am making periodical surveys on behalf of the Government.

Jubilee Colliery, Walton Park (Louden and Howarth, proprietors; James Louden, manager).—(30/6/98): This is a new colliery, and takes its name from the fact of its being commenced in the year of Otago's jubilee (1898). It is situate at the north-east base of Saddle Hill, and is entered by an adit-level (driven in coal and coaly ground) approximately 40 ft. above sea-level. The seam is the same as that worked by Messrs. Christie at Saddle Hill, but it is to the dip of their workings. At the Jubilee Mine the seam is split up into four divisions, but it is expected that as the workings advance to the rise these will die out, and the seam be found similar to where it is worked by Messrs. Christie. The adit is well driven, and secured by Tasmanian hardwood timbers. A temporary air-shaft, 60 ft. deep, 4 ft. 3 in. by 2 ft. 9 in., has been sunk to provide ventilation during opening-out. It is intended to sink a larger one to the rise when the workings are further advanced. A narrow-gauge tramway connects the mine to the siding at the terminus of the Walton Park branch railway.

Saddle Hill Colliery (Christie Brothers).—(21/7/98): In my last report I mentioned that a new outlet tunnel to the mine was in course of construction. This has been completed, and a small hauling-engine erected, which insures a considerable saving compared with the former method of horse-haulage from the old entrance (now used as a travelling-road and air-way). Mr. Christie keeps the mine in splendid order; reports, surveys, &c., all up to date; and the ventilation A1.

Burnweil Coal-mine, Saddle Hill (Adam Harris).—(21/11/98): Mr. Harris continues to work his mine in a good, safe manner, and maintains excellent ventilation. The coal is strong, and where the top coal is left on in driving the places practically no timber is needed. A tunnel has been commenced lower down the hillside to give an outlet for the coal to the dip.

Glenochiel Mine, Saddle Hill (Bryce Brothers).—(2/9/98): This colliery is within a short distance of the Mosgiel Colliery. Mr. D. Bryce thinks the seam is not the same as that worked at Mosgiel Colliery, and that there is barren ground between the two mines. I noticed, however, that similar conditions affect the seam here as at Mosgiel Colliery. Extensions since my previous inspection have proved the strata to have ceased to dip and begun to rise, but the work is not yet sufficiently developed to determine the cause. Places in good order, and well ventilated.

Mosgiel Colliery, Mosgiel (J. Sneddon, manager).—(2/9/98): Since my last visit the main incline has been continued, and it has been found that the seam has ceased to dip and begun to rise, thus forming a trough or syncline at its lowest point. Whether the field will turn out to be in the form of a basin, or whether the rising strata may only be indicative of a fault ahead, is not yet proved. The working-places, airway, and plant are kept in good condition. Report-book, plans, posting of rules, &c., have proper attention.

Real Mackay Mine, Akatore, Milton (Anthony Young).—(26/4/98): Part of the work here is open-cast and part underground mining. Seam about 20 ft. thick, lying almost level. Place generally in very good order. Report-book kept and rules posted.

Hardwick's Pit, Akatore, Milton (Noah Hardwick).—(26/4/98): Some time last year Mr. Grant, Hardwick's partner, left the mine, and it is now being worked by Mr. Hardwick alone, single-handed. The workings, which are approached by an adit-tunnel, are in fair order, and good ventilation is maintained. The output is very small.