

pillar and head coal, has the effect of confining the heated area, and being well constructed leakage of gases is not reported or discernable. Development to dip has become imperative, and a small steam boiler and winch are being erected for that purpose. One effect of the fire is that workings are perforce withdrawn from the area held under a Crown lease.

*Albury Colliery, Albury* (Crown lease; Robert Riddle; G. C. Kidd, sub-lessee; permit).—Seam, 12 ft.; 8 ft. worked bord and pillar; air-shaft not secured by timber, and sludge lying at bottom. It is proposed to drive  $1\frac{1}{2}$  chains, and sink a new air-shaft on the other side of the hill. Air good.

*Dalgety Coal-pit, Hakataramea* (New Zealand and Australian Land Company, owners).—Coal mined for station requirements.

#### NORTH OTAGO.

*Wharekuri Coal-pit, Wharekuri* (Crown license, A. Shanks).—Only a small quantity of coal produced during the year. Some prospecting is being carried on.

*Awakino Coal-pit, Kurow* (D. Scott).—(24/6/11): A small output only now being won.

*St. Andrew's Colliery, Papakaio* (Thomas Nimmo, permit, manager and owner).—(5/12/11). Mine-workings in excellent order. Places are driven to the boundary for future pillar-drawing. To the south-west a fault was found, and the stone-band thickens. A substantial ladderway is placed in third-outlet shaft. Seam, 7 ft. On the fault line the brown coal for a short distance is altered to a light coking class by natural drainage of water from the seam.

*Prince Alfred Colliery, Papakaio* (A. Beardmore, permit, lessee and manager).—(5/12/11): The incipient fire burning on my last visit is effectually stopped off. Mine is in good order, and the ventilation good. The fault to dip interferes considerably with proper developments.

*Ngapara Colliery, Ngapara* (William Nimmo, permit, owner and manager).—(5/12/11): In good working-order; ventilation good. Powder-magazine approved.

*Broadleaf Coal-mine, Shag Point* (George Brooke, permit, lessee, and manager).—(6/12/11): Seam 5 ft., work on a form of longwall. A band of stone in the seam provides convenient stowing. Instructed permit-holder that the brattice required extension to provide efficient ventilation where men were working.

*Shag Point Colliery, Shag Point* (Shag Point Coal-mining Company, lessees; C. Clasen, permit, manager).—(6/12/11): New second outlet and air-course are now connected. Seam, 3 ft., being worked on a modified long-wall system. A band of dirt affords convenient holing. Ventilation fair, and working-places fairly well timbered. A band of stone provides convenient packing. An effort is being made by the owners to reopen the branch line of railway formerly in use by the old Shag Point Coal Company.

*Allandale Colliery, Shag Point* (Allan McIntosh, lessee and mine-manager).—(6/12/11): Extraction of pillars from old workings continues. Ventilation good, except the low level, where men were temporarily withdrawn on account of an exudation of black-damp, due to unfavourable atmospheric conditions, and the stenton not being through. I traversed intake and return air-courses to upcast air-shaft. Timbering well attended to.

Some prospecting was carried on at Double Hill, near Waitati, during the year, and a small seam of brown coal was located, but is not yet being worked.

#### SOUTH OTAGO.

*Fernhill Colliery, Abbotsford* (James Gray, owner and manager).—(27/11/11): Air good. Mine-manager's report-book kept. The Dunedin City Corporation's Silverstream water-race, originally an open ditch, which traverses the coalfield above the coal-workings, is now being piped for some distance with 30 in. riveted steel flange pipes. Several settlements to the surface have occurred in the vicinity of the race, where coal had been previously mined. Some smell is discernible from stoppings built to old workings on account of underground spontaneous heating in the waste.

*Freeman's Colliery, Abbotsford* (Freeman's Coal Company, owners; A. S. Gillanders, mine-manager).—(27/11/11): I entered this mine by workmen's travelling-way, thence proceeded to all working-faces and other places underground. Places are mainly driven narrow for future pillar-workings. Nos. 7 and 8 dip sections provide output, No. 6 dip is stopped temporarily, and No. 5 dip section is closed altogether, the coal being withdrawn. No. 7 dip, lower lift, is now practically worked out; a creep is crushing pillars, and the floor is rising badly. The final extraction is taking place, and only easily got coal is being taken. The fan, at 380 revolutions, is circulating 22,500 cubic feet of air per minute. The brown-coal producer-gas plant for the fan-power is working satisfactorily, and requires a minimum of attention. Rules posted. Report-book and plan kept. James R. Walker, miner, was killed on the 20th July by a fall of coal and stone from the roof. The place was narrow, but a smooth back to a rough parting in the roof was subsequently visible. The roof had been previously examined; timber was also used. This was the first serious accident in this mine during a period exceeding forty years.

*Green Island Colliery, Green Island* (Green Island Minerals Company, owners; T. Barclay, jun., mine-manager).—(2/5/11): The roof in this mine is bad, and great difficulty is experienced in maintaining the places after they are driven a little distance. An inflow of water from a fault on the right-hand side of the dip has increased the hours of pumping. Every care seems to be taken for the safety of the employees.

*Jubilee Colliery, Saddle Hill* (Jubilee Coal Company, owners; T. Barclay, mine-manager).—(28/11/11): Still retreating on pillars and head coal. That part of the mine towards the dip south-eastward is now practically exhausted, and, owing to faulted nature of strata, and the