

volume of air at return 10,500 cubic feet per minute, more than sufficient for requirements. Air, however, inadequately conducted and imperfectly distributed, black damp being found on floor in pillar works adjoining old workings, and in two other advancing places the faces were an unreasonable distance ahead of the nearest stenton. I subsequently wrote the manager under date 16th November, 1903, drawing his attention to these defects, and on revisiting the mine on the 30th December, 1903, I found that they had been remedied, ventilation attended to, and stentons kept well up.

Walton Park Colliery, Walton Park.—(23/11/1903): Mines closed down; nothing doing here now beyond a few trucks of building-sand per week being filled away. An attendant regularly visits the surface plumps and openings for the purpose of trimming down the edges of any recent falls which may have taken place. Underground fires have reached the outcrop, but no harm is being done thereby, all available marketable coal having been extracted. Notice-boards are posted warning persons against trespassing on the property. The local people are well aware of the dangerous nature of the field, and consequently give it a wide berth. Danger lies in the treacherous nature of the outcrops, where masses of smouldering fire are more or less invisible, and depressions may be filled with CO₂ and other gases, a virulent composition generated by fires in the underground workings having been experienced.

Jubilee Colliery, Saddle Hill (Peter Campbell, manager).—(8/5/1903): Present workings to dip from a new opening on the north side of the field. Being in coal with coal roof, places all standing well, very little timber being required. Air conducted by brattice to working-faces. A 2 in. pipe siphon having 14 ft. lift keeps mine drained. (23/11/1903): Ventilation very fair; working-places and roadways in good order, except that accumulations of dross on roadsides increasingly frequent. The manager holds that there has been no heating and consequently there is no cause for alarm. In this connection past experience generally has been that any brown-coal dross stacked in heaps is liable to spontaneous ignition, and if there has been delay in such taking place it has only been because conditions were not favourable to combustion. The subject is one not very well understood, and prevention is at all times better than cure. It only remains to be said that numerous and extensive underground fires due to spontaneous ignition have occurred in several other mines working similar coal in this district.

Saddle Hill No. 1 Colliery (J. Barber, manager).—(2/5/1903): Air dull at face of low level, stentons not having been kept up close enough. Air in mine adequate, a good current circulating. New air-shaft and second outlet duly fenced and provided with ladders. Mine generally in good order. (20/11/1903—J. Kenyon, manager): Mine in good order except that the ventilation was found deficient at several working-faces. A more centrally situated upcast air-shaft is now required, otherwise it may be found necessary to substitute artificial for the natural ventilation now in vogue.

Saddle Hill No. 2 Colliery, Saddle Hill (James Christie, manager).—(8/5/1903): Main south level face now at 20 chains from mine-mouth all in coal, back level being driven on the eastern boundary. New upcast air-shaft provides good ventilation for the mine. Air good. (20/11/1903): As in No. 1 mine, on this date I had to complain to the manager in regard to deficient ventilation at several working-faces. Mr. Christie promised to remedy matters at an early date.

Kirkland's Mining Lease (Alexander Love, manager).—(8/5/1903): Property lying to eastward of Jubilee Colliery. Shaft sunk 80 ft. when water became troublesome; bore sunk 216 ft. to bottom of main seam, which is said to be 12 ft. in thickness. Work standing meantime pending financial arrangements being made.

Burneill Colliery, Saddle Hill (A. Harris).—(7/5/1903): Mine in good order; air excellent, being well conducted to faces by brattice. A "squeeze" on the second outlet and return airway renders attention to a few sets of timber necessary.

Glenochiel Colliery, Saddle Hill (D. Bryce, permit).—(7/5/1903): Working on pillars and robbing balance of coal left in old mine. Falls to surface provide free ventilation, air consequently excellent.

Mosgiel Colliery, Mosgiel (Sneddon Bros.; J. Sneddon, manager).—(7/5/1903): Old mine abandoned. New drive on western face of Saddle Hill in coal from outcrop. Dip flattened to a roll where coal crushed and bottom soft. Tram-line: 60 chains laid to roadside at Riccarton, 7-horse-power portable engine for haulage. A Deane steam-pump easily overtakes water-growth in mine.

Lauriston Colliery, Brighton Road (J. R. Walker, manager).—(12/1/1903): The tender nature of the roof continues up to the fault. Sufficiency of timber in use with stone buildings to roof at intervals. Air good.

McColl's Pit, Brighton Road (D. L. McColl, owner).—(12/1/1903): The level has tapped and drained the old workings in upper seam, there being 6 ft. of clay between the seams. Second outlet not yet provided. Owner proposes driving a low-level tunnel for drainage and ventilation.

Ferndale (Fairbairn's) Pit, Taieri Beach (Robert Fairbairn, owner).—(17/1/1903): Two parallel drives in about 1½ chains, stentons at intervals. Roof good where coal top left on to prevent overlying gravels running.

Bruce Coal-mine, Milton (A. Young).—(10/10/1903): The mine had been standing a few days when Mr. Young received word that fire had broken out. I visited the mine this day, and found the coal outcrop burning in several places, but the fire was being rapidly smothered by the overlying clay and gravel falling. Owing to the continued dry weather there is no surface water available for extinguishing the fire, which, however, does not appear to be of a serious nature. Mr. Young is of opinion that the mine had been set on fire accidentally by some visitor leaving a candle alight in the mine. At a later visit no smoke was visible, and the fire was evidently overcome, or at least retarded, but the mine may not be opened up for a time, or until a plentiful