

bad roof, it has fallen heavily to the edge of the workings. As the rise pillars are drawn in the line the roof breaks well, and the work continues to be safely conducted. Falls in which heat is detected are surrounded with substantial ash-stoppings. No. 3 air-shaft, being overtaken by the waste, is now abandoned, and No. 2 shaft is restored for ventilation satisfactorily. The air is well conducted around the working-faces by brattice. A new drive is being put in to reduce haulage to the main line of railway.

*Saddle Hill No. 1 Colliery, Saddle Hill* (Christie Bros., owners; W. W. Ogilvie, mine-manager).—(28/11/11): Extraction of pillar and head coal continues; work safely conducted, and ventilation fair. Brick and sand stoppings on the line of waste effectively close the heated area. A brick furnace is being built at the new upcast air-shaft.

*Saddle Hill No. 2 Colliery, Saddle Hill* (Christie Bros., owners; Robert Hill, mine-manager).—(28/11/11): The dip area is blocked off meanwhile on account of incipient spontaneous fires, and the creep is causing inconvenience, making frequent brushing of roads and airways necessary. Brattice is carried close to working-faces. I traversed the air-courses, which were low in places, but there exists a good current of air. Fan ventilation is satisfactory, without which the mine would have been practically unworkable owing to the large quantities of black-damp given off from the waste, which is conducted direct to the upcast air-shaft.

*Lauriston Colliery, Brighton* (Crown lands; James R. Walker, permit, lessee and manager).—(27/4/11): Mine in good working-order.

*Brighton Colliery, Brighton* (D. J. McColl; A. McColl, permit, manager).—Old mine finished, and a new drive has proved coal at a point to the northward of old workings. Communication with the latter will effect free water drainage. Warned manager against an accumulation of water or damp which might be present in the older workings.

*Ferndale Coal-pit, Taieri Beach* (S. H. Fairbairn).—A small quantity of coal was mined for local use.

*Waronui Colliery, Milton* (Bruce Railway and Coal Company, owners; James Carruthers, mine-manager).—(19/10/11): The new dip seam having turned out well, systematic development is now being carried out. Intake air-ventilation is conducted to the foot of the dip, and from thence it is split, being returned around the working-faces direct, and from thence to the fan-drift. Places are driven narrow in the first sections opened, the intention being to work out comparatively small blocks on a panel system and a maximum extraction in the first working, then to seal off. The mine is in good working-order. Tail-rope system of haulage is acting satisfactorily.

*McGill's Coal-mine, Milton* (J. J. Cooper, permit, lessee and manager).—(19/10/11): On the occasion of my visit of inspection I found the gate to the mine locked, and no person on the premises. Alexander McLuckie, miner, was killed on the 4th March by a fall of coal from roof, where a diagonal greasy back was subsequently seen on the side, with a rough parting on the top. The roof had been previously examined. There was no other fall from roof in the mine, which was in good order, and timber was available for use if considered necessary.

*Good's Coal-mine, Johnston, Waitakuna* (James Brown, owner; William Good, permit, lessee).—A small opening at Johnston for the supply of local requirements.

*Lakeside Coal-pit, Lakeside, Lovell's Flat* (G. E. Royds).—A small quantity of coal is here mined for private use.

*Taratua Colliery, Taratua* (Sargood and Cheeseman, owners; Thomas Shore, mine-manager).—(20/10/11): The shaft-working is discontinued, and the water has risen to within 100 ft. of surface. The coal-output is now obtained from pillar and head coal in earlier surface-workings. Ventilation is good, and explosives are carefully handled; one place in which a missfire shot had occurred was properly fenced. Two prospecting boreholes are being put down to test other parts of the field for coal of better quality.

*Hawthorn Den Coal-mine, Kaitangata* (T. Cunningham, permit, lessee).—(20/12/11): A small mine, worked for the supply of local farming requirements.

*Longridge Coal-mine, Kaitangata* (Nesbit Mackie, permit).—(22/11/11): Driving parallel levels in an upper seam (4 ft.) of the Kaitangata series. Ventilation good, and workings in fair order.

*Kaitangata Colliery, Kaitangata* (New Zealand Coal and Oil Company (Limited), owners; W. Carson, manager).—During the year Nos. 1 and 2, the winch heading sections, north side district, have been cut off, consequently the general air-circulation is much relieved. Owing to the roof and side pressure, the air-course areas became unduly constricted. Development in the solid to the south and eastward continues. No. 21 dip is driven several hundred feet in the solid in a westerly direction, and tends to prove continuity of the coal-deposits now exposed in the faces. There is probably a larger tonnage of coal undisturbed by faulting now in sight than at any former period in the history of the colliery. The low dip angles at which the seam now occurs are advantageous, requiring only a minimum supply of compressed air for dip haulage and pumping, an important factor considering that compressed-air transmission is now conducted up to fully one mile from its base at the mine-mouth. The method adopted for pillar and head coal extraction by the panel or sectional system continues, by which means the highest tonnage output per acre is maintained with a minimum accident rate, while workmen receive improved ventilation at lower temperature than formerly during any pillaring system hitherto practised. The sections are likewise opened and worked in a manner favouring almost complete closure by ash fire-stoppings, so that drawbacks from spontaneous ignition (to which this mine is peculiarly liable) are reduced to a minimum. The register of daily air-measurements shows that an average of 30,000 cubic feet per minute is maintained at the intake. Equal quantities of fresh air are conducted from the main split at the cabin underground for distribution around either side of the mine-workings, to meet again at the return airway to the upcast fan-shaft. The fan is