

*South Otago.*

*Fernhill Coal-mine, Abbotsford.*—Nominal output only on a small scale. Brick-burning and building-sand production forming chief source of supply.

*Freeman's Colliery, Abbotsford.*—Mine in good working-order. Owing to spontaneous fire the dip portion had been sealed off with brick stoppings, which were well attended to. Heaving bottom, due to creep, continues, consequently roadways low in places. Fan ventilation well conducted to working-faces.

*Green Island Colliery, Green Island.*—Air brattice required in rise places for clearing powder-smoke, which had been lying an undue time. Otherwise mine in good condition.

*Jubilee Colliery, Saddle Hill.*—Magazine well stocked with blasting-powder; extra supply said to be a final consignment for some time. Ventilation good; places in safe working-order in solid, and roof-break in pillar and robbing places well up to working-faces.

*Christie's Saddle Hill No. 1 and No. 2 Mines.*—These mines are connected underground, and through ventilation from No. 2 Mine to No. 1 Mine furnace shaft is in vogue. Drew manager's attention to necessity for closer attention of air-circulation around working-faces for dissemination of powder-smoke after blasting. Brattice should be kept closer up and kept tight. Pillar-robbing places in safe working-order. Blasting-powder safely handled.

*East Taieri Coal-mine, Mosgiel.*—Air dull with black-damp from old workings, owing to, as stated, unfavourable condition of the atmosphere—adverse wind and low barometer. The air, although imperfect, was not bad enough to have the men withdrawn. Fumes from the oil-engine (kerosene) underground used for dip pumping and haulage permeated the air at near the engine, but a canary kept near by exhibited no symptoms of uneasiness. The permit-holder informed me that the men were withdrawn on the few occasions that the air was unfit to work in. This mine is owned by a party of experienced coal-miners. Creep has begun in the dip, and may be expected to communicate rapidly with other parts of the mine. Although the exhaust from the oil-engine is piped to the return airway, a nuisance is created by the rank smell in the vicinity of the engine. I shall not again willingly consent to the use of an oil-engine underground in a coal-mine.

*Brighton Coal-mine, Brighton.*—Only a small local trade conducted.

*Waronui Coal-mine, Milton.*—Mine in good working-order. North side pillars finished and stopped off. Dip workings being developed. Rise pillars being drawn safely. Fire stoppings to gob receiving close attention; one rather warm one had been doubled since my last visit. A larger and more powerful electrical plant for pumping and hauling is being erected.

*McGill's Coal-mine, Milton.*—Output continues, but not at work when last visited.

*Taratu Colliery, Lovell's Flat.*—Ventilation, 14,000 cubic feet per minute. Winding-ropes tested 8th July and following quarters. Manager reports slight bulge in shaft near the bottom owing to earth-movement: not detrimental to winding. Incipient fire from lower-seam workings being attended to.

*Hawthornden Coal-mine, Kaitangata.*—Small mine worked for local supply.

*Longridge Coal-mine, Kaitangata.*—Small mine worked for local supply.

*Kaitangata No. 1 Mine, Kaitangata.*—On the 27th November eight men were withdrawn from rise places in Mundy's dip on account of gas in the air. The shift next day went to work as usual, the places having cleared meanwhile. The barometer had been heavily depressed. The previous withdrawal of men was recorded on the 15th September, 1915. Ventilation was well directed to working-places, and there were no high pillar places. Had to draw attention to brattice being deficient in two places, including Penman's (formerly Bennie and Pilling), and reported same to Mr. Carson on the 6th December, 1916. Mr. Carson subsequently wrote me under date the 22nd that special officials had been detailed to attend to bratticing, and hoping that there would be no cause for future complaint. No. 21 dip "on last legs"—pillar-extraction being safely conducted. Prospecting in old No. 18 and No. 11 dip sections pillar-workings.

*Kaitangata No. 2 Mine, Kaitangata.*—Ventilation at intake, 21,500 cubic feet per minute; 8 ft. seam; new airway made to main return. Ring-tubbing at bottom of haulage-way completed. Stone drift, cross-measures drive for air-return in 100 ft. Door between intake and return between rings No. 1 winch sealing too much air, as also brattice-cloths between Nos. 1 and 2 winch dip. Overcast presumably losing air, too. Recommended that these receive attention for supply of better quality and quantity air to working-faces. Both rats and mice were seen in this mine when visited. Assistant manager Newburn subsequently reported that the overcast screens and door had been attended to, and that an appreciable improvement had been effected in the air-circulation at the working-faces.

*Castle Hill Coal-mine, Kaitangata.*—Visited workings in Jordan's and Carson's seams. Brattice kept well up to working-faces. No gas found. North level to No. 7 dip dry and dusty in places. Report-book showed that dust is filled away on occasions, and the underviewer said that a lot of attention was paid to this matter; also that they had to be careful about watering the roadways on account of "creep," to which their steep seams were liable.

*Benhar Coal-mine, Stirling.*—Ventilation good; air well conducted by brattice to working-places. Seam, 20 ft. in thickness; 8 ft. worked meanwhile. Roof good and timbered where necessary. Fuse regular, 1 yard run in ninety-five seconds.

*Mount Wallace Coal-mine, Stirling.*—Not at work on date visited; expected to resume at early date if workmen available, being scarce at present.

*Mainholme Coal-pit, Pomahaka.*—Well stripped ahead of working-face; about to be closed on account of rising bottom and seam thinning to outcrop in all directions. Fuse regular, 1 yard run out in 89½ seconds. Lessee complained that loose blasting-powder appeared to have lost its usual strength. Work at this mine has lately been suspended.