C.—3A. 16

worked back. Air very warm; fair current travelling, but so heated that I drew manager's attention to it. I also requested that two men be withdrawn from one of the bords, the place they were working in having fallen very high. Lamp-stations appointed and safety-lamps used in the bords off two rise headings where the air was very dull. The main return air-course and travellingway was in very bad order; the stone-drift was almost blocked by a large quantity of fallen conglomerate which appeared to be "running," caused, no doubt, by the warm air "melting" the conglomerate. Timber at this place had been renewed many times, but, the drift being steep, the timber was being continually knocked out. Under date of 12th February I wrote the manager, drawing his attention to the state of the air in the south workings, and to the dilapidated condition of the return airway. (15/5/1900): Air-intake, 26,400 cubic feet per minute. The wooden brattice at the entrance to main seam between Nos. 2 and 3 faults has, since my last visit, been replaced by brick stopping 120 ft. long, 18 ft. high at the highest part by 14 in. thick at the top. The stopping is backed with 1 yard of sand and ashes; the bricks on the face are cool, and I could not find a trace of fire-stink, I found a trace of gas in a "pot-hole" in the top level of the drum section (east side) also a trace at the face in Hayes'-bord near No. 5 fault. Safety-lamps were used in each of these places, and in Hayes'-bord a strong blower of compressed air was directed on the face. The north level from the bottom of the drum-heading is being extended and prepared for the coal-cutting machines, two of which are just ready for starting. There is no second outlet from the face here, compressed air being the ventilating agent, and only safety-lamps are used. The main return airway has been put in good order. The place on the steep so heavily fallen on my last visit has been secured by a cylindrical steel tube 36 ft. long by 4 ft. diameter in the clear. The sections are 3 ft. long, secured by angle-iron flanges holted together, and the plates are stiffened by an extra angle-iron ring in the by angle-iron flanges bolted together, and the plates are stiffened by an extra angle-iron ring in the centre of each section. The tubing at the lower end butts against the hard strata, is packed at top and sides with dead ashes from the furnace, and the highly fallen place is gradually choking itself. The airway above the tubing is secured with stout timber close-lathed, and the return is now in good order. (16/5/1900): The workings in Nos. 2 and 3 winch-dips are in good order. Good air travelling freely throughout the mine. A plentiful supply of safety-lamps is kept in the cabin, and served out to the men going on shift to the places where gas has been found or is anticipated. (6/9/1900): McDougall's district, also drum-level section have been freely robbed, and bords stopped off when finished. North level district is being developed. Safety-lamps only are in use here, and the new coal is bleeding gas somewhat freely, Intake air measured 23,300 cubic feet per minute. (21/12/1900): Intake air, 27,280 cubic feet per minute. Workings in good order. Natural air circulating throughout the mine. Deputies' and underviewers' report-books well kept. Barometer and thermometer records and state of working places, roads, and airways duly entered. Rules posted and plan to date. Endless-rope haulage in the main stone-drive is working very satisfactorily. No serious accidents have been reported. George Pilling was injured on the 24th September 1900,

by a fall of coal from the roof, which bruised his head, arms, back, and legs.

Castle Hill Colliery, Castle Hill, Kaitangata (G. H. Broome, manager).—(5/9/1900): Old workings discontinued. The main dip incline has been extended 90 ft. to a 12 ft. seam of coal, in which a level to the south is in 4 chains, and to the north 3 chains. This north level is giving off gas freely, and only safety-lamps are used. The south level is connected with the main return airway to the furnace by a stone-drive just completed. Plant and appliances in good order. Air at mine-entrance registered 26,400 ft. per minute. (20/12/1900): All work now in the 12 ft. seam and in the new 6 ft. seam, which was struck at  $4\frac{1}{2}$  chains from the bottom of the main incline. The dip in stone is still being extended. The workings in the 12 ft. seam are in good order and well ventilated. I found a quantity of gas at the face of the south level 6 ft. seam. No one was working there. Lamp-stations fixed and notices posted. William Cairns met with an accident on working there. Lamp-stations fixed and notices posted. William Cairns met with an accident on the 1st November; he fractured his forearm, owing to the rope surging and striking his arm.

Cairns was travelling on the main incline at the time.

## CENTRAL OTAGO.

Coal Creek, Roxburgh (R. Coskery).—(14/9/1900): This opencast pit is in a bad state, a land-slide of about  $\frac{1}{2}$  acre having filled up the pit and covered the working-face.

McPherson's, Roxburgh (M. McPherson).—(14/9/1900): Opencast pit well kept and in good working-order. Working-face well stripped in (14/9/1900).

Perseverance, Roxburgh (J. Craig). (14/9/1900): The old mine across the creek which took fire is now abandoned. Two new drives on the east bank of the creek are in 90 yards. A shaft is being sunk for return airway and second outlet.

Black Diamond, Shingle Creek (P. Galvin) —(14/9/1900): Nothing doing; mine-mouth closed

by a slip. Owner trying to sell.

Drummey's, Alexandra (J. Drummey).—(17/9/1900): No one about. No work has been done

here for some time other than that the water is regularly bailed out of the shaft.

Alexandra Coal-mine, Alexandra (A. Hunter, manager).—(13/1/1900): A new mine-tunnel is being driven which is to be extended to the dip-boundary, and a hauling-engine is to be erected on the loading-bank. Workings are well laid out, pillars square and of a good size. Bords on the south-west boundary of lease are stopped at a fault running north and south, approaching which the coal thins and is inferior in quality. Air good throughout the mine. Report-book kept, but no rules posted. (17/9/1900): The new mine tunnel in course of extension to the dip-boundary is down 8½ chains. The back heading for air is a chain from the main dip, and the pillars are 20 yards square. The old mine to the south is abandoned, the airway having closed.

McQueenville Coal-mine, Alexandra South (J. Howie, manager).—(12/1/1900): A new shaft 130 ft. in depth has been sunk to the dip of the workings, with which it is now connected. A good grip of the field has been obtained, and the mine is capable of a larger output than there is demand for at present. A band of clay 6 in. thick and 2 ft. from the bottom of the seam is trouble-