

and only safety-lamps used throughout a district in the mine in which gas had been found or was known to exist. The underviewer (Mr. McCormack) in charge of the district had visited Weston's place within an hour before the ignition, and he did not observe more than a trace of gas in the place at that time, but both he and Weston were aware of its presence. The air is dull to-day in the south level, with a trace of gas in the high corner at the face. All other places clear of gas; only safety-lamps are used. Lamp-stations posted, and air conducted by brattice up to faces of all bords and headings. Steps have been laid in the steep part of the main return for fair travelling. No. 3 winch-dip section is now cut off and work suspended. Mr. Broome has appointed Mr. Neil McAllister underviewer, with charge of the day-shift. The brick stopping on the stone drive is slightly warm at the top; heavy sand packing has been put in above on iron plates resting on iron rails. (9/7/1901): Air at intake, 21,060 cubic feet per minute. No. 4 dip workings: Lamp-stations fixed, and only safety-lamps used in this section. The advancing workings make a little gas, which is kept clear by ventilation. I found traces of gas in pot-holes in the roof in Cairns's and Barris's bords. North level: Nos. 2 and 3 headings are up to No. 6 fault, bords finished, and now splitting and robbing pillars. Only safety-lamps used. A heavy fall of roof having driven a slight quantity of gas mixed with damp on to a naked light, which caused a slight harmless ignition, Mr. Broome decided to discontinue the use of naked lights in the pillar-workings here. Great caution is required to avoid accident while working with safety-lamps in the pillars owing to the dim nature of the light given out. Drum section: Nothing doing. McDougall's section: Pillars and roof-coal being gradually worked out homewards. Air warm. I drew Mr. Broome's attention to this, and on my return to Dunedip wrote him, under date the 16th July, pointing out that the air was much heated in the pillar-workings, and would no doubt become more so, and asked him to make special efforts to circulate as much air as possible through this section. Ponies are now used for trucking on the long roads in the north-side and McDougall's sections. Suitable stables are provided underground, and are ventilated by a small split of air leading direct into the main return. Report-books by manager, engineer, underviewers, and deputies well kept. Plans to date. (10/7/1901): No. 2 dip section: Found a small quantity of gas in Dixon's and Penman's headings; all other places clear and in good working-order. No. 3 dip section: Only six men now working; work in the 6 ft. seam is discontinued. Air good. Main return airway in fair order, a few sets of timber being required, and several small falls are being attended to. Furnace and drift in good order. Surface appliances (windlass and rope) at top of upcast are ready for immediate use, and, having been used recently in connection with repairs to furnace, are known to be in good working-order. (27/8/1901): Air good throughout the mine. McDougall's section: Robbing rapidly reducing the area of working-places. I requested Mr. Broome to see that props were more freely used in the pillar-workings under the lip or fringe of the high places. Still no work in drum section, or No. 3 dip. No. 4 dip section: Only safety-lamps used. Found traces of gas in two pot-holes in roof. No. 2 dip section: Only four places being now worked. The coal has proved disappointing, being soft and inferior generally throughout the district. North section: Small quantities of gas being occasionally reported, only safety-lamps are used. I found no gas here on this occasion. Report-books to date. (4/9/1901): Air at main intake, 17,280 cubic feet per minute. No. 2 dip workings in good order; gas occasionally reported in Penman's heading. Air dull in Nos. 1 and 2 heading districts, north section, and men sent home this morning in consequence. I traversed the whole of the district, and found that the air was impregnated with damp, and at the top of No. 2 heading an admixture of gas and damp had gathered, but was very dull. On my making inquiry into the cause of the deficient ventilation here, the manager informed me that while repairing the roadway the previous night one of the roadsmen had omitted to replace a brattice, and the air took the short circuit, leaving the top of the heading unventilated. I also observed by report-books that the barometer had fallen $\frac{3}{4}$ in. during the last twenty-four hours. When I visited the heading the brattice had been restored, and a full complement of air—4,080 cubic feet per minute—was travelling the district. No. 3 dip section clear. Main return airway requires and is receiving attention in the coal section. (20/9/1901): Air at intake, 22,200 cubic feet per minute. I found an inadequate supply of air in McDougall's section, 1,080 cubic feet per minute only at the intake, while fifteen miners, six truckers, and one pony were at work. The air was hot in two of the working-places, and at the inbye end of the level black damp was lying, the current of air being insufficient to carry it away. The faces generally were warm and ventilation inadequate throughout the section. On my recommendation Mr. Broome was subsequently prosecuted for a breach of section 33, subsection (1), of "The Coal-mines Act, 1891." Mr. Broome pleaded guilty, but in mitigation of the penalty said that an air-door between the main intake and the return had been wilfully drifted open and left so. The Magistrate imposed a fine of £2, and £2 9s. costs. Mr. Broome afterwards informed me that he offered a reward of £20 for information that would lead to the conviction of the offender, but without result. North side: Places all in good working-order; also No. 4 dip section. The coal-cutting machines are now withdrawn from the mine. Record of safety-lamps, all deflector type, in daily use at Kaitangata Colliery: Day-shift, 56 lamps; afternoon-shift, 54 lamps; night-shift, 2 lamps: total, 112 lamps. (28/9/1901): Air at intake, 20,952 cubic feet per minute. The miners are not working to-day. I traversed the working-places throughout the mine, and found them in good working-order. The return airways require some clearing-up in places, as pointed out to the manager, especially at No. 3 dip in the coal. The brick stopping on the main wall is showing signs of crush owing to weight, and is being replaced gradually by an ash stopping backed and faced with boarding. (24/10/1901): Weight on timbers at mine-mouth is causing the renewal of several sets. The pillars in McDougall's section are being successfully drawn. A fall in the drum-level return airway is giving some trouble. The No. 4 dip and No. 2 dip sections are in good working-order, and air good. The furnace has recently been repaired, and both it and the return airway are in good order. A weight on the main stone drive is causing the bottom to heave