

Rule 23 had not been kept; (7) the register required by section 13 had not been kept; (8) there was no plan of the mine. Nos. 3 and 4 were not absolutely necessary, as men are not ordinarily raised and lowered in the shaft; but, on my revisiting the mine, on 19th August, considerable progress had been made towards completing the required alterations. One side of the shaft was well fenced, as was also the machinery. An indicator was fitted to the engine. General Rule 23 had been observed by the manager, and the men were all provided with wooden rammers. The ventilation is good.

*Fernhill Coal Mine, Green Island, Otago.*—At this mine a boy under thirteen was at work. His father explained that the boy usually attended school, but that during the holidays he occasionally came into the mine. This is no reason for breaking the Act. There was no plan, but one has since been made. The ventilation was very poor. Two shafts required fencing or covering in. The rope on the aerial tramway was considerably the worse for wear. General Rule 23 had not been observed. On revisiting the mine I found the shafts filled in and the ventilation improved.

*Freeman's Colliery, Green Island, Otago.*—The plan is not altogether up to date, but a portion of the mine has been recently surveyed. The ventilation requires guiding; the roof is bad in places. The register of boys (section 13) is not kept, nor is the weekly report (General Rule 23).

*Saddle-Hill Colliery, East Taieri, Otago.*—The old mine, mentioned in Mr. Cox's report (published in the report of the Mines Department for this year), has fired, and been abandoned. The new mine is situated nine chains to the dip. Only nine men, including the underground-manager, being employed below ground, it is not necessary to have a second outlet. The ventilation (natural) is good. The register of boys (section 13), and weekly report (General Rule 23) are not kept. A plan exists. Vertical ladders are fixed in the shaft in case of any accident to the winding-gear, but, as they are not "permanently used for the ascent or descent of persons in the mine," General Rule 16 is not broken. The shaft required fencing more securely, and something had been done towards this when I revisited the mine.

*Walton-Park Colliery, Green Island, Otago.*—The coal is now raised by means of the new shaft, which was not at the time of my first visit sufficiently fenced, but some days after the sliding-gate was made, and ready to be put up. A signal from the top to the bottom of the shaft was required; the register mentioned in section 13 had not been kept, and the plan was much behind-hand. With these exceptions, great care seems to be taken to comply with the requirements of the Act.

*Bruce Coal Company's Mine, Tokomairiro, Otago.*—Only one man is now employed here. More timber is required. No plan exists; and General Rule 23 has been disregarded.

*Lawrence Coal Mine, Otago.*—The Act was here infringed in the following respects: The shaft required fencing; the cage was not covered; there was no means of signalling down the shaft; the engine had no indicator, and was, besides, very insecurely fixed; General Rule 23 had not been kept; and there was no plan. The timbering of the shaft is not at all secure; and any accident from the sides giving way would be serious, as there is only one outlet to this pit, in which, at the time of my visit, there was one man employed.

*Phoenix Coal Mine, near Balclutha, Otago.*—This colliery is situated close to the main line from Dunedin to Stirling, about two miles north of the latter place, and is worked by a tunnel in the upper part of an exceedingly thick seam. Three men are employed below ground. General Rules 2 and 23 are not observed, and there is no plan. I supplied the owners with a copy of the Act, as they had not previously received one, and also with a copy of Special Rules.

*Benhar Coal Mine, near Balclutha, Otago.*—This mine is situated close to the last-mentioned. Seven men are employed. No plan exists; iron rammers are used; the hauling engine requires fencing. General Rule 23 is not observed. The roof, which is exceedingly bad, requires to be more carefully timbered.

*Elliott Vale Coal Mine, Lovell's Flat, Otago.*—This mine is not at work at present.

*The Kaitangata Railway and Coal Company's Mine, Otago.*—The ventilation is good, the new workings being ventilated by the old tunnel, and a new shaft to the rise, as an upcast. This shaft is furnished with ladders to serve as a means of exit in case of accident, and there is a furnace at the top fed with fresh air. The old workings are separated from the new by wooden stoppings, in one of which a door is fixed, provided with a padlock, the key of which is kept by Mr. Samson, the manager. This portion of the mine is ventilated by the old furnace-shaft as a downcast, while the air ascends by a new shaft to the rise: no artificial means exists for maintaining the current of air, but at present it is good: whether the present means of ventilation for both parts of the mine will be sufficient when the hot weather comes is a question. Every morning the whole of the new workings are examined with a safety-lamp by a fireman, who makes a mark on the end of each working place, and also writes a report. Mr. Samson also examines them and makes a written report daily. Twice a week, at least, the old workings are thoroughly examined. From the report-book I see that, during July, gas was found fourteen times in the new workings and twice in the wastes, but always in very small quantities; in the former, always in one of the cross-drives to the rise; and in the latter, close to the place where it is supposed to have fired on the 21st of last February, and where I found it on March 10th. Although so little is given off, it has been necessary to put up some bratticing to keep the place clear, as, were it allowed to accumulate, there would doubtless soon be enough explosive mixture formed to cause a dangerous explosion, if brought in contact with a naked light. On the 29th and 30th of July, I examined the whole of the mine, and failed to find fire-damp in any portion of it. On the 14th of August I found a quantity of gas in the end of one of the cross-cuts and a very little in the other. The men were not at work that day, and a bolt-hole, which was nearly through between the two drives, would probably have cleared all gas out, had it been completed. The company are in possession of a large number of safety-lamps (which will require shields before they are safe in a current of air); but it is not necessary at present to make general use of them. A barometer, of which a daily register is made, is kept at the entrance to the mine. General Rule 2 (e) appears to have been broken in one case, and no register of boys, as required by section 13, had been kept; but Mr. Samson immediately remedied these defects. With the present system of management this mine need not be more dangerous than any other; but it must always be remembered that the safety of the workmen depends on constant care and watchfulness.