

object apparently being to get some coal as cheaply as possible, let the roof fall in, and start again somewhere else. In after years the ill-effects of this will be greatly felt. I referred to the same subject in my report of July last (page 19, line 23).

15. *Brunner Coal Mine*.—On the 21st of April the General Rules were neither hung up nor distributed. This was remedied as regards the former particular on the 22nd. All abandoned places were not fenced; no register was kept of the one boy under nineteen; the fireman's report was not signed, and was too short; he also appears not to have invariably examined the whole of the travelling roads. No barometer or thermometer was on the premises. Considering the fatal explosion which occurred a few weeks before my visit, it seems strange that the Act should have been disregarded on so many points; but the manager (Mr. R. Elliott) was seriously injured by the explosion, and was no doubt unable to give as much attention to the subject as it required. He was relieved only just after my last visit by Mr. Jonathan Harrison, F.G.S., who has informed me by letter, dated 29th May, that the coal beyond the fault has been at length reached. This is a matter for the greatest congratulation. The powder magazine mentioned in my report of July, 1879, has been removed from the workings. The ventilation is still dependent on natural causes, but, as it has always (so far as I can ascertain) been very good, and as gas has never been seen in the present workings for many years, I consider it sufficient at present. A 15-foot Guibal fan was erected to ventilate the workings in the fault, but was destroyed by the explosion on the 3rd March, 1880. The output given does not include a large amount of slack which is wasted. If there were a demand this would be of considerable value, being excellent fuel, and well adapted for the manufacture of first-class coke.

16. *Coal Pit Heath Colliery* is rather fiery just now. At the time of my visit, men with naked lights were working close to an accumulation of gas in the roof of the main level. This is a breach of General Rule 1, so I required Mr. Alexander to remove the gas, or work that place and one or two others of a somewhat similar character with safety-lamps; he adopted the former course. At least, in a letter dated 13th May, he informed me that the stoppings through which there had previously been some leakage had been replaced, and that the gas had in consequence disappeared; also that the foundations of a new furnace were being got out. There was certainly plenty of air when I tested it, if properly distributed, the amount being 3,127 cubic feet per minute for twenty-six men, or 20 per cent. more than the New South Wales standard, which is similar to that required in some of the districts of the United States. The ropes are not tested in the morning before the first man descends, as required by Special Rule 47. With these exceptions, Mr. Alexander seems to take the greatest pains to observe the Act, which affects this mine as much as any one in the colony, with one exception.

17. *Wallsend Colliery, Greymouth*.—Work has not yet been recommenced, and pumping operations have been suspended. There is, I am glad to say, some prospect of this colliery, which ought to be one of the best in the colony, being again in a position to put out coal.

18. *Springfield Colliery, Malvern*.—When this colliery was last visited, the Act was broken in the following particulars: (1.) Young persons under sixteen were not registered, and were working underground more than forty-four hours per week. (2.) Hardly any of the men had Special Rules, and none General. (3.) In one place, which two workmen had to pass very frequently, five consecutive bars were broken. Considering what a bad roof this seam has—one of the worst, if not the worst that I have ever seen—this was very dangerous, and, at my request, Mr. Bridgett, the overman, withdrew the men from the mine. This place had been reported as "safe" by the fireman, who acknowledged, when questioned, that it was anything but secure at the time of his examination, thus showing the utter unreliability of his report. Printed forms are used here for the reports, as in some parts of the Old Country, having a blank space to be filled in "safe" at the top, and "ditto" all the way down, if the various portions of the mine are really so. This style of report-book is, in my opinion, not only an incentive to idleness, but conducive to a stereotyped and perfunctory method of performing a most important duty. (4.) There was practically no ventilation in the top-level workings, a ventilating-door on this level is frequently open owing to the passing sets, besides which there should be two doors (Special Rule 8). The furnace also is neglected. (5.) The man-holes in the engine-plane were insufficient in number, and those existing were not clear of obstruction, as provided by General Rule 5. (6.) The plan was not up to date. After having usually found the Act better observed here than at almost any other colliery, it is disheartening to find such a condition of things as is described above. Fire-damp is said to have been found in the workings, but, although this is by no means unlikely, I have not seen it. A shaft is being sunk to the dip, which will not only in all probability open out a large amount of coal, but will improve the ventilation and general condition of the workings. I am informed by Mr. Oliver Evans, Secretary to this Company, that the output of coal at the beginning of May was about 290 tons per week. The larger of the shafts mentioned in the table is the one which is being sunk to the dip. The coal is expected to be reached at about 200 feet.

19 and 20. *Kowai Pass Colliery and Eureka Coal Mine* are both small mines, situated close to Springfield. The latter is little more than a prospecting-shaft, having no workings opened out. I put them both in the way of observing the Act.

21. *Canterbury Colliery, Sheffield*, is nearly at a standstill.

22. *Homebush Coal Mine*.—No register kept of the one young person employed above ground. General Rules not hung up or distributed. Act and Rules otherwise observed. The mine is in very good order, and shows a great improvement on its condition as described in former reports. As predicted in my report dated 12th September, 1879, gas has been found in the workings; but in very minute quantities.

23. *Wallsend Colliery, Malvern*.—Operations suspended.

24. *Rockwood Coal Mine*.—Only prospecting-shafts and drives.

25. *Mount Somers Coal Mine* is an open-work quarry. Although the Act appears to apply to these mines, I fail to see how it affects them under ordinary circumstances. The total output is compiled from information kindly supplied by Mr. C. P. Cox.

26. *Wharekuri Coal Mine*.—Not visited. Only one man employed. I am indebted to Mr. Cairns for the information given in the Statistical Table.

27 and 28. *Prince Alfred (Nos. 1 and 2)*.—These are now connected underground. A good plan