

No. 3.

ANNUAL REPORT UPON INSPECTION OF COAL MINES, NORTH ISLAND.

Mr. Inspector M'LAREN to the UNDER SECRETARY for Mines.

SIR,—

Grahamstown, 31st March, 1880.

In accordance with "The Regulation of Mines Act, 1874," I have the honor to forward report upon the inspection of coal mines in the Province of Auckland, for the portion of the year ending 31st December, 1879, during which I have had charge of the inspection of these mines; but as my inspections were made partly before, and partly after that date, I deem it advisable to give the latest information up to the date of this report.

Mr. Inspector Cox being in this district on his geological duties during the summer, I was much pleased to have his company and valuable assistance when inspecting the various mines during the months of December and January.

Since the date (17th July, 1879,) of Mr. Inspector Binns's report, there have been two mine accidents. The first of which was fatal, and occurred at the Waikato Colliery (Huntly,) on the 19th July, 1879. The second (non fatal) occurred at the Kawa-Kawa Colliery, on the 5th November, 1879. In regard to these accidents, I am glad to say, that in neither case, could any blame be attached to the management, nor in the first, or fatal case, could the unfortunate man who was killed be blamed, the accident occurring through a fall of coal in the place where the deceased was working, by a large piece of coal parting from the seam at what is known as a "sooty back," evidence of the existence of which was not apparent until after the accident, as its dip was off, instead of towards the workings. The man working as the mate of McGlynn, who was killed, had, it appears, shortly previous to the accident, sounded the portion of coal that fell, but did not detect anything to cause him alarm.

The men were undermining the seam for the purpose of obtaining a fall, but had not done so sufficiently to enter the sprags, and no suspicion of any particular danger was in their minds, everything looking safe, when the piece suddenly dropped from the face without giving any warning, killing McGlynn, and just missing his mate.

The second accident at the Kawa-Kawa Colliery was caused by a shot which hung fire, exploding after a man named Balero had returned to the spot. Three different holes had been charged in one of the bords, and the man returned after hearing two explosions, thinking that two of the shots had taken place simultaneously, giving one report; his mates wished to deter him from returning so soon, but he disregarded them, and the shot went off as he reached the place.

The accident was, however, not serious, he soon afterwards recovered and left the district.

It is gratifying to be able to state, that the mine managers have generally shown the utmost desire to carry out the provisions of the Act, so far as these affected their mines, and so far as I could observe, have been careful in enforcing that the men also carried them out, and have readily complied with any instructions that I may have given with a view to the greater safety of the men, or ventilation of the mines.

No trace of gas has been reported to me, as being found in any of the mines. With the exception of the Kawa-Kawa mine, none are in possession of safety lamps; I, however, think it should be made imperative that each mine should be in possession of one, so that in all cases, whether gas has been previously found in the mine or not, the first examination of the mine by the underviewer previous to the men being allowed to go to work for the day, be with a safety lamp, and not as at present with a naked light, this also applies to the examination of all old workings, or places not in use.

Kawa-Kawa Colliery.—Since the date of Mr. Binns's report, great difficulties have been encountered in this mine by a large influx of water, which I found on my first visit had completely flooded their lower workings. Although a large amount of pumping machinery was drawing the water, it was inadequate to clear it, therefore another 24-inch Tangye pump was procured and fixed before the water could be lowered, this necessitated a long delay and so curtailed the output that the demand for coal to a great extent could not be met, and there were sometimes about a dozen vessels waiting for cargo, at the coaling ground in the bay, many of these having to wait for over a month before being supplied. At the time of my visit with Mr. Cox, in January, the shaft, which had been in progress for over eighteen months, had been bottomed on the coal at a depth of 190 feet, and a drive was in progress towards the bottom of the new incline, this has since been holed through, allowing the water to go down to the large new pump in the shaft and effectually draining the mine, and also giving a splendid ventilation, which only requires guiding to the various workings. The new or No. 3 shaft is sunk to a depth of 228 feet 9 inches, through the following strata:—Soft clay and gravel mixed with limestone boulders, 81 feet; hard blue limestone, 97 feet; hard bed of pipi and cockle shells, 10 inches; hard blue limestone, 7 feet 10 inches; hard coal, 4 feet 3 inches; tough fireclay, 7 feet; hard clean coal, 5 feet 9 inches; soft fireclay (mud parting), 4 inches; hard clean coal, 2 feet 9 inches; hard sandstone, 3 feet; clay slate, 19 feet—Total, 228 feet 9 inches. The shaft has been sunk 22 feet lower than the under layer of coal, and a drive 200 feet in length put in at that level for the purpose of storing the water to prevent its rise in the shaft, should a stoppage of the pump at any time be necessary for repairs. It will be noticed that the coal is in two distinct layers where cut in the shaft, but in driving towards the upper level the fireclay entirely died out, showing that the coal which has been already worked as one seam is now distinctly divided. A large amount of difficulty attended the sinking of the shaft on account of the hardness of the limestone and the quantity of water to be contended with. Some of the water courses in the limestone cut in sinking through the rock gave a great deal of water, and kept the pump constantly employed to enable operations to be continued. A portion of the upper workings caught fire through the decomposition of the pyrites, and water being found ineffective, the ignited part was walled in, which seems to have completely extinguished it. Generally, the mine and machinery are in good and efficient order, and great care seems to be exercised in carrying out the provisions of the Act, the plan of the mine being kept up to date. The facilities for loading vessels will be greatly increased as soon as the railway to deep water is completed, the first contract for which is about to be let.