

The direction of the current changes at times, and it is naturally very slow in the workings places, owing to their great sectional area. In close weather a fire bucket is hung in the shaft, but this is fixed near the mouth of the shaft instead of at the bottom.

Gas has been found at the end of the main level, but due precautions appear to be taken to prevent accidents.

*Wallsend Colliery, Greymouth.*—When visited this colliery was not at work, but the engine was employed in pumping.

There is a considerable quantity of gas present in the workings, and the bratticing has been put in in a very inefficient manner, and is now down in many places. The ventilation is poor even where the fan, which is 15 feet in diameter, was running 93 revolutions per minute, the water gauge showing 1.312 inches against a theoretical 1.702 inches. The fan, however, works to a great disadvantage, since the total area of the shaft is about 95 square feet, about 13½ square feet only of which is available for an upcast. There is also a great deal of water falling down this part of the shaft, and Mr. Brown, the manager, states that there is a considerable leakage in the shaft between the downcast and the upcast divisions; the brickwork at the top of the shaft is leaking somewhat.

Two headings have been commenced for the purpose of communicating with the old shaft; these should be pushed on, and it is of the greatest importance to keep them straight.

I have, &c.,

S. HERBERT COX.

No. 3.

MR. S. HERBERT COX to the UNDER-SECRETARY FOR MINES.

REPORT UPON INSPECTION OF D'URVILLE ISLAND COPPER MINE.

SIR,

Wellington, July 12th, 1879.

I have the honor to inform you that on the 22nd March, ult. I visited the D'Urville Island Copper Mining Co.'s mine.

This mine has been at work for about a year and a half, the mineral raised being the red oxide of copper, (cuprite); and the grey sulphide of copper, (copper glance), the thickness of the lode being from 1ft. to 4ft. with a N.-S. to N. 19° E. course.

Five shafts have been sunk at different points to test the ore, the deepest of these "Owen's shaft" being sunk to a depth of 70ft.

But very little real mining work has as yet been done, and the total quantity of ore shipped is fifty tons, the average return on which was 10 per cent. of copper, but there is reason to believe that the ore was very imperfectly picked.

Certain of the works were somewhat unsafe at the time of my visit, amongst which may be noted that the No. 2 level was falling in, owing to the fact that it was driven along the strike of the bed, and had not been timbered; however steps were being taken to remedy this defect, and now I understand the drive is timbered up to the face.

Owen's shaft was also dangerous, but was not being used. No plan of the workings existed, and I requested the manager to obtain one, on a scale of not less than 2 chains to the inch, as provided for by the Regulation of Mines Act 1874. I also called his attention to part II., section 6, rule 6, of the same act, requiring that all working shafts should be securely fenced, and disused ones covered in, and he promised to comply with the conditions of the Act at once. At present I believe only two men are employed in the mine, although at the time of my visit there were six.

I have, &c.,

S. HERBERT COX,

Inspector of Mines.

The Under-Secretary for Mines, Wellington.

No. 4.

MR. G. J. BINNS to the UNDER-SECRETARY FOR MINES.

REPORT UPON INSPECTION OF MINES.

SIR,—

Wellington, July 17th, 1879.

I have the honor, in accordance with section 40 of "The Regulation of Mines Act, 1874," to make the following report.

Since my appointment as Inspector of Mines on the 28th of February last, I have been able to visit only the coal mines in the North Island, and those on the West Coast of the South Island.

Before the announcement of my appointment reached me, however, I made an inspection of one of the Otago mines, particulars of which will be found in the after portion of this report.

The large amount of official work consequent on the introduction of this Act, and the drafting of an amended Mines Regulation Bill have kept me in Wellington for a considerable time.

It is gratifying to be able to state, that in almost every case the owners and managers of mines have acknowledged that an Act for the regulation of mines was needed, and that they, with hardly an exception, expressed their willingness to assist me in carrying out the requirements of the Act now in force.

I may here quote a portion of your letter addressed to me, and dated 15th March, 1879, this reads as follows:—

"But in view of an amended Act next session, you will use your judgment in exercising your powers, so as not to render the operation of the present Act unnecessarily arbitrary or vexatious in cases of real difficulty in complying with its provisions."

These instructions, added to a desire not to cripple a new industry like coal mining, by increasing the already great cost of getting coal, and the knowledge that in all probability the present Act would