

has been well considered, and that there is considerable risk both from the water and bad air. It is a serious matter to Mr. Rich, no doubt, but should not feel justified in interfering, unless you thought there was sufficient ground to do so. Mr. Cox, I think, has reported approving of Mr. Binns's action.

6th July, 1883.

W. ROLLESTON.

MEMORANDA, &c., by Dr. HECTOR.

The Hon. Mr. Rolleston.

AFTER careful perusal of these papers I am of opinion,—

1. That Mr. Binns has done right in closing the old workings.
2. That the wedge dams, to prevent possible overflow from the closed workings down the shaft, are absolutely necessary in any case, and cannot be avoided, as Mr. Binns supposes.
3. That the question of allowing water to accumulate in the closed workings is not urgent, and requires much consideration. My private opinion is that such an accumulation would be a standing danger to the mine, but not for the reason Mr. Williams gives, as I doubt if the Inspector will permit the lower seam to be taken far under the old workings except under most stringent regulations. The real question is whether the danger is so great as to require the mine to be charged with the constant expense of pumping the old workings; and, as I have said, the question can stand over, and does not alter the question of constructing dams, which should be pushed on without delay.

JAMES HECTOR.

9th July, 1883.

Reply that after careful inquiry Government does not see reason to interfere with the course taken by the Inspector.

W. ROLLESTON.

F. D. Rich, Palmerston, 12th July, 1883.—J.S.

11th July, 1883.

Dr. HECTOR to the Hon. Mr. ROLLESTON.

THE discrepancy between my minute on the former papers (9/7/83) and Mr. Rich's account of what I said to him is easily explained. My conversation with Mr. Rich took place before the papers had reached me, and before I had seen Mr. Twining's correct plan of the mine, which differs materially from the tracing of the company's plan that was used by Mr. Rich when he explained his manager's reasons for being dissatisfied with the action taken by Mr. Binns. The remarks I made were therefore based on the supposition that Mr. Rich's version of the matter was correct, which I found not to be the case when I had examined the papers.

As my minute shows, I distinctly approve of the action Mr. Binns has taken, as the responsible Inspector, in closing the old workings. I have a very high opinion of Mr. Binns's skill, integrity, and judgment in the performance of his duties; but, as I told Mr. Rich, he is probably a younger man than would be placed in the position of a final referee in such cases at Home, and I was not aware if he ever had any practical experience of submarine workings, which often present very unusual and difficult problems. The subsequent examination of the papers has proved that, so far as my knowledge goes, he quite understood what he was about.

Nelson, 29th February, 1884.

JAMES HECTOR.

J.—MR. DENNISTON'S REPORT.

DEAR SIR,—

No. 14, Ross Buildings, Dunedin, August, 1883.

At your request I have made an inspection of all parts of the Shag Point Colliery workings now open, while my special attention was directed mostly to those points of the workings known as the Eugen's Plane and submarine workings, which, for the present, has been suspended by the Government Inspector of Mines (Mr. Binns), pending some alterations which he, individually, considers necessary, upon his assertion that the covering overhead of the metals are insufficient for the safety of those workings. The continuance of the submarine workings the Inspector appears to be willing to allow to extend seaward, provided the company conform to leaving a solid rib of coal, 3 chains or 66 yards thick, round the seaward or west dip side (seaward), and also north boundary of these workings; and, further, to allow of these workings so confined to fill with drainage water from the higher parts of the coaly workings reaching thus high up into portions of the workings not under the sea, thus reaching past and flooding the workings around shaft known as No. 2 Shaft, now working; while in detail he (the Inspector) has ordered shaft to be built round with timber back-dams, thus confining the water in a confined space. In his opinion, he, no doubt, expects the water so confined to withstand against risk of downward settlement.

While from results of survey made by the Public Works Department of those submarine workings, also from soundings taken, results of which show a covering at least point of a 130 feet of cover at the foreshore, with increasing cover on reaching to the dip seaward, Inspector Binns has confined his restrictions, being favourable to allow of these submarine workings extending to dip where a cover shows overhead of 150 feet.

From inspection made of those parts of the workings, with a view to special examination, I found them wrought upon the system of post and stace, with four roadways, driven to dip, forming incline planes driven 9 to 12 feet wide, and distance apart 1½, 3, and 3½ chains, with bords or staces broken off at intervals of 20, 25, and 30 feet apart, and driven 15 feet wide on the strike of the coal.

While the full thickness of coal, varying from 8, 10, and 12 feet, has been taken out by the process wrought, the workings, after standing unused for some time, appear to be sound, and ample allowance made by having strong and ample pillars to withstand pressure through the narrow roadways that have been prudently driven, thus giving provision support of strata, which consists of shale and soft sandstones, covered with hard bands