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than the expense of the drive, and would not get rid of the shoot, the use of which, by breaking the

coal into dross, greatly reduces its value in the market.

The question of whether thin and irregular seams like those in the mine are worth working, should however be considered before this large additional expenditure is entered on. Seams of pure coal under  $2\frac{1}{2}$  feet are worked in many countries, and particularly in Belgium, where few thicker seams occur; but they are free from the stone bands which give so much trouble in the Collingwood Mine. The manager, Mr. Marshall, is inclined to think that there is on the whole an improvement in the purity and thickness of the seams as they dip into the hill, and he is very sanguine that if they were cut at a lower level this would be clearly established, and that it would even pay to work with the present seams if the shoot were done away with, and a greater extent of ground opened, so that more miners could be at

work, and thus keep the brakesmen, tramway drivers, and other hands above ground, fully employed.

It is not necessary to allude to the very favourable analyses that have been made of the coal, as there is no doubt of its value for steam, gas, and household purposes; and that it would compete successfully with Newcastle coal on its own merits may be judged from the attached letters furnished, at my request, from persons who have actually tested the coal. I also beg to enclose an abstract of experiments that were made on the comparative value of this coal for steam and gas purposes, which show most satisfactory results. It is not quite so free from ash as the Grey and Buller coal; on the other hand, not being so tender, it bears carriage better. The area of the coal field, the capabilities of which the successful working of the mine will test and direct practical attention to, is about thirty square miles. The position of Collingwood is most favourable, as it is very little out of the track of the steamers, and at very slight expense wharves might be built into deep water, Cape Farewell Spit affording perfect shelter from all heavy seas.

On the ground, therefore, that it may lead to the opening of more extensive mines in the district,

I am able to recommend that the present Company should, under proper restrictions, have assistance

towards putting in the upper tunnel B.

I have, &c., JAMES HECTOR.

## Enclosure No. 1.

## MEMORANDUM re COLLINGWOOD COAL COMPANY for Dr. HECTOR.

Nelson, New Zealand, 30th May, 1872. The original capital of the Company was thirty shares of £120 each ... Advance made by shareholders (since capital was paid up) 350 0 0 Bonus received from Provincial Government on 3,000 tons at 5s. 750 0 0 £4,700

The whole of this sum has been expended in making a road from the river bank to the mine, a distance of three and a half miles through heavy bush, and rising to an elevation of nearly 1,000 feet above the sea-level; laying a substantial wooden tramway; erecting a shoot about 140 feet long; a selfacting brake, to work an incline a quarter of a mile long, and rising 1 in 2; huts for the accommodation of miners; blacksmith's shop, with tools and all appurtenances; trucks for conveyance of coal from mine to wharf; wharf for shipping coal; together with about 20 tons iron, used as rails for underground roads; underground trucks, &c., &c.

The wages paid by the Company, while it was in full work—viz., from March, 1871, to January, 1872, a period of nearly ten months—amounted to £1,940; and cash received for coal sold during the same period, £1,946. The number of men employed during that time, from 15 to 20. Total quantity

of coal raised, 3,200 tons.

Early last January the Company received notice from the Provincial Executive that they would not be prepared to pay any further bonus without a special vote from the Council; and just at that time the Company was engaged in carrying through their level in the lower seam, an undertaking calculated to cost from £100 to £150; and the Company, being entirely without funds, was obliged to suspend operations, as the coal was costing every penny that was received for it, leaving no margin for drives, plant, or any contingency whatever.

The directors then thought of increasing their capital by an appeal to the public, for the purpose

of putting in a drive at the bottom of the shoot—that is, 140 feet below the present workings—with the double view of getting rid of a shoot that smashed the coal to such a degree that for household purposes militated against its marketable value, and to lay open a larger field of coal; but the almost universal failure of mining speculations in this part of the Province rendered the attempt abortive.

The underground manager, Mr. Marshall, an intelligent, painstaking, and practical man, is satisfied that, if the coal was cut at a lower level, the undertaking could be made to yield a large

profit on the outlay.

In what has been done, the Company has achieved one great object—viz., proving the quality of the coal, which, for steam, gas, and household purposes, is unsurpassed by any coal hitherto discovered in New Zealand.

EDWARD EVERETT, } Directors. JAMES HENRY, THOMAS WEBSTER, Legal Manager.