

approval of Governor in Council must show how little weight is given to purely engineering considerations, and to what an extent an engineer in the hands of the Board, and without a large amount of self-assertion, may get overawed by the over-ruling individuality of members of the Board and the public.

The present proposal has probably arisen from a misconception by some non-technical member of the Board, or by some amateur engineer acting upon the members of the Board, who fancies that because sheet-piles were used at the old staiths (which are close in to the stone-work) that therefore they must be used everywhere, even where the conditions are entirely different. I may also mention that I went very carefully into the designs for this extension of the coal-staiths at Westport, both in the office here and also on the ground, in conjunction with Mr. Martin, and provided for all the works which I considered to be necessary, after carefully considering the whole case, including the position of the face of the river bank.

The Assistant-Secretary, Marine Department.

C. Y. O'CONNOR.

SIR,—

2nd July, 1891.

Re proposed pile-sheathing at coal-staiths extension, Westport: In reply to your letter of the 29th April last, forwarding in duplicate plans, specifications, &c., for proposed pile-sheathing in connection with the extension of the coal-staiths at Westport, and requesting that the approval of His Excellency the Governor might be obtained thereto, I have now the honour, by direction of the Minister for Public Works, to state that as the Government is advised that the extension of the staiths now in progress is situated so far out in the river that there is very little danger of large stones rolling outside the front line of piles, and that any which may possibly do so can be easily removed, they do not consider that the pile-sheathing proposed is necessary.

I have, &c.,

H. J. H. BLOW,

The Chairman, Harbour Board, Westport.

Acting Under-Secretary for Public Works.

SIR,—

Westport Harbour Board, Westport, 8th June, 1891.

In accordance with a wish expressed by you that I would forward a report of the state of the works here when the present Board assumed office, I now have the honour to forward this for your information.

Soon after the first meeting of the new Board, when the Minister for Public Works had declared the intentions of Government—namely, on 23rd March, a committee was appointed to report upon the progress of works and matters incidental thereto, all members joining in a searching examination, in order that the position might be thoroughly understood. It was found that the western breakwater was advanced to the last bay, but required 58,000 tons of stone for completion. On the eastern there required still two bays and 42,000 tons of stone for completion. It was noticed that the stone then being used was of a very inferior kind, much too small and some much too soft. This was specially bad at this stage—the finishing of breakwaters—where the exposure necessitated the use of the very heaviest stone obtainable. As a consequence of using such inferior material a storm which occurred soon after took down or displaced a large portion of both breakwaters. The quarries were examined, and it was found that 250 men were working there to very great disadvantage, turning out unsuitable and inferior stone at a cost of 4s. 0½d. per ton as compared with 3s. 6½d., the cost of stone in 1888. This was partly due to the fact that all the large and easily-obtained stone had been removed from the old workings, and that provision had not been made to open any new place. It appears that Mr. Wilson, then Assistant-Engineer, had surveyed an approach to a very suitable deposit of stone near the lighthouse, but having no authority did not proceed any further. At that time a very large amount of spoil from the quarries was being removed to waste. This might have been disposed of to great advantage by the exercise of a little foresight in making the embankments necessary to approach the new place, which was found upon examination to be the best to obtain stone from. The Board, finding that quarrying stone of an unsuitable quality and at great expense would be quite unwarrantable and a waste of money, was compelled to take the very unpleasant alternative of reducing the number of men employed. Eighty single men received notice and were accordingly retrenched, and as soon as possible a contract was let for a great portion of the embankment approach to the new place. Thus in the course of this month the work will be resumed upon the breakwaters with suitable stone.

Internal Works in the Harbour.

Nothing has been done towards the erection of training-walls except the purchase of some private land and the construction of 15 chains of railway leading to a bridge where it was apparently intended to commence the training-walls by the continuation of the railway, as at Greymouth, along the wall itself. To do this the bridge was built so low as to intercept timber floating down the river, which soon accumulated and did some damage. The owner of the island, Mr. Martin, and another island on the main-land, claim compensation. Finding this bridge to be a white elephant and likely to breed compensation-claims to a large amount, the Board ordered its partial removal to clear away the obstruction. There are no plans or papers here to show what scheme was adopted, nor have any steps been taken to protect the Board from compensation-claims likely to be made as this work proceeded by owners of the foreshore.

The operations so far would tend to show that the previous management intended to construct the inner training-walls as at Greymouth. If so, it is clear that they had adopted a most expensive way, as that plan would require the use of at least twice the stone necessary. It appears that this