Railway Protection Works.

A report on the comparative cost, &c., of supplying stone to the railway protective works at Whale's Creek, was submitted by the sub-committee (Messrs. Rutherfurd, Sealy, and Roberts) appointed by the Chamber to draw up the same. The report, which was dated 29th April, was read by the Secretary as follows:—

"*Report of Sub-Committee appointed by the Timaru Chamber of Commerce to draw up a statement of the comparative cost, &c., of supplying Stone to the Railway Protective Works at Whale's Creek, Timaru.*

"The sub-committee have to report that they examined the above works with the view of comparing the strength, durability, and general suitability of the rock brought from Officers' Point, in Lyttelton Harbour, with the local stone as previously supplied to the Government, and in doing so have to meet the following assertions made in favour of the Lyttelton stone—namely: (1) That it costs the Government nothing; (2) that it is procured in larger blocks than the local stone; (3) that it is harder, and resists the action of the sea better than the local stone.

"With regard to the first point we have ascertained—(*a*) That the Government pays for the stone delivered in trucks at Lyttelton 5s. per yard; (*b*) the cost of carriage to Timaru at ordinary rates would be £1 3s. 6d. per yard; (*c*) the cost of labour, putting on site, say 1s. per yard: making a total cost on the site (if usual rates are charged against the maintenance of Railways Department), £1 9s. 6d. per cube yard. Or, merely allowing for wear and tear of rolling-stock, the cost will stand thus—(*a*) Cost of stone at Lyttelton, as above, 5s. per yard; (*b*) wear and tear of rolling-stock, &c., cannot be put less than 6s. 6d. per yard; (*c*) labour putting on site, 1s. per yard, making the total minimum cost 12s. 6d. per cubic yard.

"With regard to the second assertion, we find that blocks can be and have been supplied fully as large as any of those brought from Lyttelton; and we also find, from actual inspection, that, whereas a large proportion of the Lyttelton blocks get broken and crushed up in rolling into position, nothing of the kind can be observed in respect of the blocks locally supplied.

"As to the third assertion, from several inspections made by us we find that, so far from the Lyttelton stone resisting the action of the sea better than the local, the opposite is plainly indicated. Some of the Lyttelton blocks have already been much worn and grooved by the action of the sea, and others have scaled and cracked to pieces, apparently by the mere action of the weather; whereas the exceeding toughness of the local stone is such that it is simply rounded off without fracturing. Besides this, where the latter has been a considerable time in position under the southernmost viaduct, the action of the sea has packed it nearly as compact as if purposely built by manual labour, obtaining thereby a greater resisting power to the action of the waves. We should also add that we find by actual experiment that a heavy sea will have the effect of splitting up the Lyttelton rocks into spalls by the mere concussion of one block against another.

"In addition to the unquestionable superiority of the local stone for the purpose under consideration, we find that the comparative cost stands thus: ordinary cost of rock from Lyttelton, £1 9s. 6d. per yard; estimated minimum cost, 12s. 6d. per yard: cost of local stone of equal size, 9s. per yard.

"We believe it has been stated that 'the Government would have had to send the trucks down to Timaru empty if not loaded with stone.' But the increased wear and tear, both of the line and of the trucks, in bringing the stone would be at least equal to the rate mentioned above, so that this argument has really no force, if used, in favour of the carriage of rock from Lyttelton.

"In conclusion, we estimate that the extra cost incurred by the Government in using Lyttelton stone for the works referred to cannot have been less than £500 up to date, while the loss to the district has amounted to at least £1,200."

Several samples of stone were laid on the table. One specimen was very friable, mottled in colour, and resembling a mere indurated clay. Another was of uniform dark colour, and broke with a clean but irregular fracture, but splintered rather easily at the edges. A third was a piece of coarse shingle concrete of indifferent quality. These had all come from Lyttelton. A fourth specimen was a piece of the local dolorite rock, and, though not of the hardest of the local rocks, compared very favourably in respect of this quality with the better of the two specimens from Lyttelton.

Mr. Woollcombe moved, Mr. Bruce seconded, and it was carried unanimously, "That the report of the sub-committee be forwarded as early as possible to the Government, with samples of each sort of stone; that the Timaru Harbour Board be informed of the action taken by this Chamber; and that copies of the report be sent to the members for the South Canterbury districts."

Enclosure 4 in No. 3.

The Levels Road Board to the Timaru Harbour Board.

Gentlemen,— Timaru, 9th June, 1880.

I am instructed by the Levels Road Board to forward you the following copy of a resolution passed at their meeting held yesterday—namely:—

"That this Board desires to support the action of the Harbour Board in rebutting the report of Mr. Blackett with regard to the damage done to the railway at Caroline Bay; and, as the site in question is within the Levels District, this Board is in a position to state that Mr. Blackett's report is entirely contrary to local knowledge and experience. And that a copy of this be forwarded to the Chairman of the Harbour Board."

I have, &c.,

William T. Barnett,

The Chairman and Members, Timaru Harbour Board. Clerk to Board.