

3638. It only extended from £24,000 to £80,000?—Yes, that is all.

3639. *The Chairman.*] It extended from £21,000 to £80,000—that is, the railway?—That £80,000 includes the wharf.

3640. No; nothing at all. It does not include the bridge at the Gorge nor any protective-works?—It is £21,000 to £80,000. Yes; that is quite probable. The expense of the railway was greatly increased by the erection of what is called the “Slip Bridge,” which alone cost, I think, about £20,000, in order to cope with a continually sliding mass of semi-liquid clay that was encountered there. As regards the question of making estimates without details, I had a similar sort of thing to do a little while ago. There were four routes to be examined and decided upon, and the best one chosen, for the railway between Canterbury and the West Coast. I quite realised—partly from my memory of this Brunner Railway case—that, as there were four engineers (one on each route), each of whom would have ideas of his own as to railway-construction, and also possibly a little bias in favour of his own route, it would eventuate that unless we supplied them with a specification of the class of work to be provided for, and a complete schedule of prices, as a basis to go upon in making their estimates, we should possibly find that what was considered to be the cheapest line by the engineer having charge of the survey of it might in reality, if put on the same basis as the others, be the most expensive line; and the only possible way of obtaining estimates relatively correct, in view of the work to be done, was to furnish all the engineers engaged with a complete and exhaustive schedule of prices of the various classes of work to be adopted. This was actually carried out, as I will be happy to show to the Commissioners if they wish. In that case I went very carefully into the question, and, on the basis of what railway-work had cost all through New Zealand, I made out a scale of prices, not based on any theory, but on actual experience, and this was furnished to the engineers, who had to follow it. The consequence was that we got estimates which truly represented the relative cost of those lines. This is proved to be so by the fact that Mr. Bell, who surveyed the line from Springfield to Brunnerton, or the greater part of it, finds now that the estimate which he made upon the basis of those prices is working out in practice very close indeed—that is to say, he is able to make the line from point to point for the amount arrived at in his original estimate; whereas, on the other hand, the portion of the railway from Brunnerton to Belgrove which was surveyed and estimated in 1878 by a quite different process cannot be constructed for anything like the original estimate. I merely mention this to show that everything depends upon the basis originally adopted, and, as a matter of fact, I never believed in those Brunner estimates being more than a basis for comparing the two routes. I may also mention that Mr. Carruthers, the Engineer-in-Chief, in the following year, in making up his estimates from merely walking over the ground, more than doubled the estimate for the Greymouth line [*vide* Parliamentary Paper D.—No. 5A, 1872], and I quite concurred in that at the time. I should also say that I am absolutely convinced that whatever the railway on the south side has cost the railway on the north side would have cost at least as much if made on the same scale and up to the same standard.

3641. *Mr. Brown.*] What is your idea of the movement on foot just now for making a wharf at Point Elizabeth?—I am clearly of opinion that anything in the shape of a solid mole at Point Elizabeth would be sure to fail. In the same parliamentary paper which contains the original estimate for the Brunner Railway it will be seen that Sir James Hector and Mr. Blackett gave an opinion on the subject—I think it was in 1871—in which they say there would not be the smallest chance of a harbour there succeeding, in consequence of the travelling shingle. If the projectors were to adopt what I recommended to Mr. Smith and Mr. Hamilton, an open viaduct, leaving complete freedom for the shingle to travel through, they might succeed in loading ships there in ordinary weather; but, of course, an open viaduct would not give any shelter. I think there is an immense shingle travel at Point Elizabeth. I went to look at it a short time ago, for the first time, especially to satisfy myself on that question.

SATURDAY, 15TH NOVEMBER, 1890.

Mr. JAMES McKERROW, F.R.A.S., examined.

3642. *The Chairman.*] You are Chief Commissioner of Railways to the colony, Mr. McKerrow?—Yes.

3643. The Commissioners are anxious to find out how the charge of 2s. made for haulage on the Greymouth-Brunner line is arrived at?—It is made up of the actual cost of hauling the coal down, and a terminal charge in respect of the very large expenditure that has been made at Greymouth on works—harbour improvements and sea-walls.

3644. Is the terminal charge also supposed to cover the expense of handling the coal?—Yes.

3645. And loading it?—Everything—cranage and all the wharf labour.

3646. What portion of that would be credited to the railway supposing, as in other places, that the wharf charges were separate from the railway charges?—To say “wharf charges” is scarcely a proper way of putting it. We call it a terminal charge. About 9d. for haulage and 1s. 3d. for the terminal charge.

3647. Is that in accordance with the scale in other parts of the colony, or the tariff that is published in the *Gazette*?—There is nothing else analagous in the colony, except on the Westport Railway, where the charges are assessed in the same manner.

3648. For instance, we find from a telegram we have received that the Green Island coal, hauled about the same distance is charged 2s., and there there were no terminal charges?—Yes; there is included in this a terminal charge in respect of the Dunedin Railway-station, which cost several hundred thousand pounds.

3649. I mean that portion of the terminal charge which meets the expense of handling the coal and shipping it. That is not, I understand, done by the railway at Dunedin?—Not at Dunedin,