

65. Have you any estimate of the cost of carrying coal by wire tramways in such trucks as you speak of? No; I have simply been informed that the cost would be very small.

66. Has there been any obstruction or delay in opening this coal field from any action taken by the Provincial Government? So far from the Provincial Government having offered any obstruction to the development of these coal mines, they have done everything in their power to hasten it.

67. Have you had any communication with the General Government with regard to opening up the Brunner? I applied on behalf of the Province in 1870 for a loan of £30,000 to make a railway from the mine to the port. The Government declined, but stated that they would consider the propriety of making it as a part of the policy of public works. It was afterwards put into the Schedule of Coal Railways, and the Government asked me, as Superintendent of Nelson, to give security for the amount of expenditure. The railway was to be made in the County of Westland, and was to serve to develop all the coal mines on that side as well as on the Nelson side. I declined to give security for the whole of the amount, and the Government subsequently consented to take security for the remaining part from the County of Westland. The security was only to be over the Coal Reserve, not over the Province. There was no delay whatever on my part in the matter.

68. *Mr. J. Shephard.*] Since the railway has been agreed upon, companies have been formed to work coal seams that have been discovered on the south side, that this railway will open? Yes.

69. So that if the original request of the General Government had been agreed to by you, as Superintendent of Nelson, coal deposits that are said to be equal to those on your side would have been enabled to compete with them at an unfair advantage? Quite so.

70. *The Chairman.*] Have you anything to state with regard to coal on the River Owen? Yes. Coal has lately been discovered on the River Owen at its junction with the Buller, at a distance of sixty-five miles from Nelson. The seam at its outcrop measures 2 feet 6 inches. The coal has been analyzed by Dr. Hector, and proves to be at least equal in quality to the average of coal imported from New South Wales. [Mr. Curtis cited Dr. Hector's report, and pointed out the position of the discovery on a large map of the Province of Nelson.] A railway for twenty miles of the distance (from Nelson to Foxhill) is now in course of construction. The place where the coal has been discovered is on what is proposed to be the direct line of railway running through the whole Island. Forty-five miles of railway only would have to be made to connect the coal mines with the port of Nelson. None of the ports on the West Coast can be entered by the ordinary trading steamers from Australia, nor of course by vessels direct from England.

71. *Mr. O'Conor.*] What is the difference of the depth of water at Nelson and the Buller? At this moment, four or five feet. The difference is sometimes very much greater.

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THURSDAY, 4TH SEPTEMBER, 1873.

Dr. HECTOR appeared before the Committee, and stated that he was unable to give any information relative to the cultivation and manufacture of European Flax beyond that given in his evidence (1871).

As regards Roman cement, he stated, that no true puzzuolana (volcanic ash) has as yet been found in New Zealand; something resembling it has been found near Lyttelton. It may yet be found, particularly in the neighbourhood of volcanic formations.

As regards Portland cement, that there is material in many places for making it; as at Amuri, Collingwood, and White Cliffs. A bonus, if given on cement, should be by the barrel or other measure.

A considerable amount of capital must be sunk in stock, as good cement requires time before coming to maturity. On this subject, for further information, he refers to former evidence.

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WEDNESDAY, 10TH SEPTEMBER, 1873.

Mr. H. P. HIGGINSON was in attendance, and was examined as follows:

72. *The Chairman.*] Your attention is drawn to a report furnished by you to the Chief Engineer, relative to the Ngakawau Coal Fields, with a view of determining upon the best means of exportation. In clause 1 of that report you say, "The Ngakawau is nearly always navigable for small steamers of not more than 8 feet draught at high tide, the rise being 10 feet and the bar dry at low water." Will you explain the source from whence you derived that information? I got my information on that point from the Harbour Master and from men residing at the mine. They stated that the rise of the tide was 10 feet and the bar good. The channel runs straight out with 2 feet of water in the channel. That gave 11 or 12 feet, consequently I took 8 feet as a fair average. That part of the report was made upon the faith of statements made by other people. I was assured that the rise of the tide was generally 10 feet.

73. In the next paragraph you state, "A vessel of such size can go up to the mouth of the mine, and lie with safety at low water, there being a pool measuring five by three chains at this point. Between this pool and the mouth of the river (distant three-quarters of a mile) the bottom is nearly dry at low water." Did you take soundings at different parts of this pool? I did at two different parts, with a stick. Under the rock there were 12 feet of water.

74. How many vessels would lie in the pool, drawing 8 feet of water I mean? Only one vessel drawing 8 feet of water. Other smaller boats might also lie in the pool, but there would be no room for more than one drawing 8 feet.

75. Does not the pool slope down from the edge? It shelves for about 40 feet under the rock.

76. You propose in one part of the report to deepen the channel? Yes.

77. How would the deepening of the pool affect the channel? If there is 5 feet of a rise at the mine and 10 feet on the bar, the effect of deepening the channel would be to lessen the water to 5 feet. That is simply a supposition of my own. I cannot say it would be the case definitely.