

comparing it with other contracts that I know have been completed. I took a certain length of line, that I know of, through certain country, the price of which per mile I know, and I compared the country on this line with that, and put down about the same rates per mile.

1949. Bearing in mind the nature of the country, I would further ask you whether you still consider that the allowance you have made here is a fair one?—Yes, I do.

1950. *Mr. W. White.*] What price did you put on for the ballast?—The price allowed is 4s. 6d.

1951. At what price have you reckoned the timber?—I did not reckon any price; I did not go into details at all.

1952. Then, at what price was the timber taken in the contract you are referring to as a guide?—It varies so. I have known it as low as £1 5s. per 100 b.m., fixed in position, and I have known it as high as £2.

1953. Then, are we to take the average of that as being allowed on this estimate?—About £1 10s., I should say, would be about the average price.

1954. On this contract?—That depends on the class of timber that is used in the contract. I could not say exactly, because I have no details before me to price from.

1955. But you must have some information to go upon. I understood you have taken it from other contracts. Then, I wish to know at what price the timber was charged or allowed for in these other contracts?—About £1 10s. per hundred b.m.

1956. And you think the timber can be got for this railway at £1 10s. per hundred, fixed?—Yes, I think so, taking the average right through.

1957. That would include ironbark?—No; it would hardly include ironbark.

1958. Is there no ironbark used in these bridges?—I anticipate black birch being used in place of ironbark.

1959. What are you allowing for piling?—I have not gone into details like that at all. I can get you some prices on contracts from the department if you wish it. I cannot speak from memory on this point.

1960. Is there sufficient timber along this line for the purpose of bridges and so forth?—I think so.

1961. Totara or matai?—Matai and black birch; very little totara.

1962. Will the contractors' roads be more expensive on one line than the other, in consequence of the roughness of the country?—I could not say. I do not know anything about the central line.

1963. Then, the work, or rather what you call here "easy, moderate, heavy, and very heavy work," you have taken your estimate from contracts for similar country to the Stratford line?—Yes.

1964. And you think that the estimate is a reliable one, so far as you can make it?—Yes.

1965. I see there is an increase in the rate per mile on the permanent-way: what has that been put on to cover?—To cover ballast.

1966. Do you know what rates are reckoned for sleepers on this line?—3s. 6d. each.

1967. For what kind of sleeper: is it reckoned to be birch?—Birch and matai. That is the average price of sleepers, I believe.

1968. Do you think that £900 per chain for tunnelling will do the work?—Yes.

1969. *Mr. Fergus.*] I see there is nothing put in for bridges here. Can you tell us, approximately, what number of bridges there would be on the whole length of the line?—I could not do that.

1970. There is a good deal of bridging?—There would be a good many small bridges, but nothing long; nothing larger than 80ft. span.

1971. All timber bridges I suppose. What length of bridging would there be approximately? In asking this question my object is to see what would be the cost of keeping those bridges in repair?—I cannot say.

*The Chairman:* You will bear in mind, in answering that question, that you have intimated to the Committee that there is a considerable length of this country you have not been over at all.

1972. *Mr. Fergus.*] Still the witness has got the reports of his subordinates?—I think I mentioned, in my report of the line, the number of times we crossed the rivers.

1973. But you could not state the length of bridging approximately?—No.

1974. Do I understand that you have included bridges in your estimate?—Yes.

1975. You must have had some idea of what the bridging was?—It will be nothing above the average.

1976. What would the timber be principally that you propose to use?—Black birch.

1977. Is there any quantity of it along the line, so far as you saw?—Yes.

1978. Is it of sufficient lengths?—Yes.

1979. Do you prefer black birch to totara or matai for bridging-work?—I prefer totara in certain parts of the bridging. It depends where it is to be used in the bridge. I prefer black birch for strength and totara for lasting.

1980. For upper work you would prefer totara?—Yes; in certain places.

1981. Do you propose to have all black birch for this line?—I should use all black birch where we could get it easily.

1982. And you could get it more easily than totara, I think?—Yes, I think so.

1983. You know maire?—Yes.

1984. What is your opinion of that for bridging-work?—You cannot get it in sufficient length.

1985. *Mr. Larnach.*] On that line?—Anywhere in New Zealand.

1986. *Mr. Fergus.*] Do you think that maire can be worked up for bridging-work cheaply?—No.

1987. Why?—It is hard, and there is too little of it.

1988. It is too hard to be manipulated by a carpenter?—Yes.

1989. It is suitable for some portions of railway work though?—Yes.

1990. What is that?—For straining-blocks and scarf-pieces.