

24. *Mr. Field.*] What do you mean by saying that the grass would not keep the scrub down?—I do not speak as a farmer, but am giving my own impressions—that merely grassing the land would not be sufficient.

25. *The Chairman.*] There is a man named Punchon who has 180 acres, all felled and sown in grass, upon which he put cattle, but they did not go on the grass. There is no question about the efficiency of grass in keeping down the scrub?—I do not see much advantage in bushfelling being put in hand a long time before the formation-works are likely to start, as long as it is done sufficiently before the formation to admit of its being burnt in the ordinary way.

26. *Mr. Field.*] It has to be something more than a year, I think, but at least four or five years after starting the road before it is of much use?—Clearly then we cannot take advantage of the suggestion under these circumstances, because I understand the railway is to be completed in about four years.

27. *The Chairman.*] When you fall bush you clear it away; you cut away the supplejacks and vines, and put them on one side instead of burning them, and in my opinion there is about 25 per cent. more work than if you burn it?—I concur that burning is cheaper than hand-clearing; but, as regards the increased cost, the cost of bushfelling on the railway, compared with the other works, is so small that any small saving therein would scarcely affect the total cost of the line. It is only right, of course, to be as economical as possible in all works, but still the saving in this matter would be very trifling.

28. *Mr. Hogg.*] If the present rate of progress should continue, when would you be able to complete the Makohine Viaduct?—The present rate of progress is as rapid as is possible. For some time past the work in the workshop has been vigorously pushed on night and day, with three reliefs of workmen, and erecting operations are being carried on during all the hours of daylight. It is impossible to carry on this work at night. At the rate of progress prevailing now, and allowing for even greater progress when the days lengthen, we expect the bridge to be ready for the passage of trains within a year. As the members of the Committee are aware, the bridge consists of two short land-spans, then two long spans, and a central cantilever span. The long span in each case is supported at the end by a concrete pier, which is already finished, and the concrete abutments at the shore end of the land-spans are also finished. A number of workmen are employed on the two main piers, and of these one—pier D—is almost completed. Pier C has been commenced and erected to a quarter of its height above the concrete base. The concrete has been completed for some time. There are over 12,000 tons of concrete in this structure, all of which has been in position for some considerable time. The height from the bed of the creek to the rail-level is practically 250 ft.—more than three times the height of the tops of the chimneys in the Government Buildings.

29. *The Chairman.*] What length of time will it take for the completion of the proposed viaduct north of Mangaweka? Is the greatest expedition being used?—We cannot go on any faster than we are going.

30. *Mr. Field.*] How long would the work at Makohine take if you used the electric-light and carried on the work of erection night and day?—The electric-light throws so deep a shadow, and in other respects would be so unsatisfactory in a position like this, that the risk to men working at a height of 250 ft. from the ground would be greater than I should care to advise the Government to take.

31. *Mr. Hogg.*] What length is the viaduct or bridge at Mangaweka?—That is 13 chains.

32. What is the height?—The height at Mangaweka is about 150 ft. But the style of the structure is totally different. At Makohine the foundations were of a treacherous character, and we had to avoid putting in piers as much as possible, and therefore had to use long spans. At Mangaweka we adopted 80 ft. spans, consequently there will be more piers; but so much less will depend upon them that the construction is comparatively easy.

33. *Mr. Lethbridge.*] Are you getting any material at Mangaweka?—Yes, the foundations have been commenced, but the manufacture of the iron-work is not yet in hand. We have only one workshop, and to duplicate the shops would increase the expense without any commensurate benefit. The work of manufacturing the iron-work for Makohine is nearing completion, and the iron-work for Mangaweka is on order, and will be delivered shortly, and the idea is that the work for the Mangaweka Viaduct will be proceeded with when the other is finished.

34. *Mr. Hogg.*] How long do you say it may be before the Mangaweka Viaduct is completed? You say the present work is likely to be completed in about a year?—I think the Mangaweka Viaduct should be completed in two years.

35. *Mr. Field.*] What is the distance?—Eleven miles.

36. *Mr. Lethbridge.*] Is the formation beyond Mangaweka near completion?—A good deal of it is, but not all of it. There are several tunnels on this section, and some of these will be some time before they are finished. When a tunnel has to be constructed there is usually a considerable quantity of work to be done before we can get to the tunnel at all. The approach cuttings have to be made, and these sometimes extend to a depth of 30 ft. or 40 ft.

37. Is it started at both ends?—You refer to the tunnel before you get to Utiku, I presume? This is started at one end; another approach cutting at Utiku end is in hand, but not complete. The excavation of the tunnel at this end will be started the moment we can get at it, and will be worked with three shifts.

38. If the Makohine Viaduct is completed and this tunnel still under way, you do not get any further on?—We cannot have the whole of the line ready for opening on one day. But the viaduct at Mangaweka will not be completed for two years. The tunnel will be completed before that time.

39. *Mr. Hogg.*] Has not the platelaying been done beyond Makohine?—Not at present, but we are making preparations for laying the rails beyond Makohine. A large number of the sleepers