

mations?—Part of them are from detailed surveys, and the bulk of them are average estimates, but some of them pretty close.

43. I understand that a detailed survey has been made of the whole of the Ngaire survey?—Not a detailed survey sufficient for construction purposes, but a very careful trial survey.

44. What officers in your department can speak as to the general character of the country traversed by these routes?—Well, Mr. Holmes surveyed the greater part of the Ngaire route, and also a portion of both ends of the central route.

45. Any other officers?—I do not think there are any officers in the department now who did any survey work on these lines.

46. *Mr. Carncross.*] Have you a knowledge of the quality of the land on the Stratford route?—No; I have not been over that route.

47. *The Chairman.*] You have some knowledge of the land on the Marton end of the line?—I have.

48. Can you state to what extent—how far beyond Marton?—Along the line of railway; I have not been over any very great length of it—about thirty miles.

49. Well, such land as you have seen, is it first-, second-, or third-class land?—It is first-class land all the way for the distance I have named.

50. Suitable for small settlements?—Yes; it is very good land, principally bush land. Some fifteen or sixteen years ago I explored a road through the Murimutu Plains, as far down as Wanganui.

51. Is that an open road?—Yes; the road has been made, and a great deal of the country is settled. It is good land all along there.

52. From your knowledge of the country, could the tunnel which has been made at Poro-o-tarao have been dispensed with without involving heavy works of another character?—No.

53. It could not?—No; it is an unbroken range, and there is no way of getting a railway with the grades required except by tunnelling. There are two streams that lead up to the watershed, and the tunnel is made through the lowest and narrowest part of the dividing ridge.

54. It has been stated that it could have been avoided by a few miles' divergence?—I have heard that statement, but I could not find the place mentioned.

55. It is not true?—It is not correct so far as my knowledge goes.

56. You could not find any ground where a railway could be constructed dispensing with the tunnel?—No; that question has been talked over for a long time, but I never could find anybody who could give me any information on the subject—that is, reliable information.

WEDNESDAY, 14TH SEPTEMBER, 1892.

Mr. R. C. BRUCE, M.H.R., sworn and examined.

1. *The Chairman.*] Perhaps you would prefer to make a statement first?—I may say, gentlemen, that I have been over this central route several times. I have started from Hunterville on horseback, travelling north on one occasion to Waimarino. I then struck away in a north-east direction towards Taupo, coming back on the east side of Ruapehu through Rangipo, lying between Ruapehu and the Kaimanawa Ranges. I have, on another occasion, gone north to Waimarino and on to Taumarunui, which is on the Wanganui River, and on again to Poro-o-tarao, so that I have a very tolerable acquaintance with the interior of the country. I may also say that I have been across the country to the eastward of the Rangitikei River, and near the Ruahine Ranges, the whole of which district will be served by the central line. I have, therefore, a fair acquaintance with the character of the country on the east side of the river. On the west side I have also a knowledge of the character of the country, having gone right through it on several occasions from the coast line on the Wangaehu River. This wide area of pastoral country will be served by the central line coming to the open plateau in the interior. I make this preliminary explanation to show that I ought to know what I am speaking about when I refer to this large tract of country. I cannot give you general averages. I presume they will be supplied by the department. I wish particularly to speak in reference to the character of the country that will be served by the central line. I may say there is a large tract of country lying between the Rangitikei River and the Ruahine Ranges which is all good pastoral country. A good deal of it is undulating country, but it is all good until you reach the pumice plateau. I may perhaps say that this pumice plateau has been the result of the upheaval of these mountains. The pumice shower has been deposited all round, least of all to the west. As to the quality of the land east of the Rangitikei River, I would put the carrying capacity of that country at two sheep to the acre when cleared, and it is being rapidly cleared, settlement going on at a great rate. When you get into the interior to the north you come to an open limestone country, which you may call excellent, north of wooded country. This is a really magnificent country until you touch the country where the pumice has fallen. I am now going to say a little in reference to the west side of the line. This is country that I am well acquainted with. I have been through it. I live in it. It is of papa formation, which is an estuarial deposit, and contains a good deal of lime in a varying percentage. It is a wooded country. Perhaps the land is not of such good quality as that on the east side. The carrying capacity would be about equal, as the climate is colder the nearer you approach the Ruahine Ranges. I now come to the west side. This is also on the west side of the line. It is a wooded, pastoral, and hilly country, having the carrying capacity which I have already indicated until it gets to the open plateau which skirts the pumice country. On the east side it is a pumice country. Again, on the west side of the line, you come to what is called the Waimarino Block, and, so far as I am able to judge, though I have not been through it except on the line, it is very fine country. I have heard that from reliable