material for this filling anywhere in the locality, and he suggested that it would be necessary to bring that filling by train from the Gorge line, and therefore he thought a price of 4s. would have to be put on for such filling. Now, as a matter of fact, a comparatively few chains after we cross the Rangitikei line we get into the terrace land where there is a deep cutting, and the material from that cutting would be quite close to where the filling is required, and it would be used for that purpose. put in a price of 4s., but I think it would be quite reasonable to reduce that £100,000 by £20,000.

Now take the item of your tracks: you have allowed in your estimate for fourteen miles at

£5,000 per mile?—That is so.

Do you think you could effect a saving on that ?—That is based on a price of £20 per ton for It is difficult to forecast the future, but I think there is no doubt whatever that we shall be able to get rails at £15 per ton, and I am quite sure that the £70,000 I put down for that item could be reduced by £20,000 and possibly more.

But as you have already said, you were determined to be on the safe side and make an outside estimate ?-- I was not going to have it said that I was putting in estimates at which I could not carry

out the work no matter what the conditions were.

The item of bridges you have dealt with--you have allowed £50,000 for them; but if you were to adopt the proposal suggested by Messrs. Fulton and Maxwell you could effect a saving of what ?-£30,000.

That no doubt is a matter of principle, but do you agree with the principle suggested by Messrs.

Fulton and Maxwell ?—I do not.

Your own preference is for overhead bridges ?—It is not only my own preference, but it is the consensus of opinion of railway engineers all over the world. At the present time we are constantly faced with accidents at level crossings, and I am quite satisfied that in the near future this country will have to face the bridging of a very large number of existing level crossings, and in connection with a new scheme such as this I am of opinion that it would be wrong to perpetuate level crossings.

I want to ascertain if it is a fact that in bringing your scheme and Mr. Fulton's scheme down to a common level you would effect a saving of £30,000 on that item ?—Yes. Mr. Fulton referred to certain safeguards at level crossings, such as gates and bars. Those are in common use in many places. They have been used in New Zealand, but they were a constant source of anxiety to us owing to frequent accidents. Each one involves a power plant to operate it, in addition to a staff of men who open and shut the gates. The cost of them in most cases would equal the cost of a bridge.

You mean the capitalized cost ?—Yes.

Now take the passenger and local-goods yards: I think you allow £120,000 in your estimate in connection with your deviation scheme ?—Yes.

Do you regard that as an outside estimate?—I do.

What do you say about the possibility of that ?-To give you an example: at present turnouts are costing £100 each; scissors crossings are costing £600 each; double slips are costing £250 each, and the cost of those is bound to come down. We have put in estimates for entirely new buildings on a very generous scale—namely, for buildings, platforms, and verandas, £50,000; and for roading I have put down £20,000. Now, I am satisfied those items could be reduced by £20,000.

In other words, I suppose we may take it that your estimate is made on the basis of your having, when the works are completed, a perfect organization there?—Certainly, as nearly perfect as possible

-a thoroughly efficient arrangement.

Now, taking the sorting-yards and accessories, I think you allow £50,000?—Yes, and I think it would be reasonable to reduce that to £40,000 and still be very liberal. The engine-depot, without land, I estimated at £80,000. That includes shed, £20,000; sidings, £20,000; &c.

I think in your estimate you allowed for a sum under the head of "miscellaneous" ?-Yes, I

allowed £65,000.

Is that a liberal allowance ?--That is what most engineers would call a most extraordinary You could easily cut that down by £20,000. allowance.

Then the land I think you put down at £100,000 ?—Yes.

It is all rural land, is it not ?—Yes, I put the land down at something like £750 per acre, but the witnesses have put the amount down at £130. In the preparation of this estimate I originally put down £50,000, which I thought was ample, but I decided to be still on the safe side, so I put down £100,000.

But you think it will not cost as much as that ?-Oh, no. I could knock £40,000 off that. That is a total of £160,000. or even more than that.

A total possibility of saving on the deviation estimates ?—Yes. On the Terrace End-Whakarongo deviation I allow for two and a half miles of railway, £50,000, for a single line. That is a

very high estimate. but I do not suggest that that would be reduced.

The Chairman.] That would not be spent in the meantime?—No. On top of all that I provide £50,000 for contingencies, which is a very high estimate considering the allowances which have already been made.

Mr. Myers.] It is very difficult to make estimates at the present time, is it not ?—Yes.

It is difficult to make a satisfactory estimate of either the cost or the time required for completion ?-That is so.

But you have taken everything into consideration and allowed up to the utmost limit ?-That is so. I might say in connection with this saving, amounting to £160,000, I provided in my estimates for £200,000 on account of land to be sold. I was criticized somewhat for suggesting £200,000, but I think that estimate was supported by very experienced land-valuers and land agents, such as Mr. Nash and Mr. Johnston, of Palmerston North.

Mr. Luckie.] Mr Nash did not support it?—He did support it. He thought it was a very fair amount to allow.