you go into the matter in detail, and find out the actual management required to carry on the As a general rule you allow about 5 per cent. for engineering and office expenses.

302. I understood you to say that other tunnels have cost about £42 a lineal yard?—Yes.

303. Why should this one cost £60 a yard as against £42 in a shorter tunnel?—I might perhaps answer that by saying that if sufficient time were allowed we might be able to complete this tunnel at very little more cost than the £42. Time is the governing point.

304. If you were allowed to go through with it very slowly you could reduce the cost per

yard very much ?-Yes.

305. Is it reasonable to suppose, then, that the fact that Mr. McLean has had to hurry on with the job has something to do with the great difference in the cost?—The time factor governs the position almost entirely.

306. Have you ever had to stop a job—tunnel or other job—for want of labour in the Public

Works Department?—We have had to go very slowly—not actually close down.

307. Are there any cases in which the cost of construction has been materially increased through shortage of labour !-- Not in our tunnel-work, because we employ only very few men.

308. You do not work on a big scale?—No. About half a mile or 30 chains is our longest

The Chairman (to Mr. Blow): Have you any further papers to put in?

Mr. Blow: Yes, sir. Here is a copy of a letter to the contractors, remonstrating against their delay; and their reply. [Letters put in.]

Hon. Mr. R. McKenzie: I asked that we should be informed when the heading was started

at each end of the tunnel.

Mr. Blow: The heading at Otira was commenced in February, 1908, and at the Bealey end

in January, 1909.

The Chairman: The letter to the contractors is as follows: "Public Works Department, Wellington, 16th November, 1910.—Arthur's Pass Tunnel Contract: Gentlemen, -- I am directed by the Minister of Public Works to communicate with you regarding the progress of works under your contract for the construction of the Arthur's Pass Tunnel on the Midland Railway. From recent reports by the Resident Engineer it appears that the rate of progress attained up to the present is not sufficient to warrant the hope that the tunnel will be completed within or about the time stipulated in your contract, which expires on 1st August, 1912, and I am therefore to request that you will be good enough to take steps to accelerate the progress of the work, so that the opening of the railway may not be unduly delayed owing to the non-completion of the tunnel by the date fixed in your contract. The Minister will be glad to hear at your early convenience that you are making arrangements to expedite the work, and to learn the nature of the means you propose to adopt to bring about an improvement in the present rate of progress .- I have, &c., H. J. H. Blow, Under-Secretary.'

Messrs. McLeans' reply is as follows: "Otira, 5th December, 1910.—The Under-Secretary, Public Works Department, Wellington.—Dear Sir,—We are in receipt of yours of the 16th ultimo re expedition of work on our Arthur's Pass Tunnel contract, and beg to inform the Minister as follows: Our trouble is that we have never been able to obtain the services of enough men, and that, of the men we do get, some are inferior, and some are irregular in attendance, while there are very few first-class men, and no leaders of value. By the use of bonuses equivalent to increased wages we hope to induce more and better-class men to come to this work, and by this means to expedite its progress to your satisfaction.—Yours faithfully, John McLean and Son."

Hon. Mr. R. McKenzie: Is it not usual for the Department to send notice of this kind to all contractors when they are getting behind with their work?

Mr. Blow: Yes; it is usual for the Resident Engineer to draw the attention of the contractor to the slow rate of progress, and if that has no effect the Department takes action.

Hon. Mr. R. McKenzie: In the replies you get, is there not invariably some excuse from the contractor about matters beyond his control?

Mr Blow: They make the best case they can.

## Tuesday, 24th September, 1912.

## MURDOCH McLean further examined. (No. 12.)

1. The Chairman.] We have received from Mr. Armstrong a copy of a proposed agreement between the men and your firm. You might have a look at it [document handed to witness] and tell us whether it ever came before you?—These were the demands made by the union at the time.

2. Mr. Seddon.] Was this proposed agreement considered?—Yes. The demands were made

by the union shortly after the expiration of the award. It was some time in December last, I

think, when they made these claims, and they were considered in February.

- 3. The Chairman.] Then you came to a settlement?—They claim there was no settlement made; but we made certain advances in wages, and they went on working under those conditions without any agreement. I have submitted to the Committee the rates of wages that we gave at
- 4. Hon. Mr. Fraser.] Then that simply is a statement of their demands upon you, which were not acceded to, but you made certain concessions to them upon which they continued to work? -That is right. I should like to say that as regards rock-drill men their original demand was 12s., but as a matter of fact we advanced the wages to 12s. 6d.; and as to shift-bosses, they claimed 13s., and we increased the payment to 13s. 6d. There is really not very much difference between us as far as wages are concerned.

5. The Chairman. The other conditions were not agreed to !-No.