In order to make the extension from Mores' terminus to Ohai at a cheap rate, it would also probably be necessary to introduce a grade of 1 in 40. This, however, being favourable to the traffic, is not of so much moment, while by increasing the cost a fairly good grade can be obtained. Mores' line also joins the present line in such a way as to be unsuitable for through traffic, as is plainly shown on the map.

Considering the black and white line in detail, though the route as a whole is satisfactory, the line is capable of considerable cheapening without affecting its efficiency. The grades have not been laid out in such a way as to give the minimum of hauling-power required, nor so as to balance the quantities, or to reduce them to a minimum consistent with a line of workable curvature. However, the survey work done on it would not be wasted, as it would all be available as a basis from which to make a permanent location.

I am satisfied that the estimates suggested by Mr. Joseph Johnston, jun. (£16,000) and Mr. Cuthbertson (£18,000) are both much too low if the line is constructed in accordance with Government standards. Even assuming that 40 lb. rails are employed (which would be a doubtful policy in view of the heavy traffic anticipated), the cost would certainly not be under £4,000 per mile, and as the length to be constructed is six miles and a half, we get £26,000. (NOTE.— The plans as forwarded show no terminal station, which would be a necessity.)

As noted above, the line as surveyed is capable of considerable improvement, and therefore the cost can be somewhat reduced; but for the purpose of considering the payableness of the line, I do not think that a less figure than £30,000 should be adopted. On this basis, allowing for two trains each way per day, the annual expenditure would be: Interest, 4½ per cent. on £30,000, £1,350; running costs, maintenance, and depreciation, £2,520: total, £3,870.

In arriving at the revenue I will assume that 24,000 tons produced here takes the place of a similar quantity from the Nightcaps Mine, and as such is only entitled to be credited with the extra length of haulage, amounting in this case to 7d. per ton, or £700. The balance, say 36,000 tons, will replace sea-borne coal or the poor lignites mined at Green Island, Gore, &c., and on this it would not be unreasonable to assume an average distance hauled of fifty miles. Assuming, further, that the sea-borne and other coal referred to would have been carried an average distance of thirty-five miles from port or mine, this gives an increased distance hauled of fifteen miles, equal to 1s. 3d. per ton, or £2,250. (NOTE.—It will be observed that the above estimates are based on a total output of 60,000 tons only, as against Mr. Rodger's estimate of 100,000 tons.)

From the Nightcaps Station there is a revenue of £2,300 from passenger traffic. It is reasonable to assume that one-third of this is due to the coal-mines, and that with an equal population mining at the new centre an equal amount would be received, say £700; wool, say 400 bales, at 3d. per bale, £10; sheep, say twenty trucks, at 4s. per truck, £4; cheese, 120 tons at 11d. per ton, £5 10s. The amount allowed for passenger traffic makes no allowance for returning halves on all single tickets, which are shown as receipts from other stations; but in the event of the new mines bringing extra population, this would be directly attributable to the extension. Further, we have all the provisions which would be consumed by the increased population; all the timber which would be required to build their houses and maintain them; the extra mileage on all the agricultural implements, manure, &c., and the thousand-and-one things which are carried by rail, both inwards and outwards, for the social and industrial existence of any community. It would probably be very moderate to allow for all this the sum of £1,000, showing a probable total revenue of £4,669 10s.

I think sufficient has been set down here to show that the line, if constructed, would pay handsomely.

The above figures take no account of the great saving which would accrue to the County Council, and also to the State, both directly and indirectly, by the removal of the heavy coal traffic from the roads.

Assuming that Mr. Rodger's figures, either as to the output of the coal or the construction of the line, are nearer the truth than mine, the prospects of the line would be so much better.

Another point that should have been mentioned in connection with the suggested extension of either Mores' line or the Nightcaps line is that each of these companies has a right to make charges which would be a severe handicap on the owners of other mines, and also upon the general public.

It is against my inclinations to forward a hurried report upon such an important matter at such short notice, but in view of the urgency of the matter I have endeavoured to arrive at conclusions which will be safe. F. W. FURKERT, Inspecting Engineer.

EDWARD RABBIDGE, Gas Engineer for Invercargill Borough Council, examined. (No. 7.)

1. *Mr. Rodger.*] I want you to give us your idea of our scheme, and whether it would benefit the business people of Invercargill and the general community?—I am probably a layman as far as the question of benefit to the community is concerned. I can only give you my views as an individual. A good coal-supply for any community is of course a desirable thing. The supply is not too good in Southland at the present time, and I can only say that further competition must be good for the community as a whole. I am more inclined to take an interest in Mr. Rodger's proposition from a gasmaker's point of view. I have been following it carefully. I have got all the information I can from Mr. Rodger and his friends with regard to his coal-boring operations, from a gasman's point of view, and it has been proved satisfactorily that certain seams of coal from which he has taken borings are a very good class of bituminous coal, possibly suitable for gasmaking purposes, though no sample up to test has yet been submitted. The boring-cores have been tested, I know, by various analysts and found to practically equal West Coast coal. From a gas department's point of view, if Mr.