

suggested above, this would mean approximately \$200,000 for coal as compared with approximately \$88,000 for electricity. These figures may not be correct for the Milwaukee road but they give an idea of the order of difference. In some parts of the country electric power would cost more and coal would cost less.

There are the same number of men on an electric locomotive as on the steam locomotive. The labour men insist on the force not being reduced. Moreover, with a locomotive at the head of a 2,000-ton train, it is a good thing to have a second man, if he does nothing but wander through the locomotive and see that all the machinery is in good condition.

There has been no change in the rate of pay, but many men have applied for transfer from steam to electric locomotives.

MR. SNOWBALL: When the saving is as eighty-eight to two hundred on motive power and as eight to eighteen in equipment and maintenance, why has the Milwaukee road not electrified a greater mileage.

MR. DODD: Four hundred and forty miles of road is a pretty long section. It is the first big electrification that has been made. The company has now let contracts for the electrification of 220 miles of road through the Cascade mountains, leaving a gap of about 200 miles between the two electrified sections. It will, I have no doubt, finally electrify the connecting section. It costs money to change from steam to electricity and at the present time the railways experience great difficulty in raising capital. With this long section of the Chicago, Milwaukee & St. Paul in operation, I do not think that question will have to be asked very much longer.

RAILWAY ELECTRIFICATION IN CANADA

Mr. W. F. Tye, C.E., Montreal, late Chief Engineer of the Canadian Pacific railway, was invited to address the Commission on the electrification of railways in Canada, but was forced to decline as he felt that the short time available debarred him preparing an adequate address on this important question. Mr. Tye's letter of declination, however, is such an admirable, though brief, summing up of the subject that it has been printed below:

"The question is a very important one, and very complicated. It is not now so much a problem in mechanical or electrical engineering as one in economics. The ordinary man who has seen the miracle wrought by the application of electricity to industrial plants, imagines that the same result can be obtained by its application to the railways. It must not be forgotten, however, that