

Chairman,—

Mr. Wickens, have you something to say on this subject?

Mr. Wickens,—

From what has been said to-night it seems to show that the steam locomotive is doomed. It looks as though the day will come when we will have electric railroads out and out. In fact it shows the electric locomotive as being more efficient than the steam locomotive, whose weight has increased so much that it is difficult to keep the tracks in repair under its weight. The starting of trains is very hard on all parts of the steam locomotive, but from reports on the comparison of the two locomotives in this tunnel (taking into consideration the grade of 2 per cent.) it shows conclusively that many of the troubles which have been connected with the steam locomotive, have been eliminated entirely by the use of the electric locomotive. Besides this, the cost of operation seems to be reduced to a great extent, and perhaps the cost has not been reduced yet as far as it may be. For instance, they are using the turbine with superheated steam. I think it is safe to say, that it would give better steam economy in the end, if they used reciprocating engines and put in low pressure turbines, because more steam would get converted into mechanical work better than any other way. It is quite likely that the cost of operation of this plant would be considerably reduced if the steam equipment was built in that particular way in the powerhouse. Then as far as the electric construction of these locomotives is concerned, the use of the alternating current in single phase, they have reached practically the desideratum as far as we know.

They have also got rid of many of the troubles connected with the direct current, and they have adopted the system as used for long distances. When you use the alternating current at high voltage, you can send it a longer distance on a smaller wire with a less drop.

We may expect to see all locomotives, in time, run by electricity, unless Edison gives us something better. However, when we were boys we thought the electric light was an impossibility. Then again we are now seeing the wireless telegram flashed across the ocean. Now these things seemed to us, years ago, just as impossible as what Edison is now trying to do—get power from coal direct. Now that the electrification of the St. Clair tunnel has proved perfectly successful, it will be only the fore-runner of other things as marvellous along these lines.

I will not take up your time regarding the construction of these locomotives, as I do not know anything about them. However, I feel that I would like to spend a day on one of them.