

will carry one-third larger trains, would not there be the same weight passing over them in a short time and break them down just the same?

Mr. Wickens,—

I do not think I should do all the talking. If any railroad man (I may say I am not a railroad man although I use the trains considerably, and have only one neck) will watch the tracks when a heavy locomotive is going over them, he will notice the rails totter. One reason why this happens is, because the centre of gravity on that engine is very high, and although the driving wheels are counter-balanced, yet they are not always balanced right. If you put the same weight on an electric locomotive, there is no thrust or counterbalancing weight. There is a rolling motion all the time. Then again you are going to get rid of that high centre of gravity and this will save your track considerably.

Then again, you take a large steam locomotive and an electric locomotive of the same weight, the latter will give you double the drawbar pull. This means you can lighten your electric locomotive and get the same efficiency from it as the steam locomotive.

Mr. Jeffries,—

I thoroughly agree with what has been said, that we will have the electric locomotives pretty soon. I would like to know, is there any increased danger to the operators of the locomotives in case of a wreck.

Chairman,—

The voltage used on these electric locomotives is so extremely low that there is hardly any danger to human life. They use 240 volts on these locomotives generally and in surface traction service they use 550 volts. I do not know of any person whose death was directly due to shock received from trolley voltage. Then again, it is only a matter of training your steam engineers in regard to the devices placed at their disposal, that danger will be eliminated.

Mr. Wickens,—

At the St. Clair tunnel the electric locomotives are being run with the steam engineers.

Mr. Bannon,—

We take it that the electric locomotive is run on the single