

avoided. From my experience I would favor the Walscheart gear for the reason of its light roundhouse maintenance, less liability to failure on the road, more accessible to the working parts and an advantage derived making repairs to engine and strengthening the engine frame. Although the gear costs \$350.00 more, I consider it well worth the money to any railway company.

Chairman,—

We would like to hear from Mr. Wensley.

Mr. Wensley,—

I am much the same as Mr. Stortz. It is really a matter of opinion as far as my experience goes. The cost of applying this gear is of course much higher, and it has to be found out whether it is worth the extra cost or not. We have troubles with the Walscheart valve gear and troubles with the Stephenson gear, but, of course, our troubles with the former are not to the same extent.

Chairman,—

Perhaps Mr. Kirkwood would like to say something?

Mr. W. Kirkwood,—

I am not in a position to say anything about the Walscheart valve gear. Since I came over to the 15th district I have not had any experience with it, and I left the 17th district before the Walscheart valve gear was in operation.

Mr. McRobert,—

Mr. Wickson mentioned that there was no lap or lead from the crank motion. I have had considerable experience with engines and would think that this would be detrimental and I would like the reader to explain this.

I would also like to know if the Walscheart valve gear takes steam on the inside or the outside of the piston valve and if the valves are single or double ported.

Mr. Wickson,—

You are correct in saying that there is no lap or lead from the crank motion. This is derived entirely from the motion of the crosshead and is transmitted through the combination lever.

So far as the valve is concerned there is no difference what-