miles a month. The man that works opposite to me takes the engine out when I get back to Sarnia and I take the engine out when he gets back. We have had that engine since they first came, and the packing in the pistons and cylinders has never been renewed in six months. The boilermakers are not in the engine any longer than they were with the old type and the coal consumption is cut away down. The flues have never been renewed and we expect to take 75,000 miles out of these engines. Our engine is in better shape now than when we got it, for the simple reason that it has got worked down a little and the repairs to the engine have not been as much as before we got these superheaters. The flues are extra long, 21 ft. 6 in., and the only trouble I have had was when the flues gave out on the road.

I think the Grand Trunk is satisfied with them, I know I am.

Mr. Barron,—

I have enjoyed this discussion very much.

Referring to the German engine you spoke of, Mr. Wickens. It seems to me that it would be a very expensive business to install one of these engines. Take the small man you spoke of, it would be very hard on him to have to install one of these engines. The engine is practically built on to the boiler, and I think you would have a hard time persuading the small man that it would be to his advantage to install one of these engines on the evidence given here.

Mr. Wickens,—

It seems to me that if a man could operate an engine for 9 lbs. of water per h.p. hour that it would pay him in the long run. Then there is the low cost of operation. If you keep the cost of operation down the initial cost does not cut so much figure and you can afford to have a little higher overhead expense if the cost of operation is low.

The Locomobile is a self-contained engine and boiler. The boiler shell is made of heavy plate 7/8-in. or 1-in. thick, having a corrugated flue for the furnace, behind that is a set of tubes running direct to the combustion chamber in which is placed the superheater and a reheater. These heaters are made of drawn steel pipe. The combustion chamber is extended higher than the top of the boiler shell for the purpose of housing in the engine cylinders. A very heavy cast iron saddle, covering one-third of the circumference of the boiler carries the engine crank and shaft. The crosshead bearing is cast iron also, but is not fastened to the shell, thus allowing for expansion. The