

rails for trolley cars, as used by the Toronto Street Railway; while no doubt there is expansion and contraction in them, there does not appear to me to be any allowance for it.

Mr. Smith,—

I do not know what arrangements they have made to look after the expansion and contraction there. I have never gone into the question of welding rails, and am sorry I cannot give you any information on that subject.

Mr. F. W. Slade,—

Gentlemen, I am not a street railway man, but I have noticed they do not weld their rails all together in one continuous length but weld say seven to ten lengths and still have enough for expansion.

Mr. Riley Schenek,—

I was just thinking what wonderful feats those bridge construction gangs perform. I remember the Suspension Bridge at Cincinnati. It was the third largest suspension bridge in existence at that time. It was about 5,000 feet long with the approaches. They widened it 10 feet, and raised the bridge to give it six feet more clearance, and did not stop street car traffic more than half an hour. After the cables had been spun and fitted on, and everything ready they lifted the entire floor with tracks to the new level, and only stopped the traffic about half an hour.

Mr. W. O. Maclean,—

Mr. Smith did not mention the three-span cantilever bridge in his paper. Can he give us any information on this?

Mr. Smith,—

No, I did not go into that; they are very seldom seen in Canada, and I therefore thought it not worth while touching on that subject. The Quebec Bridge in the course of erection is of that type, but the work is not far enough advanced yet to enable one to secure any reliable data on the subject.

Mr. Baldwin,—

I might tell you something that perhaps would interest some of the members here, in connection with the building of the Victoria Bridge in Montreal. I was not working on it; I don't want you to think I am old enough to have been, but