

especially by a representative of a firm, and it is equally hard to keep such matters out of the discussion. I am prepared to say, however, I am sure that Mr. Parker, Sr., and Mr. Parker, Jr., have not used this Club to-night as an advertising medium. I feel that no railroad official will censure us for discussing this subject. It is only by getting down to the men who have dealings with these things, that we get at the facts.

I have listened to-night to Mr. Parker's paper with the greatest of pleasure and I would like to move a vote of thanks to Mr. Parker for the paper he has so kindly given us.

Mr. Bly,—

I take very much pleasure in seconding the motion. I would like to ask, before sitting down, what would be the temperature of the radiators and how much would it cost to heat a car for 24 hours in severe weather, say at zero.

Mr. Parker, Jr.,—

That is rather a difficult question to answer accurately. We have never had a railroad of our own to figure this out, however a rough estimate can be had from some tests which have been made where cars have run as many as 446 miles in freezing weather before releasing any of the condensation it was found that there was then discharged about 20 gallons of water or 200 pounds, whereas a car equipped with a drip system would discharge during this eleven hour run upon an average of 60 pounds of condensation per hour or 660 pounds in all.

Mr. Bly,—

I would like to find out the temperature of the discharge water through the drip.

Mr. Parker, Sr.,—

We have no drip, we have the same pressure of live steam on the discharge side of the radiation as on the supply by means of a by-pass or Crossover and as there is no escape the water of condensation is retained and is prevented from returning back into the train line by the Automatic Regulator Valve.

If I may be allowed to demonstrate this point by the use of this glass model it would materially assist those present to understand the operation of the system.

The model consists of a glass tube with a bulb attached to create an air pressure, which in this case, takes the place of the steam. By entering at the lowest point the steam will pass through the water of condensation just as you see the air working through the water in the glass. Now by entering