

out the winter. We patch it up the best we can, yet there is surely an uncertainty in that case.

Mr. Bly,—

I have listened to the discussion very attentively, although I did not get here in time to hear the paper. Sometime ago I was operating a plant. I was only there a short time and after looking around I went to the proprietor and told him the boiler was leaking and we had better get it retubed. He said it must run until the holidays were over. I said it was taking a great chance, but he replied that there was no use in telling him about chances as it had to run two or three months longer until the rush was over. After the holidays we took the tubes out of that boiler. Some were broken and some were so thin that they would not stand the touch of a hammer. I think that is one reason why stationary engineers should require a government certificate. The proprietor of that establishment said as much to me that if I did not wish to run the boilers in their defective condition he would get someone who would. The consequence was I had to take the chances of running those boilers or losing my position. In this same plant the proprietor came to me and said that the factory inspector was around and wanted a boiler inspection report made out. He asked me to make it out, but finally said, "By the way I will have my stenographer make it out and you can sign it." I think there are a great many reports made out in that way.

Last year there was an explosion at Earls court, and I understand the pressure of that boiler was 15 pounds. One piece was found about 600 or 700 yards from where it was originally located and another piece about 200 yards. The tubes in that boiler looked as though some one had been splitting rails. I found that it had been torn right across the stop valve hole and through the plate. We found the steam gauge. The end of the spring had apparently gone up against the side of the gauge and the other end was broken off. I believe the stop valve was never found.

I have found in stationary boiler work that the blowing down of the boiler in the morning is a great factor in keeping it clean. During the night the sediment has dropped down to the bottom of the boiler, and when in this position you can blow considerable sediment off. I have found this method very effective.

Mr. Jackson,—

Gentlemen, as I must leave you now, I take this opportunity to thank you for the hearty vote of thanks tendered me.

I would like to say in reference to what Mr. Bly was speaking