

boiler on which the operator had used a pneumatic chisel, and apparently had held it in such a manner that he scored the lower plate off all the way around. That is one point that has come under our notice lately. Sometimes the operator does not hold the tool squarely, and we get a rivet that is closed down on one side and not on the other. We get a nasty ragged fin sticking out on the side of the rivet. Sometimes they are tight, and sometimes not, and after a time we find that the sheet is being corroded a little at these spots by the action of the gases. In these days they roll the sheets so that they will go together tight and they do not need plying down with a flogging hammer like in the older days. We find a good deal of good work as well as some bad work when we go to inspect.

Chairman,—

While these gentlemen have been talking along the lines of advantages and disadvantages of pneumatic tools, I was thinking that some few years ago a company with which I was connected, gave an order for some steel tank work. The contract was in the neighborhood of \$250,000, and the work was done by an old country firm. Men were brought over from the old country and a firm on this side supplied the pneumatic tools. The foreman in charge was an expert in this work, and I doubt very much whether he has very many peers in this line. As soon as he started in to use the pneumatic hammers he commenced to have trouble with them. The hammers began to break and he came into my office and said: "I do not know what to think of these hammers as they are the first ones we have ever used. I believe I can make better time by hand work and put in the rivets by piece work. If the cost of the erection of this job goes under a certain amount, I get a third of the profits, therefore, it means a great deal to me". I was busy at the time and the job was a little distance away, and I suggested that perhaps the men were not using the tools properly. He said he had the best men on the job, and I therefore suggested that we get the best tool maker in town to go down and help him out. I took him to a firm and arranged for their expert to go up to the job, but these tools were a little out of his line of business. In the meantime he was doing the work by hand, and as the firm wanted him to persevere with the job, he finally decided to cut out the pneumatic tools and do the work entirely by hand. However, before doing this the pneumatic tool people sent their expert over and he said that the rivets were a little larger than they were used to, and this caused the trouble with the tools. But I really believe the trouble was due to the fact that they did not have a tool maker on the job. They finally sold the