

will find the machine fired retorts do not require scurrying as often as the hand fired retorts.

There is no reason and it has been proved conclusively on this continent and Europe that more gas can be obtained per pound of coal with the use of the mechanical stoker over hand charging, but there are two ways of doing everything, wrong and right, and the way this is done depends upon success or failure.

Mr. David,—

I think you are wrong. You have a retort say 26 inches by 16 inches, and 20 feet long, and when the scoop is rammed in there with about  $1\frac{1}{2}$  inch clearance at each side and you have 1,200 to 1,300 pounds of coal in the retort there is a very great resistance and I think must necessarily wear the retort out much quicker than when done by hand.

I have stoked myself, by hand, and I know a little about this work and I have also seen this work done by machinery, and I shall be pleased if you could give me a few figures making a comparison of the renewals required to the hand charged retort and the machine charged retort.

Mr. Herring,—

Our friend is still hammering at the retort. Now at a recent test to find out some particulars in regard to this it was found that the actual power required to push the coke out of a 20 foot retort was  $10\frac{1}{2}$  horse power initial, and of course after the coke got started the power required was greatly decreased.

It took just 40 seconds to put a charge into a 20 foot retort and push the coke out. That is the complete operation from the time the retort was opened until closed.

Mr. Baldwin,—

Mr. Herring was speaking about making bricks in a gas works. Do I understand these bricks to be made from a by-product?

Mr. Herring,—

Yes, this was done at the Dewsbury Road Station of the Leeds Corporation Gas works. These bricks were used for a retaining wall for a large gas holder of about eight million cubic feet capacity.

Mr. Baldwin,—

Is the life of these bricks equal to the clay bricks.