

**THE RUGGLES FLUE CLEANER.**

Owners of steam plants are more keen than ever to adopt measures for the economizing of fuel, and anything touching on this subject ought to be of interest to them.

In seeking to reduce the cost of fuel consumed by their boilers in generating steam, attention is paid among other things to the draught; manner of firing; quality of fuel, etc.; but only too often the flues of the boilers are neglected. The proper care of these will aid most materially in reducing the fuel bills. Only the clean polished iron of the flues should be offered to the heat if the full benefit of the latter is to be attained. A coating of such non-conductors of heat as soot, carbon, rust or scale upon the fire surface of the flues means a waste of fuel and time in generating steam.

Many kinds of devices have been invented for the purpose of cleaning flues. The idea embodied in the construction of all of them has been that of circular, sharp-edged discs,



The Ruggles Flue Cleaner.

the intention of which is to push or scrape off the offending incrustation. This idea of construction applied in different ways

in all the tools limited their usefulness to such an extent that, although some do fairly good work, yet none have ever thoroughly cleaned a flue. Often there are irregularities, such as thimbles, welds or deviations of diameter to be found in flues. In such cases most of the cleaners have been found to stick fast in the flue and when diminished in size, so as to run through the same, cease entirely in front and beyond the obstruction to do the work for which they were intended. Some of them attain a limited degree of flexibility through the use of spiral springs, which, however, soon lose their temper and become rigid.

In connection with this subject it is interesting to note the appearance of a new flue cleaner called the Ruggles Flue Auger, which has been on the market for about a year or more in the United States. It comes highly recommended for its efficiency by some of the largest plants having it in constant use. Its construction, which differs entirely from all other tools used for the purpose, would seem to give assurance that it meets all the requirements needed for cleaning flues. The principle of the tool is not to push or scrape but to cut like a knife. It consists of a set of knives or blades, curved and set diagonally across a central shaft, and made of the finest

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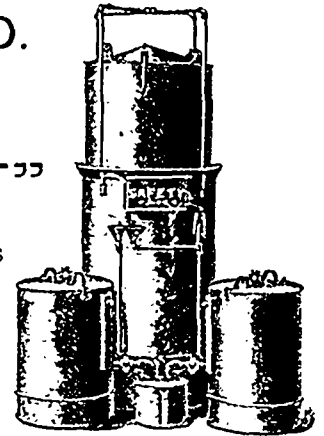
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As we shall not be able to personally visit each manufacturer, it is for this purpose that we publish this advertisement. This is our agent who is going about to solicit a share of your patronage. We are thankful for the patronage extended to us in the past, and hope that we may secure an extension of the favors for the future.

All correspondence relating to the following Tools will be promptly answered, viz:

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