

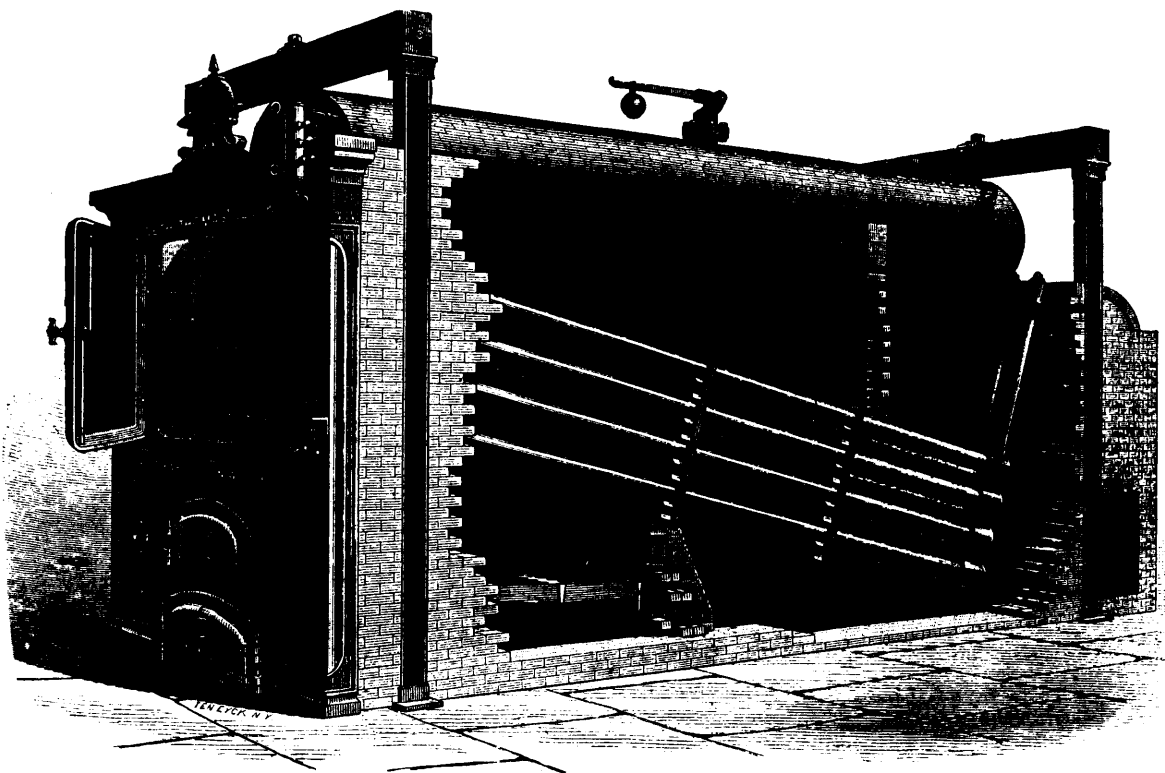


FIG. 2.—SECTIONAL PERSPECTIVE VIEW OF A BABCOCK & WILCOX BOILER.

PARSON'S AIR-JET TUBE CLEANER.

We give here an illustration of Parson's air-jet tube-cleaner, manufactured by the Watertown Steam Blower Co., of 42 Pine street, New York, whose admirable arrangements for utilizing waste products as fuel we have described in a previous article. All users of steam boilers are aware of the difficulty of properly and speedily cleaning the tubes of boilers of soot, ashes, scale, etc., and many devices have been brought forward for the purpose. The Parsons air-jet tube cleaner is affirmed to be very effective for this and similar purposes. The apparatus is shown in Fig. 1, and the method of using it in Fig 2. The inventor, in this device, claims that its efficiency largely depends upon the manner in which he has succeeded in utilizing the expansive power of air, which is carried into and through the tubes. To this end he delivers from the orifice of the apparatus a thin ring of steam, in such a manner that the angles of delivery form a wedge or cone shaped surface, inducing and holding a strong central air current, which, being forced through the heated tubes, expands as it travels, and carries with it all the accumulations of soot, ashes, etc., that have found lodgment therein. In using the apparatus, it is recommended that the steam should be taken from as near the top of the dome as possible. A piece of strong flexible tubing, connecting the steam delivery pipe with the apparatus, is necessary, as shown in the cut, to enable the operator to move from tube to tube. With this apparatus, it is claimed, that ten tubes per minute can be cleaned, while the boiler is running.

This device, we are informed, has been extensively introduced into a number of large industrial works throughout the country, and in all cases has demonstrated its utility.

GAS ENGINES.

A paper on this subject was read by Mr. Charles Gandon at the meeting of the Society of Engineers. The author pointed out that the use of gas as a motive power was still in its infancy, which was not a matter for surprise, seeing that its introduction for lighting purposes dated only from the commencement of the present century. So early as the year 1794 a patent was taken out in England for producing an inflammable vapour force by exploding the spirits of tar or turpentine in closed vessels.

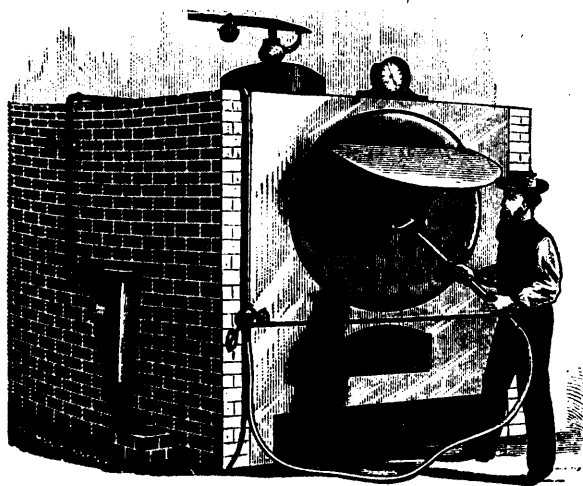


FIG. 2.

AIR-JET TUBE-CLEANER AND STEAM BLOWER ATTACHMENT.

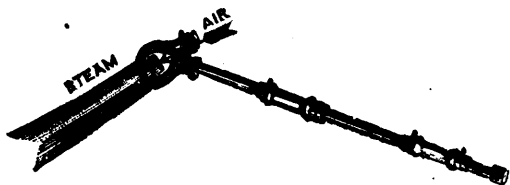


FIG. 1.—PARSON'S AIR-JET TUBE-CLEANER.