(No Model.)

G. F. BARTON.

BOILER FOR CLEANING OR BOILING RAGS.

No. 395,416. Patented Jan. 1, 1889.

Fig. 1.

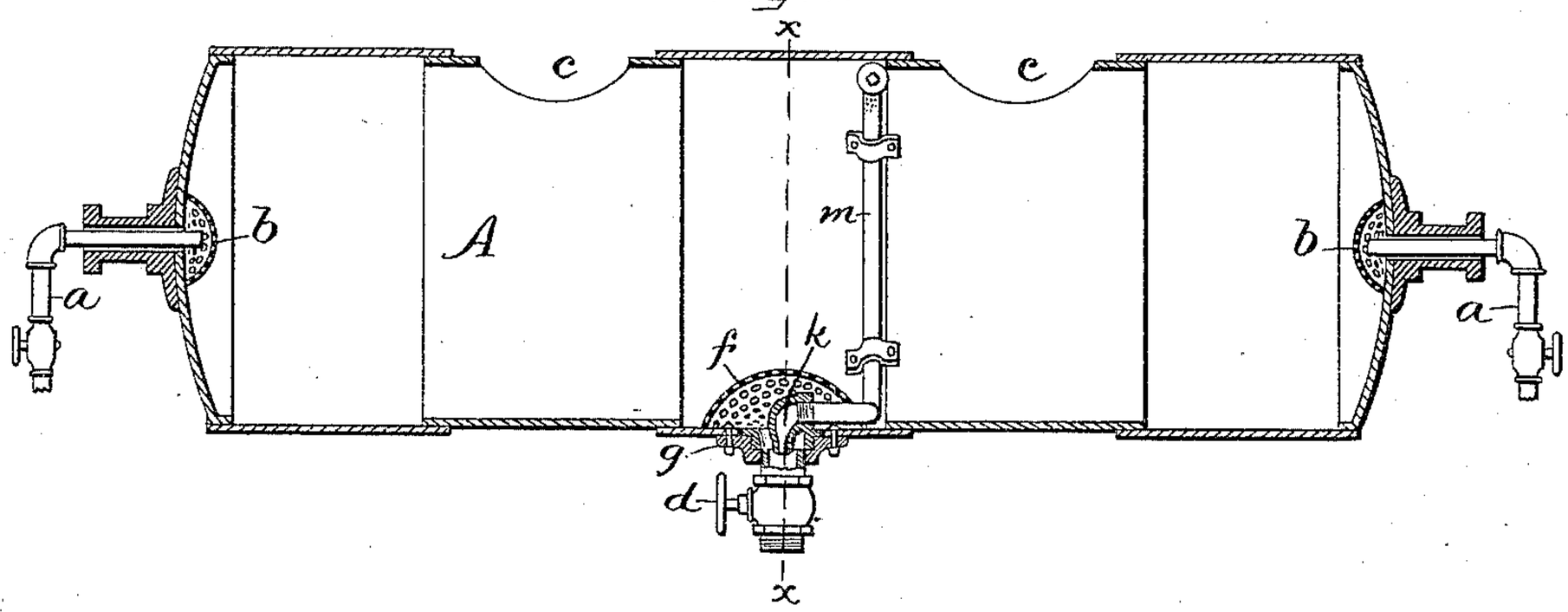


Fig. 2.

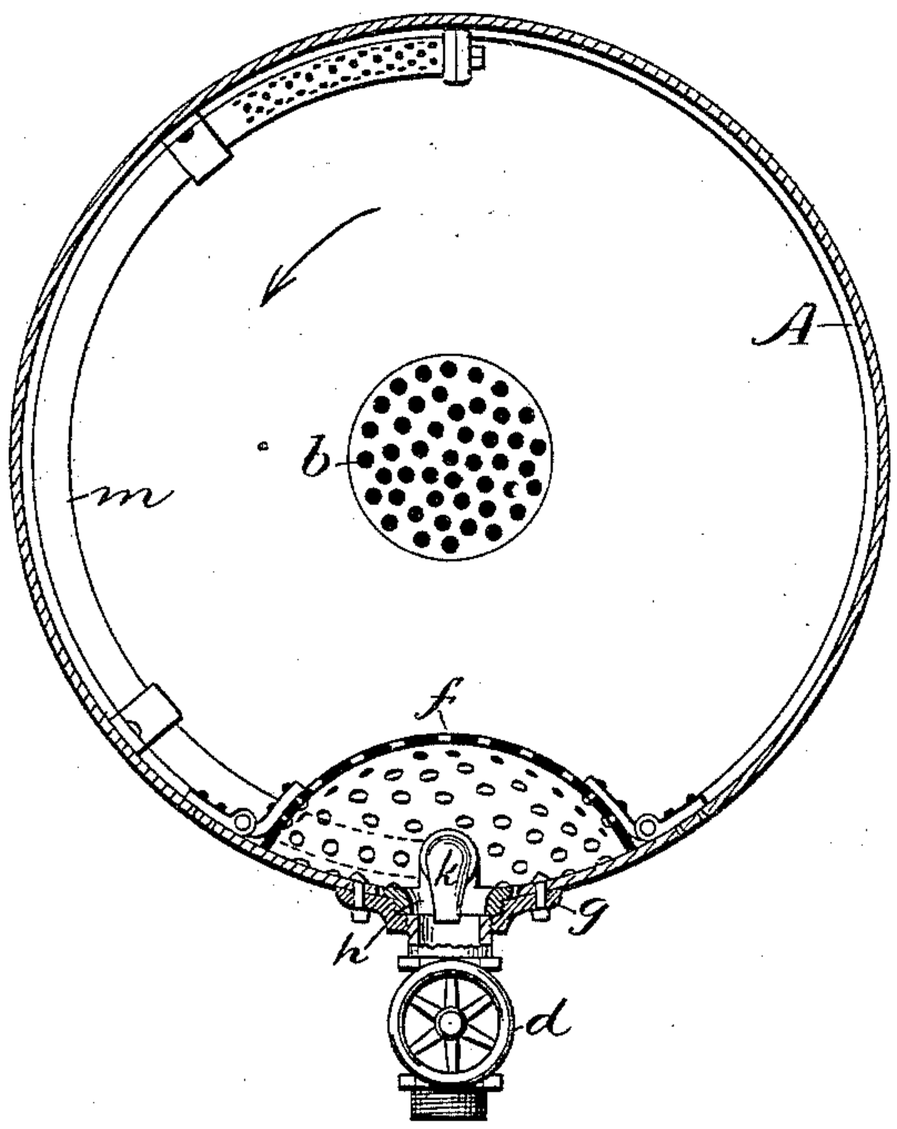


Fig. 3.

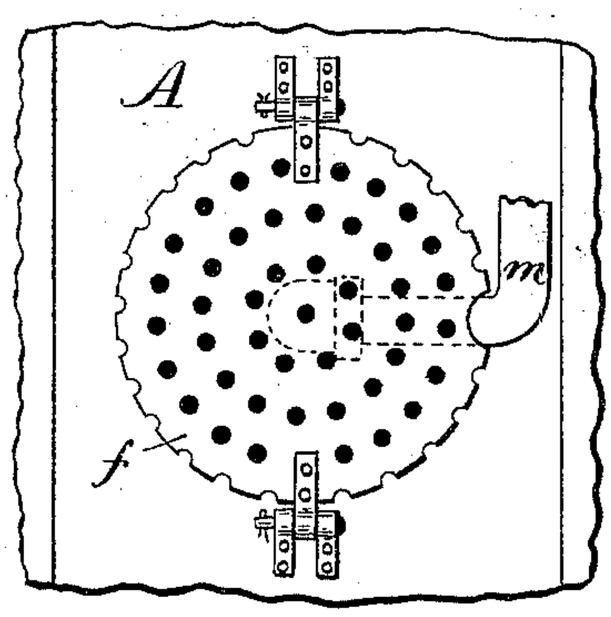
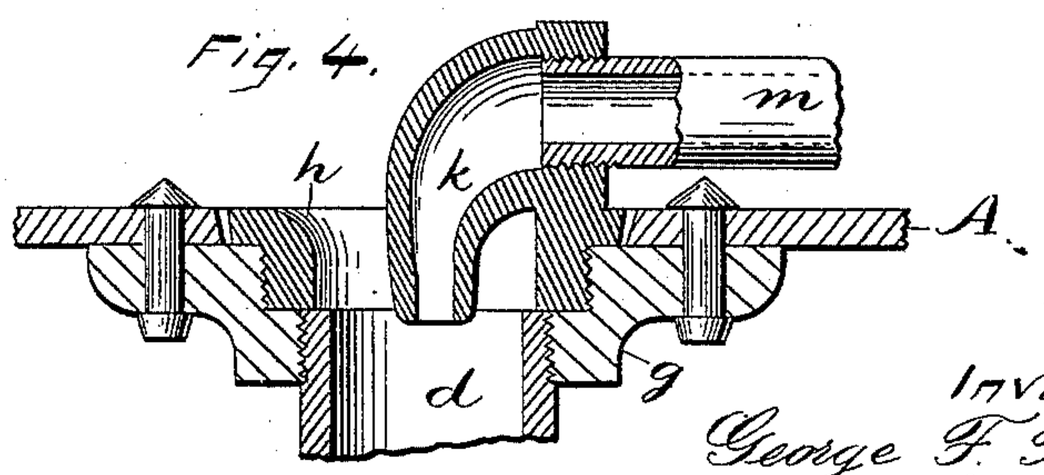


Fig. 4.



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UNITED STATES PATENT OFFICE.

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BOILER FOR CLEANING OR BOILING RAGS.

SPECIFICATION forming part of Letters Patent No. 395,416, dated January 1, 1889.

Application filed February 6, 1888. Serial No. 263,134. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. BARTON, a citizen of the United States, residing at Warehouse Point, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Boilers for Cleaning or Boiling Rags, of which the following is a specification.

My invention relates to improvements in boilers for boiling or cleaning rags; and the chief object of my invention is to more rapidly draw off the steam and water preparatory to removing the rags and refilling the boiler.

In the accompanying drawings, Figure 1 is a longitudinal section, partly in elevation, of a boiler containing my improvement. Fig. 2 is an enlarged transverse section of the same, partly in elevation, the plane of section being indicated by the line *x x*, Fig. 1. Fig. 3 is a detached view showing in plan view the strainer which covers the exit and adjacent parts, and Fig. 4 is a central section, longitudinally of the boiler, of the ejector, the same being on a still larger scale.

A designates a cylindrical boiler mounted upon hollow axles, through which steam is admitted by the pipes *a*, the ends of the steam-pipes being protected by the strainers *b*. The boiler is also provided with man-holes or openings *c*, which are provided with suitable covers, said holes being used for the insertion and removal of rags.

d designates a discharge cock or valve on one side of the boiler, the opening leading therefrom into the boiler being protected by means of the hinged screen or strainer *f*. The parts so far specifically described are all of them old and in common use. Instead of a simple opening leading to the discharge-cock, I provide said opening with an ejector. In the preferred form of construction I secure a plate, *g*, to the under side of the boiler, which plate is internally threaded at its smallest diameter to receive the end of the pipe leading to the outlet-valve *d* or the threaded neck forming a part of said valve. The larger internal diameter of said plate is threaded to receive the bushing *h*, Fig. 4, to which bushing the ejector-nozzle *k* is secured, said ejector-nozzle being preferably formed in one and the same piece with the bushing *h*. From the ejector-nozzle *k* there is a pipe, *m*, which extends circumferentially about half way around the boiler on the inside and is provided with perforations toward its end, as shown. The strainer *f*, as in prior boilers, is provided with hinges, so that it may be turned back from over the exit when desired, and in order to accommodate the pipe *m* to this hinged strainer or screen, I form an elbow near the front end of the pipe *m*, whereby said pipe first extends laterally in a line parallel to the hinge or hinges of the strainer and then circumferentially to the opposite side of the boiler, as shown. The boiler is filled and the rags boiled or steamed in the ordinary manner, so that when the rags are thoroughly saturated they will fill the boiler only about half full. The stop-cock *d* is closed and the boiler given a rotary motion in the direction indicated by the arrow in Fig. 2, so that the rags will not catch under the perforated end of the pipe *m*. After the rags have been sufficiently boiled or steamed the rotation of the boiler is stopped, steam is cut off from the inlet-pipes *a a*, and any suitable conduit is connected to the lower end of the stop-cock *d* to carry the steam and water to any desired point. The stop-cock *d* is then opened, when the steam, which the rags and water confine principally to the upper part of the boiler, will enter the perforations at the end of the pipe *m* and pass out through the ejector-nozzle *k* with all the force due to the pressure of the steam within the boiler. The steam thus finds ready exit and in addition thereto it acts as in an ordinary ejector to draw with it the water from the boiler, so that the steam and water are both discharged in a much less time than in the boilers as heretofore constructed, and more water is drawn from the rags than would naturally flow out without the use of the ejector. After the steam and water are thus drawn off the man-holes can be opened for removing the rags and refilling the boiler for a subsequent operation.

I claim as my invention—

1. The combination of a boiler of the class described, with the ejector at the discharge-opening of the boiler, and the pipe *m*, extend-

ing around to the opposite side of the boiler, substantially as described, and for the purpose specified.

2. In a boiler of the class described, the combination of an ejector, the covering screen or strainer *f*, hinged as described, and the pipe *m*, leading laterally to one side of the strainer in a line parallel to its hinge and from thence to the opposite side of the boiler, substantially as described, and for the purpose specified.

3. The combination of a boiler of the class described and the pipe *m*, extending from under the screen at the exit around to the opposite side of the boiler, substantially as described, and for the purpose specified.

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Witnesses:
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