

R. S. MANNING.

Improvement in Fountains for Wash-Boilers.

No. 132,094.

Patented Oct. 8, 1872.

FIG. 1.

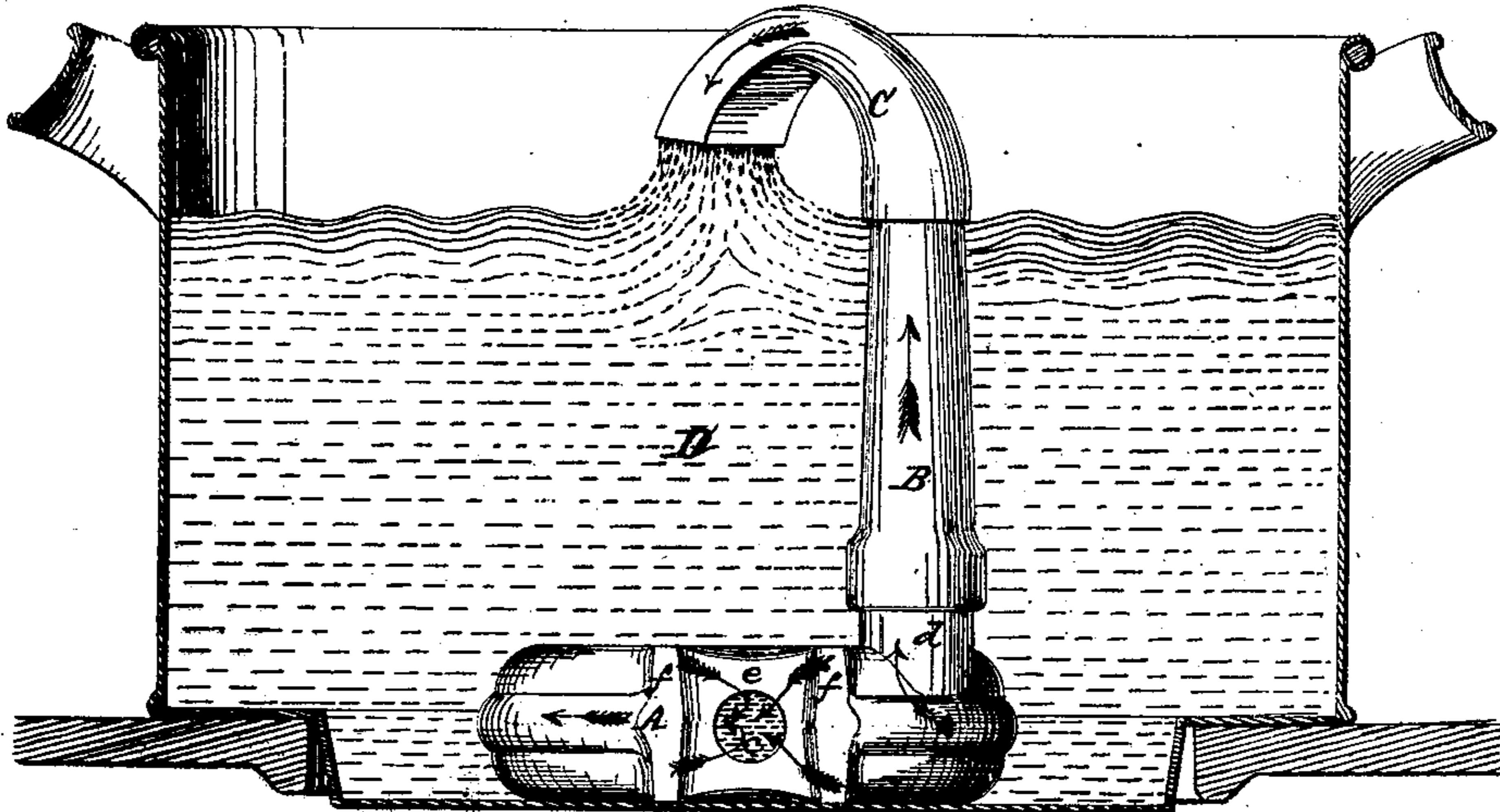


FIG. 2.

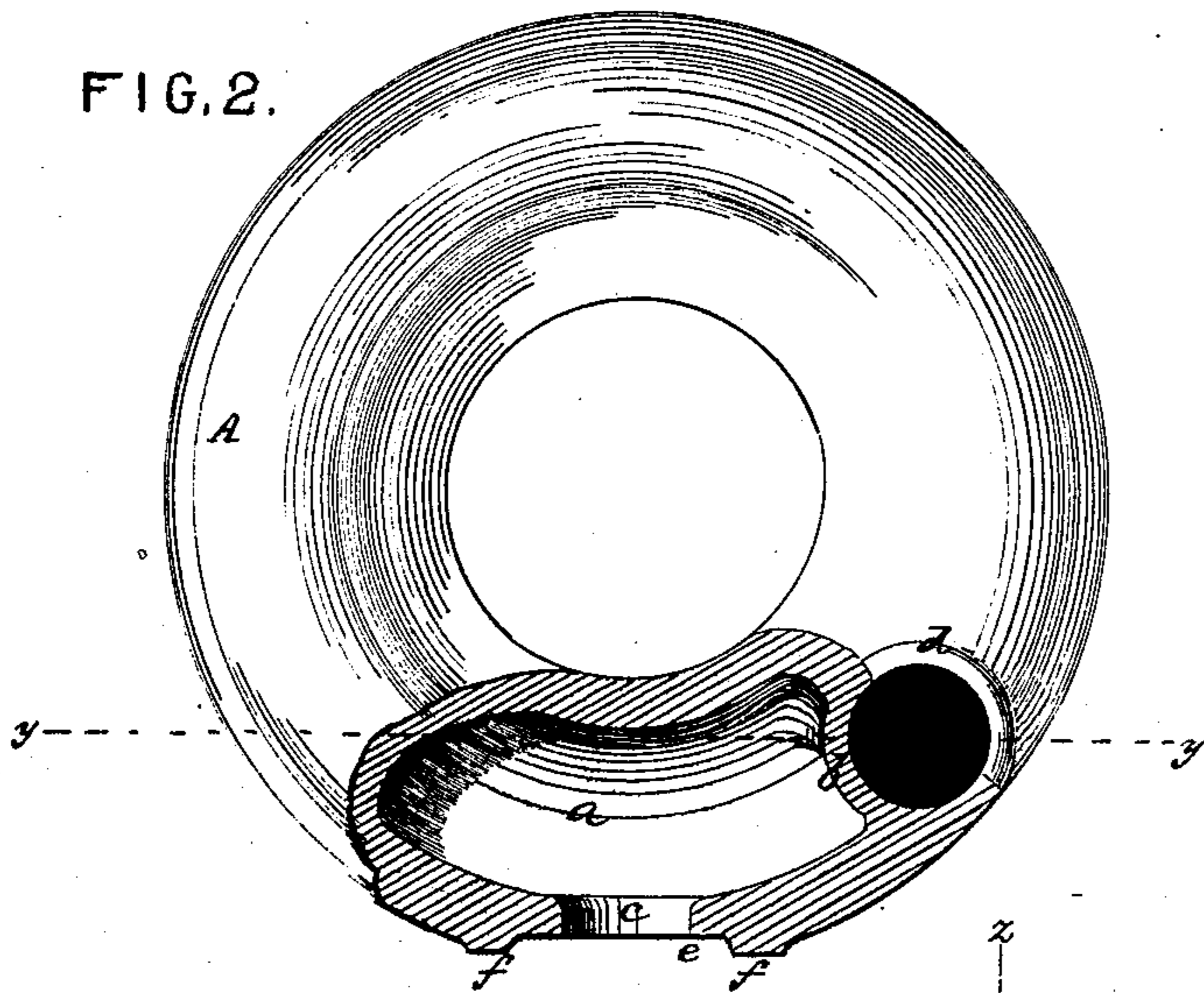
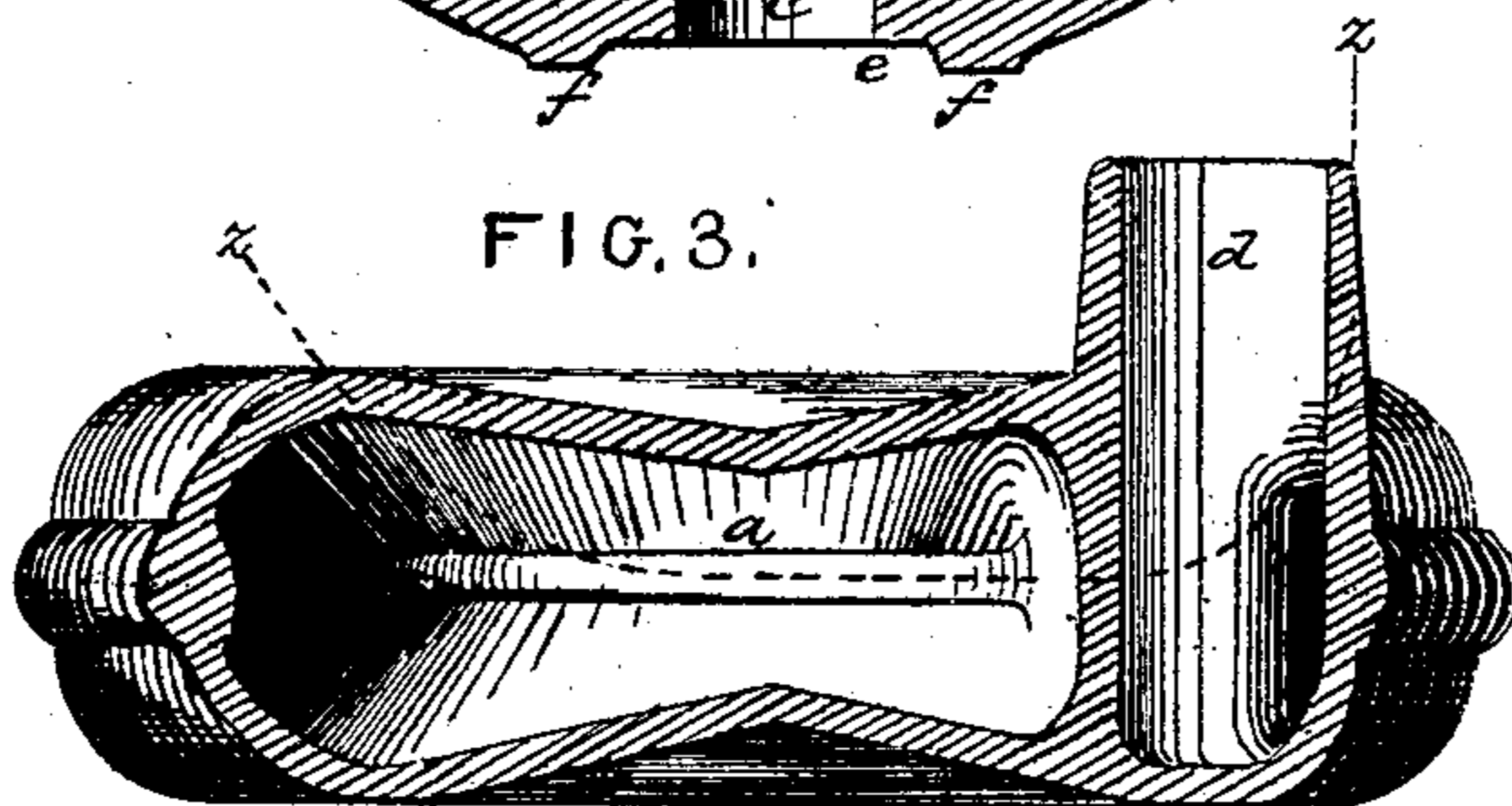


FIG. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT S. MANNING, OF TRENTON, NEW JERSEY.

IMPROVEMENT IN FOUNTAINS FOR WASH-BOILERS.

Specification forming part of Letters Patent No. 132,094, dated October 8, 1872.

To all whom it may concern:

Be it known that I, ROBERT S. MANNING, of Trenton, in the county of Mercer and State of New Jersey, have invented an Improved Fountain for Wash-Boilers, of which the following is a specification:

Nature and Objects of the Invention.

This invention relates to means for producing forced currents of water or suds in wash-boilers, so as to "automatically" cleanse the clothes by boiling them. Fountains applicable to ordinary boilers have already been made in which the more highly-heated water or suds at the bottom of the boiler is partially confined in a circuitous channel, and thence conducted by a vertical pipe and discharged above the clothes, the operation being automatic and continuous so long as a sufficient degree of heat is maintained. These fountains have heretofore been made of sheet or cast iron, and, although galvanized or tinned, they have been objectionable on account of the rust which would result from the exposure of the iron to the water by flaws, cracks, or abrasions. The primary object of this invention is to furnish a superior fountain of non-corrosive material. The substance preferred is porcelain, but other similar material may be employed. The invention further consists in constructing the fountain with a closed bottom, so as to increase its effect, and of annular form, with a lateral orifice for the entrance of the water or suds.

Description of the Drawing.

Figure 1 is a side elevation of the improved fountain as furnished with pipe and nozzle and in operation, a boiler and a portion of the top of a stove being shown in section. Fig. 2 is a plan of the fountain on a larger scale and partly in section on the line *z*, Fig. 3. Fig. 3 is an edge view partly in section on the line *y*, Fig. 2.

General Description.

The improved fountain is an annular hol-

low structure, A, of porcelain or similar non-corrosive material, such as China, stoneware, glass, or earthenware. The cavity *a* is closed at one point by a partition, *b*, and is thus made to constitute a circular channel. A lateral orifice, *c*, forms the entrance to this channel, and a discharge-neck, *d*, is formed on the top of the fountain on the opposite side of the partition *b*. A depression, *e*, and vertical flanges *f* are formed at the entrance aperture to prevent the same being closed by the side of the boiler-pit or by the clothes. The bottom and top are made alike with the exception of the discharge-neck on the latter. The closed bottom serves to increase the forcing power of the fountain as compared with those in which the bottom of the channel is open, owing to the more perfect confinement of the stream laterally. The fountain, as above described, may be readily and cheaply manufactured of porcelain or similar material by well-known processes, and is obviously a very superior article, being sufficiently strong, impervious, and well adapted to stand the heat, and withal non-corrosive, and thus free from liability to injure the clothes. The shape of the fountain in transverse section and other details of form illustrated and described are not essential. The fountain is fitted with a pipe, B, of sufficient height to extend from the discharge-neck to the top of the size of boiler for which it is intended, and with a nozzle, C, applied to the upper end of this pipe. The pipe and nozzle may either or both be made of the same material as the fountain, or of tin or other suitable sheet metal.

In use, the fountain, with pipe and nozzle applied, is placed in the pit of any ordinary wash-boiler, D, as illustrated in Fig. 1. The clothes lie above the fountain and operate to prevent the natural circulation of the heated water. The bottom water, as it becomes highly heated, is thus caused to find vent through the fountain, and, gaining force by circulation therein, rushes, in a strong stream, through the pipe and nozzle, onto the clothes, its place being supplied by cooler

water from above, and so on continuously until the operation is completed.

Claim.

The following is claimed as new—

A non-corrosive wash-boiler fountain, of porcelain or similar material, constructed and operating substantially as herein shown and described, for the purpose specified.

To the above specification of my fountain for wash-boilers I have hereunto set my hand this 12th day of September, 1872.

ROBT. S. MANNING.

Witnesses:

OCTAVIUS KNIGHT,
WALTER ALLEN.