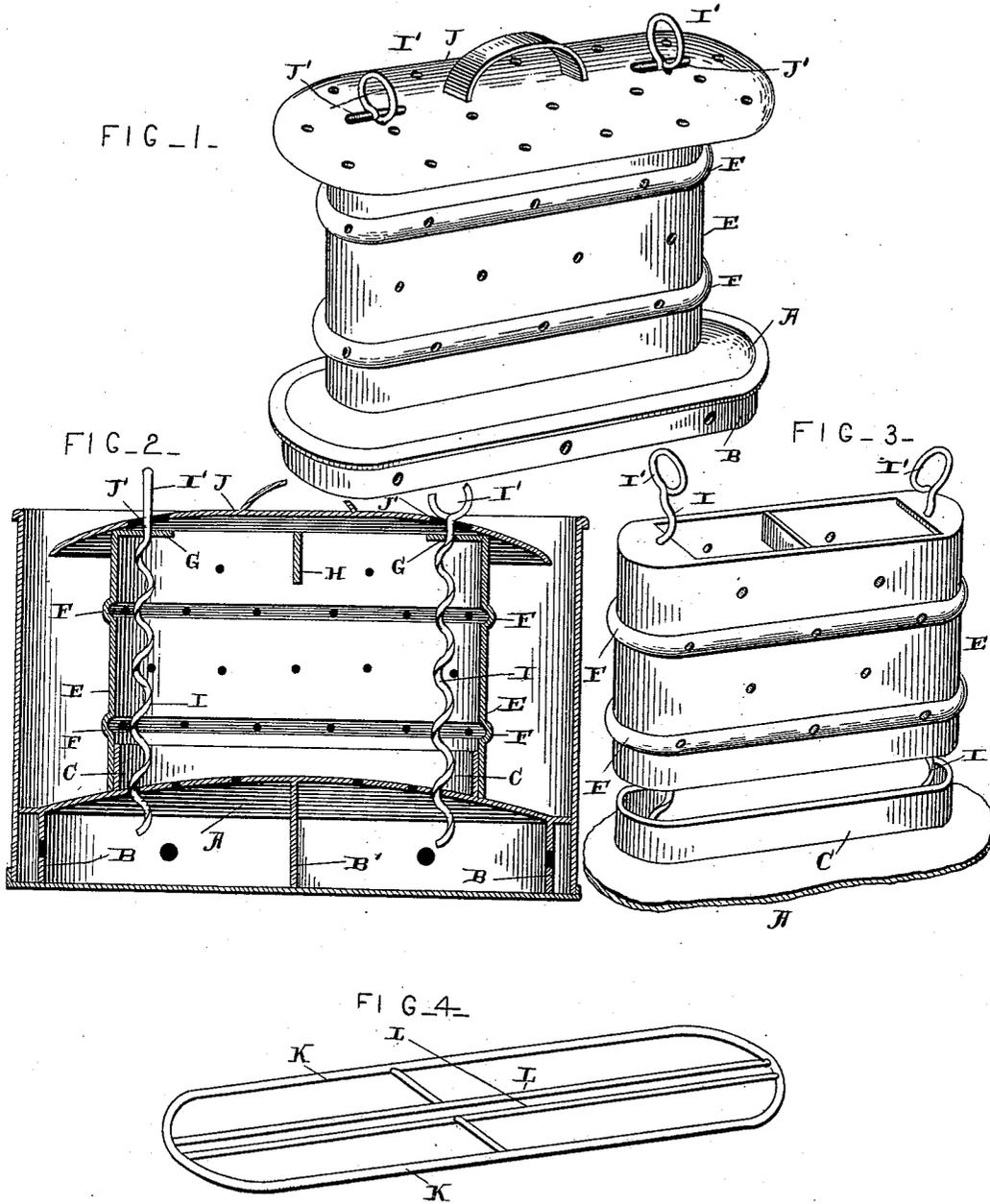


(No Model.)

E. W. GIDDINGS.
WASH BOILER.

No. 463,578.

Patented Nov. 17, 1891.



WITNESSES-

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UNITED STATES PATENT OFFICE.

ERASTUS WARREN GIDDINGS, OF SAN FRANCISCO, CALIFORNIA.

WASH-BOILER.

SPECIFICATION forming part of Letters Patent No. 463,578, dated November 17, 1891.

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To all whom it may concern:

Be it known that I, ERASTUS WARREN GIDDINGS, of San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Boiler Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in boiler washing-machines; and it consists in the combination and arrangement of parts which will be fully described hereinafter, and more particularly referred to in the claims.

The object of my invention is to construct a device which will assist in thoroughly cleansing the articles to be washed, and which will also hold them submerged by means of an adjustable cover, whereby different quantities of clothing may be held down with equal ease.

Figure 1 is a perspective view of my improved device. Fig. 2 is a sectional view of the same, shown in position in the boiler. Fig. 3 is a detached view of the fountain. Fig. 4 is a perspective view of a modification of the inner cover.

A represents a false bottom, which is bulged upward, as here shown. Secured to the under side of the false bottom is the perforated rim B, upon which the said bottom rests. This rim and the portion A are strengthened by the cross-brace B'. Secured to the upper side of the bottom is the upwardly-projecting rim or band C, which may be of the shape here shown or any other shape that may be preferred. The bottom A is provided with perforations, which are surrounded by the rim C. Adapted to fit over and around this rim is the fountain E, which may be of the shape here shown or any other that will fit the said rim. The fountain is perforated on its sides and ends, and is provided with any desired number of bulges F, which may extend entirely around the fountain or only part way, as may be preferred. These bulges may be made U-shaped or V-shaped or after any other desired design. The bulges are also perforated, as shown, and their object is to pre-

vent the articles from packing solidly which are placed around the fountain and assist in making them form in layers, and thus allow the water to more thoroughly penetrate them.

The fountain E is provided with perforated plates G and a central brace H, which stiffen and strengthen the fountain. The plates G also serve as guides for the screw-rods I, which extend through the fountain and are adapted to be adjusted in openings in the bottom A. These rods confine the inner cover J in position, and are provided with loops I' on their upper ends, which pass through slots J' in the cover, and the said loops being turned across the slots the cover cannot be raised. On opposite sides of the slots are formed notches, in which the loops rest when turned, thus holding them firmly in position across the said slots. The perforated cover may be constructed of perforated sheet metal, as shown in Fig. 1, or it may be formed of a wire frame, as shown in Fig. 4. If so constructed, it will consist of an outer wire K and the two parallel cross-wires L, between which the rods I extend and across which the loops I' of the rods are turned. The frame will be covered with any suitable cloth or material, as shown. The rods I are made spiral, and they may be adjusted in the openings in the bottom A to any desired height. Thus if there is more clothing than will pack around the fountain, some may be packed over its top around the rods I, and then the cover put in place and pulled down by the rods until the desired pressure is obtained.

In operation the articles to be cleansed are packed around the fountain, being supported by the base A, and the inner cover is placed in position, as above described. As the water contained in the boiler proper boils it has a tendency to rise or bubble up in the fountain and, along with the steam, pass through the perforations in the fountain sides and penetrate the clothing. The bulges F serve to conduct the water and steam between the layers of clothing, and thus assist the same to reach all the parts of the articles. The water and condensed steam pass down through the clothing over the perforated bottom and into the bottom of the boiler, where they are again heated, and thus a constant circulation is kept up through the articles. When clothing is

placed over the top of the fountain, the pressure of the inner cover may be so regulated as to force all the water and steam through the perforations in the sides and ends of the fountain instead of any escaping through the perforated top.

The device may be constructed of tin or any other sheet metal that may be preferred.

Having thus described my invention, I claim—

1. In a device of the character described, a base, a fountain supported on the base, an inner cover, and rods adapted to engage the cover at their upper ends and the base A at their lower ends, the parts being combined to operate substantially as shown and described.

2. In a device of the character described, the combination, with a perforated base, a supporting-rim on its under side, and a band or projection on its upper side, of a fountain which is held in position by the last-named band, an inner cover, and rods adapted to engage the cover at their upper ends and the base at their lower ends, substantially as shown and described.

3. In a device of the character described, an upwardly-bulged perforated base, a support secured to its under side, a fountain, guide-plates G, secured to the fountain, a perforated cover, rods made spiral at their lower

ends to engage the base A, and loops formed on the upper ends of the rods which hold the inner cover in position, the parts being combined to operate substantially as shown and described.

4. In a device of the character described, a base, rim B, brace B', a fountain, perforated plates G, brace H, a perforated cover, and rods formed into loops at their upper ends to engage the cover and made spiral at their lower ends to engage the base, the inner cover being provided with openings through which the said loops pass, which when turned confine the cover in position, the parts being combined to operate substantially as shown and described.

5. In a device of the character described, the combination, with the base, of a fountain supported thereon, bulges formed on the fountain, an inner cover, and rods which engage the cover at their upper ends and the base at their lower ends, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ERASTUS WARREN GIDDINGS.

Witnesses:

HOLLAND SMITH,
ERNEST CLAXTON.