

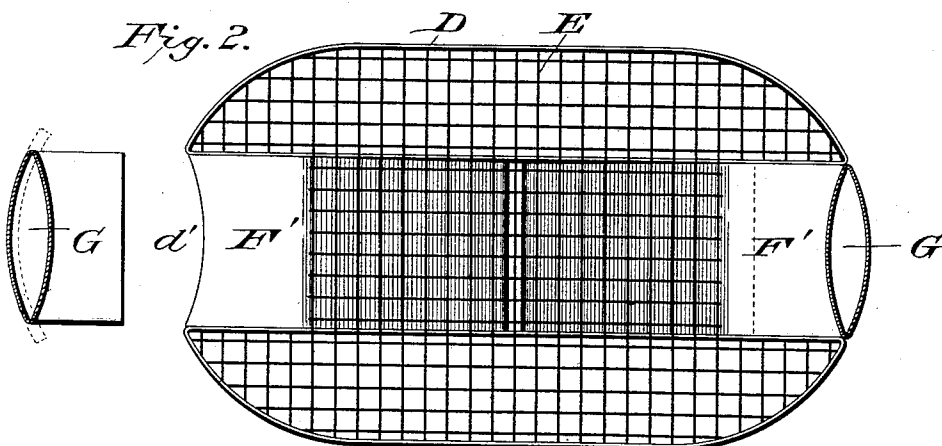
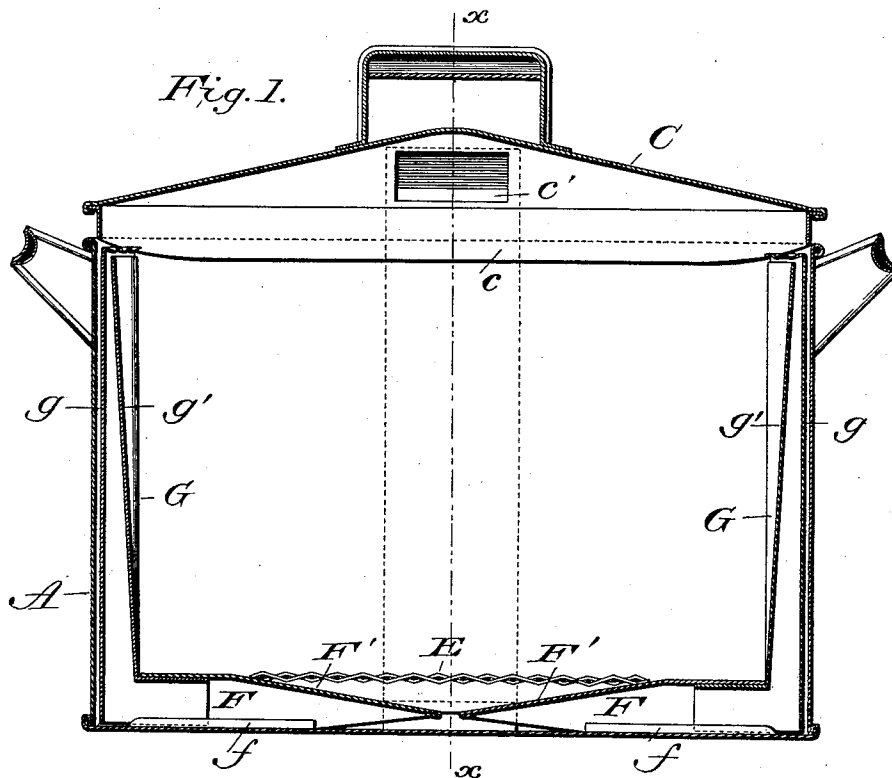
(No Model.)

2 Sheets—Sheet 1.

J. FULLEN.
WASH BOILER.

No. 484,417.

Patented Oct. 18, 1892.



Witnesses

L. S. Elliott.

C. M. Johnson

James Fullen

Inventor

by *[Signature]*
Attorney

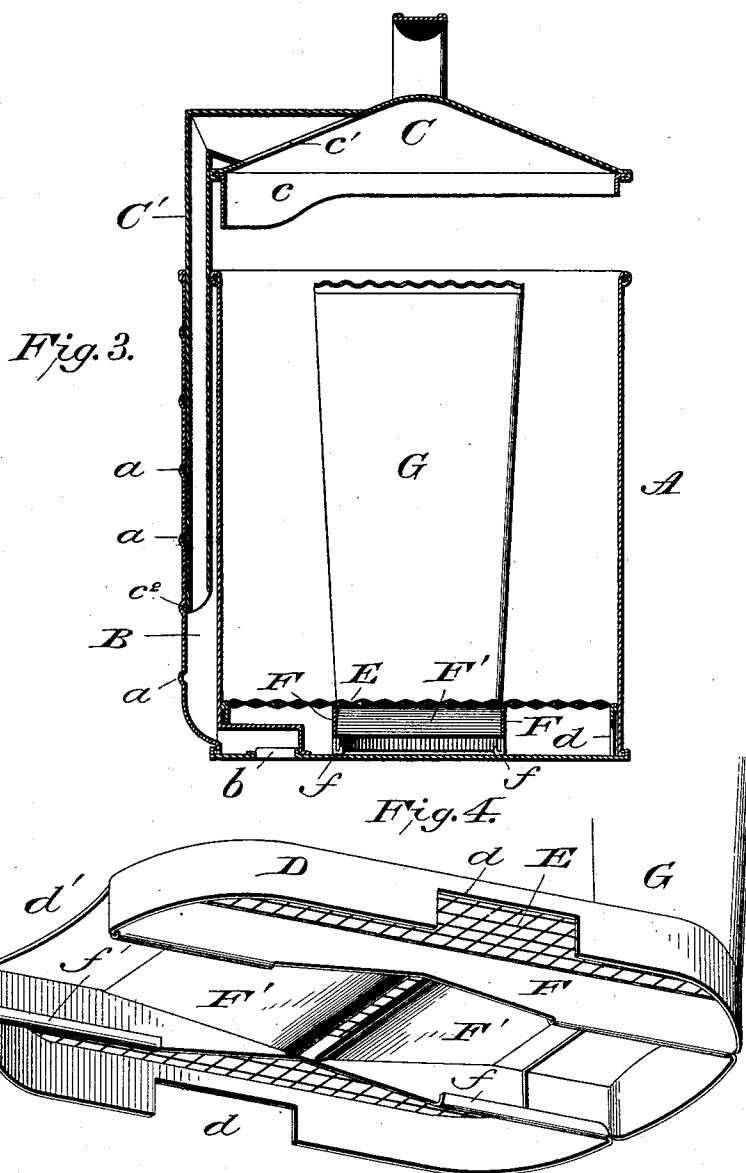
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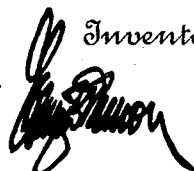
Witnesses

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UNITED STATES PATENT OFFICE.

JAMES FULLEN, OF PAWTUCKET, RHODE ISLAND.

WASH-BOILER.

SPECIFICATION forming part of Letters Patent No. 484,417, dated October 18, 1892.

Application filed June 9, 1892. Serial No. 436,113. (No model.)

To all whom it may concern:

Be it known that I, JAMES FULLEN, a citizen of the United States of America, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Wash-Boilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in wash-boilers; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal sectional view of a wash-boiler constructed in accordance with my invention. Fig. 2 is a plan view, partly in section, of the false or removable bottom which is placed in the boiler and which carries the water-circulating tubes. Fig. 3 is a sectional view taken through the line *xx* of Fig. 1. Fig. 4 is a perspective view of the removable or false bottom.

A designates the main or body portion of the wash-boiler, which is of ordinary construction, except that it is provided on one side with a vertical flue which extends from the upper edge thereof to an aperture *b* in the bottom. The outer wall of this flue B is provided at suitable intervals with transverse corrugations *a*.

C designates the top or cover, which is provided with the usual handle and a depending flange *c*. This flange, it will be observed, is of greater depth at the rear end of the cover than at the other. The upper part of the cover has an opening *c'*, which connects with a vertical flue or support C', said flue or support fitting within the flue B, and is provided at its lower end with a projecting portion *c''*, which engages the corrugations in the flue to hold the cover at the desired height above the wash-boiler. The cover can be placed directly upon the wash-boiler, so as to close the same, or may be held raised above the upper edge of the same, so that air can enter and

mix with the steam, which is carried by the downdraft through the flue B into the fire through the opening *b*. Said opening being to one side of the bottom of the boiler prevents the steam coming in contact with the stove.

In practice the flue or support C' will engage with the lower corrugation, so that there will be but a small opening at the front part of the wash-boiler. By the construction of the top the escape of steam into the room is prevented and the objectionable odors which are produced therefrom are obviated.

With such a wash-boiler I propose to use a removable bottom for causing a circulation of the water within the same, the water being carried up side conduits and discharged upon the clothes. The false bottom is made up of a rim D, cut away at its sides and ends, as shown at *d* and *d'*. To this rim is secured a wire netting or grating E, and beneath the same are depending flanges or strips F, the center portions of which are cut away, while the end portions are turned up, as shown at *f*, to provide grooves or ways in which the lower ends of the side conduits slide.

F' F' designate plates which are attached to the ends of the rim D and between the plates F, the outer ends of these plates being horizontal for a short distance and then inclined downwardly toward each other, a space between the two being left through which water from the bottom of the boiler can pass.

G G designate end conduits, the lower ends of which lie against the depending portions F of the false bottom, and the width of these conduits increases upward, while the depth decreases. The outer wall *g* of each conduit extends beyond the inner wall and is corrugated so as to spray the water which passes out of the conduit upon the clothes which rest upon the grating E of the false bottom.

In operation the clothes to be washed are placed upon the grating and a sufficient quantity of water and soap placed in the boiler to form suds. As the water boils a part of the same will act upon the clothes in the usual manner, while the water contained between the depending plates F F will be carried up the conduits G G and discharged out of the upper ends thereof upon the clothes, thus keeping up a constant circulation within the boiler. The water which is discharged upon

the clothes will find its way through them and pass through the false bottom to the conduits.

The advantages of the construction herein shown are many, and it will be noted that the vertical conduits may be extended and that one size of removable or false bottom can be used with different-sized boilers.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a wash-boiler having a vertical flue B, with transverse corrugations formed in the outer walls thereof, a flue C', rigidly attached to the cover Cover an opening therein, the lower end of said flue having a projecting portion c^2 , which is adapted to engage with the corrugations or recesses in the flue B, so as to maintain the top above the boiler, substantially as shown.

2. In combination with a wash-boiler and cover having flues B and C', with openings b and c' , a depending flange c , formed on the cover, said flange being of less depth at the front of the cover than at the rear thereof, so that air may be admitted to the upper end of the boiler when the cover is lifted a little dis-

tance, substantially as shown, and for the purpose set forth.

3. In combination with a wash-boiler, a false bottom having end conduits for causing a circulation of water in the boiler, said conduits while increasing in width upwardly decreasing in depth, the rear wall of each conduit being extended and bent over the front wall and corrugated, substantially as shown.

4. In combination with a wash-boiler, a removable bottom having depending rims D D, vertical flanges or walls F F, extending longitudinally between the rims and provided with central cut-away portions and bent or upset end portions f , walls or plates F' F', having horizontal and inclined portions, a central space being left between said plates, and conduits G, having open-ended horizontal portions adapted to engage with the depending portions F, substantially as shown, and for the purpose set forth.

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

JAMES FULLEN.

Witnesses:

RICHARD MARTIN,
JAMES M. RYAN.