

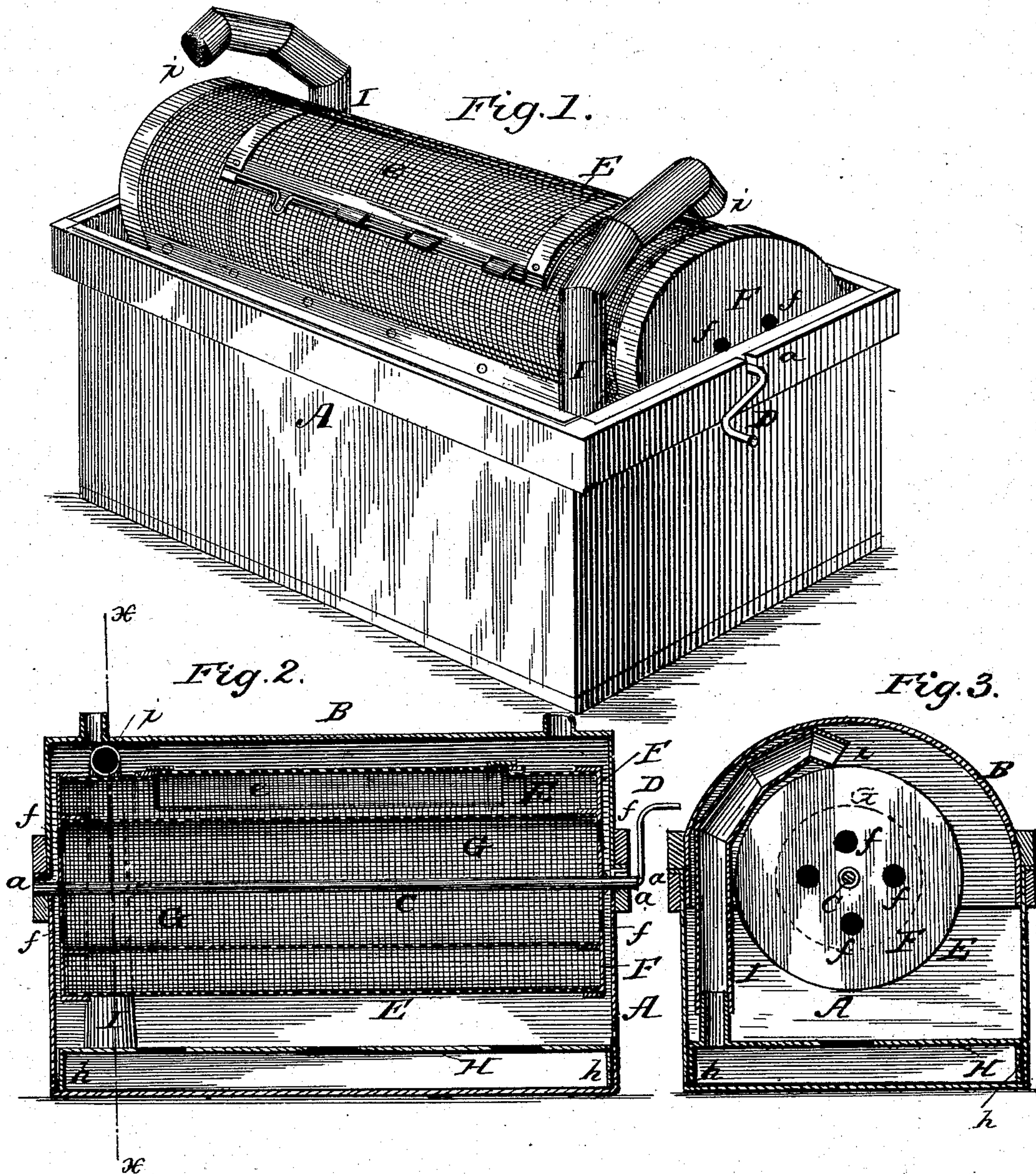
(No Model.)

J. S. CALDWELL.

WASHING MACHINE.

No. 282,955.

Patented Aug. 14, 1883.



WITNESSES:

Fred G. Duterich  
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# UNITED STATES PATENT OFFICE.

JAMES S. CALDWELL, OF ANGUS, TEXAS.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 282,955, dated August 14, 1883.

Application filed May 10, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES S. CALDWELL, of Angus, in the county of Navarro and State of Texas, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved washing-machine with the top or cover removed. Fig. 2 is a longitudinal vertical section of the same with the cover in position, and Fig. 3 is a vertical cross-section through line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of washing-machines which consist of a boiler containing a revolving cylinder in which the clothes are placed, and provided with means for causing one or more streams of hot water to be thrown upon the clothes contained in the cylinder; and it consists in the improved construction and combination of parts of a washing-machine or wash-boiler, of that class as hereinafter more fully described and claimed.

In the accompanying drawings, A is the wash-boiler proper, which is preferably made of sheet metal, of a rectangular shape, and provided with an arched cover, B. At opposite ends of the boiler are boxes or bearings *a*, for the cylinder-shaft C, which has a crank or handle, D, for turning it.

E is a cylinder, which is made of wire-cloth or perforated sheet metal, and has heads or ends F perforated at *f*. Inside of and concentric with the cylinder E is fixed another smaller cylinder, G, so arranged that the perforations *f* of the heads or end pieces, F, will open up into the ends of this smaller cylinder, G, as will appear more clearly by reference to Fig. 2 of the drawings.

H is a false bottom having flanges *h*, by means of which it rests upon, and some dis-

tance above, the bottom of the boiler A; and I I are the hot-water tubes, which are fixed in opposite corners of the false bottom H, diagonally opposite to each other, and curved at their upper ends to form the spouts or nozzles *i*.

From the foregoing description, taken in connection with the drawings, the operation of my improved washing-machine will readily be understood without requiring further explanation. The clothes to be washed are placed in the outer cylinder, E, through the door or opening *e* of the same, after which the boiler is partially filled with water and suds, and placed over the fire. As steam is generated hot water will rise through the tubes I, and be ejected through their nozzles *i* upon the cylinder, which is being rotated by means of the crank D. The hot suds will also enter the inner cylinder, G, through the perforations *f* in the cylinder-heads, and permeate the clothes from the inside of the cylinder. Thus it will be seen that the clothes are subjected not only to the action of the hot suds from the nozzles *i*, but to the suds which permeate them in the opposite direction from cylinder G, thus causing them to be cleaned thoroughly and effectually in a very short time, and without the wear and tear incidental to rubbing or beating of the clothes.

As stated in my statement of invention, I am aware that washing-machines have been made consisting of a perforated cylinder containing the clothes and revolving in a boiler, having means for raising the water from the bottom of the same, throwing it in streams over the clothes in the cylinder, and I do not wish to claim such construction, broadly; but

What I claim, and desire to secure by Letters Patent of the United States, is—

The combination, in a wash-boiler or washing-machine of the described class, of the boiler A, having bearings *a* and cover B, cylinder E, of wire-cloth or perforated sheet metal, having an inside concentric cylinder, G, of similar material, shaft C, having handle D, and provided with the heads F, having



apertures *f* opening in to the ends of the inside cylinder, and false bottom *H*, having the vertical hot-water tubes *I*, bent at their upper ends to form the discharge-nozzles *i*, the whole  
5 constructed and combined to operate substantially in the manner and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES S. CALDWELL.

Witnesses:

JOHN P. GRAY,  
S. F. W. NORTON.