H. G. ROBERTSON.

WASH-BOILER.

No. 184,666. Patented Nov. 21, 1876.

Fig. 1.

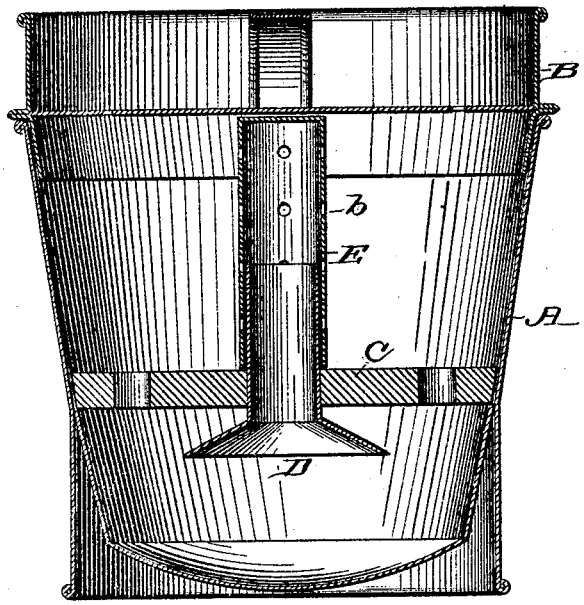


Fig. 2.

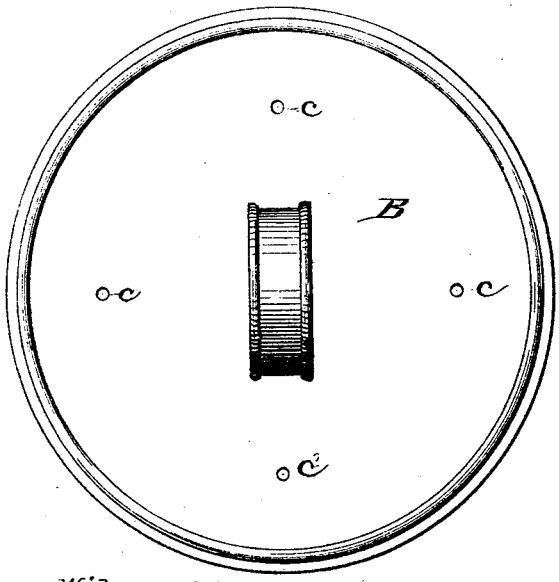
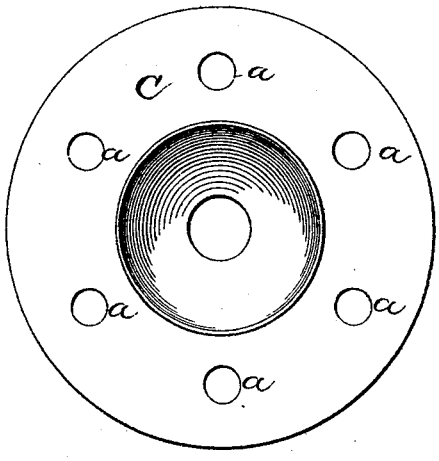


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

HARVEY G. ROBERTSON, OF ASHEVILLE, NORTH CAROLINA.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **184,666**, dated November 21, 1876; application filed August 16, 1876.

To all whom it may concern:

Be it known that I, HARVEY GREENE ROBERTSON, of Asheville, in the county of Buncombe and State of North Carolina, have invented a new and useful Improvement in Steam-Boiler and Hot-Air Washer, which improvement is fully set forth in the following specifications, reference being had to the accompanying drawing.

The object of my invention is to facilitate the operation of cleansing clothes, &c., by the use of a small quantity of water, and to dispense with the common method of rubbing. This is accomplished in accordance with the method and by means of the mechanism hereinafter described.

Referring to the drawings, Figure I is a vertical cross-section of the boiler. Fig. II represents the lid or cover of the steam boiler and hot-air washer. Fig. III is a perforated disk, which is fitted to the inside of the boiler near the bottom.

A represents the body of the boiler, which is made of the ordinary shape or an inverted frustum of a cone. B is the lid or cover, which is recessed on top, so that it will hold boiling water, which is allowed to filter into the boiler, while the clothes are being steamed through small holes or perforations, thus answering the double purpose of supplying an additional quantity of water, if necessary, and also of condensing the steam after it rises to the top of the clothes in the boiler. The wooden disk C, which has perforations *a a* to allow the steam to pass up through the clothes, is applied inside the boiler at a suitable distance from the bottom. A tin tube, E, is fitted in the center of the wooden disk, and is provided with a funnel-shaped mouth at its lower end to receive the steam generated in the boiler.

This tube may be made in two parts, as shown in the drawing, having the top part perforated, as at *b*, to allow the steam to permeate the clothes, and the lower portion without the perforations, or it may all be made in one piece, having the top portion only perforated.

It is evident the disk C may be made of any other material than wood, which is adapted to the purpose without departing from the spirit of my invention.

The plan of operations is as follows: A quantity of water is poured into the boiler to fill it to a point about two inches below the perforated disk. The disk, with the tube attached is then inserted in the boiler, and the clothes to be cleansed, after having the usual quantity of soap rubbed on them, and being thoroughly wet in boiling water, are placed in the steamer over the perforated disk and around the tube. It is then placed over the fire, and as soon as steam is generated, it permeates the entire mass of the clothes, and so effectually loosens the dirt by the power of the steam alone, that it is only necessary afterward to remove the clothes from the steamer and rinse them in warm water, to render them entirely clean, this whole process taking only from five to ten minutes.

The recessed and perforated top and the perforated disk and tube may be applied to any ordinary wash-boiler at correspondingly small expense, and the same result will be attained.

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

In a steam-boiler and hot-air washer, the combination of the boiler A, the recessed and perforated lid or cover B, and the perforated disk C, having the tube E, all constructed and operating in the manner described, and for the purpose specified.

HARVEY GREENE ROBERTSON.

Attest:

JAS. W. PATTON,
W. M. FARRISS.