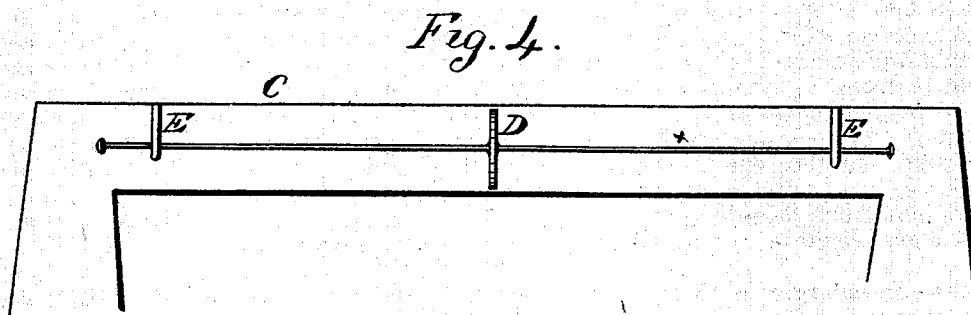
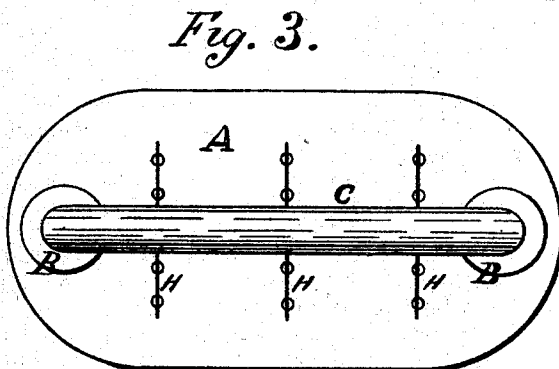
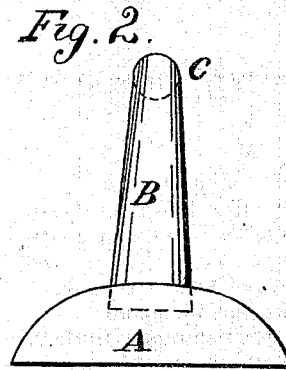
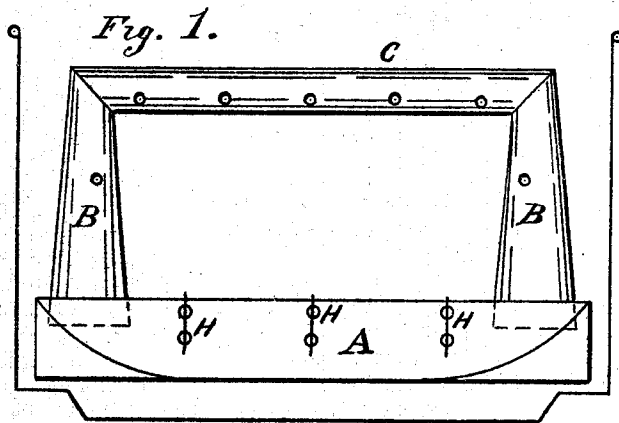


W. R. BROOKS.
Clothes-Washers.

No. 139,494.

Patented June 3, 1873.



Witnesses;
Jesse C. White }
A. S. Furber }

Inventor:
William R. Brooks.

UNITED STATES PATENT OFFICE.

WILLIAM R. BROOKS, OF PHELPS, NEW YORK.

IMPROVEMENT IN CLOTHES-WASHERS.

Specification forming part of Letters Patent No. **139,494**, dated June 3, 1873; application filed May 3, 1873.

To all whom it may concern:

Be it known that I, WILLIAM ROBT. BROOKS, of the village of Phelps, county of Ontario, State of New York, have invented an Improved Steam Clothes Washer, of which the following is a specification:

My invention belongs to that class of clothes-washers in which, by the pressure of steam, water is elevated through tubes, or their equivalents, and discharged upon the top of the clothes, thence, by gravitation, passing down through the clothes to the bottom of the boiler, to be again returned as before; thus, by the circulation of the water and steam through the clothes, the clothes are cleansed. The object of my invention is to secure a more thorough and efficient distribution and circulation of the water upon and through the clothes, at the same time in a very simple manner. It can be made either solidly, attached to the boiler, or separately therefrom, so as to simply set into any ordinary boiler when in use. In this latter form it is shown in the accompanying drawings.

Figure 1 shows a side elevation of my invention set into an ordinary wash-boiler, the latter shown in outline; Fig. 2 is an end view; Fig. 3, plan.

A is a false bottom of an elliptical form in the direction of its width, perforated with holes H H H, and bridged with wires across their centers. Rising up from this false bottom are two perpendicular tubes, B B, and communicating with the space below the false bottom. Connecting the tops of these perpendicular tubes is a horizontal tube, C, perforated with numerous holes on its bottom side and a short distance up its rounding sides.

Fig. 4 shows an enlarged sectional view of the horizontal tube C. Within it is arranged, fitting loosely, a sliding valve or diaphragm, D, having a sliding motion of two or three inches, supported by bearings E E.

The operation of this washer is as follows: Water is placed in the boiler sufficient in quantity to just cover the false bottom A.

The clothes to be washed are next laid in upon the said false bottom, until up, say, to within an inch or two of the under side of the horizontal tube C. As soon as the water boils the steam drives the water up through the tubes B B into the horizontal tube C, and thence violently out of the holes in the same upon the clothes, also out of holes in the upright tubes into the ends of the clothes. The water then passes down through the clothes, through holes H H H in the false bottom, to the bottom of the boiler, to be again returned through the tubes upon the clothes; thus, in a few minutes purging and cleansing the clothes. The office of the sliding valve or diaphragm D is as follows: It is found in practice that the water will sometimes boil sooner or harder at one end of the boiler than the other. In that case the diaphragm is driven over toward one end of the horizontal tube and more holes are opened on that side, at the same time giving more force and directness to the streams when issuing through the holes, than if allowed to spend its force in filling the whole length of the tube.

In practical use this apparatus has been proved exceedingly efficient and its action more thorough and powerful than any invention for the purpose with which I am acquainted. I am aware that several devices are in use, known as wash-boiler attachments, consisting of false bottoms and upright tubes, or their equivalents, for circulating the water through the clothes for the purpose of cleansing them; the application of this principle broadly, therefore, I do not claim; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The horizontal perforated tube C, containing the sliding valve or diaphragm D, when arranged upon perpendicular tubes, in connection with a false bottom, substantially as described, and for the purposes specified.

WILLIAM ROBT. BROOKS.

Witnesses:

LYSANDER REDFIELD,
JESSE E. WHITE.