C. R. EVERSON & L. L. CRAMER.

Boiler Washing-Machine. 2 Sheets--Sheet 1.

No. 166,691. Patented Aug. 17, 1875.

Fig. 1.

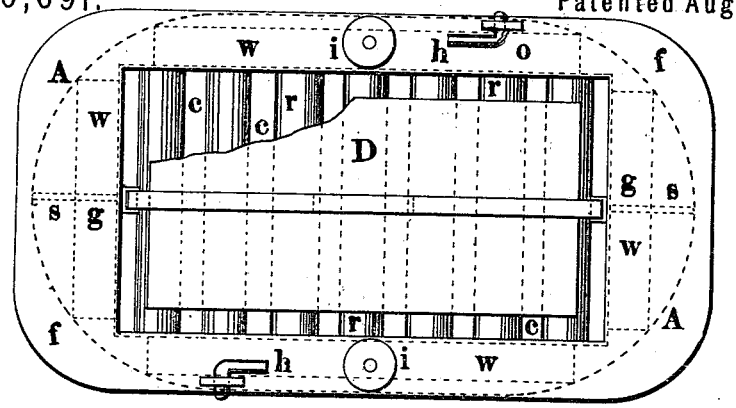


Fig. 2.

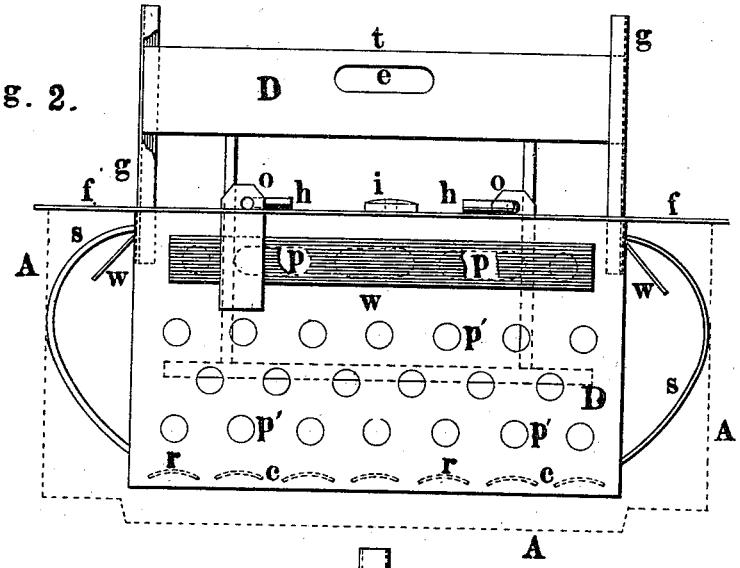
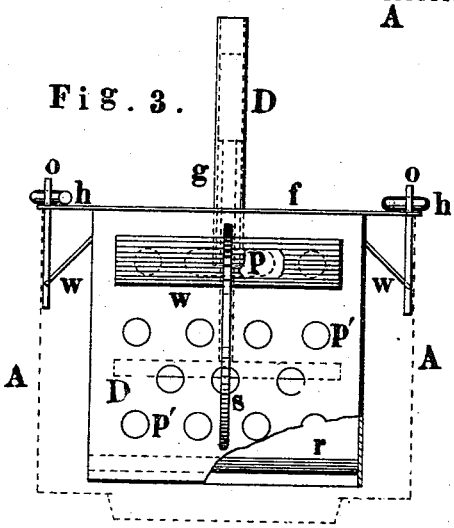


Fig. 3.



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C. R. EVERSON & L. L. CRAMER.

Boiler Washing-Machine.

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Fig. 4.

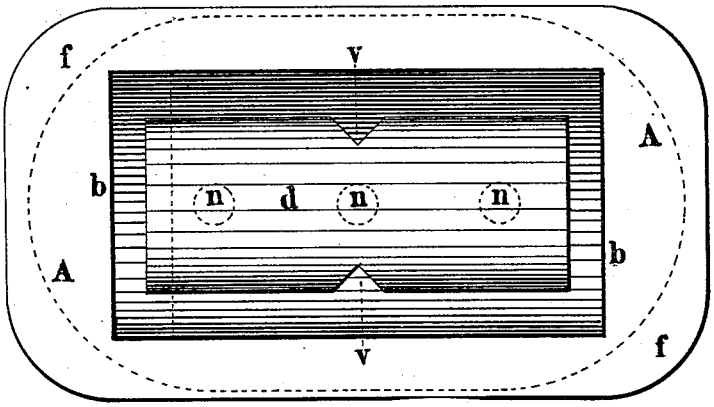
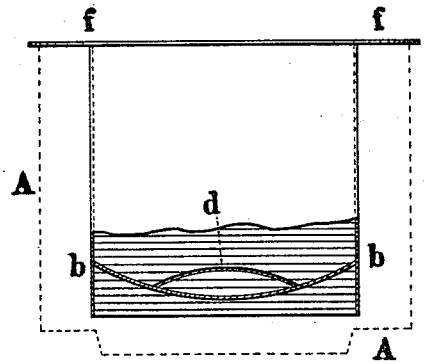


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES R. EVERSON AND LEONARD L. CRAMER, OF MACEDON, NEW YORK.

IMPROVEMENT IN BOILER WASHING-MACHINES.

Specification forming part of Letters Patent No. **166,691**, dated August 17, 1875; application filed April 17, 1874.

To all whom it may concern:

Be it known that we, CHARLES R. EVERSON and LEONARD L. CRAMER, of Macedon, in the county of Wayne and State of New York, have invented new and useful Improvements in Wash-Boiler Attachments; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, sufficient to enable those skilled in the art to which it appertains to understand, construct, and make use of the same, reference being had to the drawings accompanying this specification, and to the figures and letters referring to the same, in which like letters refer to like parts throughout the same.

Our improvement consists in an arrangement for retaining the boiler attachment in position, both laterally and perpendicularly, and in the size and shape of the openings in the wall for the circulation of the steam and water, and means for conducting these fluids to those openings; also, for giving warning when the temperature of those fluids is at the proper point for active operations, and for shielding the point of egress of the water, and in a process for manipulating the clothing in the attachment in bulk while undergoing the operation of cleansing.

The invention is illustrated more in detail in the plan view, Fig. 1, and in the side and end vertical sections, Figs. 2 and 3, in which is shown the outside boiler-vessel. A A represent an outline of the said boiler vessel, in which is shown the boiler attachment with our improvements. S S are spring-bows, one of which is joined to each end of the attachment to prevent endwise oscillation, the bow extending to the wall of the boiler-vessel, and *o o* are metal slips soldered to each of the two sides of the boiler, and pass up through slots at *h h* in the flange *f f* of the attachment, and fastened to the boiler by hooks, as seen at *h h*, the object of which being to prevent vibration sidewise, and to resist the upward steam-pressure when the boiler is in operation; and also to prevent the attachment from being raised above the boiler, in which event the water and steam overflow the boiler and escape; but by this construction and the inclined projections or wings *w w* the heated water and steam are directed to, and find vent through, the elliptical apertures *p p* into the middle of the boiler and returning to the bottom through the spaces *c c*. The perforations *n n n* in the longitudinally-concave bottom, as seen at Fig. 4, allow of the free circulation of the water both for its ingress and egress, to protect which perforations from being closed by the superincumbent clothing in mass the convex protector *d*, provided with open ends, as shown, and triangular perforations *v v* at the edges of the same, is rigidly attached to the said concave bottom. By this construction of the bottom a free and easy flow of the water is secured, at the same time it is combined with strength and consequent durability. To aid the circulation of the water and steam the vertical sides of the attachment below the wings *w w* are perforated all round, as desired. In the flange *f f* at the top of the attachment the whistles *i i* give notice when the mass of clothing is at the boiling-point. By means of the handle *t* made above, and out of the same piece of material, in which is the slot *e* for the handle to pass through, a dash or presser, D, is operated in the vertical grooves *g g*, which grooves are separate pieces of metal attached to the center of the ends on the inside of the attachment, the object of which dash being to force out and expel the partially-relieved soil from the clothing in mass. This dash is adjustable and removable at pleasure, and used in connection with the boiler attachment or without the same, as desired.

We are aware that different forms of boiler attachments have before been used, and we do not claim broadly a wash-boiler attachment as such merely. But we are not aware that boiler attachments have ever been in use before having a dash, wings, spring-bows, steam-whistles, and a bottom similar to ours.

Having fully described our improvement in wash-boiler attachments, what we claim, and desire to secure by Letters Patent, is—

The herein-described wash-boiler attachment, having concave bottom *b*, convex pro-

tector *d* open at each end, and provided with triangular-shaped openings *v*, springs *s*, wings *w*, and slides *o o*, provided with hooks *h h*, dasher D, operating in vertical grooves *g*, apertures P and P′, when the several parts are combined to operate substantially as and for the purpose set forth.

In testimony whereof we severally, in presence of these two witnesses, hereunto subscribe our names this 9th day of April, A. D. 1874.

CHAS. R. EVERSON.
LEONARD L. CRAMER.

Witnesses:
JAMES B. PIKE,
P. MCFARLAND.