

M. W. STAPLES.

Wash Boiler.

No. 84,715.

Patented Dec. 8, 1868.

Fig: 1.

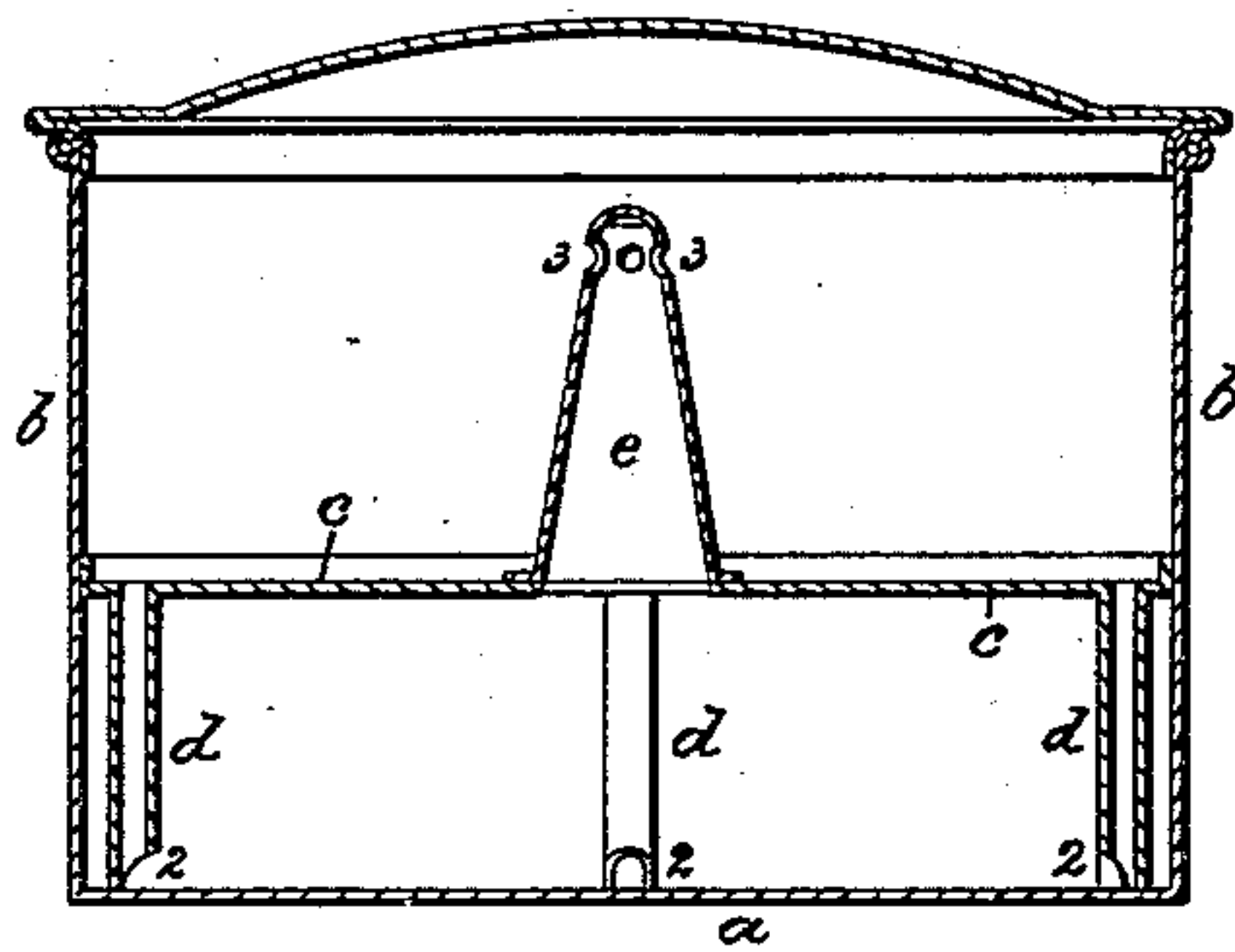
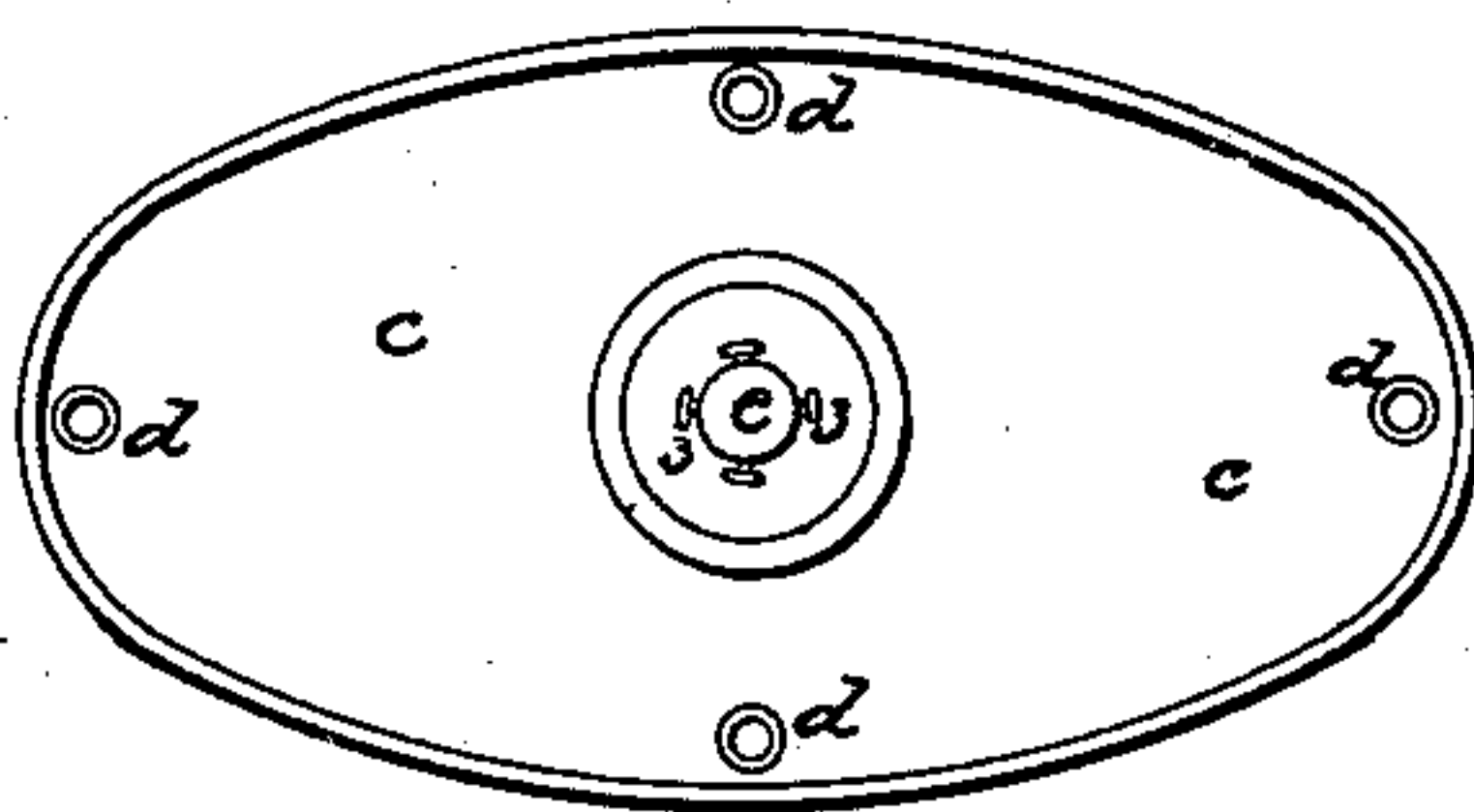


Fig: 2.



Inventor.

M. W. Staples.

Witnesses:

Chas. H. Smith
Geo. J. Hinchey.

per Lemuel W. Terrell
Att'y.



M. W. STAPLES, OF CATSKILL, NEW YORK, ASSIGNOR TO HIMSELF
AND JOHN H. BURTIS, OF NEW YORK CITY.

Letters Patent No. 84,715, dated December 8, 1868.

IMPROVEMENT IN WASH-BOILERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, M. W. STAPLES, of Catskill, in the county of Greene, and State of New York, have invented and made a certain new and useful Improvement in Wash-Boilers; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical section of a boiler fitted with my improvement.

Figure 2 is a plan of the movable bottom and circulating-tubes detached.

Similar letters denote the same parts.

Heretofore wash-boilers have been made with a perforated bottom, and with a rising tube, for allowing the boiling water to circulate up through said tube, and be ejected upon the surface of the clothes, returning through the same to the space below the movable bottom.

The nature of my present invention consists in a conical tube, that is affixed to the movable bottom, and receives the circulating heated water, and concentrates the same at the point where it is ejected upon the clothes from perforations in the sides of the upper portion of the conical tube.

The movable bottom stands upon hollow legs or supports, through which the water passes to the bottom of the wash-boiler, and emerges through openings in the side of the tubular legs.

In the drawing,

a represents the bottom, and *b*, the sides of any usual wash-boiler.

c is a plate, of a shape to fit the inside of the boiler, so as to be easily taken out or replaced. This plate may be of either wood or metal.

d d are tubular legs, supporting the plate *c*, and provided with openings near the lower end of each leg,

formed by removing a portion of the side of the tube, as seen at 2 2.

These tubular legs serve to return the water to the space below the plate *c*, in order that the necessary circulation of heated water may be maintained and promoted.

The rising conical tube *e* is attached, at its larger end, to the plate *c*, around an opening therein, corresponding, or nearly so, to the size of the interior of the tube *e*; and at the upper or smaller end of this tube *e* are openings, 3 3, through which the circulating water is ejected by the action of the heat and steam, causing a column of water to rise and pass out upon the clothes, and then circulate down through the clothes contained in the boiler.

This conical tube *e* is much stronger than the straight tube heretofore employed, the clothes do not become entangled by twisting around the same, and are easily freed from the conical pipe by simply lifting them up, and, the base of the tube being large, causes the heated water to flow in rapidly, and rise, so that the speed of the circulation is promoted, and the facility for introducing and removing the clothes is not lessened.

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

The tubular legs *d*, supporting the removable bottom, *c*, and provided with openings in their sides, near the lower ends, in combination with a tube, rising above the bottom, *c*, through which the rising water circulates, substantially as set forth.

In witness whereof, I have hereunto set my signature, this 1st day of August, 1868.

M. W. STAPLES.

Witnesses:

HILAND HILL,
JOHN DAY.