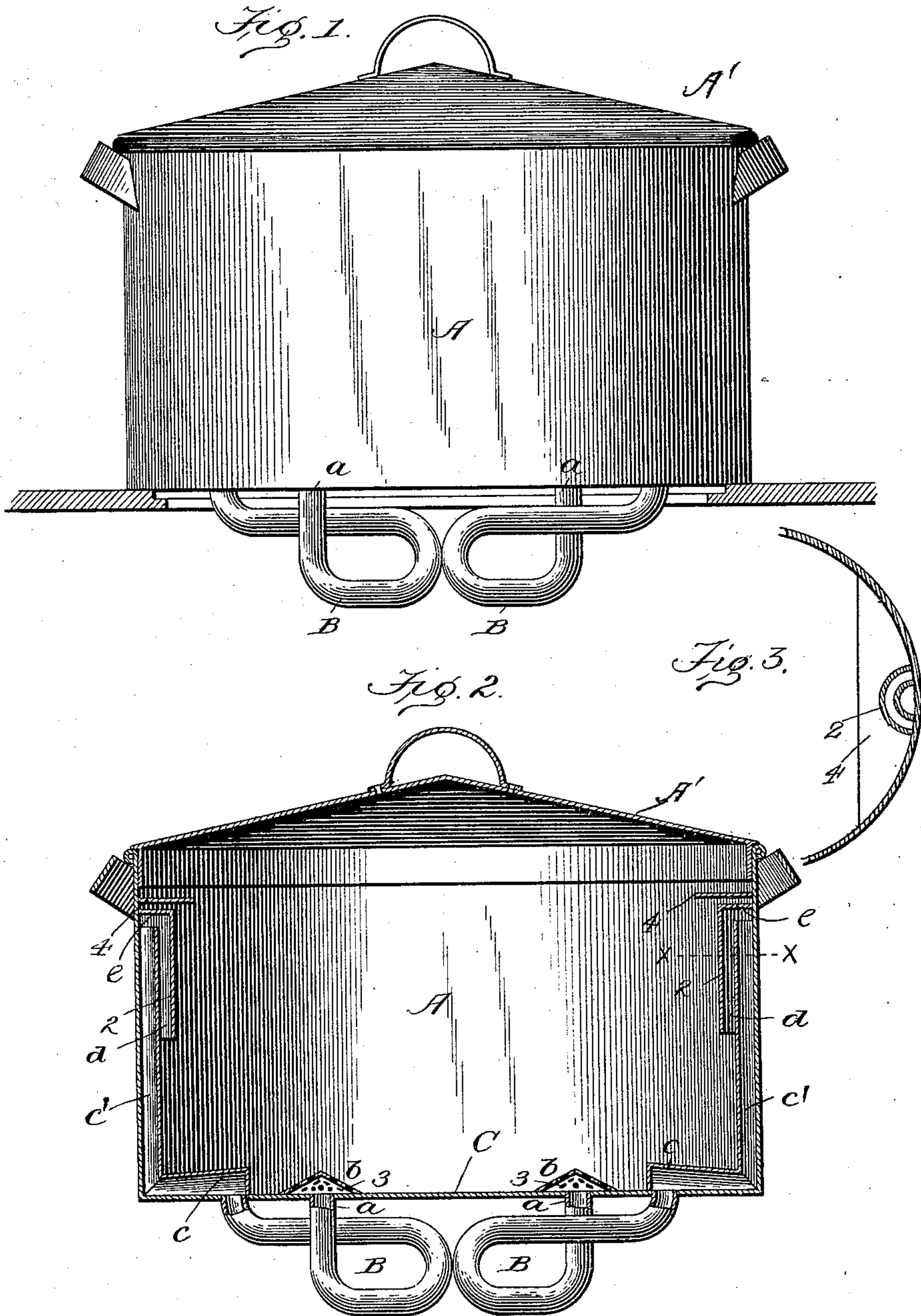


(No Model.)

J. R. ROBERTSON.
WASHBOILER.

No. 585,050.

Patented June 22, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH R. ROBERTSON, OF COSHOCTON, OHIO, ASSIGNOR TO GEO. F. SCHAUWEKER, OF SAME PLACE.

WASHBOILER.

SPECIFICATION forming part of Letters Patent No. 585,050, dated June 22, 1897.

Application filed September 19, 1896. Serial No. 606,406. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. ROBERTSON, a citizen of the United States, and a resident of Coshocton, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Domestic Washboilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention has relation to improvements in washboilers for family use, and the object is to provide a simple, cheap, and effective device of this class for the household; and to this end the novelty consists in the washboiler provided with a plane horizontal bottom, duplex pipes fixed in said bottom, perforated conical hoods covering the inner contiguous ends of said pipes, the opposite ends of which open into the boiler, a pair of oppositely-diverging horizontal hoods fixed in the bottom of said boiler and communicating at their inner ends with said pipes, vertical semicircular pipes communicating at their lower ends with the outer ends of said hoods, semicircular tubes closed at their upper ends and encompassing said vertical pipes and having their lower open ends terminating in the same horizontal plane about midway of the vertical height of the boiler, and a pair of horizontal transverse protecting-shelves fixed in the longitudinal ends of the inside of the boiler above the closed upper ends of the semicircular tubes, as will be hereinafter more fully described, and specifically identified in the claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a side elevation of my improved washboiler. Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 is a horizontal section on the line $x x'$ of Fig. 2.

A represents the usual shell, provided with a removable cover A'.

C represents the horizontal bottom, and B B represent two coiled pipes, the ends $a a$ of which are fixed in the horizontal bottom C and

communicate with the interior of the boiler A, the openings in the ends $a a$ being each covered by a stationary conical hood b , provided with a series of perforations 3.

The pipes B B after being secured at their ends $a a$ in the bottom of the boiler A extend vertically downward a short distance and are then turned horizontally inward toward the center of the boiler, where they meet, and are then carried upwardly and outwardly in a horizontal plane in opposite directions to within a short distance of the longitudinal ends of the boiler, when they are directed vertically upward and enter the bottom C, so as to communicate with the interior of the longitudinal hoods $c c$, fixed on the inside of the bottom C. These hoods $c c$ are covered at their inner ends and extend outwardly in opposite directions toward the longitudinal ends of the boiler proper, where they communicate, respectively, with the lower ends of the semicircular vertical pipes $c' c'$, which extend upwardly to within a short distance of the closed tops $e e$ of the depending semicircular tubes 2 2, with their lower ends opening into the boiler about midway of its height.

4 4 represent longitudinal transverse shelves extending across the longitudinal ends of the boiler on the inside thereof and a short distance above the closed tops $e e$ of the tubes 2 2, their office being to prevent the wet and comparatively cold clothes in the top of the boiler from coming in contact with the circulating hot water, which would lower its temperature, and consequently check its circulation at this point, and as these shelves 4 4 are located a sufficient distance above the closed upper ends of the circulation-tubes 2 2 to form a space between the shelves and the top of these tubes the steam is permitted to surround the upper ends of said tubes and assist, instead of retarding, the circulation of the water at this point.

The washboiler as a whole is very simple and effective in operation, has no movable parts requiring adjustment, and its construction is such that it requires no skilled labor to produce it. In fact, an ordinary washboiler can be readily converted into my improved pattern by an ordinary mechanic with the common tools usually found in a tin-shop.

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

5 The washboiler A, provided with a plane horizontal bottom, the duplicate pipes B, the ends *a a* of which communicate with said bottom, the perforated conical hoods *b b* secured to the inside of the bottom immediately above
10 the contiguous ends *a a* of the pipes B B, the opposite ends of said pipes opening into the boiler, the longitudinal horizontal hoods *c c* communicating with said pipes and extending in opposite directions toward the ends of
15 said boiler, the vertical semicircular pipes *c' c'* communicating at their lower ends with the outer ends of the hoods *c c*, the semicir-

cular tubes 2 2, having closed tops *e e* and encompassing said pipes *c' c'*, and having their lower open ends terminating in the same horizontal plane about midway of the vertical height of the boiler, and the horizontal transverse protecting shelves 4 4 extending across the longitudinal ends of the inside of the boiler a short distance above the closed tops 25 *e e* of the tubes 2 2, substantially as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOSEPH R. ROBERTSON.

Witnesses:

G. F. SCHAUWEKER,
BURT F. VOORHEES.