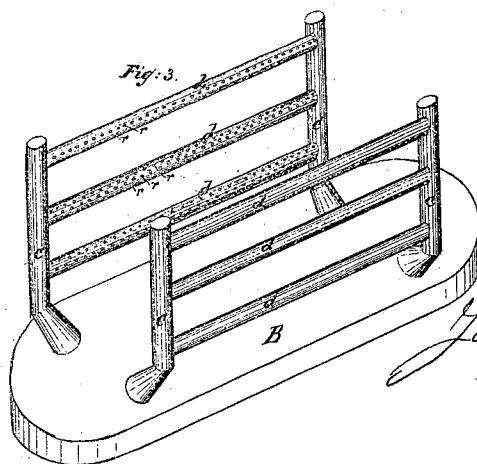
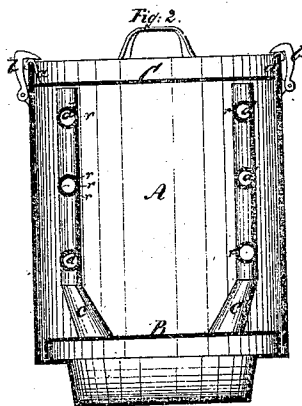
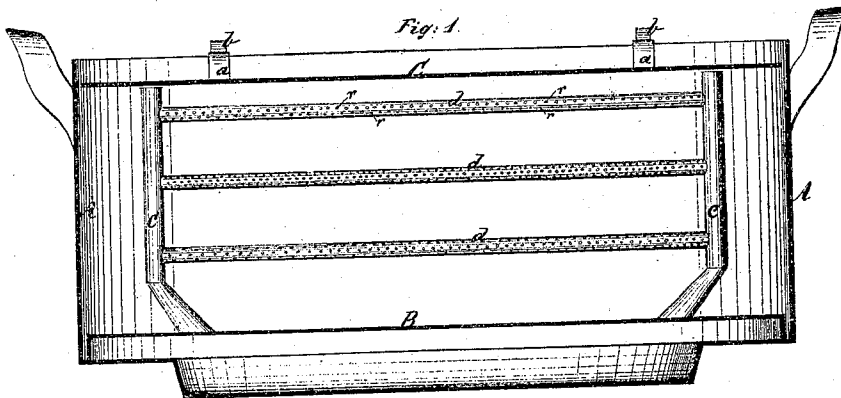


J. Ringle,

Wash Boiler.

No. 102712.

Patented May 3. 1870.



Witnesses.
Chas. J. Froude
James Nissen

Jacob Ringle
Inventor

UNITED STATES PATENT OFFICE.

JACOB RINGLE, OF JERSEY CITY, NEW JERSEY.

IMPROVED WASH-BOILER APPARATUS.

Specification forming part of Letters Patent No. **102,712**, dated May 3, 1870.

To all whom it may concern:

Be it known that I, JACOB RINGLE, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Washing Apparatus; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a longitudinal section of a wash-boiler provided with my improved apparatus. Fig. 2 is a cross-section of the same. Fig. 3 shows a perspective view of my improved washing apparatus detached from the boiler.

Similar letters indicate corresponding parts.

This invention relates to an arrangement of devices by which the clothes are cleaned by the motion of boiling water, dissolving any ingredient, as soap, &c., by passing through small holes, and operating upon the clothes until a good clean wash is obtained.

My washing apparatus consists of a bottom plate with edges bent over. In this bottom plate are fastened vertical tubes, to which are secured again some horizontal tubes, provided with a great number of small holes, and forming, by this arrangement, a row lengthwise on each side of the attached boiler, where, in the middle, is room sufficient left for the admittance of the wash.

My improved apparatus gives much convenience for taking out and putting the same into the boiler, and even can be made according to size of any given boiler.

A plate or false cover resting on hooks near to the top of the boiler, provided with a small space left between the wall of the boiler and edge of the plate or false cover, for condensing the steam and water as soon as it comes in contact with the air, prevents the overflowing of the water out of the boiler.

The letter A designates the boiler, in which is set the bottom plate, B, with both rows of tubes fastened to it. The plate or false cover C is hung in the boiler by resting on hooks *a*, which are kept in position by hooks or catchers *b*, whereby is obtained an easy access to the interior of boiler and apparatus.

The boiler is filled with a certain quantity of water, and supplied with the soap, or any usable ingredient, under the bottom plate, B. The apparatus is lowered, the clothes are admitted, and, when the boiling begins, the liquid operates from the lowest part of the boiler, passing in and through the vertical tubes *c* into the horizontal tubes *d*, and passing out through the small holes *r r r* with force and velocity, acting upon the clothes.

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

In a wash-boiler of the ordinary construction, the arrangement of the plate C, with hooks *a b*, the plate B, and tubes *c d*, as shown and described, for the purpose set forth.

JACOB RINGLE.

Witnesses:

JULIUS KLEIN,
THOS. A. CHAMBERLAIN.