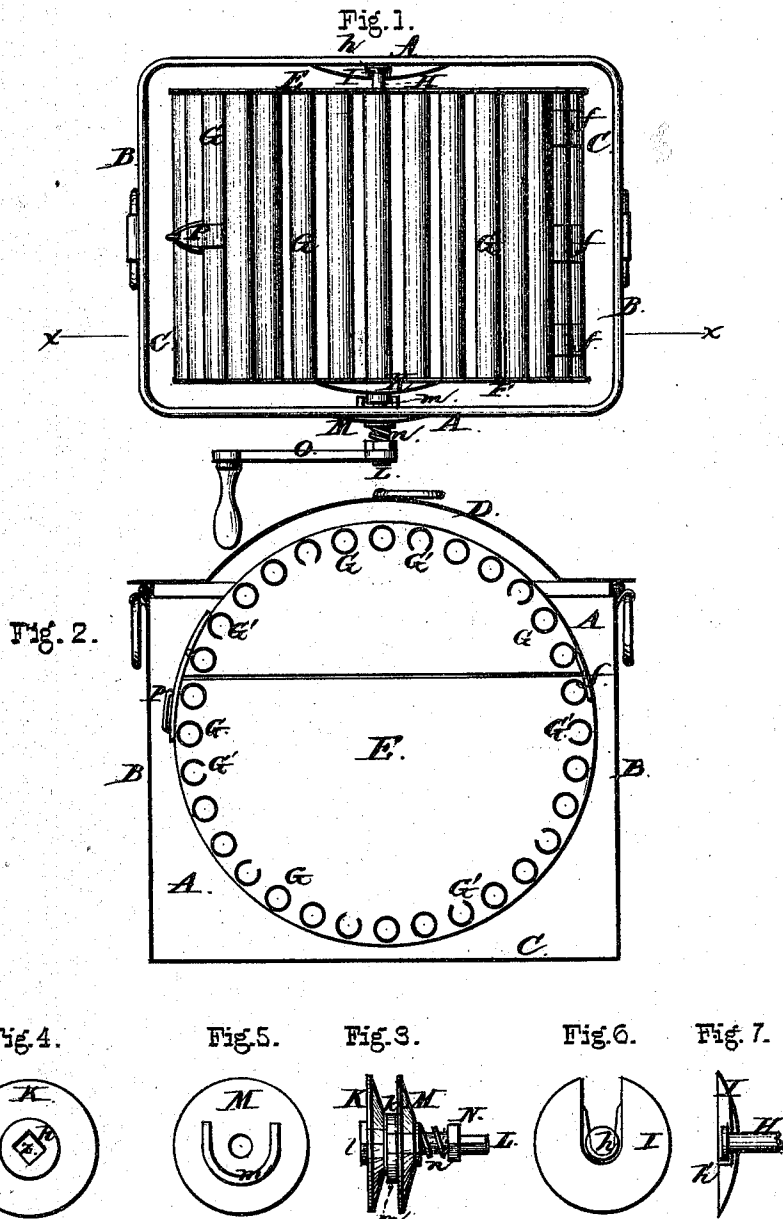


*F. C. Brooks,*

*Washer & Boiler.*

*No. 104,550.*

*Patented June 21, 1870.*



Witnesses.

*A. S. Mearns*  
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Inventor.

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Attys.

# United States Patent Office.

EDWIN C. BROOKS, OF NORWICH, NEW YORK.

Letters Patent No. 104,550, dated June 21, 1870.

## IMPROVED BOILER AND WASHER.

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, EDWIN C. BROOKS, of Norwich, in the county of Chenango, and in the State of New York, have invented certain new and useful Improvements in Combined Boilers and Washers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a plan view of the upper side of my device, with the cover removed;

Figure 2 is a vertical longitudinal section of the same on the line  $xz$  of fig. 1;

Figure 3 is a side elevation of the crank, pivot, and pivot-disks of the revolving cylinder;

Figures 4 and 5 are elevations of the inner faces of said disks;

Figure 6 is an elevation of the outer side of the bearing for the opposite end of said cylinder, showing the axial pin in place; and

Figure 7 is an edge view of the same.

Letters of like name and kind refer to like parts in each of the figures.

My invention has for its object the cleansing of soiled clothing by means of boiling water through which said clothing is caused to pass by mechanical means; and

It consists principally in the peculiar construction and arrangement of the bearings for the revolving cylinder, as is hereinafter specified.

It also consists in the general construction and arrangement of the hereinafter described boiler and washer, substantially as shown and set forth.

In the annexed drawing—

A and A' represent the sides,

B and B, the ends, and

C, the bottom of the boiler, constructed of sheet metal in the general form shown, and having its upper side inclosed, when desired, by means of a cover, D, arched longitudinally within a short distance of each end.

E and F represent two circular plates of sheet metal, which have a diameter sufficient to permit them to be contained within the boiler, and are connected together in the form of a cylinder by means of a series of tubular bars, G, the ends of which are attached to said plates at equidistant points upon the outer edges of their contiguous faces.

Projecting horizontally outward from the center of the plate E is a journal, H, having upon its outer end a collar or flange, I, which journal and collar fit into a corresponding metal bearing, I, secured to or upon the inner face of the side A, and serve as an axial pivot upon which one end of the cylinder revolves.

A pivotal bearing is secured for the opposite end of

said cylinder by means of the following described devices:

A small metal disk, K, provided upon one side with a cylindrical projection,  $k$ , is secured in place upon the center of the cylinder end F by means of a bolt, L, passing outward through said end F and disk K, a head,  $l$ , upon the inner end of said bolt holding it within said cylinder while a squared portion near said head fitting into corresponding openings within said end and disk preserves their relative radial positions.

A second disk, M, corresponding in size with the disk K, is provided upon one of its faces with a U-shaped projection,  $m$ , which, when said disk is placed in position upon the outer face of the side A', extends inward through a suitable opening within said side, and furnishes a bearing for the projection  $k$  upon said disk K.

A suitable opening,  $z$ , being provided for the bolt L, in and through the center of the disk M, the latter and the disk K are held in place upon the boiler and cylinder, and in relative position, by means of a spiral spring,  $n$ , placed around the bolt, and caused to bear against said disk M, by means of a nut, N, suitably threaded upon said bolt.

A crank, O, secured upon the outer end of the bolt L, furnishes a means by which the cylinder can be rotated within the boiler, when desired.

As the cylinder is designed to contain the clothing to be operated upon, it is divided horizontally a little above its center, and the sections secured together upon one side, by means of hinges  $f$ , and upon the other side by means of a hasp and staple, P, of usual construction.

Being ready for use, the boiler is provided with a sufficient quantity of water, and placed upon a stove, or over any suitable fire, and after said water has acquired a boiling temperature, the cylinder is nearly filled with clothing, the cover replaced, and said cylinder caused to revolve slowly, by which means said clothing will be alternately immersed within, and removed from, the boiling water, so that the latter is brought into immediate contact with each portion of the former, and the dirt contained therein speedily and thoroughly removed.

In order that the clothing within the cylinder may be more quickly acted upon by the water, a portion or the whole of the tubular bars G are provided upon their inner side with a longitudinal slot,  $g$ , by means of which said bars are converted into cups that are filled with water each time that they are immersed, which water is carried upward, and discharged upon the upper side of the clothing.

From the foregoing description of my device, it will be seen that the heretofore separate boiler and washer are combined in so simple and compact a manner that,

while capable of performing, in a superior manner, and at a less expense of time and labor, the office of each of said devices, can be furnished at a comparatively low cost.

I am aware that boilers provided with revolving open-work cylinders have been used before, and also that cups or hollow bars for raising above and discharging water upon the clothes have been employed, and therefore do not claim the same broadly.

Having thus fully set forth the nature and merits of my invention,

What I claim as new is—

The hereinbefore described washing device, consisting of the boiler A, B, C, and D, containing the cylinder, composed of the plates E and F, connected to-

gether by means of the bars G and G', and pivoted to or upon said boiler by means of the journals H and L, the bearing I, and the disks K and M, substantially as and for the purpose specified.

Also, the disks K and M, provided with the projections *k* and *m*, respectively, and secured to or upon the boiler and cylinder by means of the bolt L, the nut N, and the spiral spring *n*, substantially as shown and for the purpose specified.

In testimony that I claim the foregoing, I have hereunto set my hand this 28th day of May, 1870.

EDWIN C. BROOKS.

Witnesses:

JAMES E. NICKERSON,

W. S. HEWITT.