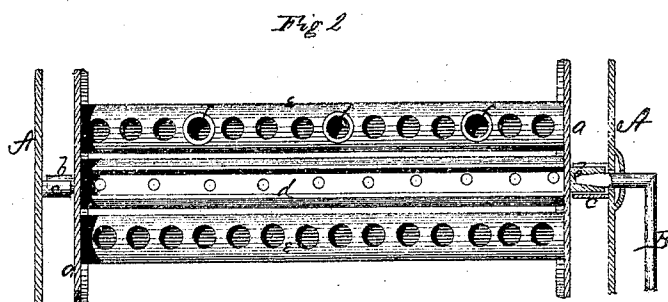
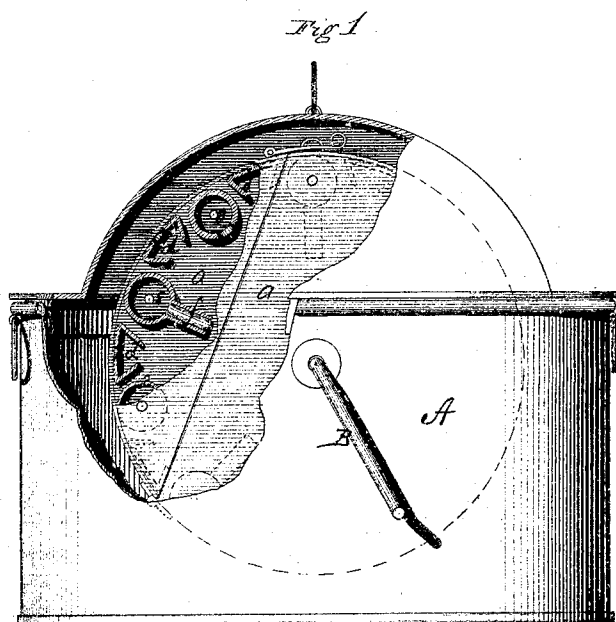


*W. H. Welch,*  
*Washing Boiler.*  
*No. 94,459.      Patented Aug. 31. 1869.*



*Witnesses*

*Harry King*  
*C. L. Green*

*Inventor*

*Wm H. Welch*  
*per Alexander Mason*  
*Attys*

# United States Patent Office.

WILLIAM H. WELCH, OF BLOOMINGTON, ILLINOIS.

Letters Patent No. 94,459, dated August 31, 1869.

## IMPROVED ROTARY WASHING-MACHINE.

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, WILLIAM H. WELCH, of Bloomington, in the county of McLean, and in the State of Illinois, have invented certain new and useful Improvements in Rotary Washing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of the cylinder in a rotary washing-machine, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of a wash-boiler, part in section, and

Figure 2 is a part of the cylinder.

A represents a wash-boiler, of any suitable size, inside of which a cylinder is made to revolve. This cylinder consists of two heads *a a*, each having on its outer side, in the centre, a pin or journal, *b*, which rests in suitable supports or boxes *c c*, in the sides of the boiler A.

The heads *a a* are connected together by means of a series of tubes and troughs, as follows: At the outer edges of the two heads is secured a perforated trough, *d*, the sides of which are bent inward, as seen in fig. 1. At the side of the trough *d*, leaving a small opening, and following the edges of the heads, is placed a tube, *e*, having a series of perforations on its inner side, some of which are provided with small tubes *f f*, pointing inward toward the centre of the cylinder. At the side of the tube *e*, and the same distance apart, is placed another trough *d*, and on the other side of this trough is another perforated tube *e*, having two tubes *f*. In this manner the two heads *a a* are connected along their entire circumference, form-

ing a cylinder, in which the clothes are placed. At the points where the tubes *e e* are connected with the heads *a a*, there are small holes, as seen in fig. 1, so as to allow the water to enter from the ends of the tubes as well as from the inner side.

One of the journals *b*, for the cylinder thus formed, is hollow, and the end of a crank, B, which passes through the side of the boiler, is inserted into the same, in such a manner that the cylinder can be turned in either direction.

The heads *a a* are divided or cut, at suitable points, so as to form a lid or cover and body of the cylinder, said lid being hinged on one side, and fastened in any suitable manner on the other, as seen in fig. 1.

When the boiler is placed on the stove, and the water and clothes placed in the same, the cylinder is turned in either direction. The tubes *f f* prevent the clothes from clogging up the perforations in the tubes *e e*, and the water, having a free and unobstructed flow through the tubes, will rapidly clean the clothes.

The troughs *d d*, as they move upward, carry some water with them, which contributes, afterward, to rinse them.

Having thus fully described my invention,

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

1. A cylinder for washing-machines, constructed as herein described, of the heads *a a*, troughs *d d*, and perforated tubes *e e* and *f f*, all substantially as and for the purposes herein set forth.

2. In combination with a wash-boiler, a revolving cylinder, when constructed substantially in the manner described, and for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 30th day of July, 1869.

WILLIAM H. WELCH.

Witnesses:

THOS. SLADE,  
W. M. HATCH.