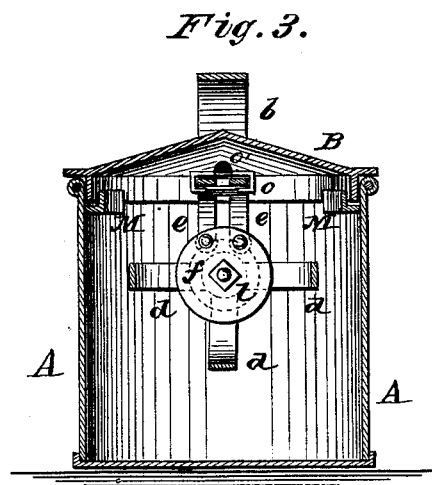
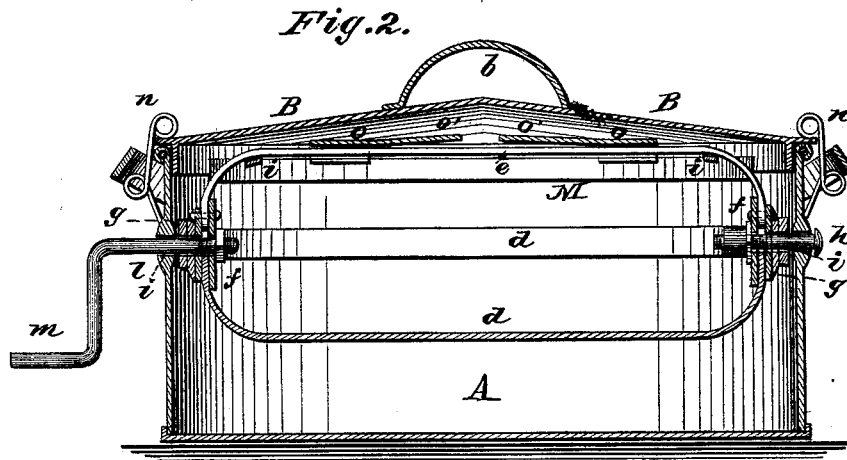
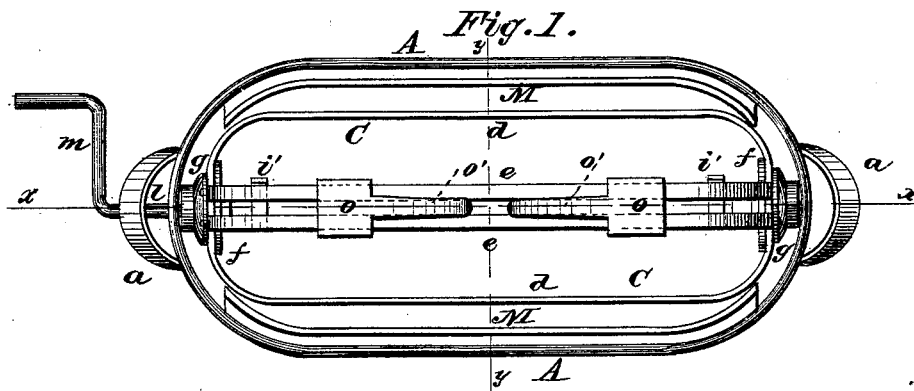


J. C. SMITH.
Boiler Washing-Machine.

No. 218,327.

Patented Aug. 5, 1879.



Witnesses:
P. L. Ditcher.
J. H. Stockman.

Inventor
Julia C. Smith.
Per *C. H. Watson & Co.* Attorneys.

UNITED STATES PATENT OFFICE.

JULIA C. SMITH, OF ASHTON, ILLINOIS.

IMPROVEMENT IN BOILER WASHING-MACHINES.

Specification forming part of Letters Patent No. **218,327**, dated August 5, 1879; application filed May 31, 1879.

To all whom it may concern:

Be it known that I, JULIA C. SMITH, of Ashton, in the county of Lee and State of Illinois, have invented certain new and useful Improvements in Boiler Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in certain improvements in boiler washing-machines provided with a rotary reel, whereby the clothes may be carried around through the hot water and suds, as hereinafter more fully described, and pointed out in the claims.

In the drawings, Figure 1 is a top or plan view of my improved wash-boiler. Fig. 2 is a central vertical section on line *x x*. Fig. 3 is a similar section taken on line *y y*.

Let A represent the boiler for containing hot water, B its cover, and *b* a handle secured to the cover, so that it may be lifted up, as usual.

The boiler has ordinary handles, *a*, and may be made of copper, tin, or other suitable metal. It may or may not be lined with tin or zinc, according to the judgment of the manufacturer.

C designates the rotary reel, which is arranged within the boiler A. This reel is composed of the flat bars or strips *d* and *e e*, the two latter being set in closer proximity to each other than to the other two, which lie in planes at, or about at, right angles to each other. These strips are all secured at their ends to disks *f f*, and these disks are strengthened by smaller disks or washers *g*, secured thereto. These washers also serve to give an increased bearing-surface for the axes of the reel.

At both ends of the boiler are bearings *i*. The shank of a set-screw, *h*, is passed through one of these bearings *i*, as shown. The said screw is passed through a washer and disk of the reel until that portion of the shank which

projects into the boiler enters the opening in the plate and disk.

The rod *l* of the handle *m* is likewise passed through an opening in the opposite end of the boiler, also through a suitable washer and the end plate of the reel.

Screw caps or nuts are adjusted upon the screw-threaded ends of the set-screw *h* and rod *l* of the handle, so as to maintain the same in place, and at the same time allow a free rotation of the reel.

M M are flanges or troughs upon the interior sides of the boiler A. These prevent the water and suds from splashing out of the boiler, and are of advantage both when the cover is on or off. The splashing water which strikes against them falls back into the boiler, while the shape of the same avoids the presentation to the clothes of a sharp edge.

Upon the ends of the boiler I secure the two springs *n n*, and adapt the same to hold down the cover.

The strips or bars *e e* are pivoted at their ends to the disks *f f*, so that they may be opened for the insertion of clothes between the same. These strips will be found especially advantageous in washing small pieces which are not long enough to be wound around the reel. These strips, when closed upon the clothes, are held together by catches or spring-catches *v v*. Rubber bands might be substituted for these, if desired.

To facilitate holding small and fine pieces, I provide spring arms or fingers *o o*, arranged to bear upon the said pieces to be washed. These arms have clasps *o' o'*, whereby they are secured to the slats or bars, and, by reason of such clasps, can be adjusted along said bars of the reel.

The clothes are usually wound round or placed within the reel, according to the number of the same, and the reel rotated while the water is hot.

It is evident that the spring-fingers may, when desired, be removed from the reel-bars by bringing bars *e e* closely together when clothing is not between the same.

What I claim is—

1. The boiler A, reel C, composed of the

strips *d d*, pivoted strips *e e*, catches *i' i'*, disks *f f*, and the axes *h l* of the reel, all arranged and constructed as specified.

2. In combination with the pivoted slats or bars *e e* of the reel, the spring-fingers attached thereto by clasps and adapted to be adjustable thereon, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MRS. JULIA C. SMITH.

Witnesses:

S. F. MILLS,

N. A. PETRIE.