

D. H. Hull,

Boiler & Washer.

No. 101,622.

Patented Apr. 5, 1870.

Fig. 1.

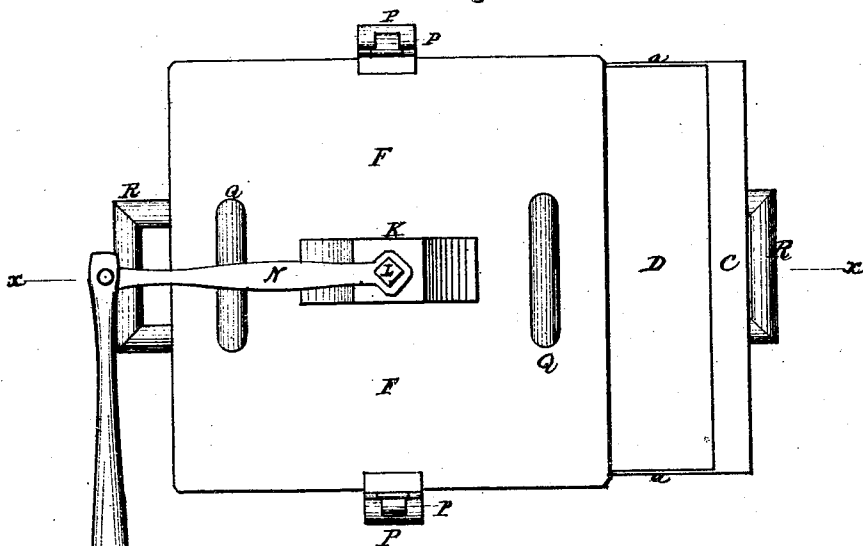
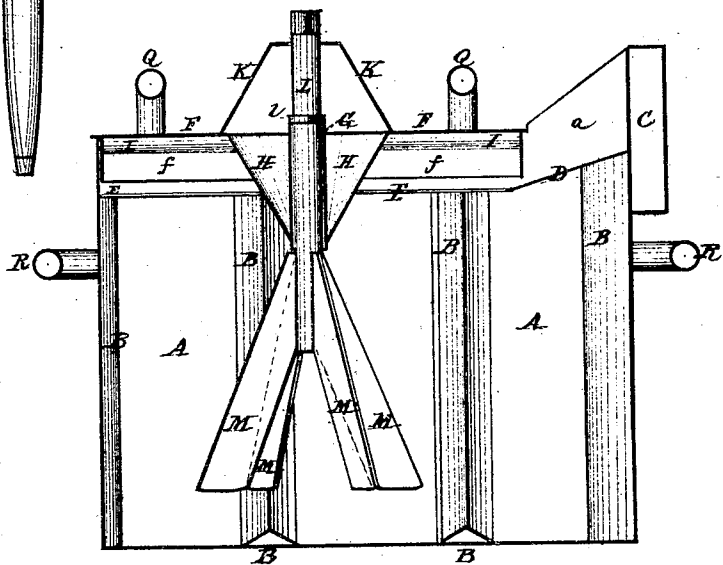


Fig. 2.



Witnesses.

*Alfred M. ...*  
*Chas. H. ...*

Inventor.

*Daniel H. Hull,*  
*by Prindle & Lyon,*  
Attys.

# United States Patent Office.

DANIEL H. HULL, OF PLANTSVILLE, CONNECTICUT, ASSIGNOR TO HIMSELF AND J. B. SAVAGE, OF SAME PLACE.

Letters Patent No. 101,622, dated April 5, 1870.

## IMPROVED BOILER AND 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, DANIEL H. HULL, of Plantsville, in the county of Hartford and in the State of Connecticut, have invented certain new and useful Improvements in Combined Boilers and Washing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of my improved device, and

Figure 2 is a vertical central section of the same, on the line  $x x$  of fig. 1.

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, in which said clothing is agitated so as to bring each and every portion of the same in contact with said water; and to this end

It consists, principally, in the peculiar construction and arrangement of the various parts of the combined boiler and washer, as is hereinafter described.

It also consists in the means employed for strengthening the end of said boiler, and fitting the same for the reception of a "wringer," as is hereinafter set forth.

In the annexed drawing—

A represents a rectangular reservoir of sheet metal, strengthened upon its sides and bottom by means of a number of ribs, B, of the same material.

The sides  $a$  of the reservoir or boiler are extended upward at one end, and have secured thereto a flat rectangular box, C, of sheet metal, having a sufficient thickness to receive the clamp of a wringer, so as to permit the latter to be attached to the boiler.

A sloping shelf, D, extending inward and downward from the box C, connects at its ends with a narrow ledge, E, that extends along the sides and across the opposite end of the boiler, the objects of which are to further strengthen the boiler, so as to enable it to withstand the strain caused by the wringer, and also to receive the drippings from the wringer, and to prevent the water contained within said boiler from boiling over.

Corresponding in size with the top of the boiler A, between its end and the raised portion  $a$ , is a cover, F, having upon its lower side a flange,  $f$ , that shuts inside of the walls of said boiler.

Secured to and extending downward from the center of the cover F is a tube, G, the lower end of which passes the small end of a cone, H, of sheet

metal, the base of said cone being secured to or upon the lower side of said cover, and strengthened by means of four ribs, I, attached to the same and to the cover, and extending outward to each corner of the latter.

A brace, K, attached at its ends to the upper side of the cover, and extending upward and across, directly above the pipe G, is provided with an opening corresponding in size, shape, and position with the opening through the latter, and, together with said pipe, serves to contain a shaft, L, which, passing downward through the same, is supported and held in position vertically by means of a pin,  $l$ , passing transversely through said shaft immediately above said pipe.

Secured to and extending downward and radially outward from the lower end of the shaft L, are four blades or wings M, which, when said shaft is partially or entirely rotated, cause the clothing to change its position in the same, so as to bring every portion of said clothing in contact with the boiling water.

In order that the shaft and blades may be readily operated, a crank, N, secured to or upon its upper end, and a lever, O, pivoted to the end of said crank, are provided, by means of which the operator is enabled to agitate the clothing and water, while at a sufficient distance from the stove to make the heat endurable.

Two hasps, P, hinged to the edges of the cover, and engaging with suitable staples  $p$ , attached to the sides of the boiler, hold said cover firmly in place, while two handles, Q, attached to the upper side of said cover, permit its ready removal when desired.

Two handles R, secured upon the ends of the boiler, complete the device, the operation of which is as follows:

A suitable quantity of suds being placed within the boiler, and caused to boil, the clothing is placed therein, the cover replaced, and said clothing and water thoroughly agitated by means of the shaft and blades, operated as above set forth, when it will be found that in from three to five minutes the dirt will be removed from the fabrics in the most thorough manner, and without the necessity of rubbing, pounding, or other equivalent means.

A wringer being now secured to the box or brace C, the clothing can be passed through the same as taken from the boiler, and, after rinsing, is ready for the line.

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

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

The hereinbefore-described boiler and washer, consisting of the reservoir A, the cover F, the pipe G, the braces H and K, and the shaft L, provided with blades M, all constructed and arranged to operate substantially as and for the purpose specified.

Also, in combination with the above, the means employed for strengthening the end of the boiler, consisting of the extended sides *a*, the box or brace

C, and the sloping shelf D, substantially as shown, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 16th day of March, 1870.

DANIEL H. HULL.

Witnesses:

GEO. S. PRINDLE,  
EDM. F. BROWN.