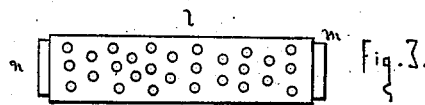
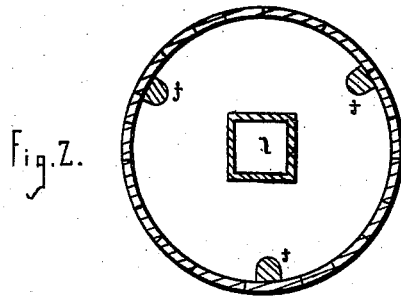
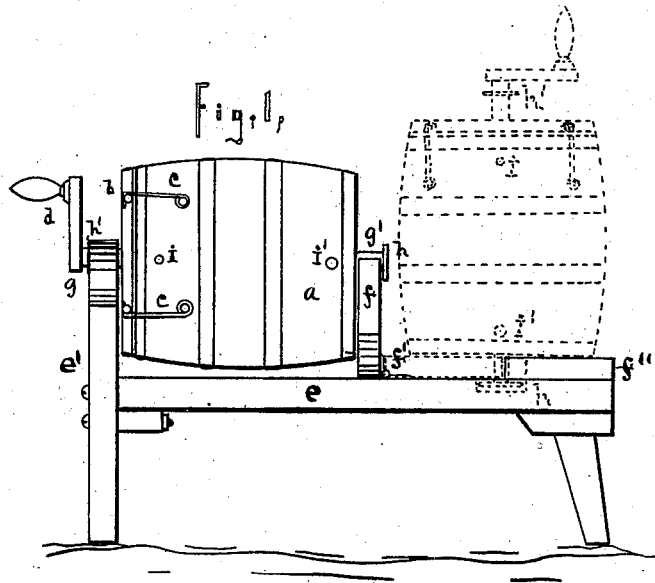


H. C. MULHOLLEN & D. E. GOLDSMITH.
Washing-Machine.

No. 197,791.

Patented Dec. 4, 1877.



Samuel F. Parker.
Chas. G. Say.
Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY C. MULHOLLEN, OF JASPER, AND DANIEL E. GOLDSMITH, OF MECKLENBURG, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 197,791, dated December 4, 1877; application filed August 7, 1877.

To all whom it may concern:

Be it known that we, HENRY C. MULHOLLEN, of Jasper, Steuben county, New York, and DANIEL E. GOLDSMITH, of Mecklenburg, Schuyler county, New York, have invented, jointly, an Improved Washing-Machine, whereof the following is a specification, reference being had to the accompanying drawings.

Our object is to make a readily-used washing-machine, whereof a barrel or receptacle of a size to suit the individual using it, and a stool whereon it is adjusted, are prominent parts, as will be apparent as we describe it.

Figure 1 is a side elevation of our device; Fig. 2, a transverse section of the barrel; and Fig. 3, a side view of the removable inner air, water, and steam chamber.

In the figures, *a* is the barrel, having the cap or cover *b*, which is held to the barrel by the hooks *c*, and the joint between the cover and the barrel made water-tight by rubber packing, so that when in use the barrel is substantially air-tight. This barrel is suspended by journals *g g'*, one fast to the cover and the other to the bottom of the barrel, and on which it revolves by the crank *d*. The crank-end journal lies in the groove in the top of an upright, *e'*, formed by continuing above the platform the legs at one end of the bench or stool *e*, which stool is made about the width of the barrel, and on which it revolves by the journals, the other end of the barrel resting on a hinged support, *f*, which is a little longer than the diameter, and a little wider than half of the diameter of the barrel, and on which the bottom journal *g'* rests. When the clothes are thought to be washed, the barrel, by means of this support *f*, is turned on the hinges at *f'* by seizing the crank *d* and lifting the barrel loose from the flange *h'*, and over from its side to the end, to the position shown by the dotted lines at the right-hand end of Fig. 1, when the support *f* becomes a part of the platform on the stool *e*, the flange *h* on the bottom journal aiding in this tipping of the barrel. The other half, *f''*, of the platform has an en-

larged aperture at its center, through which to pass the flange *h*, and is fast to the stool. A pit is formed beneath the platform in the stool for the flange, and to allow some end motion to the journal *g'* and flange *h*.

To the inside of the barrel are attached to its sides the ribs or projections *j*, which are for the purpose of causing the clothes to revolve on themselves in the water in the barrel, as well as to agitate and rub the clothes and give motion to the water. In the center of the barrel is the perforated chamber *l*, made preferably of wood, and square. It can be of tin, and in other shapes. It is held by tenons *m n*, and mortises in the bottom and cover of the barrel, and is removable at pleasure. It has holes on all sides, and is for the purpose of receiving the air, water, and steam in the barrel, and to aid in their circulation amid the clothes. The flange *h* steadies the part *f* when turning. The flange *h'* holds the barrel and part *f* from displacement when the clothes are being washed. The spigot *i* is to let out air and steam. The lower plug *i'* is to draw off the water.

The preferable mode of using our machine is to put in the barrel, when in the position shown by the dotted lines in Fig. 1, the clothes, adding, preferably in solution in boiling water, the soap, washing chemicals, or other erasive substances, as may be thought best, and regulating the quantity of boiling water so that some air and steam shall be in the chamber *l*; place the cover on the barrel, and lock it tight by the hooks *c*. Now tip the barrel over on the piece *f* to the position seen in the continuous lines at the left, Fig. 1, and revolve it as long as may be thought best, when the steam of the hot water, air, water and soap, or other articles will do their work in the air-tight barrel. Ten to twenty minutes, experience has shown, is best. Then replace the barrel, as seen by the dotted lines, and open it, and, either as the clothes are taken out or in a tub, look over the clothes and rub very soiled spots. A large washing is often done in sixteen to twenty minutes.

The further uses and parts of our invention are apparent to those skilled in the art to which it appertains.

We claim, in a washing-machine—

1. The barrel *a*, having a cover, *b*, held thereunto by the hooks *c*, and made air-tight by a rubber-packed joint, and with a crank, *d*, and flanged journal *g h'* on the cover, and a journal flanged bearing *g' h* on the other end, and provided with internal ribs *j* and the chamber *l*, arranged and operating as shown and described.

2. The combination of the stool *e*, upright *e'*, half-platform *f''*, hinged half-platform *f*, with the barrel *a*, having a crank, *d*, and flanged journals, as set forth.

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Witnesses:

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