

GEORGE F. JORDAN.

Improvement in Washing-Machines.

No. 114,826.

Fig. 1.

Patented May 16, 1871.

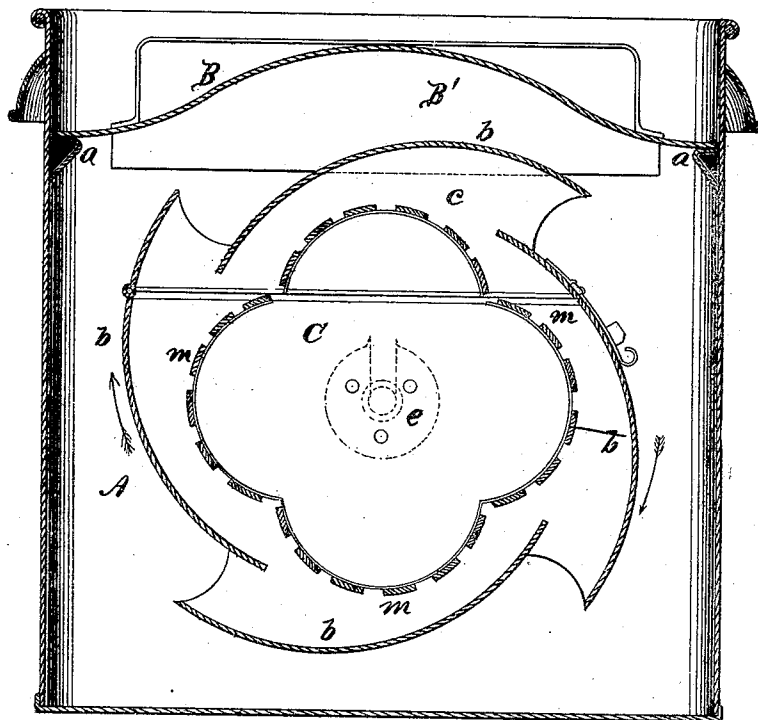
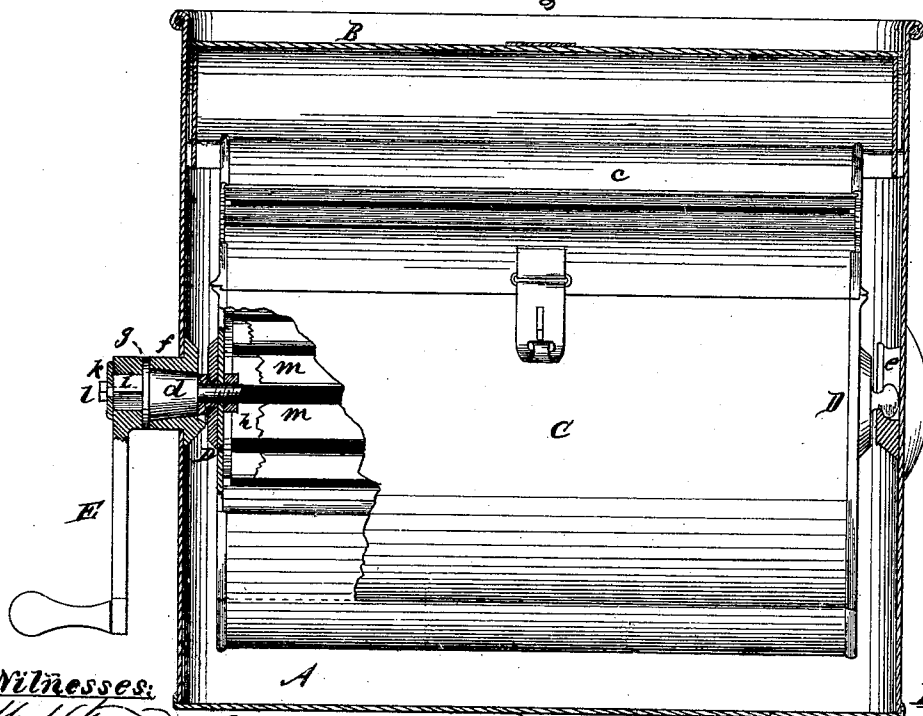


Fig. 2.



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GEORGE F. JORDAN, OF GARDINER, MAINE.

Letters Patent No. 114,826, dated May 16, 1871.

IMPROVEMENT IN WASHING-MACHINES.

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, GEORGE F. JORDAN, of Gardiner, in the county of Kennebec and State of Maine, have invented a new and useful improved Washing-Machine; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a central transverse section through the boiler and cylinder.

Figure 2 is a longitudinal section of the boiler, showing a front elevation of the cylinder partly broken away to expose the interior.

This invention relates to an improvement in that class of washing-machines wherein a cylinder is suspended in a boiler, the former to contain the clothes and the latter to hold the water.

It consists of a cover which sits down in the boiler on suitable flanges or ledges, and conforms to the shape of the cylinder, for a purpose to be specified.

It also consists of a peculiarly-constructed cylinder having buckets and an interior arrangement of strips or slats for diffusing the water and agitating the clothes; and

Finally, consists of the construction, combination, and arrangement of the parts in the manner and for the purpose to be hereinafter specified and claimed.

Referring to the drawing—

The letter A may designate the boiler, made of sheet metal or other material, and in any desired form.

B is the cover, which is preferably curved in the manner shown, so as to conform to the shape of the cylinder, and which sits down within the boiler on flanges or ledges *a a*, provided for that purpose.

C is the cylinder, composed of a number of buckets, *b b*, of the shape and arranged preferably in the manner shown in fig. 1, and which are secured between two solid heads.

Thus constructed it is provided with a hinged cover, through which the clothes to be washed are introduced.

Between these heads also, and within the buckets, are arranged longitudinally with the said buckets a number of slats or strips, *m m*, of wood or metal, forming as many semicircles or arcs of circles as there are buckets, the said semicircles or arcs of circles being arranged underneath and a short distance from the buckets, as is shown in fig. 1.

The cylinder is provided on one of its heads with the journal D, having the knob-shaped end shown in fig. 2, which has for its bearing a recessed casting, *e*, in

which it works, the said casting being soldered or otherwise secured on the inside of the boiler.

The other head is provided with a casting, D', perforated through its center, which has an extension forming a partial journal that rests on a lip or flange projecting from a cast-iron or other bearing, *f*, secured in the boiler.

The casting and bearing, constructed and arranged as shown in fig. 2, form a box for the reception of a peculiarly-shaped journal, *d*, having a squared head, *i*, to which the operating crank or handle E of the cylinder is attached, a flange, *g*, which serves as a washer between the crank and the bearing, a conical body revolving within the bearing, and a nib, *h*, having a thread cut therein, and which nib extends through the perforation in the casting D', and is secured inside the cylinder by a suitable nut.

The handle is secured to the head *i* by a washer, *k*, and screw *l*, the latter passing into the head.

The journals thus formed are simple, and of easy operation, and allow the cylinder to be readily removed. They are at the same time very strong and secure.

The operation is as follows:

The boiler being provided with the necessary quantity of water and soap-suds, and the clothes to be washed having been placed in the cylinder, and its lid and the cover or lid of the boiler being properly secured, motion is given to the cylinder by means of its handle; the buckets collect the water, and, dashing it inside, it strikes against the strips *m* and is diffused in sprays over the clothes, and instead of soaking them and thus clogging them in a mass impervious to water, they are made to rise and fall with the revolutions of the cylinder, and being scattered or loose the water penetrates through them all and thoroughly cleanses them.

When the clothes are sufficiently clean this water may be run off through a spigot or otherwise, and clean water put in; and if the cylinder be turned forward—that is, in the direction of the arrows—the water will rush into the cylinder and fill it, though the boiler be only half full, and thus the clothes are rinsed.

By constructing the lid or cover of the boiler in the form shown in the drawing all splashing out of water is prevented, and by being thrown up against the concave surface of the cover it immediately falls back into the buckets or into the boiler. The side flanges B' prevent its escape there.

At each revolution of the cylinder the clothes are carried by the strips *m* a certain distance and then dropped, and the faster the cylinder is revolved the more rapidly will this agitation of the clothes be carried on, so that they receive a more thorough washing than if the interior surface of the cylinder were plain

or if provided with ribs. The rapidity of this agitation will be in proportion to the number of revolutions in a certain time multiplied by the number of semicircles or arcs in which the strips or slats *m* are arranged.

Having thus described my invention,

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

1. The cover B, provided with a concave inner surface and side flanges B', when arranged within the boiler and over the cylinder, in the manner and for the purpose specified.

2. The cylinder C, provided with the buckets *b b* and the strips *m m*, arranged in semicircles or arcs of

circles, when operating in combination with the boiler, in the manner and for the purpose described.

3. The combination, in a washing-machine, of the boiler A and its cover D, the cylinder C and its bearings, when the several parts are constructed, arranged, and operate substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

G. F. JORDAN.

Witnesses:

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R. M. MANSUR.