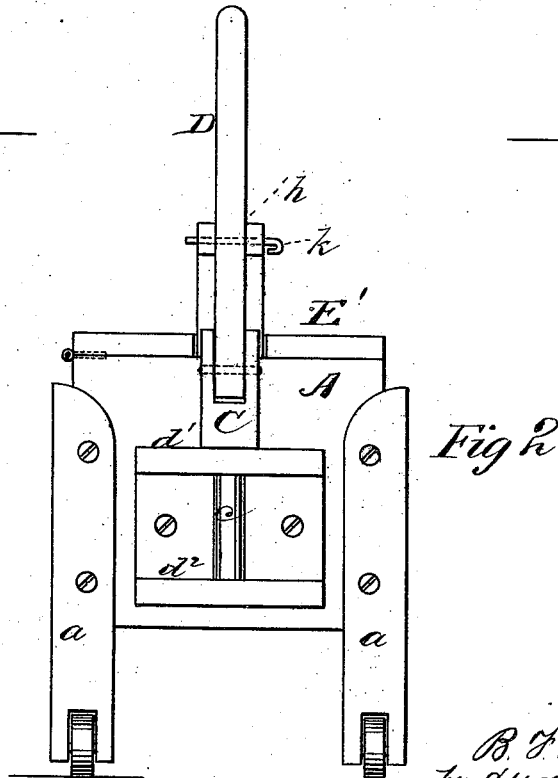
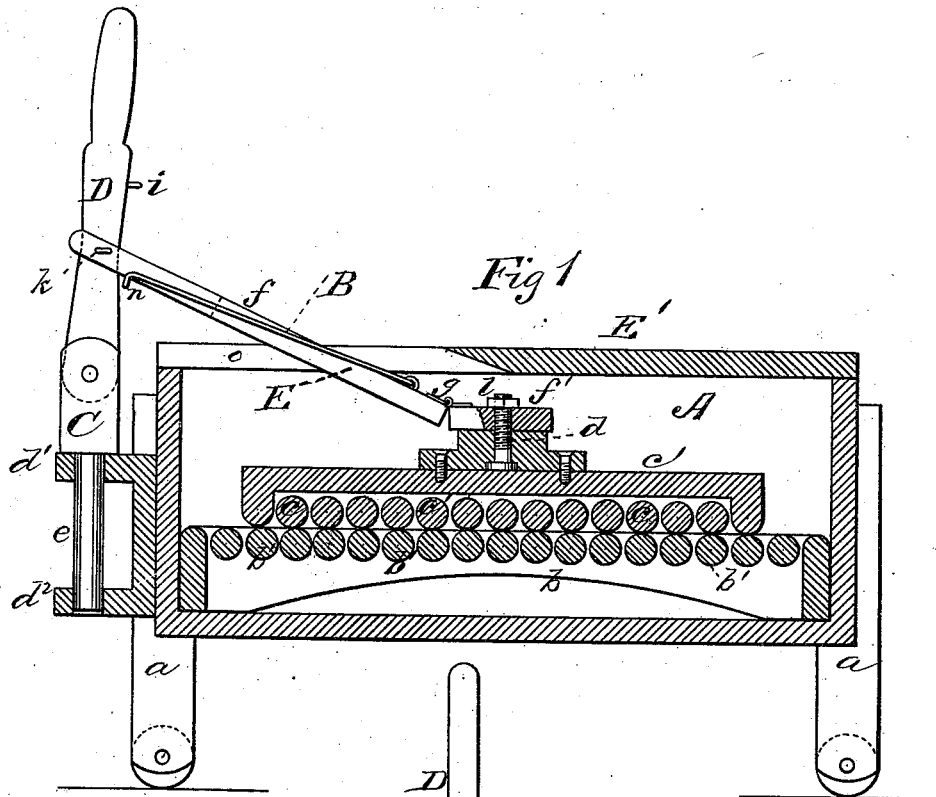


B. F. HENRY.
WASHING-MACHINES.

No. 195,364.

Patented Sept. 18, 1877.



WITNESSES
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BENJAMIN F. HENRY, OF MIAMI TOWNSHIP, SALINE COUNTY, MISSOURI,
ASSIGNOR TO HIMSELF, BENJAMIN COOPER, JOSEPH T. COOPER, AND
JAMES MAYFIELD, OF SAME PLACE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 195,364, dated September 18, 1877; application filed
May 19, 1877.

To all whom it may concern:

Be it known that I, BENJAMIN F. HENRY, of Miami township, in the county of Saline and State of Missouri, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my improved washing-machine, and Fig. 2 is an end view thereof.

This invention has relation to improvements in washing-machines wherein reciprocating scrubbers are used; and it consists in the arrangement and novel construction of the operating mechanism, as will be hereinafter more fully explained.

In the annexed drawings, the letter A designates an oblong rectangular tub, that is, preferably, mounted on legs *a*, and provided with castor-wheels or rollers, by means of which the apparatus is conveniently moved from place to place. Within this box is snugly seated a rectangular wooden detachable frame, *b*, having transverse corrugations, or, in lieu thereof, cylindrical rods *b'*, placed side by side, close together. B represents a rectangular wooden scrubber, composed of cylindrical rods *c* upon its under side, arranged in a covered frame, *c'*. This box is shorter than the suds-box and the corrugated detachable bottom aforesaid, and is adapted to reciprocate freely in the length thereof. It is provided at the middle of its length with an upright block, carrying a screw-threaded bolt, *d*, the object of which will hereinafter appear.

The suds-box aforesaid is provided upon one of its ends with spaced bearings *d¹* *d²*, in which is journaled the shank *e* of a shouldered spindle, C. This latter is bifurcated at its upper end, as shown in Fig. 2, and in this bifurcation is pivoted an upright operating-lever, D, that swings freely in the direction

of the length of the box, and turns upon its longitudinal axis freely with the spindle C. E represents a connecting-rod, that is composed of a long and of a short section, lettered, respectively, *f* *f'*, connected together by means of a hinge, *g*. The free end of the longer section is, preferably, bifurcated, as shown at *h*, and is pivoted to the operating-lever by means of a pin, *k*, and the shorter section is perforated for the reception of the bolt *d* on the center-block of the spindle, and is secured thereto by means of a nut, *l*.

It is evident that if the lever-handle be actuated a horizontally-reciprocating movement will be imparted to the scrubber, owing to the flexing of the connecting-rod aforesaid and its pivotal connection with the said lever. The article to be washed is placed between the corrugated bottom and the scrubber, and is cleansed by the rubbing of the former thereon.

B represents a metallic rod, one end of which is permanently secured to the longer section of the connecting-rod, and the other provided with a hook, *n*.

It being desired to raise the scrubber bodily out of the suds-box, the hooked end *n* of this rod is engaged in an eye, *i*, upon the operating-lever, above its junction with the connecting-rod. The vibratory motion of the said lever in reference to the connecting-rod being thus broken up, the scrubber may be raised by throwing the said lever away from the box. This being accomplished, the scrubber may be swung around out of the way by causing the lever spindle-block to turn in its bearings, and thus the interior of the box above the removable supplementary bottom will be exposed to view, and the clothes removed. All this is done without wetting the hands.

The suds-box is provided with a hinged lid, E', in one end of which will be formed a longitudinal slot, *o*, for the passage of the connecting-rod. Thus the movements of the latter, as the lever is actuated and the scrubber reciprocates, are in no degree affected, while the splashing of water out of the tub will be effectually prevented. It will also be provided

with one or more draw-off cocks, by means of which the dirty water in the box may be readily let off.

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

1. The combination of the axially-rotating and vertically-vibrating lever, the hinged sectional connecting-rod, and the hooked rod B with a suds-box and reciprocating scrubber, substantially as specified.

2. The suds-box A, having spaced horizon-

tal bearings, in combination with the shouldered spindle C, the lever-handle pivoted thereto, the flexing connecting-rod, and a scrubber, substantially as specified.

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

BENJAMIN F. HENRY.

Witnesses:

GEO. W. CUNNINGHAM,

OTTO AMERLAN.