2 Sheets—Sheet 1.

C. A. DODGE.
Washing-Machine.

No. 203,250. Patented May 7, 1878.

Fig. 1.

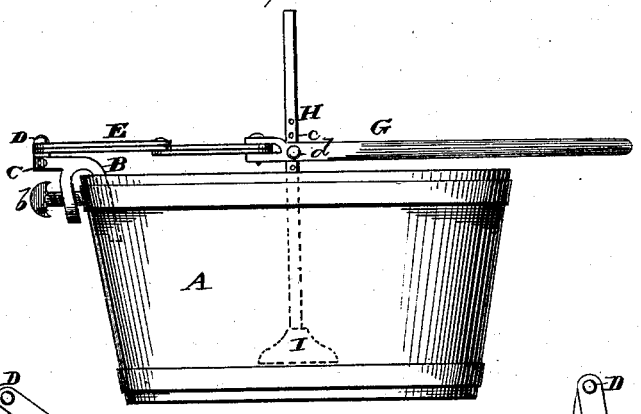


Fig. 2.

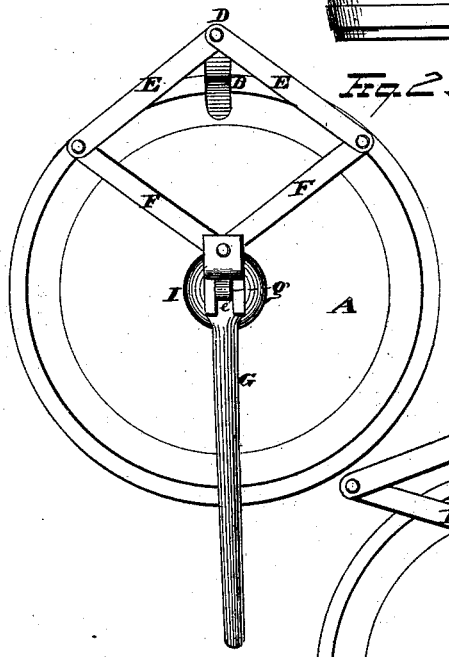


Fig. 3.

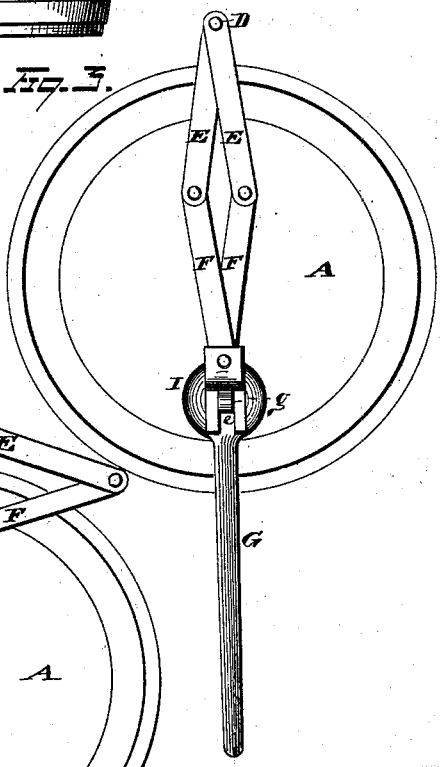
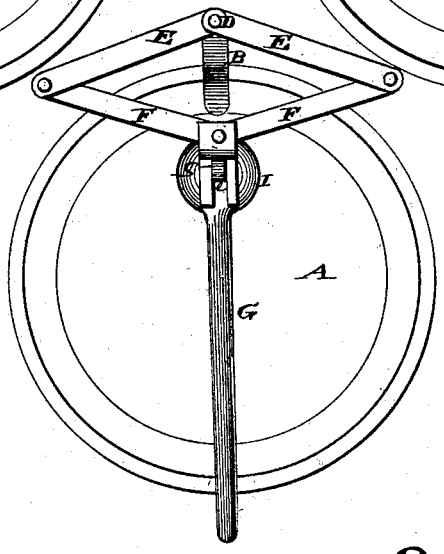


Fig. 4.



WITNESSES
Ed. L. Northrup
A. W. Bright

INVENTOR
Cyrus A. Dodge.
By H. A. Seymour.
ATTORNEY

2 Sheets—Sheet 2.

C. A. DODGE.
Washing-Machine.

No. 203,250. Patented May 7, 1878.

Fig. 5.

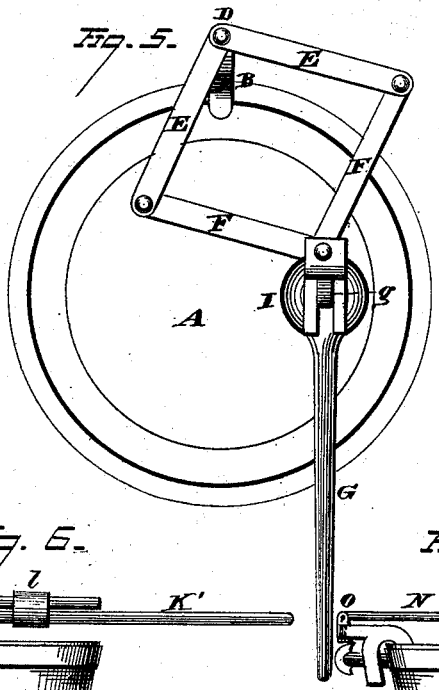


Fig. 6.

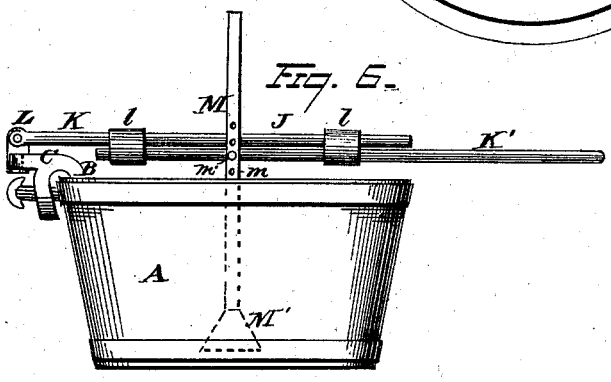


Fig. 7.

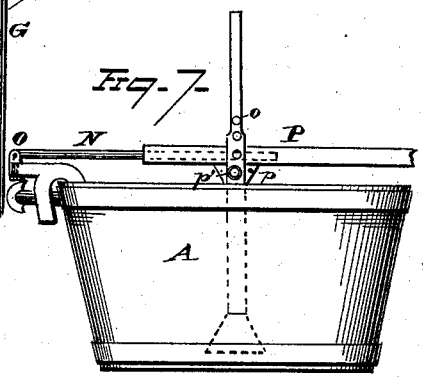
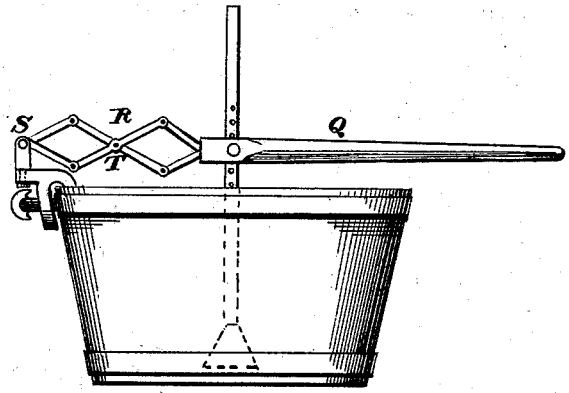


Fig. 8.



WITNESSES
Ed. J. Nottingham
A. W. Bright

INVENTOR
Cyrus A. Dodge.
By H. A. Seymour.
ATTORNEY

UNITED STATES PATENT OFFICE.

CYRUS A. DODGE, OF MIDDLEBURY, VERMONT.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **203,250**, dated May 7, 1878; application filed January 18, 1878.

To all whom it may concern:

Be it known that I, CYRUS A. DODGE, of Middlebury, in the county of Addison and State of Vermont, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in pounder washing-machines; the object being to provide an actuating-lever for a pounder washing-machine, of such construction that the lever may be moved either laterally or vertically, and also be readily contracted or expanded in length, to permit the pounder to be placed in any portion of the tub while the machine is being operated.

My invention consists, first, in a pounder washing-machine, having an actuating-lever, constructed and adapted to be readily expanded or contracted in length, whereby the pounder may be carried to any portion of the tub by moving the free end of said lever toward or from its fulcrum.

My invention further consists in the several details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of one form of pounder washing-machine embodying my invention. Fig. 2 is a plan view of the same, showing the pounder in the center of the tub. Fig. 3 is a plan view, showing the lever when expanded or drawn out to its full length. Fig. 4 represents a similar view, with the lever contracted to allow the pounder to be located near the fulcrum. Fig. 5 is a plan view, showing the pounder at one side of the tub. Figs. 6, 7, and 8 show modified forms of construction.

A represents an ordinary tub. B is an inverted U-shaped clamp, provided with a set-screw, *b*, whereby said clamp may be removably secured to the upper edge of the tub. To the upper part of the clamp is secured, or formed solid therewith, an arm, C, within the outer end of which is pivoted a stud, D, the latter having the bars E pivoted to its upper end. To the opposite ends of bars E are pivoted the ends of the bars F, the opposite ends of the latter being pivoted to the end of the rigid portion of the actuating-lever G. H is a pounder-shaft, provided with a series of holes, *c*, to allow said shaft to be adjustably secured to the lever G by means of a removable pin, *d*. The opening *e* in the lever G is of sufficient length to allow a rocking movement of the pounder-shaft, in order that the latter may be retained in a vertical position, regardless of the position or inclination of the actuating-lever.

Instead of forming an opening in lever G for the introduction of the pounder-shaft, the latter may be slotted to receive said lever, and thus the same results will be secured.

From the above it will be understood that the length of leverage will be increased or diminished as the handle or rigid portion G is moved toward or away from the stud D, which constitutes the fulcrum for the lever, the latter being pivoted thereto in such a manner that said lever may be freely moved either in a vertical or lateral direction. In Fig. 2 the pounder I is represented as being placed in the center of the tub.

When it is desired to operate the pounder in that portion of the tub opposite the fulcrum, the operator may continue to reciprocate the pounder, and, by drawing out the lever without removing the hand from the same, can bring the pounder to operate in such portion of the tub. This position of the pounder is illustrated in Fig. 3. When it is desired to operate the pounder at a point in the tub near the fulcrum of the lever, as shown in Fig. 4, the handle is forced toward the fulcrum, and the pivoted bars expand or recede from each other, thus allowing the pounder to be freely operated near the fulcrum. The pounder may also be operated at the side of the tub without the necessity of any change of position on the part of the operator, as clearly illustrated by the position of the several parts of the lever in Fig. 5.

Fig. 6 represents a modified form of construction, embodying the same principle of operation as has been heretofore described. The clamp B is of the same form, and is se-

cured to the tub A in the manner illustrated in Fig. 1. The actuating-lever J consists of the pivoted sliding lever K and handle K′. Lever K is pivoted to a stud, L, which is swiveled in the arm C, attached to the clamp, whereby said lever may be freely moved either in a vertical or lateral direction. The handle K′ is attached to the lever K by means of the sleeves of rings *l*. The pounder-shaft M, provided with pounder M′, is preferably slotted to receive said levers, and also provided with a series of holes, *m*, whereby it may be secured in a vertically-adjustable manner to part K′ by a removable pin, *m′*.

The construction of washing-machine last described is such that the pounder may be readily operated in any portion of the tub, as the actuating-lever has free lateral and vertical movement; and, as it is adapted to be expanded or contracted in length, the pounder may be carried toward or from the center of the tub in any direction desired.

Fig. 7 represents another modification of my improvement. In this case the actuating-lever is of telescopic form, one end, N, being pivoted to the swiveled stud O, while its other end is received within the tube P, the latter serving as the handle. The pounder-shaft *o* is slotted for the reception of the tubular handle P, and is pivoted in a vertically-adjustable manner to said handle in any manner. In the present construction a perforated lug, *p*, is attached to the lower side of said handle, and the pounder-shaft is pivoted to said lug by means of a removable pin, *p′*. This construction embodies the same principle of operation as the forms of construction heretofore described. The actuating-lever may be freely moved either in a vertical or lateral direction, and, as the lever is constructed to be expanded or contracted in length, it enables the pounder to be moved to any portion of the tub.

Fig. 8 represents another modification embodying my invention. In this instance the actuating-lever consists of the handle portion Q, to which the pounder-shaft is adjustably secured, in the manner hereinbefore described, and the lazy-tongs R, which is pivoted at one end to the handle Q and at the other end to a swiveled socket, S. The crossed levers T, of which the lazy-tongs is composed, will approach each other as the pounder is drawn away from the fulcrum, and recede from each other as the pounder is moved toward said fulcrum.

I am aware that pounder washing-machines have been heretofore provided with an actuating-lever which is adapted to slide to and fro within a fulcrum located at one side of the tub, as illustrated in the patent to L. Caldwell dated September 24, 1872, No. 131,659, and hence I make no claim to such construction, as in my improved pounder washing-machine the actuating-lever has no sliding movement within the fulcrum, but is pivoted thereto, and the outer or handle end of the lever is adapted and arranged to have a longitudinal movement imparted thereto.

In view of the fact that my invention is of such a character that it may be embodied in different forms of construction, I would have it understood that I do not limit myself to the particular construction and arrangement of parts shown and described, as many variations can be devised without departing from the spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a pounder washing-machine, the combination, with a pounder-shaft having a pounder attached thereto, of an actuating-lever pivoted to a stationary fulcrum attached to the tub, said lever composed of two or more parts, which parts are arranged and combined in such a manner that that portion of the lever between the pounder-shaft and fulcrum may be expanded or contracted in length, whereby the pounder may be carried to any part of the tub by means of a lever, one end of which is pivoted to a fulcrum and maintains a fixed relative position thereto at all times, substantially as set forth.

2. In a pounder washing-machine, an actuating-lever, consisting of bars or levers pivoted to each other and to a swiveled or pivoted fulcrum at one end, while their opposite ends are pivoted to a handle carrying the pounder-shaft, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

CYRUS A. DODGE.

Witnesses:
H. A. SEYMOUR,
THOMAS B. HALL.