4 Sheets—Sheet 1.

# C. A. DODGE.

## Pounder Washing-Machine.

No. 205,366. Patented June 25, 1878.

Fig. 1.

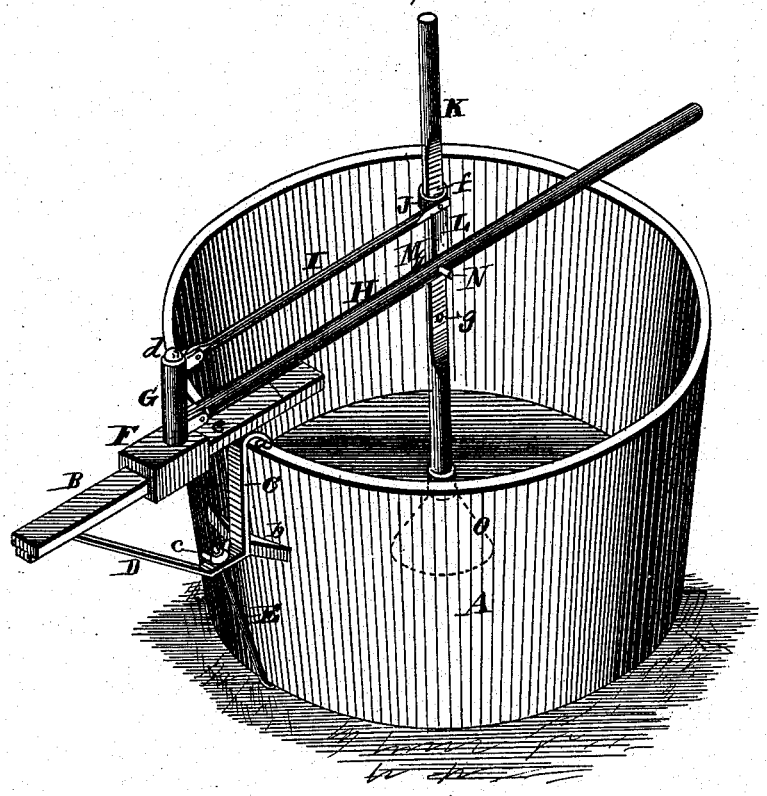
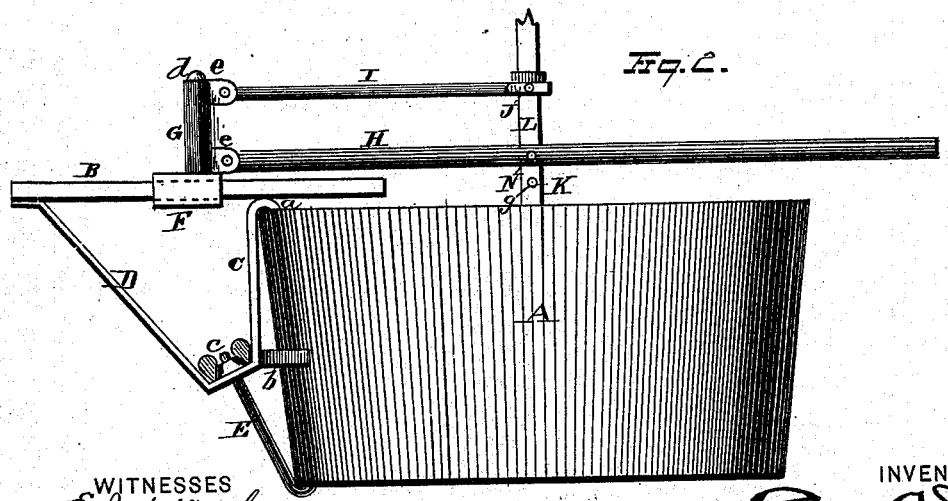



Fig. 2.




WITNESSES

E. J. Nottingham

A. M. Bright

INVENTOR

Cyrus A. Dodge.

By H. A. Seymour

ATTORNEY

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

4 Sheets—Sheet 2.

# C. A. DODGE.

## Pounder Washing-Machine.

No. 205,366. Patented June 25, 1878.

Fig. 3.

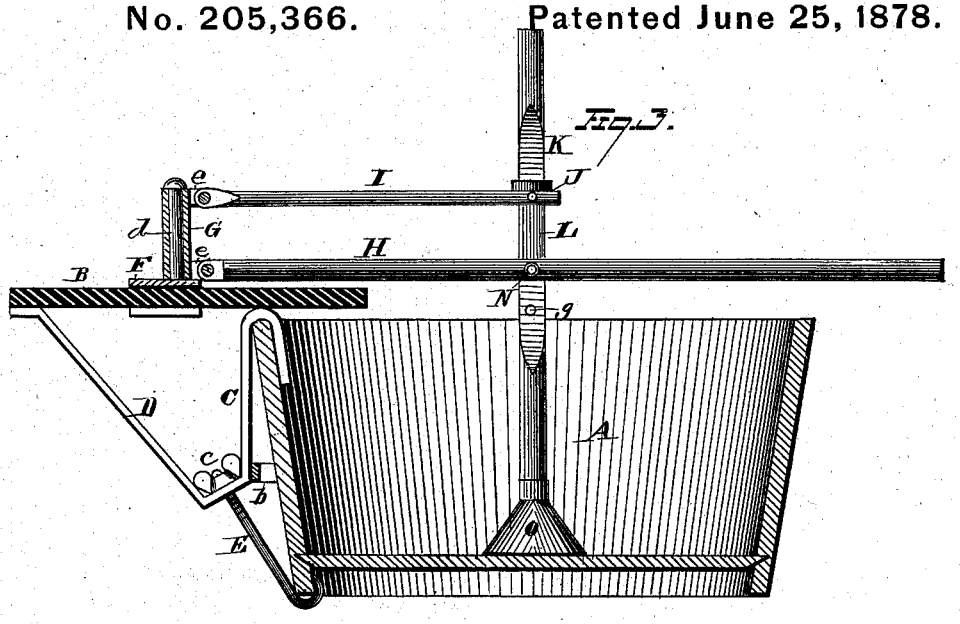



Fig. 4.

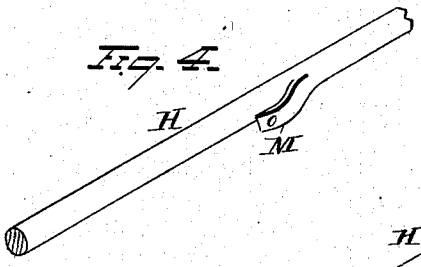
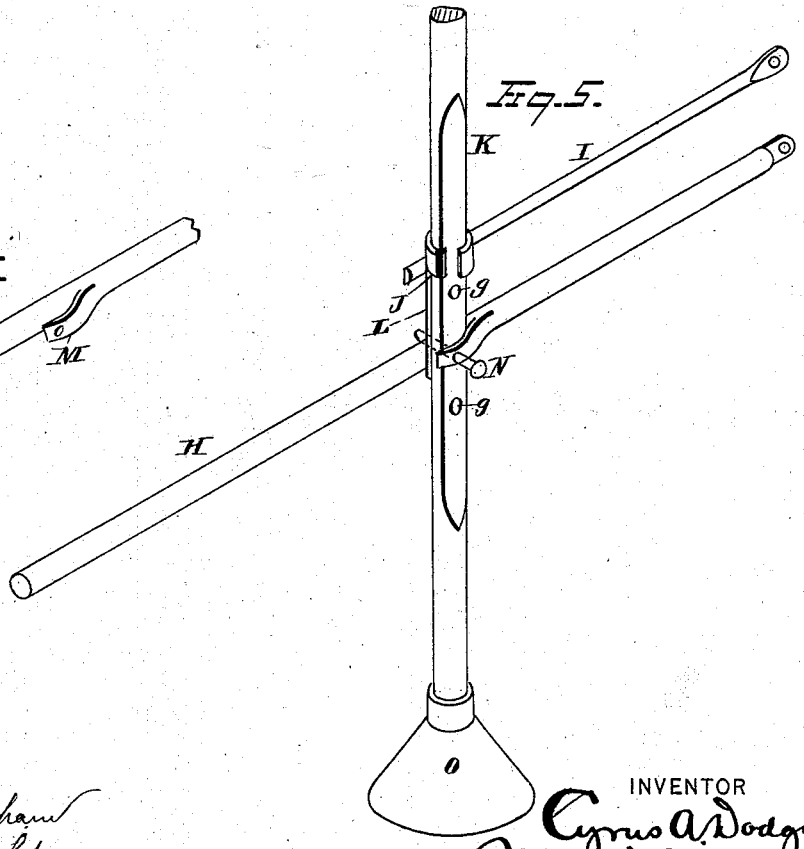



Fig. 5.




WITNESSES
E. J. Nottingham
A. W. Bright

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

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

4 Sheets—Sheet 3.

# C. A. DODGE.

## Pounder Washing-Machine.

No. 205,366. Patented June 25, 1878.

Fig. 6.

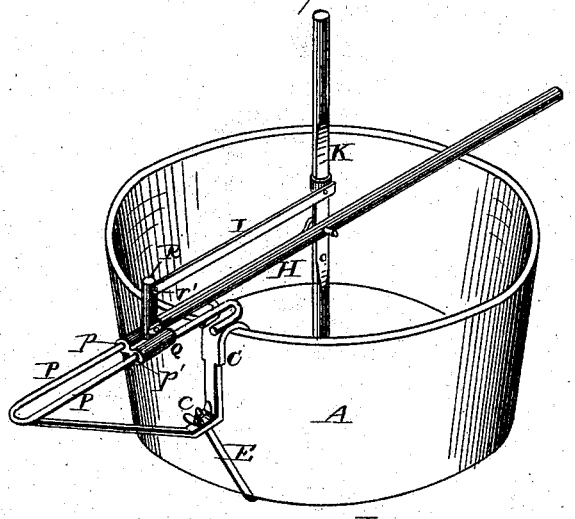



Fig. 7.

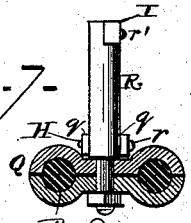
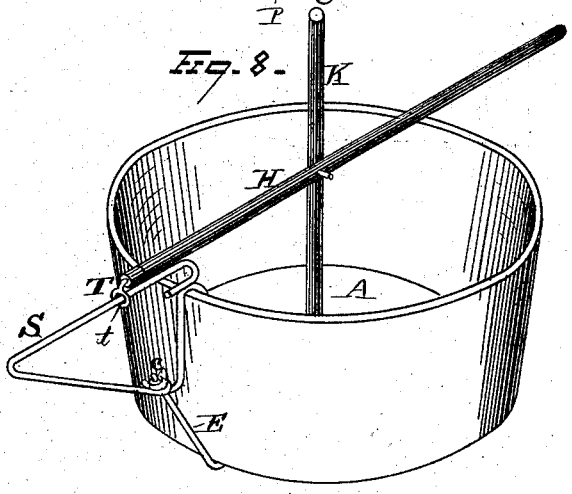



Fig. 8.




WITNESSES

E. L. Nottingham

A. W. Bright

INVENTOR

Cyrus A. Dodge

By H. A. Sammons

ATTORNEY

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

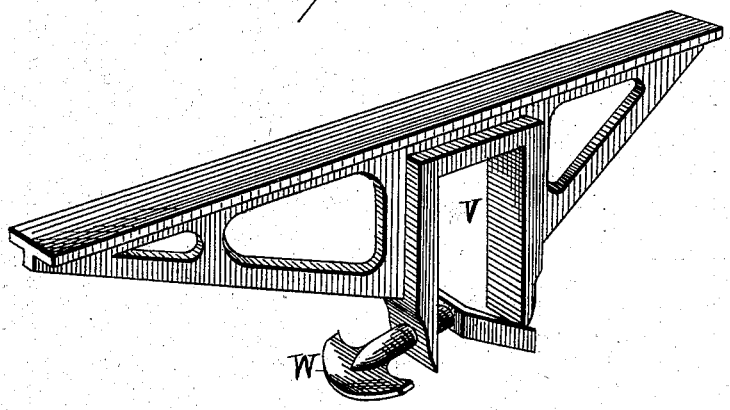
4 Sheets—Sheet 4.

# C. A. DODGE.

## Pounder Washing-Machine.

No. 205,366. Patented June 25, 1878.

Fig. 9.




WITNESSES

E. F. Nottingham

A. W. Bright

INVENTOR

Cyrus A. Dodge.

By H. A. Seymour

ATTORNEY

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

CYRUS A. DODGE, OF MIDDLEBURY, VERMONT.

## IMPROVEMENT IN POUNDER WASHING-MACHINES.

Specification forming part of Letters Patent No. **205,366**, dated June 25, 1878; application filed June 15, 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 Pounder 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 a washing-machine of such construction that the actuating-lever to which the pounder-shaft is pivoted shall be supported on a guideway extending outwardly from the tub, whereby the pounder may be freely moved to any part of the tub.

My invention consists, first, in the combination, in a pounder washing-machine with a slide supported on a guide bar or rod extending outward from the edge of the tub, of an actuating-lever provided with a pounder-shaft having a pounder attached thereto, whereby the actuating-lever may be freely moved toward or away from the center of the tub.

My invention further consists in the combination, in a pounder washing-machine with a slide provided with a swiveled bearing, said slide supported on a guide rod or bar extending outward from the edge of the tub, of an actuating-lever provided with a pounder-shaft having a pounder attached thereto, one end of said actuating-lever being pivoted or hinged to said swiveled bearing, whereby the actuating-lever may be freely moved either in a longitudinal, lateral, or vertical direction.

My invention further consists in the combination, in a pounder washing-machine, with a guide rod or bar extending outward from the tub, and a slide provided with a swiveled bearing, of an actuating-lever and equalizing-bar, both being pivoted to said swiveled bearing on the slide.

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

In the accompanying drawings, Figure 1 is a view, in perspective, of my improved washing-machine. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical section taken through the swiveled bearing, slide, and guide bar or rod. Fig. 4 is a detached view of the holder for the pounder-shaft, and Fig. 5 is an enlarged view of the pounder-shaft holder secured in place for operation. Figs. 6 and 7 are different views of one form of modification. Fig. 8 represents another form of modification. Fig. 9 represents still a different form of modification.

A represents an ordinary tub. B is a guide bar or rod, extending outward from the tub and secured thereto, as follows: C is a fastening-bar, provided with an upper hooked end, *a*, which fits over the edge of the tub, and to this bar is rigidly secured one end of the guide-bar B. The bar C is of less width than the guide-bar, in order that the slide, hereinafter described, may be moved the entire length of the guide-bar. The lower end of fastening-bar C is provided with a clip or saddle-plate, *b*, the central portion of which is attached to bar C, while its ends rest against the tub. D is a brace, attached at its upper end to the outer end of the guide bar or rod, while its lower end is secured to or merges into the lower end of the bar C, which is outwardly bent, and perforated to receive the screw-threaded end of the tightening-rod E, the latter being held in place and adjusted by means of a thumb-nut, *c*. The lower end of rod E is bent into hook form, and engages with the lower edge of the tub.

From the foregoing it will be observed that the guide-bar is most firmly braced throughout its length, and is adapted to be removably secured to any size of tub.

F represents a slide, the lower ends of which extend beneath the guide bar or rod, so that it may be freely moved to and fro on the same. To the upper face of the slide is attached a stud or pin, *d*, upon which is placed a sleeve, G, which is adapted to be freely rotated on said pin or stud. Sleeve G is provided at its upper and lower ends with ears *e*, between which are pivoted the ends of the actuating-lever H and equalizing-bar I. The opposite end of the equalizing-bar is pivoted to a holder, J, the upper end of which is provided with

jaws *f*, or a ring which embraces the pounder-shaft K.

A bar or plate, L, depends from the jaws or ring *f*. A keeper, M, is attached to the actuating-lever H.

The pounder-shaft is provided with any number of holes, *g*, whereby it may be secured to the actuating-lever in a vertically-adjustable manner by means of the pin N, which latter passes through the keeper M, pounder-shaft K, bar or plate L, and actuating-lever H.

It will thus be observed that the position of the equalizing-bar and actuating-lever relative to the pounder-shaft may be readily varied, as desired, by simply changing the position of the single bearing-piece N.

The equalizing-bar I is arranged parallel with the actuating-lever H; and as the swiveled sleeve, to which the outer ends of said equalizing-bar and actuating-lever are pivoted, always maintains a fixed vertical position it follows that the pounder-shaft holder I will always be maintained in a vertical position, as it is pivoted to both the equalizing-bar and actuating-lever.

From the foregoing it will be observed that the actuating-lever may be freely moved either in a longitudinal, lateral, or vertical direction, and thus carry the pounder O to any part of the tub.

Figs. 6 and 7 represent a modified form of construction. The guide in this instance consists of the parallel rods P, and the slide Q is provided with two openings, *p p'*, which receive the rods and retain the slide in horizontal position.

Slide Q may be made of a sheet-metal plate, with looped sides to receive the parallel rods; or it may consist of two sheet-metal plates provided with curved sides; or it may be of cast metal, as may be desired.

R is a swiveled upright, extending down through the central portion of the slide Q, and held in place by means of a head formed on the lower end of the upright, or by a nut.

The actuating-lever is formed with a bifurcated end, the arms *q* of which straddle the upright, and are pivoted thereto by a pin, *r*. The outer end of the equalizing-bar is pivoted directly to the upper end of the upright by a pin or rivet, *r'*, while the opposite end of said bar may be secured in place by a holder, as heretofore described; or the end portion of the bar may be turned at a right angle to its length and inserted in one of the holes in the pounder-shaft.

Fig. 8 represents another modification, wherein the equalizing-bar is dispensed with. In this case the guide may be a round rod, S, and the actuating-lever connected therewith by an eyebolt, T, the eye *t* of which surrounds the guide-rod, while the shank of the bolt is inserted and secured in the end of the actuating-lever. This form of construction will also allow the actuating-lever to be moved freely either in a longitudinal, lateral, or vertical direction.

In Fig. 9 the guide-bar and inverted U-shaped clamp are cast in a single piece, and preferably in skeleton or open-work form, as shown in the drawing.

The clamp V, which embraces the upper edge of the tub, is provided with a thumb-screw, W, by which the device is securely attached to the tub.

From the foregoing it is evident that my invention may be embodied in various forms of construction, and hence I do not limit myself to the exact construction shown and described.

I do not herein claim the particular clamping device which consists of the vertical rod, screw-threaded at one end and provided at its lower extremity with a hook to fit over the chine of a tub, in combination with the hooked clamp, which latter fits over the upper edge of the tub, said clamp being perforated to slide on the vertical rod, and adjustably secured thereto by a nut. The said clamping device constitutes the subject-matter of an application for patent filed by me of earlier date than this, and hence I desire to be understood as not including the same herein.

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 stationary guide-bar equal in length to the desired longitudinal movement to be imparted to the actuating-lever, said guide-bar adapted to be removably secured to the tub and extend outwardly therefrom, of an actuating-lever provided with a pounder-shaft, one end of said lever being connected with said guide-bar and adapted to be moved vertically, laterally, and longitudinally, the extreme end of the lever being at all times supported by the guide-bar, substantially as set forth.

2. In a pounder washing-machine, the combination, with a stationary guide-bar equal in length to the desired longitudinal movement to be imparted to the actuating-lever, said guide-bar adapted to be removably secured to the tub and extend outwardly therefrom, of a slide provided with a swiveled bearing, said slide adapted to be freely moved to and fro upon said stationary guide-bar, and an actuating-lever provided with a pounder-shaft and pounder, said lever pivoted at one end to said swiveled bearing on the slide, substantially as set forth.

3. In a pounder washing-machine, the combination, with a stationary guide-bar equal in length to the desired longitudinal movement to be imparted to the actuating-lever, said guide-bar adapted to be removably secured to the tub and extend outwardly therefrom, of a slide provided with a swiveled bearing, said slide adapted to be moved to and fro upon said stationary guide-bar, and an actuating-lever and equalizing-bar, the outer ends of which are pivoted to the swiveled bearing on the slide, substantially as set forth.

4. A stationary guide bar or rod equal in length to the desired longitudinal movement to be imparted to the actuating-lever, and adapted to support one end of the actuating-lever throughout its movement toward and from the center of the tub, said guide bar or rod having an inverted U-shaped clamp cast in a single piece therewith, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of June, 1878.

CYRUS A. DODGE.

Witnesses:
A. W. CADMAN,
GEO. H. WALDO.