Charles Fortin.

Washing Machine.

117400

PATENTED JUL 25 1871

Fig. 1.

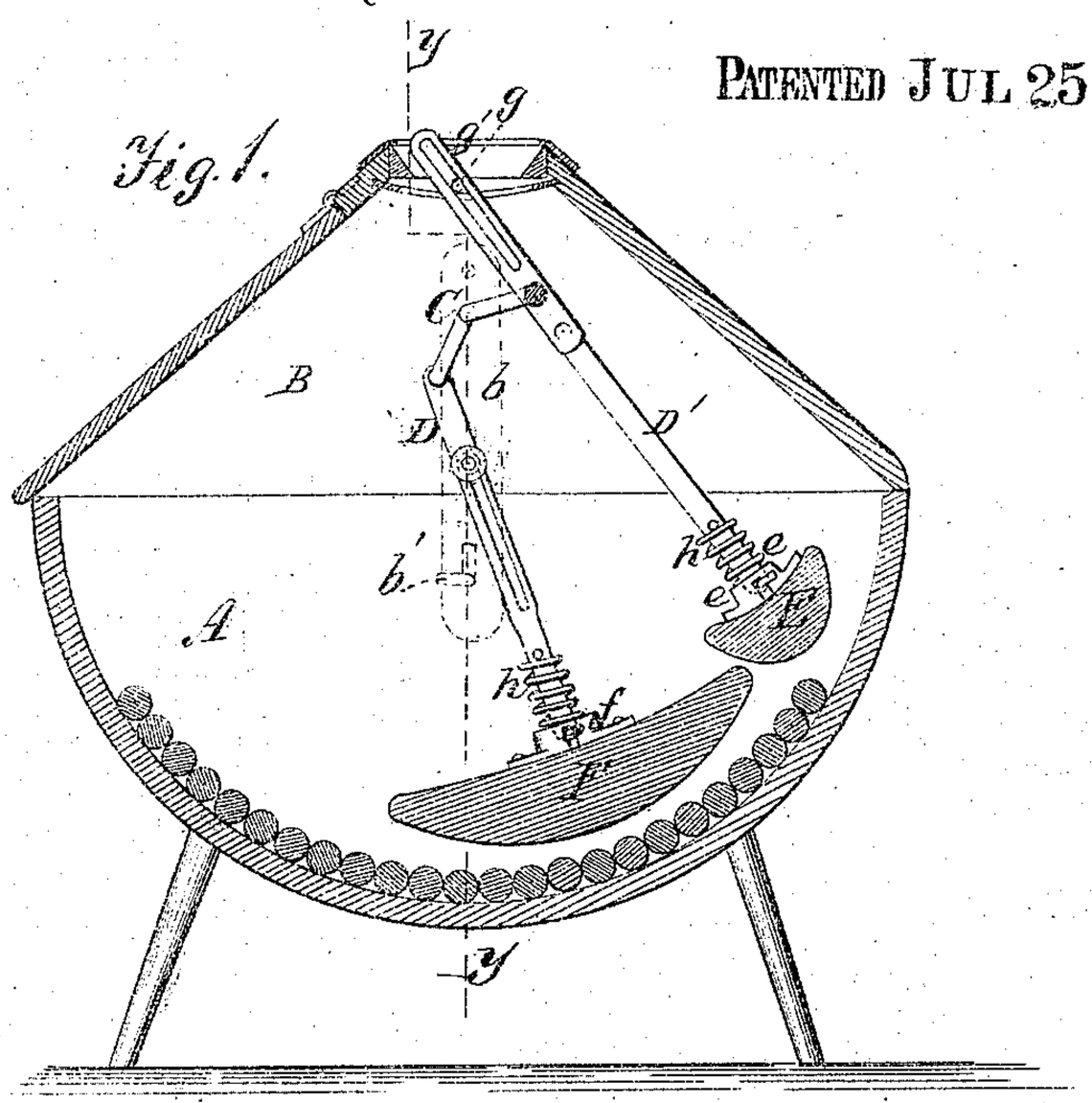


Fig. 2.

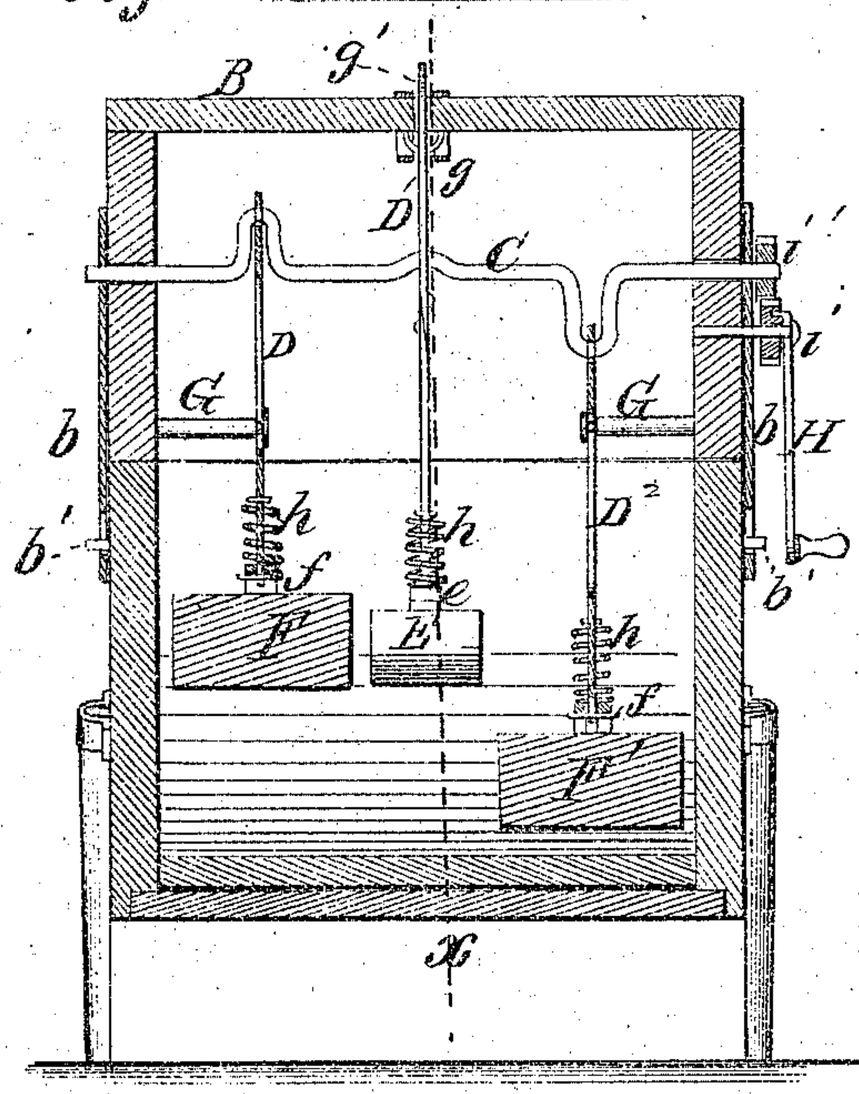
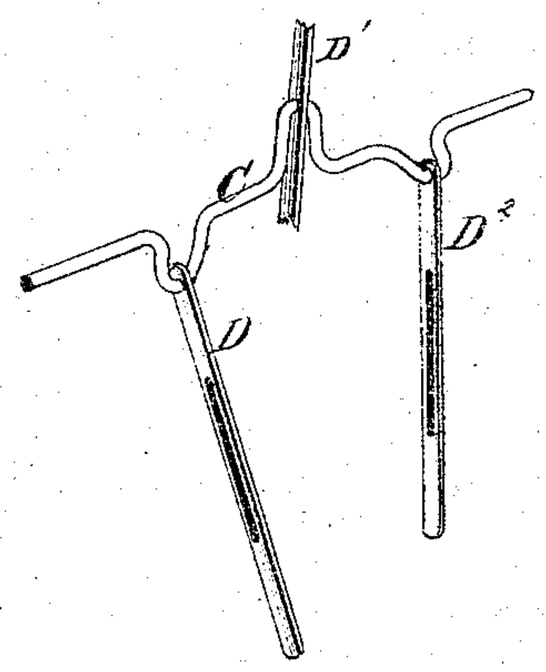


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES FORTIN, OF POULTNEY, VERMONT.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 117,400, dated July 25, 1871.

To all whom it may concern:

Be it known that I, CHARLES FORTIN, of Poultney, in the county of Rutland and State of Vermont, have invented a certain new and useful Improvement in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of the same, and in which—

Figure 1 represents a vertical section of my improved washing-machine taken through the line *x x* of Fig. 2. Fig. 2 is a similar view taken through the line *y y* of Fig. 2, and Fig. 3 is a perspective view of the crank-shaft carrying the rubber and beater-shafts.

Similar letters of reference in the several figures refer to like parts.

This invention has reference to an improved washing-machine; and it consists of a peculiarly-constructed crank-shaft, in combination with shafts carrying the beater and rubbers, and of the general construction, combination, and arrangement of the constituent parts thereof, substantially as hereinafter more fully described and claimed.

To enable others to make and use my invention, I will proceed to describe it.

In the annexed drawing, A refers to a receptacle, within which the clothes to be washed are placed, made of a semi-cylindrical shape and supplied with a series of transverse stationary rollers, which assist the rubbers in performing the operation of washing the clothes or articles being cleansed, and legs for its support. B refers to a conically-shaped cover or case, resting and fitting upon the upper edges of the receptacle A, to which it is so attached by means of metallic slotted plates and buttons, marked respectively *b b'*, as that it can be readily and conveniently attached to and detached from the said receptacle. This cover or case is supplied with a lid, by means of which the removal of the said cover is obviated when it is desired to introduce the articles to be washed into the receptacle A, as it will be seen, by merely raising the said lid, the said articles can be thrust into the latter. C refers to the crank-shaft, having its bearings in the sides of the cover B, and supplied with three loops, each one of which has a different angular position, as plainly shown in Fig. 3, and receive the shafts D D^1 D^2, to the center one of which shafts is fastened the beater E, the remaining ones thereof being attached at their lower ends to the rubbers F F'. By so constructing the said crank-shaft, or giving its loops or cranks different angular positions, the rubbers E E and beater F are each, as the said crank is revolved, brought in contact with the articles being cleansed at different points upon their surface and at different times, whereby a continuous rubbing and pounding of the said articles is obtained while the machine is in operation, and, at the same time, the whole of the surface thereof subjected simultaneously to the cleansing process of the said rubbers and beater. Each of the shafts D D^1 D^2 is supplied with a vertical elongated slot, those in the shafts D D^2 receiving the reduced and headed or nutted portions of horizontal bars or guides G G, fastened to the inner sides of the removable cover B, while that in the central or beater-shaft D^1 receives a similarly-located bar or rod, *g*, secured in the apex of the cover B by means of metallic strips or rails, between which the said shaft passes, and from which the latter extends up through a transverse slot, *g'*, cut in the top of the said cover B, as shown in Figs. 1 and 2, the object of which slot being to allow of the said beater-shaft having the requisite movement in performing its office or function. The rubbers F F' and beater E are provided upon their upper sides with shanks or necks *f f* and *e*, which are furnished with vertical slots, (see Fig. 1,) through which pass pins entering apertures in the lower extremities of the shafts D D^1 D^2, for securing the latter to the former, the object of said slots being to permit of the rubbers and beater having vertical movement, whereby they may accommodate themselves to the different thicknesses of the articles being cleansed. *h h h* are spiral springs, embracing the lower portions of the shafts D D^1 D^2, and pressing at their upper extremities against pins passing through said shafts, and resting at their lower extremities upon the shanks *f f e* of the rubbers and beater. These springs are for the purpose of assisting in holding the rubbers and beater properly in place upon their shafts; and, also, after they have been elevated by the articles being cleansed, and, when removed therefrom, to cause them automatically to return to their original positions. H refers to a crank or handle, connected to a pinion or cog, *i*, having

its axle attached to the cover B and gearing with another pinion secured to the projecting end of the crank-shaft C.

By revolving the handle H motion is communicated to the various operative parts of the machine, and the operation of cleansing the articles to be washed commenced, they having been previously introduced with the water for that purpose in the receptacle A.

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

1. The crank-shaft C, constructed as described, in combination with the shafts D D^1 D^2, beater E, and rubbers F F′, arranged to operate substantially as shown and for the purpose described.

2. The receptacle A, cover B with the slot *g′* and bar or guide *g*, crank-shaft C, slotted shafts D D^1 D^2, beater E, rubbers F F′, guides G G, springs *h h*, pinions *i i′*, and crank H, all combined and arranged to operate substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 20th day of June, A. D. 1871, in presence of two subscribing witnesses.

CHARLES FORTIN.

Witnesses:
BARIUS FRISBIE,
S. L. WARD.