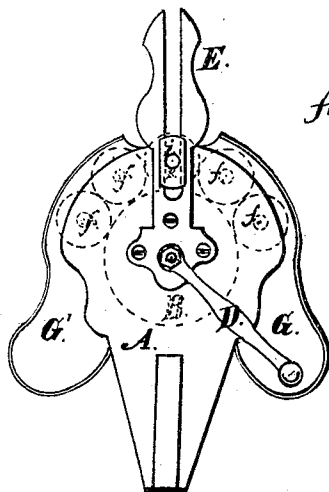
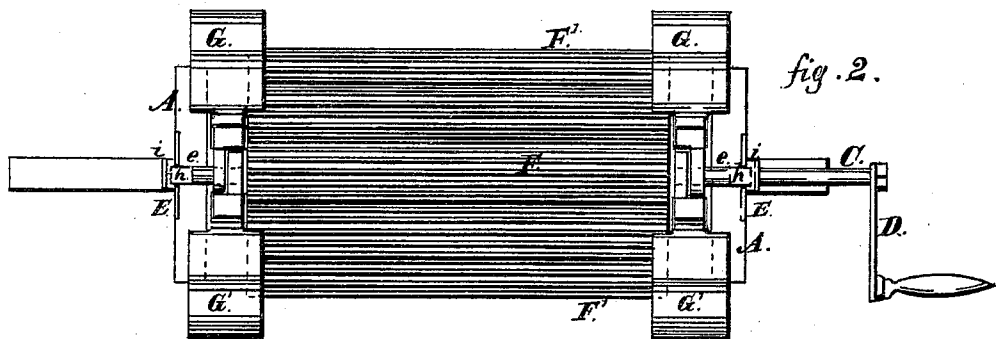
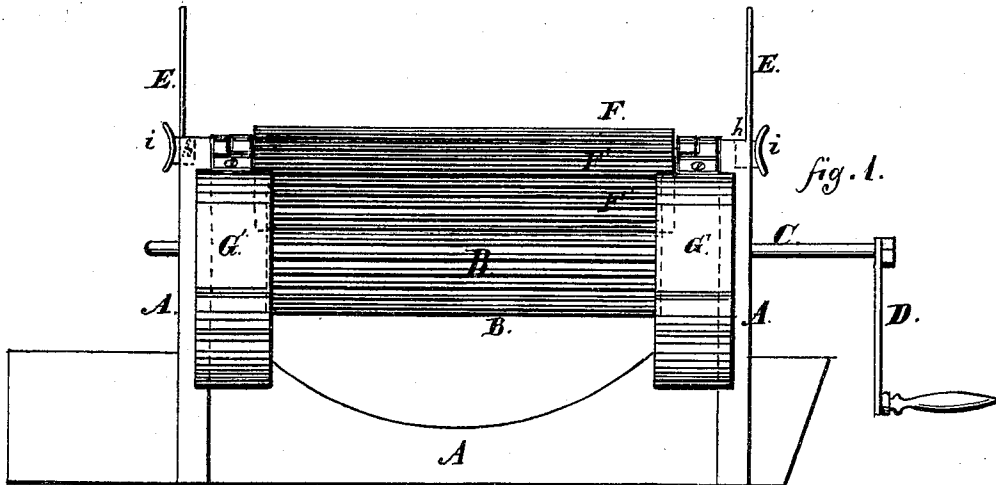


C. W. SHERER.
Washing-Machines.

No. 142,742.

Patented September 9, 1873.



Witnesses:

John W. Munday
Heinr. F. Bruns

Inventor:

Chas. W. Sherer

UNITED STATES PATENT OFFICE.

CHARLES W. SHERER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **142,742**, dated September 9, 1873; application filed July 21, 1873.

To all whom it may concern:

Be it known that I, CHARLES W. SHERER, of Chicago, in the county of Cook and State Illinois, have invented certain Improvements in Washing-Machines, of which the following is a specification:

This invention relates to that class of washing-machines in which the garments to be washed are passed between fluted rollers; and the present invention consists in employing a central roller, to which is applied the power, and a series of overlying rollers, surrounding the central, said overlying rollers being pivoted in a hinged weighted frame-work, and adapted to slide up and down all together in a slide-way, to adapt them to various thicknesses of goods or garments. The advantage of having the rollers swing in a weighted frame over the use of springs consists in the fact that, when springs are compressed, the pressure they exert increases, so that when a thick or folded piece of cloth or garment passes through between spring-compressed rollers it receives a greater pressure than a thin or unfolded piece would; while the weighted frame always exerts the same pressure, which pressure may be gaged to exactly the right amount to allow the cloth to remain saturated always with suds, no matter how thick or how thin; and the invention further consists in the peculiar construction and combination of parts hereinafter more fully explained.

In the accompanying drawing, which forms a part of this specification, Figure 1 represents a side view of my improved washing-machine. Fig. 2 is a top or plan view of the same. Fig. 3 is an end view thereof.

Like letters of reference, made use of in the several figures, indicate like parts wherever used.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same.

In said drawing, A represents the supporting-frame of the mechanism, by means of which it may be applied to a common wash-tub. B is the central fluted roller, carried by the shaft C, having bearings in the said main frame. D is the winch or crank, by

which said central roller is turned. Attached to the standards of the main frame at each end is a guide-plate, E, made with a central slot to receive and retain the ends of the shaft *e*, upon which or with which the upper central roller F turns. This upper central shaft *e* serves also as a pivot, upon which swing the parts of the weighted hinged frame pieces G G'. These frame pieces are connected together by rods or shafts *f*, upon which are placed rollers F' like the roller F. I prefer to have these upper rollers F' five in number, as that number produces the best result at the least expense. The pieces G G' are weighted, or are made of solid metal, large enough to give them proper weight, as shown in the drawing. The rods *f* and *e* connect the frame G G' together so strongly as to prevent any torsion or twist when raised by the clothes passing between the rollers. To the outer ends of the shaft or rod *e* are affixed the buttons *h h*, which are made with rocker-ends, as shown at *i*, so that one end of the upper system of rollers may be raised higher than the other without the buttons binding. The upper system or arc of rollers F F' move together, and rest upon the cloth to be washed, which is fed between said system and the central roller B, upon which the arc of rollers rests.

Having thus fully described my invention, that which I deem new, and desire to secure by Letters Patent, is—

1. The arc of fluted rollers F F', bearing in the hinged weighted frames G G', in combination with the central roller B, substantially as specified.

2. The hinged weighted frame pieces G G', connected together by the rigid rods *e f*, upon which turn loosely the rollers F F', as specified.

3. The arc of fluted rollers F F', bearing in the weighted frame G G', in combination with the rocker-shaped buttons *h h*, attached to the ends of the rod *e*, and the upright slotted guide-plates E, as specified.

CHAS. W. SHERER.

Witnesses:

HEINRICH F. BRUNS,
JOHN W. MUNDAY.