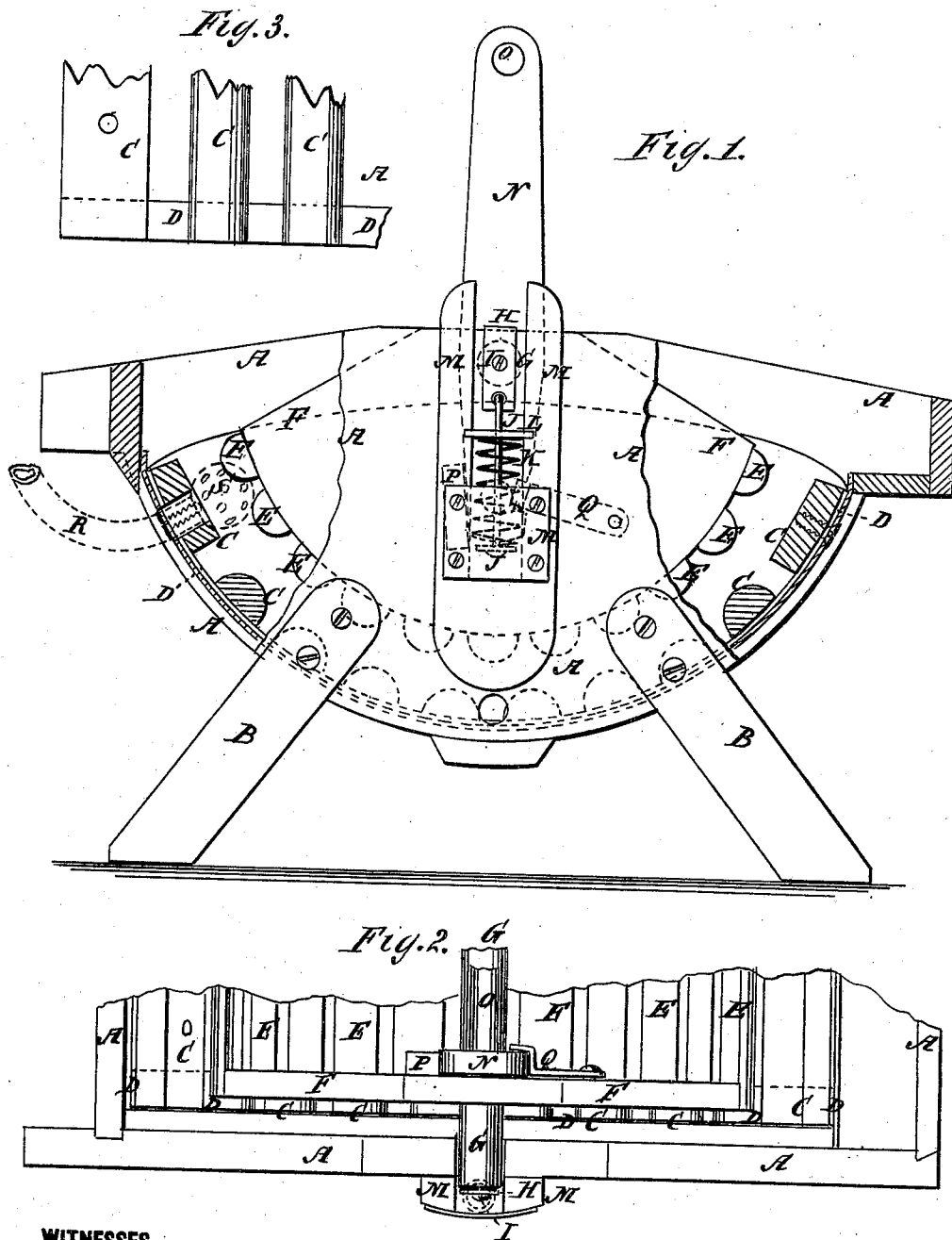


F. M. HELLSTROM.
 WASHING-MACHINE.

No. 177,505.

Patented May 16, 1876.



WITNESSES:

E. Wolff.
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INVENTOR:

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UNITED STATES PATENT OFFICE.

FRANZIS M. HELLSTROM, OF LAWRENCE, KANSAS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **177,505**, dated May 16, 1876; application filed March 21, 1876.

To all whom it may concern:

Be it known that I, FRANZIS M. HELLSTROM, of Lawrence, in the county of Douglas and State of Kansas, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification:

Figure 1 is a side view of my improved washing-machine, parts being broken away to show the construction. Fig. 2 is a detail top view of a part of the same. Fig. 3 is a detail top view of a part of the suds-box.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for washing clothes which shall be simple in construction, convenient in use, and effective in operation, washing the clothes quickly and thoroughly.

The invention consists in the combination of the perforated plates, the rods, the spiral springs, and the stop-plates with the shaft of the movable rubber, and with the suds-box; in the lever-handle pivoted to the shaft of the movable rubber, and connected with the disks of said rubber by the cleats, and the buttons or catches.

A represents the suds-box, which is made semi-cylindrical in form, and is provided with a lining. The suds-box A is provided with legs B, of such a length as to support the machine at a convenient height. The rubbing-surface of the suds-box A is formed by attaching half-round or polygonal strips C of wood at their ends to strips of zinc D.

The movable rubber is formed by attaching half-round or polygonal strips E of wood to the curved edges of segmental disks F. G is a shaft, which passes through and is attached to the disks F at the center of the circles of which said disks are parts. The ends of the shaft G project and work in notches in the centers of the upper edges of the ends of the suds-box A, and to said ends are attached headed pins I, or upon them are formed necks to receive small perforated plates H, the holes of which are made large enough to enable the

said plates to be readily slipped on and off. To the lower ends of the plates H are pivoted the upper ends of the rods J, to the lower ends of which are attached disks, or upon them are formed heads, for the lower ends of the coiled springs K to rest upon. The upper ends of the springs K rest against plates L, inserted in grooves formed in or are otherwise secured to the box M, that incloses the springs K and rods J, and through holes in which plates the said rods J work.

The box M may be a slotted strip, covered by a plate to confine the springs K, and which are attached to the end boards of the suds-box A.

N are levers, the middle parts of which are perforated to receive the shaft G, and their upper and lower ends are connected by rounds O. When the levers N are arranged in a vertical position their lower ends rest against cleats P, attached to the disks F of the movable rubber, against which they are locked by the buttons or catches Q, pivoted to said disks and turned against the said levers, so that the rubber E F will be operated by operating the levers N, and so that, by turning back the buttons Q, the levers N may be turned down for convenience in storage and transportation.

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

1. The combination of the perforated plates H, the rods J, the spiral springs K, and the stop-plates L with the shaft G of the movable rubber E F, and with the suds-box A, substantially as herein shown and described.

2. The lever-handle N O, pivoted to the shaft G of the movable rubber E F, and connected with the disks F of said rubber by the cleats P and buttons or catches Q, substantially as herein shown and described.

FRANZIS M. HELLSTROM.

Witnesses:

O. P. KENNEDY,

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