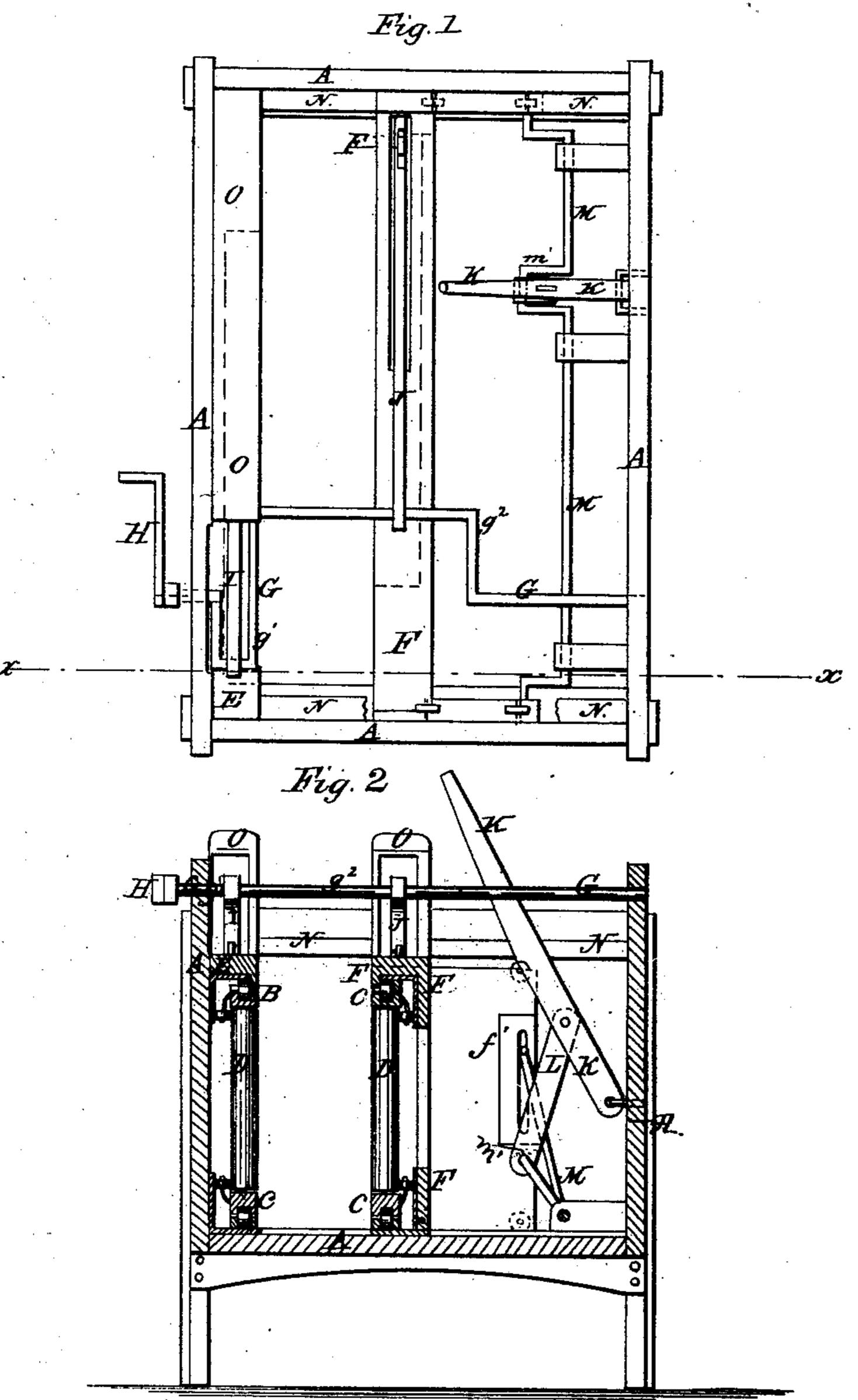
# S. R. Holmes, Washing Machine, Patented Oct. 8, 1867.

Nº69668.



Mitnesses: The Trusche Treventor: Per Mun fo Attorneys

# Anited States Patent Office.

# SAMUEL R. HOLMES, OF SALEM, OREGON.

Letters Patent No. 69,668, dated October 8, 1867.

## IMPROVED WASHING MACHINE.

The Schedule referred to in these Tetters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, Samuel R. Holmes, of Salem, in the county of Marion, and State of Oregon, have invented a new and improved Washing Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of my improved machine.

Figure 2 is a vertical cross-section of the same, taken through the line x x, fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved washing machine, by means of which the clothes may be easily, quickly, and thoroughly washed, which will not wear or tear the clothes, and which may be operated with a small outlay of power; and it consists of the rollers and roller-frames, placed in a vertical position and vibrating at the same time in opposite directions; in the combination of the double crank and pittaen with the vertical roller-frames and with the box of the machine; in the combination of the lever, connecting-bar, crankshaft, and sliding frame with each other, and with the roller-frame and box, the whole being constructed and arranged as hereinafter more fully described.

A is the box of the machine, which is made rectangular in form, as shown in the drawings. B and C are the roller-frames, in which are pivoted the rollers D. The frame B slides back and forth along the side of the box A, and is furnished at its top, bottom, and rear sides with friction-rollers, rolling along metal plates, attached to the bottom and side of the tub or box, and to the longitudinal bar E attached to the side of said box. The roller-frame C moves back and forth in a frame, F, and is furnished with friction-rollers or wheels upon its top, bottom, and rear sides, which roll along metal plates attached to the said frame F. G is a crank-shaft, revolving in bearings in the sides of the box A, near one end, and to the projecting end of which is attached the crank H by which the machine is operated. Upon the shaft G are formed two cranks,  $g^1g^2$ , upon opposite sides of the axis of said shafts, as shown in fig. 1, the crank-arm of the crank  $g^2$  being made long. To the cranks  $g^1$  and  $g^2$ are pivoted the pitmen I and J, the other ends of which are pivoted to the roller-frames B and C, so that as the shaft G is revolved the said frames B'and C may be made to move back and forth, the frames moving always in opposite directions. K is a lever, the lower end of which is pivoted to the side of the box A, in the rear of the frame F. To the middle part of the lever K is pivoted the upper end of the connecting-bar L, the lower end of which is pivoted to the crank m' formed upon the shaft M. The shaft M works in bearings attached to the bottom of the box A, and has crank-arms formed upon its ends which enter and work in slotted plates f', attached to the ends of the frame F, so that as the crank-shaft M is operated by the lever K the frame F, and with it the roller-frame C, will be moved nearer to or further from the roller-frame B, so that the distance between the roller-frames B and C may be regulated at pleasure, according to the amount of clothes being washed and the amount of pressure desired to be applied to them. The sliding frame F is provided with frictionwheels or rollers upon its upper and lower edges, which roll along metal plates attached to the bottom of the box and to the cross-bars N attached to the ends of the box A. The pitmen I and J and their points of connection with the frames B and C may, if desired, be covered with caps O, as shown in figs. 1 and 2.

What I claim as new, and desire to secure by Letters Patent, is-

1. The rollers D and roller-frames B and C, placed in a vertical position, and vibrating at the same time in opposite directions, in combination with each other and with the box A, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the double crank G and pitmen I and J with the vertical roller-frames B and C,

and with the box A, substantially as herein shown and described, and for the purpose set forth.

- 3. The combination of the lever K, connecting-bar L, crank-shaft M, and slotted plates f', with each other, and with the box A and sliding frame F, substantially as herein shown and described, and for the purpose set forth.
- 4. The combination of the roller-frame C and sliding frame F with each other, substantially as herein shown and described, for the purpose of giving to the said roller-frame a longitudinal and lateral movement at the same time.

SAMUEL R. HOLMES.

Witnesses:

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