# P.F. Bindewald, Washing Machine.

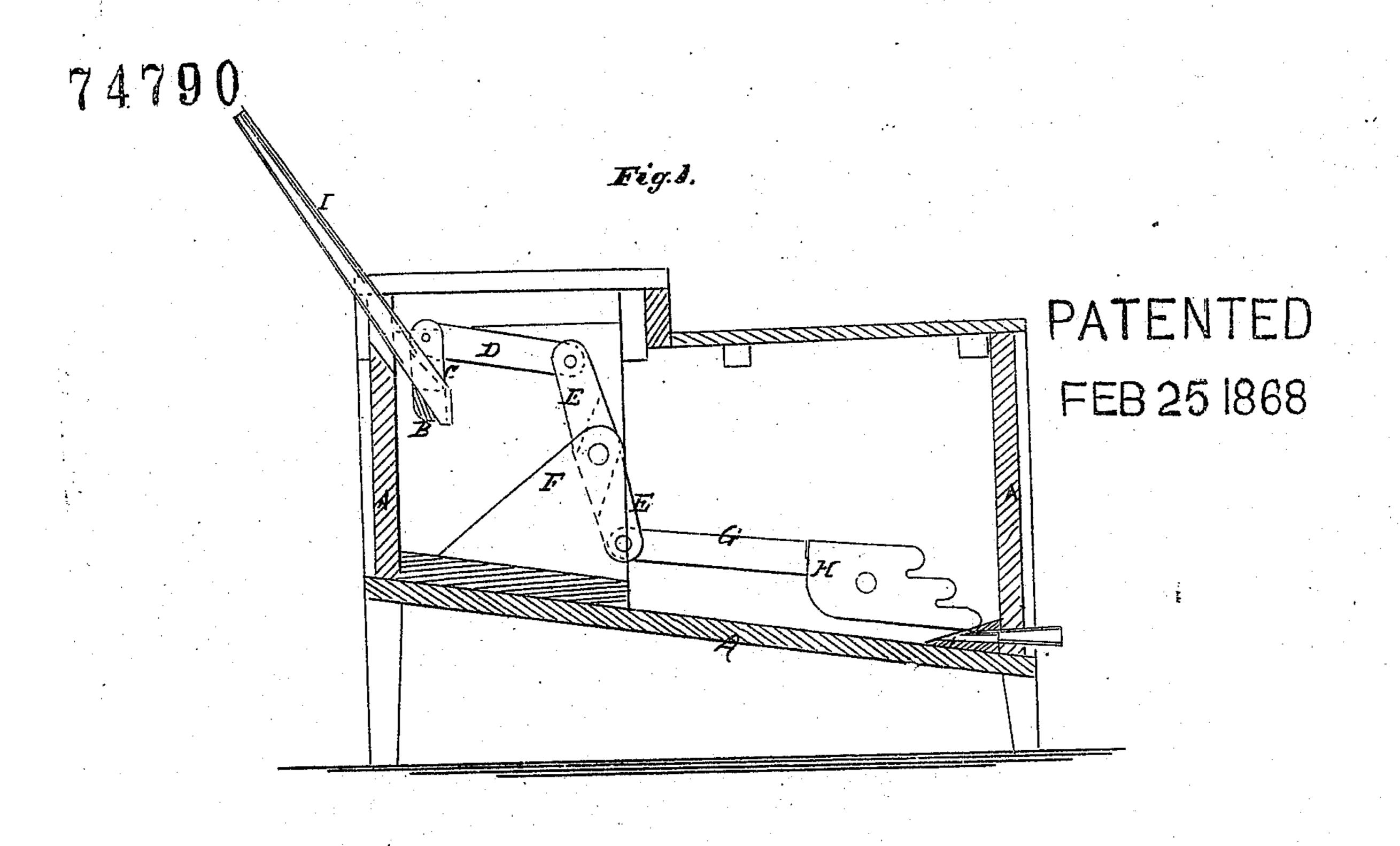
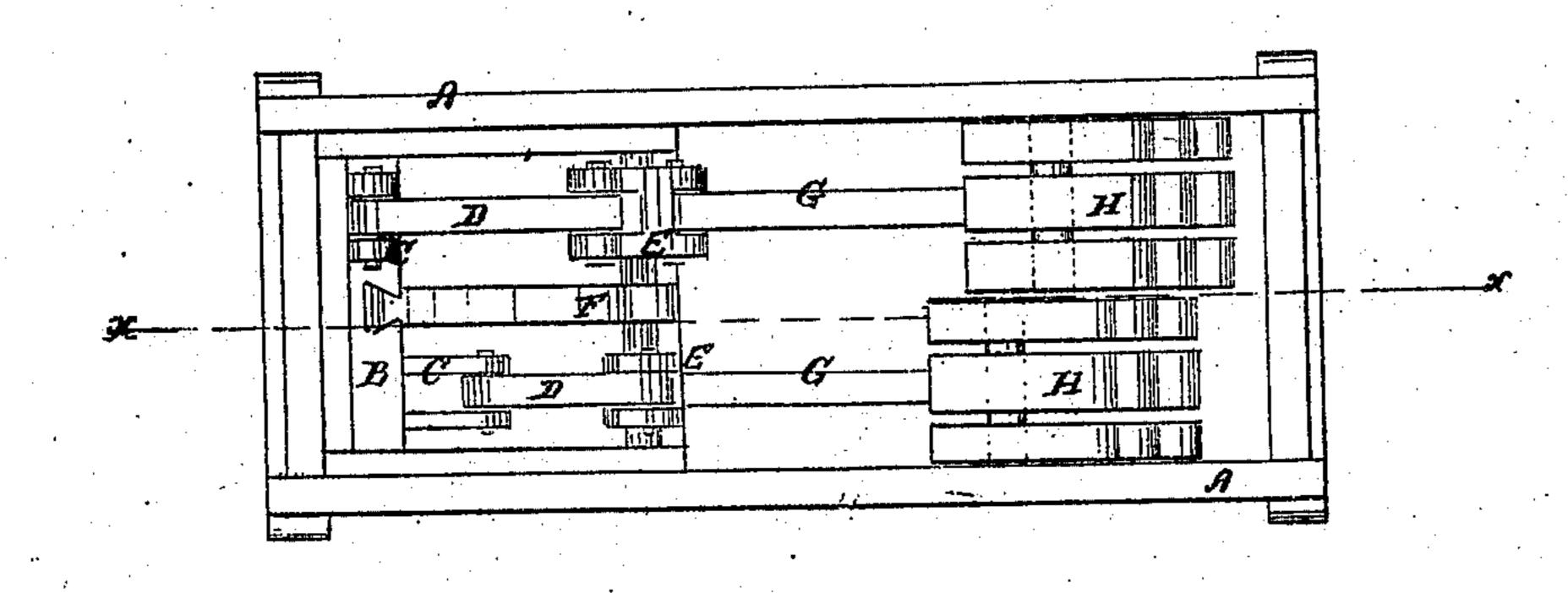


Fig. 2.



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# Anited States Patent Pffice.

## P. F. BINDEWALD, OF STRONGSVILLE, OHIO.

Letters Patent No. 74,790, dated February 25, 1868.

### IMPROVED WASHING-MACHINE.

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

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, P. F. BINDEWALD, of Strongsville, in the county of Cuyahoga, and State of Ohio, 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.

Figure 1 is a vertical longitudinal section of my improved machine, taken through the line x x, fig. 2.

Figure 2 is a top or plan view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine, simple in construction, easily operated, effective in operation, and which shall be made wholly of wood, so that there may be no danger of the clothes being injured by iron-rust; and it consists in the combination and arrangement of the various

parts of the machine, as hereinafter more fully described.

A is the box or tub of the machine, which is made rectangular in form, and is supported upon legs of such a length as to raise the machine to such a height as to be conveniently operated. The bottom of the tub or box A inclines downward, as shown in fig. 1, to near the forward end of said box, where it inclines upward. This upward inclination may be formed by securing a triangular piece in the bottom of the box, at its forward end, as shown in fig. 1. B is a shaft, the ends of which work in bearings formed in or attached to the upper part of the sides of the box of tub A, at its rear end, as shown in fig. 1. To the sides of the shaft B are rigidly attached arms C, in such positions as to be at right angles to each other, as shown in fig. 2. To the ends of the arms C are pivoted the rear ends of the connecting-bars or rods D, the forward ends of which are pivoted to the upper ends of the levers E. The levers E are pivoted, at or near their middle parts, to the sides of the box or tub A, and to a central standard or support, F, attached to the bottom of the rear part of the tub or box A, between the two levers E, as shown in figs. 1 and 2. To the lower ends of the levers E are pivoted the rear ends of the arms G, to the forward ends of which are attached the beaters H. The beaters H are made in the form shown in figs. 1 and 2, that is to say, each of said beaters consists of three or more thick plates, placed edgewise, and side by side, and which are so connected to each other as to leave a narrow space between said plates to allow the free passage of the water as the clothes are being operated upon. The forward ends of the beaters H are made in the form shown in the drawings, that is, in the form of steps, with a groove in the angles of the steps, as shown, so that as the said beaters are forced forward against the clothes, the said clothes may not only be beat or pounded against the forward end of the box or tub, but also raised or lifted up, so that upon the withdrawal of the beaters they may fall back and partially turn over, presenting a different part to be acted upon at each forward movement of the said beaters. The beaters H are moved back and forth alternately by operating the shaft B, which is done by means of a hand-lever, I, inserted in a mortise formed in said shaft, and the upper end of which passes out through a slot in the rear part of the cover of the machine, as shown in fig. 1.

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

The combination and arrangement of the lever I, shaft B, arms C, connecting-bars D, pivoted levers E, arms G, and beaters H, constructed as described, with each other and with the box or tub A, substantially as herein shown and described, and for the purpose set forth.

P. F. BINDEWALD.

Witnesses:

M. STONE,

N. SMITH.