

H. Bucknall,

Washing Machine,

Nº 55,610,

Patented June 19, 1866.

Fig: 1.

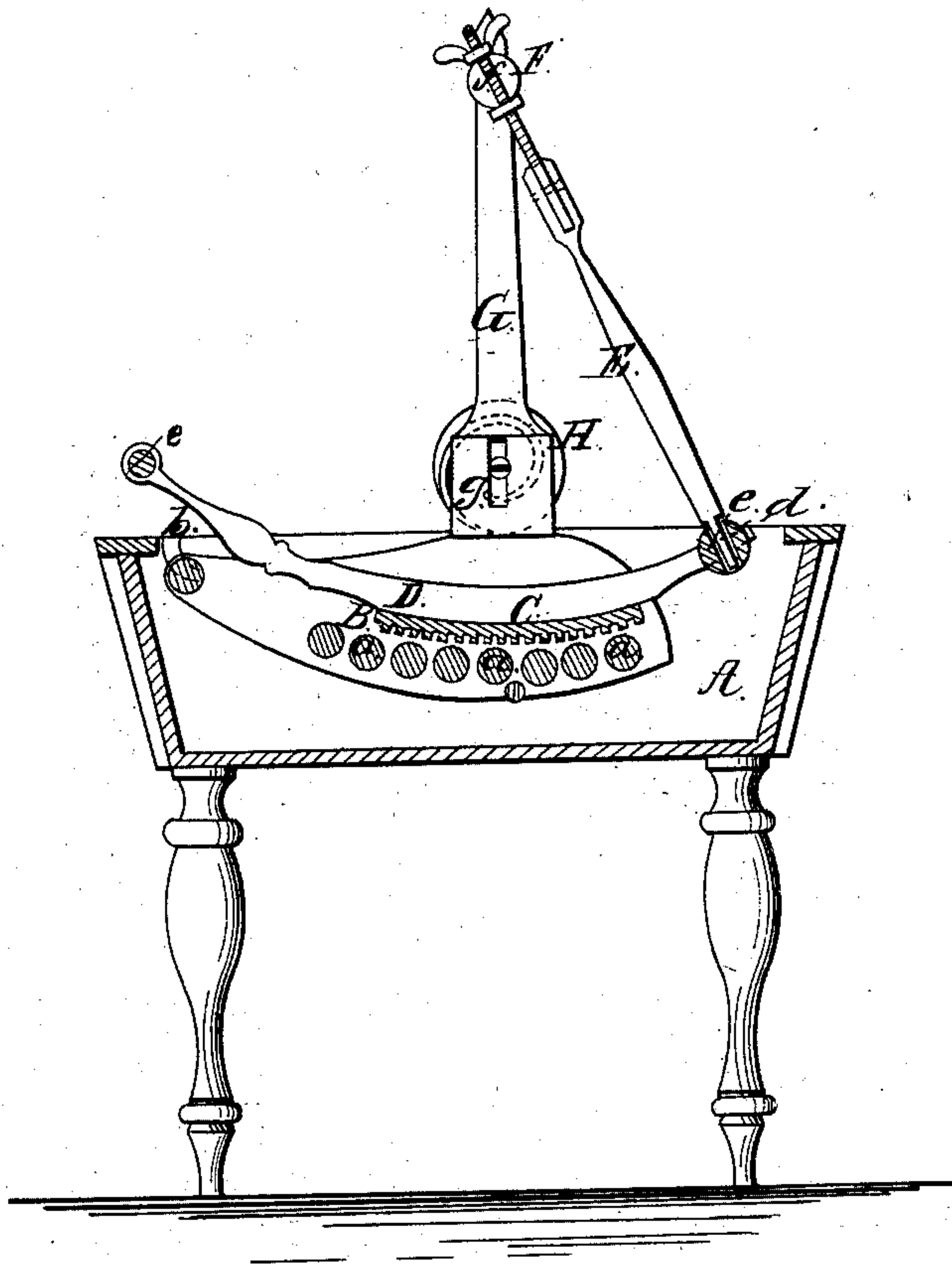
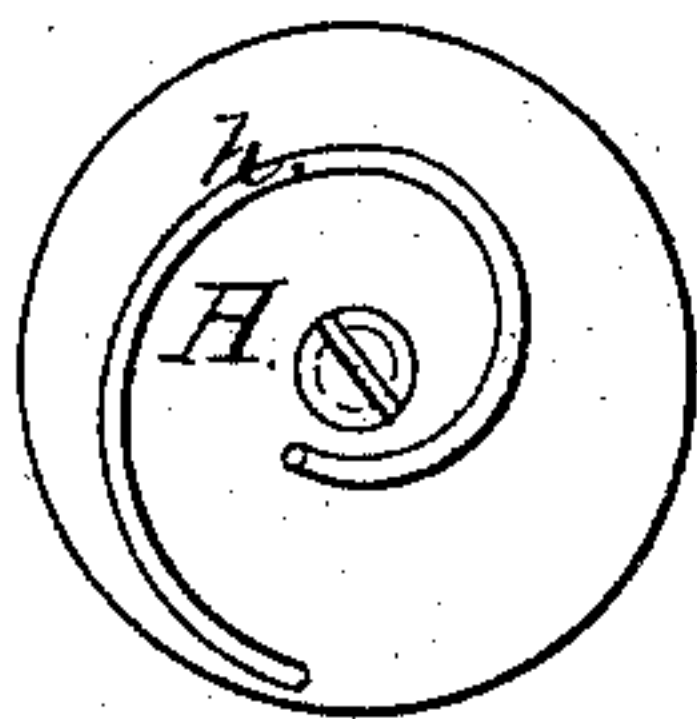


Fig: 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

H. BUCKNALL, OF DARIEN, WISCONSIN.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 55,610, dated June 19, 1866.

To all whom it may concern:

Be it known that I, H. BUCKNALL, of Darien, in the county of Walworth and State of Wisconsin, 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 those 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 longitudinal vertical central section of my machine. Fig. 2 is a detached view of the cam I employ for elevating the rubbing-board.

My invention consists in hanging the rubbing concave or bed in a groove at one end of the machine, so that it will swing loosely in the tub; also, in the employment of a cam of peculiar construction for elevating and lowering the rubbing concave or bed; also, in the employment of a thumb-screw for regulating the length of the arm in which the rubbing-board is suspended; also, in making a joint at the end of said rod, so as to enable the board to rise or lower at either side, to adjust itself to the thickness of the clothes being washed.

A designates the box or tub, which may be of any suitable form or construction. B is the roller-concave, *a a* being the rollers journaled therein. This concave is hung loosely in the box by pivots or journals, which are let into grooves *b* in either side of the box, and thus it is permitted to have a rising or falling motion. This concave, by reason of thus hanging it, is enabled to be submerged so as to bring the clothes (whether there be a greater or less quantity) under or above the surface of the water, as may be desired.

C is the rubbing-board, which, in the present instance, is a fluted board secured to arms D, connected at their ends by a rod, *e*, which may be taken hold of when operating the rubbing-board. E is a rod, which is jointed at its lower end to a cross-rod, *d*, connecting the two other

ends of the arms D D. The joint designated by the letter *e* allows the rubbing-board to have an up-and-down lateral play, so as to enable it to ride freely over any inequalities in the thickness of the clothes at either side of the machine. The other end of the rod is connected by a thumb-screw, *f*, to a rock-shaft, F, which extends across from two uprights, G G, attached to each side of the machine. By operating this thumb-screw the height of the rubbing-board may be regulated as desired. The uprights G G carry on their ends cams H, which are pivoted thereto, and these cams (refer to Fig. 2) have a quirl-shaped groove, *h*, cut into them, which plays on a pin, *g*, and thus by turning the cams the uprights, and consequently the roller-concave, may be elevated in the box, as can be readily understood by reference to the two figures of the drawing.

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

1. The combination of the rubbing-concave B, hung loosely in the machine by journals or pivots, with the uprights G, cam H, and rubbing-bar C, substantially as shown and described.

2. The cam H, in combination with the uprights G G and pin *g*, when constructed and operating substantially as and for the purpose specified.

3. The thumb-screw *f*, for raising and lowering the rubbing-board C, in combination with the rock-shaft F and rod E, as shown and described.

4. In a washing machine constructed substantially as described, the employment of a joint, *e*, at the connection of the rod E and the cross-rod *d*, substantially as and for the purpose specified.

H. BUCKNALL.

Witnesses:

U. W. HOAG,
J. F. LYON.