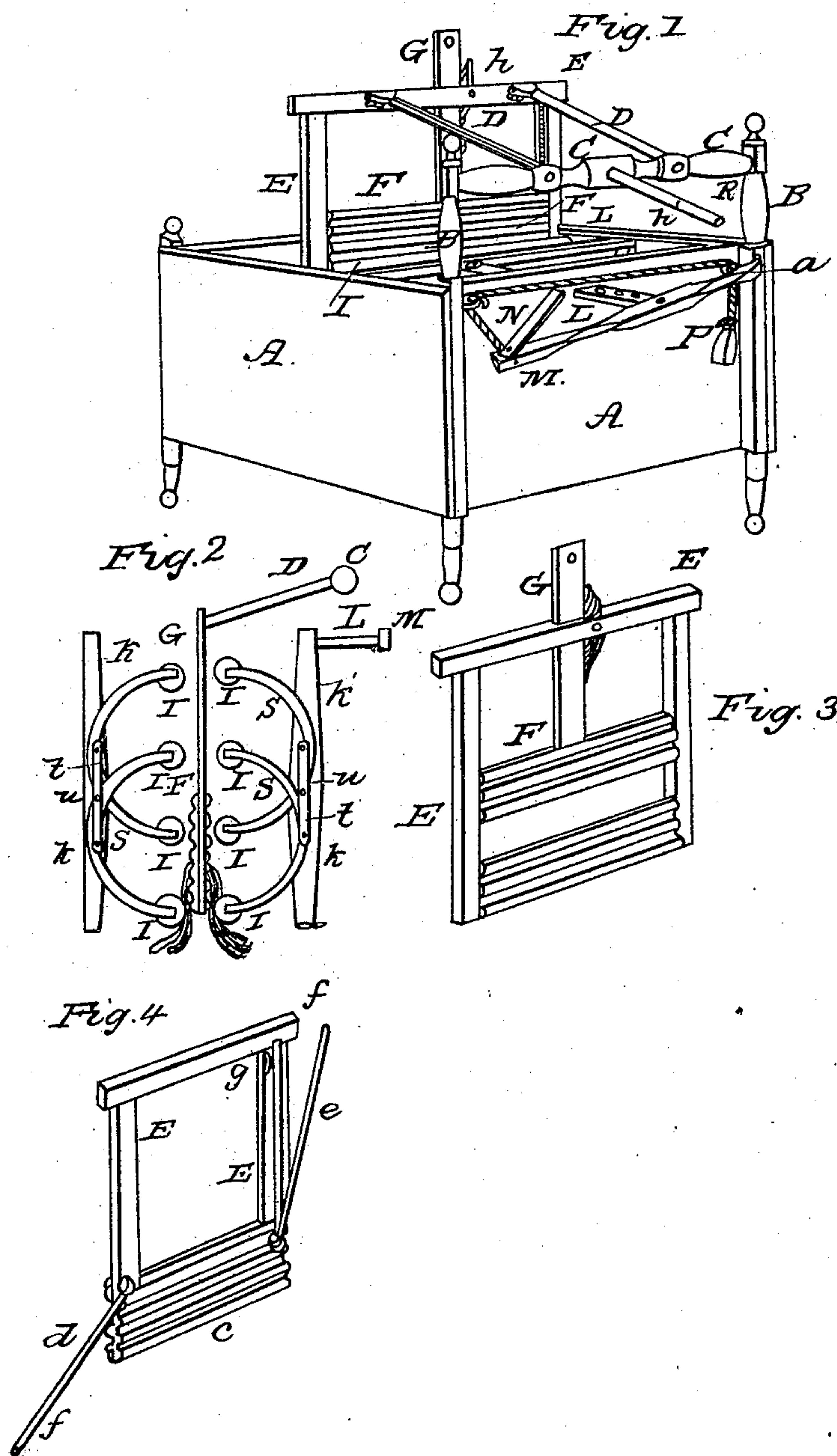


S. BENSON.
Washing Machine.

No. 1,616.

Patented May 25, 1840.



UNITED STATES PATENT OFFICE.

SEWALL BENSON, OF WATERVILLE, MAINE.

MACHINE FOR WASHING CLOTHES.

Specification of Letters Patent No. 1,616, dated May 25, 1840.

To all whom it may concern:

Be it known that I, SEWALL BENSON, of Waterville, in the county of Kennebec, in the State of Maine, have invented a new and
5 Improved Machine for Washing Clothes; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawing Figure 1, is a perspective view of the whole machine.
10 A, A', is a tub, or cistern, which may be made about two feet square. This box is to contain the water, and the clothes to be washed; in which operation the latter are attached to a wash board, which is made to
15 vibrate up and down between sets of rollers, which act upon them in a way to be presently described. B, B, are two parts which rise from the corners of the machine, and receive the gudgeons of a rock shaft C, which is to be acted upon by the lever R.
20 From this shaft proceed two arms D, D, which are attached to a frame E, E, by hinge joints, so that said frame may be worked up and down by means of the lever R. The frame E, E, is seen also in Figs. 3 and 4. F, is a fluted wash board, attached to, and passing from side to side of, the frame E, E. This wash board is seen in
25 each of the figures. In Fig. 2, it is shown in section, or rather, an edge view is given of it, such as would be afforded were the end A', of the cistern, Fig. 1, removed.

The clothes to be washed, are, I have said, to be attached to the wash board, and I have,
35 in the drawings, represented two modes of effecting this. Sometimes I divide the wash board into two parts longitudinally, as shown in Fig. 3. G, is a slide rod attached to the upper portion, which slides up and
40 down in grooves within the frame E, E. The clothes are hung across the lower section of the fluted board, and the upper section is then lowered, and confines them in place. The second method is shown in Fig.
45 4; in this the wash board is not divided, but the clothes are hung across it, and confined in place by means of a stout wire, or rod d, attached to one corner of the wash board by a swivel joint, this wire falls into
50 a groove, or flute, along the upper edge of the board, against which it presses the clothes, and its end f, may be confined by passing it under the rod or strip e, which may be hooked to the frame at g, or con-
55 fined in any other convenient way. The clothes when so confined are, as they are

passed up and down, to be operated upon by a series of rollers, on both sides of the board, which rollers extend along its face from side to side. Their ends are shown at I, I, I, 60 Fig. 2. Their gudgeons revolve in the ends of semicircular iron arms S, S, S. These iron arms are attached by joint pins to the ends of iron rods t, t, and these again, turn on joint pins at their centers u, u, affixed to 65 frame work k, k', within the tub. By this arrangement the rollers are enabled to adapt themselves to the different thicknesses of clothes upon the wash board, in the most perfect manner. 70

The frame of which k, k', is one of the uprights rests against the back-side of the cistern; but that of which k', k', is the upright, is hinged to its bottom, at some distance from its front side, to allow room 75 for it to vibrate, as it is to be borne up against the wash board by the action of weights. The upper edge of this frame is shown at k', Fig. 1.

L, is a rod, or arm, attached to the upper 80 part of the frame k', and passing out through the front of the box, where it is connected by a joint pin to the lever M, which is hinged at its end a, to the cistern; its other end is drawn in by means of a 85 cord O, O, passing over pulleys, and having a weight P, attached to it. A prop N, may be used to keep the lever M, at any required distance from the side of the cistern.

Operation: The cistern is to be filled with 90 soap suds to about the height of the top of the lower roller; the articles to be washed are then to be put across the fluted wash board, and secured in place in the manner described, and this is then to be passed down 95 between the sets of rollers, which are to be pressed together with such a degree of force as may be thought best, which can be readily regulated by the weight applied. The sliding frame is then to be worked up and 100 down by means of the lever on the rock shaft. After working in this way for a short time, this board is to be raised from the cistern, and the clothes may be shifted, or receive a slight rubbing by hand, should 105 any spots require it. A faucet may be inserted to draw off the water; and steam may be introduced through a tube, if desired.

Having thus fully described the nature of 110 my invention, and described, also, the manner in which I put my machine into oper-

ation; what I claim therein as constituting my improvements, and desire to secure by Letters Patent are the following particulars:

5 1. The manner in which I have arranged and combined the rollers on semicircular arms, vibrating on their centers upon vibrating arms, and regulated in their action by the lever M, borne up by means of a
10 weight, as above set forth.

2. The combination of the rollers attached to the semicircular arms with the vibrating frame, and fluted wash board.

15 In making the foregoing claims I do not intend, by the terms employed to limit myself to the precise form, and particular con-

struction by me set forth, as these may be departed from without substantially altering the nature and operation of the machine; the semicircular arms, for example 20 may be replaced by arms not semicircular; the weights for making pressure against the rollers may be substituted by a spring, and other changes of a like nature may be made, and yet the essential characteristics of my 25 machine might still remain, as every competent machinist is well aware.

SEWALL BENSON.

Witnesses:

THOS. P. JONES,
GEORGE WEST.