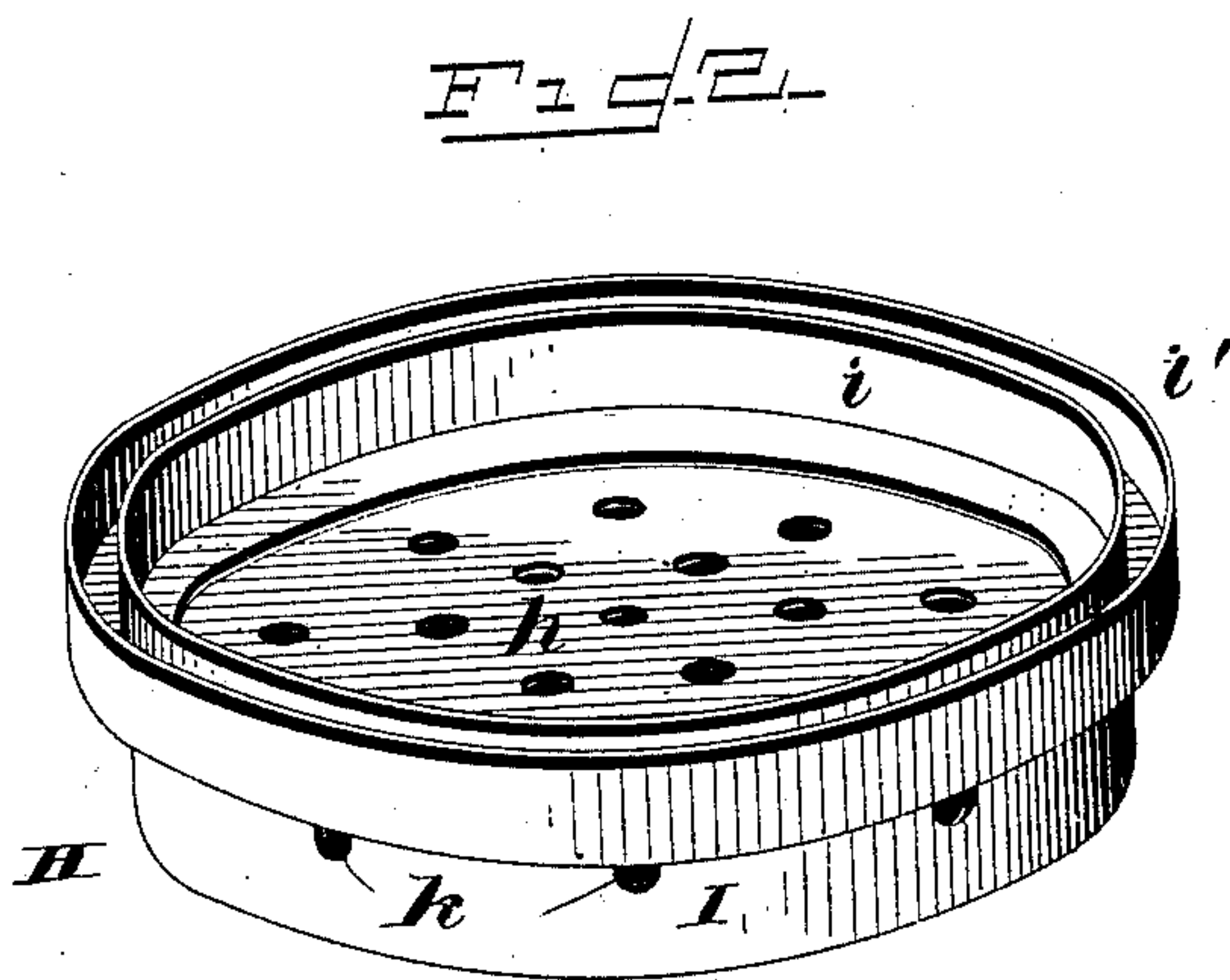
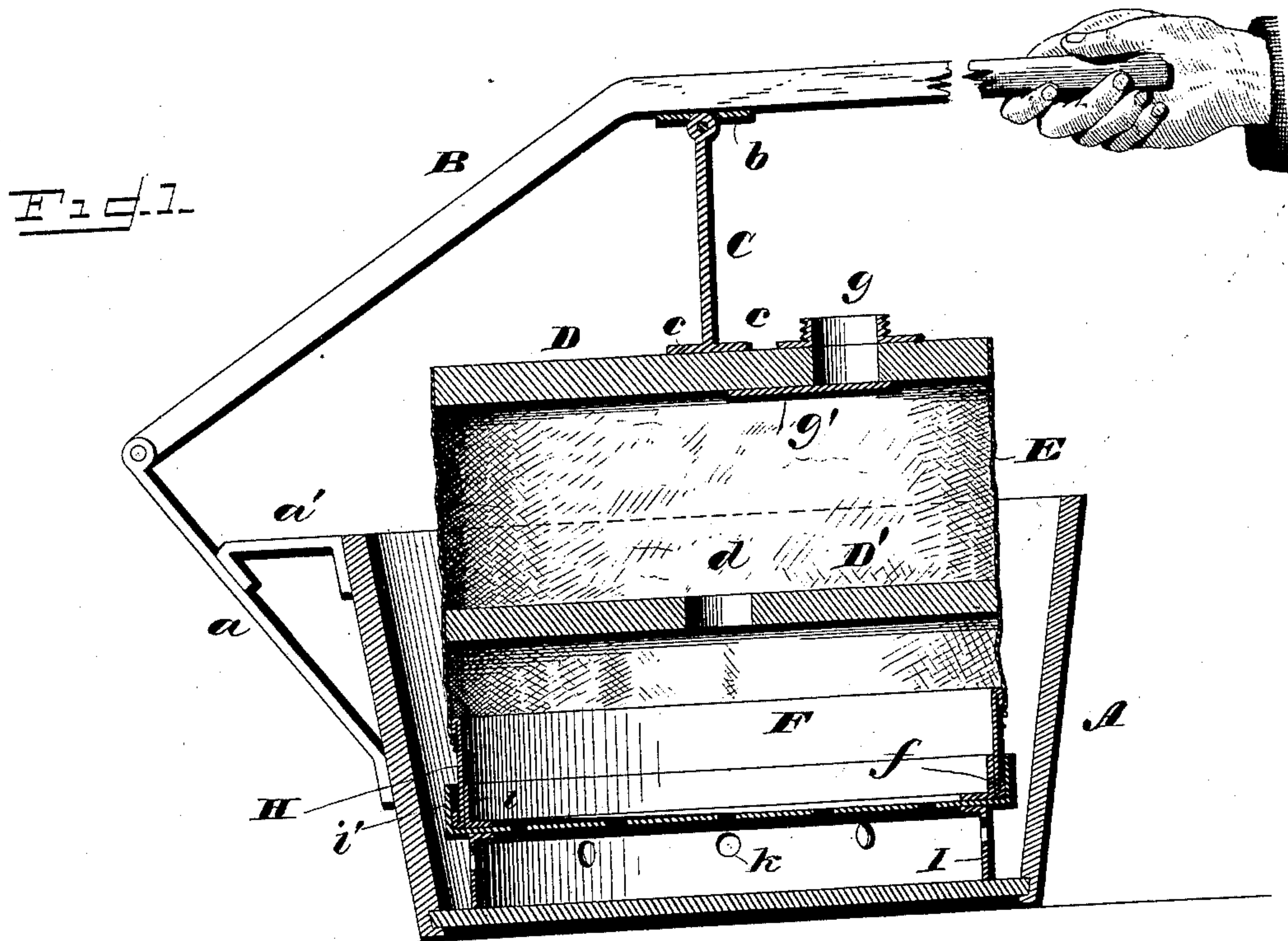


(No Model.)

T. W. WOOD.
WASHING MACHINE.

Patented Mar. 8, 1887.

No. 359,238.



Thomas W Wood.

INVENTOR

[Signature]
Attorney

WITNESSES

G. Sargent Elliott.
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UNITED STATES PATENT OFFICE.

THOMAS W. WOOD, OF ATLANTA, GEORGIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 359,238, dated March 8, 1887.

Application filed November 11, 1886. Serial No. 218,606. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. WOOD, a citizen of the United States of America, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in washing-machines; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth.

In the accompanying drawings, which illustrate my invention, Figure 1 is a vertical sectional view of a washing-machine constructed in accordance with my improvement, and Fig. 2 is a detail perspective view.

A refers to a wash-tub or other suitable vessel, which has secured thereto an inclined arm, *a*, to the upper end of which an operating-lever, B, is pivoted. The arm *a* may be suitably braced to the upper portion of the wash-tub by a bracket, *a'*. The lever B is provided, immediately above the center of the tub, with an eye, *b*, to which is pivotally attached a depending rod, C, the lower portion of said rod having horizontally-projecting feet *c*, to which the upper head, D, of the bellows is attached. The handle portion of the pivoted lever B may extend over the tub, so as to be within convenient reach of the operator.

The bellows consists of the heads D and D', which are preferably circular sections, and to the edge of these heads D and D' is suitably secured flexible material E, said flexible material extending below the head D', the lower edge being secured to a ring, F, and the lower edge of said ring having formed thereon a suitable bead, *f*.

The upper head, D, of the bellows is provided at any suitable point with an opening, *g*, beneath which is placed an ordinary flat valve, *g'*, which will open so as to admit air to the in-

terior of the bellows when the heads are separated from each other, and will close when the heads are forced toward each other. The lower head, D', has formed near its center portion a perforation, *d*, through which the air will pass to the compartment in which the clothes are placed.

H refers to a false bottom, which is provided with a perforated plate, *h*, to which are attached upwardly-projecting walls *i i'*.

If desirable, the outer upwardly-projecting wall, *i'*, may be formed integral with the perforated plate *h*, and between these plates *i* and *i'* the lower edge of the ring F is placed and held by frictional contact, so as to provide substantially a tight joint between the parts.

To the under side of the perforated plate *h*, near the periphery thereof, is secured a perforated ring, I, which is provided with a series of perforations, *k*, said ring being rigidly attached by means of an intumed flange beneath the ring *i*.

The operation of my invention is as follows: The clothes to be washed are placed in the space on the under side of the head D, so as to rest upon the perforated plate *h*, the false bottom being removed from the ring F, so as to allow them to be placed in this compartment, after which the parts are secured to each other. The tub is then filled partially with water, and by reciprocating the handle B on the upward movement thereof the water will be drawn into the compartment occupied by the clothes and the upper portion of the bellows filled with air. As soon as the downward movement of the lever commences, the valve will close and the air will force the water through the clothes into the tub. Thus it will be seen that by reciprocating the lever the water will seek its level at each upward stroke, and will be forced through the clothes, so as to thoroughly cleanse the same at each downward stroke. By providing the compartment in which the clothes are placed with flexible sides, which are, in fact, a continuation of the bellows, said space will contract vertically when there are not sufficient clothes in the same to completely fill said compartment. By providing the ring I with the perforations *k* at a slight distance above the lower edge of said ring, the dirt

which may be removed from the clothes will settle at the bottom of the wash-tub, and will not find its way into the compartment containing the clothes to be washed.

5 I am aware that it has been proposed to construct washing-machines so that pounders would be connected to a bellows, so that when said pounders are brought upon the clothes by the movement of a lever the air will be
10 forced from the bellows through said pounders upon the clothes; but,

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

1. In a washing-machine, the bellows provided below the lower head of the same with
15 a ring, and a false bottom detachably secured to said ring, so as to form a chamber in which the clothes to be washed are placed, in combination with a receptacle and means for reciprocating the bellows, substantially as shown, and
20 for the purpose set forth.

2. The combination, in a washing-machine, of a bellows provided with side walls extending below the lower head of said bellows, and

a removable bottom with perforations adapted 25 to be attached thereto, substantially as shown, and for the purpose set forth.

3. The combination, in a washing-machine, of a bellows constructed substantially as shown, and provided with a compartment beneath the same, in which the clothes to be
30 cleansed are placed, said compartment having a removable bottom and an operating-lever, which is pivotally attached to the tub and to the bellows, substantially as shown, and for the
35 purpose set forth.

4. In a washing-machine provided with bellows, substantially as shown, a false bottom having upwardly-projecting edges *i* and *i'*, a
40 perforated bottom, *h*, and a depending perforated ring, *I*, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS W. WOOD.

Witnesses:

W. J. WOOD,

THOS. M. MCKINNON.