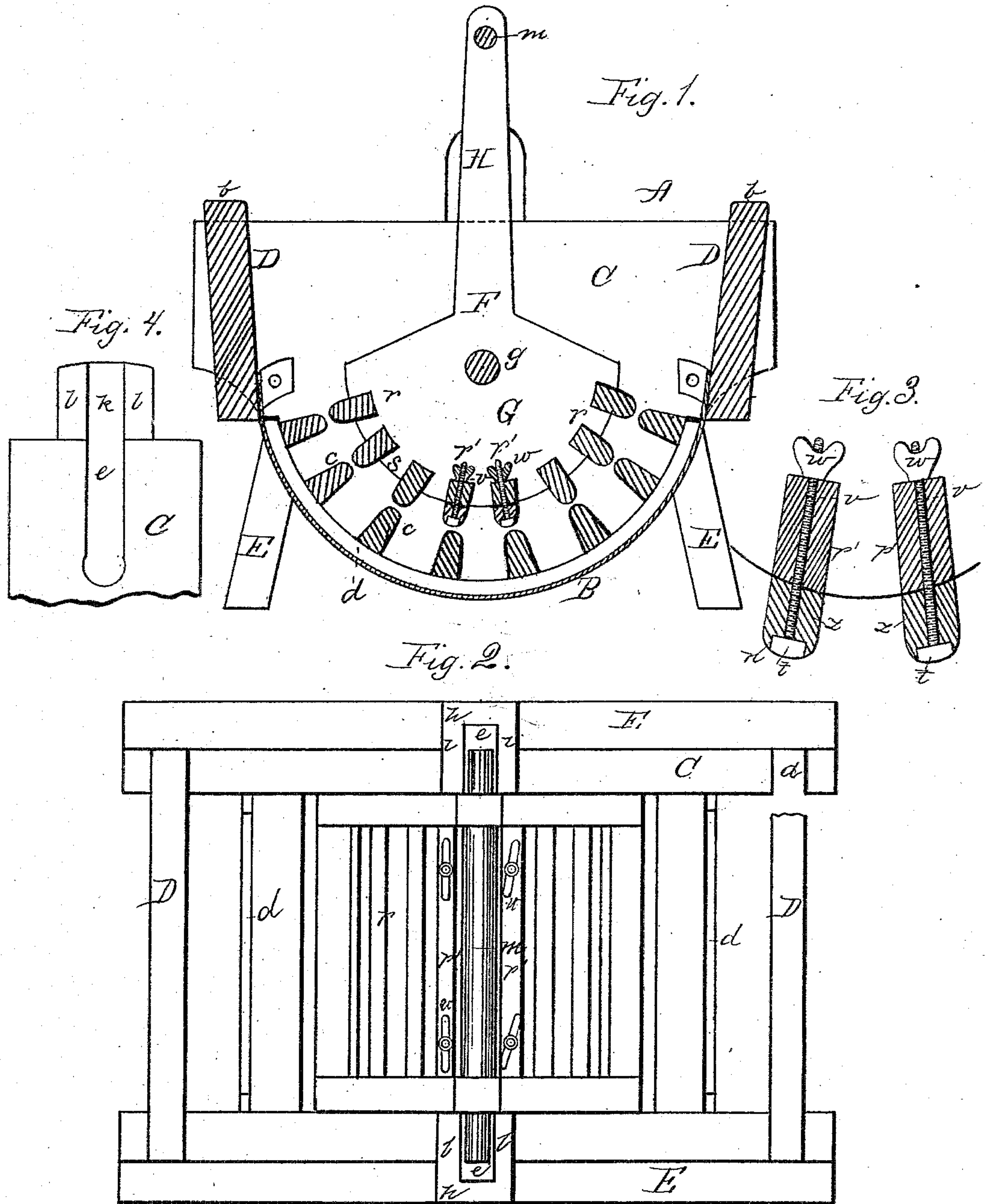


(No Model.)

R. SMITH.
WASHING MACHINE.

No. 295,065.

Patented Mar. 11, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

RANSOM SMITH, OF COTTAGE GROVE, OREGON.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 295,065, dated March 11, 1884.

Application filed August 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, RANSOM SMITH, a citizen of the United States, residing at Cottage Grove, in the county of Lane and State of Oregon, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical section of my machine. Fig. 2 is a plan view of the same. Figs. 3 and 4 are detail views.

This invention has relation to washing-machines; and it consists in the construction and novel arrangement, in connection with the cylindric form rubber having transverse rubbing-ribs, of the detachable and adjustable under sections of the middle ribs, their clamp-screws, and thumb-nuts, all as hereinafter set forth.

In the accompanying drawings, the letter A designates the case or tub, the lower portion of which is made in semi-cylindrical form, and is provided with a metallic bottom, B, which is attached to the curved lower edges of the sides C, and to the inside lower portions of the inclined wooden ends D, the lateral edges of which are seated in inclined grooves *a*, made in the sides C on the inside, and tangent to the curved edges *b* of said sides at their ends. Transversely arranged in the lower portion of the tub are the rubbing-bars *c*, having rounded upper edges. The series of transverse bars is parallel to the curved bottom B, and the bars are supported above the same by the curved strips *d*, which extend along said bottom near the sides C. In the middle portion of the upper part of each side C is made a vertical slot, *e*, which is rounded at its lower end, to form a bearing for one of the journal ends of the shaft *g* of the swinging rubber. This bearing-slot is backed by a vertical strip, *h*, which is secured to the outer wall of the side C, and is provided with a slotted head, *k*, having shoulders *l*, which bear on the upper edge of the side wall, C. These heads *k* form upward extensions of the slot-bearing, which enable the swinging rub-

ber to be worked when its journals are above the upper margin of the tub.

E E designate the standards, which are secured to the side walls, C C. The standards are arranged in inclined position, and their upper ends are abutted against the edges of the back strip, *h*, of the slot-bearing.

F represents the swinging rubber, consisting of the cylindric form sides G, having the arms H, the ends of which are connected by the transverse handle *m*, the transverse rubbing bars or ribs *r r'*, connecting the curved marginal portions of the sides, and the shaft *g*. The ends of the rubbing-ribs are let into the edges of the sides, and their outer or working edges project somewhat, as shown in the drawings. Between the bars or ribs are open intervals *s*, to afford free passage to the water. The middle bars or ribs, *r'*, are provided with lower sections, *z*, which form the projecting or rubbing portions of said bars. Each section *z* is secured to the body of the bar *r'* by means of clamp-screws *v*, having squared heads *t* and thumb-nuts *w*. The squared head *t* is seated in a squared recess, *n*, in the bottom of the section, and the threaded shank of the screw passes up through said section and through the body of the bar to engage the thumb-nut, which is applied from above, and, being within the hollow of the swinging rubber, is not liable to entangle the clothes upon which the machine is operating. The heads of the clamp-screws should be rounded on their ends to correspond with the rounded working edges of the sections in which said heads are seated, so that they will not catch or injure goods of the lightest texture. When the thumb-nuts are loosened, the clamp-sections *z* can be separated sufficiently from the body parts of the bars *r'* to enable the edge of a collar, handkerchief, or other small article to be introduced into the interval, and the thumb-nuts being then turned down, the clamp-sections will be drawn up closely against the bars, holding the small articles firmly, and so that they will be moved to and fro in the water as the swinging rubber is operated.

Clamps for securing the article to be washed to the ribs of the rocking rubber are not new in this connection, and a clamping-bar operated by springs to compress the clothes between

it and a rubbing-block is also old; and neither of these constructions is claimed, broadly, herein.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a washing-machine, the combination, with the tub A, having the transverse bars *c* in its lower portion, of the swinging rubber F, having the transverse ribs or bars *r r'*, the adjusta-

ble under sections, *z*, of the middle ribs, and the clamp-screws *v* and thumb-nuts *w*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RANSOM SMITH.

Witnesses:

AARON LURCH,
BEN LURCH.