

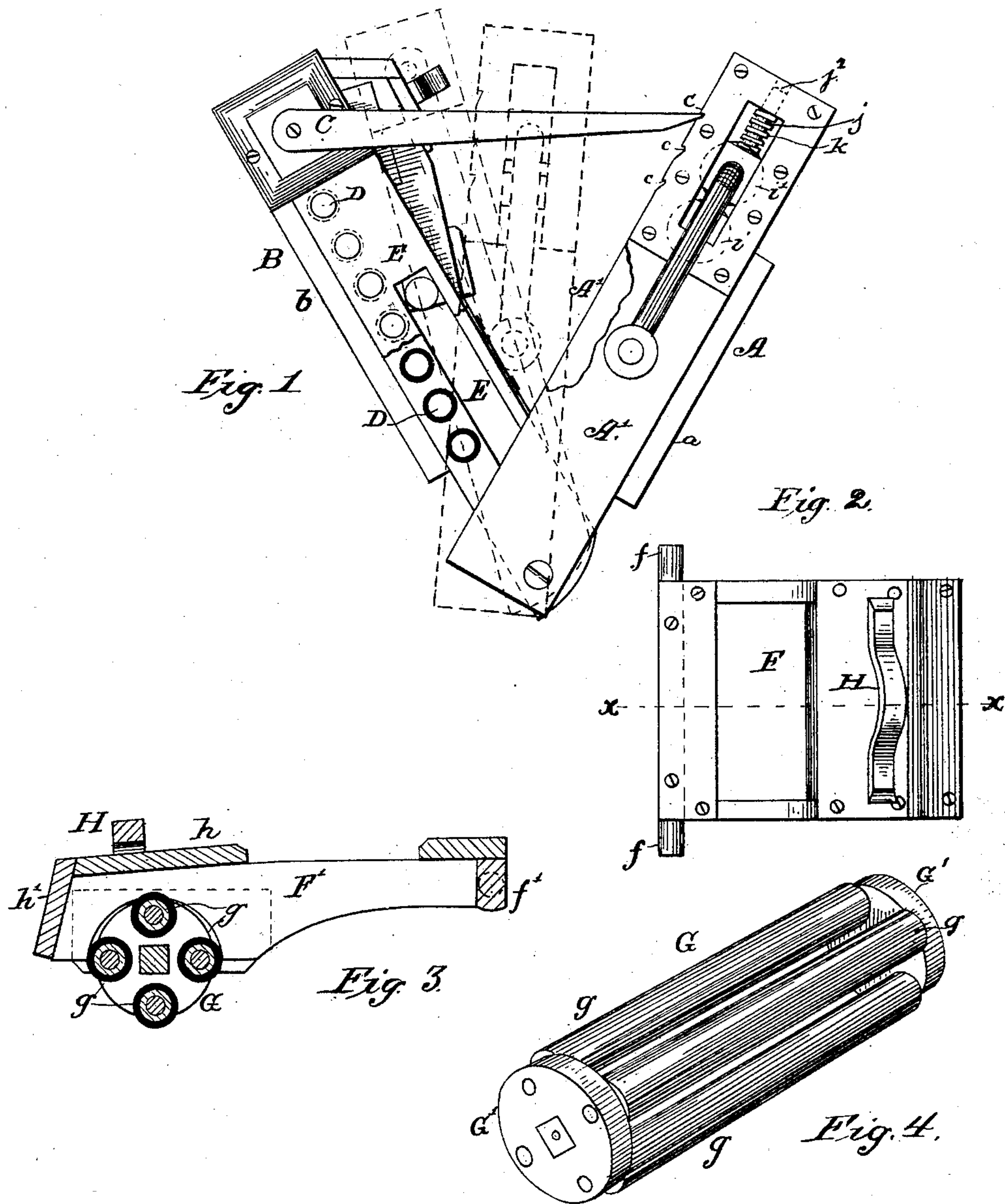
(No Model.)

J. H. HELMS.

COMBINED WASHING AND WRINGING MACHINE.

No. 360,524.

Patented Apr. 5, 1887.



Witnesses

Susan R. Leiler.

R. H. Bishop.

Inventor

Jacob H. Helms

By his Attorneys

1019
R. E. V. A. Lacy

UNITED STATES PATENT OFFICE.

JACOB HENRY HELMS, OF MATTHEWS, N. C., ASSIGNOR OF ONE-HALF TO
JAMES S. FUNDERBURK AND JAMES E. BLACK, BOTH OF SAME PLACE.

COMBINED WASHING AND WRINGING MACHINE.

SPECIFICATION forming part of Letters Patent No. 360,524, dated April 5, 1887.

Application filed February 1, 1886. Serial No. 190,515. (No model.)

To all whom it may concern:

Be it known that I, JACOB HENRY HELMS, a citizen of the United States, residing at Matthews, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Combined Washing and Wringing Machines; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to combined washing and wringing machines; and it consists in the novel details of construction and combinations of parts, more fully hereinafter set forth and claimed.

In the annexed drawings, Figure 1 is a side elevation of a machine constructed according to and embodying my invention, a portion being broken away to better show the internal construction. The dotted lines indicate the folded position of the parts. Fig. 2 is a plan view of the rubber. Fig. 3 is a section on the line X X of Fig. 2. Fig. 4 is a perspective detail, on an enlarged scale, of the rubber-roller.

In carrying out my invention I employ a wringer, A, and wash-board B, and hinge them together at their lower ends. The wash-board is constructed to partially fold between the sides of the wringer, as indicated by dotted lines, Fig. 1. The outer end of the wash-board has a brace, C, pivoted on its side to engage one of a series of notches, c, on the inner edge of the side of the wringer, to hold the upper ends of the board and wringer at an adjusted distance apart.

The under side of the wash-board is closed by a bottom, b, and rollers D, journaled in the sides at a slight distance above the bottom, form the rubbing-surface, against which the clothes are pressed when moved over the board.

Coincident slots E, formed in the sides of the wash-board above the rollers D, and near the lower portion of the sides, receive studs f, projecting laterally from a rubber, F, and serve as a means to give direction to the rubber in its movements, and at the same time assist in

holding it down to its work. These studs form an integral part of and project from the rear end board, f', of the rubber. The sides F' of the rubber are expanded near their front ends, and a roller-rubber, G, is journaled between said ends in such a manner that it projects beyond the lower edges of the sides. A partial top, h, and end board, h', form a guard and prevent the splashing of the suds-water in the operation of the device.

The rubber G consists of disks G', between which rollers g are journaled. The rollers g have a twofold motion, one around their axis and the other around the axis of the disks. This twofold motion subjects the clothes to a greater agitation and beating action, thereby quickening the process of the washing without increasing the labor.

The wringer is composed of sides A', strengthened by a back piece, a. The upper ends of the sides are slotted to receive the bearings of the rollers i i'. The bearings of the upper roller have a stem, j, projecting through an opening, j', in the end of each side A', by which they are guided in their movement and held in place. A spiral spring, k, surrounding the stem and located between the bearing and the upper end of the slot, serves to yieldingly hold the rollers in close relationship.

The rollers D of the wash-board and the rollers g of the rubber are incased by rubber tubing, which presents a yielding surface to the clothes, thereby preventing injury.

In practice the combined wash-board and wringer is set in a suitable vessel, with the outer edges of each resting against the sides of the vessel, and the braces C adjusted to prevent the inward movement of either one. The device being in readiness, the washing may be done in the usual manner; or the rubber F may be inserted in place in the slots E, and motion imparted thereto by means of the handle H.

For packing the rubber is removed, when the parts may be folded, as shown by dotted lines, Fig. 1.

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

1. The combination of a wash-board and wringer hinged together at their lower ends,

with a brace hinged to the one and adjustably contacting with the other, substantially as described, and for the purpose specified.

2. The combination, with the wash-board
5 having guideways formed in the sides thereof, of a rubber-frame having lateral studs, comprising sides widened near their front ends, a partial top and end board closing the front end of the frame on two sides, disks journaled in
10 the frame beneath the partial top and near to the closed end, and rollers journaled near and

around the periphery of the disks, substantially as shown and described.

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

JACOB HENRY ^{his} X HELMS.
mark.

Witnesses:

E. C. FESPERMAN,
M. H. LINDSAY.