

(No Model.)

W. I. SLIPHER.
WASHING MACHINE.

No. 415,129.

Patented Nov. 12, 1889.

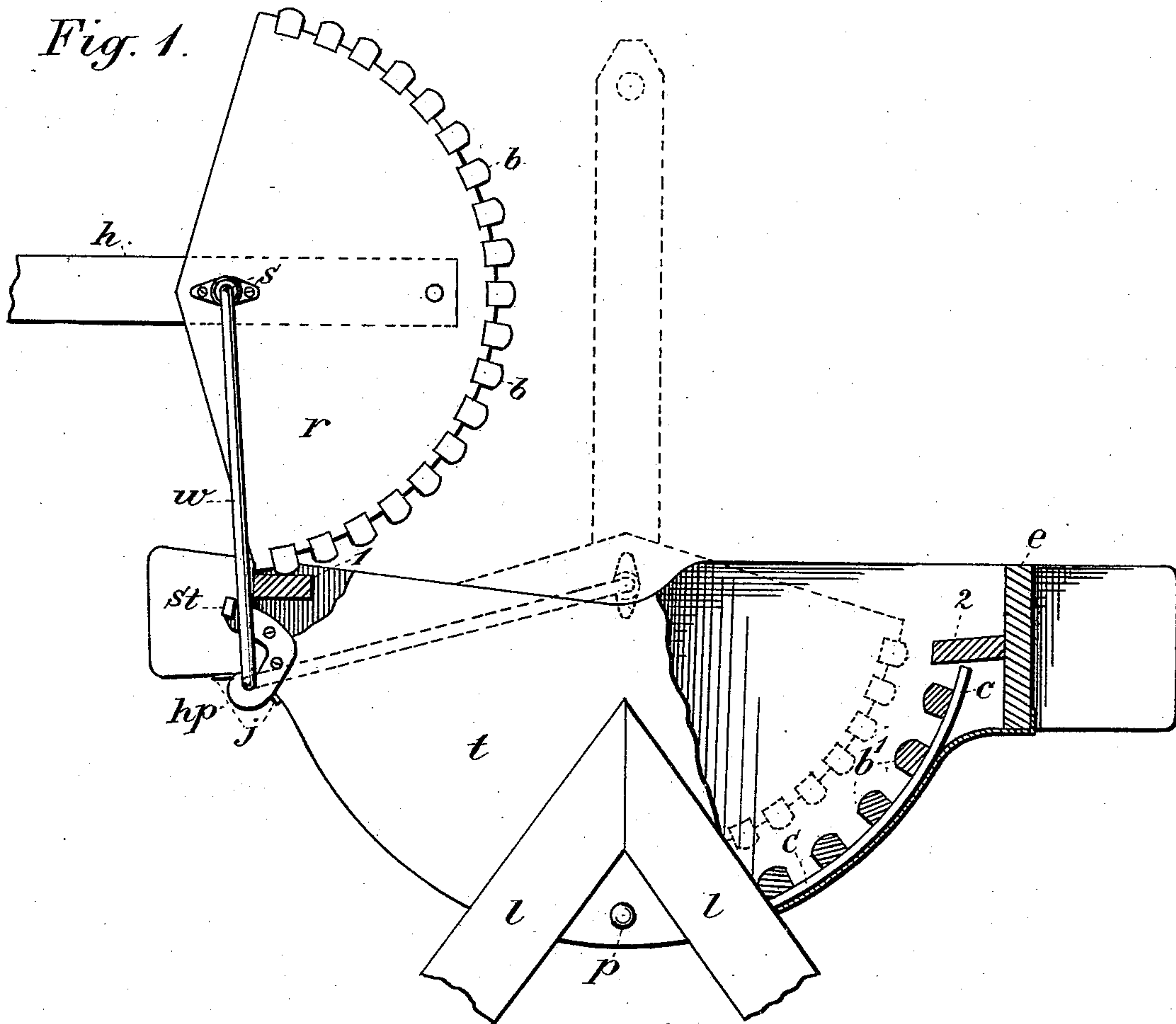


Fig. 2.

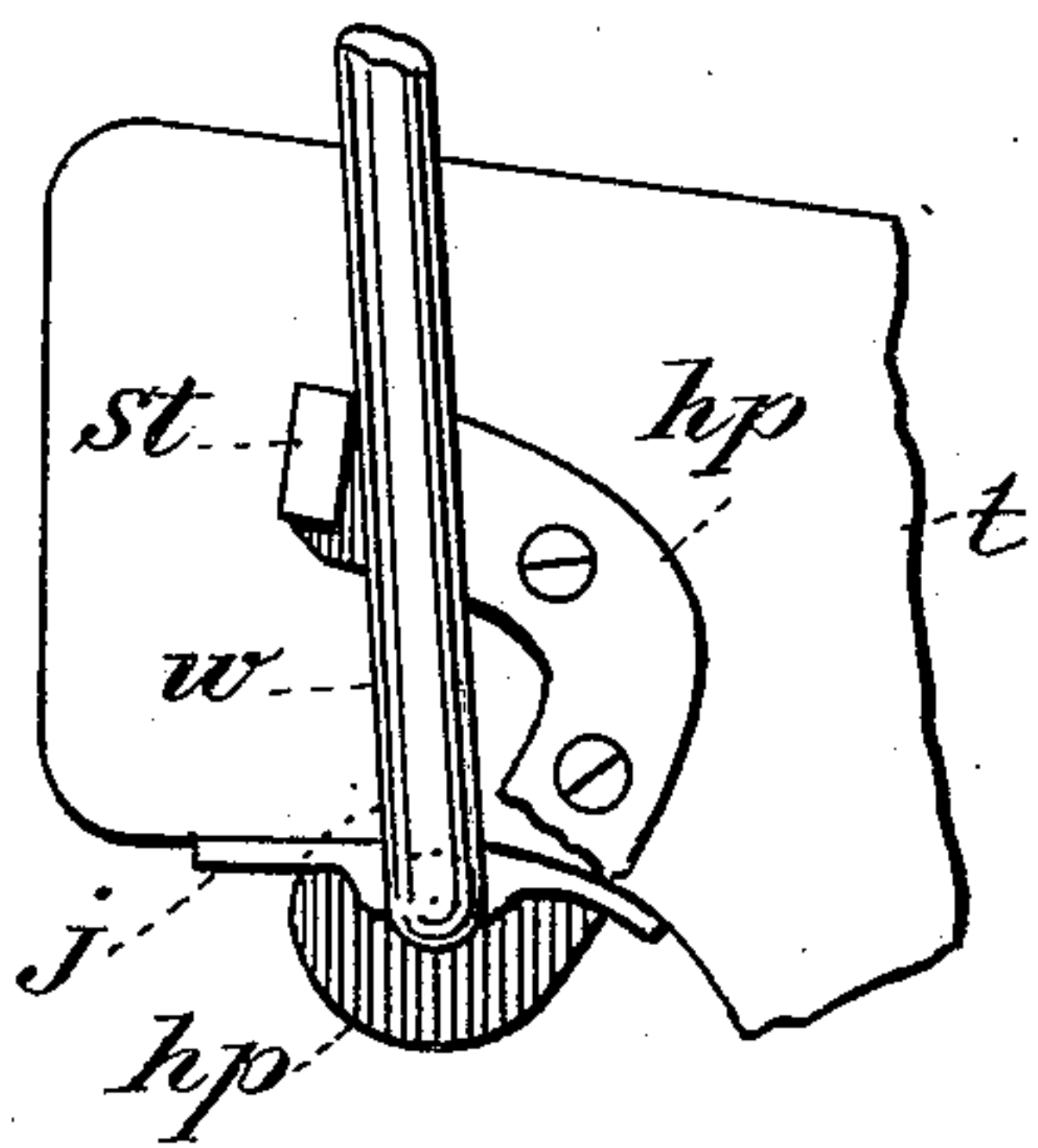
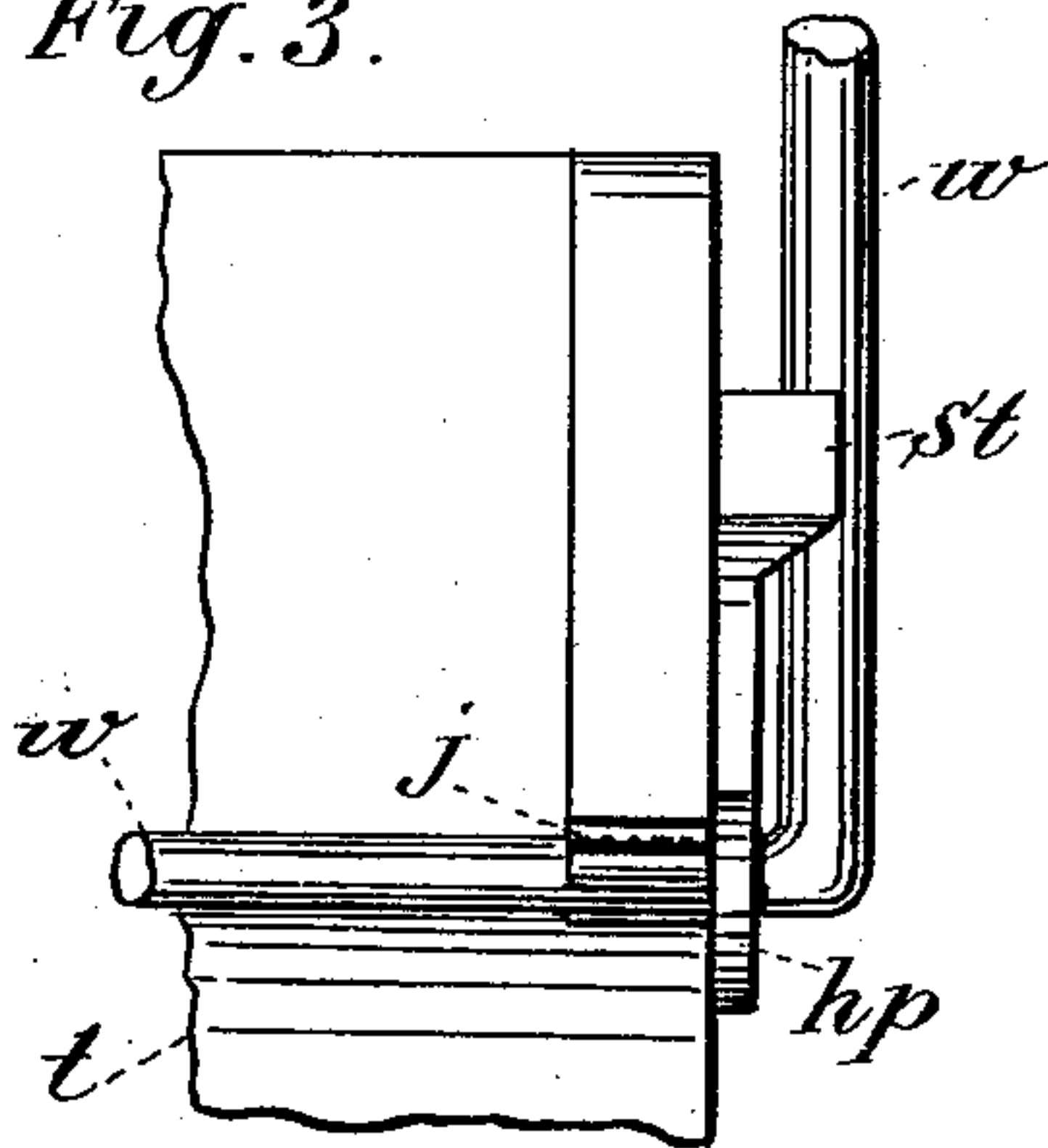


Fig. 3.



WITNESSES.

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WILLIAM I. SLIPHER, OF MULBERRY, INDIANA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 415,129, dated November 12, 1889.

Application filed May 27, 1889. Serial No. 312,237. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM I. SLIPHER, of Mulberry, county of Clinton, and State of Indiana, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

My invention relates to improvements in the construction of that class of washing-machines in which a semicircular tub having a ribbed bottom is mounted upon legs, and a rubber of corresponding shape is hinged thereto and adapted to oscillate inside the tub, and will be understood from the following description.

In the drawings, Figure 1 is a side view of my device, partly in section, the dotted line showing the normal position of the rubber when in the tub. Fig. 2 is a detail view of the hinging mechanism, a part of the hinge-plate being broken away, showing also the corresponding part of the hinge on the opposite side. Fig. 3 is a rear view of the hinging device. Figs. 2 and 3 are drawn on a larger scale than Fig. 1.

In detail the device consists of a semicircular tub *t*, mounted on legs *l*. Near the bottom of this tub are a series of parallel rubbing-bars *b'* with rounded tops, resting upon semicircular cleats *c*, fastened on each side, thus lifting the bars above the bottom of the tub and avoiding any wear or pressure of the bars directly on this bottom, which is usually composed of zinc or metal. Above these bars and on opposite sides of the tub are placed splash-boards 1 and 2, the former also serving as a rest or support for the rubber when it is in the position shown in Fig. 1. The rubber *r* is of a shape corresponding with the interior of the tub, and is hinged thereto by a wire bail *w*, the ends of this wire bail journaled in socket-plates *s*, fastened on each side of the rubber, the rear angle-bends journaled in hinge-plate *hp*, fastened to the sides, and having bearings also in journal-plates *j*, secured beneath the ends of the tub. The lower end of this hinge-plate is formed into a hook, which may be tapped down by a hammer, so as to take up any lost motion occasioned by the wearing away of the socket or eye in

which the bail is journaled, keeping the parts at all times snug, and preventing any rattling during the operation of the machine. The upper part of this hinge-plate, which is of an angular shape, is provided with a stop *st* projecting from the body of the plate, and when the rubber *r* is swung up out of the tub the bail *w* will rest against this stop, which is set so that the bail will incline backward, and thus get a greater leverage, and the bottom of the rubber *r* will rest upon and against the shelf 1 in the position shown in Fig. 1, the weight of the rubber and the friction of its bearing against this shelf creating leverage along the line of its top, which forms an acute angle with the line of the hinge-bail *w*, as shown, and the result arising from this construction is that the whole machine may be tipped forward without dislodging the rubber *r* from its bearing and position on the shelf 1, and it will not fall down, the gravity and leverage of the rubber working in one direction against the leverage of the bail *w* in the other, and this being alike on both sides the machine may be moved about safely without danger of the rubber falling off into the tub. In such case the stop *s* acts as a fulcrum for the bail *w*, and the bearing-point of the rubber against the shelf acts as a fulcrum for the leverage of the rubber itself. When it is desired to take the rubber out of the tub for rinsing or wringing clothes, it is lifted up by the handle and swung over to the rear and let down upon the shelf 1, where it is held by its own weight and the counteracting leverage of the parts, as before described, and no accidental blow will dislodge and throw it down upon the operator's hands, and no extra mechanism is necessary to sustain it above the tub or hold it up out of the way.

p is a plug for fitting into an opening in the side of the tub, and when removed the water may be drained off through this opening.

I am aware that washing-machines have been heretofore constructed wherein a semicircular rubber having ribs at the bottom is adapted to oscillate in the tub, and do not broadly claim the same as my invention; but I am not aware that a washing-machine wherein the rubber is held upon its edge upon the draining-shelf, so that the drippings will fall

back into the tub, and secured by an arrangement of hinging mechanism from dislodgment or falling off, as herein shown, has been heretofore known or used.

5 What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. In a washing-machine, a hinge-plate *hp*, secured to the rear of the tub, provided at its lower end with a socket-bearing for a bail-
10 wire, which hinges the rubber to the tub, and at its upper end with a stop for sustaining the bail-wire in position when the rubber is swung up out of the tub, substantially as described.

15 2. In a washing-machine, a tub *t*, resting upon legs *l* and provided with rubbing-bars *b'* sustained upon semicircular cleats *c* above the bottom of such tub, hinge-plates *hp*, fastened to the rear and upon the sides of
20 such tub, their lower ends forming an opening or eye providing a bearing, and their upper ends stops *st* for the bail-wire *w*, in combination with a rubber *r* and socket-plates *s*, fixed to the sides of the rubber, the ends of
25 the bail-wire entering such sockets, substantially as shown and described.

3. In a washing-machine, a semicircular tub mounted upon legs, provided with transverse bars sustained on cleats above the bottom, and having in its rear a shelf for sustaining the rubber in position when swung
30 up upon its hinging mechanism, in combination with a rubber corresponding in shape with the tub and having similar rubbing-bars upon its bottom, a hinge-bail, its rear
35 portion journaled in bearings connected to the sides or back of the tub, its open ends journaled in bearings in the sides of the rubber, and a stop connected to the tub for sustaining the rubber in position when swung up
40 out of and above the tub, whereby the leverage of the bail operates against the leverage of the rubber when raised upon the supporting-shelf of the tub, substantially as shown
45 and described.

In witness whereof I have hereunto set my hand this 20th day of May, 1889.

WILLIAM I. SLIPHER.

Witnesses:

C. P. JACOBS,
E. B. GRIFFITH.