

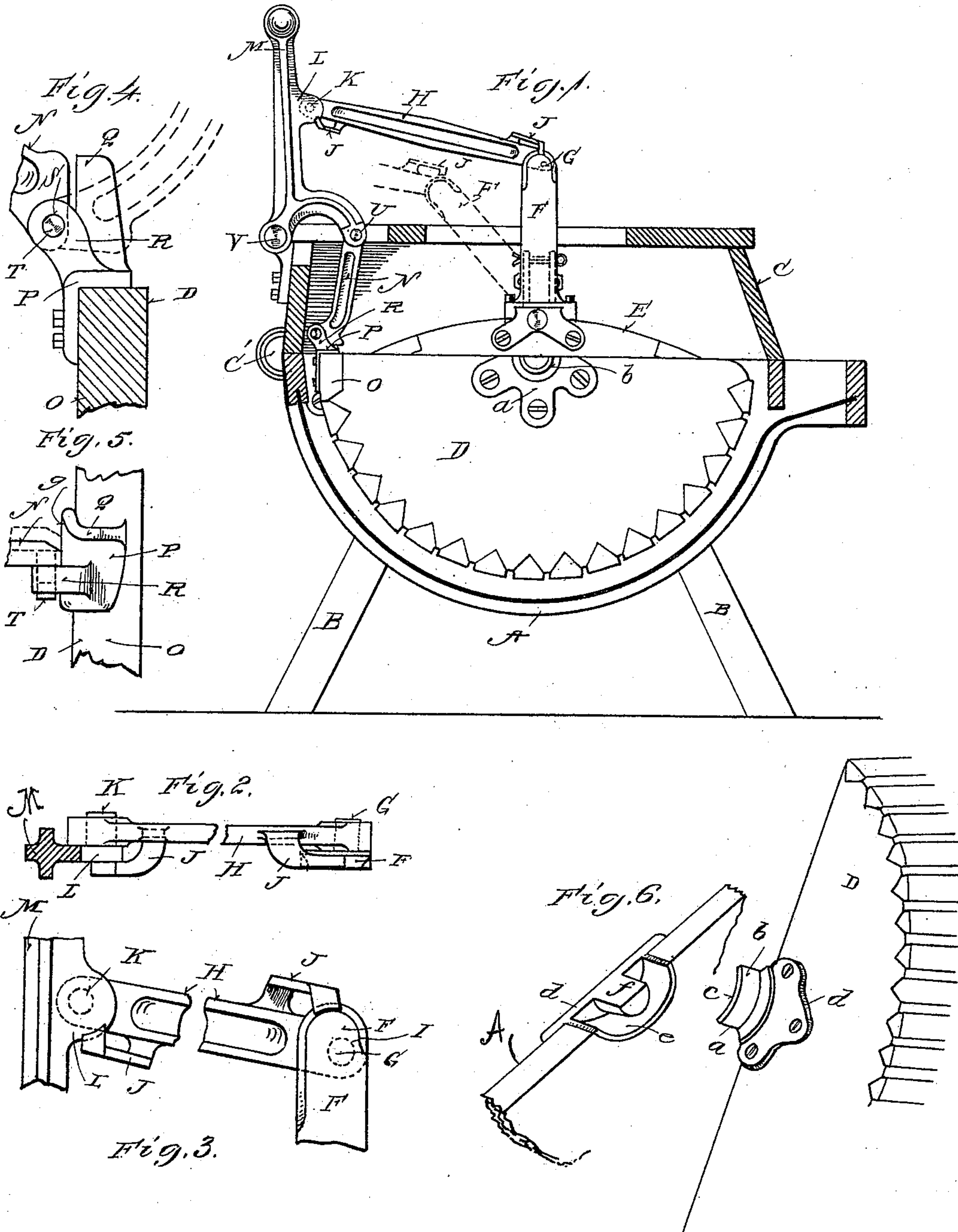
No. 616,068.

Patented Dec. 20, 1898.

J. BANY.
WASHING MACHINE.

(Application filed Dec. 27, 1897.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

JACOB BANY, OF ST. HENRY, OHIO.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 616,068, dated December 20, 1898.

Application filed December 27, 1897. Serial No. 663,500. (No model.)

To all whom it may concern:

Be it known that I, JACOB BANY, a citizen of the United States, residing at St. Henry, in the county of Mercer and State of Ohio, have
5 invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and
10 useful improvements in washing-machines.

The objects of my invention are, first, to provide suitable means for holding the lower rubber in position and at the same time allow it to be quickly removed from the body for
15 cleaning and drying without the use of hasps or spring devices, and, second, to provide means for holding the pitman in position and at the same time allow of readily detaching the same by means of hooks and eccentric
20 surfaces, and also to provide means for conducting the pitman-rod into its proper relation with its connecting parts when only partially so placed, whereby shearing of any of the parts is prevented, and whereby the pit-
25 man-rod is positively held in its proper relation when the machine is operated.

In the accompanying drawings, on which like reference-letters indicate corresponding parts, Figure 1 is a sectional elevation of my
30 washing-machine complete; Fig. 2, an enlarged plan view of the upper pitman, showing its connection with the operating bell-crank lever and with the post of the upper rubber; Fig. 3, a detail elevation of the same
35 with parts in section; Fig. 4, a detail side view of a portion of the lower pitman and the device for attaching the same to the lower rubber and also showing the manner of connecting said pitman with said device; Fig. 5, a
40 detail plan view of the same parts shown in Fig. 4; and Fig. 6, partial detail perspective views of the lower rubber and one side of the body, showing my improved pivotal connection between them.

45 The letter A represents one form of the body portion of my improved washer, mounted upon suitable legs B. Upon this body portion is mounted a suitable top or cover C, hinged thereto at one end, as shown at C'.

50 Within my washer are mounted two oscillating rubbers D and E, between which clothes are placed for washing in a manner

well known in the art. The lower rubber D has a trunnion *a*, secured to each side near its upper edge by screws or otherwise. The po- 55
sition of these trunnions, which fit within suitable bearings, hereinafter referred to, are in the form of a half-circle, as shown at *b*, and are hollowed out or concave, as shown at *c*. A bearing-box *d* is secured to the upper 60
edge and each side of the body of the washer and has a properly-shaped bearing-surface *e* to accommodate the trunnion *a* and permit the cylinder to swing back and forth freely. In order to hold this rubber in place in the 65
bearings when water is poured into the machine, I have provided a lug or projection *f*, which fits within the concave or hollowed-out portion *c* of the trunnion. This lug or extension in the bearing-boxes will prevent the wa- 70
ter from lifting the lower rubber and at the same time will permit the rubber to be rotated out of engagement therewith when it is desired to remove the lower rubber. This is of great practical importance in this class of 75
machines, as it overcomes the annoyance caused by the rubber floating when water is let into the machine and also does away with hasps or any spring contrivance for holding the rubber in place. To the upper rubber is 80
securely attached a post *F*, and at its upper end is eccentrically mounted a stud or projection *G*, cast or otherwise secured thereto. The letter *H* represents a pitman or connect-
ing-rod, and the letters *I* holes near each end, 85 while the letters *J* represent hooks cast or otherwise secured thereto, also located near each end for the purpose hereinafter appearing. A stud *K* is eccentrically cast or otherwise secured to a projection *L* from the bell- 90
crank lever *M*, and one end of the pitman *H* is slipped onto this stud *K* by raising the other end of the pitman enough for the hook *J* to miss the projection *L*, when the pitman is lowered and the hook comes in contact with the 95
face of the said projection and prevents the pitman from slipping off of the stud *K*. The post *F* is then turned to the dotted position shown in Fig. 1, when on account of the eccentricity of the stud or pin *G* with respect 100
to the post the hook *J* will miss the post and at the same time allow the pitman to be mounted on the stud or pin, and on allowing the parts to again assume their normal oper-

ating position the said hook will engage with the post F and hold the pitman in its proper position.

I will now refer to the lower pitman or link N and its connection with the bell-crank lever M and the lower rubber D. To the cross-bar O, secured to one end of the rubber D midway between its ends, is fastened a bracket P, having two ears Q and R. The ear Q is flared or beveled outward, as shown at g, and the ear R projects forward beyond the body part P of the bracket and has a hole S therein. The link N has a lug or projection T, which is adapted to fit in this hole. To insert this lug in this hole, the link is thrown to the full-line position shown in Fig. 4 or the dotted position in Fig. 5. The link is then thrown to the dotted position shown in Fig. 4, and the flared or beveled surface of the ear Q forces the link in close to the ear R instead of abutting against the edge of the ear Q, should the link not be pressed in against the ear R, and shearing the lug T, as formerly frequently occurred. This is of great practical importance, as it prevents the annoyance and expense formerly experienced on account of breakage. The upper end of this link N is bolted or otherwise pivotally connected to the bell-crank lever by a bolt U. The bell-crank lever M is pivotally secured to the top of the machine, as shown at V.

I have shown my improvements as applied to a double-rubber machine; but it is obvious that they might equally well apply to a single-rubber machine.

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

1. In a washing-machine, the combination

with an oscillating rubber, trunnions secured thereto and each having a curved bearing-surface and also a concavity therein, of suitable bearings secured to the sides of said machine, in which said trunnions fit, and lugs or extensions secured to said bearings and extending into said concavities in said trunnion to hold the said rubber in place.

2. In a washing-machine, the combination with a bracket adapted to be secured to an oscillating rubber, and ears secured to said bracket, one of said ears having a hole therein and the other flared or beveled outward, of a link having a lug or projection adapted to fit within said hole and be forced into close contact with said first-named ear by the bevel or flare of said beveled ear, whereby a cam action is produced to force the link projection into the ear when the link is swung to operating or normal position.

3. In a washing-machine, the combination with an oscillating rubber having a post with a stud or projection eccentrically mounted thereon near one end, a pivoted lever secured to said machine and having an extension with a lug projecting therefrom and eccentrically mounted with respect to the outer edge of said extension, of a pitman or rod having a hole at or near each end and also a hook near each end, said pitman adapted to fit over said lugs when in the proper position and be held in place by said hooks when in operating position.

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

JACOB BANY.

Witnesses:

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