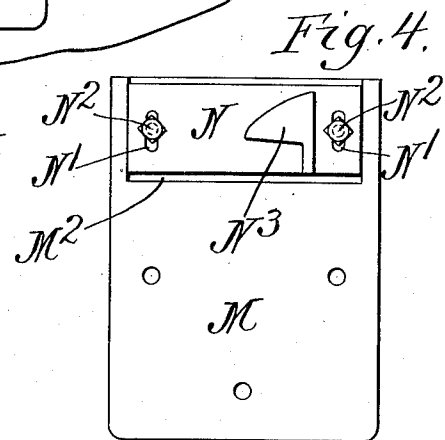
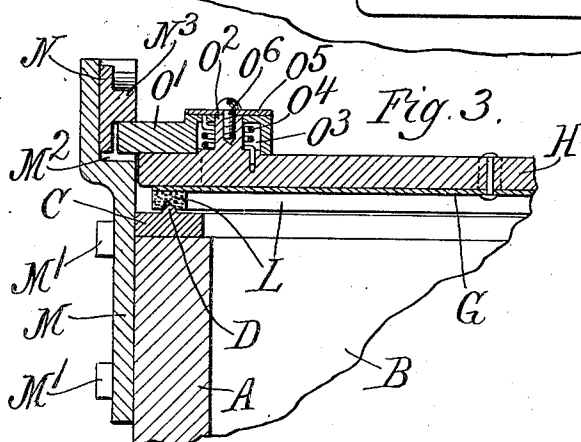
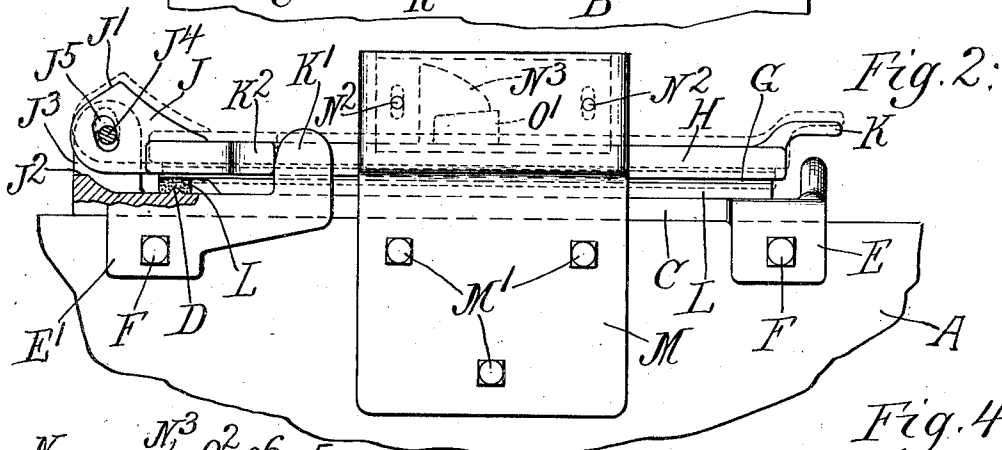
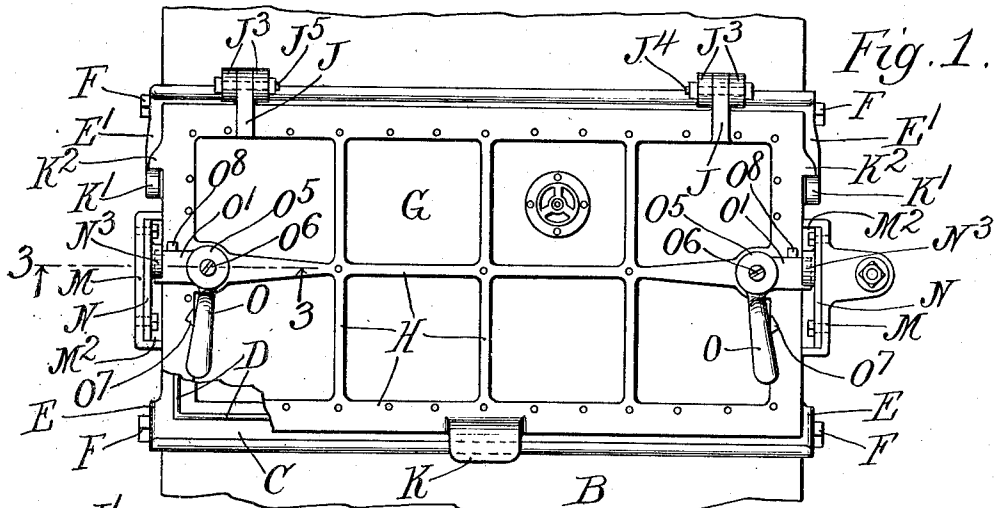


H. S. JUDD.
WASHING MACHINE CLOSURE.
APPLICATION FILED MAY 8, 1907.

983,287.

Patented Feb. 7, 1911.



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UNITED STATES PATENT OFFICE.

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WASHING-MACHINE CLOSURE.

983,287.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed May 8, 1907. Serial No. 372,538.

To all whom it may concern:

Be it known that I, HENRY S. JUDD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Washing-Machine Closures, of which the following is a specification.

My invention relates to laundry machines and particularly the lid or cover of an oscillatory laundry tub.

It is illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of the tub cover with portions of the tub shown. Fig. 2 is an end view looking from the left, with parts broken away. Fig. 3 is a detail cross section on line 3—3 of Fig. 1, and Fig. 4 is a detail of the lock.

Like parts are indicated by the same letter in all the figures.

A is the end board or piece of the tub, and B the sheet metal sides. The tube is approximately cylindrical in form and mounted so as to oscillate on a horizontal line. The lid which we are now to describe, closes the opening normally at the top of the tub. This opening is surrounded by a rectangular frame C having the bead D thereon and the downwardly projecting corner pieces E, E¹ through which pass bolts, the heads of which are seen at F and by which the frame is secured about the upper opening of the tub.

G is a metal sheet secured upon the frame H which constitutes the lid of the tub. The rear portion of the frame is provided with the lugs J, J which are shaped as shown in Figs. 1 and 2, having each the shoulder J¹ to engage the part J² on the frame and hold the tub lid in its open position. The lugs J are interposed between lugs J³ J³ on the rim and a pin J⁴ connects these lugs J³ and passes through the oblong aperture J⁵ in the lug J. Thus while the lid is pivoted to the rim it also has a certain amount of vertical motion with reference to the rim. On the opposite side, or front edge of the lid, is the hand piece K whereby it may be lifted. The downwardly projecting parts E¹ are provided each with an upwardly turned lug K¹ adapted to engage a projection K² on the edge of the lid. The engagement of these two parts stops the descent of the lid and tends to bring it to a

horizontal position before it completes its descent. The object of this is to avoid rubbing the lid laterally across the top of the cork rib L which is formed on the bottom of the edge of the lid and rests upon the bead D to make a tight joint.

At each end of the tub is a bracket M secured to the end of the tub by the bolts M¹ and off-set as indicated in Fig. 1, to form an inner recess M² near the end of the lid. On the inside of the bracket or in this recess is adjustably mounted a plate N slotted at N¹ and adjustably secured by the bolts N² and provided with a locking lug N³ which inwardly projects toward the lid.

The lock portion on the lid consists of the handle O with the projection O¹ therefrom, together forming a bell crank lever pivoted on the pin O² which rises from the frame of the lid. At the pivotal point the elbow crank lever is recessed at O³ to receive the spring O⁴ which coils around the pin O² and is secured at one end to the lid and at the other end to the elbow crank lever. A washer O⁵ held in place by a screw O⁶ keeps the parts in their proper relative position. O⁷ and O⁸ are stops on the lid frame which tend to limit the excursion of the elbow crank lever. One or both of these stops may be omitted.

It will be understood that the drawings are to be taken as diagrammatic and representative of a single form of device in which my invention is set forth, and that modifications could be easily made without departing from the spirit of my invention.

I have described the device as applied to my laundry tub. It is capable of application, of course, to any vessel where a lid of this kind is required, and, therefore, I use the term laundry tub to indicate broadly any sort of vessel to which the lid may be applied. The invention is in the lid not in the tub.

The use and operation of my invention are as follows: The tub, preferably of the shape and mounted as indicated, requires of course, a securely fitted lid. Assuming that the lid is open, having been thrown back in a position not shown in the drawing, the shoulders J¹ engage the surfaces J² and the tub lid is held in its open position. If now the tub lid be thrown forward to close the opening the projection K² on the lid engages the upright lug K¹ on the rim and

the lid is arrested or its rear portion is slightly raised until the whole lid has assumed an approximately horizontal position or has come into parallelism with the rim of the hole to be closed. This the lid may do because of the lost motion pivotal connection. The weight of the lid then causes it to descend, the cork rib resting upon the bead, and thus making a secure closure. As the lid descends the arm O^1 of the elbow crank lever strikes the upper part of the locking lug L^3 for it will be held in its outward position by the spiral spring - O^4 . When it strikes the lug N^3 it is, of course, swung on its pivot until it gets below the end of such lug whereupon the spring forces it back into a locking position. If the spring is not sufficient for this purpose it will at least start the motion in this direction and the handle may be operated by hand to bring the parts to the safe position indicated in Fig. 1.

I have described the use and operation of my invention as applied to a laundry tub, but, of course, it is, as previously explained, applicable to any such device. In using the term laundry tub as applied to my closure I do not mean to limit the use of the closure to any particular device. I have spoken of the rim of the hole to be closed and of the tub, but obviously they are parts of one and the same thing.

I claim:

1. A laundry tub closure comprising a rim, a lid, a lost motion pivotal connection between the two, and means for bringing the lid to parallelism with the rim before it completes its motion toward the rim.

2. A laundry tub closure comprising a rim, a lid, a lost motion pivotal connection between the two, and means for bringing the lid to parallelism with the rim before it com-

pletes its motion toward the rim, comprising engaging lugs one on the rim, the other on the lid.

3. A laundry tub closure comprising a rim, a lid, a pivotal connection between the two and interlocking devices comprising an elbow crank lever pivoted on the lid, and an adjustable locking lug on the rim.

4. A laundry tub closure comprising a rim, a lid, a pivotal connection between the two and interlocking devices comprising an elbow crank lever pivoted on the lid, an adjustable locking lug on the rim, and a bracket on the tub to which said adjustable locking lug is secured.

5. A laundry tub closure comprising a rim, a lid, a pivotal connection between them, a bracket at one end of the tub, a locking lug thereon, an elbow crank lever, one arm of which is in the path of such lug, a pivot on the lid on which the elbow crank lever is mounted, and a spiral spring interposed between the elbow crank lever and the lid to normally keep the elbow crank lever in the locking position.

6. A laundry tub closure comprising a rim, a lid, a pivotal connection between them, a bracket at one end of the tub, a locking lug thereon, an elbow crank lever, one arm of which is in the path of such lug, a pivot on the lid on which the elbow crank lever is mounted, and a spiral spring interposed between the elbow crank lever and the lid to normally keep the elbow crank lever in the locking position, said spring housed in a recess between the lid and the elbow crank lever.

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