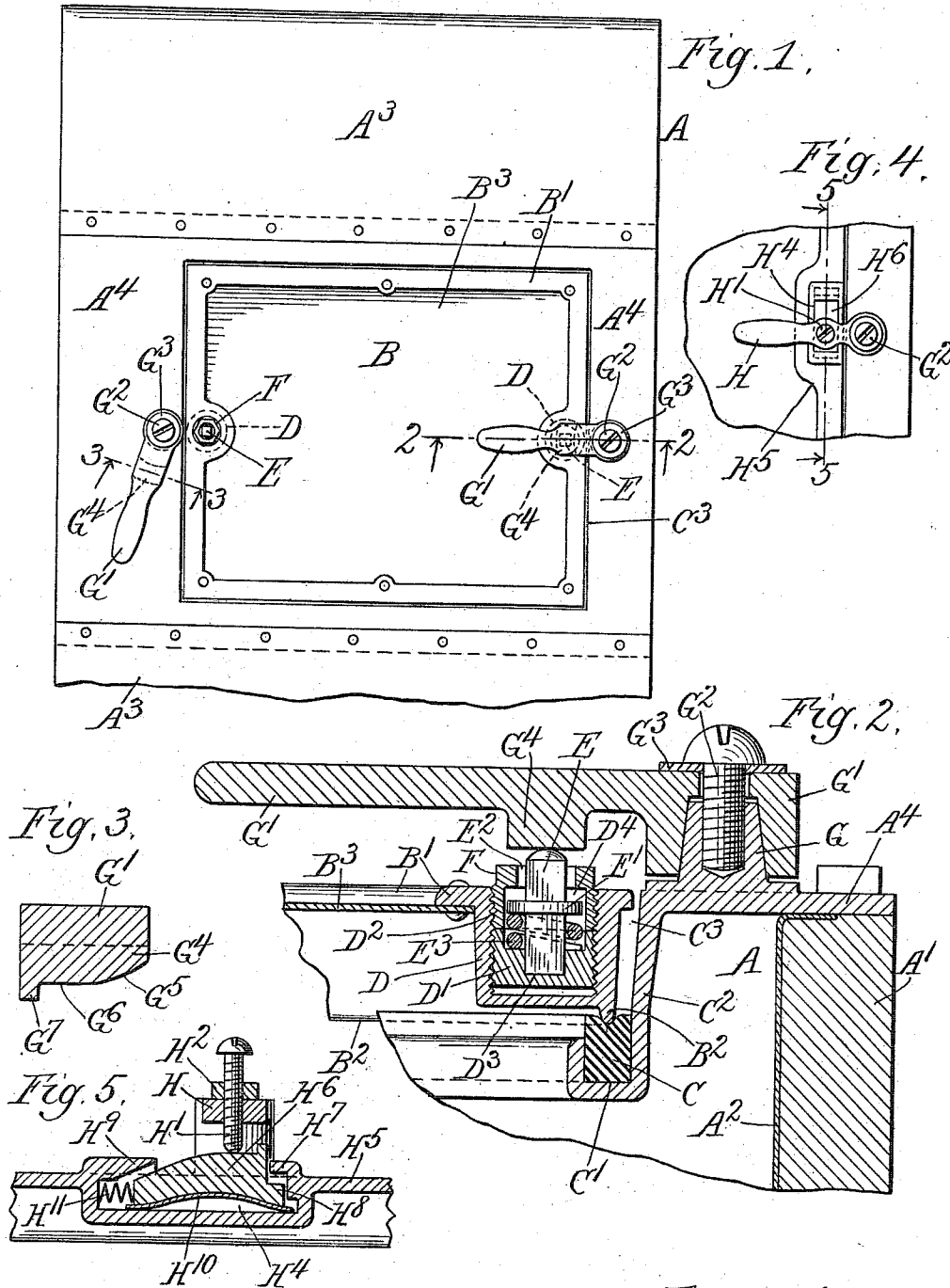


H. PLETSCH.
TUB COVER FASTENER.
APPLICATION FILED MAR. 7, 1910.

985,933.

Patented Mar. 7, 1911.



Witnesses,
Edward T. Wray,
Sophie B. Werner.

Inventor,
Henry Pletsch,
by *Parker & Pletsch*
Attorneys.

UNITED STATES PATENT OFFICE.

HENRY PLETSCH, OF CHICAGO, ILLINOIS, ASSIGNOR TO JUDD LAUNDRY MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE.

TUB-COVER FASTENER.

985,933.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed March 7, 1910. Serial No. 547,631.

To all whom it may concern:

Be it known that I, HENRY PLETSCH, 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 Tub-Cover Fasteners, of which the following is a specification.

My invention relates to improvements in tub cover fasteners, and is illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of the device; Fig. 2, a section along the line 2—2 of Fig. 1; Fig. 3, a section along the line 3—3 of Fig. 1; Fig. 4, a plan view of a modification; Fig. 5, a section along the line 5—5 of Fig. 4.

Like parts are indicated by like letters in all the figures.

The tub A has the rigid end pieces A¹ to which are attached the end lining A², the side pieces A³ and the frame A⁴. The door B is made up of the rigid outer frame B¹ having the downwardly depending flange B² and the interior panel B³. The flange B² is adapted to engage the resilient packing material C contained in the groove C¹ in the L-shaped flange C² which depends downwardly from the frame A⁴ about the opening C³. At either end of the door B and integral with the frame B¹ are the cylindrical members D screw-threaded at their interior to engage the plugs D¹, D². The plug D¹ is provided with the square hole D³ and with the plug D² incloses the chamber D⁴. The square lug E having the collar E¹ rigid thereabout, engages the hole D³ and is rotatably mounted within the circular opening E² in the top of the plug D². The spring E³ surrounds the lug E and is contained between the plug D¹ and the lug E. The plug D² is provided with the flat surfaces F to permit a wrench being used to rotate the plug. The upper portion of the lug E is also provided with flat surfaces in order that it and the plug D¹ may be rotated. The conical lug G projects upwardly from and is rigid upon the frame A⁴. The handle G¹ which rotates about the lug G and is held thereupon by the screw G² and washer G³, carries the lug G⁴ which has the curved face G⁵, and the flat surface G⁶ which terminates in a projection G⁷.

In the modification illustrated in Figs. 4 and 5 the handle H which is attached to the tub in the usual manner, carries the screw H¹ and lock nut H². The recess H⁴ in the door H⁵ contains the cam member H⁶ which

is held therein by means of lugs H⁷ H⁸ at one end, and the lug H⁹ at the other. The spring H¹⁰ is adapted to force the cam member upwardly against the lugs H⁷ H⁸ and the spring H¹¹ to force it longitudinally against the wall of the recess. In this device the screw H¹ rides upon the cam member H⁶ as the handle is rotated to close the tub.

It will be evident of course that although I have shown in my drawings an operative device still numerous changes in the size, shape and arrangement of parts could be made without departing from the spirit of my invention. I wish therefore that my drawings be considered as diagrammatic.

The use and operation of my invention are as follows:—In a tub or other receptacle having a door I provide holding means whereby the door may be held in position. These means comprise a plurality of adjustable plugs, a chamber within and between said plugs, a lug protruding through one of said plugs and engaging the other, and a lever to engage such lug. When the lever is swung over the lug, a cam member upon it engages the lug and forces it downward against a spring until it rests upon the interior plug. By this means a positive closure is provided. The two plugs may be adjusted in position in order to regulate the pressure exerted upon the door by the lever. Even, however, if these plugs be not regulated or adjusted the spring within them will maintain the door closed even after wear has taken place.

In the modification which I have illustrated is shown a lever having a screw adapted to engage a cam-shaped surface on a lug which lug is held in the body of the tub door by means of a spring, and the pressure of the screw, as the handle is thrown over, tends to compress the spring, thus exerting a closed pressure upon the door. One of the advantages in the use of this spring closure for the tub door is that it enables any too great increase in pressure to operate, to raise the door, thereby reducing the pressure to allow the machine to operate. This is essential in that when the pressure in the tub has reached a certain point, the tub no longer oscillates and the driving mechanism operates without moving the tub in any way whatever.

I claim:—

1. The combination with a tub of a door

therefor, a seat upon the tub for such door and elastic means for forcibly retaining the door upon the seat, said means comprising a plurality of levers rotatably mounted upon the tub and carrying cam surfaces adapted to engage projections elastically mounted upon the door.

2. The combination with a tub of a door therefor, a seat upon the tub for such door and adjustable means for forcibly retaining the door upon the seat, said means comprising a plurality of levers rotatably mounted upon the tub and carrying cam surfaces adapted to engage projections adjustably mounted upon the door.

3. The combination with a tub of a door therefor, a seat upon the tub for such door and adjustable and elastic means for forcibly retaining the door upon the seat, said means comprising a plurality of levers rotatably mounted upon the tub and carrying cam surfaces adapted to engage projections adjustably and elastically mounted upon the door.

4. The combination with a door of retaining means therefor, said means comprising a plurality of plugs screw-threaded upon the door, a chamber within and inclosed by said plugs, and a lug slidably mounted within said chamber.

5. The combination with a door of retaining means therefor, said means comprising a plurality of plugs screw-threaded upon

the door, a chamber within and inclosed by said plugs, a lug slidably mounted within said chamber, a collar about said lug and a spring within said chamber and between the collar and one of the plugs.

6. The combination with a door and a closure therefor, comprising two threaded plugs, one above the other, engaging said door, a chamber within and inclosed by said plugs, an angular recess in the bottom of one of said plugs opening through the other to the chamber, an angular lug within said chamber engaging the angular recess in one of the plugs and projecting through the other, a collar about said lug, a spring within the chamber between said collar and the lower plug and a lever upon the tub having a cam surface adapted to engage the end of said angular lug.

7. The combination with a tub, of a door therefor, a seat for such door and adjustable means for forcibly retaining the door upon the seat, said means comprising levers and cam surfaces mounted upon the tub and in engagement with projections adjustably mounted upon the door, said projections elastically mounted but adapted when the resiliency of their mounting is overcome, to engage the door to hold it in a rigid position.

HENRY PLETSCH.

Witnesses:

FRANCIS W. PARKER, Jr.,
EDWARD T. WRAY.