July 29, 1924. 1,502,872

G. A. OBERG

SLIDING DOOR AND LOCK FOR WASHING MACHINE CYLINDERS

Filed Nov. 15, 1922

Fig. 1.

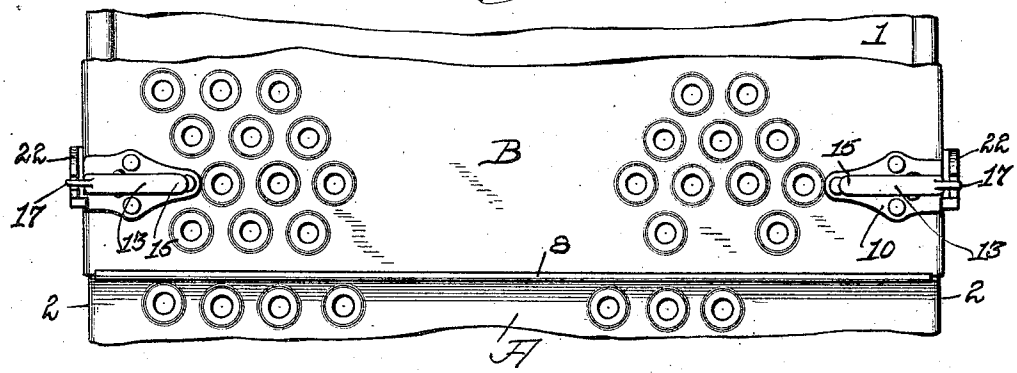


Fig. 2.

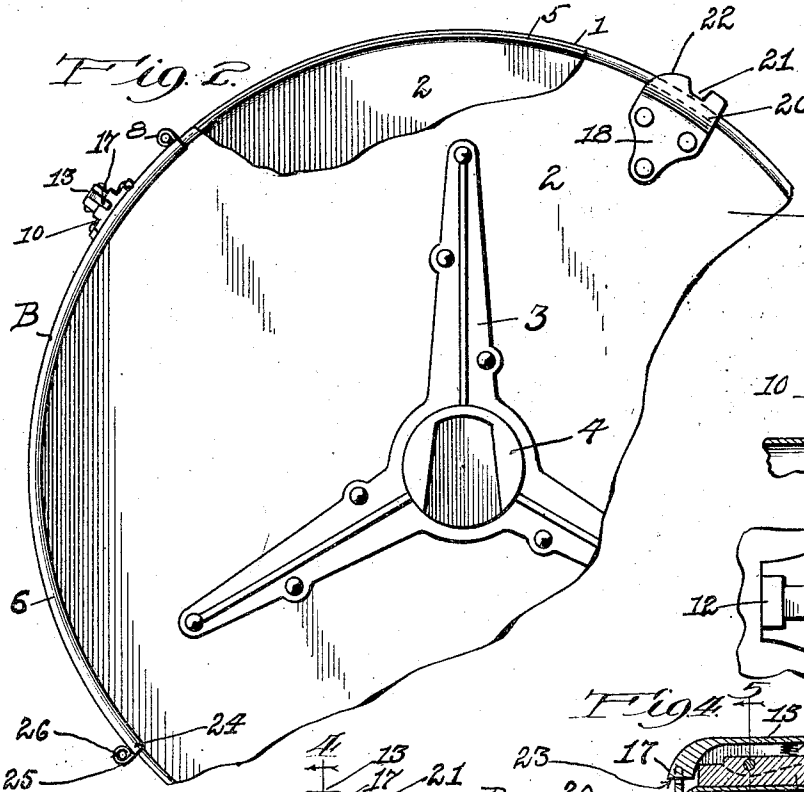


Fig. 5.

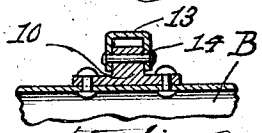


Fig. 6.

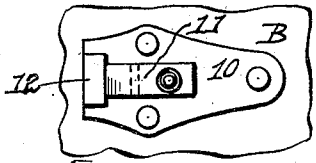


Fig. 3.

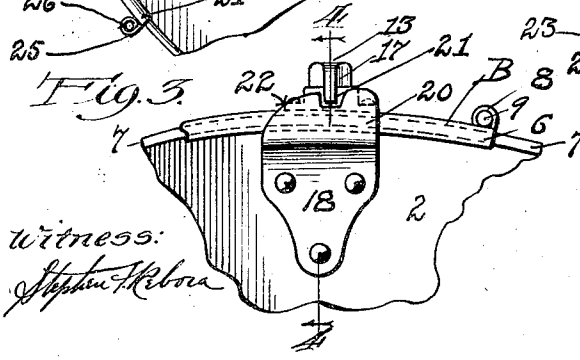
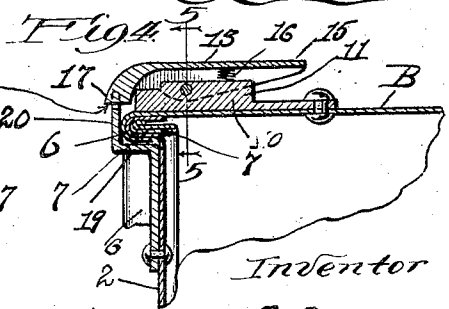


Fig. 4.



Witness:
Stephen Hebron

Inventor
Gunnard A. Oberg.
by Taylor & Brown his Attys

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UNITED STATES PATENT OFFICE.

GUNNARD A. OBERG, OF JAMESTOWN, NEW YORK, ASSIGNOR TO BLACKSTONE MANUFACTURING COMPANY, OF JAMESTOWN, NEW YORK, A CORPORATION OF NEW YORK.

SLIDING DOOR AND LOCK FOR WASHING-MACHINE CYLINDERS.

Application filed November 15, 1922. Serial No. 601,197.

To all whom it may concern:

Be it known that I, GUNNARD A. OBERG, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Sliding Doors and Locks for Washing-Machine Cylinders, of which the following is a specification, reference being had to the accompanying drawings, and to the reference characters marked thereon, which form a part of this specification.

This invention relates to cylinders for washing machines, having a sliding door or cover, and means for locking the slidable cover in its closed position.

The invention consists of the devices and combination of devices herein illustrated and described, and more particularly pointed out in the appended claims.

In the drawings:

Fig. 1 is a plan view of a part of a cylinder embodying the present invention, showing the sliding lid locked in the closed position.

Fig. 2 is a fragmentary end elevation of the cylinder, showing the cover unlocked and in its retracted position.

Fig. 3 is an end view of a portion of the cylinder and the lock.

Fig. 4 is a vertical sectional view through the lock, the section being taken in the plane of the dotted line 4—4 of Fig. 3.

Fig. 5 is a transverse, vertical, sectional view of the lock, the section being taken in the plane of the dotted line 5—5 of Fig. 4.

Fig. 6 is a plan view of that portion of the lock secured to the lid, with the latch member removed.

In said drawings: A indicates as a whole, a metal cylinder or container for washing machines, provided with my improved lid and lock therefor. The cylinder is of sheet metal and is composed of a circular body portion 1 and two end portions 2, 2, suitably joined together at their margins by overlapped or bent portions. Each end 2 is provided with a suitable bracket 3 riveted thereto and carrying an integral bearing stud or hub trunnion 4, whereby the cylinder may be supported and rotated.

B is a lid for the opening 5 of the cylinder. At its ends, the lid B is bent downwardly and then under, as shown at 6, to surround an outwardly projecting bead or lug 7 on the ends 2. There being two of these bent parts 6, it follows that the lid B will have a sliding connection with the cylinder as a whole and may be moved from the closed position shown in Fig. 1 to the retracted or open position shown in Fig. 2, and back again, because of its sliding bearing upon the cylinder. One edge, 8, of the metal composing the lid B is turned up to surround a wire 9, thus forming a beaded margin or hand-hold, making it convenient for the operator to manipulate the lid B. On each end of the lid B and somewhat near the bent portion 8, is a lock plate 10, suitably secured by rivets or otherwise, to the lid B, and having a centrally disposed rib 11 and a transversely arranged shoulder 12. Mounted upon and surrounding the rib 11 is a U-shaped metal member 13 which is pivoted to the lug 11 at 14 and which is provided at its inner end with an extension 15. It will be noticed by reference to Figs. 3 and 4, that the bottom margins of the forward end of the member 13 normally rest upon the top surface of the shoulder 12. Upon the upper part of the lug 11 of the lock plate 10, I mount a spring 16, which is adapted to bear against the under side of the member 13, and being located between the pivot 14 and the extreme end 15, tend to hold the outer end of the member 13 upon the shoulder 12, as stated. At the extreme end of the member 13, I provide a centrally positioned locking lug 17, which extends sufficiently outward so as to clear the shoulder 12, as clearly seen in Fig. 4.

Upon the cylinder end 2 is a locking plate 18. At its upper portion it is bent outwardly at 19, and then upwardly at 20, so that the upwardly inclined part 20 stands in a plane parallel with the plane of the end 2. The parts 19, 20, it will be understood, are of such length and dimension as to pass completely about and clear the lug 7 and the space in which the parts 6 of the lid B will move. The part 20 extends beyond the outer circumference of the lid B and its upper edge is provided with a locking notch 21 adapted to receive and between its two side walls, to hold the bolt 17.

One of the edges 22 of the part 20 extends away from the notch 21 on such a curve or

slant as to form a cam surface which will engage the lower edge 23 of the bolt when the lid is in the retracted position but is being moved up to its closed position. In such movement, the edge 23 will strike the wedge or cam shaped edge 22 and ride upon it until the bolt 17 will come opposite to and engage the notch 21 whereupon under the influence of the spring 16, the bolt 17 will promptly enter the notch 21.

It will be manifest, of course, that the extension 15 may be pressed downwardly, thus compressing the spring 16, in order to raise the bolt 17 out of the notch 21, and permit the cover B to move from its locked to its unlocked position.

In order to limit the movement of the lid B when opening the same to gain access to the interior of the cylinder, I find it convenient to place on the body 1 of the cylinder at any desired point, a stop bead or shoulder against which the end 24 of the lid B may abut. This bead may be conveniently formed by bending the metal at 25 about a wire 26, in a familiar manner.

As shown in Fig. 1, I prefer to use a plurality of locks, one at each end.

I claim as my invention:

1. A sheet metal cylinder provided with an opening and a circumferential flange on each end, a lid provided with means for embracing and sliding upon said flanges, a stop on the body to limit the movement of the lid, a lock on the body and a bolt on the lid to engage the lock when the lid is in its closed position.

2. A sheet metal cylinder provided with an opening and a circumferential flange on each end, a lid provided with means for embracing and sliding upon said flanges, a stop on the body to limit the movement of the lid, a lock on the body and a bolt on the lid to engage the lock when the lid is in its closed position, the lock being provided with a cam to engage and lift the bolt.

3. The combination of a cylindrical body having a slidable lid mounted thereon, a bracket secured to the body and projecting beyond its periphery, a cam on the projecting part and a lock recess adjacent the cam, a lock plate secured to the slidable lid, a longitudinal rib on the plate, a shoulder on the outer part of the plate, a member pivoted to the rib, a spring intermediate said member and said rib, said member being adapted to engage the shoulder under the influence of the spring and a bolt on the outer part of the pivoted member adapted to ride upon the cam and engage said recess.

In testimony that I claim the foregoing as my invention, I affix my signature, in the presence of two witnesses, this 10th day of November, 1922.

GUNNARD A. OBERG.

Witnesses:
MAE LARSEN,
FLORENCE HAMMOND.