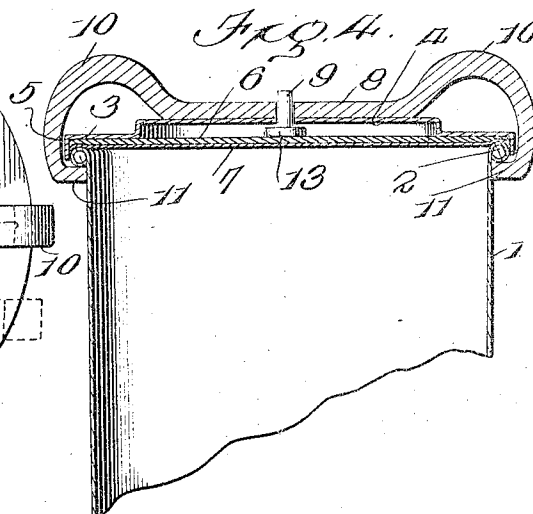
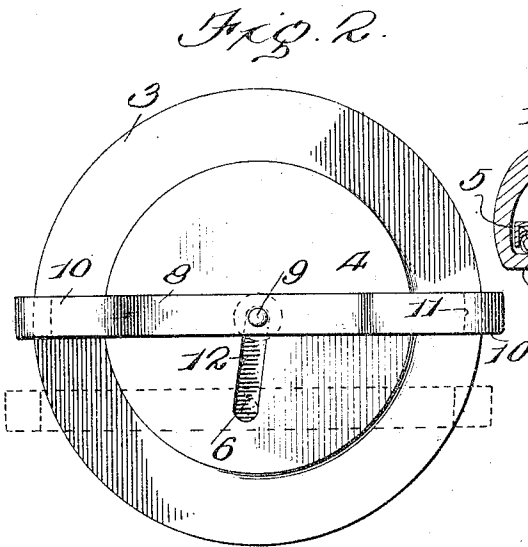
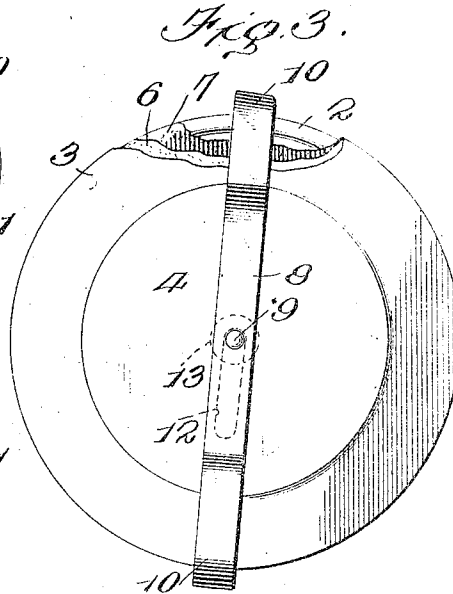
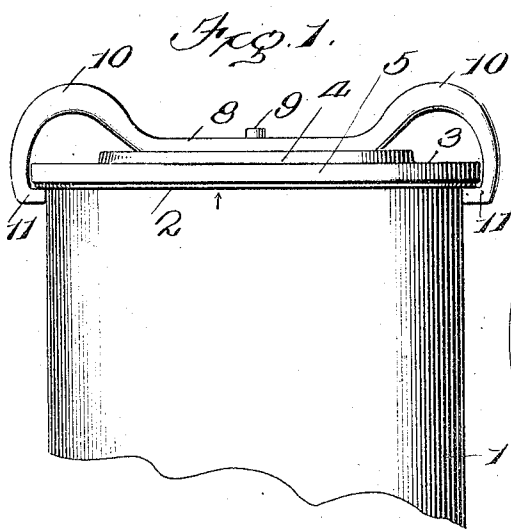


S. B. THOMAS.
FASTENER FOR CAN CLOSURES.
APPLICATION FILED NOV. 11, 1908.

944,297.

Patented Dec. 28, 1909.



Witnesses

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FASTENER FOR CAN-CLOSURES.

944,297.

Specification of Letters Patent. Patented Dec. 28, 1909.

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To all whom it may concern:

Be it known that I, SAMUEL B. THOMAS, citizen of the United States, residing at Manchester, in the county of Hillsboro and State of New Hampshire, have invented certain new and useful Improvements in Fasteners for Can-Closures, of which the following is a specification.

This invention contemplates the construction and arrangement of a fastener for can or other receptacle closures and is particularly designed to retain the closure in its proper position to close the receptacle and prevent the injurious action of air upon the contents.

The invention comprises essentially a clamping bar pivotally secured to the receptacle closure and formed at its opposite extremities with jaws designed to engage a flange or bead carried by the receptacle, and the bar operating in a slot formed in the closure, when properly manipulated, is brought into or out of a clamping or operative position upon the receptacle.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of the receptacle with the closure and fastener illustrated in a closed or clamped position. Fig. 2 is a top plan view illustrating the movement of the clamping bar from an inoperative to an operative position. Fig. 3 is a top view partially in section illustrating the position of the clamping bar in an operative position. Fig. 4 is a vertical sectional view of the receptacle, closure, and clamping bar assembled.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates a receptacle of any character and for the purpose of illustration is shown as a plain cylindrical shell upon which a bead or outwardly projecting flange 2 is formed or secured in any desired manner. The receptacle closure 3 is shown as adapted to fit upon the receptacle and is formed with a raised annular portion 4 and deflected downwardly at its rim to partially extend over the

bead 2 as indicated at 5. The closure 3 may be of any desired shape to properly fit upon the receptacle 1 and is preferably constructed of metal possessing sufficient resiliency to permit the raised annular portion to be slightly deflected upon the application of pressure when clamped in position upon said receptacle.

To more completely close the receptacle and to promote the sanitary condition thereof both as regards the exclusion of air and foreign matter, a card board disk or layer 6 and an inner layer of wax paper 7 are preferably interposed between the closure and receptacle and firmly held in position when said closure is clamped upon the receptacle. These layers or disks, in consideration of their economical construction, are preferably destroyed upon refilling the receptacle and such procedure is especially advisable when milk or other recognized germ conductor is contained within said receptacle.

A clamping bar 8 is pivotally secured at its middle to the closure 3 by a pin 9 and said bar is formed with upwardly curved portions 10 designed as finger pieces by which the jaw extremities 11 are moved into or out of engagement with the bead 2 of the receptacle 1. The pivot pin 9 upon which the clamping bar 8 is mounted operates in a slot 12 formed in the raised portion 4 of the closure 3 and the head 13 of said pin is permitted to move within the space formed between said raised portion of the closure and card-board disk 6 (Fig. 4). The jaw extremities 11 of the clamping bar as shown, extend around the edge of the closure 3 and as illustrated in Fig. 2 said clamping bar is drawn toward the edge of the closure to disengage said jaws from the receptacle bead or flange 2 as indicated by the dotted parallel position of the bar.

In the practical operation of the fastener, the closure 3 containing the disks 6 and 7 is placed upon the receptacle, the pivot pin 9 and clamping bar 8 having first been moved to the dotted line position of Fig. 2. Said bar is then moved to an operative or clamping position at the center of the closure (Fig. 2), and by manipulation of the finger pieces 10, is given a quarter turn to the position illustrated in Fig. 3. In this position the closure is securely locked upon the receptacle and accidental disengagement of the

clamping bar is prevented by the changed relative positions of the slot 12 and said bar.

The jaws 11 sufficiently overhang the edge of the closure to permit forced engagement with the receptacle bead 2, and as before stated, the resiliency of the metal at the raised portion 4 of the closure, cooperating with the disks 6 and 7 will form an efficient air-tight and waterproof closure for any receptacle.

As will be understood, the fastener is designed for use in connection with receptacle closures of any formation or construction and for purposes of illustration, is applied to a common form of closure and receptacle best adapted to intelligently display the invention.

Having thus described the invention, what is claimed as new is:—

1. The combination with a closure, of a clamping bar and a pivotal connection at the middle of the bar engaging with the closure and movable along a definite line to and from the rim of the closure, said bar having a rotative movement on said pivotal connection in a plane parallel to the plane of the closure, said pivotal connection permitting the bar to be turned at right angles to the direction of said line.

2. The combination with a closure, of a clamping bar pivotally connected to the upper face of said closure for rotative movement in a plane parallel therewith, and means for permitting a movement of said bar in a diametrical line transverse to the closure and in one direction only, whereby the bar may be turned to a position in alignment with said line, to prevent said movement, or into a direction at right angles to said line to permit a disengagement of the clamping bar with a vessel.

3. The combination with a receptacle and a closure therefor, of a clamping bar engageable with the receptacle to hold the closure in place, a pivotal stud on the bar engaging with the closure and means on the closure for guiding the stud along a definite radial line.

4. The combination with a receptacle and a closure therefor, of a clamping bar having its ends adapted to engage the receptacle, a stud mounted on the bar, and pivotally but shiftably connecting the clamping bar to the closure, and means for guiding the movement of the stud in its engagement with the closure toward or from the center of said closure to effect a clamping position of said bar, said means thereby permitting the relative positions of said bar.

5. The combination with a receptacle and a closure therefor, the latter provided with a radial slot, of a clamping bar, a stud mounted on the clamping bar and pivotally connecting the clamping bar to the closure, said stud projecting into the slot and being

thereby guided radially over the face of the closure whereby an engaging and disengaging position of the clamping bar is effected.

6. The combination with a receptacle, and a closure therefor, of a clamping bar having its ends engageable with the walls of the receptacle to hold the closure in place, and a stud shiftably engaged with the closure for radial movement therein, said stud having pivotal engagement with the middle of the clamping bar.

7. The combination with a closure provided with a slot extending radially from the center of said closure toward the rim, of a clamping bar, and a pin pivotally connecting the clamping bar to the closure and movably mounted in said slot, whereby said pin may be moved toward or from the center of said closure to effect a clamped or disengaged position of the clamping bar.

8. The combination with a receptacle having an annular flange at its upper end, a closure for the receptacle having a radial slot extending from the center of the closure outwardly, a clamping bar having its end portions downwardly and inwardly turned to engage with the flange of the receptacle, and a stud mounted in the slot of the closure and having pivotal engagement with the clamping bar.

9. The combination with a receptacle having a flange at its upper end and a closure therefor having a radial slot extending from its center, of a clamping bar having downwardly and inwardly turned ends adapted to engage with the flange of the receptacle and a stud having an enlarged head, the shank of the stud projecting up through the slot on the closure and pivotally engaged with the clamping bar.

10. The combination with a receptacle having an annular flange at its upper end, of a closure for the same having a centrally embossed portion, the said embossed portion being radially slotted from the center of the closure, a stud having a head, the shank of said stud projecting outward through said slot and the head thereof being contained in the embossed portion of the closure, a locking bar having a perforation surrounding said pin, the ends of the locking bar being downwardly and inwardly turned to engage with the annular flange of the receptacle.

11. The combination with a receptacle having an outwardly turned flange at its upper end, of a closure comprising a covering plate having a centrally raised portion slotted from the center of the closure radially outward, a disk mounted within the closure below the centrally raised portion, a pin having a head contained within the centrally raised portion and a shank extending out of the slot therein, and a clamp bar having a perforation in its middle through which said pin passes, the ends of said

clamping bar being downwardly bent and extending beneath the flange on the receptacle.

5 12. The combination with a receptacle and a closure therefor, of a locking bar having its ends adapted to engage the receptacle, a stud having a radially shiftable engagement with the closure and a pivotal engagement with the locking bar, means for limit-

ing the radial shifting movement of the stud 10 to a movement in one direction only.

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

SAMUEL B. THOMAS. [L. s.]

Witnesses:

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