

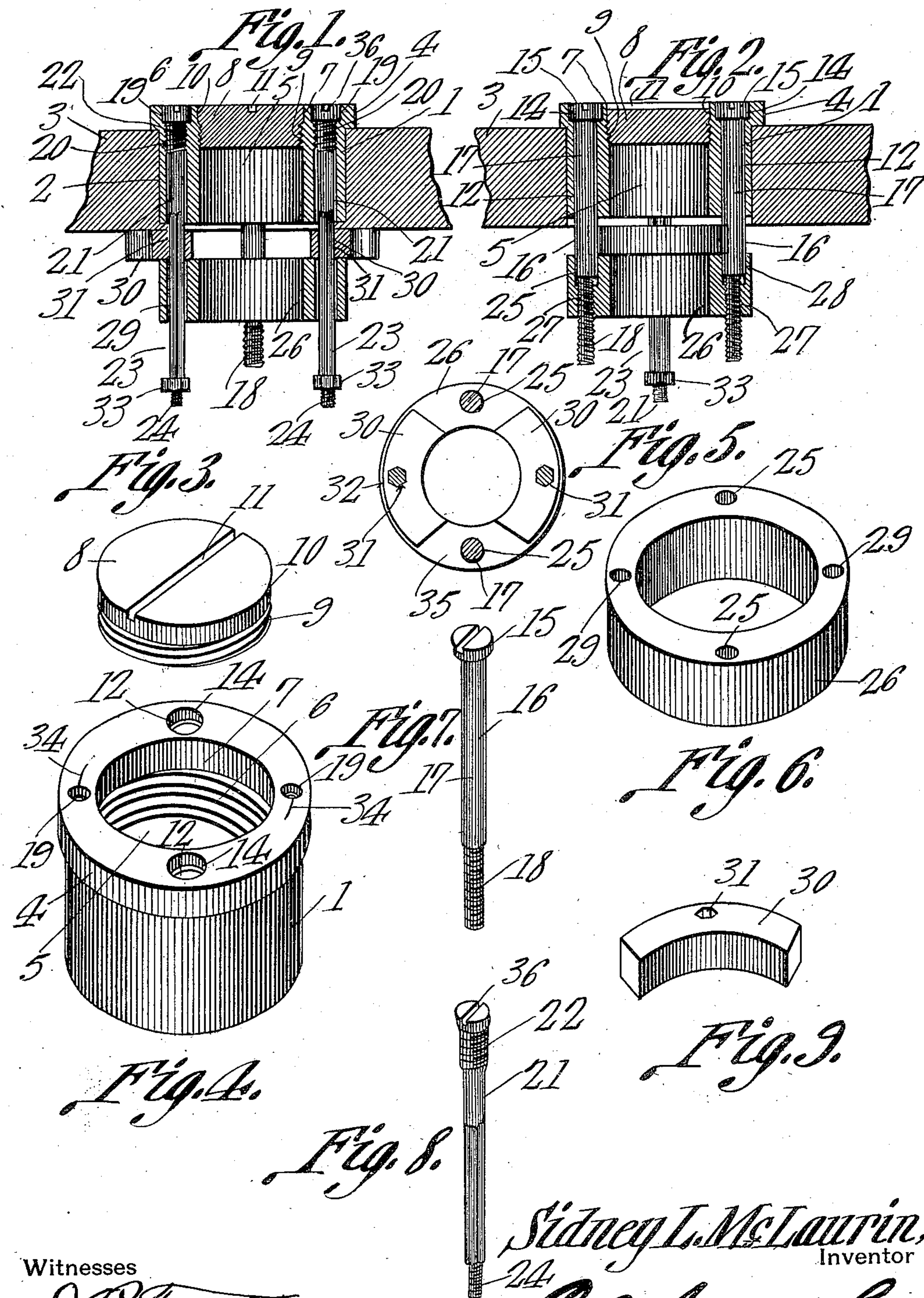
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BUNG.

APPLICATION FILED JAN. 20, 1911.

999,240.

Patented Aug. 1, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## BUNG.

999,240.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed January 20, 1911. Serial No. 603,778.

*To all whom it may concern:*

Be it known that I, SIDNEY L. McLAURIN, a citizen of the United States, residing at Brandon, in the county of Rankin and State of Mississippi, have invented a new and useful Bung, of which the following is a specification.

It is the object of this invention to provide a bung for a barrel or cask, so constructed that bungs may readily be mounted in place in the cask, and removed therefrom at will, the bung being provided with locking means which may be manipulated, to engage the inner face of the cask, to hold the bung in position, the manipulation of said locking means serving to seat the bung hermetically in the bung hole of the cask.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figures 1 and 2 are transverse sections, the cutting planes of which are at right angles to each other; Fig. 3 is a detail perspective of the closure; Fig. 4 is a detail perspective of the casing which is inserted into the bung hole, to receive the closure; Fig. 5 is a bottom plan of the collar, showing the locking members, parts being sectioned; Fig. 6 is a detail perspective of the collar; Fig. 7 is a detail perspective of one of the adjusting members; Fig. 8 is a detail perspective of another of the adjusting members; and Fig. 9 is a detail perspective of one of the locking members.

In carrying out the invention there is provided, as a primary and fundamental element, a tubular casing 1, adapted to be inserted into the bung hole 2 of the barrel 3, the casing being provided, adjacent one end, with an outstanding flange 4, adapted to overlap the barrel 3, about the bung hole 2, and upon the outside of the barrel. Inter-

mediate its ends, the bore 5 of the casing 1 is threaded for a short distance, as shown at 6, the bore being smooth above the threaded portion 6, as denoted by the numeral 7. A closure 8, seen most clearly in Fig. 3, is provided, the closure being threaded, adjacent its lower end, as denoted by the numeral 9, to engage the threaded portion 6 of the casing 1. Above its threaded portion 9, the closure 8 is shouldered slightly, as shown at 10, to register in the portion 7 of the bore of the tubular casing 1. The closure 8 is supplied with a kerf 11, whereby the closure may be rotated into a firm seat in the casing 1, by means of a screw driver, or like tool. Openings 12 are extended through the tubular casing 1, these openings being enlarged slightly, adjacent their outer ends, as shown at 14, to receive the heads 15 of screws 16, the shanks 17 of the screws being smooth, so as to register, for free rotation and for longitudinal sliding movement in the openings 12 of the casing 1. The screws 16 terminate in threaded portions 18, of slightly less diameter than the shanks 17. In the tubular casing 1 there are other openings 19, threaded for a short distance, intermediate their ends, as shown at 20. Into these openings 19, screws 21 are inserted, the screws being threaded for a short distance, adjacent their heads, as shown at 22, to engage with the threaded portions 20 of the openings 19 in the casing 1. The screws 21 are supplied with polygonal shanks 23, of any desired cross sectional contour. The openings 19 in the casing 1 are of sufficient diameter to receive the polygonal shanks 23 freely, both for rotation, and for longitudinal sliding movement. Adjacent their extremities, the screws 21 are reduced in diameter slightly, and threaded, as shown at 24.

The screws 16 are adapted to extend through openings 25 in a collar 26, the openings 25 being threaded adjacent one end, as shown at 27, and being enlarged slightly, without threads, adjacent their other ends, as shown at 28, these portions 28 being adapted to receive the extremities of the shanks 17 of the screws 16, the threaded ends



18 of the screws 16 engaging the threaded portions 27 of the openings 25 in the collar 26. In the collar 26 there are other openings 29, adapted to receive for rotation and  
 5 for longitudinal sliding movement, the polygonal shanks 23 of the screws 21. Upon the threaded ends 24 of the screws 21, below the collar 26, nuts 33 are mounted. Segmental latches 30, one of which is shown in  
 10 Fig. 9, are interposed between the collar 26 and the tubular casing 1, there being polygonal openings 31 in the latches 30, adapted to receive the polygonal portions 23 of the screws 21, the construction being such that,  
 15 when the screws 21 are rotated, the latches 30 will be rotated with them. As clearly shown in Fig. 5, the latches 30 may be housed entirely within the contour of the collar 26, a space 32, appreciable but small, existing  
 20 between the peripheries of the latches 30 and the periphery of the collar 26. However, when the screws 21 are rotated, the extremities of the segmental latches 30 will protrude beyond the periphery of the collar 26, and  
 25 overlap the barrel 3 about the bung hole 2.

Presupposing that the device has not been mounted in the barrel 3, the operation is as follows. The screws 16 are first rotated slightly, so that the latches 30 will be bound  
 30 between the collar 26 and the tubular casing 1, the latches 30 being within the contour of the collar 26, as shown in Fig. 5. The casing 1 is then inserted into the bung hole 2, and the screws 16 are rotated so that the latches  
 35 30 are spaced slightly below the inner surface of the barrel 3. The screws 21 are then rotated, swinging the latches 30 outwardly, beyond the periphery of the bung hole 2, as shown most clearly in Fig. 1. If the screws  
 40 16 be rotated, the collar 26 and the tubular casing 1 will be drawn toward each other, the flange 4 of the tubular casing being bound tightly against one side of the barrel 3, the latches 30 being engaged by the collar  
 45 26, and being pressed firmly against the inner face of the barrel. By the foregoing operation, the casing will be firmly seated in the bung hole, and the latches 30 will be pressed against the barrel 3. The bung,  
 50 under such circumstances, cannot be displaced accidentally. After the bung has been thus locked in the bung hole, the closure 8 may be removed and replaced, as often as desired, without disarranging the locking  
 55 mechanism, or moving the casing 1 in the bung hole 2.

By reason of the fact that the screws 16 each slide freely in the tubular casing 1, each of the said screws may be manipulated  
 60 individually, to actuate the collar 26, the screw 21 which is not manipulated, sliding freely in the casing 1, whereupon the last mentioned screw may, in its turn, be rotated to exercise its clamping effect upon the col-  
 65 lar 26 and the casing 1.

Owing to the fact that the screws 21 are supplied with the nuts 33, the collar 26 cannot drop into the interior of the barrel, even though the screws 16 be removed entirely from the bung structure. The nuts  
 70 23, of course, are housed well within the periphery of the collar 26, so that the nuts will not interfere with the insertion and removal of the bung. The coöperation between the threads 22 of the screws 21 and  
 75 the threaded portions 20 of the openings 19 in the casing 1 is such that when the screws 21 are rotated to a firm seat, the latches 30 will be held against rotation in the outstanding positions shown in Fig. 1, a slight  
 80 rotation of the screws 21 being necessary, in order to house the latches 30 within the contour of the collar 26, as shown in Fig. 5. Therefore, if, after the bung has been  
 85 mounted in the bung hole, the operator rotates the screws 21 to a firm seat, he will be positively assured that the latches 30 will be in the outstanding position shown in Fig. 1.

If desired, there may be marks 34 upon  
 90 the outer end face of the casing 1, adjacent the openings 19, as shown in Fig. 4, the construction being such that when the kerf 36 of the screw 21 is alined with this mark, the operator will be assured that the latches 30  
 95 are in the protruding positions shown in Fig. 1.

Referring particularly to Fig. 5, it will be seen that the space 35 between the ends of the latches 30 serve to define openings  
 100 through which the liquid may pass, between the collar 26 and the inner face of the barrel 3. Owing to this construction, the last drop of liquid in the barrel may be drained away through the bung, the collar 26 being in-  
 105 effective to interfere with the complete draining of the barrel.

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

1. In a device of the class described, a  
 110 tubular casing adapted to be inserted into the bung hole of a barrel; a collar movable with respect to the casing; a latch rotatable between the casing and the collar, and adapted to overlap the inner face of the bar-  
 115 rel; means in the casing and accessible from the outside of the casing, for rotating the latch; and means in the casing and accessible from the outside of the casing to move the collar against the latch and to cause the  
 120 latch to bind against the inner surface of the barrel.

2. In a device of the class described, a tubular casing adapted to be inserted into the bung hole of a barrel; a collar movable  
 125 with respect to the casing; a latch rotatable between the casing and the collar, and adapted to overlap the inner face of the barrel; a member rotatable in the casing and engaged with the latch to rotate the  
 130



same, the collar being movable upon said member, and said member being provided with means adapted to engage the collar to prevent the collar from dropping into the  
5 barrel; and a screw mounted in the casing, and engaging the collar, to advance the collar against the latch, and to cause the latch to bind against the inside of the barrel.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

SIDNEY L. McLAURIN.

Witnesses:

MASON B. LAWTON,  
N. L. COLLAMER.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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