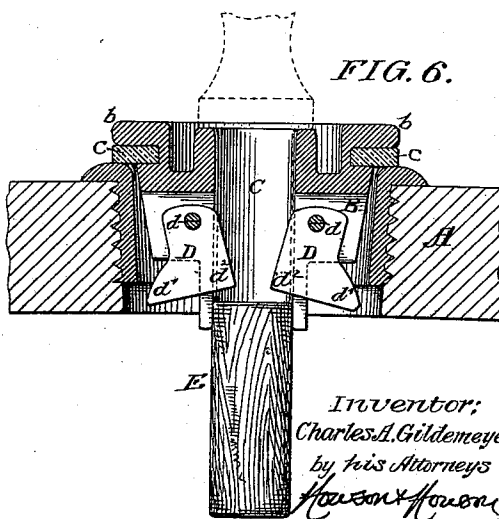
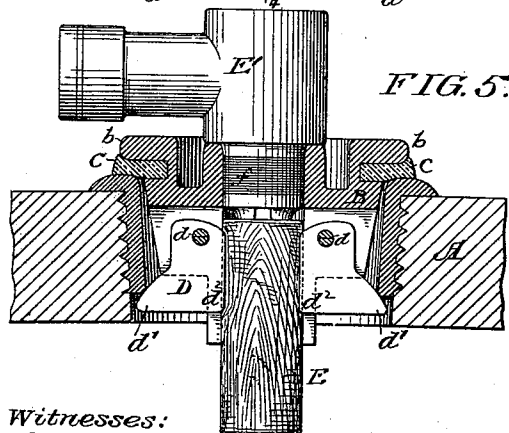
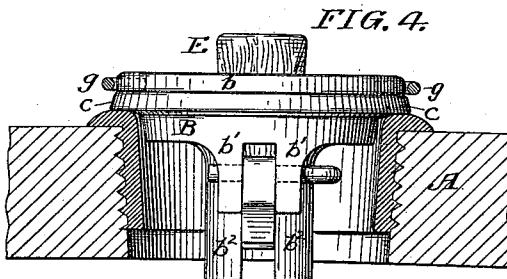
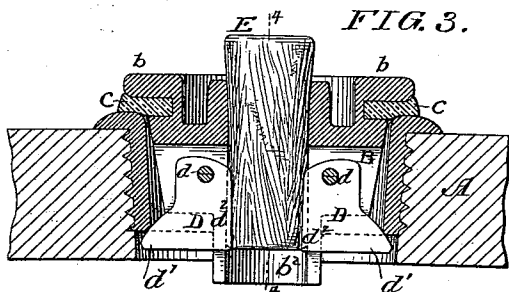
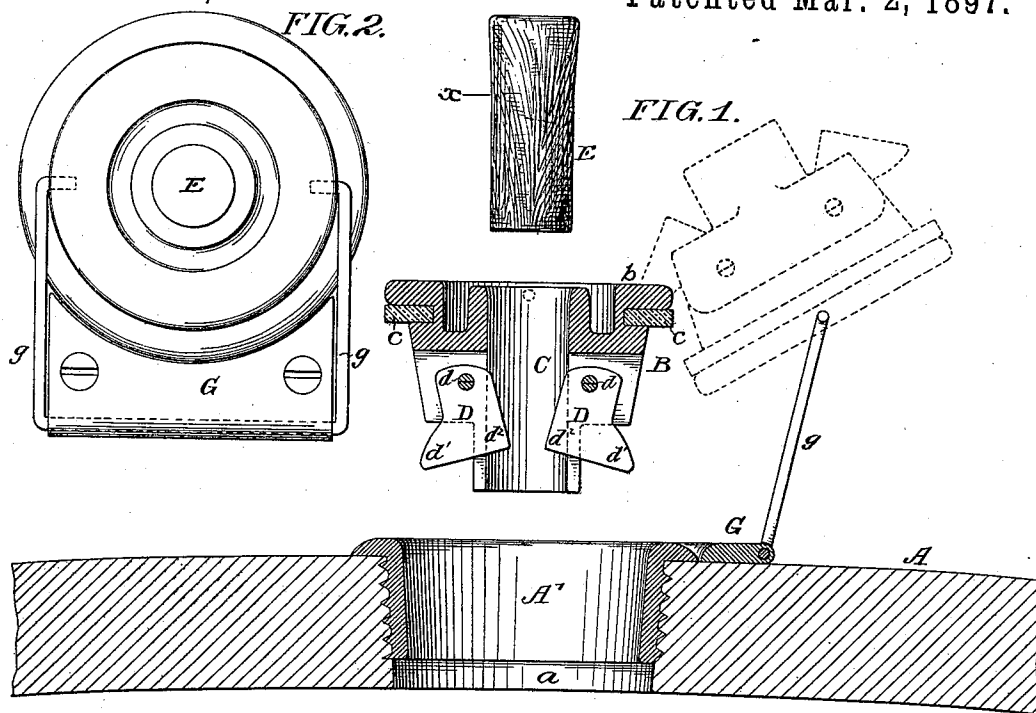


(No Model.)

C. A. GILDEMEYER.
BUNG.

No. 578,232.

Patented Mar. 2, 1897.



Witnesses:
Hamilton T. Turner
Charles Debow.

Inventor:
Charles A. Gildemeyer
by his Attorneys
Hanson & Hanson

UNITED STATES PATENT OFFICE.

CHARLES A. GILDEMEYER, OF HADDONFIELD, NEW JERSEY.

BUNG.

SPECIFICATION forming part of Letters Patent No. 578,232, dated March 2, 1897.

Application filed February 21, 1896. Serial No. 580,253. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. GILDEMEYER, a citizen of the United States, and a resident of Haddonfield, Camden county, New Jersey, have invented certain Improvements in Bungs, of which the following is a specification.

The object of my invention is to construct a bung for use in barrels which is not only adapted to seal the same for transportation, but is also adapted to act as a vent for the barrel while the contents are being removed.

The main object of my invention is to so construct the bung that it will be fastened by driving a plug in the same manner as the ordinary bung is driven, the plug acting as a stopper for the vent, which when forced down a certain distance will allow the plug to be inserted and when driven down the full distance will be held by the bung, so that the bung and plug can be readily removed together from the barrel. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view of sufficient of a barrel to illustrate my invention, with the bung and plug detached. Fig. 2 is a plan view. Fig. 3 is a sectional view similar to Fig. 1, with the plug driven to lock the bung to the barrel. Fig. 4 is a section on the line 4 4, Fig. 3. Fig. 5 is a sectional view similar to Fig. 3, with the plug driven into the bung and the vent-valve attached. Fig. 6 is a sectional view showing the plug driven the full distance into the bung, but retained by the lower flanges, so that it can be removed with the bung.

A is the barrel, in which is the usual bung-hole *a*, provided with the ordinary flanged bushing having a thread which cuts its way into the barrel, so as to form a good seat for the bung.

B is the bung, having a flange *b*, which extends over a rubber or other flexible gasket *c* and which is in the present instance laid in an annular groove in the body of the bung. The body of the bung fits loosely in the bung-hole, as shown in Fig. 3, and has two downwardly-extending arms *b'*. Pivoted to these arms by pins *d* are locking-dogs D, the portion *d'* of these dogs extending under the

bushing, as clearly shown in Fig. 3, when the block or plug E is driven. Extending entirely through the bung is an opening C, and the plug E is adapted to this opening. The rear portions *d''* of the dogs extend into the opening, as shown in Fig. 1, when the bung is loose, and when the plug is driven, as shown in Fig. 3, it forces the dogs out, so that their ends *d'* rest under the bushing, holding the bung tightly in place.

The plug E is slightly tapered, so that when it is driven it will be a tight fit in the opening C, thus preventing any leakage during transportation.

On each side of the bung are lips *b''*, which extend below the lower edges of the dogs D, so that when it is wished to remove the bung all that is necessary is to force the plug down to a point past the dogs, as shown in Fig. 6, and as soon as this point is reached the dogs are free to swing on their pivots away from the bushing, after which the bung can be removed with the plug attached. When it is wished to vent the barrel, however, as, for instance, when the bung is used for beer-barrels that are tapped at the end, the bung need only be driven part way, as shown in Fig. 5, and this can be accomplished by using an ordinary vent-plug E', having an extension *f*, which enters the opening C, and by hitting this vent-plug with a mallet the plug E can be driven down beyond the edge of the opening, so that air will be admitted to the barrel without detaching the plug, as clearly will be seen on referring to Fig. 5.

I prefer to attach the bung to the barrel by pivoting it to a bail *b*, hung to a plate G, secured to the barrel adjacent to the bushing A', the edge of the bung having two openings into which the ends of the bail may extend, so that the bung can be thrown up onto the barrel, as shown by dotted lines in Fig. 1, when it is wished to cleanse and fill the barrel. In some instances, however, the bung may be separate, as it will be understood that my improved bung is adapted to fit barrels having bung-holes differing slightly in diameter. All bung-holes provided with bushings will be the same size, so that the bung will fit any ordinary barrel having an opening of a given diameter.

If the bung is to be adapted to a barrel not having the bushing, then the dogs engage with the barrel itself.

I preferably taper the plug only at the head, leaving the main body of the plug of an even diameter throughout from the line *x* down. By using this form of plug it may be readily placed in the opening of the bung and with one blow it can be driven tightly in place. At the same time it will lock the bung tightly to the barrel. The head being slightly larger than the opening C, an air-tight fit is insured, and, furthermore, when the plug is driven to the position shown in Fig. 6 the tendency of the head to expand will prevent the plug from dropping into the barrel.

The upper edges of the projecting portion *d'* of each dog D is tapered, so that when the plug E is forced into the bung the dogs will draw the bung tightly against the barrel, so that the rubber gasket *c* will fit tightly upon the bushing.

I preferably make the plug of some flexible material—for instance, wood—so that it will form a tight fit in the bung.

I claim as my invention—

1. The combination of a bung having a dog or dogs pivoted thereto with an opening centrally disposed therein into which the dogs may extend, and a plug adapted to enter said opening and act upon the dogs to force them out so as to lock the bung to the barrel, substantially as described.

2. The combination of a bung having a central opening, pivoted locking-dogs hung to said bung, lips extending beyond the lower edges of the dogs, with a plug adapted to be driven into the opening and to force the dogs out so as to lock the bung to the barrel, the lips holding the plug when driven past the dogs to free them, so that the plug can be removed with the bung, substantially as described.

3. The combination of a bung, locking-dogs pivoted thereto, said bung having a central opening, side openings communicating with said central opening and forming vent-passages, a plug adapted to the central opening so as to force the dogs out to lock the bung to the barrel, the parts being so arranged that the plug can be driven part way through the

bung to vent the barrel without releasing the dogs, substantially as described.

4. The combination of the barrel, a bung adapted thereto and having a flange *b*, a rubber gasket under the flange and adapted to rest upon the fixed portion of the barrel and form a seal, said bung having extensions *b'*, locking-dogs pivoted to said extensions, lips *b''* projecting beyond the dogs, with a plug adapted to the central opening in the bung, said plug forming the lock, substantially as described.

5. The combination with a barrel having a bung-hole provided with a bushing, of a bung having a reduced portion, a gasket carried thereby, a flange extending over said gasket, locking-dogs pivoted to the bung and having a portion *d'* adapted to extend under the bushing, said bung having a central opening, with a plug adapted to enter the central opening and act upon the dogs so as to force them under the bushing and thus lock the bung to the barrel, the upper surface of the dogs being tapered so that the plug may readily act thereon, substantially as described.

6. The combination of the barrel having a bung-hole therein, a bung adapted to the same, means for securing the bung in the bung-hole, with a bail for securing said bung to the barrel, said bail being hinged to a plate G secured to the barrel adjacent to the bung-hole, and provided with hooked ends adapted to enter depressions in the rim or flange of the bung, said plate G being flush with said flange of the bung and the bail so as to protect the latter, substantially as described.

7. The combination with a bung having a central opening and mechanism for locking the bung to the barrel extending into the opening, of a yielding locking-plug adapted to be forced into said opening and to lock the said mechanism to the barrel, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES A. GILDEMEYER.

Witnesses:

MURRAY C. BOYER,
WILL. A. BARR.