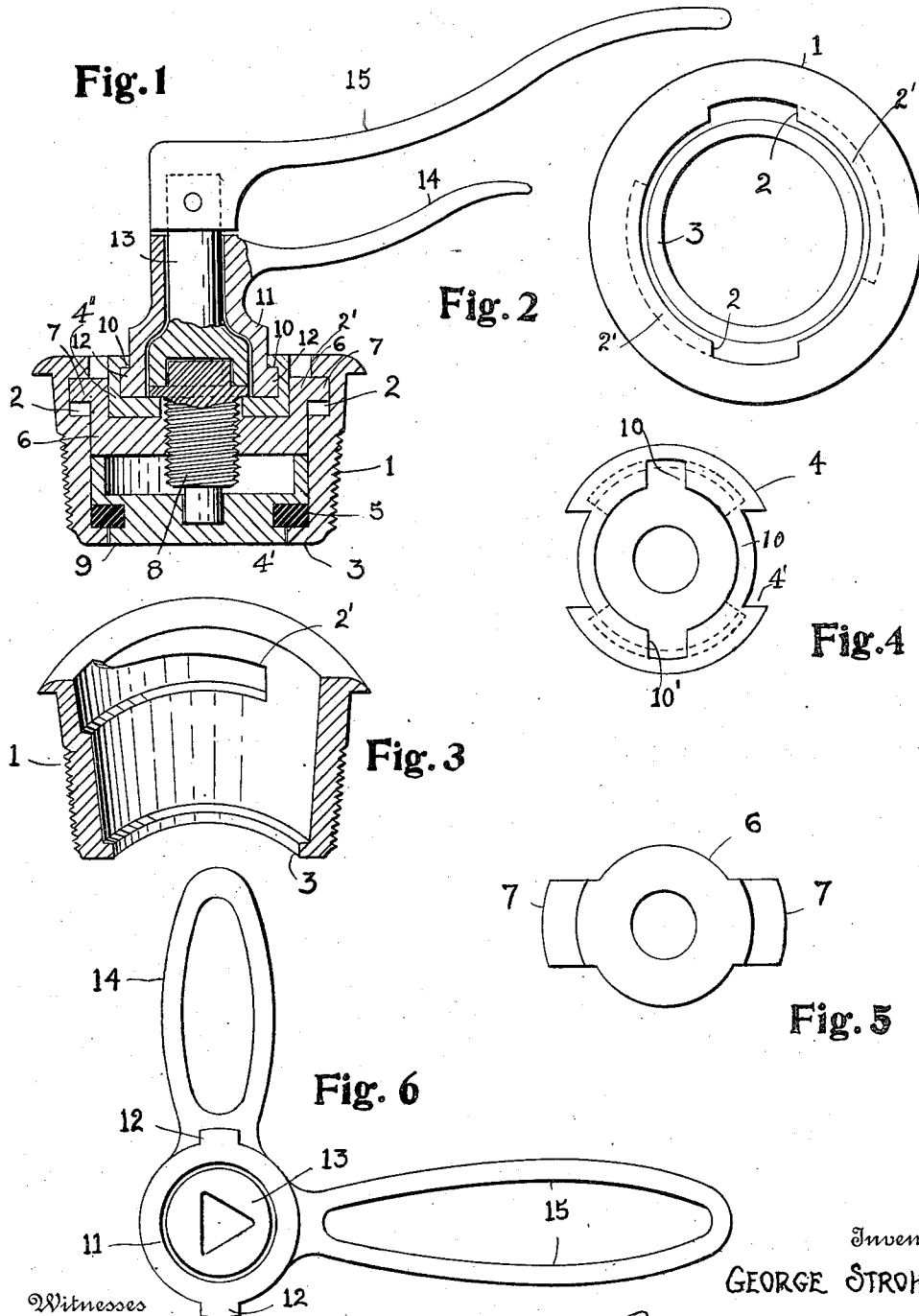


G. STROH,
BUNG.

APPLICATION FILED OCT. 7, 1910.

1,028,148.

Patented June 4, 1912.



Witnesses
Arthur F. Draper.
O. M. Shannon

Inventor
GEORGE STROH

By *Barthel & Barthel*
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE STROH, OF DETROIT, MICHIGAN.

BUNG.

1,028,148.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed October 7, 1910. Serial No. 585,815.

To all whom it may concern:

Be it known that I, GEORGE STROH, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Bungs, of which the following is a specification, reference being had therein to the accompanying drawings.

In shipping beer and the like in kegs, barrels or casks, the agitation of the liquor and changes of temperature oftentimes cause generation of gas and consequent high pressure in the containing vessels and the ordinary friction-held bungs are frequently forced out for this reason.

This invention relates to bungs for barrels, casks or the like, which are positively secured in place and cannot be dislodged by internal pressure, together with means for readily removing them when desired.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in longitudinal section of a bung and wrench applied thereto; Fig. 2 is a plan view of a bung bush; Fig. 3 is a view in detail, partly broken away, of the bushing; Fig. 4 is a plan view of a bung with locking plate removed; Fig. 5 is a plan view of a locking plate ready for insertion in the bung; and Fig. 6 is a view of the lower end of a wrench.

Referring to the drawings, a bushing 1 is exteriorly screwthreaded for permanent insertion in the bung-hole of a barrel, keg or cask, with its outer, exteriorly flanged end countersunk or flush with the outer face of the barrel. A pair of oppositely disposed slots 2 whose upper margins are cut away at the ends, are formed in the inner periphery of the bushing above an inner, annular flange or seat 3 formed thereon. A bung whose body 4 fits and slides in the bore of the bushing has a packing ring 5 on its lower end adapted to bear against the flange 3 when the bush is inserted. A locking plate 6 is removably secured in a transverse opening 6' through the bung, with ears 7 at each end adapted to enter the bushing slots 2 and lock the bung against displacement longitudinally. A screw-plug 8 rotatable in the bung engages a screw-threaded aperture in the locking plate, and when turned forces

the plate ears upwardly against the slot margins 2', and the bung downwardly, thereby compressing the packing ring 5 against the seat 3, and forming a tight joint. Preferably the lower plate 4' of the bung has a retaining flange 9 over the packing ring or gasket 5.

The upper end plate 4'' of the bung has an undercut interrupted margin 10. A wrench is provided with an outer longitudinally apertured body 11 whose lower end has lugs 12 adapted to enter the openings 10' of the interrupted margin 10 and underrun the latter when the wrench is given a part turn. A member 13 rotatably secured in the body, has its lower end recessed to non-rotatably engage the upper end of the plug 8, which end may be triangular, square, polygonal or flattened for this purpose. A handle 14 on the body 11 and a lever 15 on the upper end of the member 13 are provided for ready manipulation of the wrench.

By this construction there is no possibility of the bung working loose under pressure, and as its outer end is flush with the barrel it is not disturbed accidentally. The wrench 11 is used to secure the bung in place, and to withdraw it as well, the interlocking of the body and interrupted run permitting this.

Obviously, changes in the details of construction may be made without departing from the spirit of the invention and I do not wish to limit myself to any particular form or arrangement of parts.

I claim as my invention:—

1. In a device of the character described, a bushing having recesses in its inner periphery and an annular seat, a bung adapted to interlock with said recessed face and to engage the seat, and independent means adapted to lock the bung in engagement with the recessed face and seat.

2. In a device of the character described, a bushing having an inner recessed periphery and provided with an annular seat, a rotatable bung adapted to rest on the seat, a device carried by the bung adapted to interlock with said recessed periphery and to hold the bung against outward movement, and independent means for forcing the bung against the seat and for frictionally holding the same against rotation.

3. In a device of the character described, a bushing having an inner recessed periph-

ery and provided with an annular seat, a rotatable bung adapted to rest on the seat, a locking plate movable in the bung and adapted to enter and interlock with the recessed periphery when the bung is inserted in the bushing and turned, and independent means engaging the bung and plate adapted to move the bung relatively to the plate and force the bung to the seat.

10 4. In a device of the character described, a bushing provided in its inner periphery with slots having interrupted upper margins, an inner annular flange seat formed on the inner periphery, a bung adapted to rest on the seat, a locking plate movable in a transverse opening of the bung and having extensions adapted to enter said slots through the interrupted openings when the bung is to be seated, a plug rotatable in the bung and in screwthreaded engagement with the plate, and adapted to force the bung against the seat when the plate engages the bushing, a removable wrench adapted to non-rotatably interlock with the recessed outer face of the bung and an inner member rotatable in said wrench and adapted to non-rotatably interlock with the

screw-plug when the wrench engages the bung.

5. In a device of the character described, a tubular bushing exteriorly fitted for permanent insertion in a vessel and provided near one end with inner peripheral slots having interrupted outer margins, an inner annular flange seat near the other end of the bushing, a transversely apertured bung having a compressible gasket adapted to rest on the seat, a locking plate movable in the opening of the bung and having its ends adapted to enter the bushing slots through the interrupted margins and interlock with the bushing when the plug is turned and an axial screw-plug rotatable and non-reciprocable in the bung in screwthreaded engagement with the plate for moving said bung relatively to the plate and frictionally hold the bung and plate against rotation in the bushing.

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

GEORGE STROH.

Witnesses:

OTTO F. BARTHEL,
C. R. STICKNEY.

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