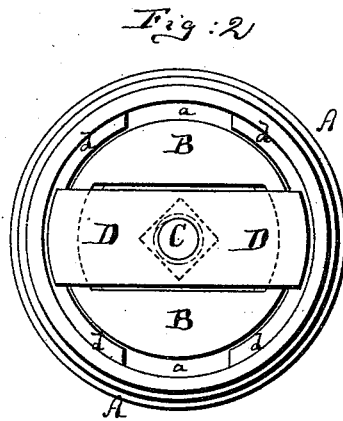
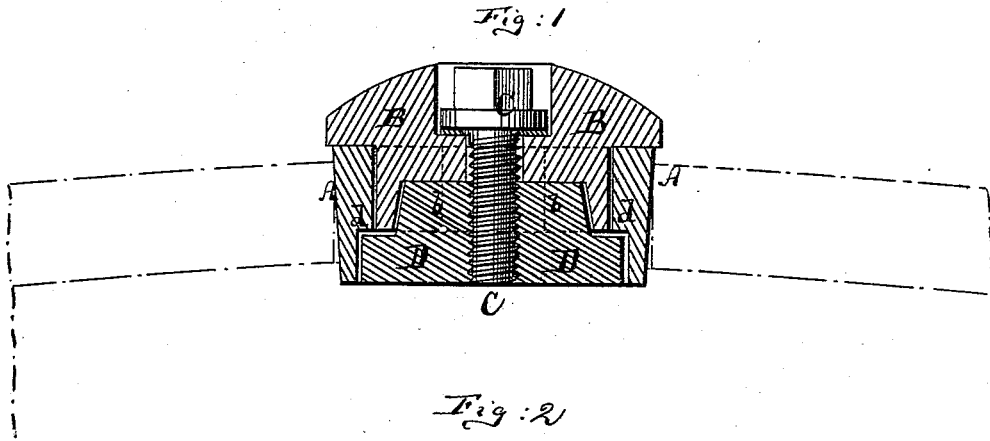


W. E. WHITE.  
Barrel-Bungs.

No. 167,419.

Patented Sept. 7, 1875.



Witnesses:

A. Moraga.  
W. J. Gardner,

Inventor

Wm. O. White  
by his attorney  
A. V. Briesen

# UNITED STATES PATENT OFFICE.

WILLIAM E. WHITE, OF BIRMINGHAM, CONNECTICUT, ASSIGNOR TO HIMSELF  
AND WILLIAM LINDLEY, OF SAME PLACE.

## IMPROVEMENT IN BARREL-BUNGS.

Specification forming part of Letters Patent No. 167,419, dated September 7, 1875; application filed  
July 23, 1875.

*To all whom it may concern:*

Be it known that I, WILLIAM E. WHITE, of Birmingham, in New Haven county, in the State of Connecticut, have invented a new and Improved Bung for Barrels, of which the following is a specification:

Figure 1 is a vertical central section of my improved bung. Fig. 2 is a bottom view of the same.

Similar letters of reference indicate corresponding parts in both figures.

The object of this invention is to produce a permanent bung for barrels, and one which can be readily removed and replaced. The invention consists in the construction and combination of an annular bung with an annular bush, central screw, and inner cross-bar, all substantially as hereinafter shown and described.

The letter A in the drawing represents an annular bush, of slightly conical or cylindrical form, with smooth or threaded outer circumference, and with two vertical grooves, *a a*, along its inner circumference, said grooves being diametrically opposite one another. B is the bung, made of metal or other material, of a size and form to fit the interior of the bush, and flanged on top to lap over the upper edge of the bush, as clearly shown in the drawing. The bung is of annular form—that is to say, it is perforated in the center for the reception of a screw, C, the said perforation being larger at the upper than at the middle part, so that the head of the screw C may be sunk into the bung, as shown. D is a cross-bar, perforated in its middle, and threaded to fit the screw-thread of the screw C. It has a projecting top, *b*, shorter than the body of the bar. Said top *b* enters a socket formed in the bottom of the bung to prevent the cross-bar

from turning in the bung. The length of the cross-bar D is greater than the inner diameter of the upper part of the bush, but slightly less than the distance between the grooves *a a*, so that such cross-bar can be let down through the bush when held in line with the grooves.

For use, the bush A is first screwed or fastened into a barrel. The bung to be applied is then fitted into the bush, the cross-bar passed down through the grooves *a a*, and the bung then turned to bring the ends of the cross-bar below an inner shoulder, *d*, which is formed in the bush A between the grooved parts thereof, as clearly shown in the drawing. The screw C is then turned to firmly draw the cross-bar against such shoulder *d*, and the bung is thereby secured and clamped in place.

For removing the bung it is only necessary to unscrew the cross-bar slightly, so as to loosen it from the shoulder *d*, and then the bung can be turned to bring the ends of the cross-bar in line with the grooves *a a*, whereupon the bung can be raised. Thus I produce a durable and reliable bung, which is easily removed and replaced.

I claim as my invention—

The combination of the annular grooved bush A, having the shoulder *d*, with the annular bung B, which is flanged to overlap the upper edge of the bush, and with the screw C and cross-bar D, said cross-bar having the projection *b*, whereby it is locked to the bung, so it cannot revolve without the bung, substantially as specified.

WM. E. WHITE.

Witnesses:

S. M. GARDNER,  
WM. E. MILLER.