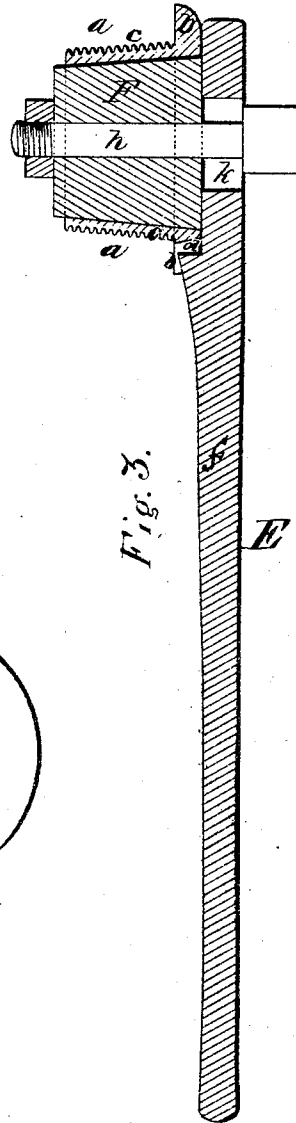
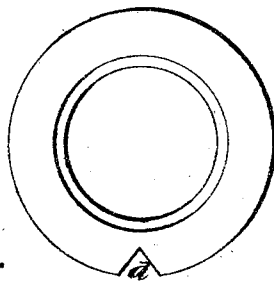
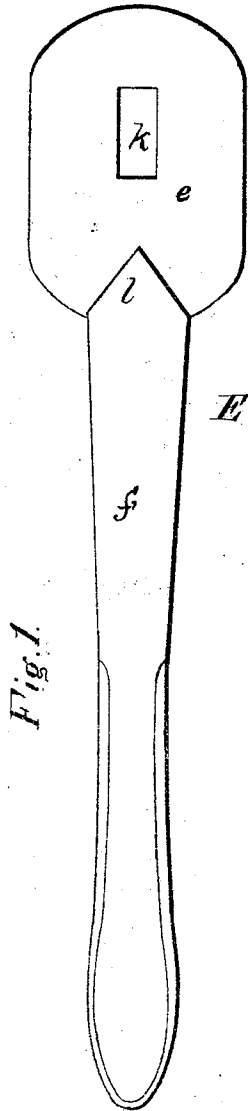


JOHN LACEY & GEORGE B. CORNELL.

Bush and Wrench for Barrels.

No. 118,617.

Patented Aug. 29, 1871.



Witnesses.

Villette Anderson

E. H. Bates

Inventors

John Lacey.

Geo B. Cornell,

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Attys.

*Received Aug. 6<sup>th</sup> 1872.  
Division A & B.*

118,617

# UNITED STATES PATENT OFFICE.

JOHN LACEY AND GEORGE B. CORNELL, OF CHICAGO, ILLINOIS; SAID LACEY  
ASSIGNS HIS RIGHT TO SAID CORNELL.

## IMPROVEMENT IN COMBINED BUSHES AND WRENCHES FOR BUNGS.

Specification forming part of Letters Patent No. 118,617, dated August 29, 1871.

*To all whom it may concern:*

Be it known that we, JOHN LACEY and GEORGE B. CORNELL, of Chicago, county of Cook and State of Illinois, have invented a new and valuable Improvement in Metallic Bushings for the Bungs of Casks, &c., and in Wrenches for operating the same; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a bottom view of the wrench. Fig. 2 is a top view of the bushing; and Fig. 3 is a longitudinal section, showing the application of the wrench to the bushing.

Our invention has relation to means for protecting the bungs of casks, &c.; and it consists in an improvement in metallic bushings for lining the bungs, and in a wrench for turning said bushing, which is cast with a screw-thread, into the bung-hole.

*a* of the drawing designates the bushing—a tapering thimble or ring of metal, provided with a flanch, *b*, at its larger end, and having a screw-thread, *c*, on its outer surface, which screw-thread is cast on the bushing in the mold, and is capable of immediate use without other finishing. The flanch *b* is rounded off at its edge, and is provided at some point in its extent with a V-shaped notch, *d*, extending in to the screw-thread. *E* represents the wrench-bar, consisting of the slotted plate *e* and the shank *f*. The metal of the shank, at its junction with the plate, forms a downward V-shaped projection, *l*, whose point

extends forward toward the center of the plate *e*. *F* represents a tapering core of metal, adapted to fit the bung-bushing *a*, and secured to the plate *e* by means of the bolt *h* and its nut. This core is made separable from the wrench-bar, in order that, by providing a number of cores of different sizes, the same wrench may be used for bushings of different diameters. Provision is also made, by the slot *k*, for moving the bolt toward the angular projection *l*, which becomes necessary when a smaller core is substituted for a larger one.

The wrench is applied by inserting the core into the opening through the bushing, and turning it until the projection *l* falls into the notch *d*. By means of the core the bushing is kept steady, and is readily prevented from assuming an oblique position in the bung-opening; at the same time the operator is enabled to get a better hold on the bushing than by means of the wrenches in common use, which are apt to slip from their seats when used on such difficult work as turning a rough-cast screw into place.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, with the notched bung-bushing *a*, of the wrench, consisting of the bar *E* having the slotted plate *e* and angular projection *l*, and the removable core *F*, substantially as specified.

JOHN LACEY.  
GEORGE B. CORNELL.

Witnesses:

G. H. FROST,  
WM. C. HASTINGS.

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