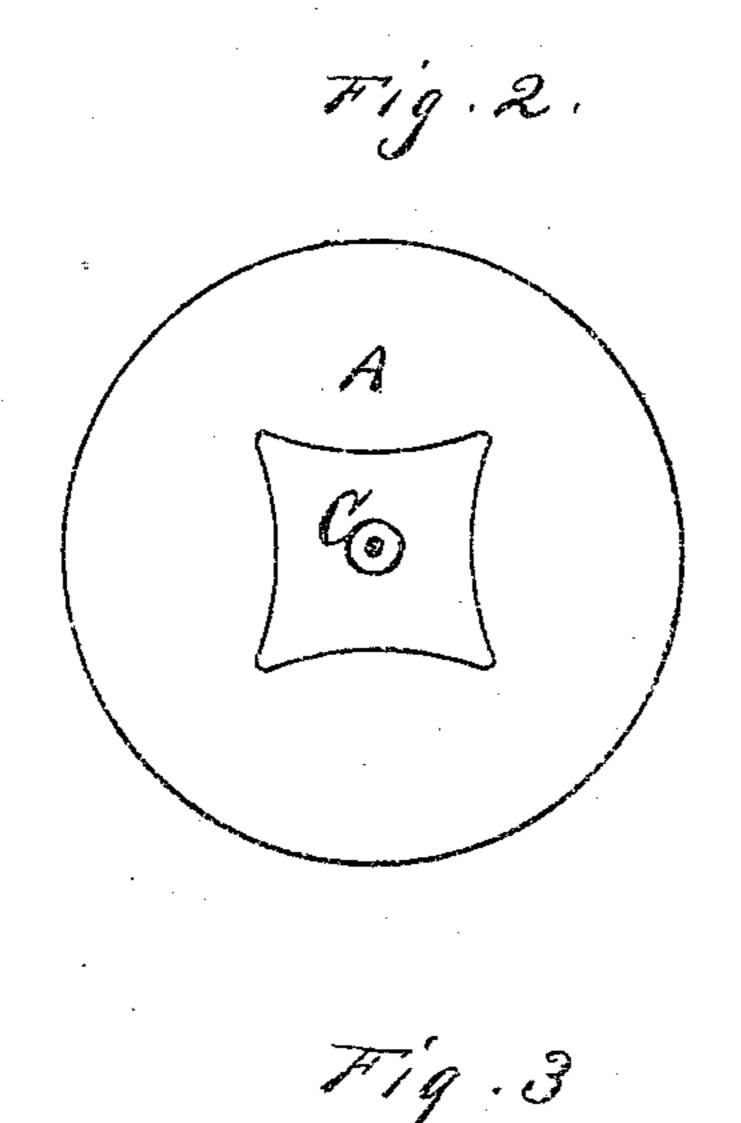
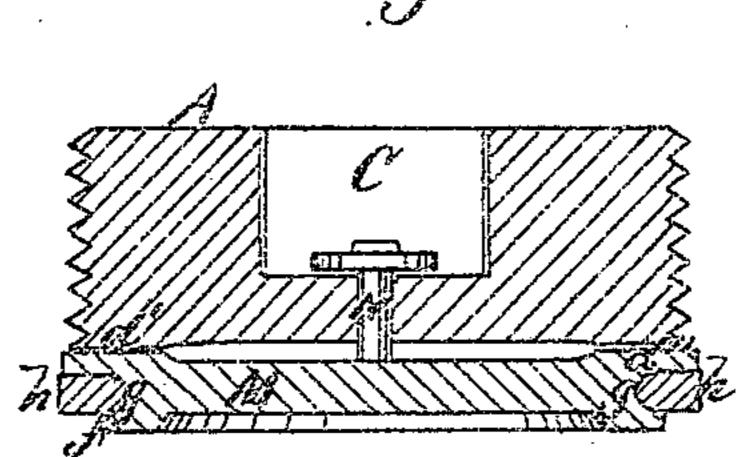
## DANIEL B. RICKEY.

Bungs.

No. 123,421.

Patented Feb. 6, 1872.





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## UNITED STATES PATENT OFFICE.

DANIEL B. RICKEY, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN BUNGS.

Specification forming part of Letters Patent No. 123,421, dated February 6, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, Daniel B. Rickey, of the city and county of San Francisco, State of California, have invented Improvements in Bungs; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to improvements in metallic bungs, such as are screwed into a metallic bushing previously secured in the barrel-stave. The ordinary metal bung is screwed directly down upon a leather washer, which is first placed upon the seat in the bushing, and if allowed to remain thus for any great length of time the leather becomes hard, and adheres both to the seat in the bushing and to the bung, so that it is almost impossible to remove the bung. My invention is intended to remedy this difficulty, and also to provide a more convenient means for turning the bung. My improvements are fully described and explained in the following description, in which reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a view of the wrench. Fig. 2 is a top view of the bung. Fig. 3 is a sectional view of the bung.

A represents a metallic bung, and B the bushing. The bung is cast with a square socket, c, on its upper face, the sides of which are slightly convexed. A wrench, shown at Fig. 1, consisting of a square-shaped body, d, and having spreading arms e, is used for turning the bung into the bushing. The sides of the body d are made sufficiently concave to fit the sides of the socket c, so as to prevent the wrench from being worn by frequent use so as to turn in the socket. The under side of the bung is dished, with the exception of the outer rim, which is turned off smooth so as to provide a bearing-surface, d'. M is a thin metallie disk, having a projecting flange, f, on its under side, around which a groove, g, is turned. The leather washer h is stretched over the flange f so as to fit into the groove g around

the outer edge of the disk, and thus be permanently fixed upon it. The upper side of the disk M is also dished, with the exception of the outer rim d'', which fits against the rim on the under side of the bung, thus giving a pressure directly over the washer for the purpose of making a tight joint and avoiding much useless friction. A stem, N, projects from the upper center of the disk M and passes up through a hole in the bottom of the bung into the socket C, where a washer is placed over it and is headed down as shown. By this means the plate M will be attached to the bottom of the bung so as to revolve independent of it. The object of this is to allow the disk and washer, as soon as the washer has touched the seat in the bushing, to remain stationary while the bung is screwed down upon them; and also, after the bung has remained thus a length of time and it is desired to remove it by unscrewing the bung, the disk and washer will be lifted directly upward by the screw, and thus avoid the trouble heretofore experienced on account of its adhesion. By this arrangement I am also enabled to use India-rubber washers, which heretofore have not been used on account of their liability to roll up upon the seat as soon as a twisting pressure is brought to bear upon them.

I thus provide a very simple construction of bungs, which obviates all the difficulties heretofore experienced, as has been proven by actual use where no other metallic bung would answer.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the bung A, the independently-revolving disk M, substantially as and for the purpose above described.

2. The disk M with its flange f and washer h, secured loosely to the bottom of the bung A by means of the stem N, which is headed in the bottom of the socket c, substantially as and for the purpose above described.

In witness whereof I have set my hand and seal.

D. B. RICKEY. [L. s.]

Witnesses:

W. F. BINGHAM, A. H. EVANS.