A. SCHNEIDER.

Bung.

No. 206,265. Patented July 23, 1878.

Fig. 1.

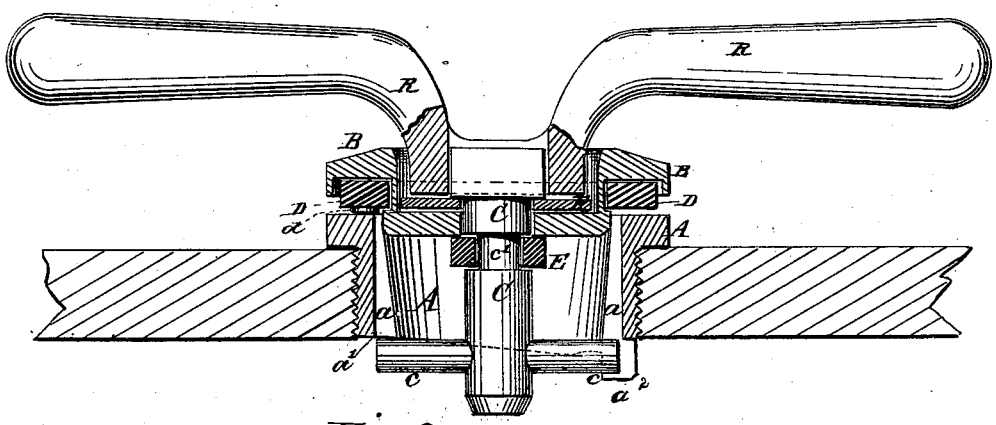


Fig. 2.

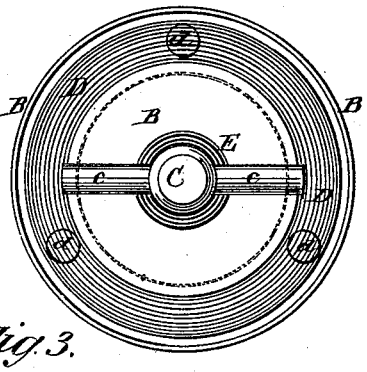
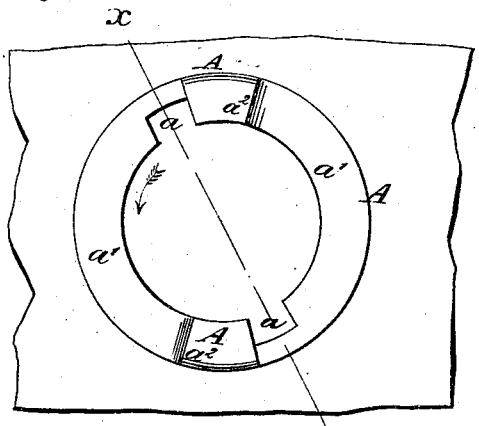


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANTON SCHNEIDER, OF NEW YORK, N. Y.

IMPROVEMENT IN BUNGS.

Specification forming part of Letters Patent No. **206,265**, dated July 23, 1878; application filed July 3, 1878.

To all whom it may concern:

Be it known that I, ANTON SCHNEIDER, of the city, county, and State of New York, have invented a new and Improved Barrel-Bung, of which the following is a specification:

The object of my invention is to provide an improved barrel-bung, strong, simple, and rapidly adjustable to close air-tight, or to open and admit air to the interior of the barrel.

The invention consists in a thimble provided with vertical inside grooves, and inclines and stops on its lower end surface, in combination with a cap provided with a turnable central bolt having a cross-head, and with suitable packing-rings; and in the combination, with the thimble and cap, of a packing-ring provided at intervals with bosses or raised portions, as will be hereinafter described.

In the accompanying drawing, Figure 1 represents a vertical section of my improved barrel-bung, the section of the thimble being taken on the line *x x* of Fig. 3. Fig. 2 is an under-side view of the same, the thimble being removed. Fig. 3 is an under-side view of the thimble.

Similar letters of reference indicate corresponding parts.

A is a metallic thimble, open at both ends and threaded on the outside, to adapt it to be screwed into the bung-hole of a barrel. The thimble is provided on the inside, throughout its whole height, with two diametrically-opposite grooves, *a*, whose lower ends are in the same horizontal plane, being the base-plane of two semicircular inclines, a^1, formed upon the lower end of the thimble A, each of the said inclines increasing in depth below the said plane from one of the grooves *a* to near the other, where it terminates with an abrupt downward projection or stop, a^2.

B is a circular cap, of suitable size to cover the upper flanged end of the thimble, a rubber packing-ring, D, being interposed between them, and inserted in an annular groove on the under side of the cap. The cap B has a large central circular recess, the bottom of which is perforated in its center to receive a bolt, C, which projects down through the bung, and the upper end of which has a square head, suitable to be grasped by a wrench, R, and turned in the said recess, the upper surface of the bolt-head being flush with, or not projecting beyond, the upper surface of the cap B, when a circular washer, F, surrounding the bolt C, is interposed between the bolt-head and the bottom of the recess. The outer circumference of the recessed central portion of the cap B is grooved to correspond with the inner circumference of the rubber ring D, so that the latter may be sprung into the said groove, and thus be held in place to the cap.

E is a rubber ring, held in a similar manner in a groove, c^2, surrounding the bolt C, immediately below the bottom of the central recess of the cap B, so as to form an air-tight packing between the cap and bolt, while allowing the latter to be turned by the wrench R.

The packing-ring D has three or more bosses or projections, *d*, on its lower surface, by which bosses it rests upon the thimble A, and when not compressed is elevated from the latter sufficiently to form an opening between them for the admittance of air to the interior of the barrel.

c is a cross-head or pin secured at right angles through the central bolt C at such a distance below the cap that the upper surface of the said cross-head will be flush with, or slightly above the lower ends of the grooves *a* when the cap is resting loosely on the thimble, the length of the cross-head *c* being slightly less than the diametrical measure of the thimble between the bottoms of the two opposite grooves *a*, and its width slightly less than the width of the groove.

The cap B is tightened upon the thimble A (after sliding the pin or cross-head *c* through the grooves *a* down to the lower end surface of the thimble) by applying the wrench R to the bolt-head, depressing, and turning in the direction of the arrow, Fig. 3, causing the ends of the cross-head *c* to climb the inclines a^1 from the grooves *a* to the stops a^2, where they rest in a slight depression formed in each incline a^1, just only deep enough to retain the cross-head in the clamped position until removed by the wrench R, thereby gradually depressing the cap, and compressing the rubber packing D and the bosses *d* until the entire lower surface of the ring D is flush and

tight upon the upper end surface of the thimble A.

When drawing off liquid from the barrel, air is admitted through the bung by turning the bolt C in the direction opposite to that of the arrow until the cross-head *c* is brought off the inclines a^1 from the stops a^2 to and into the grooves *a*. The rubber ring D, relieved of pressure, expands and rises above the thimble, leaving an opening between them equal to the thickness of the bosses *d*, by which latter the cap B is then supported upon the thimble A.

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

1. The thimble A, provided with the vertical inside grooves *a*, the inclines a^1, and the stops a^2, in combination with the cap B, provided with the turnable central bolt C, having the cross-head *c*, and with the packing-rings D E, substantially as and for the purpose set forth.

2. The packing-ring D, provided at intervals with the bosses or raised portions *d*, substantially as and for the purposes set forth.

ANTON SCHNEIDER.

Witnesses:
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