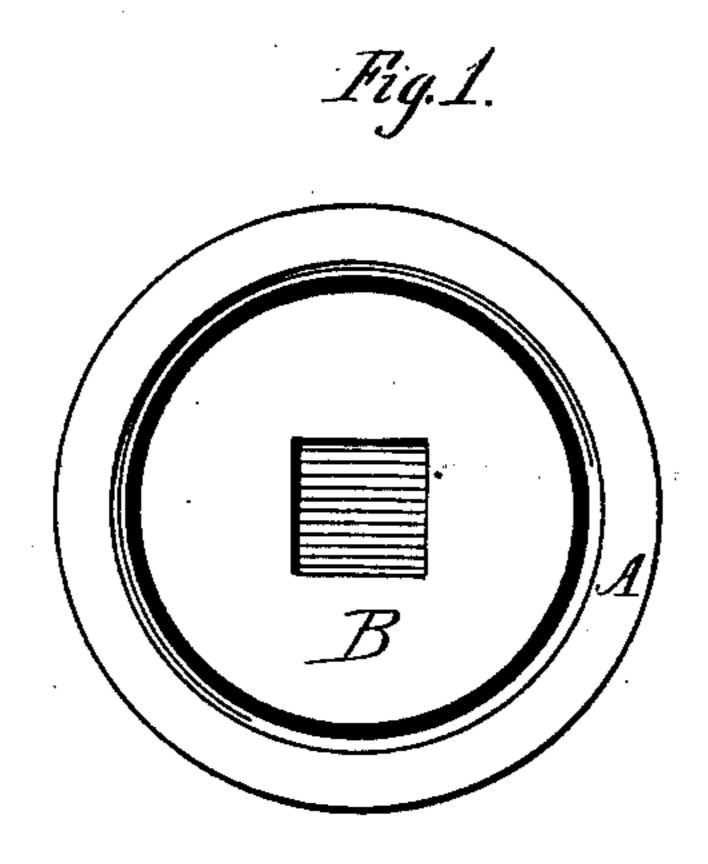
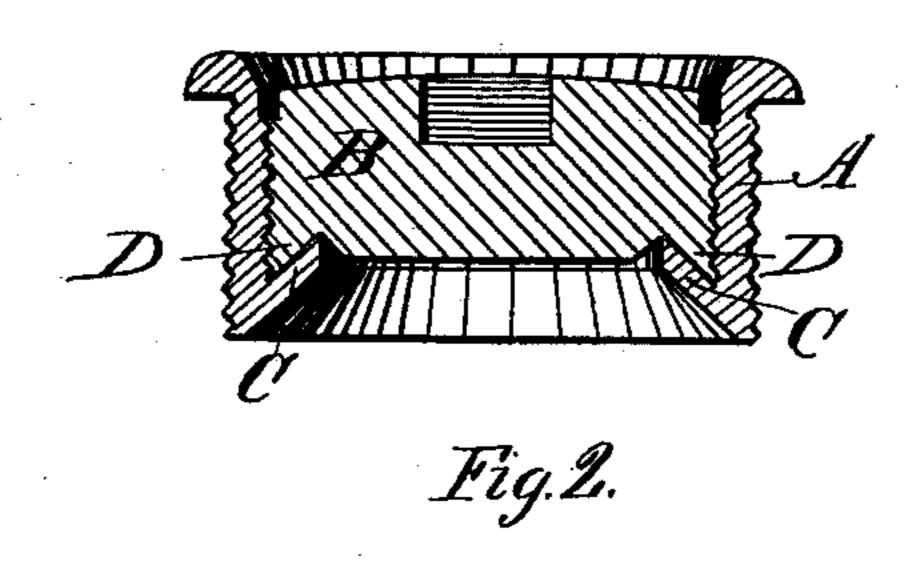
## T. T. BROWN. Bung and Bush.

No. 222,238.

Patented Dec. 2, 1879.





Witnesses: F.B. Townsend Extensible

Inventor:

## UNITED STATES PATENT OFFICE.

THOMAS T. BROWN, OF CHICAGO, ILLINOIS, ASSIGNOR TO LOUIS SNY-DACKER AND EDWARD VOSS, OF SAME PLACE; ONE-THIRD TO EACH.

## IMPROVEMENT IN BUNGS AND BUSHES.

Specification forming part of Letters Patent No. 222,238, dated December 2, 1879; application filed October 23, 1879.

To all whom it may concern:

Be it known that I, THOMAS T. BROWN, of | the city of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Bung and Bush for Barrels; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, of which—

Figure 1 is a top view of my bung and bush, and Fig. 2 a central vertical section of the same.

My invention relates to that class of bungs in which a metal bush is screwed into the barrel and a metal bung screwed into the bush; and my object is to produce a perfectly-tight | bung without the aid of a packing substance.

To this end my invention consists in providing the bush with an interior inclined seat, projecting upward from the lower part of the bush, thus forming an acute angle with the wall of the same, and in forming a beveled extension upon the lower end of the bung adapted to enter and exactly fit the angle formed by the seat, as hereinafter more fully set forth.

In the drawings, A is the bush, threaded both internally and externally; and B, the bung, threaded to match the bush, as shown. C is the seat, extending entirely around the interior of the bush at or near its lower end, and projecting inward and upward, so that its upper face forms an acute angle with the wall of the said bush. D is the angular projection, extending entirely around the bung and |

adapted to fit the angle formed by the seat. The projection is formed by beveling out the base of the bung from its lower edge inward and upward for a sufficient distance, as repre-

sented in Fig. 2.

It is essential that the beveled extension D be formed to coincide as closely as possible with the seat C, and reach, when the bung is screwed into place, quite to the bottom of the angle, thus fitting the same completely, whereby, in order to escape, the moisture and gases must force their way first upward, then around a sharp angle and downward, and finally around a second sharp angle and upward again, and this between two surfaces in perfect, or nearly perfect, contact at all points—circumstances which combine to render such escape next to impossible.

In practice I make both the bung and bush of malleable iron.

What I claim as new, and desire to secure by Letters Patent, is—

The metal bush A, provided on its inner side, at or near the lower edge thereof, with the upwardly-inclined seat C, in combination with the bung B, adapted to screw into the bush, and provided on its lower edge with the beveled extension D, adapted to fit and wholly fill the angle formed by the said bush and seat, substantially as described.

THOMAS T. BROWN.

In presence of— P. C. DYRENFORTH, MICH. PETRIE.