

(No Model.)

W. YAEGER.
TAP HOLE BUSHING.

No. 575,089.

Patented Jan. 12, 1897.

Fig.1.

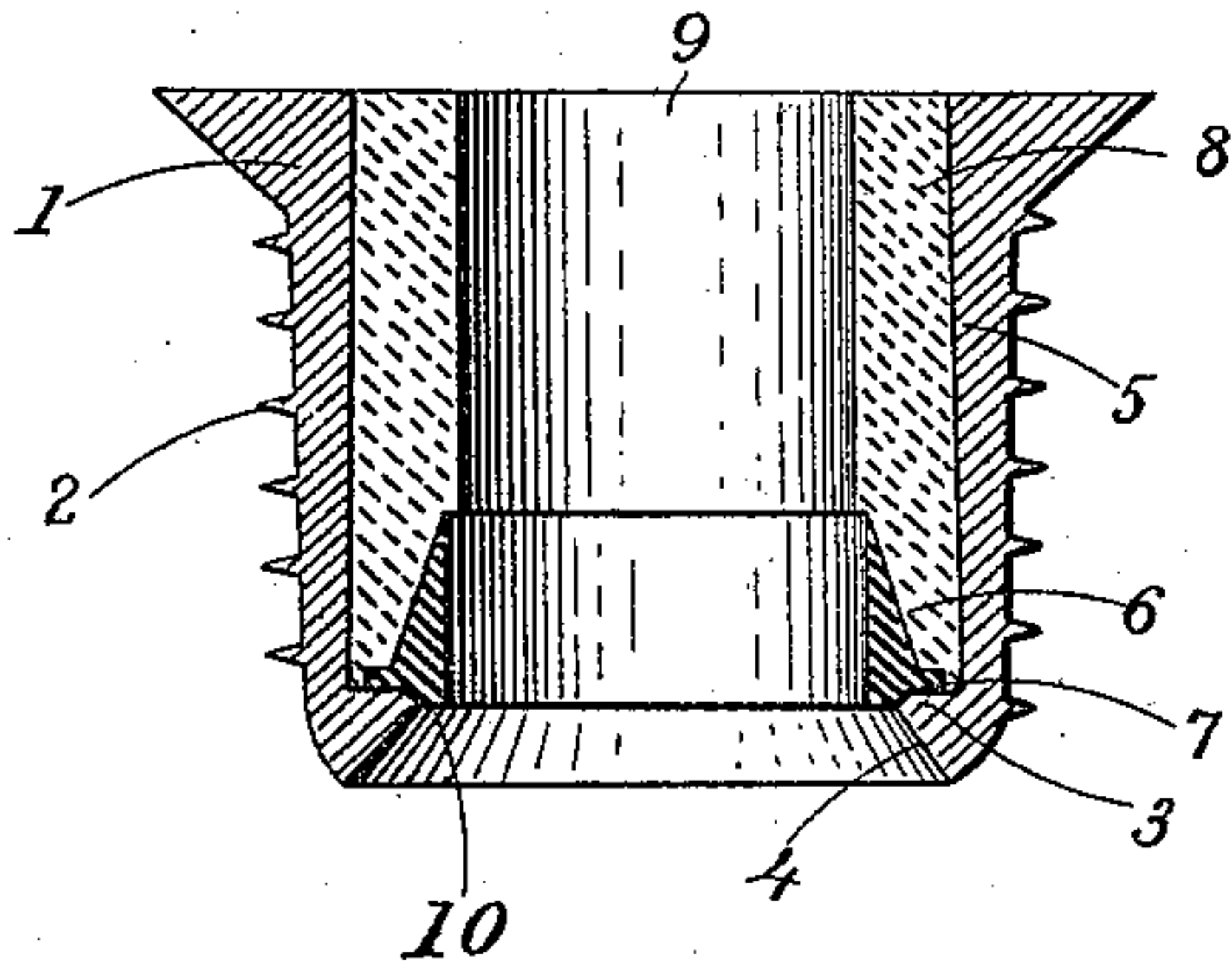


Fig.2.

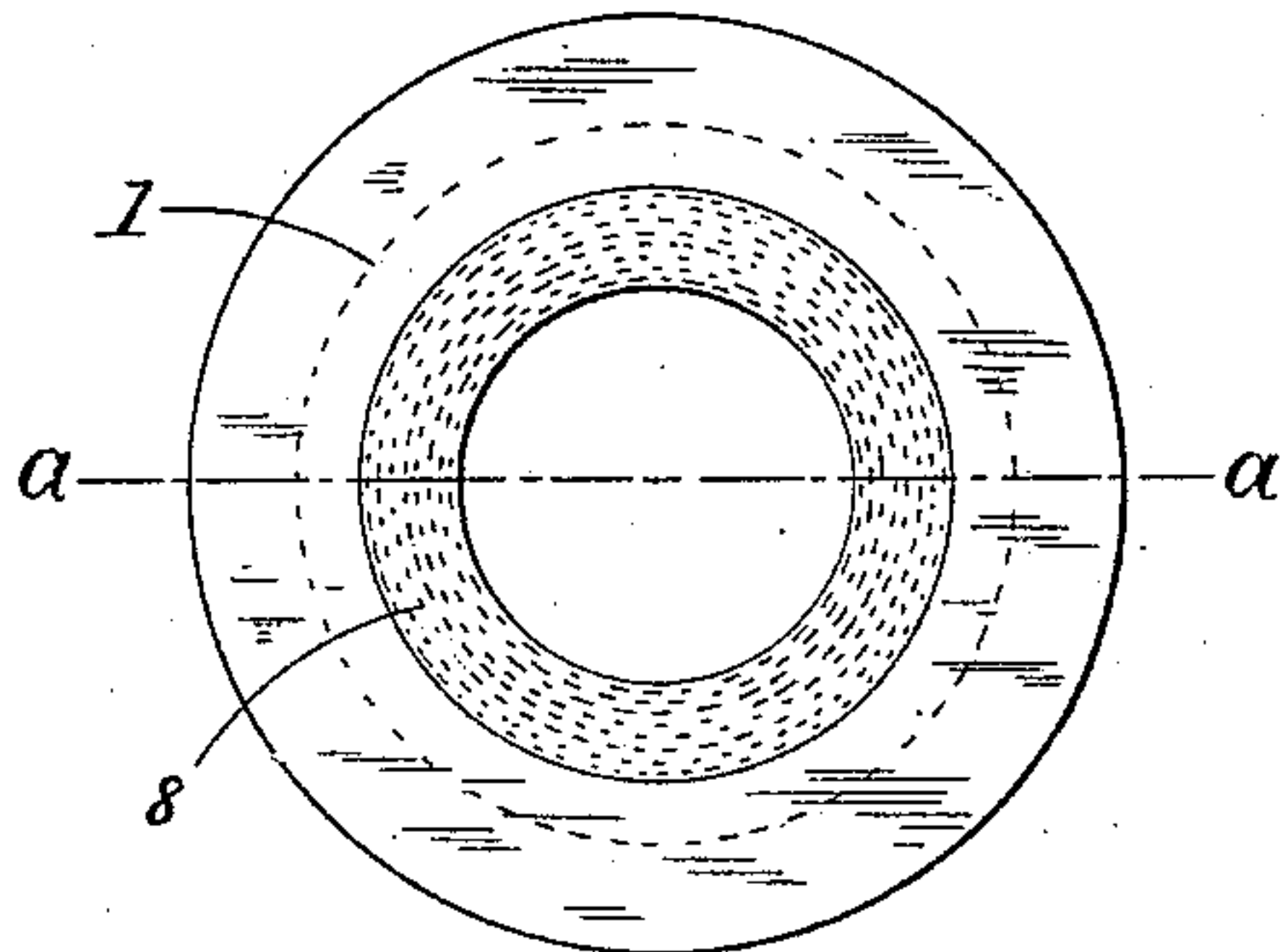


Fig.3.

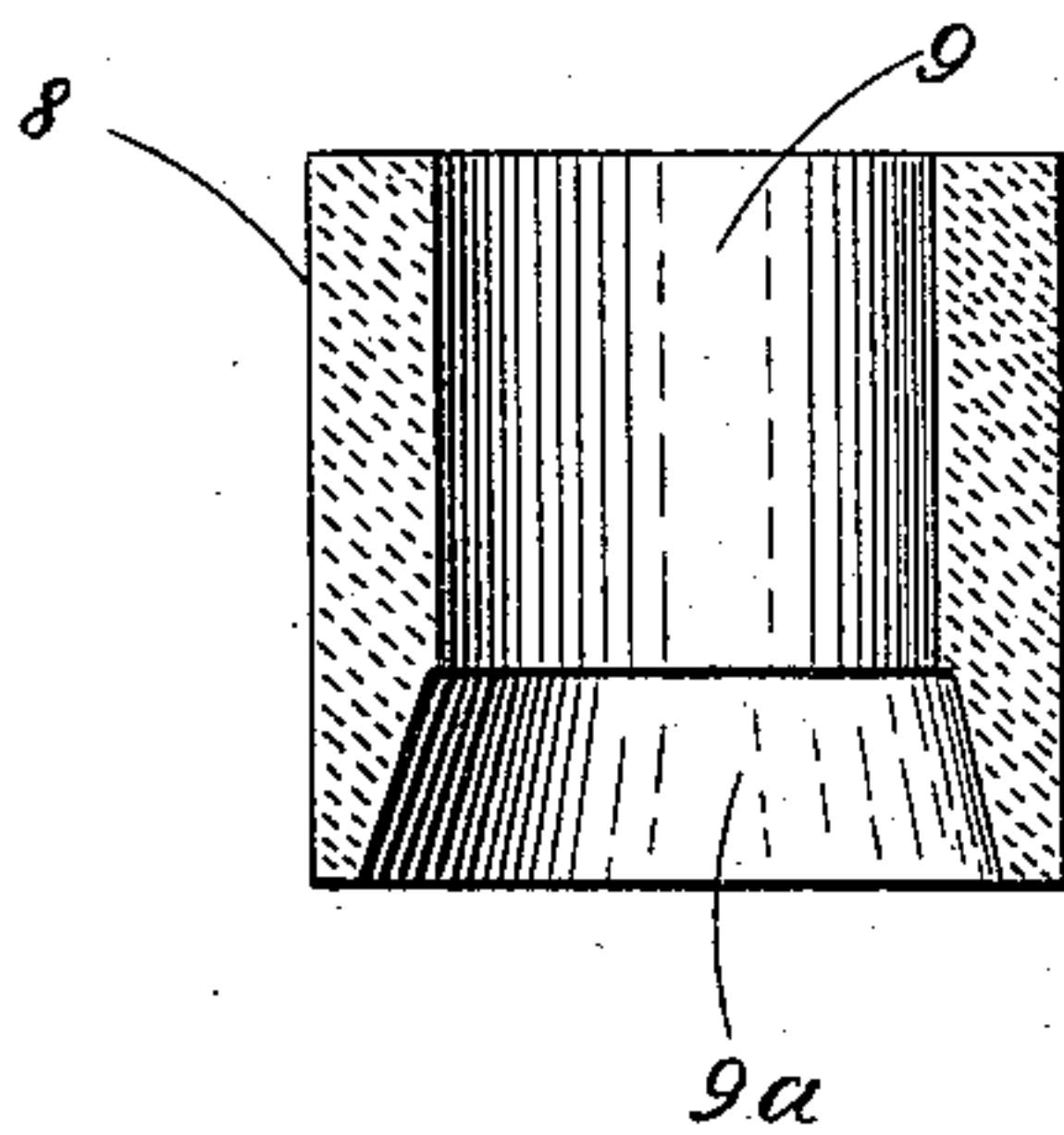


Fig.4.

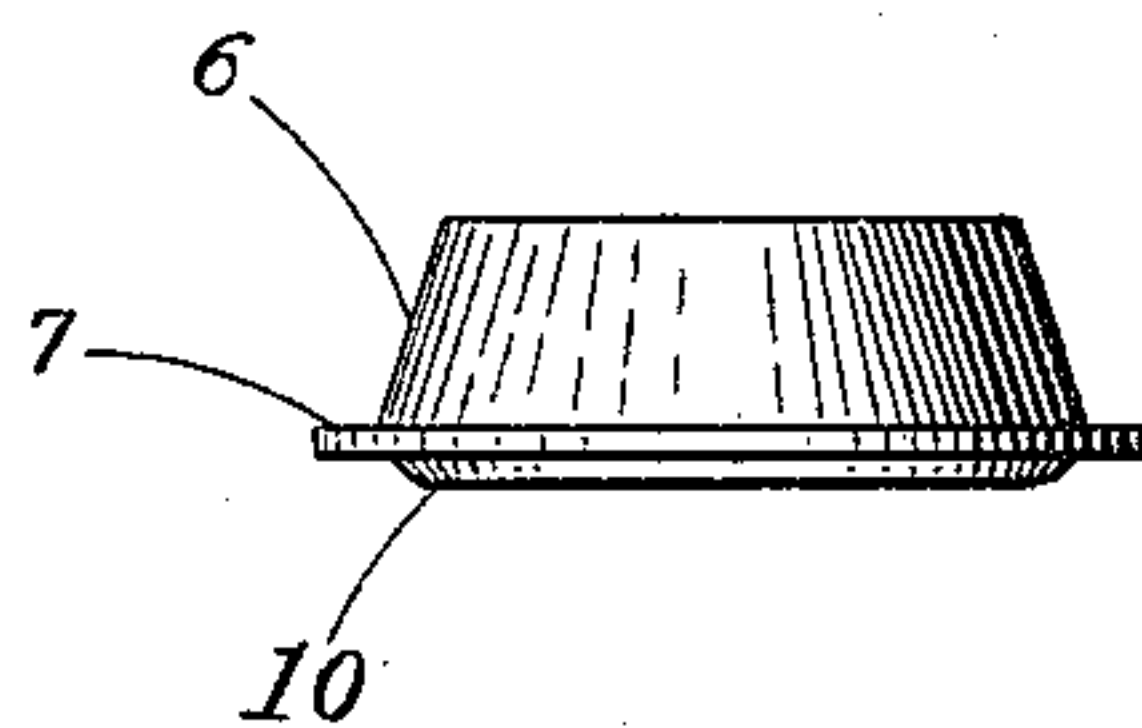
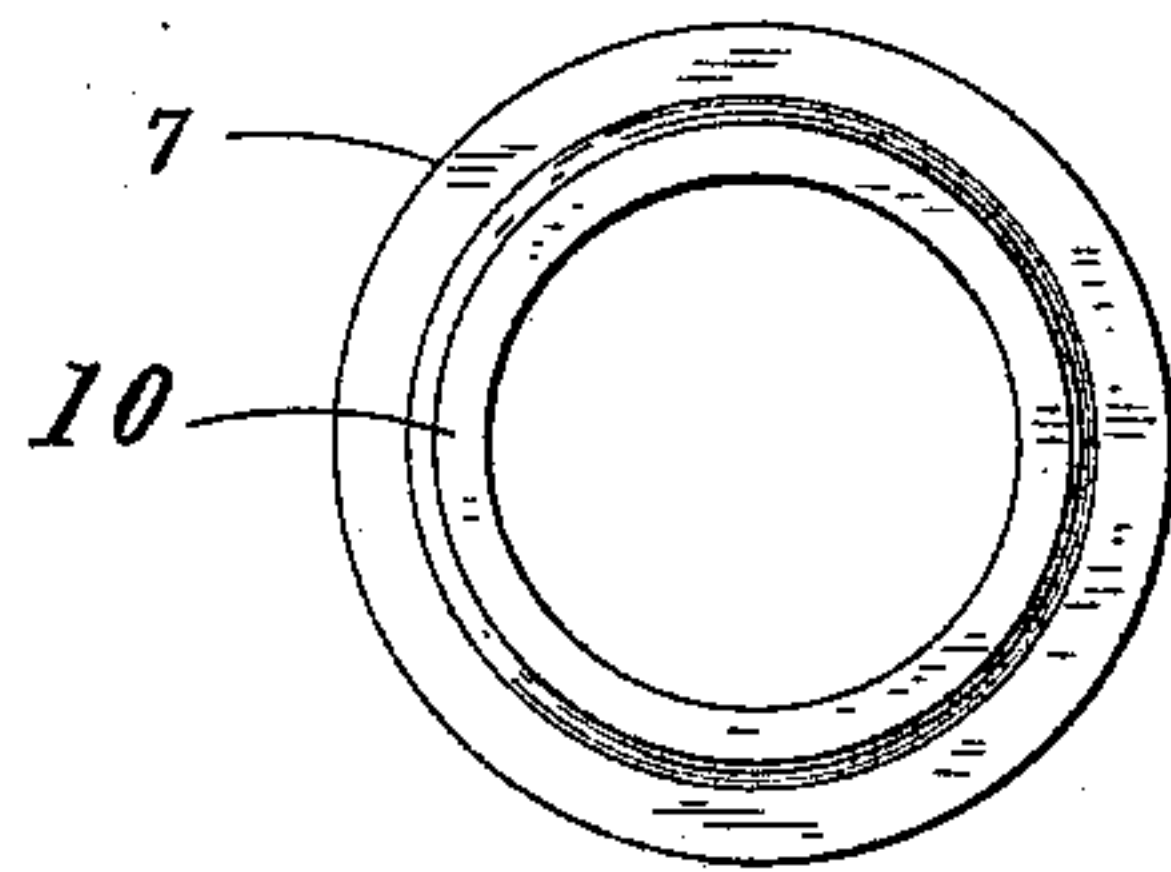


Fig.5.



Witnesses,
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UNITED STATES PATENT OFFICE.

WILLIAM YAEGER, OF BUFFALO, NEW YORK.

TAP-HOLE BUSHING.

SPECIFICATION forming part of Letters Patent No. 575,089, dated January 12, 1897.

Application filed October 15, 1896. Serial No. 608,921. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM YAEGER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a certain new and Improved Tap-Hole Bushing, of which the following is a specification.

My invention relates to a new and improved tap-hole bushing for beer or other kegs or barrels, and will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical central section on or about line *a a*, Fig. 2. Fig. 2 represents a top plan view showing the inclosed wooden bushing. Fig. 3 represents a detached view of the wooden bushing, showing a vertical central section through the same. Fig. 4 represents a detached side elevation of the bushing-expander; Fig. 5, an inverted or underside view of the bushing-expander.

Referring to the details of my improved bushing, 1 represents the outside supporting-case for holding the wooden bushing. It is preferably constructed of cast-iron, but any well-known suitable material may be used, and is provided with the usual screw-thread 2, by which it is secured in the bung-hole in the ordinary way.

At the bottom of the case 1 is an inward-extending circular flange 3, having an outward-inclined bottom 4, thereby forming a flaring opening at the bottom of the case, the object of which will appear farther on. The opening 5 or inner side of the case is made slightly tapering from the bottom of the flange 3 upward, (see Fig. 1,) so that the opening is slightly larger at the bottom than at the top.

An expander, made preferably of cast-iron and consisting of a circular ring tapering on the outside 6 from the bottom upward, so as to be sharp at the top, is provided with a surrounding flange or base 7, adapted to lie on the top of the flange 3 when it is put in the case 1, as in Fig. 1, the flange 7 being small

enough to allow it to pass down through the contracted part of the opening 5.

The wooden bush 8 is adapted to pass down easily through the top of the opening 5. The opening 9 through said bushing is made flaring, substantially as shown in Fig. 3 at 9^a, and is slightly smaller than the expander over which it is designed to fit, as in Fig. 1.

In operating with this device the expander is first put in. Then the wooden bushing is inserted and driven or forced down over the expander, thereby causing it to expand and fill the opening in the case, substantially as shown in said Fig. 1, so that it is impossible to remove it except by cutting it out piece by piece, or where the wooden bushing is worn out and requires to be removed a tool adapted to catch on the bottom 10 of the expander and force it up with the bushing may be used. The flaring sides 4 of the bottom of the bush-case will prevent the tool from catching thereon, as will be readily understood.

It will be noticed that the opening through the expander is larger than the opening through the wooden bush. The object of this construction is to prevent the vent or other device used therein from coming in contact with the iron expander and being injured thereby.

I claim as my invention—

A tap-hole bushing consisting of a metal screw-threaded supporting-case having its inner sides tapering from the bottom upward, an inner extending flange at the bottom of the same, a removable tapering expanding-ring adapted to rest on said flange, and a wooden tubular bushing adapted to pass into said case and be forced down over the expander and thereby fill the opening and be rigidly secured in place, substantially as described.

WILLIAM YAEGER.

Witnesses:

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