No. 676,622. Patented June 18, 1901.

H. H. GOCHNAUER.

BUNG BUSHING FOR CASKS, BARRELS, &c.

(Application filed Oct. 30, 1899.)

(No Model.)

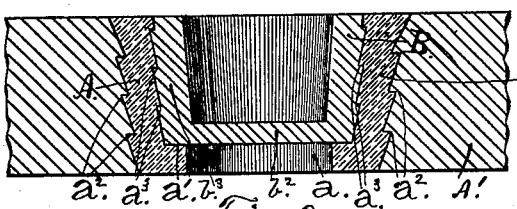

Fig. 2.

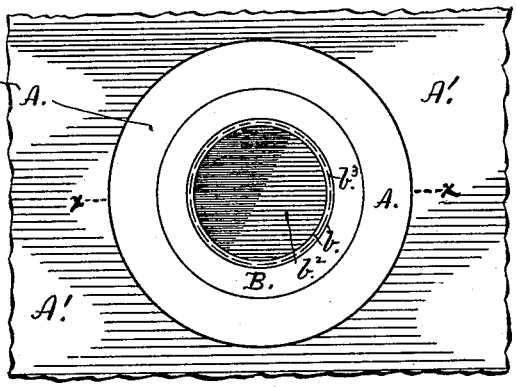

Fig. 1.

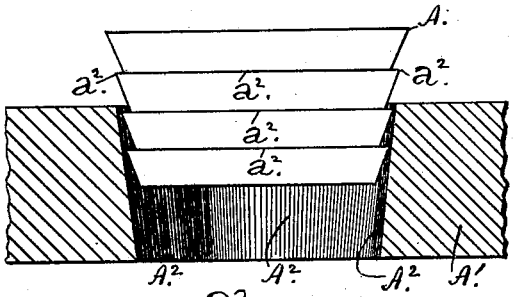

Fig. 3.

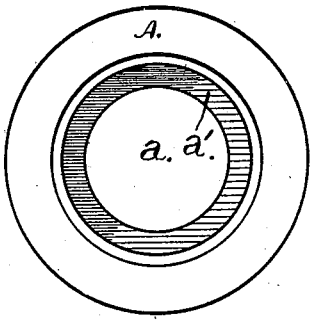

Fig. 4.

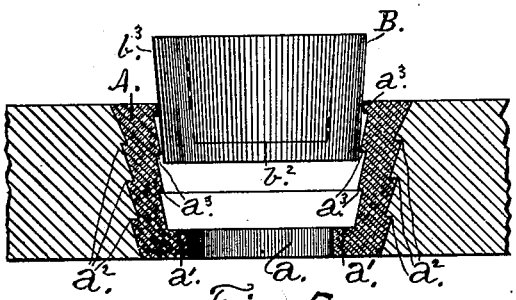

Fig. 5.

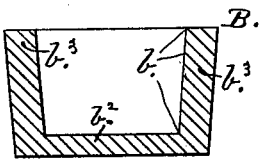

Fig. 7.

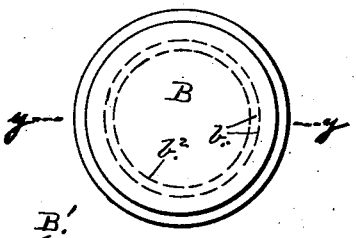

Fig. 8.

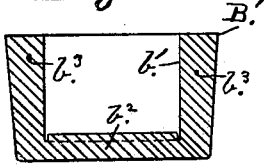

Fig. 6.

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UNITED STATES PATENT OFFICE.

HARRY H. GOCHNAUER, OF LANCASTER, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND JOHN A. SHANK, OF SAME PLACE.

BUNG-BUSHING FOR CASKS, BARRELS, &c.

SPECIFICATION forming part of Letters Patent No. 676,622, dated June 18, 1901.

Application filed October 30, 1899. Serial No. 735,215. (No model.)

To all whom it may concern:

Be it known that I, HARRY H. GOCHNAUER, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Bung-Bushings for Casks, Barrels, Kegs, and the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in a bung-bushing of that class in which a number of external peripheral steps or offsets form annular teeth which engage or bite into the wood of the head or bung-stave and within the hole formed in said head or stave for the reception of the bung which stoppers said hole, firmly holding said bushing in place therein, in which a number of internal peripheral steps or offsets form annular teeth which engage or bite into the convex surface of the bung driven therein, firmly holding it in place, and in which the lower edge is provided with an internal ring flange or offset to prevent said bung from being driven farther thereinto.

The object of the invention is to provide a lining that will protect the edges of bung-holes in casks, barrels, kegs, and the like and to hold the bungs, corks, and the like stoppering said holes securely in place, saving the wear and tear in the wood of the staves or heads in which said holes are placed.

The elements of the invention will severally and at large appear in the following description, and they will be separately and fully pointed out in the appended claim.

The purposes of the invention are attained by the devices and means illustrated in the accompanying drawings, similar reference characters designating like parts throughout the several views, in which—

Figure 1 is a plan of a portion of a barrel stave or head with a bushing embodying the elements of the invention in place and a bung seated therein. Fig. 2 is a sectional elevation taken on the line x x in Fig. 1. Fig. 3 is a similar elevation of said stave or head with a tapering hole therein, showing the bushing partially inserted in said hole. Fig. 4 is a plan of said bushing detached from Fig. 3. Fig. 5 is a central sectional elevation of the stave or head with a vertical section of the bushing in place, showing the bung or plug partially inserted in said bushing. Fig. 6 is an inverted plan of the bung or plug detached from Fig. 5. Fig. 7 is a direct sectional elevation of the bung or plug, taken on the line y y in Fig. 6; and Fig. 8 is a sectional elevation of a bung or plug having a cylindrical bore or socket in its body.

As shown in the drawings, the bushing of the present invention is practically a conical cup A, tapering gradually downwardly and inwardly from its open end to the bottom thereof, having through said bottom an aperture a for the passage of the stem of the faucet or spiggot, said aperture leaving a ring flange or ledge a' for the bung or plug driven therein to rest upon, preventing its further entrance. In the outer slanting surface of the bushing are formed annular steps or teeth a^2, which steps or teeth engaging in the wood after having been seated in place (best shown in Figs. 2 and 5, Fig. 3 showing it in process of entering) prevent said bushing from being withdrawn without first tearing away the wood holding the same, while A′ designates a portion of the stave or head having a tapering hole A^2, seating said bushing. The inner slanting surface of the bushing is provided with annular steps or teeth a^3, which steps or teeth engaging in the outer surface of the bung or plug driven therein and seated in place (best shown in Fig. 2, Fig. 5 showing it in process of entering) prevent said bung or plug from being withdrawn or blown out without first tearing away the portions of the wood holding the same.

The stopper or bung hereinbefore referred to, and illustrated in the drawings, is the ordinary cup-shaped stopper or bung, well known to the trade, and designated by B and B′, respectively, in Figs. 7 and 8, the former having a conical and the latter a cylindrical recess, respectively indicated by b and b', being adapted to be inserted and fully seated in the bushing, (best shown in Fig. 2, Fig. 5 showing progress,) while the bottom b^2 is adapted to be driven through by the butt-end

of the faucet-stem on being inserted thereinto, with the sides b^3 thereof forming a lining or packing between said stem and the bushing.

It is well known that ring bushings of various constructions and serving as linings, protecting the holes against wear and tear into which bungs are driven are old and well known to the trade. No claim is therefore made, broadly, to the bushing nor to the means of securing it in place; but

What is considered new, and desired to be secured by Letters Patent, is—

A bung-bushing, circumferentially conical in form, having a conical socket with a circular hole through its bottom at the small end thereof, and an internal ring flange surrounding said hole; a series of external ring steps with upwardly and outwardly sloping side faces and flat or level top edges, arranged on its convex slant surface; and a series of internal ring steps with downwardly and inwardly sloping side faces and flat or level bottom edges, arranged on its concave slant surface; all substantially as described and for the purpose hereinbefore set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY H. GOCHNAUER.

Witnesses:

CHAS. E. LONG,

DANL. H. HERR.