E. GUENTHER & F. HOEPPNER.

Bungs.

No. 196,659. Patented Oct. 30, 1877.

Fig: 1

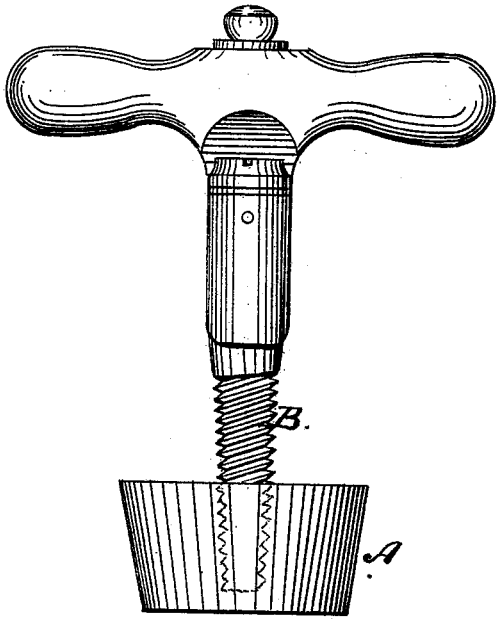


Fig: 2

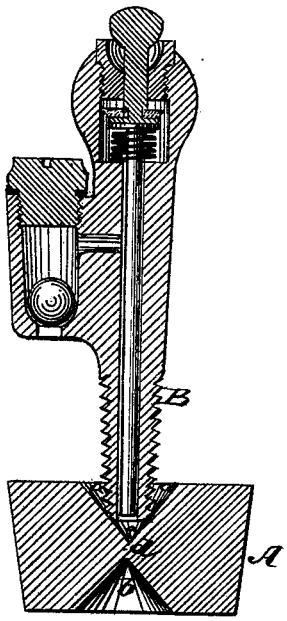


Fig: 3

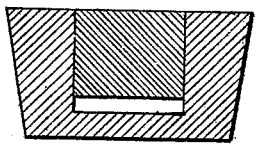
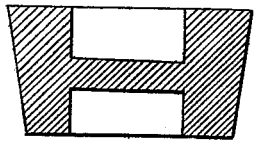


Fig: 4



Witnesses:
John C. Tunbridge
A. V. Briesen

Inventors:
E. Guenther
F. Hoeppner
by their attorney
A. V. Briesen

UNITED STATES PATENT OFFICE.

EDUARD GUENTHER AND FRIEDRICH HOEPPNER, OF NEW YORK, N. Y.

IMPROVEMENT IN BUNGS.

Specification forming part of Letters Patent No. **196,659**, dated October 30, 1877; application filed August 6, 1877.

To all whom it may concern:

Be it known that we, EDUARD GUENTHER and FRIEDRICH HOEPPNER, of New York city, in the county and State of New York, have invented a new and Improved Bung for Barrels, of which the following is a specification:

Figure 1 is a side view, and Fig. 2 a vertical central section, of our improved barrel-bung. Figs. 3 and 4 are sectional views of barrel-bungs heretofore used.

Similar letters of reference indicate corresponding parts in all the figures.

This invention has for its object to produce a wooden bung which is readily pierced by a vent-plug or faucet, and which, before being pierced, will absolutely secure the liquids contained within the barrel and prevent their escape.

Partly-pierced bungs, such as are illustrated in Figs. 3 and 4 of the drawing, have already been in use, the object of the partial piercing being to leave a narrow bridge, which can be readily driven in by a suitable instrument, thereupon leaving a vent-opening for the admission of air to the barrel. But inasmuch as the grain of the wood in nearly all cases must, to avoid splitting when the vent is inserted or an opening made, extend diagonally to and through the bridge thus formed, as indicated by the direction of the section-lines in Figs. 3 and 4, the bridge almost invariably allows the liquid to pass through the bung, or rather through the wood fibers of the bridge; and these bungs are therefore exceedingly objectionable, unless made of wood of which the grain extends parallel with the direction of the bridge. Such wood, however, it is difficult to find, and good bungs are therefore very expensive. Moreover, when the grain is transverse to the bung the latter is apt to split when perforated, and the screw-vent cannot be inserted without making a preliminary opening.

Now, our invention consists in providing the opposite sides of the bung A with pyramidal cavities *a* and *b*, as clearly shown in Fig. 2, thereby leaving a narrow thickness, *d*, of wood between the two cavities; but, owing to the form of the latter, this intervening wood has no appreciable length, and the grain of the wood, when extending diagonally, is consequently not interrupted at this intervening portion *d* of the bung. The bung is readily pierced by the use of the screw-vent B or other equivalent instrument, such as indicated in Figs 1 and 2, as the lower screw-thread of the vent can always find a bearing, and will quickly bite into the inclined side of the wood. This can be readily screwed through the bung to pierce the same, and will, if made hollow, as shown, admit air into the barrel; but the bung may also be readily pierced by any other ready and known means, without danger of splitting.

It will be seen that by our construction the side of one pyramidal cavity is substantially in line with the opposite side of the other cavity, and at about right angles with that side of the other cavity which is in the same plane of the bung.

By this means the bung is rendered useful for all kinds of wood without reference to the direction of the grain.

We claim as our invention—

The barrel-bung made with two pyramidal cavities coming to a point, and so located that the side of one pyramidal cavity is substantially in line with the opposite side of the other cavity, and at nearly right angles with that side of the other cavity which is in the same plane of the bung, substantially as specified.

EDUARD GUENTHER.
FRIEDRICH HOEPPNER.

Witnesses:
ERNEST C. WEBB,
F. V. BRIESEN.