

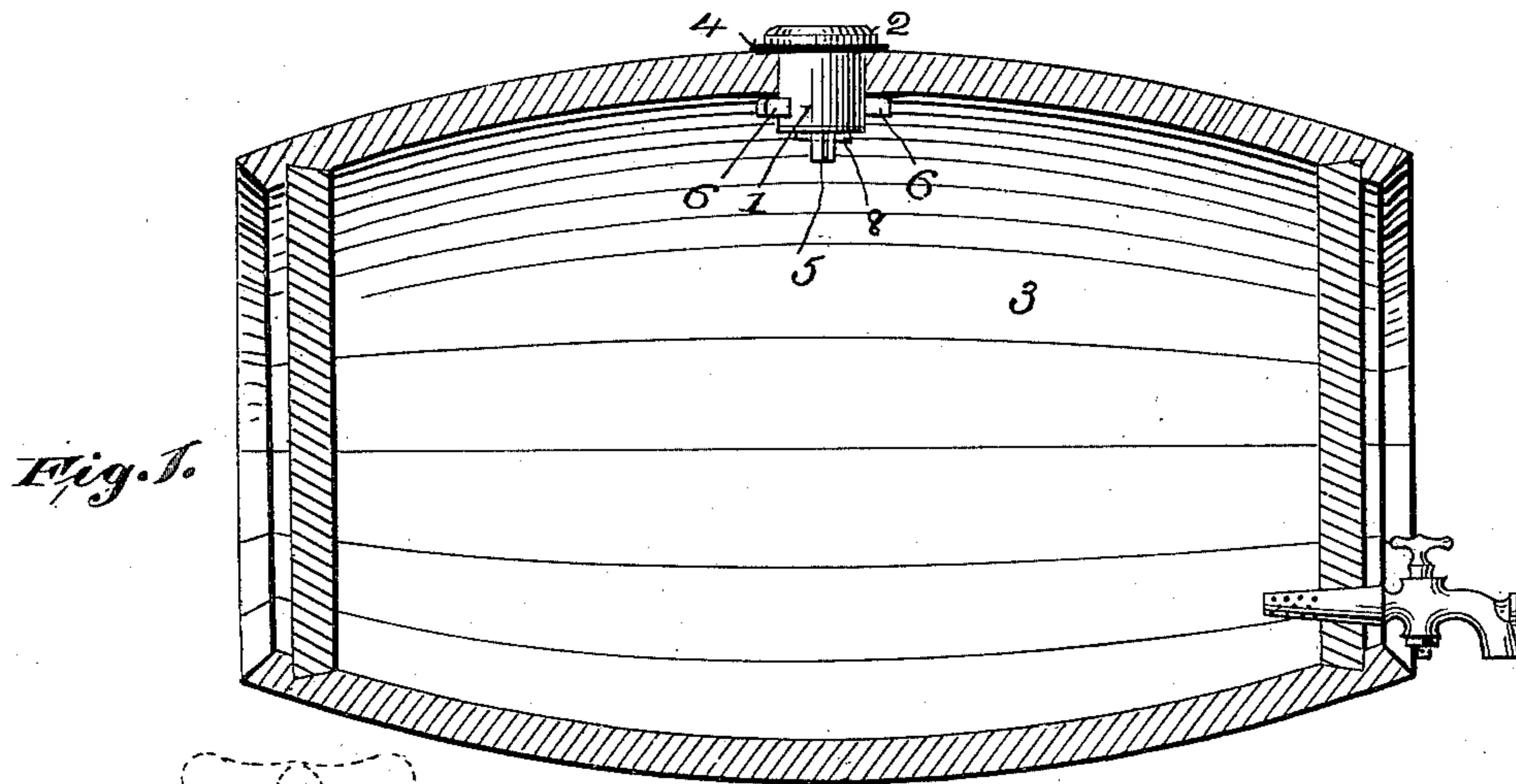
**No. 693,608.**

**Patented Feb. 18, 1902.**

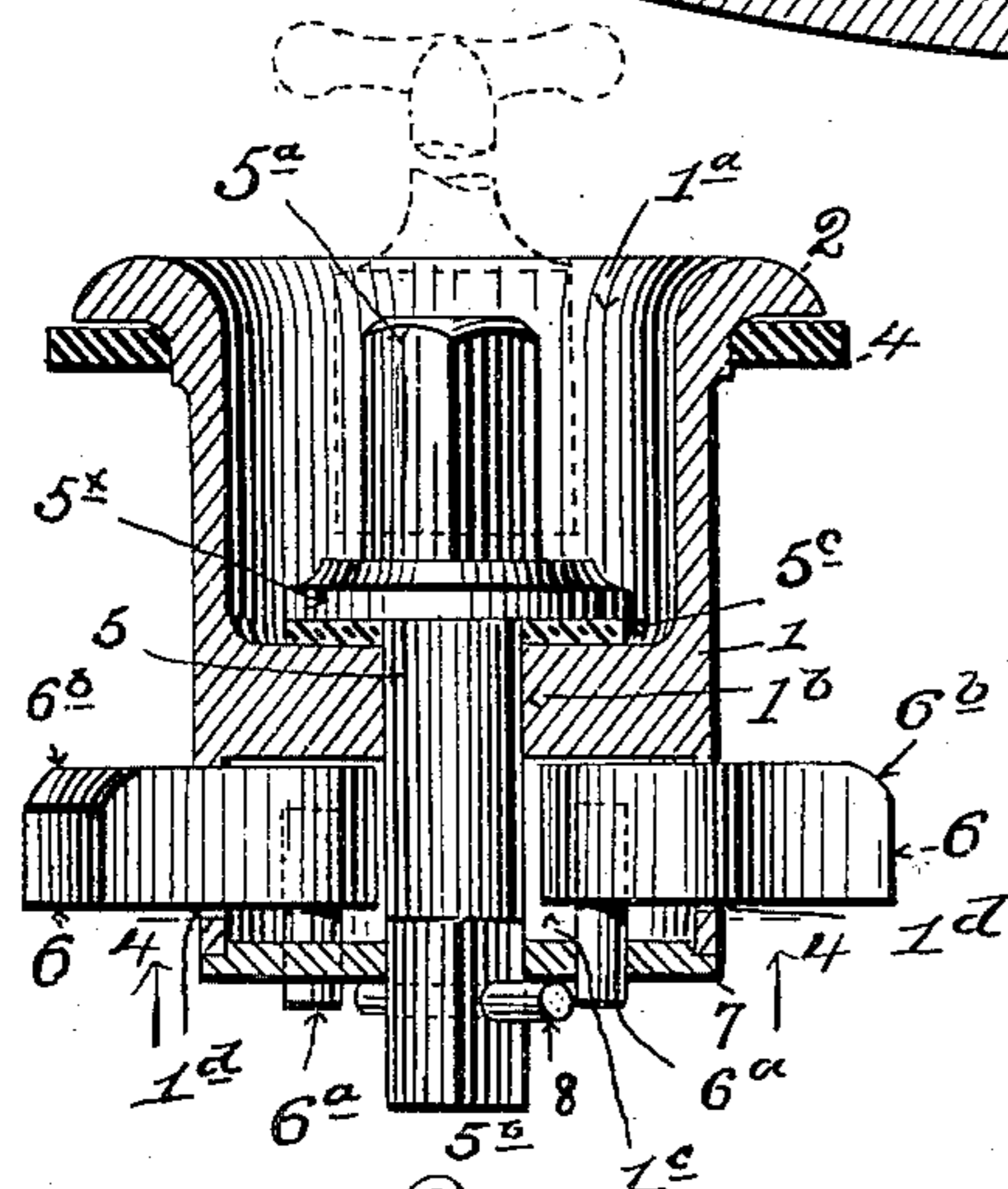
**F. KELLERS.  
BUNG.**

(Application filed Sept. 6, 1901.)

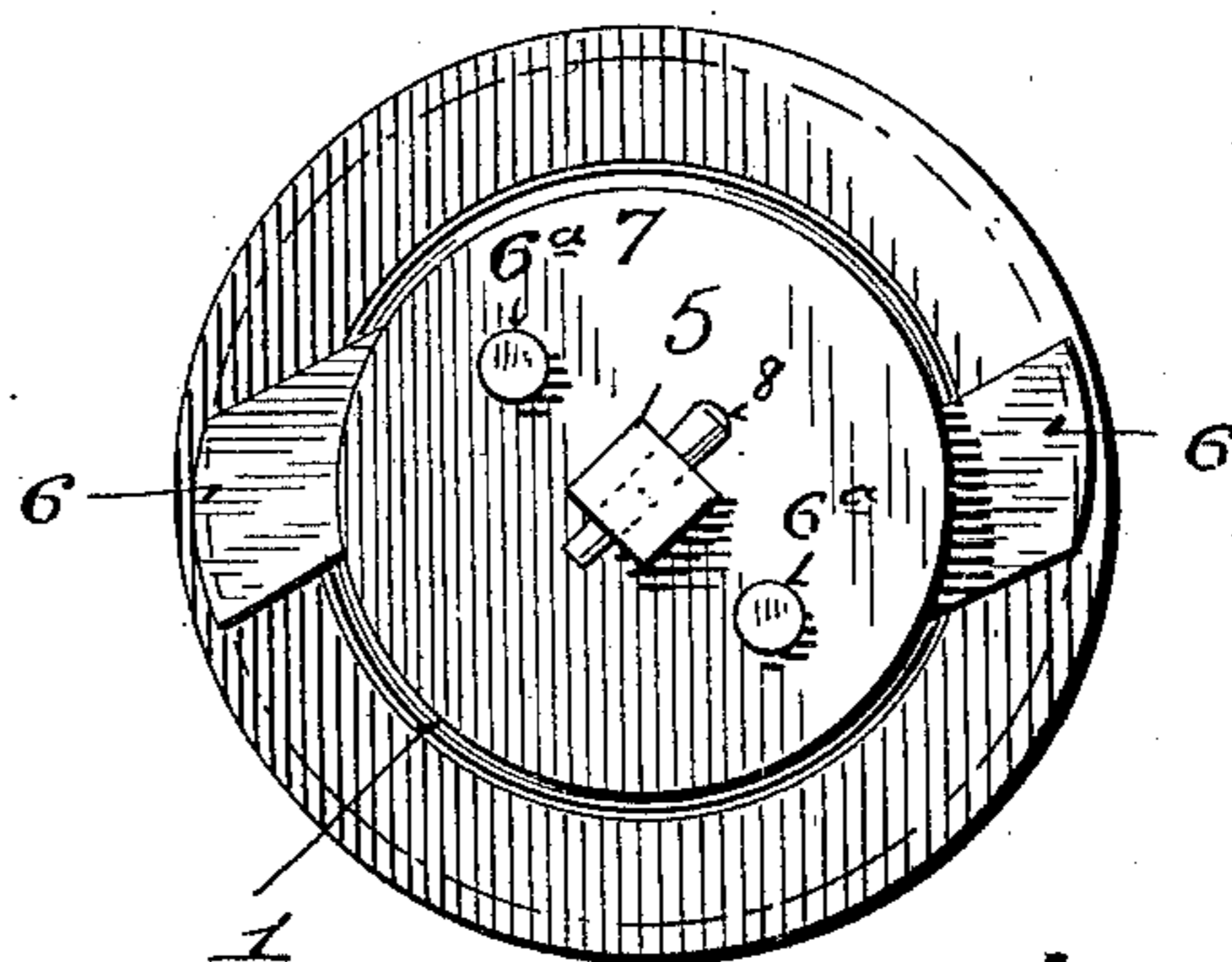
(No Model.)



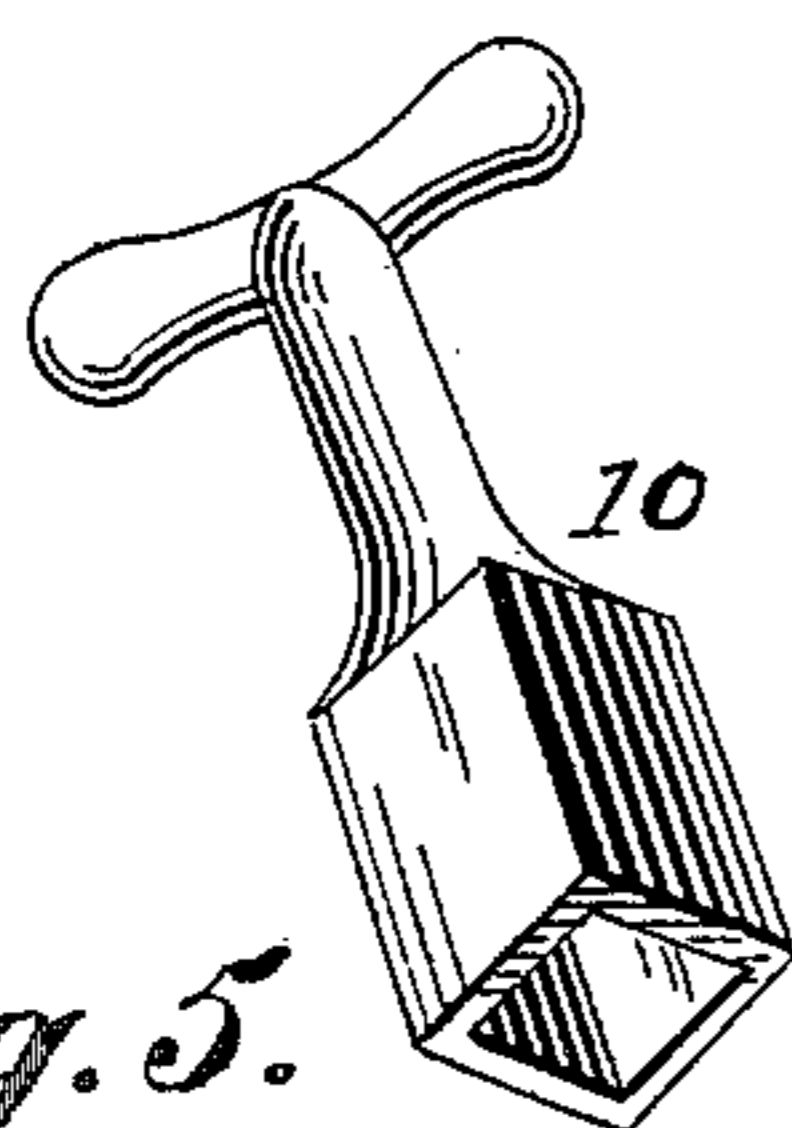
*Fig. 1.*



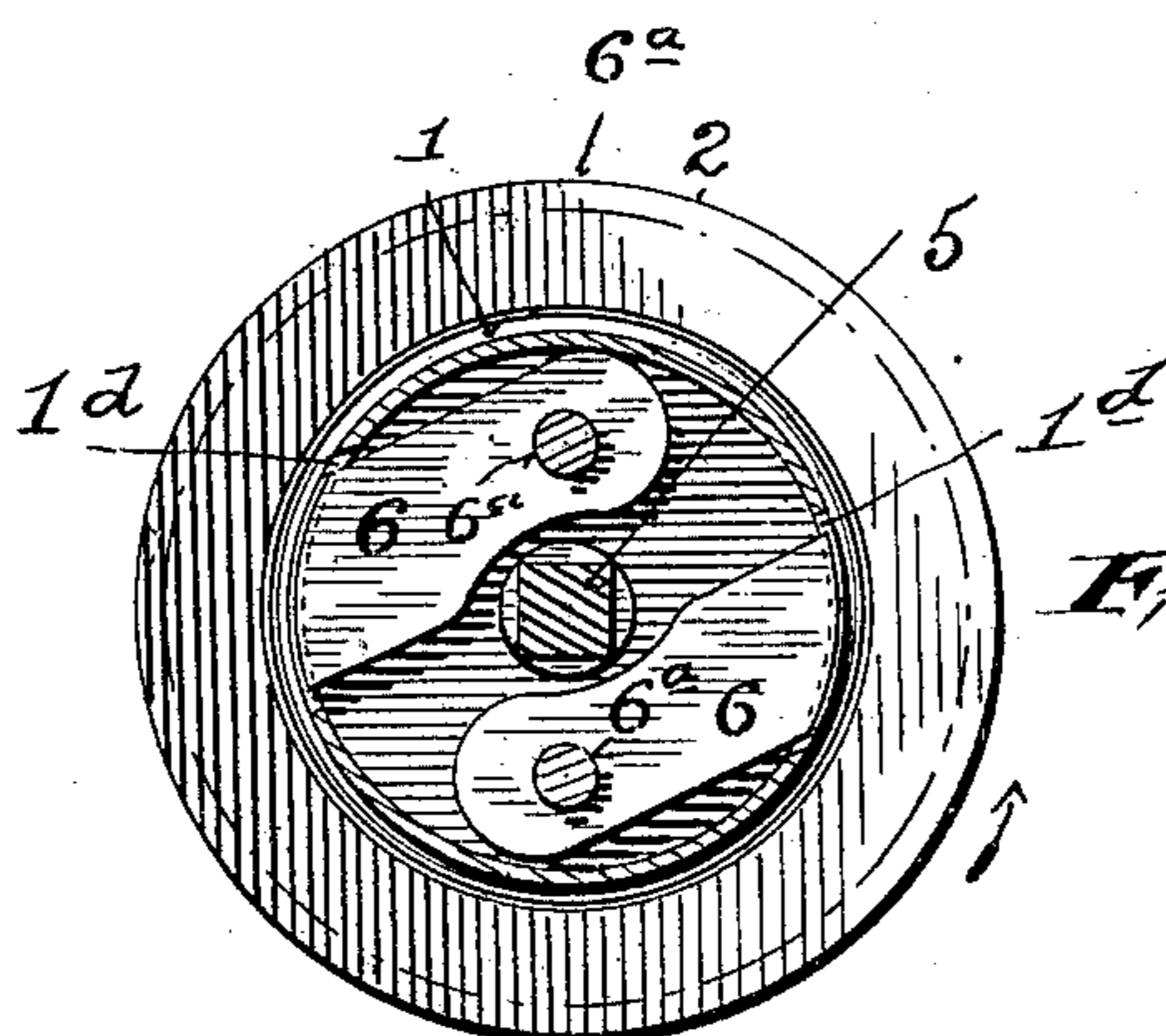
*Fig. 2.*



*Fig. 3.*



*Fig. 5.*



*Fig. 4.*

WITNESSES  
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# UNITED STATES PATENT OFFICE.

FREDERICK KELLERS, OF JERSEY CITY, NEW JERSEY.

## BUNG.

SPECIFICATION forming part of Letters Patent No. 693,608, dated February 18, 1902.

Application filed September 6, 1901. Serial No. 74,501. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK KELLERS, a citizen of the United States, and a resident of Jersey City, Hudson county, New Jersey, have invented certain new and useful Improvements in Bungs, of which the following is a specification.

The object of my invention is to provide a bung which may be readily attached to and detached from a barrel, cask, or the like and which shall be strong, durable, and efficient; and to these ends the invention comprises a shell adapted to fit within a bung-hole and provided with a flange near its outer end and with arms near its inner end, between which flange and arms a barrel stave or head may be clamped, and means for projecting the arms from and withdrawing them into said shell for the purpose of fastening the bung in place or permitting its withdrawal from the bung-hole.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a sectional view of a barrel provided with my improved bung. Fig. 2 is a sectional view of the bung, enlarged. Fig. 3 is an end view looking from the bottom of Fig. 2. Fig. 4 is a cross-section on the line 4 4 in Fig. 2 looking in the direction of the arrows, and Fig. 5 is a perspective view of a wrench for operating the bung.

Similar numerals of reference indicate corresponding parts in the several views.

The numeral 1 in the drawings indicates a shell or body, which may be made of metal or other suitable material, and near its outer end said shell is provided with a flange 2, adapted to overlies the stave or head of a barrel or cask 3, by preference a gasket 4 being interposed between the flange 2 and the stave or head. The shell 1 is also shown provided with a socket or recess 1<sup>a</sup> and with a bearing portion 1<sup>b</sup> to receive a stem 5, whose squared or other-shaped head 5<sup>a</sup> is received in the socket 1<sup>a</sup>, as indicated in Fig. 2, so as to lie within the outer surface or end of the shell to protect said stem. Between the bearing portion 1<sup>b</sup> and a flange 5<sup>x</sup> of stem 5 is shown a washer 5<sup>c</sup> to prevent leakage around the stem. Beneath the bearing portion 1<sup>b</sup> the shell 1 is provided with a chamber 1<sup>c</sup> and

laterally-disposed openings 1<sup>d</sup>, through which openings arms 6 are adapted to be projected. The arms 6 are suitably connected with the stem 5, so that by rotating the latter to the right or left said arms may be projected from or withdrawn into the shell 1. I have shown a disk or plate 7 at the inner end of the shell 1, adapted to rotate and provided with a centrally-disposed aperture to receive the squared or other-shaped end 5<sup>b</sup> of stem 5, a pin or other fastening 8 being provided to maintain the disk 7 upon the stem 5. The arms 6 are shown provided with pins 6<sup>a</sup>, which pass through corresponding apertures in the disk 7 on opposite sides of the stem 5, and thus through the medium of the pins 6<sup>a</sup> and disk 7 the arms 6 are operatively connected with the stem 5. When the parts are in the position shown in Fig. 4 and the disk 7 is rotated by the stem 5 in the direction of the arrow, the pins 6<sup>a</sup> will push the arms 6 through the apertures 1<sup>d</sup> of shell 1 into the position shown in Figs. 1, 2, and 3, and when the stem 5 is rotated in the reverse direction the arms 6 will be withdrawn into the shell. The upper outer edges 6<sup>b</sup> of the arms 6 are shown as beveled or inclined, so as to crowd under the stave or head of the barrel or cask.

The operation of my device is as follows: To insert the bung in the bung-hole, the stem 5 is rotated, as by a suitable key or wrench 10, so as to withdraw the arms 6 into the shell 1, and then the latter is pushed through the bung-hole, and the stem 5 is next rotated in the reverse direction, which causes the disk 7 to rotate, and thus the pins 6<sup>a</sup> push the arms 6 through shell 1 on the inner side of the stave or head, thus clamping the bung in position in the bung-hole, and the beveled or inclined edges 6<sup>b</sup> will serve to crowd the arms and flange 2 on opposite sides of the stave or head to make a tight fit. When the bung is to be removed, the stem 5 is rotated so as to withdraw the arms 6 into shell 1, and the bung can then be removed from the hole. By having the outer surface of the flange 2 beveled or rounded or by having the flange relatively thin the portion of the bung that projects beyond the stave or head will not interfere with the free use of the barrel and the bung will not be injured. The firm fit-

ting of the bung in the bung-hole prevents leakage around the shell, and washer 5<sup>c</sup> serves to prevent leakage around the stem 5, although leakage at this point may be otherwise provided against.

I do not limit my invention to the details of construction shown and described, as they may be varied without departing from the spirit thereof.

10 Having now described my invention, what I claim is—

1. A bung comprising a shell having a flange near one end and a socket at the same end, a stem journaled in said shell and having its  
15 operative end located in said socket, a pair of arms alined with openings in the opposed wall of the shell adapted to be withdrawn within the same and projected therefrom, a disk connected with said stem, and pins on  
20 opposite sides of said stem connecting said

disk with said arms for operating the latter, substantially as described.

2. A bung comprising a shell having a flange near one end, a socket at the same end, a chamber near the other end and a bearing 25 portion between said socket and chamber, a stem journaled in said bearing portion and having its operative end located in said socket and its opposite end in said chamber, a pair of arms located in said chamber, the walls of 30 said chamber having openings for the passage of said arms, a disk connected with said stem to be rotated thereby, and pins on opposite sides of said stem connecting said disk and arms, substantially as described.

FREDERICK KELLERS.

Witnesses:

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