

No. 744,676.

PATENTED NOV. 17, 1903.

W. S. BARNETT.
STOPPER FOR BOTTLES.
APPLICATION FILED JUNE 19, 1903.

NO MODEL.

Fig. 1.

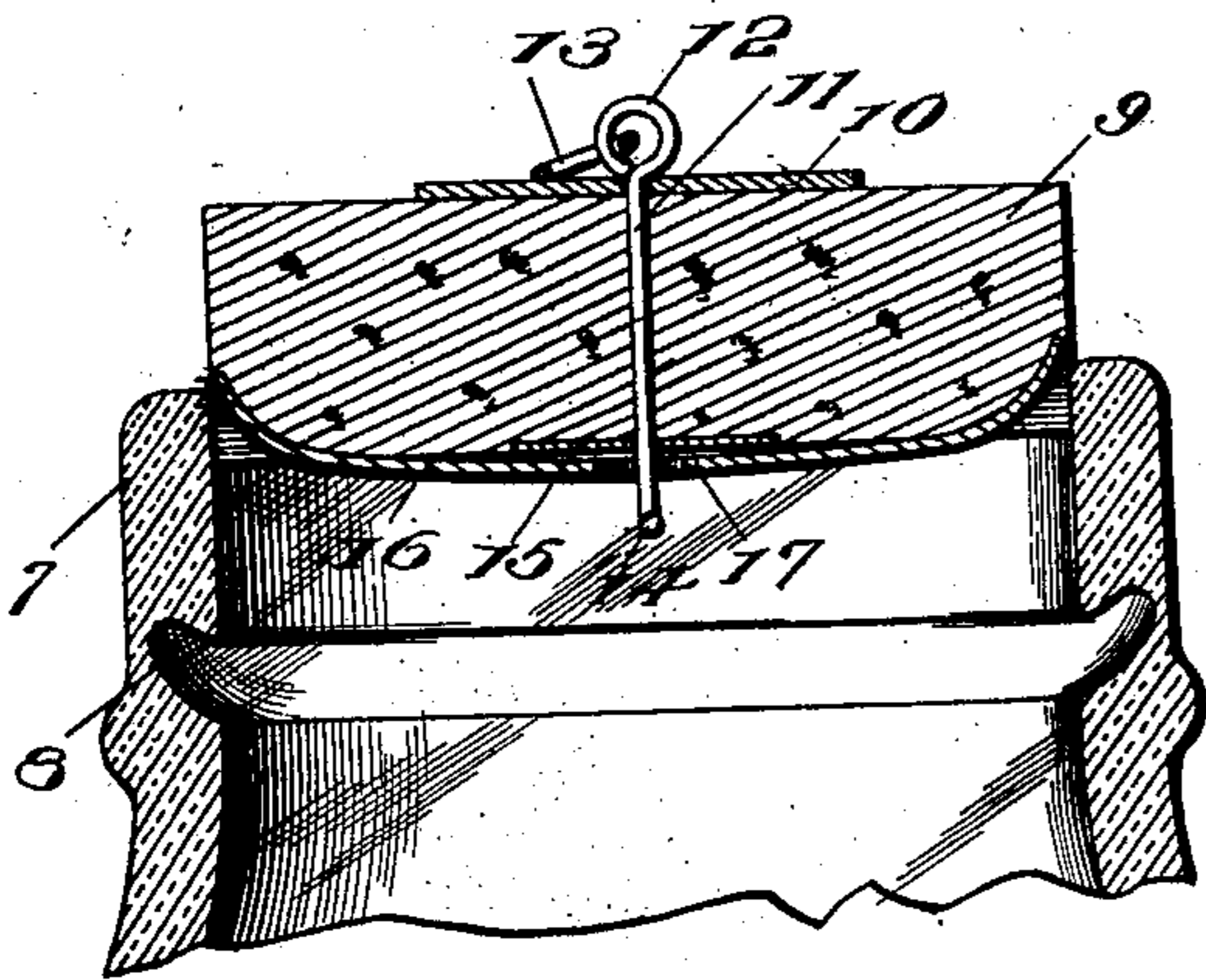


Fig. 2.

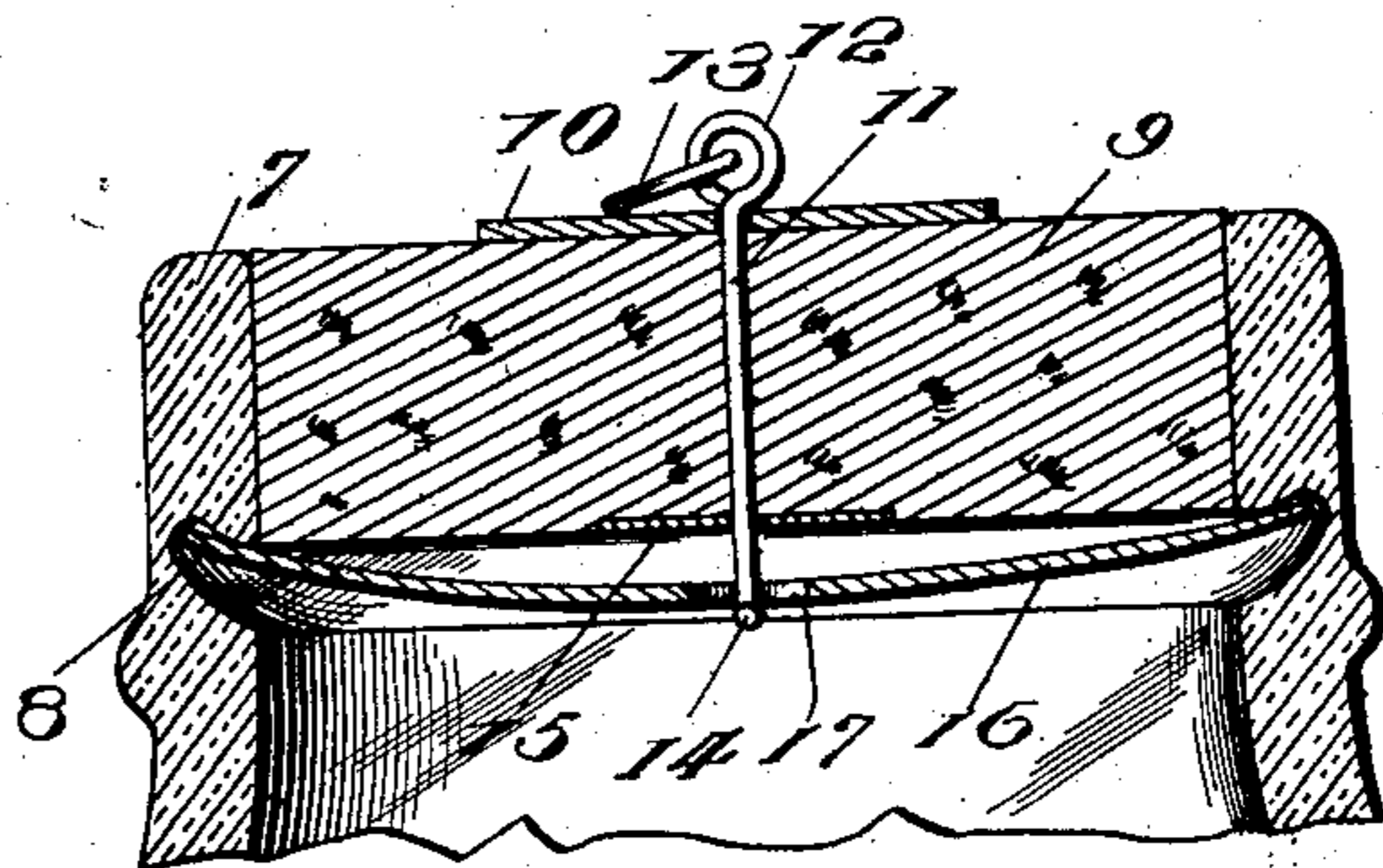


Fig. 3.

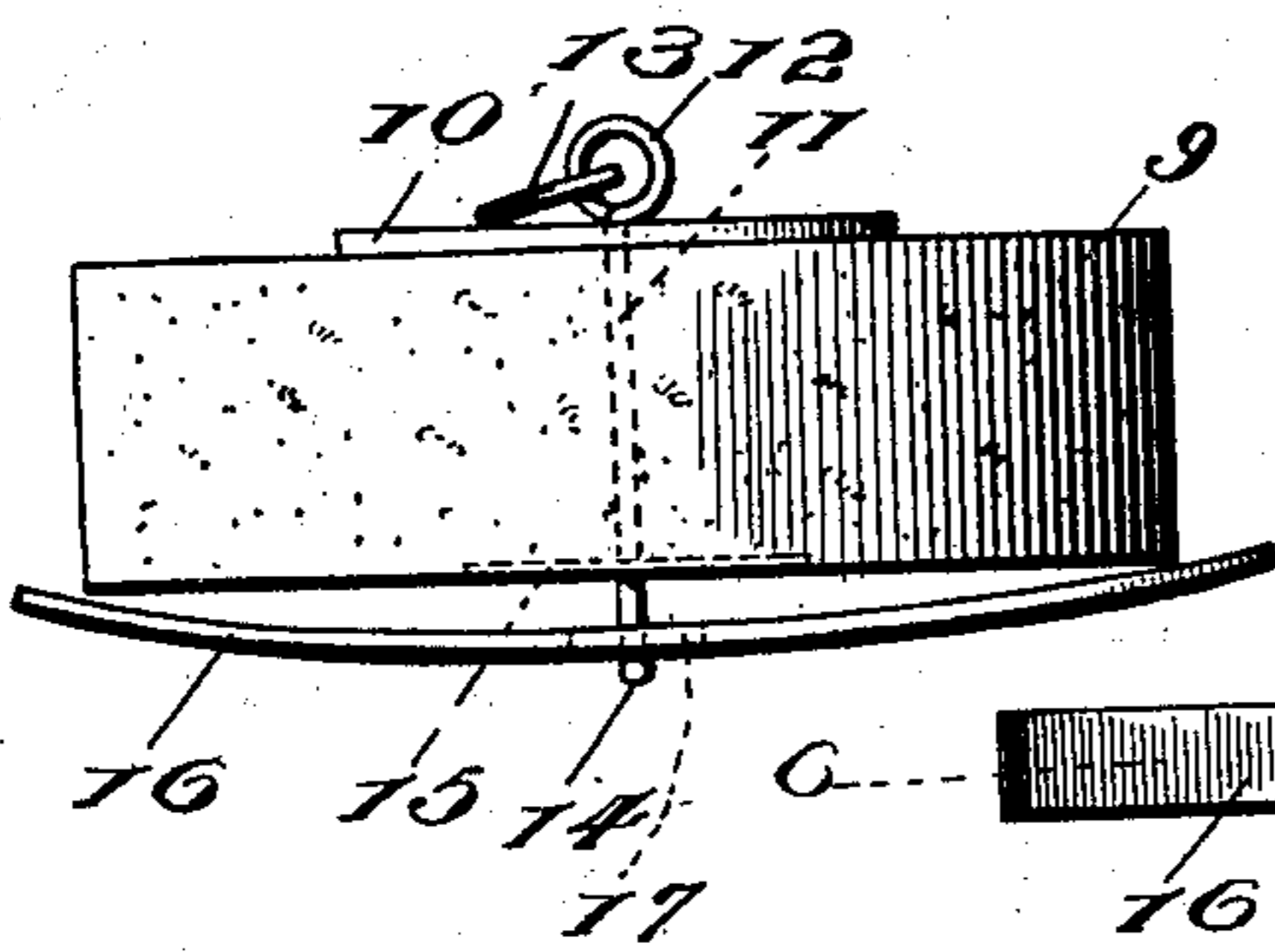


Fig. 4.

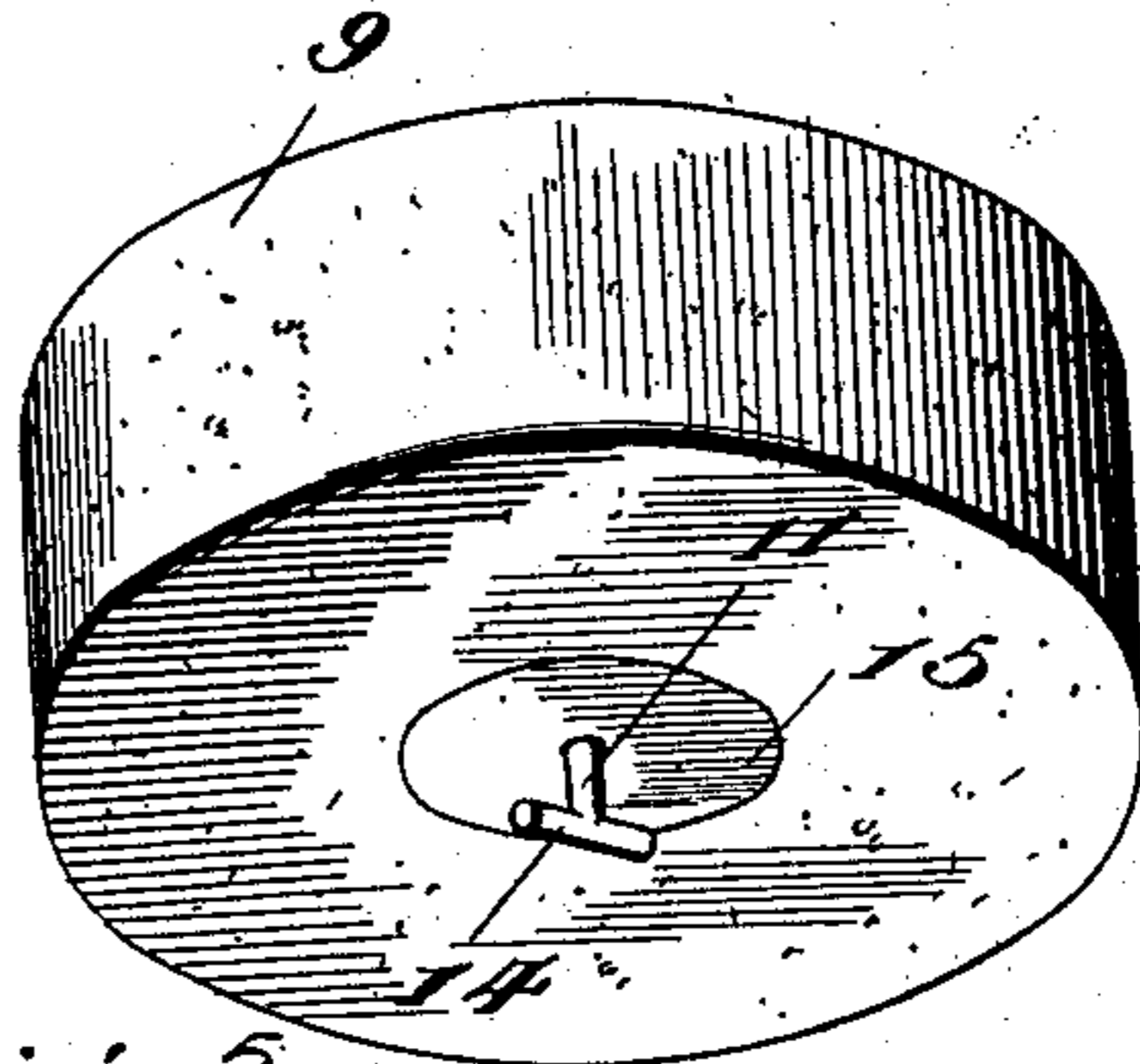


Fig. 5.

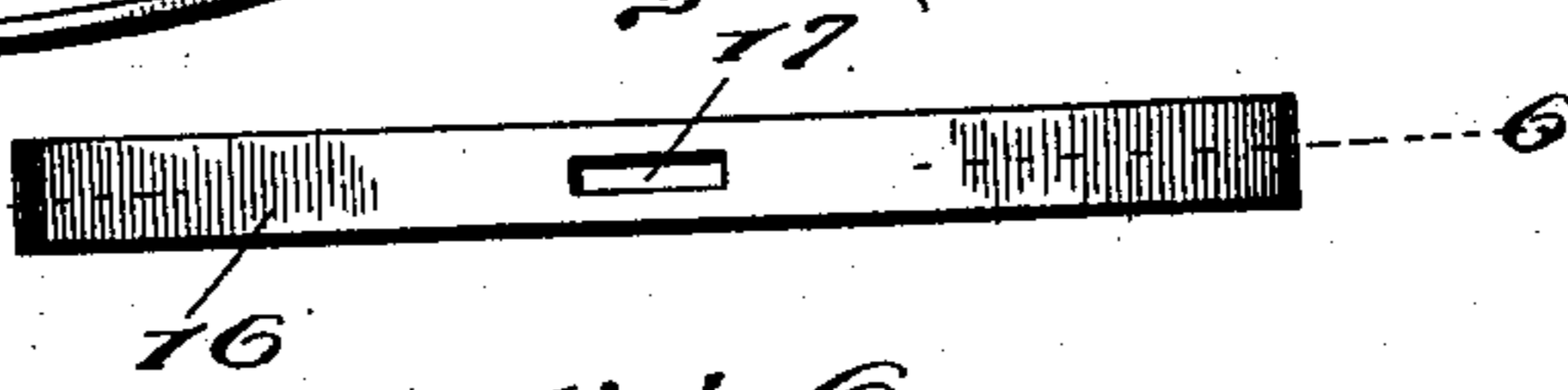
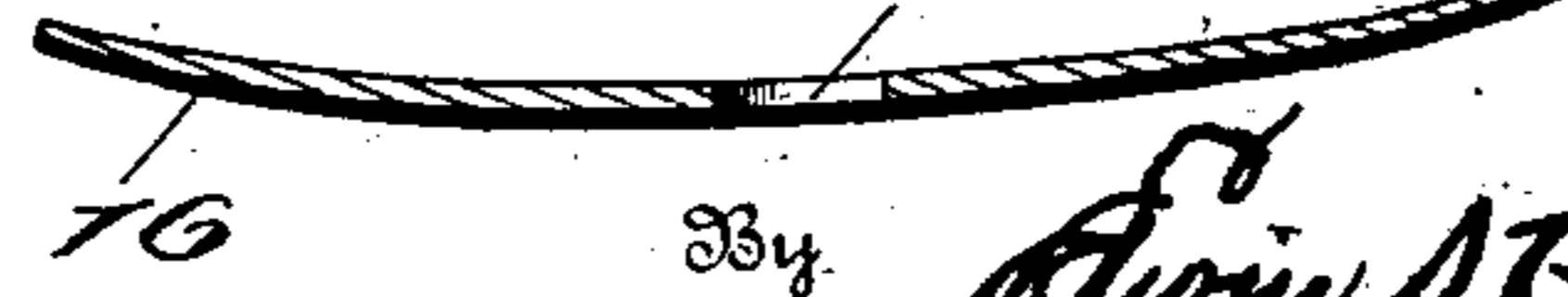


Fig. 6.



Witnesses

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STOPPER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 744,676, dated November 17, 1903.

Application filed June 19, 1903. Serial No. 162,151. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. BARNETT, a citizen of the United States, residing at Jacksonville, in the county of Duval and State of Florida, have invented certain new and useful Improvements in Stoppers for Bottles, of which the following is a specification.

My invention relates to means for temporarily locking the stopper in a bottle; and it consists of the parts and combinations of parts, as will be hereinafter more fully described.

In the drawings, Figure 1 is a vertical section of a bottle-neck with my improved stopper partly inserted therein. Fig. 2 is a similar view with the stopper fully inserted in the bottle-neck and locked into position. Fig. 3 is a side elevation of the stopper and its lock detached from the bottle. Fig. 4 is a perspective view of the stopper. Fig. 5 is a top plan view of the locking-bar detached. Fig. 6 is a section of the same on the line 6 6, Fig. 5.

7 represents the neck of a bottle broken away and shown in section.

8 is an annular groove formed on the inside of the neck of the bottle, near the top thereof. Said groove may be of any desired style or outline, but is preferably one of the outline shown in the drawings—that is to say, said groove extends slightly upwardly at the back.

9 is a stopper, of cork or composition or other suitable material, having a suitable metallic disk 10 secured upon its upper side. While I have shown the disk in the drawings as not extending entirely over the top of the cork, at the same time it will be understood that said disk may be of the same diameter as the cork for the purpose of printing or stamping advertisements upon the same.

11 is a stem passing through the plate 10 and the cork 9, the upper end of said stem being provided with an eye 12, in which is secured an extracting-ring 13. The lower end of this stem 11 is provided with a T-head 14, to be hereinafter referred to. I may, if desired, secure a metal disk 15 upon the under side of the cork or stopper 9, through which the stem 11 may pass, thus giving the stem a rigid non-yielding bearing in the cork near its upper and lower ends.

16 is a locking-bar, substantially crescent-

shaped from end to end, in which there is provided an elongated slot 17, situated near its center. As will be seen in Fig. 2, the locking-bar 16 is of a length greater than the diameter of the cork and the inside diameter of the neck of the bottle with which it is intended to be used, so that its ends will project within the annular groove 8, formed on the inside of the neck 7 of the bottle, whereby said bar is locked within the neck of the bottle. Corks will be furnished with the locking-bar attached thereto and held in position by means of passing the T-head 14 of the stem 11 through the elongated slot 17 and turning said T-head at right angles to the slot. With the locking-bar thus attached to the cork the cork is started in the neck of the bottle, and by continued pressure, such as would be derived from a corking-machine or by hand, the extreme ends of the locking-bar are pressed upwardly between the inner wall of the neck of the bottle and slightly into the cork 9, as clearly shown in Fig. 1. A continued downward pressure upon the cork will shove the stem until the ends of the locking-bar reach a point opposite the annular groove 8, whereupon said ends, by reason of the resilient nature of the material of which the bar is constructed, will spring outward into the annular groove 8, as shown in Fig. 2, and thereby will seat the bar in the neck of the bottle in the position shown in Fig. 2 against future displacement—that is to say, the bar having been once sprung into the groove 8 becomes a permanent fixture or part of the bottle, and by reason of its peculiar crescent shape it is adapted to withstand strain in pressure of gaseous or other expanding liquids that may be placed within the bottle, inasmuch as pressure on the bottom of the cork by the gas contained in the liquid in the bottle will have a tendency to straighten the bar thus elongated, and thereby more securely lock the bar in its position within the groove 8, and inasmuch as when placed in the position shown in Fig. 2 the T-head 14 is at right angles to the elongated slot 17 said T-head cannot pass through said slot, and therefore the cork is thus securely locked within the neck of the bottle.

By the use of this simple locking means I

am enabled to use a cork of less depth, and thereby economize in the cost of bottling.

Another advantage resulting from my invention is that it is only necessary that the
5 cork be sufficiently large to form an air and liquid tight joint between it and the neck of the bottle, as it is locked in its position against "popping" by means of the T-head 14 and the crescent-shaped bar 16. Another
10 advantage is that by reason of the shallow depth of the cork it is very easy to remove it by simply revolving the stem 11 until the T-head 14 alines with the elongated slot 17, whereupon by a slight pull upon the ring 13
15 the cork may be extracted.

Having thus described my invention, the following is what I claim as new therein:

1. The combination with a bottle, having an annular groove in its neck, of a bar permanently locked in said groove and a cork
20 constructed for detachable connection with said bar.

2. The combination with a cork, of a locking-bar detachably secured thereto, and
25 means permanently locking said bar within the neck of a bottle.

3. The combination with a cork and a T-headed stem secured thereto, of a locking-bar detachably connected to said T-headed
30 stem.

4. The combination with a cork and a T-

headed extracting-stem connected thereto, of a locking-bar detachably secured to said cork by means of said stem, and means permanently locking said locking-bar within the
35 neck of a bottle.

5. The combination with a cork, of a locking-bar detachably secured thereto, and of a length greater than the diameter of the cork, adapted to be compressed within the diame-
40 ter of the cork when first inserted within the neck of a bottle.

6. The combination with a bottle-neck having an annular groove in its inner wall, of a stopper, a stem secured in said stopper hav-
15 ing an extracting-ring at its upper end, and the T-head at its lower end, and a crescent-shaped locking-bar provided with an elongated slot and locked permanently within the annular groove in the neck of the bottle,
50 the T-head of the stem being adapted to pass through the elongated slot in the locking-bar and be revolved at right angles to said slot, thereby locking the stopper to said locking-
55 bar.

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

WILLIAM S. BARNETT.

Witnesses:

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