

No. 685,227.

Patented Oct. 22, 1901.

E. D. SCHMITT.  
BOTTLE SEALING DEVICE.

(Application filed Sept. 4, 1901.)

(No Model.)

Fig. 1,

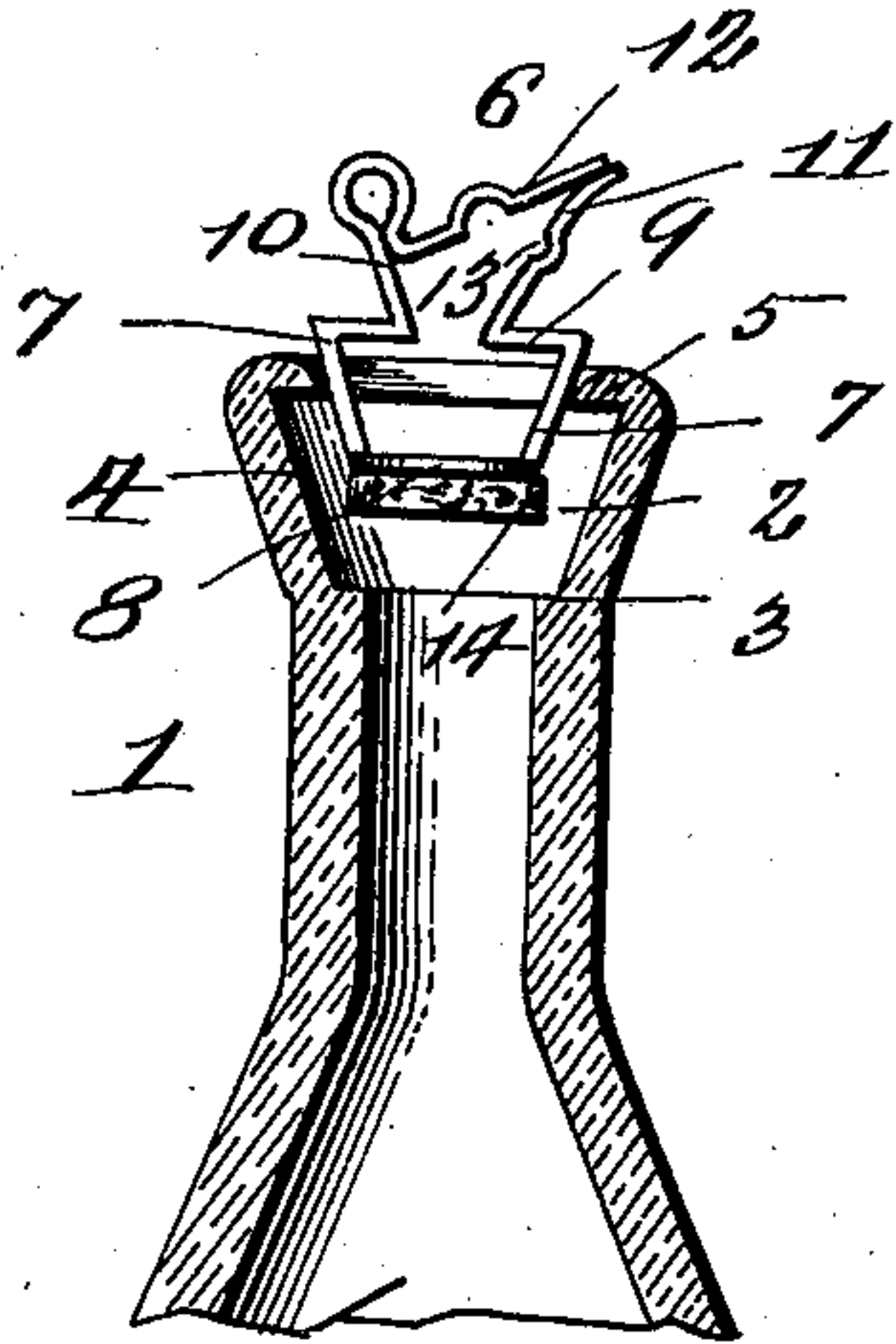


Fig. 2,

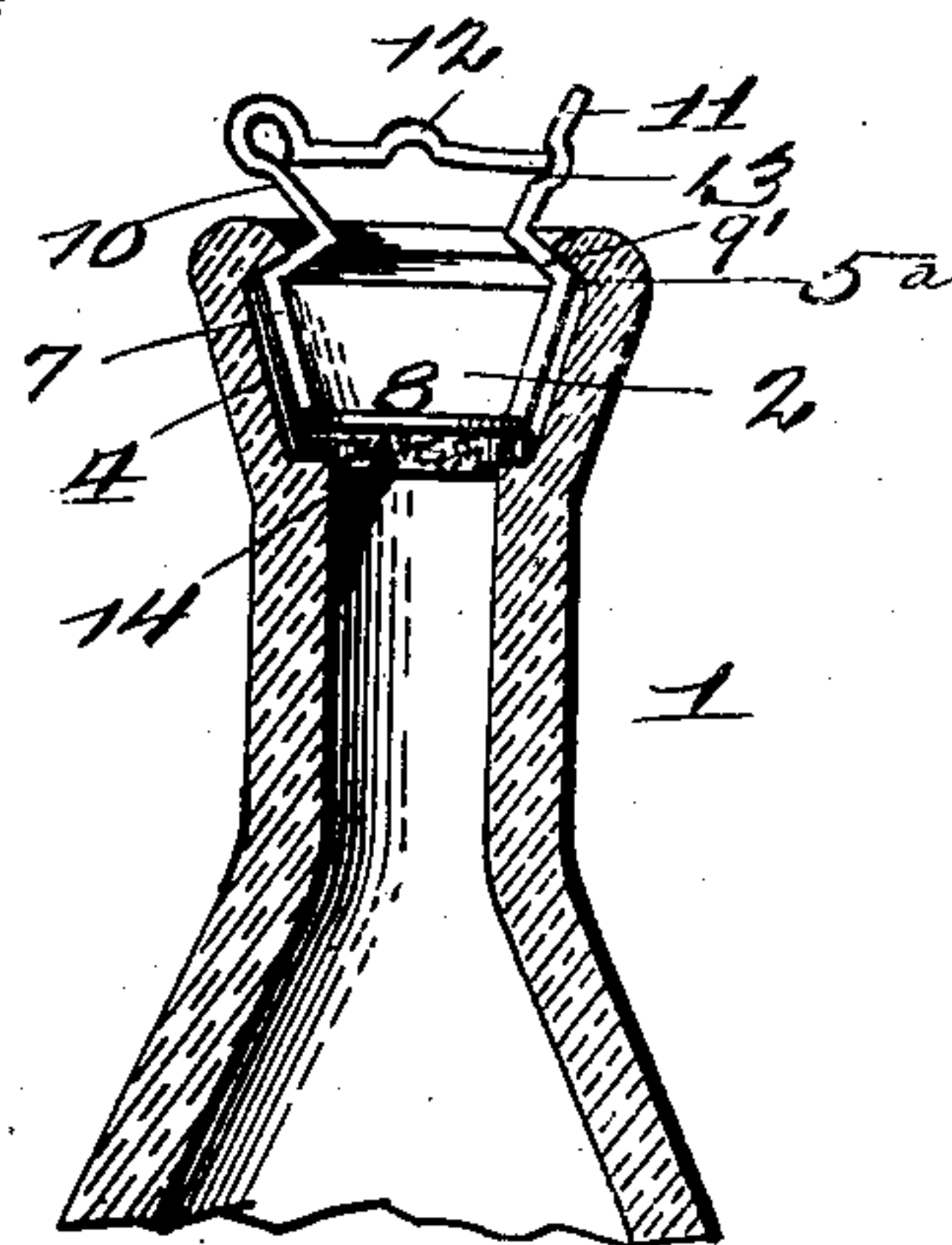
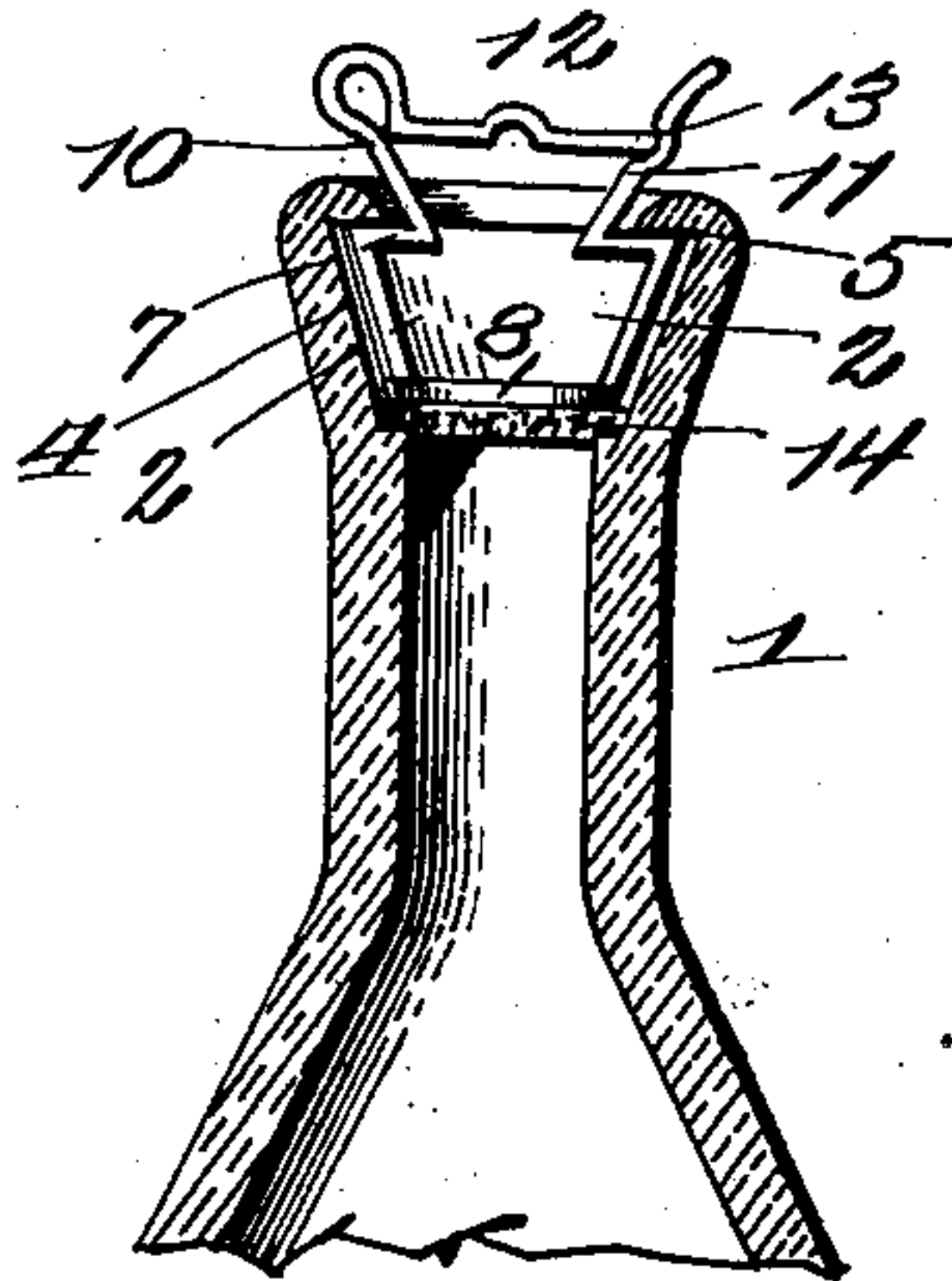
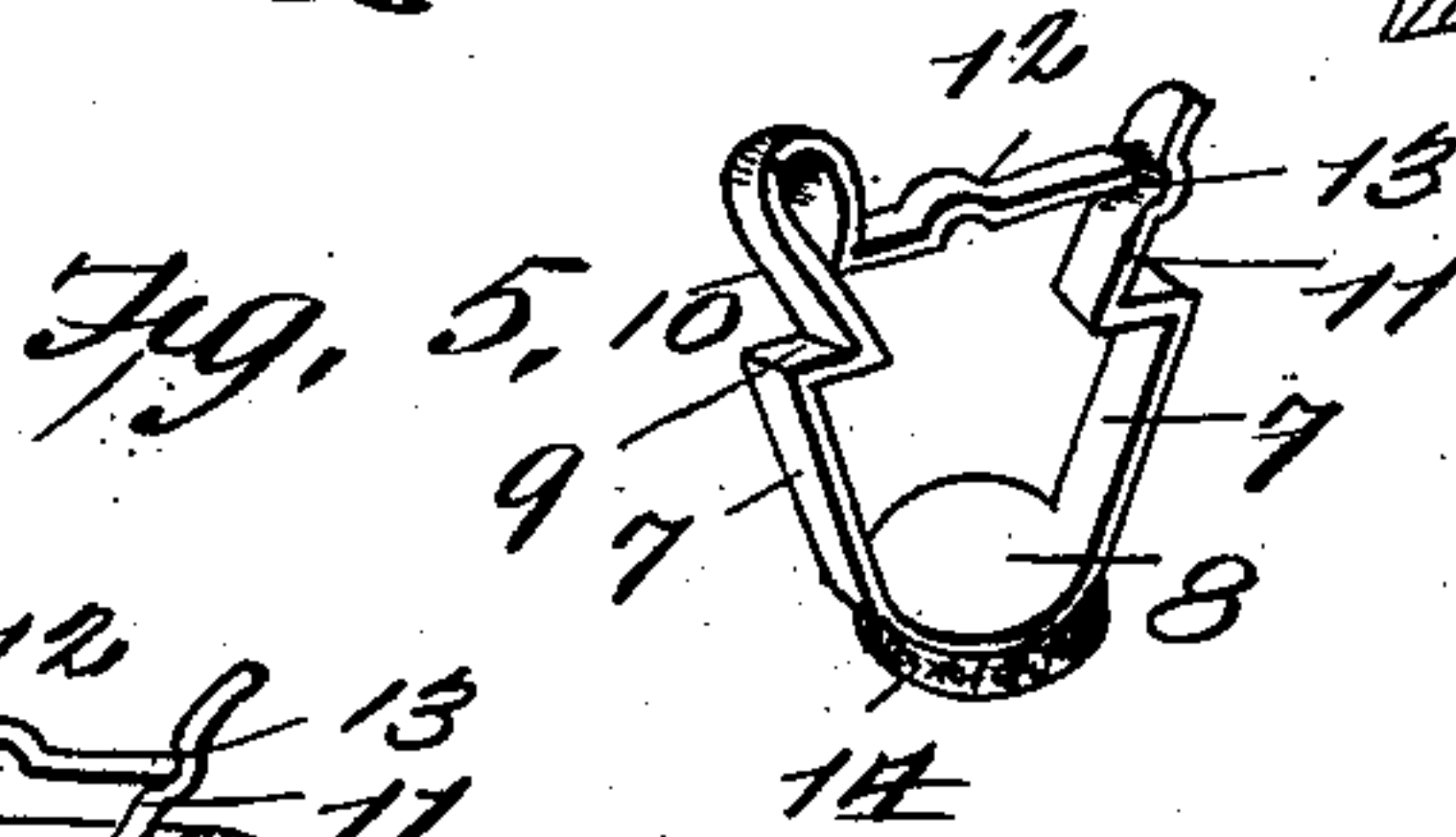
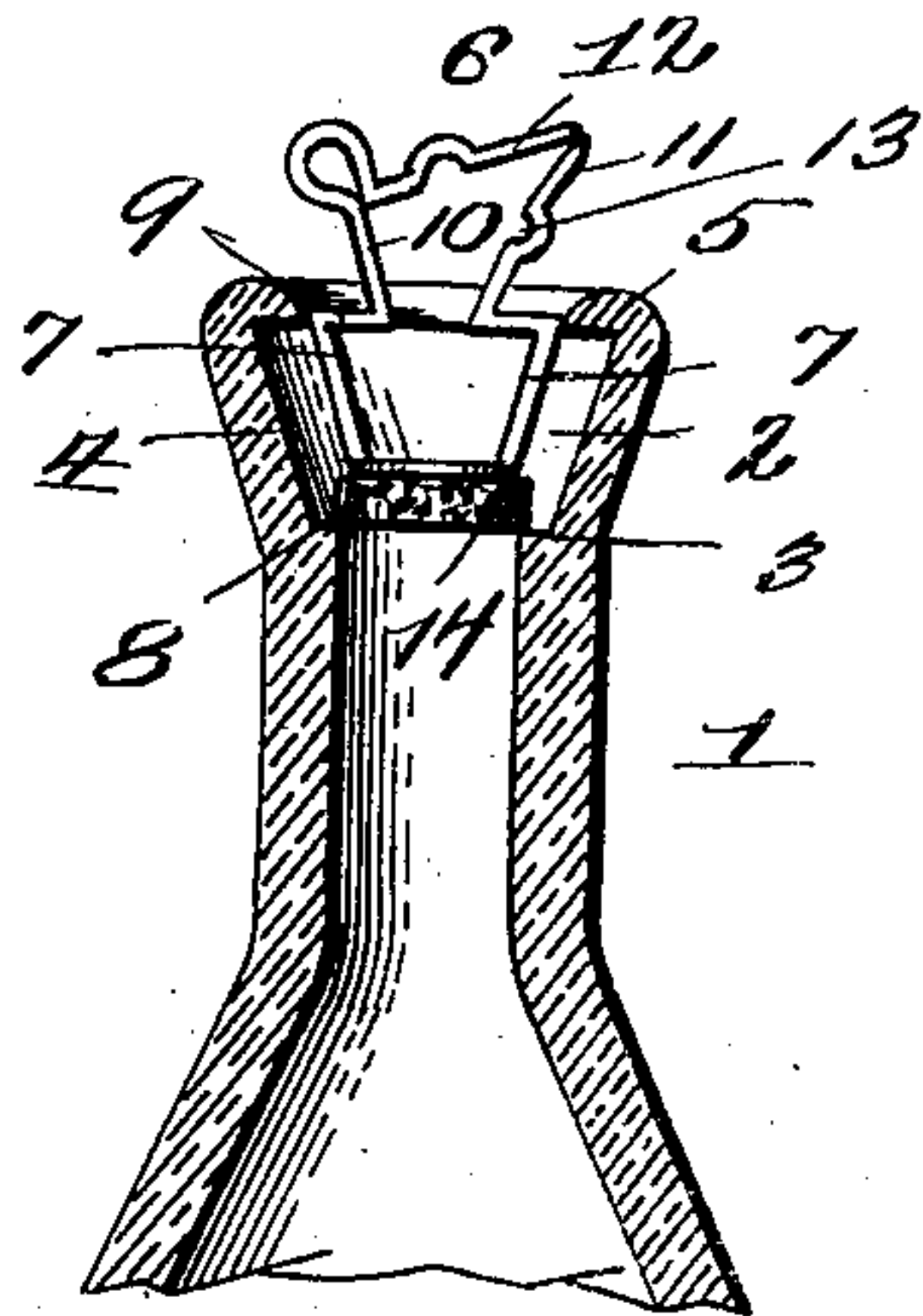
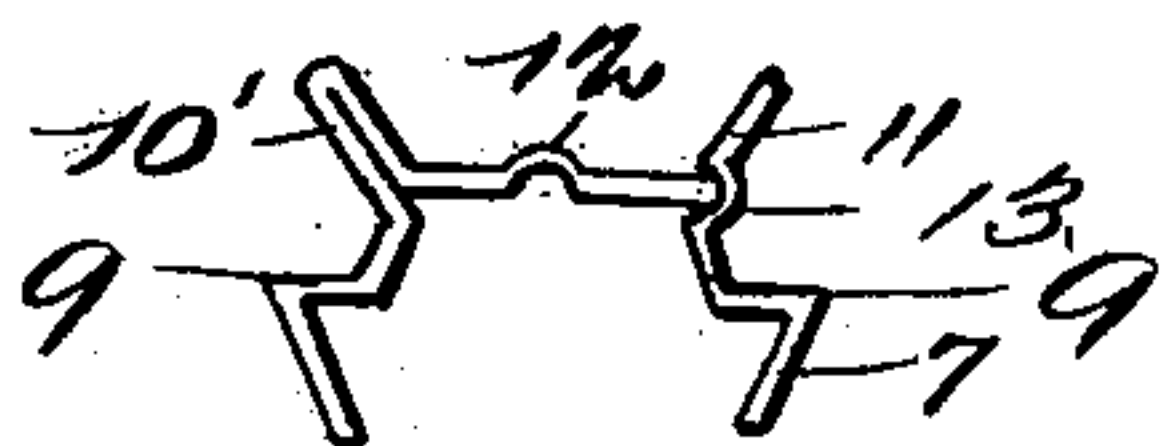


Fig. 3,

Fig. 4,



WITNESSES:

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INVENTOR

Fig. 6, Edward D. Schmitt  
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# UNITED STATES PATENT OFFICE.

EDWARD D. SCHMITT, OF BALTIMORE, MARYLAND.

## BOTTLE-SEALING DEVICE.

SPECIFICATION forming part of Letters Patent No. 685,227, dated October 22, 1901.

Application filed September 4, 1901. Serial No. 74,308. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD D. SCHMITT, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Bottle-Sealing Devices; and I do 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, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

My invention relates to bottle-sealing devices.

The object of the invention is to provide a simple, cheap, and effective seal that can be readily removed by hand, requiring no special tool, and one that can be used to reseal the bottle as many times as desired, its usefulness not being impaired after first use, as is the case with many seals now upon the market.

Other objects and advantages will become apparent in the course of the following description, and the novel features will be set forth in the claims.

In the drawings illustrating the invention, Figure 1 is a section of a bottle-neck with the securing member in the position it assumes in entering the mouth of the bottle; Fig. 2, a similar view with the securing member in the chamber in the position it assumes immediately before a seal is made. Fig. 3 is a view showing the bottle sealed. Fig. 4 is a view showing the securing member locked in place, the shoulders thereon and on the bottle being slightly modified. Fig. 5 is a perspective view of the securing member, showing the sealing member secured thereto; and Fig. 6 is a detail showing a slightly-modified form of securing member.

Referring to the drawings, the numeral 1 indicates a bottle having a chamber 2 in the neck thereof formed by the sealing-seat 3, side walls 4, and a shoulder 5.

In carrying out my invention I provide a securing member 6, formed, preferably, of spring metal stamped or otherwise shaped to form spring-arms 7, a cross-piece 8, and shoulders 9 near their terminals, which terminals are extended above the mouth of the bottle

and form arms 10 and 11 for the purpose of pressing the arms toward each other when it is desired to unseal the bottle. One of these arms is bent to form a locking-tongue 12, the end of which is adapted to enter a depression 13 in the opposite arm for the purpose of locking the shoulders on the arms in engagement with the shoulder in the bottle-neck. The arms 10 and 11 are preferably sufficiently resilient to be somewhat separated by the locking-tongue when the same is being forced downward in locking the seal in place, and thus the tendency of the arms to resume normal position will keep the tongue firmly in place in its seat in the depression 13 of the opposite arm. The arm the continuation of which forms the locking-tongue 12 is preferably bent, as shown in the drawings, to bring the tongue in a horizontal plane when in locked position, so that an equal force will be exerted upon each arm as the said locking-tongue is forced to its final position. Secured in any suitable manner to the securing member is a sealing member 14, which in the present instance should be made of some compressible or yielding material—such as cork, rubber, or the like—and which may be of any suitable thickness.

In sealing the bottle the securing member in entering its mouth will be compressed until the shoulders thereof assume the position shown in Fig. 2, wherein the sealing member is shown seated upon the sealing-seat. At this point in the operation of sealing a downward pressure on the securing member will compress the sealing member sufficiently to bring the shoulders on the securing member below the shoulder in the bottle, when they will expand into engagement with said shoulder. Obviously the compression of the sealing member for the purpose just mentioned also assures a tight seal when the final position of the device is reached. After the seal is in place the tongue 12 is brought into the position shown in Figs. 3 and 4, locking the arms 10 and 11 apart and the seal in place.

The operation of unsealing the bottle is simple, it being only necessary to disengage the tongue 12 from the depression 13 with the finger or any handy tool, when the seal is readily removable by simply pressing the arms 10 and 11 toward each other until the



shoulders on the arms are out of engagement with the shoulder in the bottle-neck.

While I have shown the device applied to a bottle, it is obvious that it is also applicable to jars, &c., by merely changing its proportions.

In Figs. 1 to 5, inclusive, I have shown the arm 10 bent to form an eye before it is formed into the locking-tongue, and while this is a convenient form the arm could be bent sharply upon itself, as shown at 10' in the detail Fig. 6, accomplishing the same result.

In Fig. 4 I show the shoulders on the securing member inclined, as at 9', and the shoulder in the bottle-neck corresponds therewith, as shown at 5<sup>a</sup>.

I claim—

1. In a bottle-seal, the combination with a bottle having a sealing-seat in the neck thereof and a shoulder above the seat, a sealing member, a securing member bearing upon the sealing member and formed with shoulders adapted to engage the shoulder above the sealing-seat, the said securing member being also formed with arms extending out of the bottle-mouth, one of said arms being bent to form a locking-tongue and the other having a depression therein for the reception of the end of the locking-tongue, to lock the seal in place in the bottle-neck, substantially as described.

2. In a bottle-seal, the combination with a bottle having a sealing-seat in the neck thereof and a square shoulder above the sealing-seat, a sealing member, a securing member bearing upon the sealing member and formed with shoulders corresponding to the shoulder above the sealing-seat and adapted to engage the same, the said securing member being

also formed with arms extending out of the bottle-mouth, one of said arms being bent to form a locking-tongue and the other having a depression therein for the reception of the end of the locking-tongue, substantially as and for the purpose set forth.

3. In a bottle-seal, the combination with a bottle having a sealing-seat in the neck thereof and a square shoulder above the seat, of a sealing member, a securing member bearing upon the sealing member and formed with shoulders corresponding with the shoulder above the seat and adapted to engage said shoulder, the said securing member being also formed with arms extending out of the bottle-mouth, and means for locking the securing member in place in the bottle-neck, substantially as described.

4. In a bottle-seal, the combination with a bottle formed with a sealing-seat in the neck thereof and a square shoulder above said seat, a sealing member, a securing member bearing upon the sealing member and formed with shoulders corresponding to the shoulder above the sealing-seat and adapted to engage said shoulder, the said securing member being also formed of a single piece of spring metal with arms extending out of the bottle-neck, one of said arms being bent to form a locking-tongue and the other having a depression therein for the reception of the end of the locking-tongue, to lock the seal in place in the bottle-neck, substantially as set forth.

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

EDWARD D. SCHMITT.

Witnesses:

JOHN W. HEWES,  
M. WARNER HEWES.