

No. 670,356.

Patented Mar. 19, 1901.

H. FINLEY.  
BOTTLE STOPPER.

(Application filed Feb. 8, 1900.)

(No Model.)

Fig. 1.

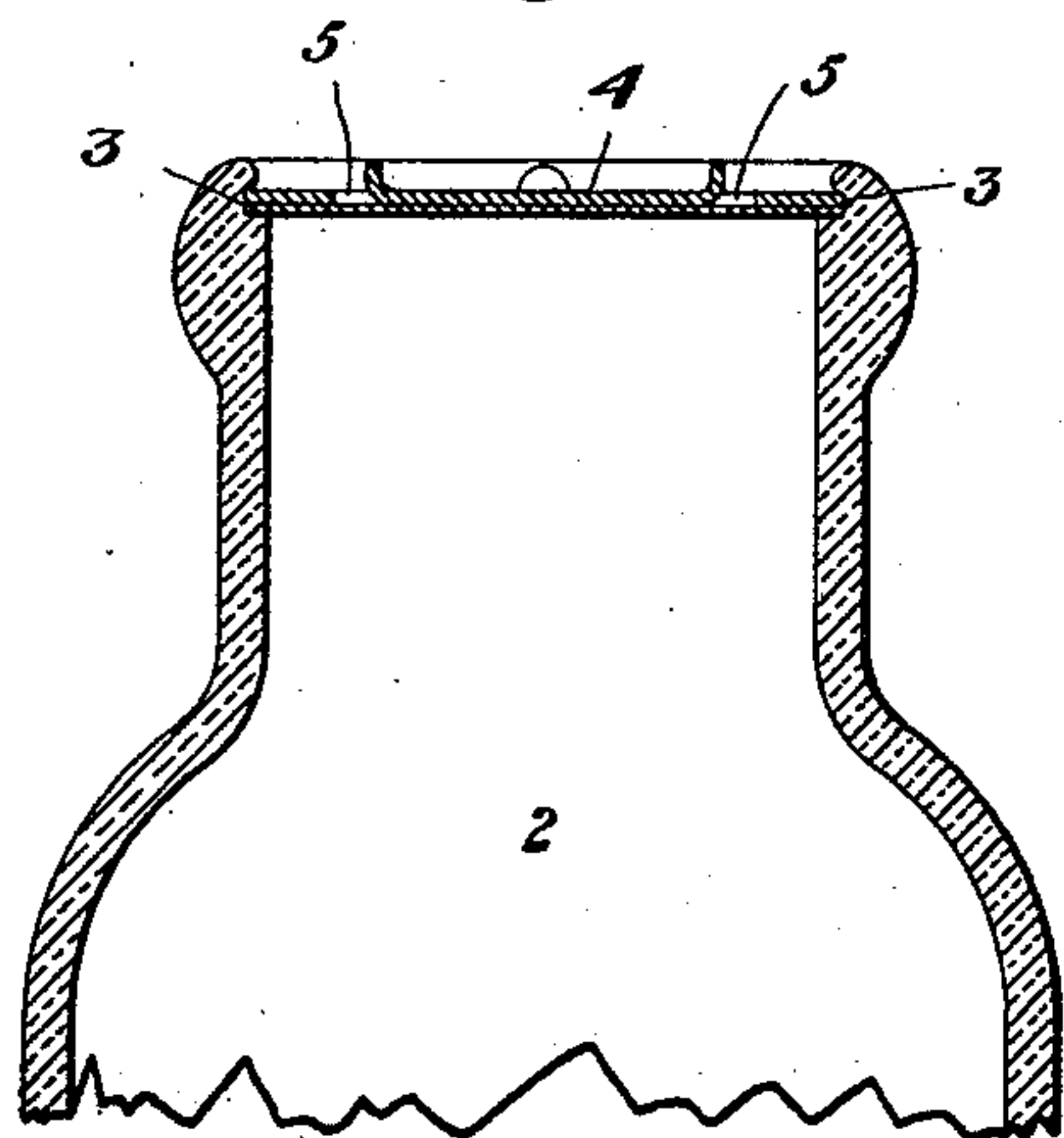


Fig. 2.

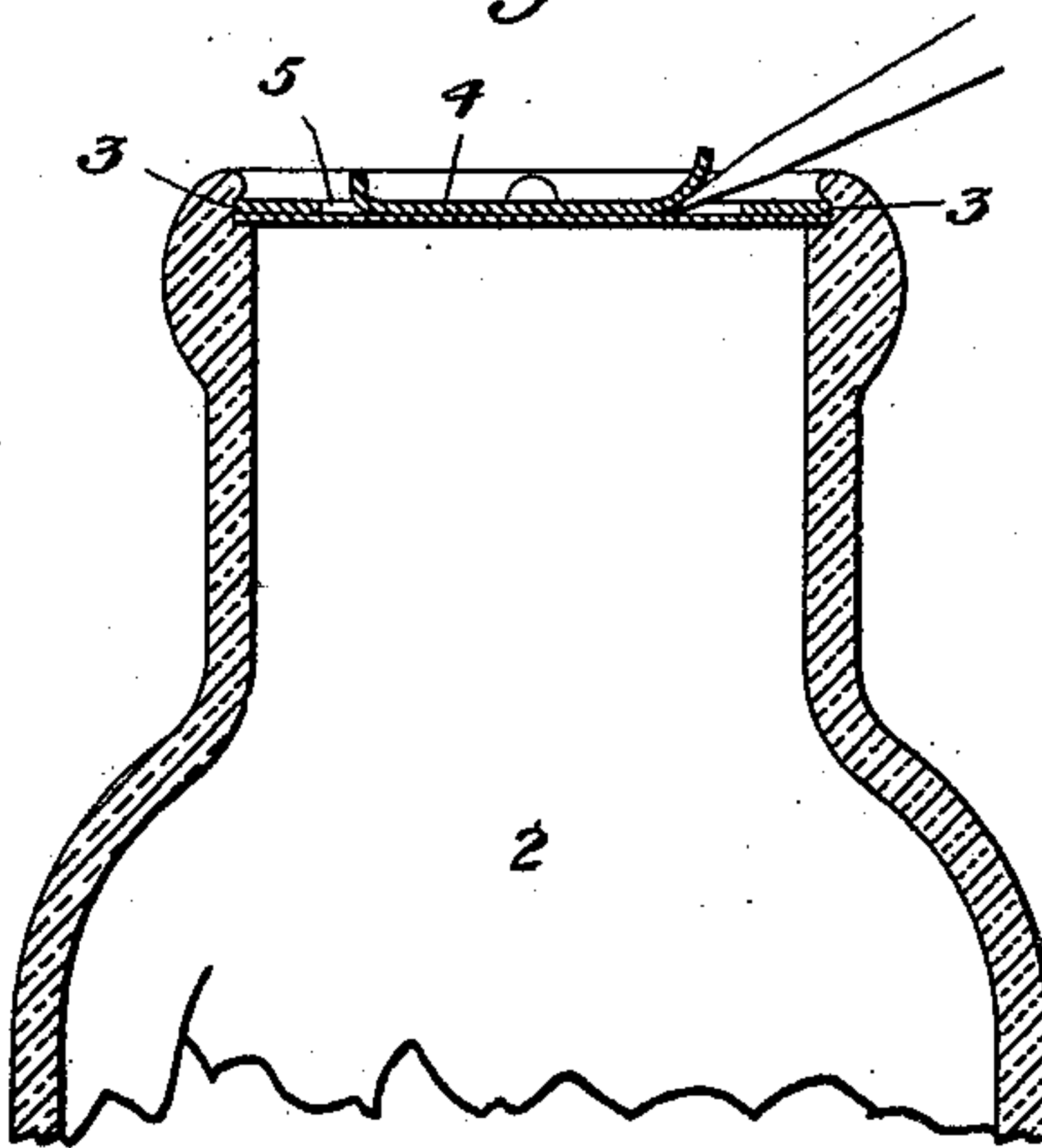


Fig. 3.

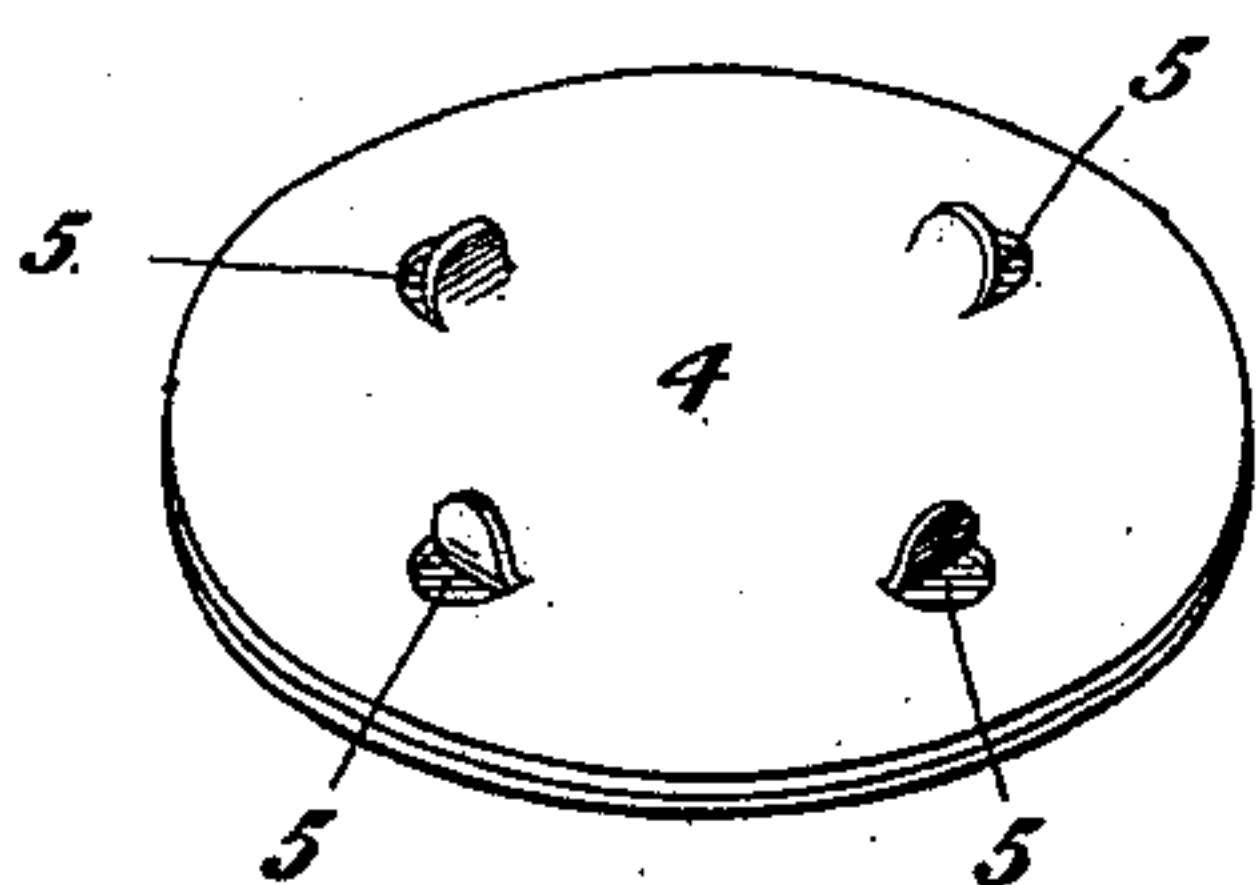


Fig. 4.

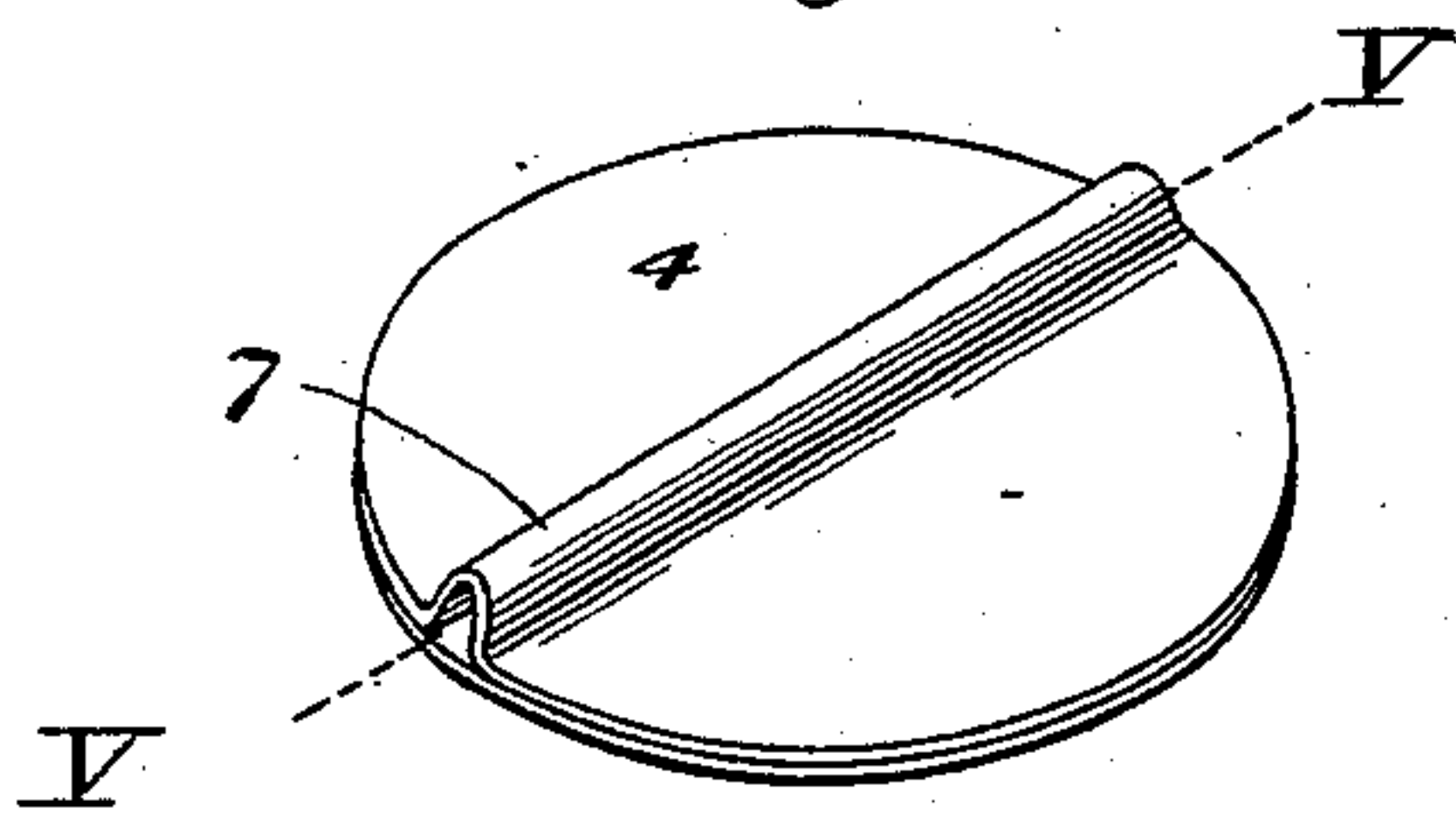
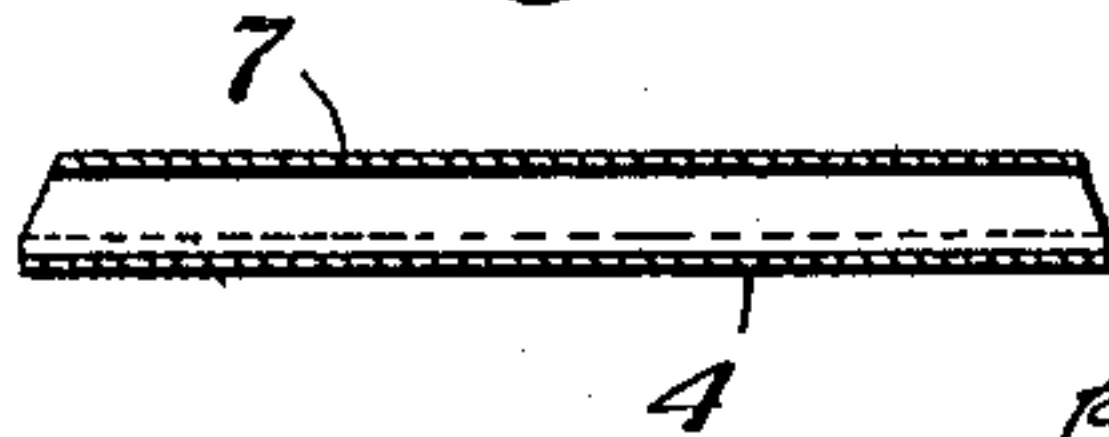


Fig. 5.



Witnesses:

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by O. M. Clarke  
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# UNITED STATES PATENT OFFICE.

HENRIETTA FINLEY, OF PITTSBURG, PENNSYLVANIA.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 670,356, dated March 19, 1901.

Application filed February 8, 1900. Serial No. 4,522. (No model.)

*To all whom it may concern:*

Be it known that I, HENRIETTA FINLEY, a citizen of the United States, residing at 5514 Claybourne street, Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered a new and useful Improvement in Bottle-Stoppers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a partial sectional view of a bottle provided with my improved stopper. Fig. 2 is a similar view showing the application of a lifting instrument. Fig. 3 is a detail perspective view of the stopper. Fig. 4 is a detail perspective view showing a further modification. Fig. 5 is a cross-section indicated by the line V V of Fig. 4.

My invention relates to the class of bottle-stoppers adapted to make a fluid and air tight closure which shall be easily and quickly inserted and removed and ordinarily dispensed with after once having been used. It is designed for use in bottles containing milk, syrup, preserves, jelly, or any substances or fluid requiring an air-tight joint. My stopper is, however, of such a construction that it may be replaced and used to cover the bottle after partially emptying the same, and it may be so used a considerable number of times without injury or impairing its usefulness. It is particularly designed for the purpose of facilitating removal without injury to the bottle or mutilation of the stopper and to be removed by the use of an ordinary household implement, as a fork, &c., or by a wooden pin similar to a meat-skewer.

In the use of the class of stoppers which are inserted in an internal annular groove, the stopper usually consisting of a flat disk of pasteboard or other similar material, the operation of prying out the stopper by any sharp-pointed instrument not only mutilates the stopper, causing fragments to fall inside, but also tends to fracture the edge of the bottle, permitting particles of glass to mingle with the contents, while endangering the fingers of the operator by slippage of the instrument used and frequently resulting in painful cuts, &c. My invention aims to avoid these objections by providing a stopper having incor-

porated with it apertures, recesses, loops, &c., adapted to receive the point of a dislodging instrument, the body part of the stopper remaining intact and impervious and not liable to injury.

Referring to the drawings, 2 is the bottle, which is provided with the usual internal groove 3, which for the better operation of my device should be located as near the top as possible.

4 is the circular disk of paper, pasteboard, or other similar material, which may be made in two or any number of layers desirable, according to the thickness desired.

In the form shown in Figs. 1, 2, and 3 the upper layer is perforated, as at 5, in one or more places, the lower layer being imperforated and the several layers being pasted together in the manner usual with this material. With this form the point of any sharp instrument is inserted through the aperture 5, as in Fig. 2, when the entire top may be raised without the necessity of digging into or prying up the edge.

In Figs. 4 and 5 the top is looped up, forming a hollow ridge 7, into which an instrument may be inserted at either end, the flat portion of the top being closely pasted to the lower layer. In this form the ridge should be slightly less in length than the diameter of the top to permit of easy insertion, and the ridge should be high enough to project above the top of the bottle.

In all the forms it will be seen that I have provided means on the top for inserting the raising instrument, the bottom being fluid-tight, while the top is not merely an attachment to facilitate raising, but forms an efficient and necessary part of the body of the stopper.

In making the stopper the under layer is preferably very thin, its function being simply that of a seal, while the upper layer is comparatively much thicker and stiffer, thus giving body and strength to the whole device and avoiding the tendency to bend or break the top in the operation of removal.

My invention is very simple, cheap, and easy to make and use. It is particularly adapted to use with milk-bottles when cleanliness and absence from any foreign matter is desirable, and an important feature of ad-

vantage consists in the adaptability to a large proportion of bottles at present in use employing plain tops, thus obviating the necessity of a special form or construction of bottle.

5 My invention will be appreciated by users of this class of devices and will be found to be a valuable and needed improvement.

I claim—

10 A composite bottle-stopper consisting of a plurality of flat circular layers of similar material incorporated together so as to form a single disk, the upper layer constituting a

non-sealing stiffening-base having an upwardly-extending portion of itself constituting means for insertion of a lifting instrument, and the lower layer or layers constituting an impervious sealing portion, substantially as set forth. 15

In testimony whereof I have hereunto set my hand.

HENRIETTA FINLEY.

In presence of—

PETER J. EDWARDS,  
C. M. CLARKE.