

(No Model.)

L. C. ADAMSON.  
BOTTLE.

No. 584,837.

Patented June 22, 1897.

Fig 1

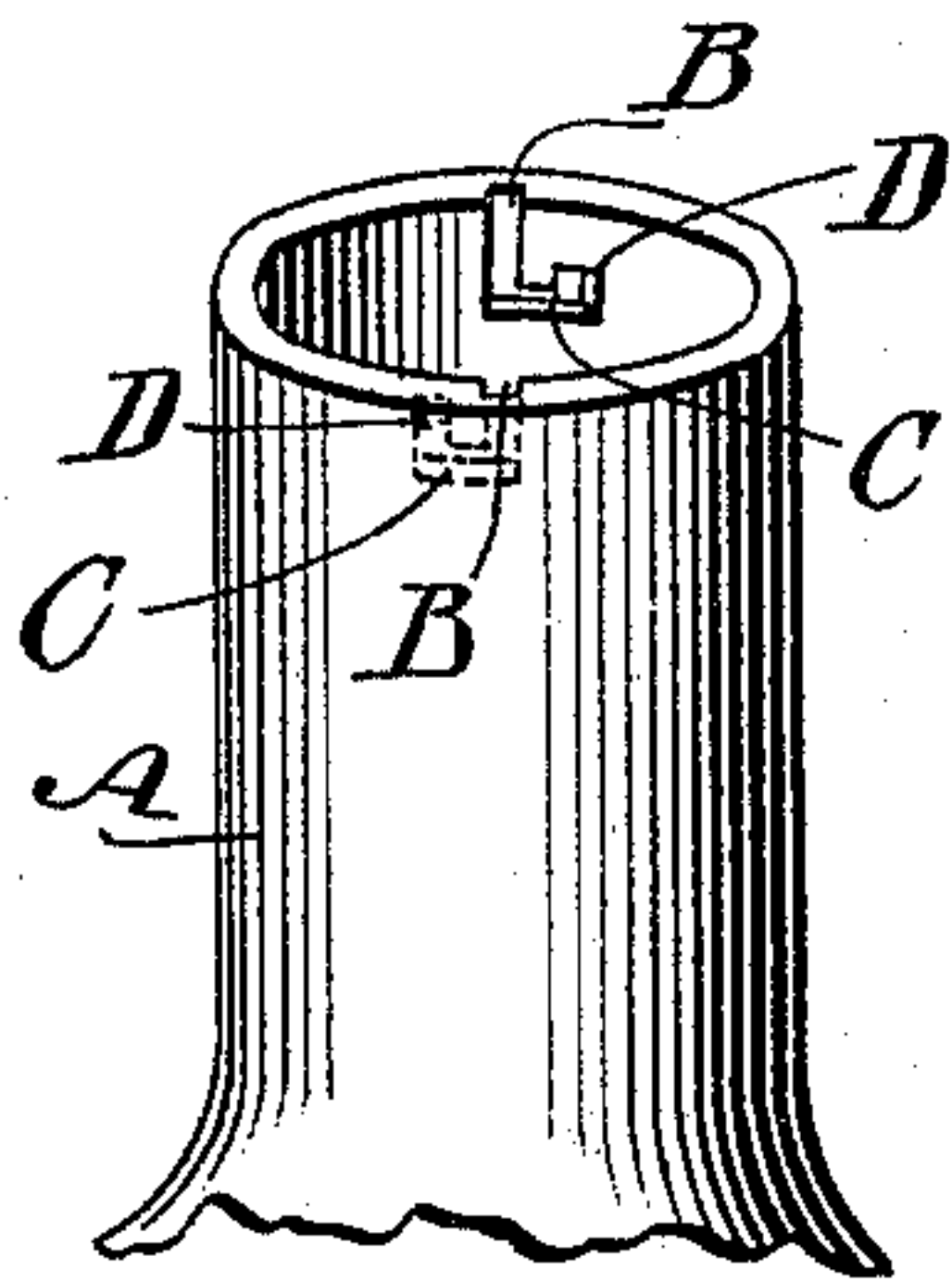


Fig 2

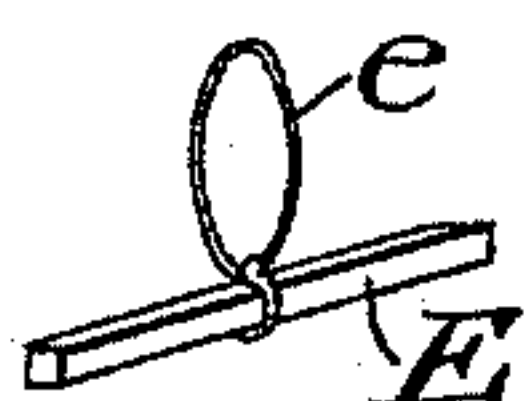


Fig 3

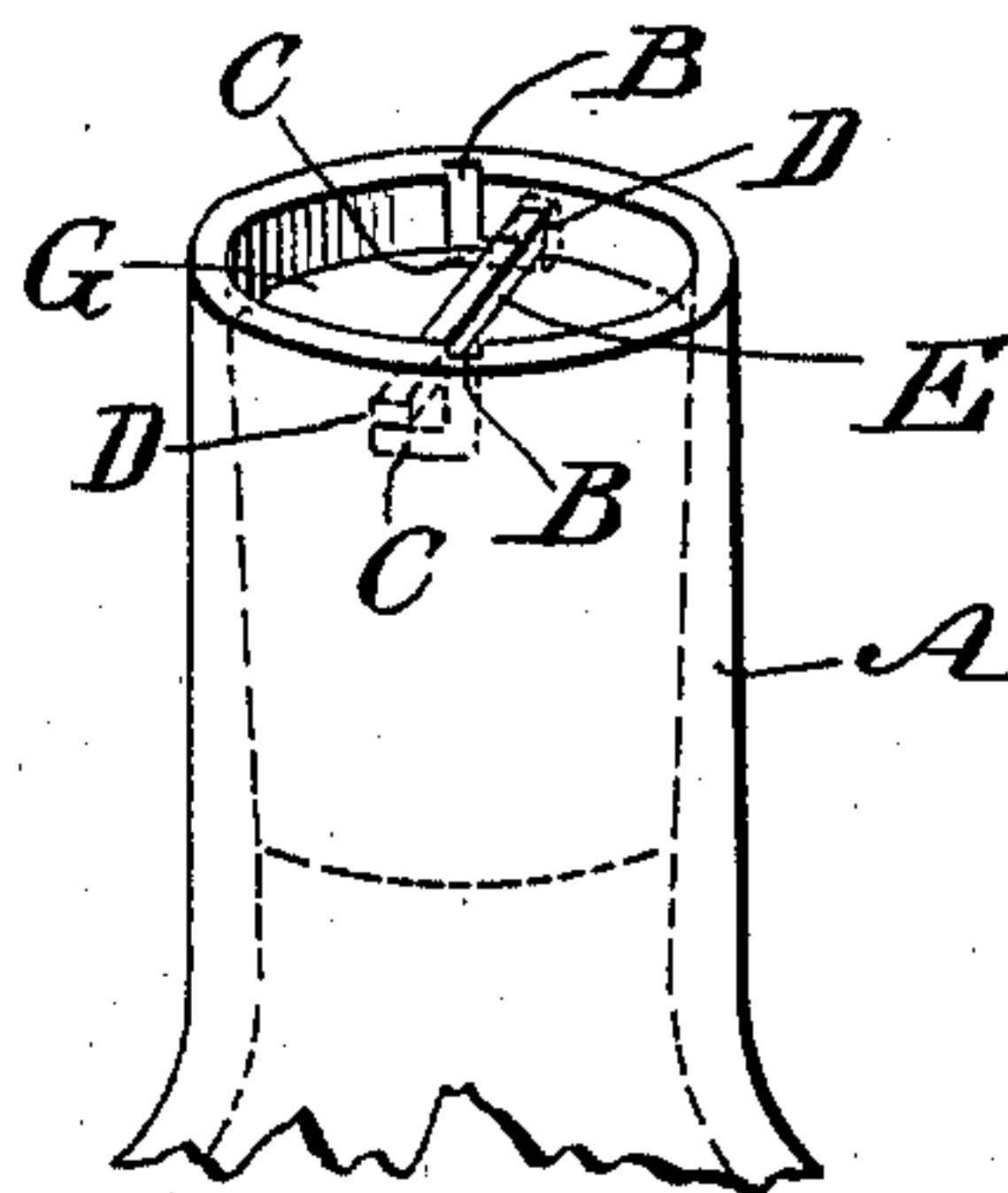


Fig 4

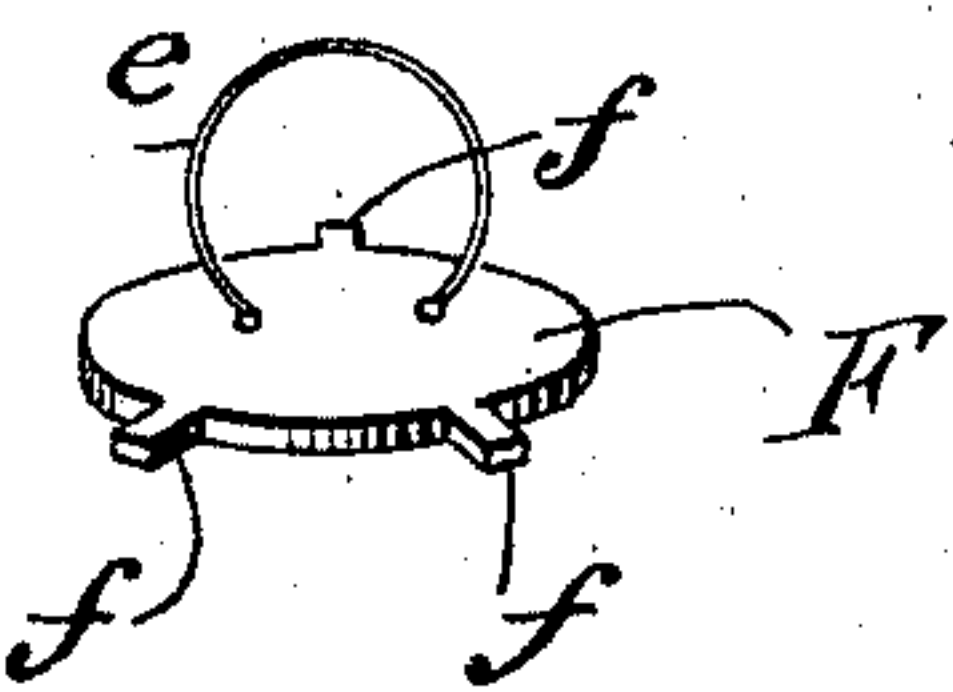


Fig 7

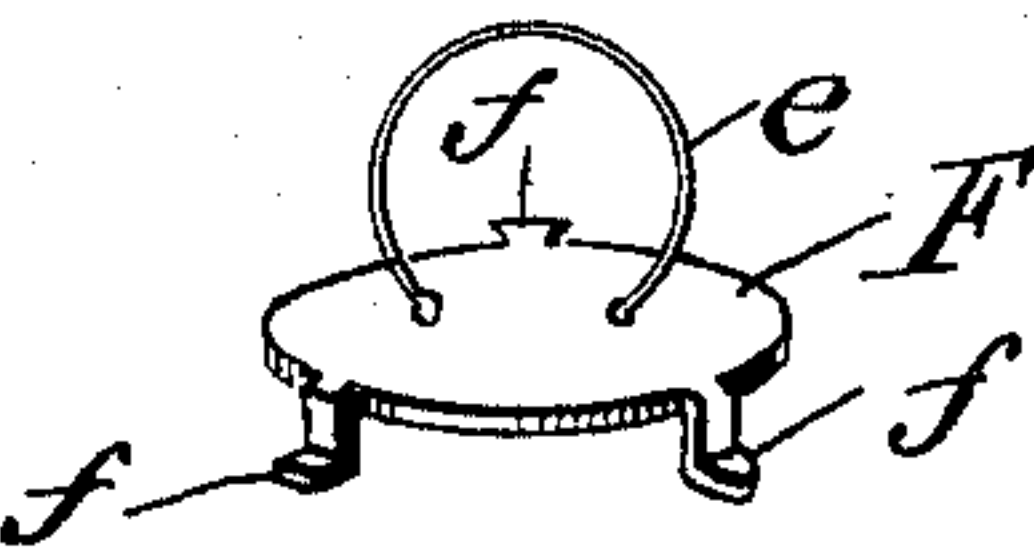


Fig 5

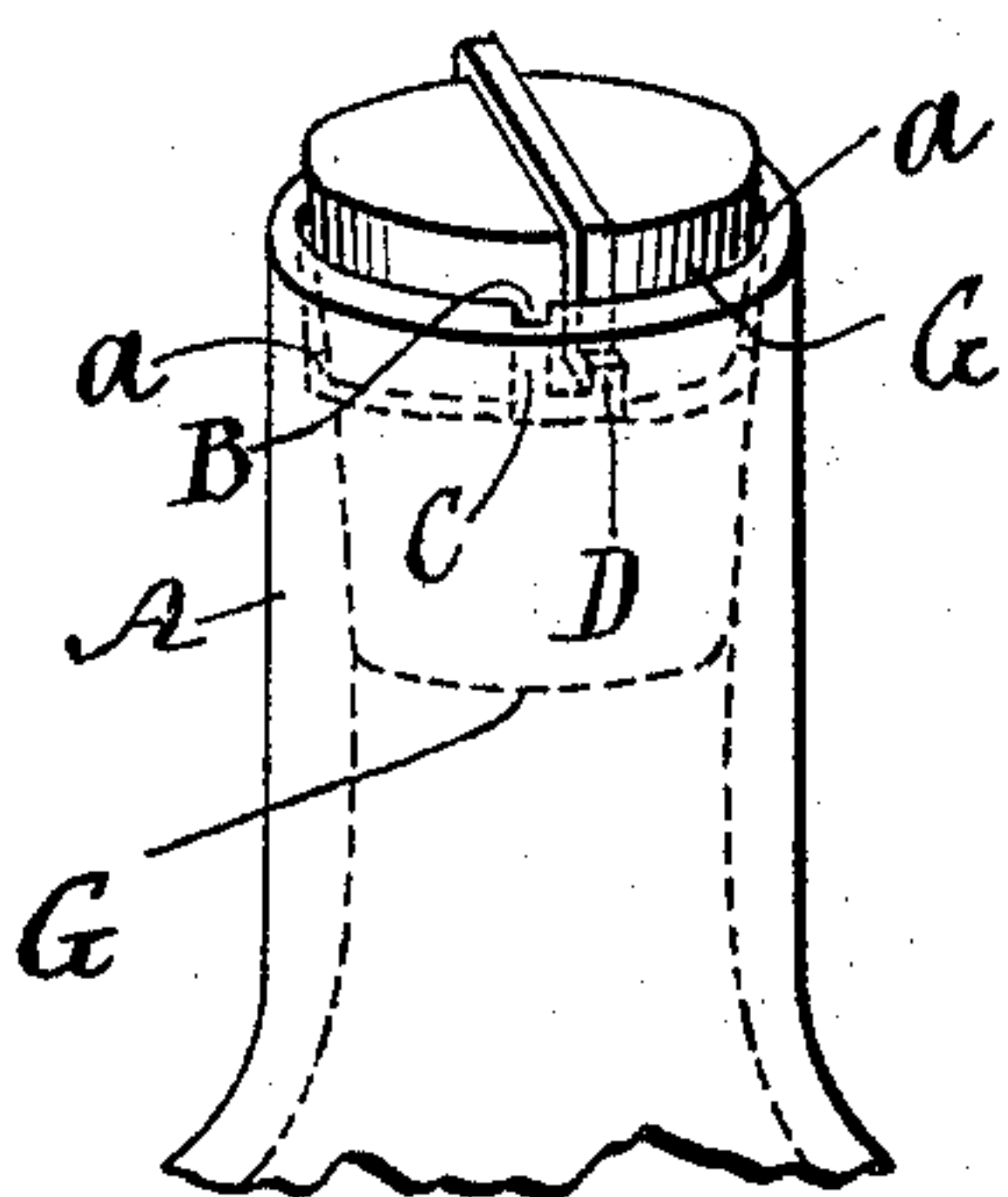


Fig 6

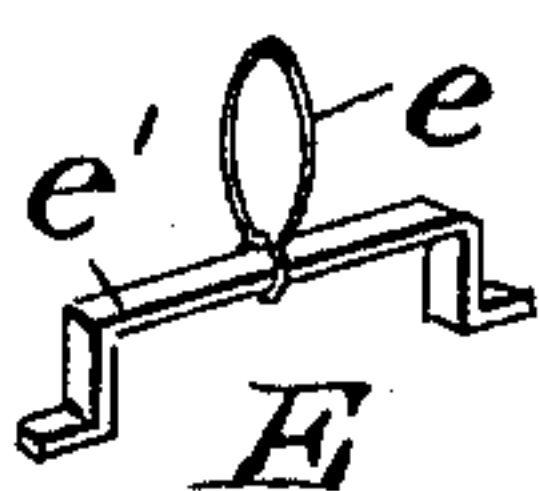


Fig 8

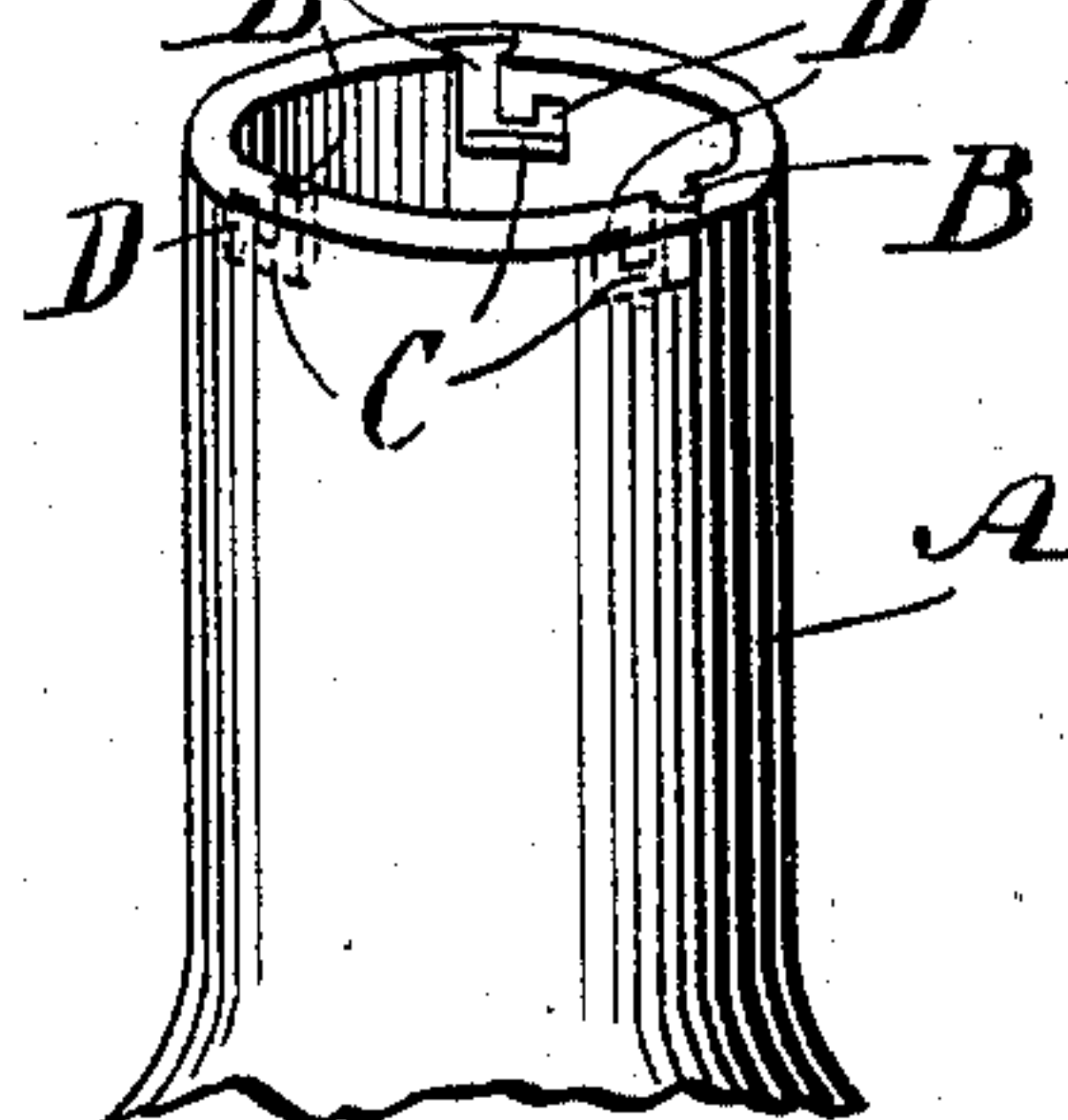


Fig 9

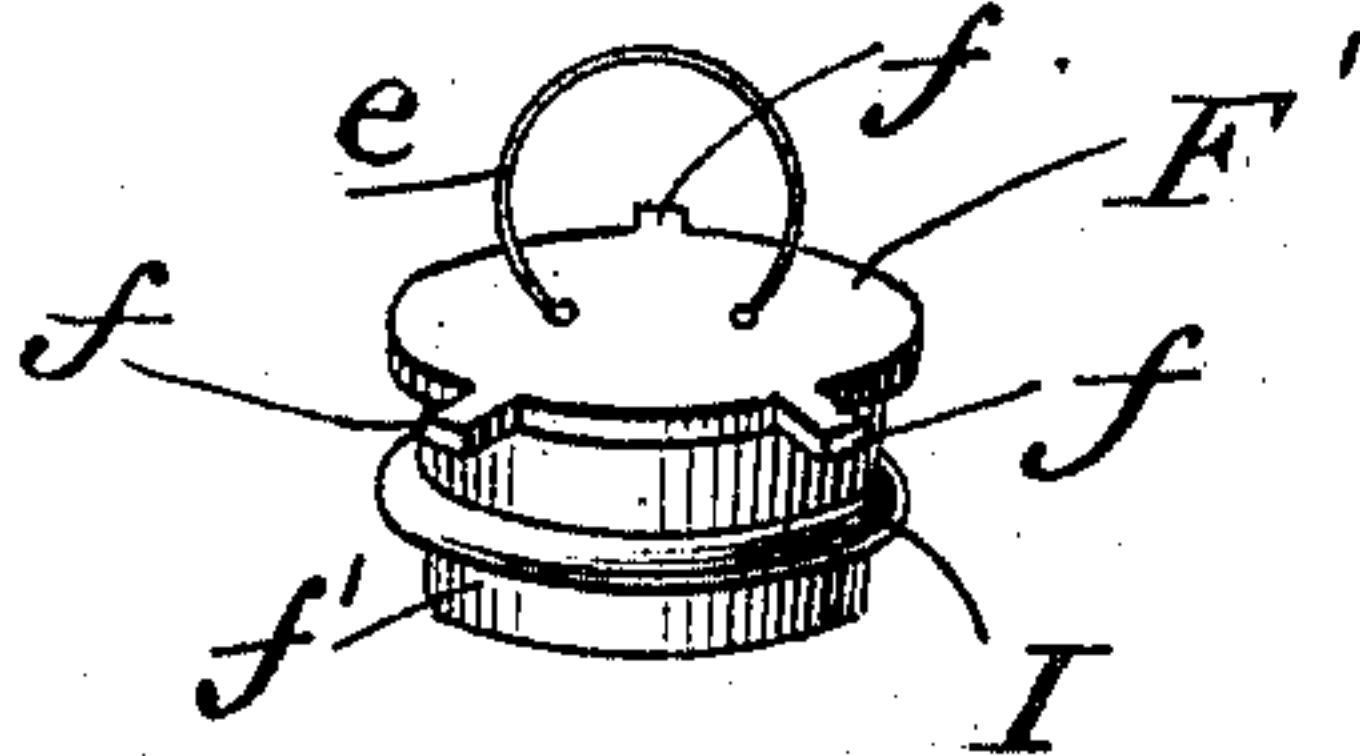


Fig 11

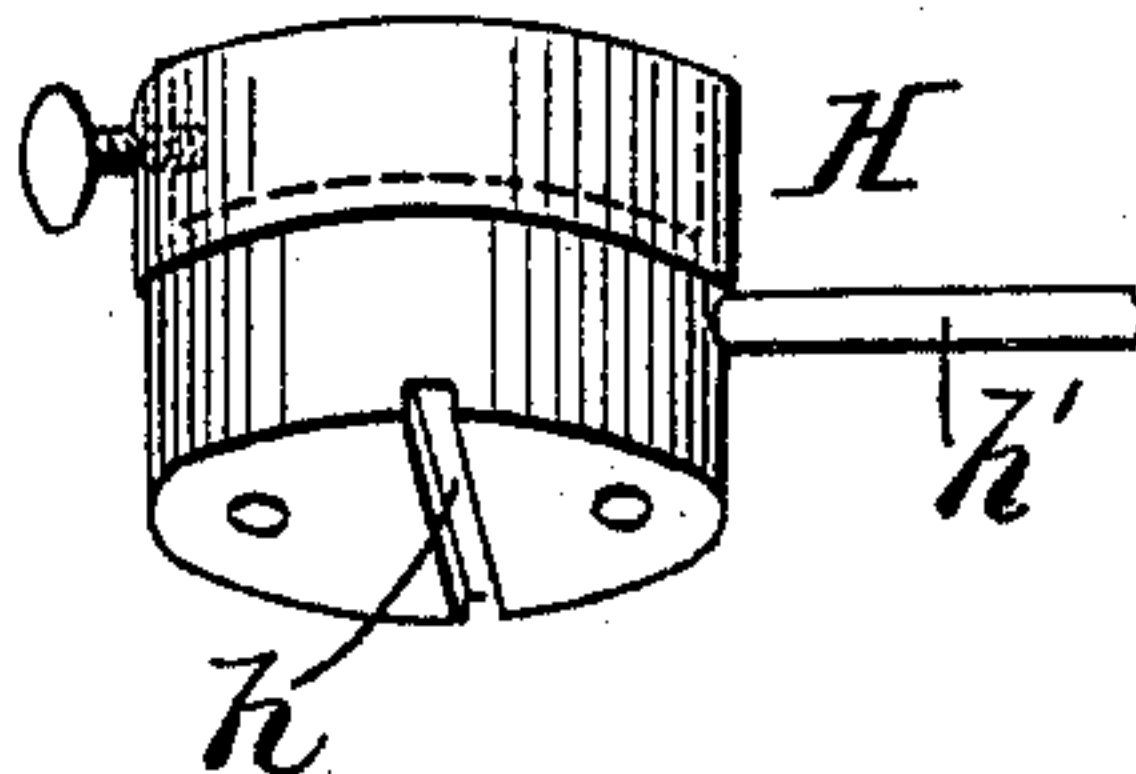
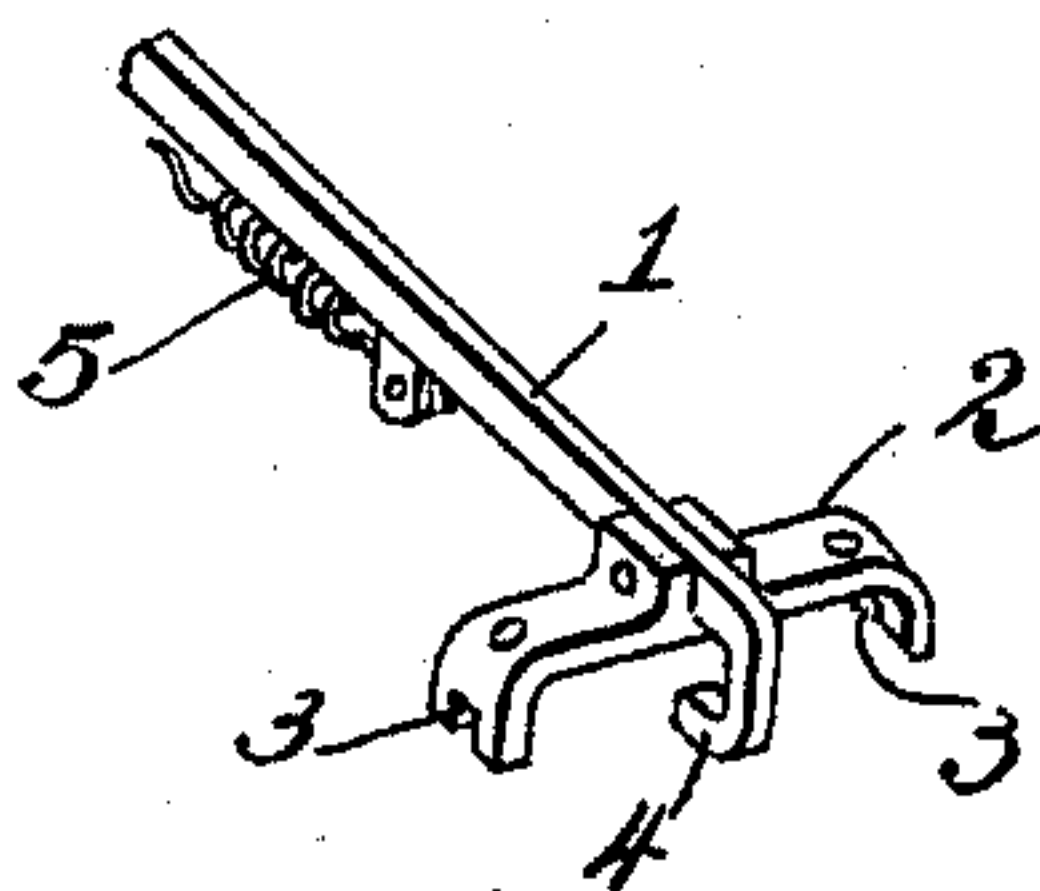


Fig 10



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LUCIUS COATS ADAMSON, OF NEW YORK, N. Y.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 584,837, dated June 22, 1897.

Application filed October 2, 1896. Serial No. 607,632. (No model.)

*To all whom it may concern:*

Be it known that I, LUCIUS COATS ADAMSON, a citizen of the United States, and a resident of New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to improvements in bottles and means for corking them, the object thereof being to prevent the fraudulent reuse of bottles bearing trade-marks of the bottlers or manufacturers of proprietary compounds contained therein.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of the neck of a bottle, illustrating a portion of my invention. Fig. 2 is a perspective view of a locking-bar forming part thereof. Fig. 3 is a perspective view of the neck of a bottle, showing the same corked and locked. Fig. 4 is a perspective view of a modified form of lock adapted for use in combination with my bottle. Fig. 5 is a perspective view illustrating a further modification of a locking-bar, showing the same in connection with the bottle-neck and a cork for closing the same. Fig. 6 is a detail perspective view of the said modified form of locking-bar. Fig. 7 is a further modification of the device for locking the bottle. Fig. 8 is a perspective view of the neck of the bottle. Fig. 9 is a perspective view of a further modification for locking the same. Fig. 10 is a perspective view of the tool for opening the bottle, and Fig. 11 is a perspective view of the plunger used in the operation of corking the bottle.

In the practice of my invention I provide any ordinary bottle with a smooth cylindrical neck A, and the inlet thereto is tapered downwardly, or in a direction opposite to that of an ordinary bottle, as clearly illustrated by dotted lines in Figs. 3 and 5 of the drawings.

In the upper edge of the neck of the bottle

I form downwardly-extended grooves B, which are preferably two in number and located diametrically opposite to each other. These said grooves communicate with segmental grooves C, which communicate with upwardly-extended vertical grooves D, adapted for retaining locking-bars E. These said bars are composed of some brittle material, preferably a composition of metal, and they should be supplied with a distinguishing mark. They may also have wire loops *e* secured to the center thereof for handling them, and they may have upwardly-extended loops *e'* formed thereon, which are adapted to project beyond the neck of the bottle, so that the cork may extend therefrom, as illustrated in Fig. 5 of the drawings. When this form of bar is used, the bottle-neck has an annular recess *a* formed therein.

In the modifications illustrated in Figs. 4, 7, and 9 of the drawings the disk F takes the place of the bar E, and it is provided with radially-extended projections or lugs *f*, which are adapted for engagement with the grooves in the neck of the bottle, which must be broken off before the disk can be removed. These said projections are preferably three in number, and when this form of locking device is used the neck of the bottle is provided with three grooves, as illustrated in Fig. 8 of the drawings. These said disks may further have wire loops *e* connected thereto as a means for handling.

In the operation of the invention the bottle may be filled to any desired height and a cork G inserted within the neck thereof, said cork being forced therein by the plunger of any suitable corking-machine to a distance below the segmental slots C. A bar E is then connected to the slots D, and the pressure within the bottle will force the cork upwardly until it contacts therewith, whereby the bottle is corked and locked, and the cork or stopper thereof cannot be removed until the bar E is taken away, and owing to the brittle nature of the same it will be necessary to break it before removing the cork. Said cork can then be readily extracted by the use of any ordinary corkscrew, and the bottle will be useless for refilling because a cork cannot be securely retained therein until a bar of the character and size to fit the slots is pro-



cured. Therefore no one but the manufacturer who possesses these bars can reuse the bottle.

For expeditiously corking and locking the bottles the plunger H, as illustrated by Fig. 11 in the drawings, is provided upon its under surface with a groove *h* for receiving the bars E, and for turning the bars into place after they are forced down into engagement with the slots C said plunger is provided with a radially-extended handle *h'*.

The locking device, which comprises a disk and radially-extended arms, is attached to the bottle in a manner precisely similar to that as described above in connection with placing the plain bars E.

The opposite ends of the bars E may be of variable contour, and the grooves in the bottle-neck may also vary in cross-sectional contour to correspond to the shape of the said ends for close engagement therewith. This idea is clearly carried out in Figs. 7 and 8 of the drawings, wherein the ends of the locking device and the grooves are respectively square, semicircular, and dovetailed in contour.

In Fig. 9 of the drawings the disk F has a plug *f'* formed integrally therewith. This said plug has a flexible collar I thereon for engagement with the interior surface of the neck of the bottle, which takes the place of a cork, but the projections *f* must be broken off before the same can be removed, whereby it cannot be effectually used as a means for recorking the bottle.

In Fig. 10 of the drawings I have illustrated a means for breaking or removing the bars, and it comprises a lever 1, fulcrumed to a bracket 2, which has forks 3 upon the feet thereof for engagement with the ends of the rods, the said lever having a hook 4 upon the end thereof, which is adapted to be forced under the rods for breaking and removing them. This lever may also have a hinged corkscrew 5 attached thereto for uncorking the bottles.

It is obvious that in manufacturing my improved bottles the grooves in the necks thereof can be made to vary in dimensions as well

as in cross-sectional contour. The bars for engagement therewith can also vary in shape and dimensions to conform therewith, whereby bottles used by one bottler can differ considerably from those used by others, because of the variable dimensions of the bars and grooves.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bottle having substantially L-shaped grooves in the neck thereof and rods of brittle material engaging with said grooves, substantially as shown and described.

2. The combination of a bottle having substantially L-shaped grooves in the neck thereof; with a bar of brittle material located within the said grooves and a cork for closing the neck of the bottle, substantially as shown and described.

3. In a bottle, the combination of a plurality of L-shaped grooves located within the upper portion of the neck thereof; with a locking device of brittle material located within said grooves and a cork for closing the bottle, substantially as shown and described.

4. The combination of a bottle having a plurality of substantially L-shaped grooves in the neck thereof which vary in dimensions and cross-sectional contour with a locking device of brittle material having projections extended therefrom of variable dimensions which closely fit the respective grooves they engage with, substantially as shown and described.

5. The combination of a bottle having a smooth neck and a downwardly-tapering inner surface with approximately L-shaped grooves therein; with a locking device of brittle material engaging with the said grooves, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 26th day of September, 1896.

LUCIUS COATS ADAMSON.

Witnesses:

C. SEDGWICK,  
B. McCOMB.