

(No Model.)

E. LIPSKA.  
BOTTLE.

No. 574,920.

Patented Jan. 12, 1897.

Fig. 1.

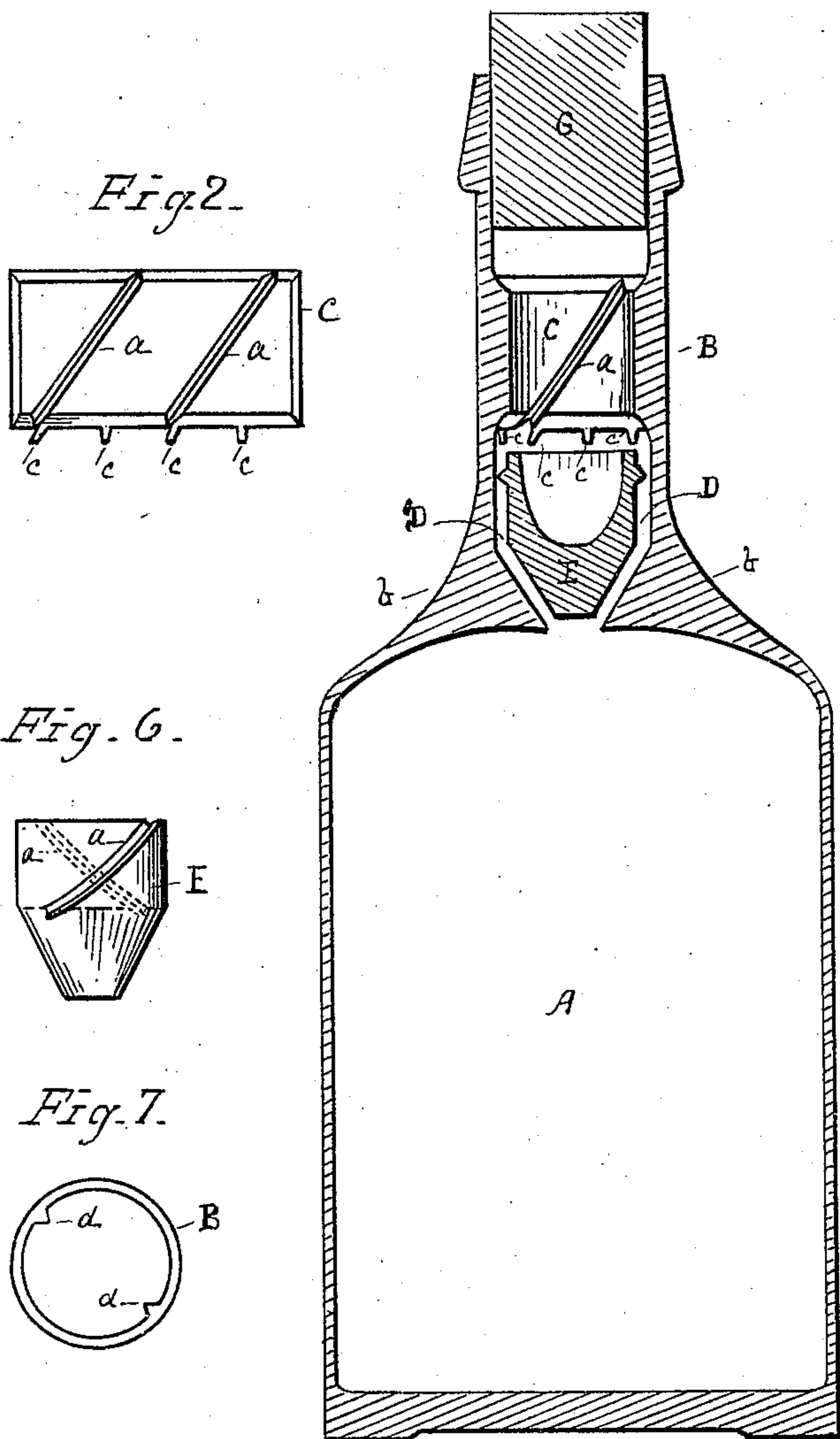


Fig. 2.

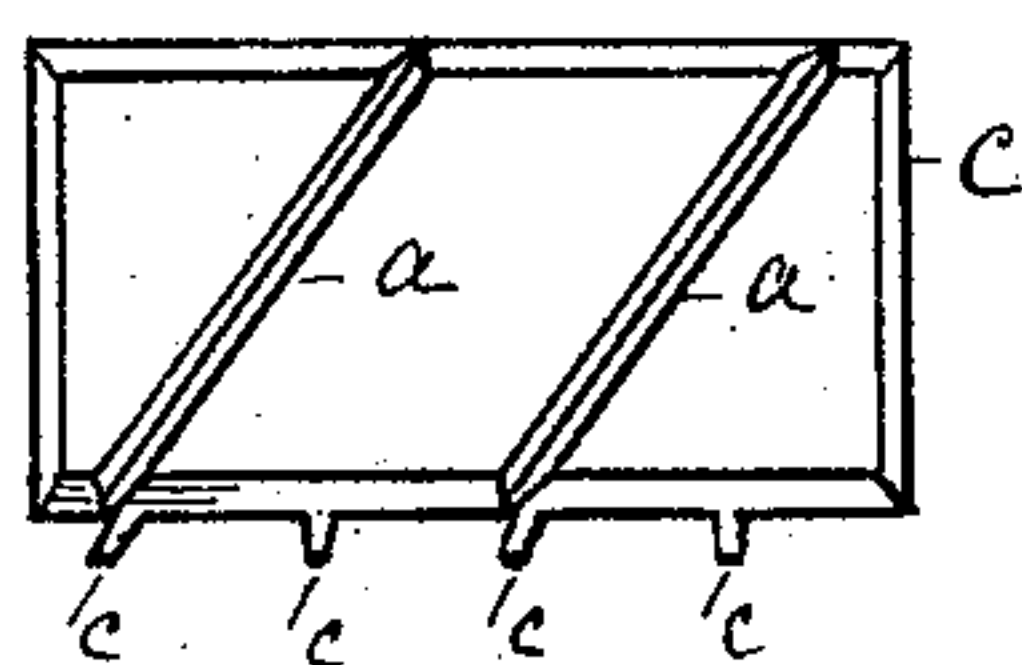


Fig. 3.

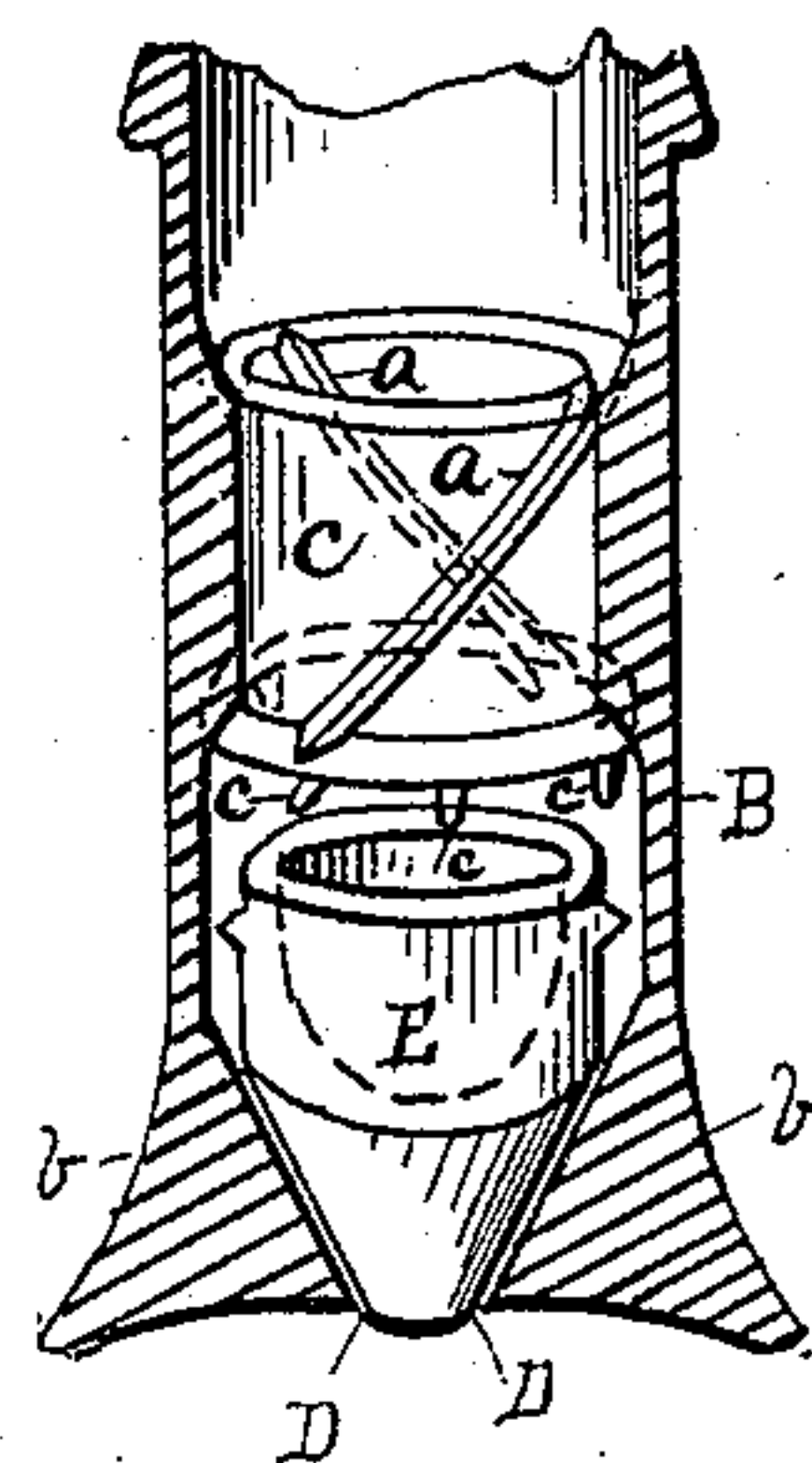


Fig. 6.

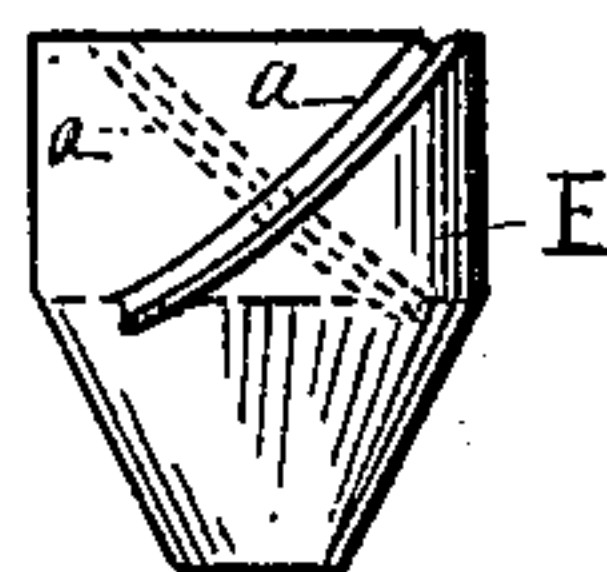


Fig. 4.

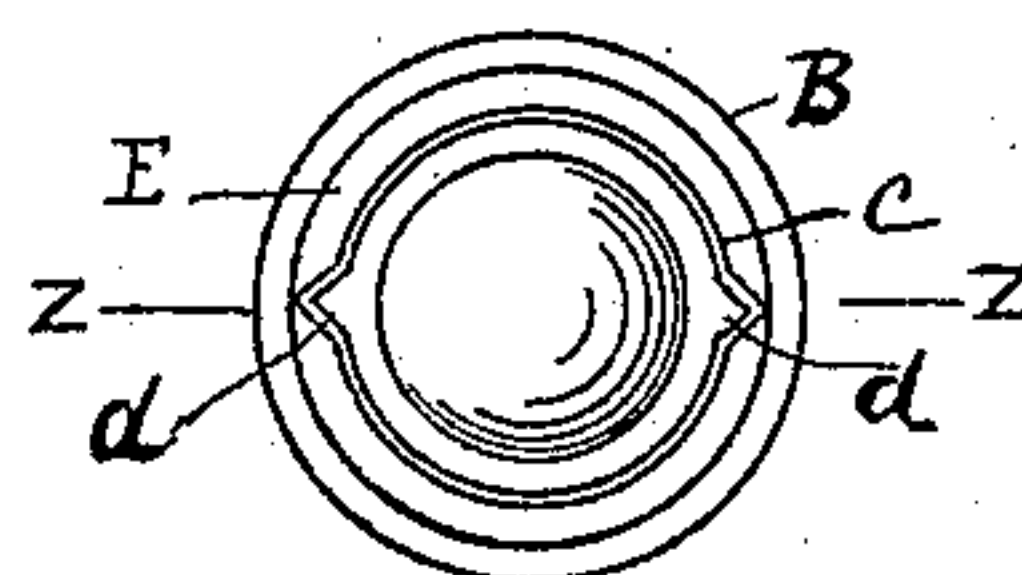


Fig. 7.

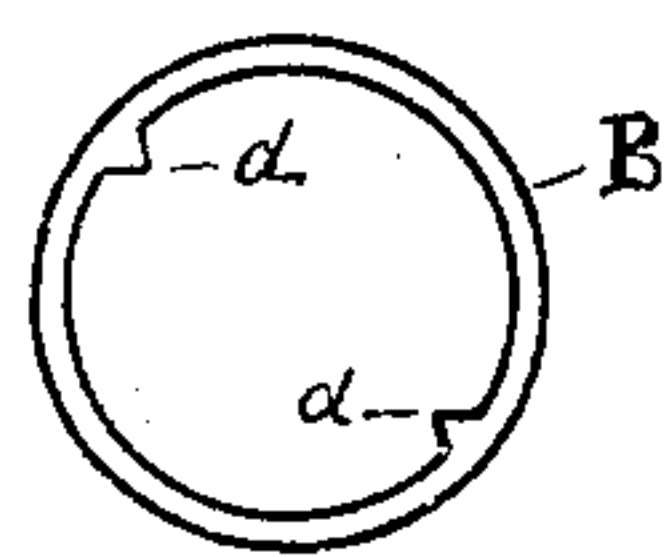
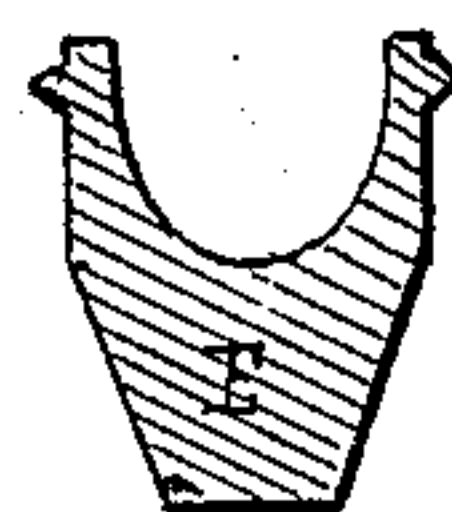


Fig. 5.



Witnesses:

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Inventor:

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by  
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atty.



# UNITED STATES PATENT OFFICE.

EDWARD LIPSKA, OF DUBUQUE, IOWA.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 574,920, dated January 12, 1897.

Application filed January 28, 1896. Serial No. 577,216. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD LIPSKA, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Bottles; and I do hereby 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.

It is the leading thought of this invention to provide a bottle with appliances whereby the bottle may be filled and its contents discharged, but cannot subsequently be refilled; and it consists in certain novel features in the construction of the neck of the bottle, together with an inner stopper, which will be fully set out, described, and claimed in the following specification, reference being had to the drawings which form a part hereof, and in which—

Figure 1 shows one-half of the bottle and stopper when inserted in the neck. Fig. 2 is a plan view of the band on the inner side of the neck of the bottle. Fig. 3 shows a perspective of the neck of the bottle with part cut away. Fig. 4 is a section on line Z Z of Fig. 3, looking down. Fig. 5 is a section of the inner stopper. Fig. 6 is a perspective of a modified form of stopper. Fig. 7 is a section of a modified form of the neck of the bottle.

Like letters of reference denote corresponding parts in all of the drawings.

The body of the bottle is represented by A in the drawings and is of any well-known construction. The neck B is thickened, or has cast integral therewith a band C on its inner side. (See Fig. 2, where is shown a plan view of the band cut and rolled out into a horizontal plane.) In this band C are cut one or more spiral grooves *a* for the purpose presently to appear. In the present instance I have shown two grooves, but there may be only one or several. This band C is also provided with slight projections *c*, integral therewith at its lower edge, to prevent the return of the stopper presently to be described. One of said projections is set at one side of each of the grooves *a* and is slightly inclined in the direction of the groove, for the reason to appear hereinafter. The neck of the bottle is also

formed into a funnel D by thickening it at *b* on the inside, into which the said stopper fits and prevents the entrance of any fluid into the main part of the bottle.

The lower stopper is made, preferably, of glass, and at its lower end is a truncated cone to just fit into said funnel D in the neck of the bottle. It is also provided with small projections *d*, adapted to mesh into the groove *a* in the band C. It is manifest that the grooves *a* may be made in the sides of the inner stopper E and the projections *d* on the inner side of the neck of the bottle, as shown in Figs. 6 and 7. In Fig. 7 the neck of the bottle is not shown as thickened, though when in use it may or may not be, as is most convenient. Its upper end is hollowed out at *c* for the purposes presently to appear. The neck of the bottle is also provided with the usual cork G.

In using the bottle it is first filled with the liquid and then the stopper E is inserted in the neck of the bottle, with its projections *d* within the grooves *a*, and as it is pushed down it will follow the grooves and be turned in a horizontal plane to about half around and as it passes out of the grooves the projections *d* will strike against one of the projections *c*, which is set, as described, slightly at an angle, and will further turn the body of the stopper E, and it will then drop into the funnel D. The cork G is then inserted in the neck of the bottle in the usual manner.

In discharging the contents of the bottle the cork G is withdrawn and the bottle turned in an acute angle with a horizontal plane. This will turn the stopper E out of the funnel D, and it will rest against one side of the neck of the bottle and the upper end of the stopper against one or more of the projections *c*, as shown in Fig. 7, and will allow the liquid to be discharged around one side of the stopper E and out through the neck of the bottle. It will be seen that it will be very difficult to withdraw the stopper E out of the neck of the bottle from the fact that when it passes through the band C and falls into the funnel it is farther turned by the projections *c* at the end of each groove, and it would be difficult to bring the projection *d* to mesh in the groove *a* in order to withdraw the stopper from the bottle. It will also be seen that when the bottle is turned down to dis-



charge its contents it will rest at its upper end against one or more of the projections *c* on the band *C*, which will allow the ready discharge of the fluid. Again, if it is attempted  
5 to refill the bottle by pouring the liquid in at the top when the bottle is set upright the stopper *E* will settle into the funnel and prevent the refilling, and if the bottle is turned bottom upward and it is attempted to force  
10 the liquid into the bottle it will come into contact with the hollow *e* in the stopper *E* and force said stopper up into the funnel and thus prevent any liquid from being forced in.

Having now described my invention and  
15 its mode of operation, what I claim, and desire to secure by Letters Patent, is—

1. A bottle thickened at the central interior portion of its neck, and grooves made in said thickened portion, combined with a stop-  
20 per having projections extending horizontally from its upper portion, and which pro-

jections are adapted both to pass through the grooves, and by bearing against the inner walls of the neck, form passages around the stopper for the liquid, substantially as shown. 25

2. A bottle thickened at the central interior portion of its neck, grooves in said thickened portion, and studs or projections formed integrally upon the lower end of said thickened portion upon each side of the lower ends  
30 of the grooves, combined with a stopper having projections extending from its upper portion and which projections are adapted to pass through said grooves, substantially as shown. 35

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

EDWARD LIPSKA.

Witnesses:

M. M. CADY,  
J. E. ROSSER.