(Model.)

## S. S. NEWTON.

BOTTLE STOPPER.

No. 257,053.

Patented Apr. 25, 1882.

Fig.1

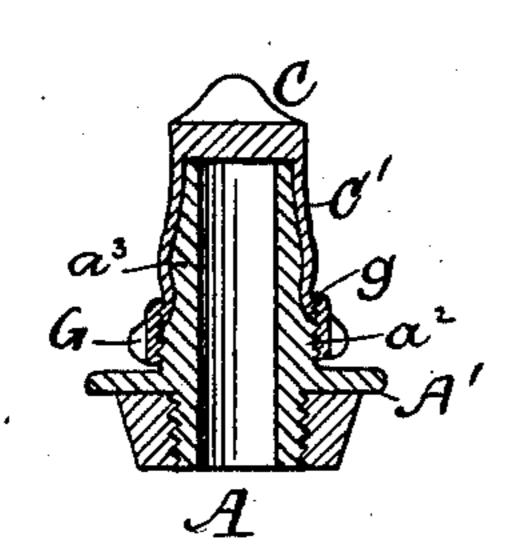


Fig. 2

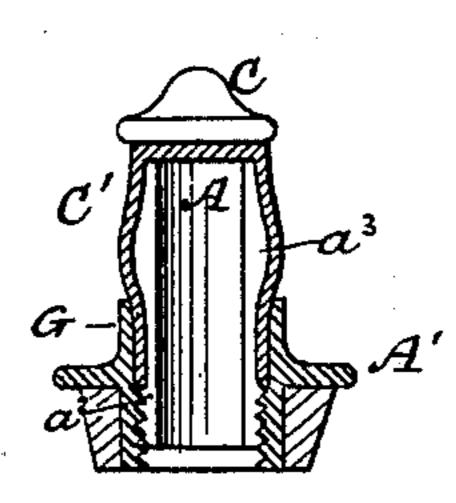
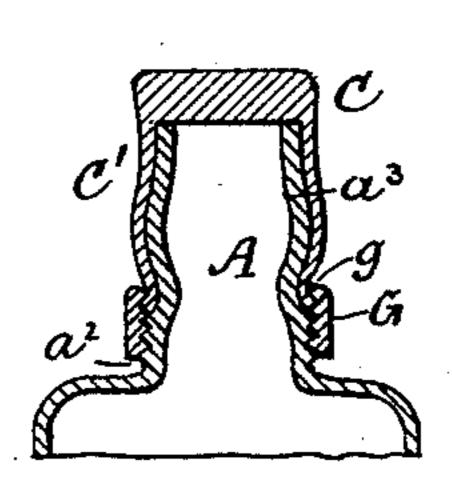


Fig.3.



Witnesses:

J. S. Barker.

Stephen Stewton by Soubleday Bliss altys

## United States Patent Office.

STEPHEN S. NEWTON, OF BINGHAMTON, NEW YORK.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 257,053, dated April 25, 1882.

Application filed June 16, 1891. (Model.)

To all whom it may concern:

Be it known that I, STEPHEN S. NEWTON, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Bottle-Stoppers; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a vertical section of a bottle-stopper containing my invention. Fig. 2 is a similar section, showing a modification. Fig. 3 is a similar section, showing another modifica-

tion.

In all the figures, A is the discharging-tube through which the contents of the bottle pass, and in Figs. 1 and 2 A' is a flange projecting horizontally to cover the cork and mouth of the bottle. The upper end of the discharging-tube is provided with a central enlargement, a<sup>3</sup>. In Fig. 1 the discharging-tube is provided with an external screw-thread, a<sup>2</sup>, a short distance below the enlargement a<sup>3</sup>.

C C' is an elastic hood or cap, the skirt C' 30 being of such size as to necessitate its being expanded in order to pass over the enlarged part a<sup>3</sup> of the discharging-tube, the head C being adapted to fit closely the upper end of

the discharging-tube.

Gis an internally-threaded clamp ring adapted to rise and fall upon the portion  $a^2$  of the discharging-tube. In Fig. 3 the discharging-tube is formed in one piece with the bottle, either by blowing, spinning, casting it, or otherwise, according to the material from which the bottle is made. In Fig. 2 the flange A' projects horizontally from the clamp-ring G, the lower part of which is screw-threaded internally and engages with a screw-thread,  $a^2$ , formed on the lower part of the discharging-tube. In all these constructions the lower end of the part C' of the hood is clamped to the discharging-tube by means of a screw-threaded ring or annulus.

o I am aware that a hood having a flexible or leastic skirt has heretofore been clamped to an enlarged portion of a discharging-tube by

means of a screw-threaded ring or annulus; but in such earlier constructions the clampingring was applied between the upper or outer 55 end of the discharging-tube and its enlarged portion, and when being screwed against the flexible skirt of the hood moved away from the outer end of the discharging-tube and toward the bottle to which the device was at- 60 tached, and the ring could be easily detached from the discharge-tube by slipping it over its outer end, whereas in my construction the conditions are the reverse of those just recited, the clamping-ring being placed below the en- 65 largment of the discharging-tube, and when being forced against the flexible skirt of the hood is moved away from the bottle and toward the outer end of the discharging-tube. Further than this, my construction permits the em- 70 ployment of a clamping-ring of such internal diameter that when placed between the neck of the bottle and the enlargement on the discharging-tube it (the ring) cannot be accidentally removed. Substantially the same result 75 is obtained by the construction shown in Fig. 2, in which the lower part of the ring G is adapted to receive the cork, so that the ring and discharging-tube can only be separated by screwing the discharging-tube entirely out 80 of its seat within the ring g, which is not liable to occur in the ordinary use and transportation of the bottle.

What I claim is—

1. In a bottle-stopper, the combination, with 85 the discharging tube having an enlargement,  $a^3$ , and a hood C C', of the clamp-ring G, adapted to move upward on the discharging-tube for the purpose of clamping the hood and to be moved downward on said tube to release 90 the hood, substantially as set forth.

2. In a bottle-stopper, the combination, with the discharging-tube and elastic hood, of the clamp-ring G, having a portion of its surface of less diameter than the diameter of the enlargement  $a^3$ , substantially as and for the pur-

pose set forth.

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

STEPHEN S. NEWTON.

Witnesses:

NERI PINE, AUGUSTUS BABCOCK.