

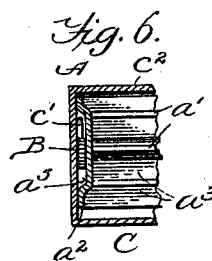
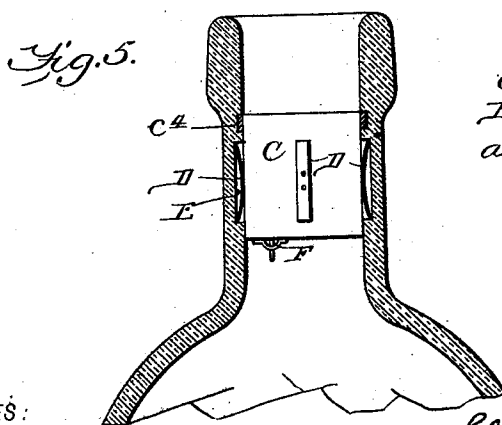
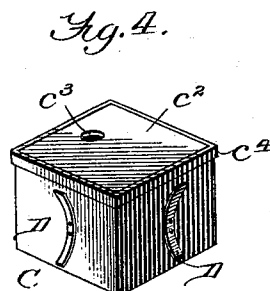
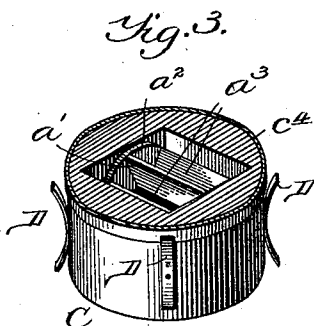
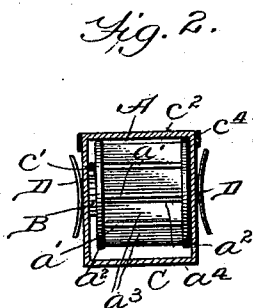
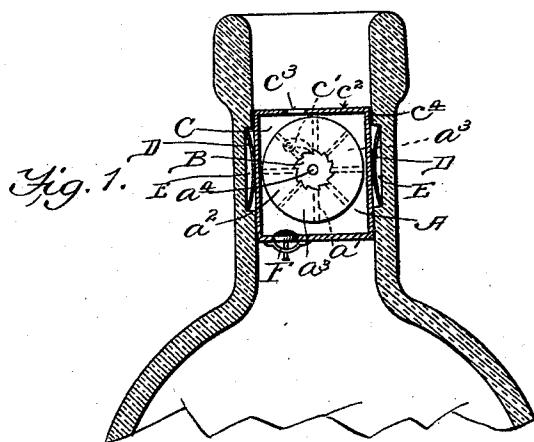
(No Model.)

S. A. SAEGER.

DEVICE FOR PREVENTING REFILLING OF BOTTLES.

No. 582,235.

Patented May 11, 1897.



WITNESSES:

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DEVICE FOR PREVENTING REFILLING OF BOTTLES.

SPECIFICATION forming part of Letters Patent No. 582,235, dated May 11, 1897.

Application filed December 28, 1896. Serial No. 617,241. (No model.)

To all whom it may concern:

Be it known that I, SALLIE A. SAEGER, of Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Preventing the Refilling of Bottles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification.

My invention relates to that class of bottles and stoppers having devices within the bottle or in its neck which, while allowing the contents to be poured out, prevent the refilling of the bottle.

The refilling has been the cause of much fraud, as it not only enables unprincipled parties to use bottles having the insignia or marks of well-known manufacturers for the sale of illegitimate or spurious liquids, &c., but it also enables such parties to dilute with cheap material or water the contents of bottles containing valuable liquids.

My invention, besides being adaptable to bottles having necks either round or square in their interior, has also the important feature of interchangeability, whereby the same improved stopper can be used again, after breaking up the neck of the bottle in which it has been previously used.

The nature of my invention will plainly appear from the following.

In the drawings, Figure 1 represents a bottle-neck in section, showing my improvements; Fig. 2, a longitudinal section of the device; Fig. 3, a perspective of the device for a round-neck bottle; Fig. 4, a similar view of the device for a square-neck bottle; Fig. 5, a bottle-neck, showing an additional recess for a washer; and Fig. 6 shows a slight modification in the end of the wheel.

A indicates a wheel with wings or leaves a' , and which, with the closed ends or sides a^2 , constitute a series of pockets a^3 , arranged around the axis or center a^4 of the wheel.

B is a ratchet-wheel secured tightly on one end of this axis, but inside of the box next to be described.

C is the box for containing this wheel, and the ratchet-wheel on the axis a^4 , supported in the box, is provided with a pawl or click c' , which is fastened on the box.

D D indicate arched or bow springs secured on the outsides of the box with their free ends turned outward, and adapted when the box with its inclosed wheel is inserted in the bottle-neck to spring outward into the recess or recesses E in the bottle-neck, and thus hold the structure firmly to place.

The top c^2 of the box has in it an outlet-orifice c^3 , which should be a little off from the center of this top, as shown, and the bottom of the box has at one side a valve F, of any suitable kind, opening upwardly, as shown, and which is normally closed, and it will be still tighter closed by the weight and pressure of any liquid fraudulently or otherwise poured into the box. This valve, however, readily opens when any of the contents of the bottle are poured out, and in such case the outcoming liquid enters one of the pockets a^3 and turns the wheel, and continuous pouring turns the wheel farther and fills the next pocket, and so on very similarly to the action of falling water on an overshot wheel. The click c' permits the wheel to revolve in one direction only.

A band or packing c^4 is placed on the outside of the upper end or edge of the box to prevent liquid from passing around the outside of the box. This band may be of rubber, cork, or other material that will perform the duty of a packing or washer. Instead of fastening such band directly on the box it may, as shown at C in Fig. 5, be fitted or fastened into a recess in the bottle-neck.

It will be seen that the springs, severally abutting as their ends do against the edges of the recess E, prevent any removal of the stopper without first breaking off the bottle-neck, and that when the device is so set free it can, unlike those of this class of stoppers with which I am acquainted, be reused in other similar bottles. The novel features of the wheel and its box render the device adaptable either for square or round necks. To adapt it for a square neck, it is only necessary that the exterior of the box be made square instead of round.

The wheel A may be dished at one end, as

shown at a^5 in Fig. 6, to admit the ratchet-wheel and click, thus permitting this end of the wheel to lie close to the side of the box.

I claim—

5 1. An internal bottle-stopper, having in combination a case or box, a revoluble wheel journaled within the case, a valve in the bottom of the case and opening inward, and an outlet in the top of the case, substantially as
10 set forth.

2. An internal stopper having in combination with the described box a valve at its bottom and an opening in its top, a wheel inclosed within said box and composed of pockets or compartments formed by radial partitions and having end pieces, and means for
15 holding the box securely in a recessed neck of the bottle, all substantially as shown and described.

20 3. An internal bottle-stopper having in

combination, the box, its inclosed wheel adapted to be revolved in one direction only, the ratchet, click, and springs on the box severally disposed as set forth, a bottle-neck recessed for said box-holding springs, and a
25 recess also in the bottle-neck and holding therein an elastic packing-band, all substantially as set forth.

4. An internal bottle-stopper having in combination, the box and its inclosed horizontal wheel adapted to revolve in one direction only, an outlet in the top of the box, a valve at its bottom, and a ratchet and a click on the wheel-axle and inside the box, all substantially as set forth.

SALLIE A. SAEGER.

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