

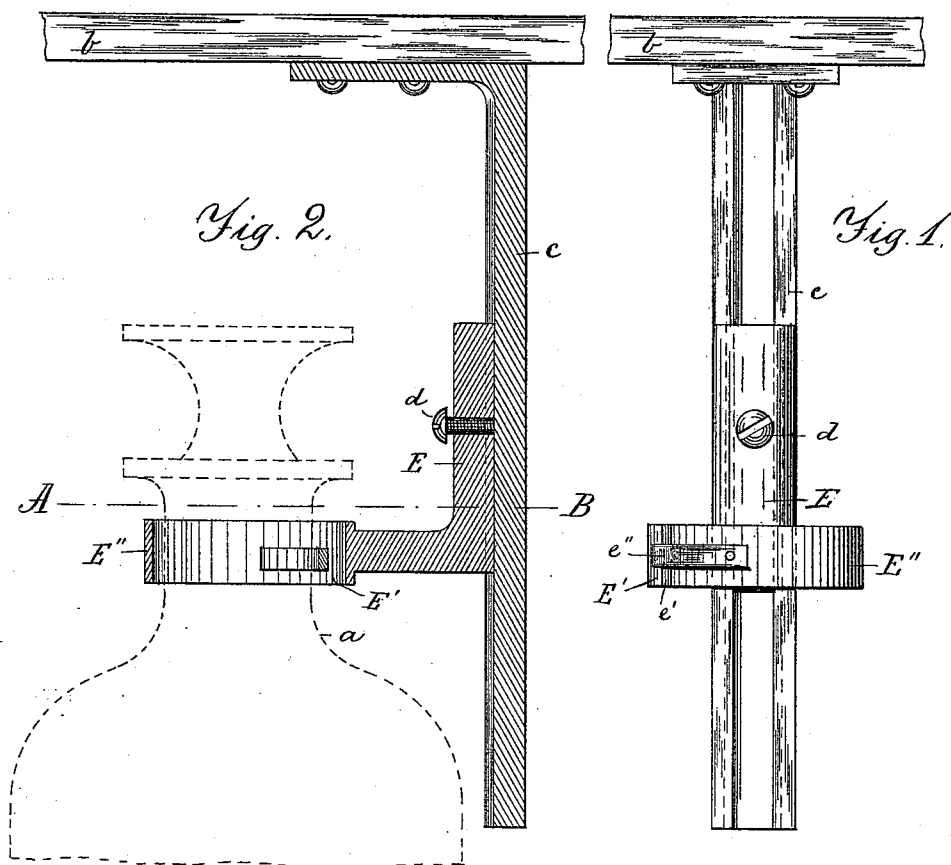
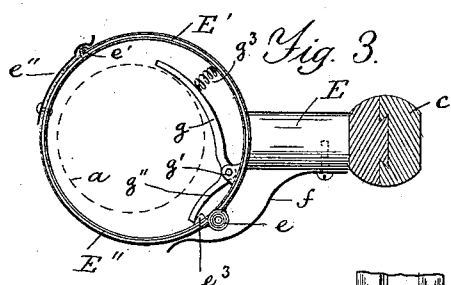
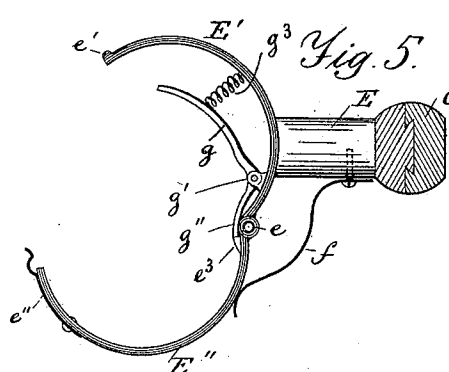
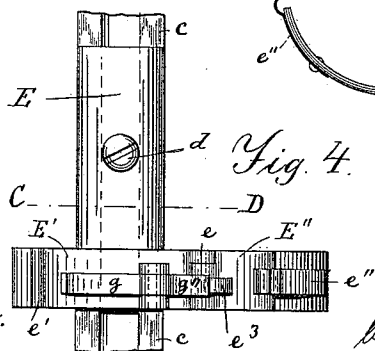
(No Model.)

A. GEYER.

SAFETY DEVICE FOR DRUGGISTS' BOTTLES.

No. 392,861.

Patented Nov. 13, 1888.



Witnesses.
Earl Andrien,
Henry Chadbourne.

Inventor.
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UNITED STATES PATENT OFFICE.

ANDREW GEYER, OF CAMBRIDGE, MASSACHUSETTS.

SAFETY DEVICE FOR DRUGGISTS' BOTTLES.

SPECIFICATION forming part of Letters Patent No. 392,861, dated November 13, 1888.

Application filed September 3, 1888. Serial No. 284,476. (No model.)

To all whom it may concern:

Be it known that I, ANDREW GEYER, a citizen of the United States, and a resident of Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Safety Devices for Druggists' Bottles, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to a new and useful device for securing bottles in place on the shelves on which they are located, so as to prevent the bottle from being removed from the shelf until the neck-holding device has been first released and expanded.

In drug stores it is customary to place bottles containing poisons side by side on the same shelf with harmless and non-poisonous medicines. In dispensing medicines fatal and serious accidents have occurred, and are liable to occur, by the carelessness of the dispenser mistaking the poison-containing bottle for another; and to avoid such accidents is the object of my invention, and for this purpose it is constructed as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a front view of the device, shown as closed. Fig. 2 represents a central vertical section of the device, showing in dotted lines a bottle secured to the same. Fig. 3 represents a cross-section on the line A B in Fig. 2. Fig. 4 represents a front view of the neck-holding device, shown in an open or expanded position; and Fig. 5 represents a cross-section on the line C D, shown in Fig. 4.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In dotted lines in Figs. 2 and 3, *a* represents the poison-containing bottle that is to be locked in position by my device, and *b* represents the shelf or part of the case above the shelf where the bottle *a* is placed, as shown in Figs. 1 and 2.

To the shelf *b* or to any other stationary part of the case or to the wall of the store is secured in a suitable manner the rod or bar *c*, to which is adjustably secured, preferably by means of a set-screw, *d*, the rod, block, or bracket *E*, as shown in the drawings.

In practice I prefer to make a vertical dovetail groove on the part *c* and a corresponding

dovetailed projection on the bracket *E*, or vice versa, to enable the latter to be vertically adjustable on the former, so as to compensate for variations in the height of the bottles that are to be locked in position. I wish to state, however, that I do not desire to confine myself to this precise construction of dovetail groove and corresponding projection on the above-mentioned parts, as any other well-known construction may be used without departing from the essence of my invention, it being only necessary that where the bottles vary in height the bracket *E* should be capable of a vertical adjustment. Where the bottles are all of uniform height, the bracket *E* may be cast or made in one piece with the rod or bar *c*, or permanently secured to it, as may be desired.

The neck-holding device is made in the form of a ring composed of two semicircular, or nearly so, parts, *E'* and *E''*, the former being made in one piece with or secured to the bracket *E*, and the part *E''* being the expansive portion that is hinged at *e* to the stationary ring portion *E'*, as shown in the drawings. The expansive part *E''* is normally held in the closed position relative to the stationary part *E'*, as shown in Figs. 1, 2, and 3, by the influence of the spring *f*, preferably secured to the bracket *E*, and having its free end pressing against the outside of the ring part *E''*, as shown in Figs. 3 and 5. I wish, however, to state that the precise arrangement, form, or location of the spring *f*, as shown in the drawings, is not essential, as any other or different spring may be used—such as, for instance, a coiled spring on the hinge *e* or equivalent device—without departing from the essence of my invention, as long as the expansive ring portion *E''* is spring-pressed, so as to close automatically around the neck of the bottle as soon as released.

For the purpose of locking the ring part *E''*, when closed, to the part *E'*, I employ a suitable spring-clasp, *e''*, secured to the free end of the expansive part *E''*, which is adapted to lock on a lip or projection, *e'*, on the stationary ring part *E'*, as shown. Any other suitable or well-known clasp or locking device may be used for the purpose of keeping the parts *E'* and *E''* locked together around the bottle-neck to equal advantage.

For the purpose of automatically holding

the ring part E'' in an expanded position (shown in Figs. 4 and 5) after it has been unlocked and opened by the operator preparatory to the removal of the bottle and until the latter is again placed in position, I use a spring-pressed lever, *g*, that is pivoted at *g'* to the interior of the stationary ring part E' and has attached to it, or made in one piece with it, a pawl, *g''*, the end of which is made to rest against the tooth or locking projection *e''* on the interior of the expansive portion E'' when the latter is fully expanded, as shown in Figs. 4 and 5. *g''* is a spring acting on the lever *g* for the purpose of holding the pawl *g''* against the projection *e''* as long as the part E'' is expanded.

The spring *g''* may be a spiral one, elliptical, flat, or of other well-known form, as may be desired.

The operation of the device is as follows: I will suppose the bottle to be inclosed by the ring E' E'', as shown in Figs. 2 and 3. If it is desired to use the bottle, the operator unlocks the clasp *e''* from the projection *e'* and swings the expansive ring part E'' on the hinge *e* against the pressure of the spring *f* to the position shown in Figs. 4 and 5, in which position it will automatically be held by the spring-pressed lever *g* and its pawl *g''*, resting against the projection or tooth *e''* on the expanded part E'', thus retaining the latter in the open or expanded position. The bottle may now be removed and used. In replacing the bottle to its original position on the shelf, as its neck is moved backward between the ring parts E' and E'' it is brought in contact with the yield-

ing lever *g*, causing the latter to turn on its fulcrum *g'*, and thus releasing the pawl *g''* from the tooth *e''*, when the ring part E'' will be automatically closed and locked in the position shown in Figs. 1, 2, and 3 around the neck of the bottle by the influence of the spring *f*.

By this simple device all liability of accidentally mixing and dispensing poisonous medicines will be obviated, as the bottles containing such poisons cannot be removed from the shelves until the neck-encircling ring is expanded, and when the bottle is returned to its original position the neck will be automatically inclosed by the encircling band, as above described.

What I wish to secure by Letters Patent, and claim, is—

The bracket E and the neck-holding device, consisting of the segmental part E', attached to said bracket, and the expansive part E'', hinged to the part E' and provided with a self-closing spring and locking device, as described, in combination with the pivoted spring-pressed lever *g* and its pawl *g''* and a tooth or projection, *e''*, on the expansive part E'', substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 22d day of June, A. D. 1888.

ANDREW GEYER.

Witnesses:

ALBAN ANDRÉN,
ZELMA R. SCHELIN.