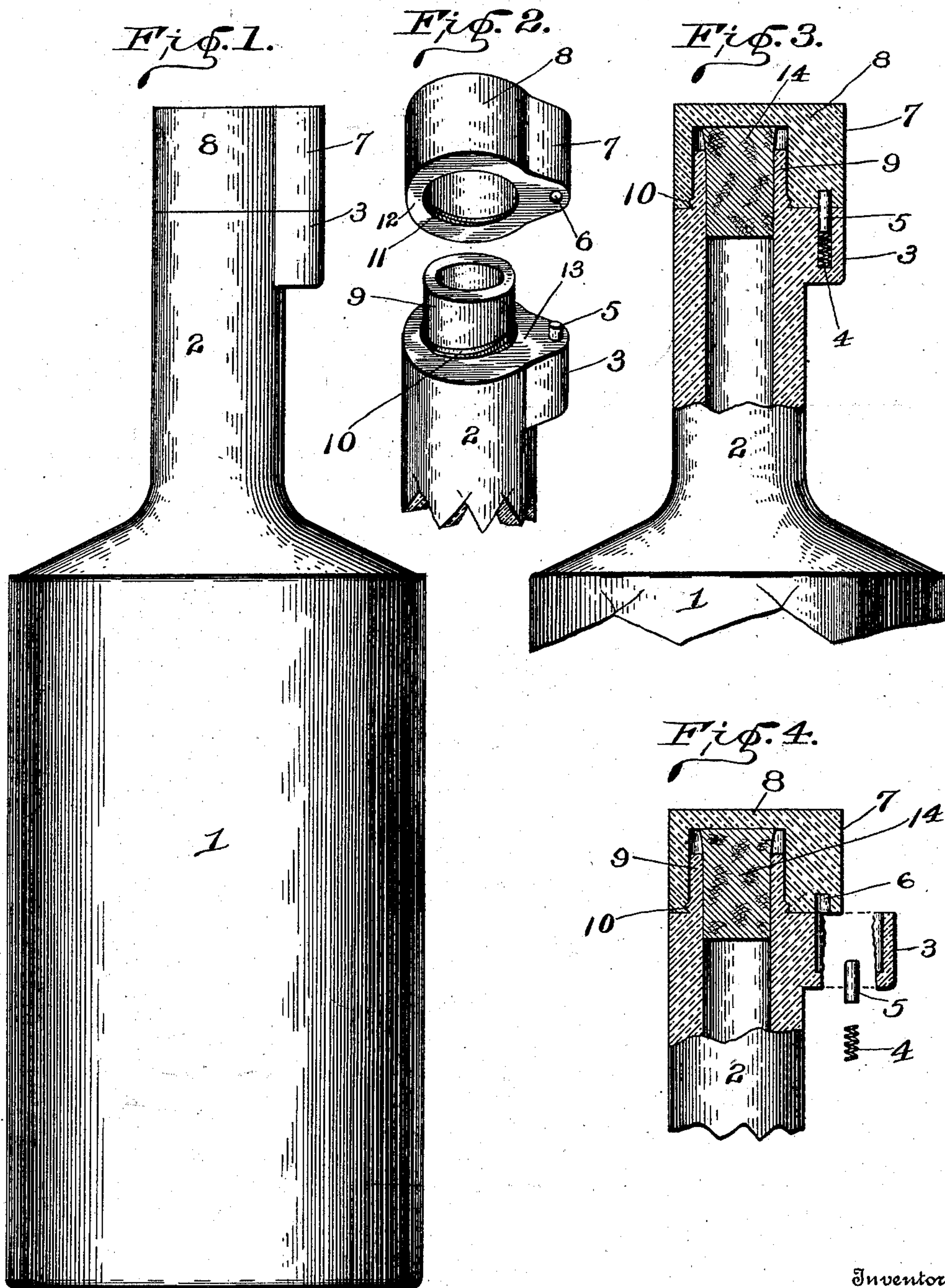


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Patented Nov. 4, 1902.

M. F. BELL.
NON-REFILLABLE BOTTLE.
(Application filed Jan. 22, 1902.)

(No Model.)



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UNITED STATES PATENT OFFICE.

MAXIMILLIAN F. BELL, OF SMITHSBURG, MARYLAND.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 712,638, dated November 4, 1902.

Application filed January 22, 1902. Serial No. 90,799. (No model.)

To all whom it may concern:

Be it known that I, MAXIMILLIAN F. BELL, a citizen of the United States, residing at Smithsburg, in the county of Washington and State of Maryland, have invented certain new and useful Improvements in Non-Refillable 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.

My invention relates to bottle construction, and more particularly to closures therefor, and the preferred details of construction and combination of parts will be hereinafter fully described, and pointed out in the claim.

The object of my invention is to provide a bottle of that class commonly designated as a "non-refillable" bottle from which the contents cannot be removed without injury to the future efficiency of the bottle.

A further object of my invention is to provide a reliable seal by which the stopper will be secured in its position in the mouth of the bottle and will be held in such position even though the contents may comprise an effervescing or gaseous liquor.

A further object of my invention is to prevent the cap from being removed without the evidence of such removal being made clearly apparent, thereby preventing the bottle from becoming refilled with spurious contents and again sold under the original seal or label carried by it.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, in which—

Figure 1 shows a side elevation of my invention complete as applied to use upon an ordinary whisky-bottle. Fig. 2 is a perspective detail view showing a portion of the neck of the bottle and illustrating the sealing-cap removed. Fig. 3 is a central vertical section of Fig. 1. Fig. 4 is a similar view to that presented in Fig. 3, excepting that a portion of the bottle has been broken to release the locking device.

In order to conveniently refer to the various parts of my invention and cooperating accessories, numerals will be employed, of which 1 indicates the body portion of a bottle, which

may be of any preferred construction and provided with the neck portion 2, having upon one side a laterally-extending swell or seat 3, as more clearly shown in Fig. 2. Within this seat thus or otherwise formed I provide a vertically-disposed socket, in the bottom of which I dispose the cushioning-spring 4, while resting upon the upper end of said spring is the locking-pin 5, normally extended upward, so that the end thereof will be disposed above the surface of the seat 3, and thus adapted to extend into engagement with the aperture 6, provided in a contiguous part of the swell or lateral extension 7, carried by the removable cap 8.

The cap 8 is provided centrally with a suitable opening designed to loosely receive the nozzle or extension 9, formed upon the end of the neck of the bottle, said cap being retained in position by the thread 10, disposed around the inner end of the nozzle 9 and adapted to cooperate with the threads 11, carried by the cap. The threads 10 and 11 are so formed that a single turn will secure the cap and bring it truly home, whereby the lateral extensions 3 and 7 will coincide or register with each other.

By reference to Fig. 3 it will be observed that the cap 8 loosely extends around the nozzle portion or extension 9, thereby bringing the threaded portions 10 and 11 into engagement with each other and insuring that the cap may be readily and easily disposed in a locked position. While the threads 10 and 11 may be of any desired extent, I prefer, as above stated, to employ a single thread extending around the base of the extension 9, so that the cap 8 may be placed over the nozzle 9 so as to dispose the lateral extension 7 immediately to the left or this side of the locking-pin 5 as said pin is presented in Fig. 2. By thus forming the threads and disposing the cap, as above set forth, a single turn of the latter will securely lock the face 12 of the cap against the face 13 of the end of the neck, and in order that the pin will enter the aperture or seat 6 said pin may be pressed downward against the tension of the spring 4, as by the finger-nail of the operator, until the extension 7 will ride over said end, and it is therefore obvious that when the cap shall have been rotated sufficiently to bring the

aperture 6 into registration with the aperture occupied by the pin 5 the latter will rise upward by the force of the spring 4 and permanently lock the cap and neck in union with each other. It is therefore obvious that when the pin 5 shall have been disposed in the position illustrated in Fig. 3 it will be utterly impossible to again remove the cap or cause the recession of the pin 5 unless the seat 3 is broken, as shown in Fig. 4, in which event the pin and its controlling-spring will fall out of their seat and permit the cap to be reversely rotated and removed.

It will be understood that a suitable stopper 14, of any preferred material, may be inserted in the neck in the usual manner to provide an efficient closure or seal for the contents, and the cap may be so constructed that when it shall have been turned home in its operative position the free end of said stopper will be contacted by the inner face of the cap and reliably locked against reverse movement, thus avoiding the necessity of tying in or otherwise securing the stopper, as is now common in the case of securing many aerated or gaseous liquids.

By reference to Fig. 3 it will be observed that there is no way left open to again gain access to the locking-pin 5 after it has been disposed in a locked position in engagement with the cap-section and that the only way to unlock the cap will be to break the seat or lateral extension 3, thereby mutilating the bottle and unfitting it for future use in connection with the same brand of goods, inasmuch as the broken condition thus presented would disclose the fact that the bottle was not in its original condition, and thereby open the contents to suspicion.

While I have described the preferred combination and construction of parts deemed necessary in materializing my invention, I wish to comprehend all substantial equivalents and substitutes that may fairly fall within the scope of my invention.

I prefer to form the seat portion or swell 3 so that the portion of glass surrounding the pin in its seat will be very thin, and therefore easily broken. By thus making the seat 3 relatively thinner with respect to the seat 7 it will insure that the seat 3 will be broken, while the seat 7 shall still remain intact and perfect, thereby destroying the bottle for future use in connection with the same brand of goods. I may in some instances employ a cement of some suitable character within the aperture occupied by the spring and pin in order that when the cement becomes thoroughly dry it will be utterly impossible to move the pin except by breaking the entire seat 3 away from the neck of the bottle, as more clearly shown in Fig. 4. I reserve the right, however, to use cement or omit it entirely, as I may find most desirable in practice.

Having thus fully described the construction and manner of using my invention, what I claim as new, and desire to secure by Letters Patent, is—

In bottles of the character specified, the combination with the bottle proper having a lateral extension 3 upon one side of its neck, said lateral extension being provided upon its outer side with a socket and a spring-controlled bolt mounted in said socket, of a cap fitting a threaded extension on said neck and having a lateral extension or swell on one side corresponding to the swell on the neck of the bottle, said swell carried by the cap having a recess adapted to receive said bolt whereby when the swell upon the neck is broken the bolt carried by the outer side thereof will be released to permit the cap to be unscrewed, all combined substantially as specified and for the purpose set forth.

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

MAXIMILLIAN F. BELL.

Witnesses:

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A. G. MILLER.