Sept. 11, 1934. B. I. HUGHES 1,973,256

DISPENSING CONTAINER

Filed Feb. 23, 1933 2 Sheets-Sheet 1

FIG. 1.

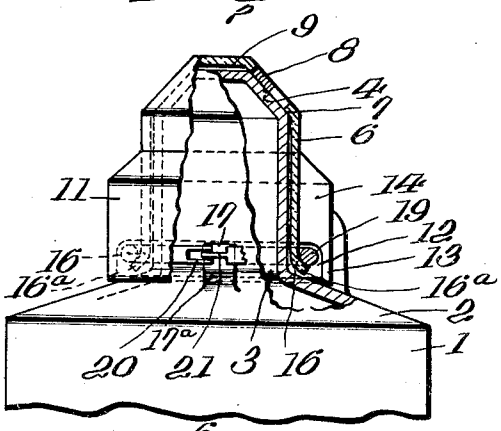


FIG. 2.

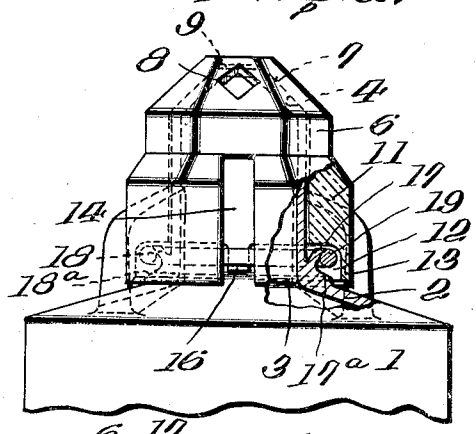


FIG. 9.

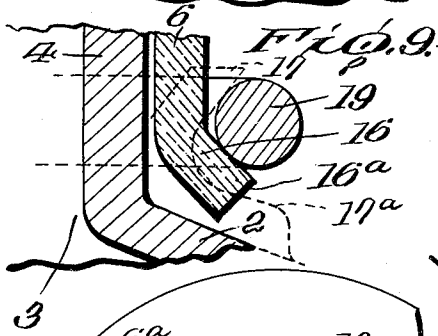


FIG. 10.

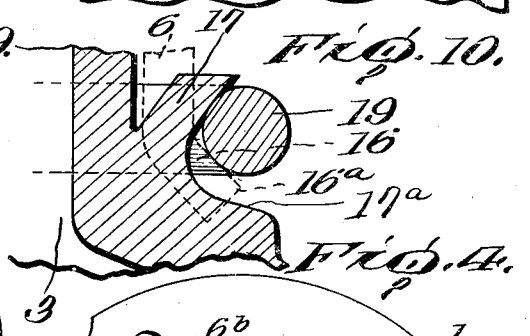


FIG. 3.

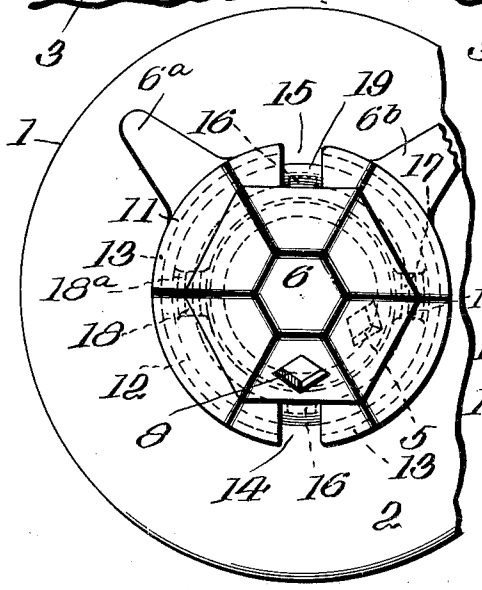
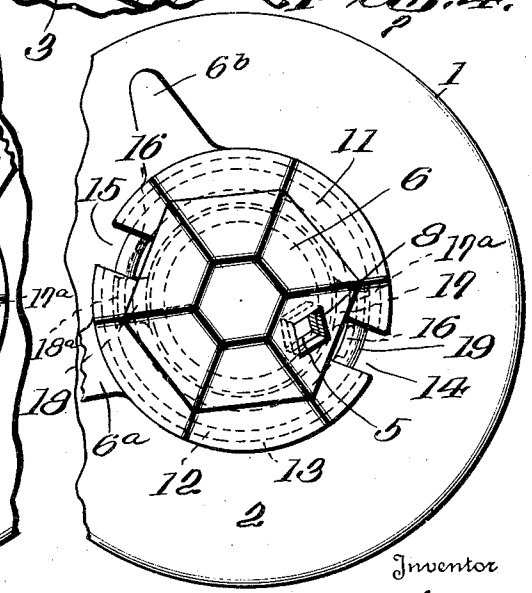


FIG. 4.



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DISPENSING CONTAINER

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FIG. 11.

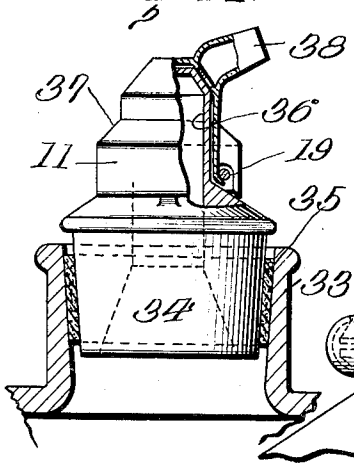


FIG. 5.

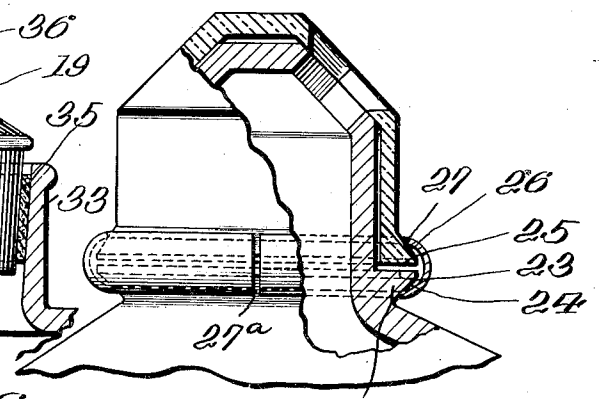


FIG. 6.

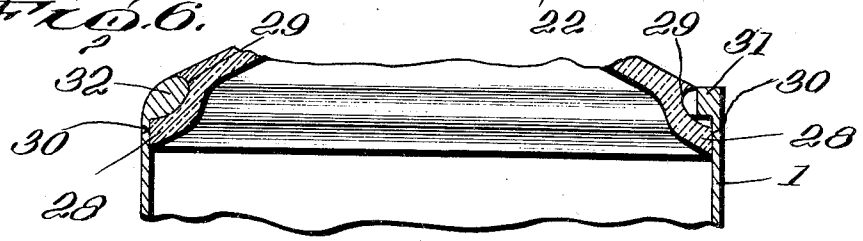


FIG. 7.

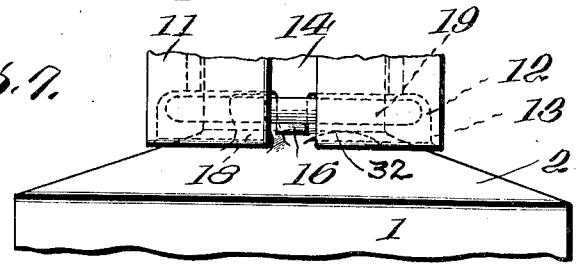
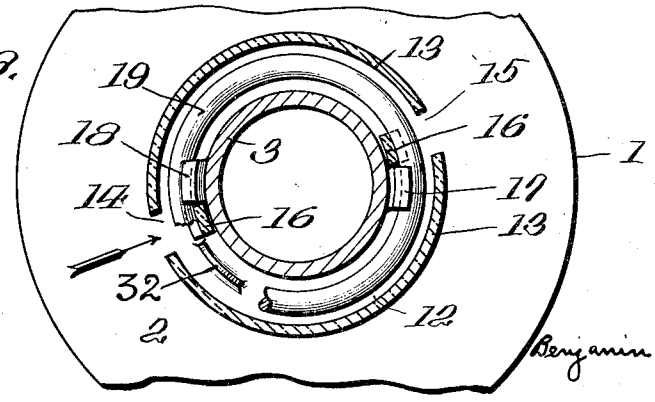


FIG. 8.



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UNITED STATES PATENT OFFICE

1,973,256

DISPENSING CONTAINER

Benjamin I. Hughes, Knoxville, Tenn.

Application February 23, 1933, Serial No. 658,214

15 Claims. (Cl. 221—60)

The invention relates to new and useful improvements in a dispensing container, and more particularly to a container provided with a metal body portion adapted to be collapsed for forcibly dispensing the contents thereof.

An object of the invention is to provide a container with a closure cap, which closure cap is rotatively attached to a neck portion of the container and has an opening adapted to be brought into register with an opening in the neck portion for the dispensing of the contents of the container, and wherein said cap is yieldingly retained on said neck portion with said cap held in contact with said neck portion in the region of the opening therethrough by said yielding means.

A further object of the invention is to provide a container with a closure cap of the above type wherein the neck of the container is provided with a closed tapered end portion in which the dispensing opening is located, and wherein said cap has a tapered inner face corresponding to and yieldingly contacting with the tapered face on said neck portion.

A still further object of the invention is to provide a container with a closure cap of the above type wherein the tapered contacting face of the cap extends above the end of the neck so that the wear of the contacting tapered faces may be taken up and said faces yieldingly held in contact when the openings are closed.

A still further object of the invention is to provide a container with a closure cap of the above type wherein the yielding means is of such a character that the cap may be readily attached to the neck portion of the container by the springing of the yielding means into locking position.

These and other objects will in part be obvious and will in part be hereinafter more fully disclosed.

In the drawings which show by way of illustration one embodiment of the invention—

Figure 1 is a view partly in side elevation and partly in vertical cross section through a container and closure cap embodying the improvements, a portion of the cap being broken away to show more clearly the retaining means;

Fig. 2 is a view partly in side elevation and partly in vertical section through the container and the closure cap in the region of the retaining lugs carried by the container;

Fig. 3 is a plan view of the container and closure cap showing the openings out of register;

Fig. 4 is a view similar to Fig. 3, but showing the openings in register;

Fig. 5 is a modification showing a different form of yielding means for retaining the cap on the neck portion of the closure;

Fig. 6 is a view showing a modified form of connection between the neck portion of the container and the body of the container;

Fig. 7 is a side view with parts broken away and showing a slightly modified form of construction of a locking means for holding the cap in closed position;

Fig. 8 is a plan view with parts broken away to show the operation of the locking cam;

Fig. 9 is a vertical section on an enlarged scale through the cap, lug and retaining ring of Fig. 1, and

Fig. 10 is a vertical section on an enlarged scale through the neck, lug and retaining ring of Fig. 2.

Fig. 11 is a sectional view showing the closure as used in connection with a jar.

The invention has to do with a container and more particularly the dispensing and closing means therefor. The container is provided with a neck portion, the outer end of which is closed and provided with an opening through which the contents of the container may be dispensed. The neck is preferably provided with a tapered or truncated closed end portion having the dispensing opening in the tapered wall thereof. The cap fits about the neck portion so that it may be rotated thereon and has an inner tapered portion contacting with the tapered portion on the neck. Said tapered portion on the cap extends above the tapered portion on the neck, so that the tapered surfaces may be forced into contact with a grinding fit, and continuously held in snug contact with each other. The cap has an opening therethrough which may be moved into register with the opening in the neck or moved out of register with the opening in the neck for the closing of the same. The cap is permanently retained on the container by means of a yielding means, which forces the cap on to the neck portion and the tapered faces into contact. In one form of the invention, this is accomplished by means of a broken spring ring which lies between upwardly and outwardly extending lugs on the container and downwardly and outwardly extending lugs on the cap. Said ring is expanded when placed in contact with the lugs and is continually contracting and operating on the inclined faces of the lugs so as to draw the cap into tight contact with the neck portion. In another form of the invention this is accomplished by a yielding ring arcuate in cross section engaging inclined portions on the neck of the container

and on the cap for drawing one into contact with the other.

It is thought that the invention will be better understood by a detail description of the illustrated embodiment thereof. In the drawings, a container 1 is shown, which is of metal, and which is adapted to be collapsed for the dispensing of the contents contained therein. The body portion of the container is provided with an inwardly tapering part 2 terminating in a projecting neck portion 3. The neck portion 3 is closed at its upper end by a tapered truncated shaped portion 4. An opening 5 is formed through the tapered wall of the closing end of the neck portion. This opening as shown is rectangular in cross section, although it may be otherwise shaped, as desired.

Fitting over the neck portion 3 is a cap 6. Said cap has a relatively long cylindrical portion, the inner face of which conforms to the outer cylindrical portion of the neck of the container, so that the cap will fit over said neck portion and readily rotate thereon. The cap has its closing end formed with an inner tapered surface 7 conforming to the tapered upper surface of the closing end 4 of the neck portion. The outer face of the cap in the region of this tapered portion may have flat faces or it may be rounded, just as desired. The flat faces are preferred, as they aid in the rotating of the cap, and furthermore, they enable the cap to be made very thin at the edges by the opening 8 therethrough which is shaped to conform to the opening 5, so that when brought into register therewith, an opening of the size of the opening 5 is produced through which the contents of the container may be dispensed. The edges of the opening 8 may be formed at an acute angle with the inner face of the cap so as to produce a knife edge contact all the way around the opening (see Fig. 5). This is for the purpose of cutting off any projecting material extending through the openings when it is desired to close the cap. The inner tapered face 7 of the cap projects beyond the tapered face 4 of the neck, providing a space 9. This allows the cap to be forced on to the neck portion so that the tapered faces will limit the movement of the cap and bring about a contact between the inner face of the cap and the neck of the container in the region of and all the way around the opening 5 therethrough. The cap is preferably forced on to the neck by yielding means, and the tapered faces yieldingly held in contact, taking up any wear and insuring a perfect sealing contact between these parts when the cap is closed. The efficiency of the contact increases with the continued turning of the cap.

The cap is preferably made of bakelite, although it may be made of any suitable material, plastic, metal or otherwise. The neck portion of the cap is thickened as indicated at 11, and said cap has a recess 12 formed therein which provides a depending skirt 13 which extends close to the inwardly tapered portion 2 of the body of the container. It is, however, spaced therefrom, as clearly shown in the drawings, and preferably the lower edge is beveled so as to bring the outer edge very close to the wall of the container, and at the same time leaving sufficient space so that the cap may be continually urged toward the container for bringing about this intimate contact between the tapered surfaces.

This thickened portion 11 of the cap is preferably provided with two vertically extending recesses 14 and 15. These recesses are in the thickened portion 11 only, leaving a wall extending across the recess, which is of substantially the same thickness as the thickness of the cap above the thickened portion. At the lower edge of the wall of the cap, and at the inner side of this recess, is a depending lug 16. There are two of these lugs, one located in the recess 14 and the other in the recess 15. At the base of the neck portion 3 there are two lugs 17 and 18 which are diametrically opposed to each other. These lugs extend upwardly and outwardly and are provided with inclined faces which extend outwardly and upwardly away from the neck of the container. At the base of these lugs 17 and 18 there are shoulders 17^a and 18^a, respectively. These shoulders are of substantially the same width as the lugs, and their upper faces incline downwardly and outwardly. The lugs 16 extend downwardly and outwardly and have inclined faces which are inclined in the opposite direction from the outer faces of the lugs 17 and 18.

A spring metal ring 19 is used for locking the cap to the container. This ring is preferably provided with interlocking end portions as shown in Fig. 1. One end of the ring is forked as indicated at 20, and the other end is provided with a finger 21 extending between the forks. This ring is dimensioned so that it is normally of smaller diameter than the distance between the lugs 17 and 18 at their bases, and of smaller diameter than the distance between the lugs 16 and 16 at their bases. The ring is expanded and sprung over the lugs 17 and 18, and when it contracts it will rest on the shoulders 17^a and 18^a. The lower end of the lug 16 is inclined as indicated at 16^a. This end inclines upwardly and outwardly, and the diameter of the lower and innermost portion of this inclined edge is less than the diameter of the center of the ring when resting on the shoulders 17^a and 18^a, and bearing against the lugs 17 and 18. The cap, therefore, may be inserted on the neck portion, and these inclined portions 16^a of the lugs will wedge within the ring so as to expand it and force it outwardly until it snaps over the outer ends of the lugs and presses against the inclined faces of the lugs 16, and also the inclined faces of the lugs 17 and 18. When the ring is in the position shown in Figures 9 and 10, it is serving as a lock for holding the cap on the neck portion of the container. It is also serving as a yielding means constantly pressing the cap against the outer end of the neck portion, for the reason that the ring is expanded and is constantly tending to contract, and it contacts with the inclined faces at points away from the bases thereof. As the tapered surface at the outer end of the neck portion or the inner face of the cap wears, the cap will be continuously forced on to the neck so as to take up the wear and maintain a tight contact therewith. This makes a very easy way of assembling the cap on the container, and if it is desired to remove the cap for any purpose, access may be had to the spring ring for expanding and lifting it over lugs 16 and thus releasing the cap. The cap, however, is not removed during the dispensing of the contents of the container. It is merely turned so as to bring the openings into register, and it can also be turned so as to move the openings out of register for closing the container. This firm but yielding pressure of the cap against the neck portion of the container prevents the material from accumulating between the two contacting surfaces as well as effecting a ground joint between the two contacting surfaces. The turning of the cap will effectively cut off the material if it is projecting through the opening.

It is obvious that the openings 14 and 15 may be dispensed with so that the ring may be completely housed within the recess 12 and inaccessible for removing the cap. The lugs 16 and 17 are so disposed that when said lug 16 contacts with the lug 17, the openings will be in alinement.

In Fig. 5 of the drawings, a modified form of yielding connecting means is provided for holding the cap on the neck portion of the container. The upper end portion of the cap and the neck portion of the container are constructed similar to that shown in Figures 1 and 2, and the same reference numerals have been applied thereto. The change in the structure has to do with the shaping of the ring and the parts with which it is immediately associated. At the base of the neck portion, there is an outwardly projecting ledge 22 having an upper horizontal face 23 and an under inclined face 24 which inclines outwardly and upwardly. The cap at the lower edge portion thereof is provided with a horizontal face 25 which is parallel with the horizontal face 23 when the parts are in normal position. It is, however, spaced from said horizontal portion 23 when the inner tapered portion of the cap contacts with the outer tapered portion of the neck. This is for the purpose of permitting the cap to have a limited movement as the contacting surfaces wear, so that they may be maintained yieldingly and continuously in contact. The bottom portion of the cap has an outwardly and downwardly inclined face 26. The cap is slipped on to the neck portion until the tapered faces at the outer end thereof are resting on each other. The cap is secured in this position by a retaining ring 27. The ring is curved in cross section, so that its upper edge contacts with the inclined face 26, while the lower edge contacts only with the inclined face 24. This ring is of spring metal and is split as indicated at 27^a in Fig. 5. The ends are normally separated and the ring is expanded in order to place it in contact with the inclined faces of the cap and the neck portion. The edges of the ring engage the inclined faces intermediate the ends thereof so that the continuous pressure of the ring against the inclined faces will draw the inner tapered portion of the cap yieldingly but firmly into contact with the upper inclined face of the neck portion.

The upper end of the neck portion of the container is illustrated as provided with a truncated tapered face. It will be understood, of course, that it may be otherwise shaped. Whatever shape is given to the end of the neck portion, a similar shape is given to the inner face of the cap, so that the cap may make intimate contact therewith, and the shaping of the faces is such that the yielding pressure of the cap on to the neck portion will take up any wear between the two parts.

In Figures 3 and 4 of the drawings, the cap is shown as having projecting finger lugs 6^a and 6^b formed thereon. These lugs are preferably integral with the cap, and are so disposed relative to each other and the opening through which the contents are to be dispensed, that one may hold the container in the hand, placing the thumb or fingers in contact with the lugs for moving the cap to open or closed position. One lug may be sufficient if the movement is of a comparatively short distance. When two lugs are used, first one lug may be contacted with and then the other, and the cap moved to a greater extent on the neck portion. This greatly facilitates the turning of the cap for bringing the openings into register, and the dispensing of the contents through the openings, and then the closing of the openings.

In Fig. 6 of the drawings, a slightly modified form of container is shown. In this form of the invention, the neck portion is made of molded material such as bakelite, although it may be made of any other suitable material. The cap is attached to the neck portion by a yielding means such as described above. The body of the container indicated at 1, is made of metal, and may be made from tubing by cutting the same into short lengths, or by individually drawing each body from the metal blank. The neck portion of the container extends downwardly and outwardly, thus forming a closing end 28 for the body portion of the container. Said end at its upper peripheral edge is formed with a recess 29, and also with a cylindrical face 30 which extends into the body portion of the container. The end of the body portion is thickened as indicated at 31 by spinning or rolling the top edge inwardly, and is finally swaged or forced into the recess as indicated at 32 so as to provide a tight joint between the neck and the body portion of the container. This makes a very simple but positive connection between the parts, allowing the body portion to be made from tubing and the entire end made from a single piece of bakelite or other similar material. The pressure of the cap against the neck portion and the turning of the same operates precisely as described above, and will serve to tighten the seal between the cap and container neck.

In Fig. 7 of the drawings there is shown a locking means for holding the cap in closed position. This locking means consists of a cam shoulder on the end portion 2 of the container which is located in the path of travel of the lugs 16. It is also disposed relative to the lugs 17 and 18 so that when the cap is rotated in a clockwise direction for closing the opening, as the lug 16 approaches the extreme limit of its movement, it will pass over this cam shoulder and will lie between the cam shoulder and the lug 18. The spring ring bearing on the lugs will yield to allow the lug 16 to rise sufficiently to pass over the shoulder, and will yieldingly hold the lug in locked position in rear of the cam shoulder. By a turning pressure, however, the cap is moved from its locked position, the lug yielding and rising to pass over the cam shoulder.

While the invention has been described as applied to a closure cap for a collapsible container, it will be understood that from certain aspects of the invention it may be applied to other types of containers. The essential feature of the closure resides in the connection of the cap to a neck portion of the container through yielding means which holds the cap in yielding contact with the neck portion in the region of the opening through which the contents are to be dispensed.

In Figure 11 of the drawings, the closure is shown as applied to a stopper for a bottle or jar. The jar is indicated at 33 in the drawings and may be of any desired type. The stopper for the jar is indicated at 34 and is placed in the jar together with a suitable sealing gasket 35. In place of this gasket there may be a ground fit between the stopper and the jar. The stopper 34 is provided with a neck portion 36 similar in construction to a neck 3 described above. Said neck portion has a tapered truncated shaped

portion at its upper end with an opening therethrough. The cap 37 is similar in construction to the cap 6, except as shown it is provided with a projecting nozzle 38 in alinement with the opening 8 therethrough. The cap is secured to the neck portion of the stopper by a yielding ring cooperating with lugs on the cap and on the stopper in the manner which is described above in connection with Figures 1 to 10, and it is not thought that a detail description or disclosure thereof is necessary.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is—

1. The combination of a container having a neck portion, the outer end of which is closed and provided with an opening therethrough, a cap rotatably fitting over said neck portion and having the end thereof in contact with the end of the neck portion in the region of the opening, said cap having an opening adapted to register with the opening in the neck portion, said openings being disposed so that they may be moved into and out of register by rotating the cap, and yielding means for retaining the cap on said neck portion and for pressing the cap against said neck portion in the region of the opening while said cap is in both open and closed positions.

2. The combination of a container having a neck portion, the outer end of which is closed and provided with an opening therethrough, a cap rotatably fitting over said neck portion and having the end thereof in contact with the end of the neck portion in the region of the opening, said cap having an opening adapted to register with the opening in the neck portion, said neck portion having outwardly and upwardly inclining faces, and said cap having outwardly and downwardly inclining faces, and yielding means engaging said inclined faces for retaining the cap on the neck portion with said cap contacting with the end of the neck in the region of the opening.

3. The combination of a container having a neck portion, the outer end of which is closed and provided with a portion of gradually decreasing diameter in an upward direction, a cap rotatably fitting over said neck portion and having the inner surface of the upper end thereof shaped to conform to the upper end of the neck portion and contacting therewith, the outer end of said neck portion and said cap having openings which may be moved into and out of register by rotating said cap, and yielding means for retaining the cap on said neck portion and for pressing the cap against said neck portion in the region of the opening while said cap is in both open and closed positions.

4. The combination of a container having a neck portion, the outer end of which is closed and provided with a portion of gradually decreasing diameter in an upward direction, a cap rotatably fitting over said neck portion and having the inner surface of the upper end thereof shaped to conform to the upper end of the neck portion and contacting therewith, said cap having an opening therethrough adapted to register with the opening in the neck portion, said neck portion having outwardly and upwardly inclining faces, and said cap having outwardly and downwardly inclining faces, and yielding means engaging said inclined faces for retaining the cap on the neck portion with said cap contacting with the end of the neck in the region of the opening.

5. The combination of a container having a neck portion, the outer end of which is closed and provided with an upright truncated outer face, with an opening in said truncated face, a cap rotatably fitting over the neck portion and having the inner surface thereof shaped to conform to said truncated portion on the neck so as to make contact therewith in the region of the opening therethrough, said cap having an opening adapted to be moved into and out of register with the opening in the neck portion by rotating said cap, and yielding means for retaining the cap on the neck portion and for pressing the cap against said neck portion in the region of the opening while the cap is in both open and closed positions.

6. The combination of a container having a neck portion, the outer end of which is closed and provided with an upright truncated outer face, with an opening in said truncated face, a cap rotatably fitting over the neck portion and having the inner surface thereof shaped to conform to said truncated portion on the neck so as to make contact therewith in the region of the opening therethrough, said cap having an opening adapted to be moved into and out of register with the opening in the neck portion, said truncated face on the neck portion terminating in a flat upper face and said recess in the cap terminating in a similar face spaced from the face on the neck portion so that the movement of the cap on to the neck portion is limited by contact thereof with the truncated face, and yielding means for retaining the cap on said neck portion and for forcing the cap into engagement with the truncated face while said cap is in both open and closed positions.

7. The combination of a container having a neck portion, the upper end of which is closed and provided with an opening therethrough, said neck portion adjacent the lower end thereof having spaced lugs, the upper faces of which incline outwardly and upwardly, a cap rotatably fitting over said neck portion in the region of the opening, said cap having an opening adapted to register with the opening in the neck portion, said cap having spaced lugs thereon, the outer faces of which incline downwardly and outwardly, and a yielding means contacting with said inclined faces on both the lugs on the neck portion and the lugs on the cap for retaining the cap on the neck portion and for yieldingly pressing said cap into contact with the neck portion in the region of the opening.

8. The combination of a container having a neck portion, the upper end of which is closed and provided with an opening therethrough, said neck portion adjacent the lower end thereof having spaced lugs, the upper faces of which incline outwardly and upwardly, a cap rotatably fitting over said neck portion in the region of the opening, said cap having an opening adapted to register with the opening in the neck portion, said cap having spaced lugs thereon, the outer faces of which incline downwardly and outwardly, and a yielding means contacting with said inclined faces on both the lugs on the neck portion and the lugs on the cap for retaining the cap on the neck portion and for yieldingly pressing said cap into contact with the neck portion in the region of the opening, said cap having a depending skirt for housing the lugs and the yielding means.

9. The combination of a container having a neck portion, the upper end of which is closed and provided with an opening therethrough, said

neck portion adjacent the lower end thereof having spaced lugs, the upper faces of which incline outwardly and upwardly, a cap rotatably fitting over said neck portion in the region of the opening, said cap having an opening adapted to register with the opening in the neck portion, said cap having spaced lugs thereon, the outer faces of which incline downwardly and outwardly, a spring ring having interengaging end portions and contacting with said inclined faces on both the lugs on the neck portion and the lugs on the cap, said ring normally being under contracting tension so as to retain the cap on the neck portion and yieldingly force the cap into contact with the neck portion in the region of the opening therethrough.

10. The combination of a container having a neck portion provided with an upright truncated face at the upper end thereof, said neck portion being closed and having an opening on said truncated face, a cap rotatably fitting over the neck portion and having a truncated inner face shaped to conform to the truncated face on the neck portion and contacting therewith, said cap having an opening therethrough adapted to register with the opening in the neck portion, said neck portion at the lower end of the cap having an outwardly and upwardly inclined face, said cap at the lower end thereof having a downwardly and outwardly inclined face, and yielding means engaging said faces for retaining the cap on the neck portion and forcing said cap into contact with the truncated face of the neck portion.

11. The combination of a container having a neck portion provided with an upright truncated face at the upper end thereof, said neck portion being closed and having an opening on said truncated face, a cap rotatably fitting over the neck portion and having a truncated inner face shaped to conform to the truncated face on the neck portion and contacting therewith, said cap having an opening therethrough adapted to register with the opening in the neck portion, said neck portion at the lower end of the cap having spaced lugs, the faces of which incline upwardly and outwardly, said cap having spaced lugs at the lower end thereof, the faces of which incline outwardly and downwardly, and a spring ring contacting with said inclined faces on both the lugs on the neck portion and the lugs on the cap for holding the cap on the neck portion and for yieldingly pressing said cap into contact with said truncated face of the neck portion.

12. The combination of a container having a neck portion provided with an upright truncated face at the upper end thereof, said neck portion being closed and having an opening on said truncated face, a cap rotatably fitting over the neck portion and having a truncated inner face shaped to conform to the truncated face on the neck portion and contacting therewith, said cap having an opening therethrough adapted to register with the opening in the neck portion, said neck portion having a circular member at the lower end of the cap provided with a face which inclines upwardly and outwardly and with an upper face which is substantially horizontal, said cap having the face of the lower edge thereof substantially horizontal and spaced from the horizontal face on said neck portion when said cap contacts with the truncated face of said neck portion, said cap being also provided with a face at the lower end thereof inclined outwardly and downwardly, and a spring ring member preferably of metal arcuate in cross section and having the upper and lower edges thereof contacting with said inclined faces on the cap and neck portion, respectively, for holding the cap on the neck portion and for yieldingly pressing the cap into contact with the truncated face.

13. The combination of a container having a neck portion provided with an upright truncated face at the upper end thereof, said neck portion being closed and having an opening on said truncated face, a cap rotatably fitting over the neck portion and having a truncated inner face shaped to conform to the truncated face on the neck portion and contacting therewith, said cap having an opening therethrough adapted to register with the opening in the neck portion, said neck portion at the lower end of the cap having spaced lugs, the faces of which incline upwardly and outwardly, said cap having spaced lugs at the lower end thereof, the faces of which incline outwardly and downwardly, and a spring ring contacting with said inclined faces on both the lugs on the neck portion and the lugs on the cap for holding the cap on the neck portion and for yieldingly pressing said cap into contact with said truncated face of the neck portion, said container adjacent the neck portion having an upwardly projecting cam shoulder disposed in the path of movement of one of the lugs on the cap and over which said lug rides when moved to closed position for locking the cap in closed position.

14. The combination of a container having a neck portion provided with an upright truncated face at the upper end thereof, said neck portion being closed and having an opening on said truncated face, a cap rotatably fitting over the neck portion and having a truncated inner face shaped to conform to the truncated face on the neck portion and contacting therewith, said cap having an opening therethrough adapted to register with the opening in the neck portion, said neck portion at the lower end of the cap having spaced lugs, the faces of which incline upwardly and outwardly, said cap having spaced lugs at the lower end thereof, the faces of which incline outwardly and downwardly, and a spring ring contacting with said inclined faces on both the lugs on the neck portion and the lugs on the cap for holding the cap on the neck portion and for yieldingly pressing said cap into contact with said truncated face of the neck portion, said container adjacent the neck portion having an upwardly projecting cam shoulder disposed in the path of movement of one of the lugs on the cap and over which said lug rides when moved to closed position for locking the cap in closed position, said cap having a depending skirt housing said ring and said locking lug, said depending skirt terminating short of the end of the container so as to provide sufficient clearance for maintaining the cap in contact with the truncated face.

15. The combination of a container having a rigid neck portion, the outer end of which is closed and provided with an opening therethrough, a rigid cap rotatably fitting over said neck portion and having the end thereof in contact with the end of the neck portion in the region of the opening, said cap having an opening adapted to be moved into and out of register with the opening in the neck portion, and separate yielding means cooperating with said cap and said neck portion for retaining the cap on the neck portion and for pressing the cap against the neck portion in the region of the opening therein.

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