H. SPENGLER.

CLOSURE.

APPLICATION FILED MAY 11, 1917.

1,260,726.

Patented Mar. 26, 1918.

Fig. 1.

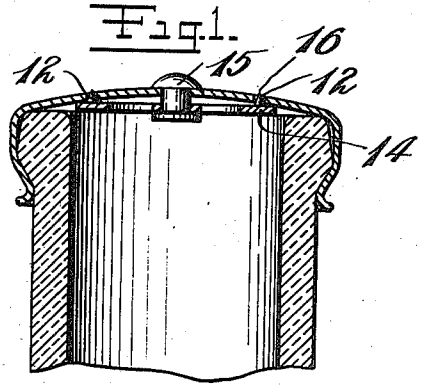



Fig. 2.

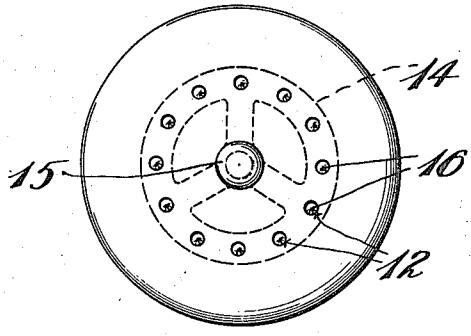
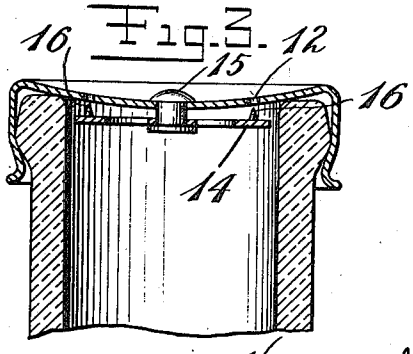



Fig. 3.




Henry Spengler Inventor

By his Attorney

Frank J. Kent

# UNITED STATES PATENT OFFICE.

HENRY SPENGLER, OF NEW YORK, N. Y.

## CLOSURE.

1,260,726. Specification of Letters Patent. Patented Mar. 26, 1918.

Application filed May 11, 1917. Serial No. 167,860.

*To all whom it may concern:*

Be it known that I, HENRY SPENGLER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Closures, of which the following is a specification.

This invention relates to caps or closures, particularly adapted for use as bottle closures, though their use is not limited to this relation.

One of the objects of the invention is to produce a device of the kind referred to which is readily put into place, which effectually accomplishes its sealing or covering function, and which may be removed without the use of any tools whatsoever.

The invention embodies certain improvements upon the devices described and claimed in my U. S. Patent No. 1,074,907 granted to me October 7th, 1913, and therefore provides a bottle cap having a central resilient portion which may be bulged to one side of a plane and yieldable under pressure, said cap having means gripped to the bottle mouth while the said bulge is maintained and released therefrom when the bulged portion is depressed, and the said bulged portion being capable of springing or being brought back from the said releasing position.

The invention contemplates, in addition to the features last above mentioned, means whereby the device may be used in special relations, as, for instance, in connection with a salt-shaker, or the like.

In the accompanying drawings which are to be taken as a part of this specification, and in which I have shown merely preferred forms of embodiments of the invention, Figures 1 and 3 are central vertical sections showing a cap made up as a top for a salt-shaker or the like, Fig. 1 showing the position of the parts when the outlet openings are closed, and Fig. 3 showing them open; and Fig. 2 is a top plan view of the subject-matter of Figs. 1 and 3, with certain parts in dotted lines.

In the drawings, I have shown such a cap as is described in my patent aforesaid. Preferably the central portion of the disk is formed so that it may be sprung to either one of two positions, one being shown in Fig. 1 and the other in Fig. 3. The disk is provided with the peripheral gripping fingers whereby it is attached to the mouth of the bottle, salt-shaker, or other receptacle, and the disk portion is provided with apertures 12 through which it is intended that the contents of the receptacle are to be shaken out. Coöperating with these apertures 12 is a skeleton disk 14 underlying the central part of the cap and secured thereto, as by means of a rivet 15. The skeleton disk is formed with spurs 16 which, when the bulge of the cap is up, as in Fig. 1, enter the apertures and close the same, and when the bulge is down, as shown in Fig. 3, the spurs on the skeleton cap are withdrawn from the openings 12 and the contents of the receptacle may be caused to pass through the same. All this is by reason of the bulging of the central disk portion. It will be understood that it is not necessary to provide this skeleton disk with its spurs. If I provide simply the cap, with the retaining fingers and with the bulge portion, so that when the bulge is in the Fig. 1 position, the fingers are locked to the mouth of the receptacle, and when it is in the Fig. 3 position the fingers are released from the receptacle, and if I provide the disk portion with apertures, it will be evident that the device may be used in connection with a salt-shaker, for instance. The apertures would be always open, and the bulge would need to be depressed only when it was desired to lift the cap off of the receptacle for the purpose of refilling. With the device shown in Figs. 1 and 3 the central portion would be so formed that depression of the bulge, Fig. 3 position, while it would open up the outlet apertures, would not serve to release the gripping fingers entirely, but would simply release them sufficiently so that the cap could be easily removed. Of course in putting the cap back into place the gripping fingers would be spread in going over the flange of the receptacle mouth, and the contact of the latter with the inside of the disk would throw the bulge back to the Fig. 1 position, thereby locking the fingers as in Fig. 1. If desired, the device shown in Figs. 1 and 3, or such a device without the skeleton disk and prongs, may be provided with a knob, such as is shown in Fig. 3.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or

shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense. It is also to be understood that the language used in the following claim is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which as a matter of language, might be said to fall therebetween.

I claim:

A cap for bottles or the like having a central portion and separated fingers depending therefrom and integral therewith, said central portion having a permanent set causing it to bulge outward when said fingers are in gripping position, said fingers being movable from the gripping position by pressing the bulge inward, the material in the cap being resilient so that the central portion tends to spring to its outward bulged position when brought approximately thereto, the said central portion being perforated, and means carried by the cap to close the perforations thereof when the bulge is outward, said means moving away from the cap to unclose the perforations when the bulge is inward.

In testimony whereof I affix my signature.

HENRY SPENGLER.