O. GOETZKE.

CONTAINER TOP.

APPLICATION FILED MAY 8, 1915.

1,173,503.

Patented Feb. 29, 1916

Fig. 1.

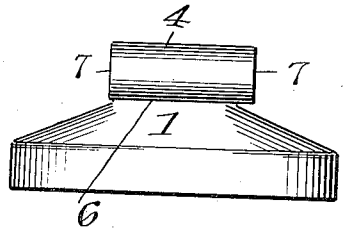


Fig. 5.

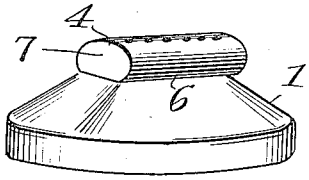


Fig. 2.

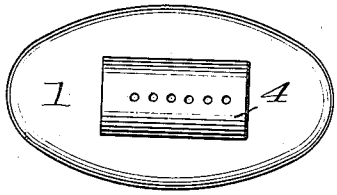


Fig. 6.

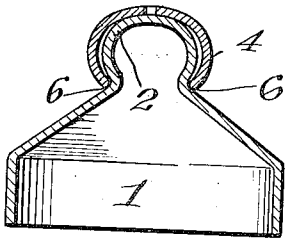


Fig. 3.

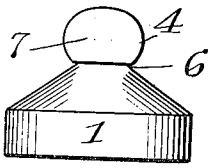


Fig. 7.

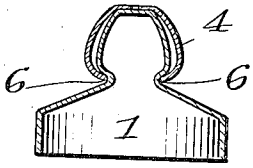


Fig. 8.

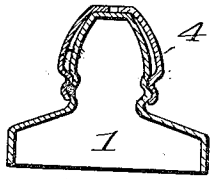


Fig. 9.

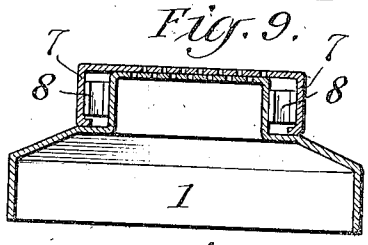


Fig. 4.

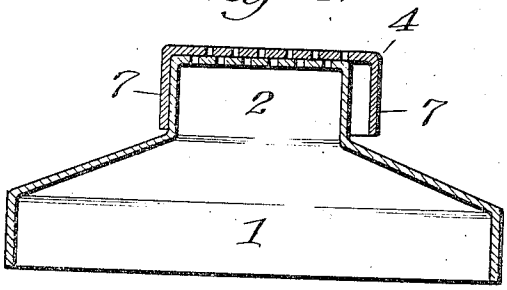


Fig. 10.

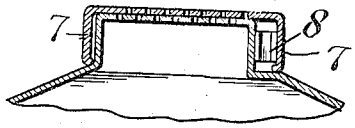
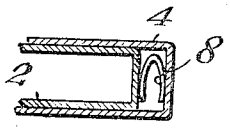


Fig. 11.



WITNESSES

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BY

Townsend & Decker

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UNITED STATES PATENT OFFICE.

OTTO GOETZKE, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO EXCELLALL PRODUCTS COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

CONTAINER-TOP.

1,173,503. Specification of Letters Patent. Patented Feb. 29, 1916.

Application filed May 8, 1915. Serial No. 26,719.

To all whom it may concern:

Be it known that I, OTTO GOETZKE, a subject of the King of Norway, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Container-Tops, of which the following is a specification.

My invention relates to that class of container or receptacle tops that are provided with a movable member having one or more openings or perforations adapted to be brought into and out of registry with an opening or openings in the top proper for the purpose of permitting the contents to escape or to seal the receptacle against the escape of its contents at the will of the user.

The invention relates more particularly to a construction of top wherein the movable member slides or moves in a rectilinear path and the object is to provide a simple, effective and cheap construction of top capable of being used conveniently in the intended manner.

To these ends my invention consists in the construction of container or receptacle top more particularly hereinafter described and then specified in the claims.

In the accompanying drawings Figure 1 is a side elevation of a form of top embodying my invention. Fig. 2 is a plan of the same. Fig. 3 is an end view. Fig. 4 is a longitudinal vertical section of the top. Fig. 5 is a perspective view of the top. Fig. 6 is a vertical cross-section thereof. Figs. 7 and 8 show in vertical cross-section modifications in the form of the sliding cap and head. Figs. 9 and 10 are longitudinal sections illustrating the application of a spring to the sliding cap. Fig. 11 is a longitudinal cross-section through one end of the container top provided with a spring for the sliding cap.

1 indicates the top proper of the can or receptacle, which top may be oval, circular, rectangular, or of other form that may be desired.

2 is the head preferably of considerably lesser dimensions in cross-section than the top proper, said head being provided with the opening or openings required for removal of the contents.

For the purposes of illustrating the invention the perforations are indicated as being a line of perforations formed in the top or extremity of the head for coöperation with a similar line of perforations in the sliding cap.

4 is the sliding member of the device and consists of a cap or shell superimposed on the head and guided thereon in a right line by means of its straight side flanges or skirts and is held in position upon the head by the crimping in of said skirts or side flanges on the line 6 where the side flanges engage the straight sides of the neck and are thereby guided so that the cap may be moved back and forth on the head to bring its line of perforations into and out of registry with the perforations in the top of said head.

As will be observed by reference to the drawings, the ends of the cap are closed in by the end portions or plates 7 which join the side flanges and complete the contour of the cap and serve not only the purpose of stiffening said cap and preventing disengagement of the side flanges with the guides formed on the head but likewise serve as thumb-pieces for operation by the user in sliding the cap back and forth upon the head. Furthermore, as will be seen, the side flanges are somewhat longer than the portion of head upon which the cap slides and the end portions of the flange thereby are enabled to operate as stops for the sliding movement and to determine the extent of movement for bringing the holes in the top of the cap into registry with the holes in the top of the head or for limiting the reverse sliding movement of the cap when the receptacle is to be closed.

In the form of my invention illustrated in Fig. 1 the cap and the top of the head are of curved form and the openings in both members occupy a straight line. In some cases, however, it is desirable to make the top of the head flat and the top of the cap also flat, as shown more particularly in Figs. 7 and 8 in which case a double line of perforations or openings might be employed if desired. In some respects the form shown in Figs. 7 and 8 is more desirable since the two members being flat, a more perfect seal is formed.

Another feature of my invention consists in so forming the parts that when the skirts

or flanges are crimped or compressed into the guides the cap will be held down upon the head by a spring pressure which insures a continuous engagement of the cap and head along the line of the perforation or perforations, thereby conducing to a more perfect closure. This end is accomplished by leaving a slight space between the sides of the cap and the sides of the head as illustrated in the cross sections, so that the spring of the metal of the flange will operate to hold the top of the cap down upon the top of the head.

Fig. 8 illustrates another form of the invention in which the flange is crimped into a groove formed in the side of the neck to form the rectilinear guide for the cap.

By constructing the cap with the end portions of its flange or skirt separated from the ends of the head or portion of top upon which it slides as already described, I secure the advantage that pockets are provided for the reception of blade or other springs 8 located between the flange and head as illustrated in Figs. 9, 10 and 11 wherein the end flange is shown as turned under at its bottom to hold the spring and prevent it from slipping out of the pocket. As shown in Fig. 9, a spring may be provided at each end or in each pocket and the two springs coöperate to center the cap with the perforations therein and in the head out of line so that the receptacle will be sealed. Pressure applied by the thumb to either end flange or plate obviously will bring the hole or holes into registry and allow the contents to escape, while upon release of pressure the cap will automatically resume a position proper for sealing the receptacle. In Fig. 10 the cap is shown as provided with one spring only which serves to only hold the cap in position to seal the top.

As will be understood, the members of the can top described are preferably made of sheet metal throughout although I do not limit myself to the use of such material for all portions of the device. In case a spring is used it may be desirable to turn in the lower edge of the end flange or portion of the skirt to retain the spring in place.

By constructing the cap as shown so that it engages with the head only on the top and at the bottom of the flanges or skirts as is the case when the space between the sides of the flanges and the head is provided, the cap works with greater freedom and the liability to the lodgment of material between the surfaces of the cap and head which exists particularly in those forms where the cap rotates on the head, is avoided. Any material, moreover, that might tend to lodge is by my construction permitted to work out at the end of the cap owing to the provision of the spaces on the sides and between the ends and ends of the head.

By this construction I am enabled to manufacture can tops having a sliding cap, in an economical fashion and so that they will be free from the objections found to exist with the ordinary rotary top.

What I claim as my invention is:—

1. In a container or receptacle top, the combination with a perforated head, of a perforated permanently attached sliding cap having rectilinear depending side flanges guided upon the head and joined at both ends in end flanges completing the contour of the top, said side flanges being longer than the head and said end flanges joining them coöperating with the head as stops for limiting the movement of the cap in both directions and determining by the action of one stop the extent of movement which will bring the holes of the cap and head into registry and by the action of the other stop limiting the reverse movement in closing the receptacle.

2. In a container or receptacle top, the combination with the perforated head, of a perforated permanently attachel sliding cap moving in a rectilinear path thereon, said cap having side flanges crimped upon and guided by rectilinear guides on the head and being stiffened to prevent their disengagement from the head by end flanges at both ends coöperating with the head to form means for limiting the movement of the cap in both directions as and for the purpose described.

3. A can top having a perforated projecting head of less size than the top proper. a perforated sliding cap having rectilinear skirts or flanges crimped into the neck and guided in a rectilinear direction by the neck. said side flanges being extended beyond the longitudinal dimensions of the head and being joined as described to form pockets and likewise to limit the movement of the cap in both directions and so as to seal the can when one end flange engages the end of a head and to stop the movement by the other end flange when it is moved in the opposite direction and when the perforations in the top and cap coincide.

4. In a container or receptacle top, the combination with a sliding cap crimped upon and guided by the sides of the head by its side flanges, said side flanges at their ends being joined to form a pocket between the end of the cap and the end of the head and a spring located in said pocket and held in place by the turned under bottom of the flange as and for the purpose described.

5. In a can or receptacle top, the combination with a perforated head, of a sliding cap having rectilinear movement thereon and engaged with the head at its top and on the sides of its neck by the side flanges of the cap, said side flanges being formed to leave a space between them and the sides

of the head after it is crimped or compressed into the guides on the head whereby the cap will be held down by spring pressure to insure a continuous engagement of the cap and head along the line of the perforations in them.

Signed at New York, in the county of New York and State of New York, this 7th day of May, A. D. 1915.

OTTO GOETZKE.

Witnesses:
F. B. TOWNSEND,
W. R. WARNER.