G. W. WEBER.

SIFTER TOP POWDER CAN.

APPLICATION FILED NOV. 1, 1910.

1,104,457. Patented July 21, 1914.

Fig. 1

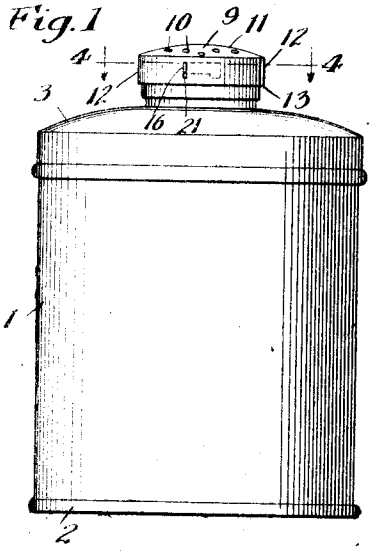


Fig. 2

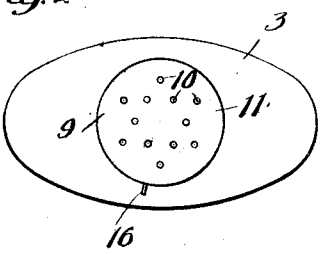


Fig. 4

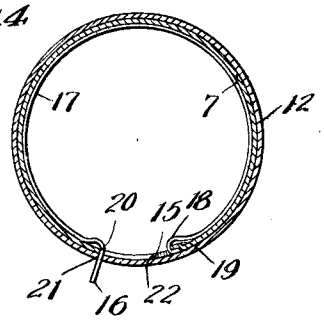


Fig. 3

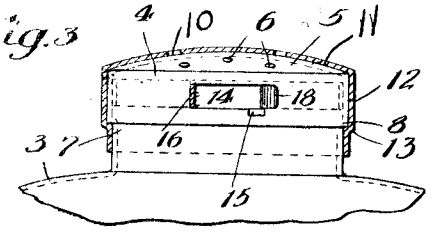


Fig. 5

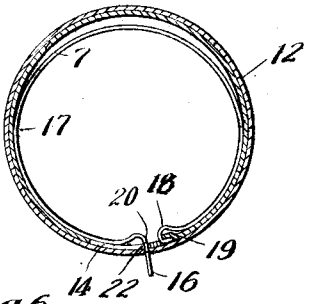
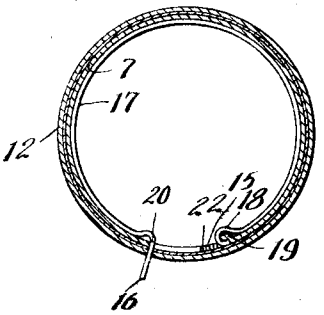


Fig. 6



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE W. WEBER, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SIFTER-TOP POWDER-CAN.

1,104,457. Specification of Letters Patent. Patented July 21, 1914.

Application filed November 1, 1910. Serial No. 590,151.

To all whom it may concern:

Be it known that I, GEORGE W. WEBER, a citizen of the United States, residing in New York, in the county of New York and State of New York, have invented a new and useful Improvement in Sifter-Top Powder-Cans, of which the following is a specification.

My invention relates to improvements in sifter top cans or containers for powder or other articles.

The object of the invention is to provide a sifter top can or container of a simple and efficient construction, capable of being manufactured at small cost, in which the rotary closure sifter member or cap may be readily opened and be self closing and also have provision for holding or locking it in its open position when it is not desired to hold it temporarily open with the thumb or finger.

To practically accomplish this object or result, and herein my invention consists, I combine with the top head or cover of the container, which is provided with a fixed or non-rotary perforated sifter member preferably in the form of a shouldered, cylindrical, central boss, a rotary closure sifter member or cap having a flange, the lower edge of which is crimped under the shoulder of the neck portion of the central boss to rotatably connect the cap with the boss, the cylindrical wall of the central boss having a segmental slot provided with a locking notch at one end, and a combined spring and finger piece, preferably a flat spring of the general shape of the major segment of a circle, and secured at one end to the central boss and having its finger piece end projecting out radially through the segmental slot in the peripheral wall of the central boss, and also through a narrow upright slot in the flange of the rotary cap, the segmental slot in the boss permitting the rotary cap to be turned sufficiently by the radially projecting finger piece to open and close the sifter openings. The rotary closure cap may be held open by the finger piece temporarily with the thumb or finger, or it may be more permanently held open by simply depressing the finger piece into the notch at the end of the segmental slot in the side wall of the central boss. The flat spring is preferably of reduced width at its finger piece end, so that the shoulder formed by the reduced end will serve to more tightly close the upright slot in the flange of the rotary cap through which the finger piece projects.

My invention further consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described and more particularly pointed out in the claims.

In the accompanying drawing forming a part of this specification, Figure 1 is a side elevation of a sifter can or container embodying my invention. Fig. 2 is a plan view and Fig. 3 is an enlarged, detail view similar to Fig. 1, but showing the rotary sifter member or cap in section, and also showing the finger piece end of the spring in section. Fig. 4 is a detail, horizontal section on line 4—4 of Fig. 1, showing the position of the parts when the sifter openings are closed. Fig. 5 is a similar view, showing the position of the parts when the sifter holes are open. Fig. 6 is a sectional view, similar to Fig. 4, showing a modification in which a washer or packing is interposed between the cylindrical wall of the central boss and the cap flange to further guard against leakage of the powder.

In the drawing, 1 represents the body of a sifter top can or container having a bottom head 2 and top head or cover 3, provided with a fixed or non rotary perforated sifter member 4, preferably in the form of a raised central cylindrical boss, having a dome portion 5, provided with sifter holes 6, and having its cylindrical or neck portion 7 provided with an annular shoulder 8.

The rotary sifter member 9 is furnished with sifter holes 10 in its dome portion 11, and with a cylindrical flange 12, having an inward crimp or annular shoulder 13 engaging the annular shoulder 8 of the neck 7 to rotatably connect the cap 9 with the fixed or non rotary sifter member.

The cylindrical wall or neck portion 7 of the fixed or non-rotary sifter member is provided above its annular shoulder 8 with a segmental slot 14, having a lock notch or enlargement 15 at one end thereof for engagement with the finger piece 16 of the spring 17.

The spring 17 is preferably in shape the major segment of a circle, and it is secured at one end to the fixed sifter member 4, preferably at one extremity of the seg-

mental slot 14 in its cylindrical wall or neck 7 by means of a hook or fold 18 at one end of the spring, which embraces an inwardly offset lip 19 in the cylindrical wall or neck 7 of the fixed sifter member 4. The finger piece 16 is bent at an angle to the spring 17 and is preferably of reduced width, thus forming a shoulder 20 on the spring adjacent to the finger piece, which aids in closing, powder-tight, the narrow upright slot 21 in the flange 12 of the rotary closure sifter member or cap 9 through which the finger piece end of the spring projects.

The ends of the segmental slot 14 serve by engagement with the finger piece as stops to limit the extent to which the rotary sifter member or cap may be turned in either direction. When the finger piece 16 is in engagement with the stop shoulder 22 at the left end of the segmental slot 14, as shown in the drawing, the sifter openings in the rotary cap 9 are out of register with the sifter openings in the fixed sifter member 4, and the sifter openings are thus closed. When the finger piece 16 is in engagement with the stop shoulder 22 at the right hand end of the segmental slot 14, the sifter holes in the rotary sifter member or cap 9 register with those in the fixed sifter member 4, and the sifter openings are thus open for sifting out the powder. The finger piece 16 may be held in its open position temporarily with the finger or thumb, or, if it is desired, the finger piece 16 may be depressed into the lock or holding notch 15 of the segmental slot 14, and the rotary cap will thus be self held in its open position. To cause the rotary cap to self close, it is only necessary to release the finger piece by pushing it upward out of engagement with the shoulder of the notch 15 if it has been depressed into said notch. Otherwise, the rotary cap self closes when the finger piece is let go.

While in practising my invention, I prefer to rotatably connect the fixed and rotary sifter members by means of the interengaging shouldered necks and flanges of said parts, and to construct the different parts substantially as shown in the drawing, I desire it to be understood that my invention is not confined to any particular construction of fixed or rotary sifter members or to the particular means shown for rotatably connecting the same.

If desired, or in special cases where required, to insure exceptional powder tightness of the closure, a washer 23 may be interposed between the cylindrical wall of the central boss and the cap flange to further guard against leakage, as shown in Fig. 6. This washer may preferably be of paper or like material and extend entirely around the circumference of the central boss. It should be made sufficiently narrow to move up and down with the finger piece 16. In operation, it turns with the rotary cap and finger piece.

I claim:—

1. An article of manufacture of the character described comprising, in combination: a container having a perforated top head, the latter being formed with a cylindrical neck portion having a slot therein; a perforated cap mounted on the outside of said top head and having a depending flange encircling said neck portion, said flange being provided with an opening; a spring mounted within said top head and having one end thereof extending through said slot and said opening; and means for holding the cap in open position against the action of said spring, substantially as specified.

2. An article of manufacture of the character described comprising, in combination: a container having a perforated top head provided with a necked-in portion, the necked-in portion having a segmental slot therein; a perforated cap having a depending flange encircling said necked-in portion, the depending flange being provided with an opening; and a spring within said top head having one end thereof secured to one edge of the segmental slot and the other end thereof projected through said slot and the opening in said flange, the extended end of said spring forming a finger piece by means of which the cap may be rotated relatively to the top head of the container, substantially as specified.

3. An article of manufacture of the character described comprising, in combination: a container having a perforated top head, the top head being formed with a cylindrical neck portion having a segmental slot therein, said slot being provided with a notch at one end thereof; a perforated cap mounted on the outside of said top head and having a depending flange encircling said neck portion of the top head, said flange being provided with an opening; and a spring mounted within said top head having one end thereof extending through said segmental slot and the opening in said flange and adapted to engage in said notch to thereby hold the rotatable cap in its open position, substantially as specified.

GEORGE W. WEBER.

Witnesses:
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