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S. H. LINDGREN

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DREDGING CAN

Filed May 1, 1924

Fig. 1

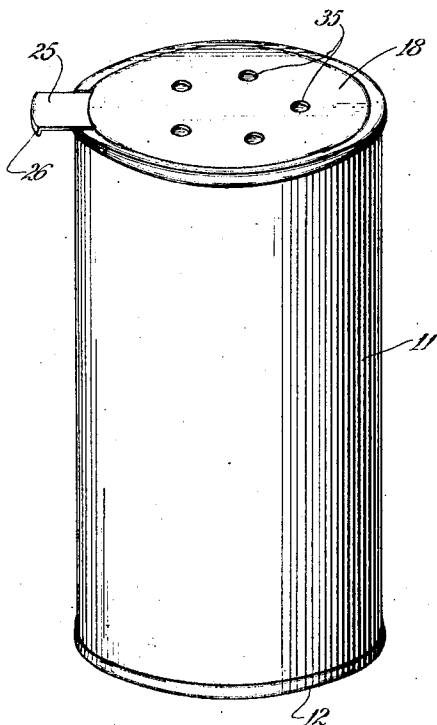


Fig. 4

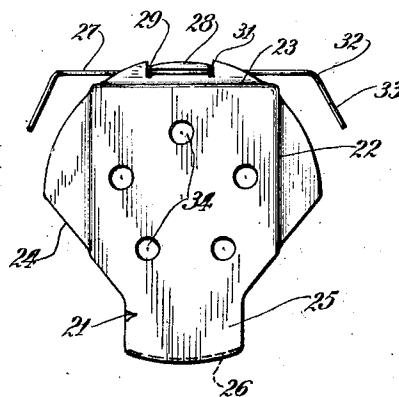


Fig. 5

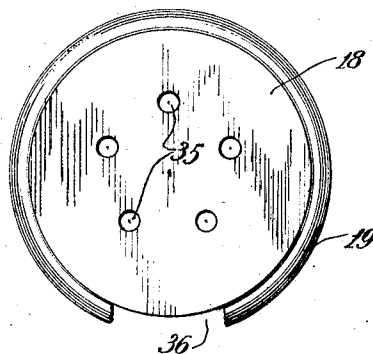


Fig. 2

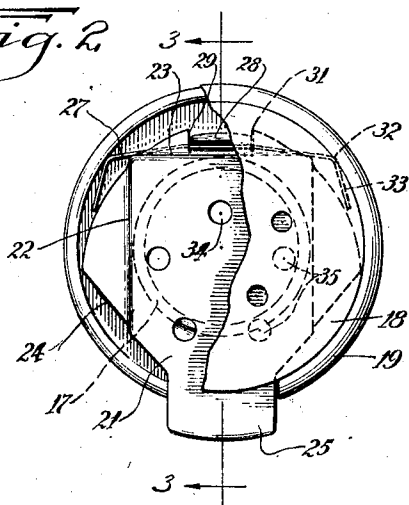
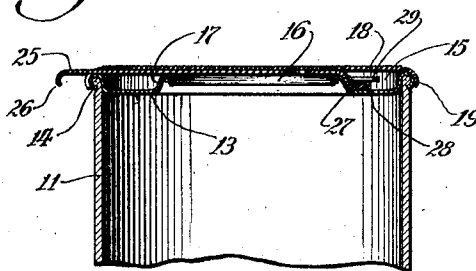


Fig. 3



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UNITED STATES PATENT OFFICE

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DREDGING CAN

Application filed May 1, 1924. Serial No. 710,235.

My invention relates to dredging cans and particularly to a sifter top of the self-closing type, the novelty residing in an adaptation of the spring closing principle and in the arrangement and form of the parts.

An important object of the invention is the provision of a self-closing sifter top of efficient action and so constructed that the sliding member will not stick when operated, or be easily broken or out of order.

A further object of the invention is the provision of a sifter top consisting of inexpensive, easily formed parts which will permit production of the containers at low cost.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawings, discloses a preferred embodiment thereof.

Referring to the drawings,

Figure 1 is a perspective view of a dredge top can in which my invention is embodied;

Fig. 2 is a top plan view, partially broken away for better illustration;

Fig. 3 is a partial vertical section;

Fig. 4 is a top plan view of the slide; and

Fig. 5 is a top plan view of the upper perforated cover member.

The container body 11, as shown, is of cylindrical form and is made of fiber with a bottom end 12 permanently secured thereto and a sifter top which forms the subject of my invention and will now be described in detail.

Said top comprises an inner metal member 13 disposed within the mouth of the container body and having a flange 14 crimped upon the upper edge of said body, the material of said member, inwardly from said flange, being disposed to provide a vertical annular wall 15. A central opening 16 is provided in said top member 13, the material about said opening being formed in an annular shoulder, or bead 17. Said shoulder or bead 17 is of substantially the height of the peripheral wall 15 and provides a guide for the closing slide, as will hereinafter appear. A perforated top member 18 is secured over

the member 13, having a depending flange 19 crimped upon the flange 14 of said member 13.

A slide 21 is provided between the top members 13 and 18 and is formed with longitudinal shoulders 22 and a transverse shoulder 23 adapted to contact with the shoulder or bead 17 to guide said slide in its movement and to hold it in desired relation. The material adjacent the shoulders 22 and 23 is extended outwardly so that the body of the slide is of general circular configuration, being, however, cut away toward the front, as indicated at 24, to permit the necessary movement of said slide and to provide the forward extension, or lip 25 which is turned downwardly at the front at 26 (see Fig. 3) to form a thumb-piece for operation of the slide.

An important advantage of the construction just described, from a factory standpoint, is the ease of assembly. The slide 21 may be positioned upon the extended neck 17 with the tongue 25 extending in any direction and without taking time to align the parts in any particular manner. The over-top 18 may then be applied by the operator with his other hand, the complete assembling operation requiring much less time than with other types of self-closing dredge cans of which I am aware.

A wire spring 27 is carried at the rear of the slide 21, being secured in place by means of a lip 28 curled about said wire and formed by slitting the material at the rear edge of the slide, as indicated at 29 and 31. Said spring 27 has its ends open at an angle 32 to provide forward extensions 33 adapted to be disposed within and adjacent the annular wall 15 of the top member 13. Said spring serves to hold said slide normally in forward, or closing position with the perforations 34 thereof out of alignment with perforations 35 in the upper top member 18. The flange 19 of said top member 18 is cut away, as shown at 36 in Fig. 5, and the thumb-piece 25 of the slide 21 extends through the opening thus provided into position to be engaged by the thumb of the hand in which the container is held. When pressure is exerted upon said thumb-piece, the slide will move

inwardly, tensioning the spring 27 against the wall 15 until the perforations 34 in said slide are brought into registration with the perforations 35 in the top member 18. Upon
 5 release of the thumb-piece, it will be evident that the slide will be automatically projected outwardly and the perforations 35 thereby closed.

It is thought that the invention and many
 10 of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts, without departing
 15 from the spirit and scope of the invention, or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

20 1. A sifter top for containers, comprising spaced apart top members, the outer one of which is provided with sifter openings, a perforated slide interposed between said
 25 members and engaging and guided by the sides of one of said top members, and a wire spring carried by said slide at the rear end thereof and having its ends bent forwardly
 30 to provide an elbow adapted to contact with the peripheral edge of one of said top members when the slide is pushed inwardly, said
 35 spring being adapted to hold said slide normally in projected position with the perforations therein out of registration with the perforations in said top member and permitting retraction of the slide under pressure to bring said perforations into registration.

2. A sifter top for containers, comprising
 40 spaced apart top members, the outer one of which is provided with sifter openings, a perforated slide interposed between said members, and a transverse wire spring slidably carried in a guideway formed in the rear end of said slide and having its ends
 45 bent forwardly to provide an elbow adapted to contact with the peripheral edge of one of said top members when the slide is pushed inwardly, said spring being adapted to hold said slide normally in projected position with the perforations therein out of registration
 50 with the perforations in said top member and permitting retraction of the slide under pressure to bring said perforations into registration.

55 3. A sifter top for containers, comprising an inner cap member secured to the upper edge of the container body and having an outlet opening and an upstanding shoulder surrounding said opening, a second cap member disposed above said first-mentioned
 60 member and having sifter openings therein, a perforated slide formed with depending wall parts adapted to engage said upstanding shoulder as a guide, said slide having a portion thereof projecting from said cap mem-

bers and forming a thumb-piece, and spring means normally holding said slide in projected or closing position.

4. A sifter top for containers, comprising
 70 an inner cap member secured to the upper edge of the container body and having an outlet opening and an upstanding shoulder surrounding said opening, a second cap member disposed above said first-mentioned member and having sifter openings therein, a perforated slide formed with depending wall parts adapted to engage said upstanding shoulder as a guide, said slide having a portion thereof projecting from said cap members and forming a thumb-piece, and a wire spring
 75 connected centrally with the rear end of said slide and having forwardly bent portions forming elbows adapted to engage the peripheral edge of one of said wall members and to be compressed thereagainst when said
 80 slide is moved inwardly.

5. A sifter top for containers, comprising an inner cap member secured to the upper edge of the container body and having an outlet opening and an upstanding shoulder surrounding said opening, a second cap member disposed above said first-mentioned member and having sifter openings therein, and a perforated slide normally spring held in position closing said openings and being yieldable under pressure of the thumb, said slide being guided by the sides of said shoulder in its movement between said upstanding shoulder and said second top member.

6. A sifter top for containers, comprising
 100 an inner cap member secured to the upper edge of the container body and having an outlet opening and an upstanding shoulder surrounding said opening, a second cap member disposed above said first-mentioned member and having sifter openings therein, and a slide interposed between said cap members and engaging the sides of said upstanding shoulder and adapted to be accurately located with respect thereto by said shoulder, said slide having perforations normally out of registration with the perforations in said second cap member and being yieldable under pressure to bring said perforations into registration.

7. A sifter top can, comprising a body wall, an under cap member having a shoulder fitting within the body wall, and crimped over to embrace the top edge of said body wall, said under cap member being raised at its center and in said raised portion having a central opening, an outer cap member disposed above said under cap member, having its edge curled about the curl of the under cap member and the body wall and providing within said curl a substantially smooth, single plane top surface, and a slide having longitudinal guiding shoulders and a part extending through the outer cap member and arranged between the raised central part of
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the under cap member and the outer cap member, said slide and outer cap member having openings adapted to be brought into registration, a spring normally pressing said slide to move said openings out of registration, the
5 part of said slide extending through the outer cap member being adapted for engagement to move the slide against the action of the spring to bring the openings in the slide into
10 registration with the openings in the outer cap member.

8. A sifter top can, comprising outer and under cap members having openings there-through, a slide arranged between said cap
15 members for opening and closing said openings, said inner cap member and slide having interengaging parts for guiding the slide, the engagement between the slide and the under
20 cap member permitting accurate slide action independently of the circumferential position of the slide with respect to the inner cap member.

9. A sifter top for containers, comprising an under cap member secured to the upper
25 edge of the container body and having an outlet opening therein, an over cap member having sifter openings therein, and a slide disposed between said cap members for opening
and closing said openings, said slide having
30 an extended operating part and being movable transversely between said cap members, irrespective of the circumferential position of said operating parts with respect to the
under cap member.

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