Nov. 7, 1939. R. J. WHITE 2,178,620

CONTAINER

Filed Nov. 12, 1938

Fig 1

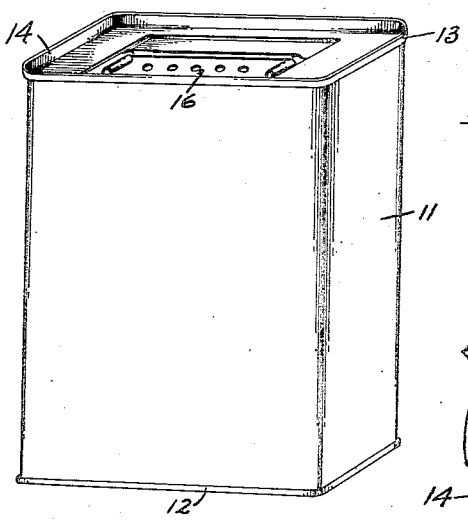


Fig 2

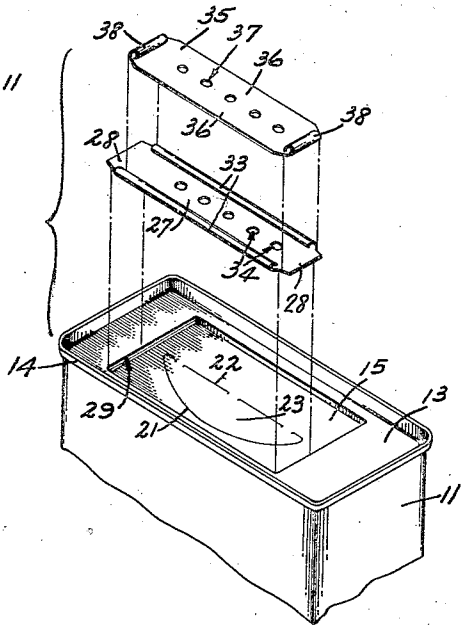


Fig 3

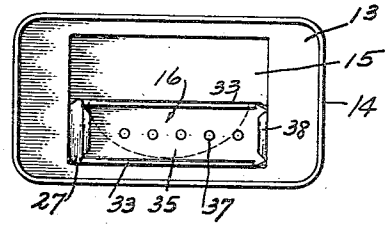


Fig 6

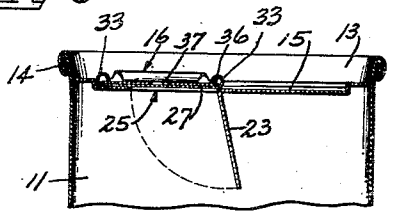


Fig 4

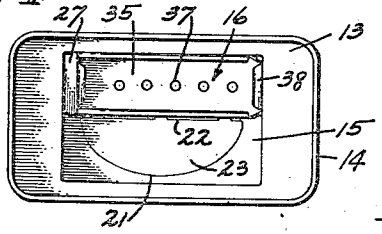


Fig 7

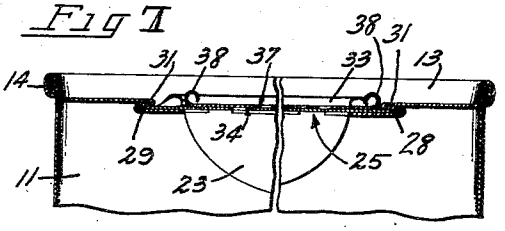
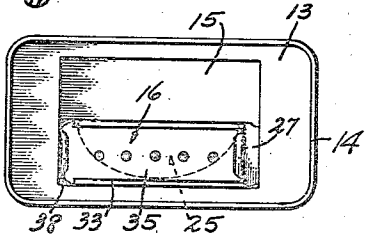


Fig 5



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UNITED STATES PATENT OFFICE

2,178,620

CONTAINER

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Application November 12, 1938, Serial No. 240,147

3 Claims. (Cl. 221—62)

The present invention relates to dredging cans for powders, condiments and the like and has particular reference to a fully sealed can which is opened by breaking out scored parts after which a duplex sliding reclosure unit movably secured to the can becomes available by means of which the can may be fully opened for dispensing of its contents as in removal by a spoon, or the dispensing may be done by sifting the contents through dredge openings or the can may be reclosed against any sifting of the contents, all by the proper positioning of the various elements in the sliding unit.

An object of the present invention is the provision of a dredging can which is initially sealed on its contents and which may be opened to make effective a duplex sliding closure unit of simple construction, being a slide within a slide, such an opening unit conditioning the can for reclosing or for different ways of dispensing.

A further object of the invention is the provision of a reclosure unit which has different positions in a can top and which can be moved as desired under a simple sliding action to permit full open dispensing or dredge and sifting dispensing, the unit including a supplemental slide element having independent sliding movement within the slide unit to reclose the can when desired.

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 drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a dredging can embodying the present invention;

Fig. 2 is an exploded perspective view of the parts comprising the reclosure unit, dot and dash line indicating the relationship between the parts;

Figs. 3, 4 and 5 are top plan views of the can showing various positions of the reclosure unit;

Fig. 6 is a transverse section on an enlarged scale through the upper end of the opened can and showing the can reclosed; and

Fig. 7 is an enlarged longitudinal section of the same can arrangement as in Fig. 6 with the central portion of the can broken away.

The present invention is concerned with a dredge can having a duplex sliding closure element which only becomes effective after the can has been opened and the drawing illustrates a rectangular shape of can by way of example. It comprises a can body 11 preferably formed of metal and provided with an imperforate bottom or end member 12 and a top end member 13. A conventional double seam 14 may be used to secure these parts together.

The top end 13 is primarily of the usual sunken panel or dished form required for double seaming and is further countersunk in a central rectangular depression 15 which provides the seat for the duplex reclosure unit, generally designated by the numeral 16. A semi-circular score line 21 (Figs. 2 and 4) is cut in the panel wall of the depression 15 and at opposite sides this line merges into an interrupted score line 22. Such score lines may be mere weakened places or they may be cut entirely through the metal of the top, such metal being then pressed back into the original plane occupied.

The score lines 21, 22 set off a removable section 23 which may be displaced from its panel position, as shown in Figs. 6 and 7, to provide a dispensing opening 25. In such an opening of the can, the can wall is bent along the broken line 22, the removable part being pushed into the can. Before such opening of the can, the panel wall of the depression 15 is smooth and may be considered as imperforate as far as holding the contents of the can.

The duplex reclosure unit 16 comprises a slide within a slide and is made up of two separate pieces. One of these is a lower flat slide member 27 (Figs. 2 and 7) which is longer than the longer dimension of the top depression 15. Its terminal ends 28 extend into grooves 29 pressed outwardly from the end walls of the panel depression. These grooves provide slideways for the slide member 27, overhanging shoulders 31 being thus formed in the depression end walls when the grooves are produced. These shoulders extend over the ends of the slide member 27 and prevent any slide displacement while allowing the slide free movement laterally of the can top.

Partially open curls 33 are formed at the sides of the slide member 27. This strengthens the slide, holds it flat so that it tightly engages the can top panel surface in any position that the slide unit may occupy and also provides finger holds to make the manual movement easier. Slide 27 is also cut through with perforations 34 which in the present embodiment of the invention are spaced from each other and are located along the longitudinal center line of the slide member.

The second part of the slide unit 16 is a supplemental slide element 35 which is shorter than the length dimension of the panel depression 15.

This supplemental slide is engaged with the slide member 27 and has longitudinal sliding movement relative to the lower slide. For this purpose the longitudinal side edges of the slide element (as at 36 in Fig. 6) extend into and are slidably held by the curls 33 of the other slide member.

For ease of assembly the slide element 35 may be inserted from either end of the slide member 27, the edges 36 easily entering the partially open curls 33 and this is done before the reclosure unit 16 is assembled in the can top.

Slide element 35 is also cut through by a series of perforations 37 which extend along the longitudinal center line of the element. The perforations are of the same size and are spaced at the same interval as the perforations 34. To make easier the longitudinal movement of the slide element within the slide member 27, finger holds are provided at the ends of the element, these being mere curls 38 formed in the ends.

When all of the can parts are assembled the slide member 27 of the reclosure unit 16 rests in close sliding position on the panel wall of the can top and the supplemental slide 35 rests in close sliding position on the slide member. This reclosure unit is in the position shown in Fig. 3 when the filled can is received by the ultimate consumer. The can is fully sealed at that time.

To open the can, the reclosure unit is moved laterally of the can top into the position of Fig. 4. In this position the scored lines 21, 22 are uncovered and the can may be opened by pushing in the removable section 23 bending the metal along the score line 22 and producing the discharge opening 25. The can is then in full open position and the desired amount of contents can be poured out or may be easily removed by inserting a spoon or other implement into the can through the discharge opening. The shape of the discharge opening lends itself to such procedure.

When the can is to be reclosed, the reclosure unit 16 is again moved back to the other side of the can. This covers the discharge opening. The sliding element 35 is toward the right (Figs. 3, 4 and 7) at such time and when in this position its perforations 37 are out of alignment with the perforations 34 of the slide member and the can is fully closed against sifting of its contents.

If a dredge or sifter dispensing is desired it is merely necessary to move the supplemental slide element 35 into the position shown in Fig. 5. This brings the perforations 34, 37 in alignment. These perforations, when the slide parts are so placed, are over the open discharge opening 25 and therefore there is free access for the contents to be dispensed through the aligned perforations.

It is thought that the invention and many 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 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:

1. A dredge top can comprising a top end having a rectangular depression, score lines cut in the panel wall of said depression and setting off a removable part which when depressed by separation along said score lines opens the can while forming a discharge opening, and a duplex reclosure slide unit located in said depression and slidably engaging a top wall of the can, said unit having two positions, one out of alignment with, the other over the top of said discharge opening when formed, said duplex unit comprising a slide member held in contact with the surface of said depression panel wall in either position of the slide unit, and a supplemental slide element held in sliding contact with said slide member and having movement at right angles to the movement of said reclosure unit one such position opening the can for sifter dispensing.

2. A rectangular dredge top can comprising a top end having a rectangular depression, score lines cut in the panel wall of said depression and setting off a removable part which when depressed by separation along said score lines opens the can while forming a discharge opening, and a rectangular lower slide member located in said depression and slidably engaging a top wall of the can, said lower slide member having two positions, one out of alignment with, the other over the top of said discharge opening when formed, the end walls of said top depression having grooves which provide for slideways for the ends of said lower slide member, and a supplemental slide member element disposed in sliding contact with said lower slide member, both said slide member and said slide element having perforations formed therein, said slide element having longitudinal sliding movement in said slide member to bring the perforations of the two parts into and out of register to adapt the can for sifter dispensing of its contents or to reclose the can, both sifting and reclosing positions being effective only when said sliding parts are over said discharge opening.

3. A dredge top can comprising a top end having a rectangular depression, the end walls of which are formed with lower grooves and overhang shoulders, the panel wall of said depression having score lines setting off a removable area, a lower slide member having perforations cut therethrough, said member being located in said depression with its ends extending under said shoulders and into said grooves, said slide member tightly contacting the top panel surface of said top end and having sliding movement within said depression, the side edges of said slide member being formed with open curls to provide for ease of sliding manipulation by digital pressure, and a supplemental slide element having perforations cut therethrough and mounted on top of said slide member with the side edges of said slide element slidably engaged in the open curls of said slide member, said element having curled ends to afford ease of sliding manipulation by digital pressure, said can being opened when said slide parts are in position to expose the score lines in said can top by pressing said removable area partially into the can thereby forming a discharge opening through which the can contents may be removed in bulk or the contents may be dispensed by sifting through said perforations of the sliding parts by engaging the curled sides of said lower slide member and moving it into position over said discharge opening and by engaging the end curls of said slide element and moving its perforations into register with the perforations of said slide member.

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