

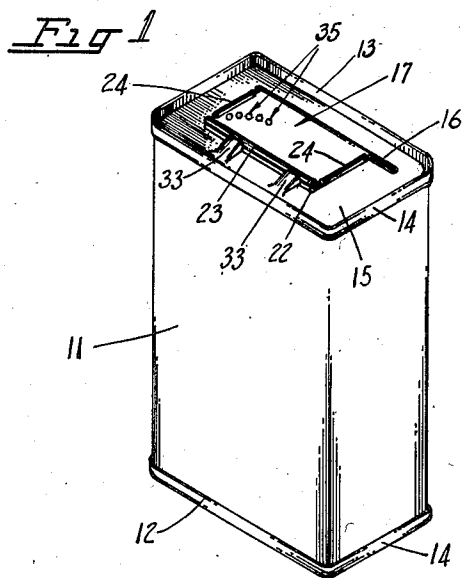
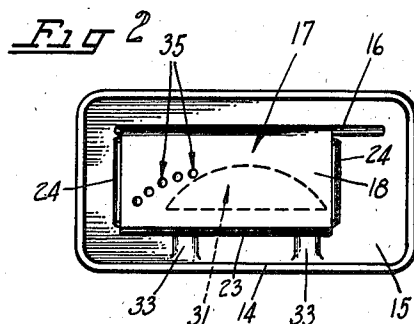
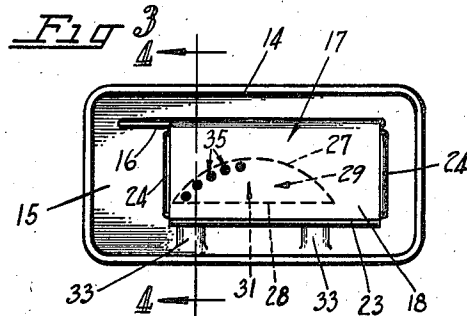
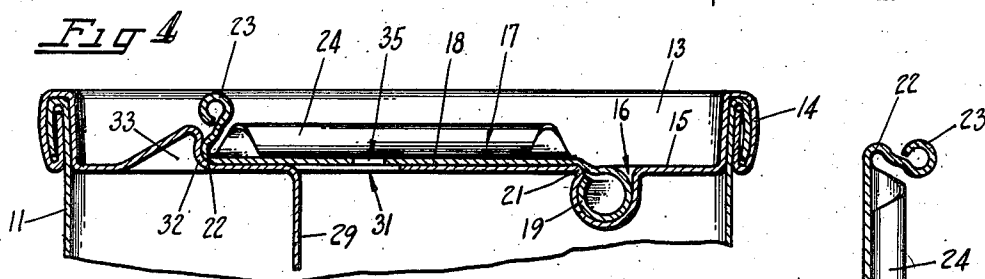
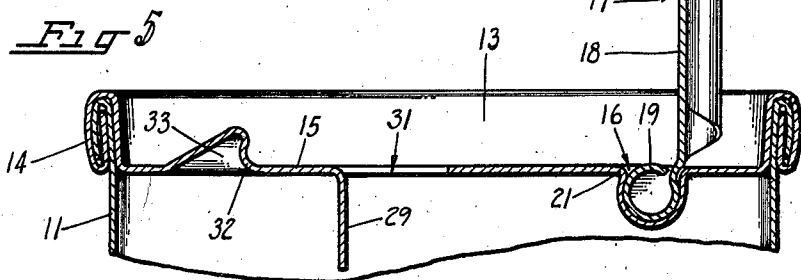
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2,310,271

CONTAINER

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CONTAINER

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4 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 cut in a central sunken panel of the can end or top, this panel being so formed as to provide a seat for a one piece combination slide and hinge member 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 a sifter action, the same hinged slide providing for a reclosure of the can against any discharge of contents, all of these different conditions being made effective by a proper coordination of hinging and sliding movements of the slide member.

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 perforated slide and hinge member which is hingedly retained in the can top without any additional parts and which may be swung on its hinge connection or slid along that connection in accordance with the kind of dispensing desired or to reclose the can against any dispensing action.

Another object is the provision of a simple two piece dredging top unit of the character described including a hinge sliding element of simple construction formed from flat stock and having its edges curled, the curled edge along one side providing a hinge pintle part and along the opposite side a snap holding part, both hinge and snap constructions allowing for sliding of the element without disturbing its hinging action.

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, the view showing the can closed;

Figs. 2 and 3 are plan views showing the slide hinge closure in different positions; and

Figs. 4 and 5 are transverse sections taken on the line 4—4 in Fig. 3 and drawn to an enlarged scale.

The present invention is concerned with a dredging can of metal or the like material having a simple one-piece combination hinged and sliding closure member. Such a closure member is of simple construction and is anchored in the usual sunken panel wall of a double seamed

can end or top in a combination hinge and slide connection formed by a proper shaping of one side edge of the slide working within a shaped groove or channel formed in the can top.

Both the combination sliding and hinged closure member and the can top are also shaped to provide catch members which retain the closure in close fitting contact with the can top when it is in one position of its hinging action. Such a combination sliding and hinge closure is preferably of rectangular form so that it will more completely cover a dispensing opening which is made at the time the can is initially opened by a breaking out of the scored part of the top end. By properly coordinating the hinging and sliding functions of the closure member and the can top, different dispensing actions may be obtained and the can after its initial opening may also be reclosed.

A preferred and usual style of can is shown in the drawing as being rectangular, the body being designated by the numeral 11. The can body is secured to an imperforate bottom or end member 12 and an imperforate top end member 13. The two end members may be secured to the body in conventional double seams 14.

Where a conventional double seam is used, the top end 13 of the can is primarily of the usual dished form required for double seaming leaving a flat panel wall 15. The combination slide and hinge closure member is located so that it may be completely confined within the dished section of the can end and without protruding beyond the outer edge of the double seam. This allows for better packing or stacking of the cans.

The connection between the closure member and the can is made without additional parts, the wall 15 adjacent one long side of the can top 13 being formed with a depressed groove 16 (Figs. 2 and 4) the ends of which terminate short of the surrounding double seam. The combination hinge and slide member is designated broadly by the numeral 17 and comprises a flat section 18 one edge of which is formed as a continuous tubular or curled wall 19. This curled edge is located in the slot or groove 16 of the can top. The length of the curled edge 19 is less than the length of the groove 16 and the fit of the curled edge within the groove is such as to allow for free longitudinal movement as well as hinge movement of the member 17 relative to the can end 13.

After the curled tubular part 19 of the closure member has been inserted into the groove 16

one side wall of the groove may be bent inwardly as at 21 (Fig. 4) to closely confine the tubular section of the closure and to prevent its being bodily removed from the groove 16. The curl 19 of the closure member is left slightly open along one edge to provide a certain springiness of the curl within its groove seat. This is sufficient to frictionally hold the closure member in various positions.

Closure member 17, along the side opposite to the curled edge 19, is bent upwardly in a curved shoulder 22 and this terminates in a tubular curl 23. These provide for a spring holding of the closure member in its position on the can top. The short sides of the closure member 17 are bent up into reinforcing curled edges 24. This tends to hold the flat wall 18 of the closure member in a single plane while at the same time allowing for some spring action along its two edges 19 and 22.

When the can of the present invention is received by the ultimate consumer, the closure member 17 is preferably in closed position, this being the position illustrated in Fig. 1. At such time the can is sealed on its contents and must therefore be initially opened before the closure member 17 becomes effective. The wall 15 of the can top at about its center is cut through with a curved score line 27 the ends of which may be joined by a straight score line 28.

The score line 27 may be cut entirely through the can top wall or may be only partially scored and in a similar manner score line 28 may be partially or wholly cut through the panel wall. If line 28 is cut entirely through the panel wall it is necessary to make this a broken score line so that parts of the metal will remain along the extent of the line. In any event the top remains imperforate as far as the sealing features for the can are concerned. The lines 27, 28 set off a removable or depressible part 29 which is adapted to be pressed into the can to initially open it.

This initial opening of the can may be easily done by pressing down on the removable section along the line 27 so that the removable area 29 bends along the score line 28 the part being thus displaced from the plane of the top but adhering to it. This open position is illustrated in Figs. 4 and 5.

Pressing of the removable part 29 from the plane of the panel wall 15 provides a dispensing opening 31. By reason of the curved and straight outline of this opening the contents of the can may be removed by inserting a spoon into the opening. The straight edge of the opening provides a scraping edge so that a level spoonful may be had. Fig. 5 illustrates the relative position of the slide member 17 and the can at such a time.

In many cases it is desirable to dispense the contents of the can by a sifting or dredging action and when this is to be done the closure member 17 is again moved down by hinging action into closed position within the can top and its wall 18 engages the wall 15, as illustrated in Fig. 2. In this closed position, the wall 18 of the member 17 presses tightly against the can end wall being held by the engagement of the catch shoulder 22 of the closure member with a pair of partially circular pockets or recesses 32 (Fig. 4) which are formed in lugs 33 pressed out and extending up from the end wall 15.

The shoulder 22 is of such size and shape as

to tightly fit these pockets 32 of the lugs 33 and the spring of the metal along the curved shoulder is sufficient to hold the closure member in its lowered position on the can top.

Dredge or sifter perforations 35 are cut through the flat wall 18 of the closure member 17 adjacent one end, as best illustrated in Fig. 2. In the position of Fig. 2 these dredge openings are closed by the can top wall 15 just beneath. It is therefore necessary to slide the closure member 17 across the can top so that the dredge openings will align with and be directly over the discharge opening 31. This sliding movement is made possible by the combination hinge and slide construction already described which includes the parts 16, 19 and 21. The curved shoulder 22 of the closure member also easily slides within the pockets 32 of the can top lugs 33 when such a movement is effected.

The perforations 35 are preferably arranged along a circular line so that when the closure member is moved from the position of Fig. 2 into the position of Figs. 3 and 4, this line of perforations will fall just inside of the curved edge of the dispensing opening 31. This allows free passage of the contents of the can through these openings and gives the desired dredging or sifting action when the can is shaken or tipped in the usual manner.

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 dispensing area therein, and a flat perforated closure member having a sliding and hinging connection with the said top end, whereby said closure member when in one position against the can end covers the dispensing area and when slid to another position relative to said end registers its perforations with said area for a sifting dispensing action, and when hinged outwardly relative to said end exposes said area for a bulk dispensing action.

2. A dredge top can comprising a top end having a dispensing area therein, a straight grooved seat formed in said top end extending along one side adjacent said area, a flat perforated closure member for covering and uncovering said area, and a tubular sliding hinge pintle carried along one edge of said closure member and having a hinge and sliding engagement within the grooved seat of said top end, whereby said closure member when in one position against the can end covers the dispensing area and when slid to another position relative to said end registers its perforations with said area for a sifting dispensing action, and when hinged outwardly relative to said end exposes said area for a bulk dispensing action.

3. A dredge top can comprising a top end having a dispensing area therein, a flat perforated rectangular closure member having a sliding and hinging connection with the said top end along one side, catch devices formed in said top end and engaging the free side of said closure member for holding the latter in one of its hinged positions, whereby said closure member when in

one position against the can end covers the dispensing area and when slid to another position relative to said end registers its perforations with said area for a sifting dispensing action, and when hinged outwardly relative to said end exposes said area for a bulk dispensing action.

4. A dredge top can comprising a can body, a top end seamed to said body in an upstanding rim edge and having a dispensing area therein, a flat perforated closure member of less dimension than said top end adapted to be contained within said upstanding seamed rim edge and having a tubular pintle element along one side and a spring catch element along the other, a straight depressed tubular grooved seat formed in said top end between said dispensing area and said upstanding rim and adapted to contain said closure pintle element in a hinging and sliding con-

5 nection, and catch devices located in said top end opposite to said grooved seat and on the opposite side of said area, said catch devices being adapted to engage the catch element of said closure member to hold the latter tightly against the wall of the top end surrounding said dispensing area, whereby said perforated closure member when held in one position against said top end closes said dispensing area and provides a reclosure for the can, said closure member when slid along said pintle grooved seat registers its perforations with said dispensing area thereby providing for sifter dispensing, and said closure member when detached from its catch devices and hingedly moved on its pintle connection fully exposing said dispensing area for a bulk dispensing action.

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