Oct. 31, 1933. F. A. PRAHL 1,933,449

DISPENSING CAN

Filed May 23, 1933

FIG. 1.

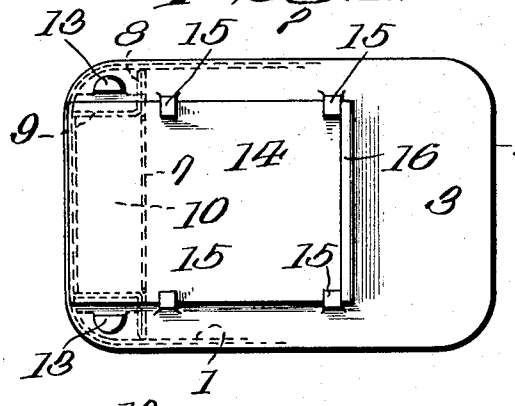


FIG. 2.

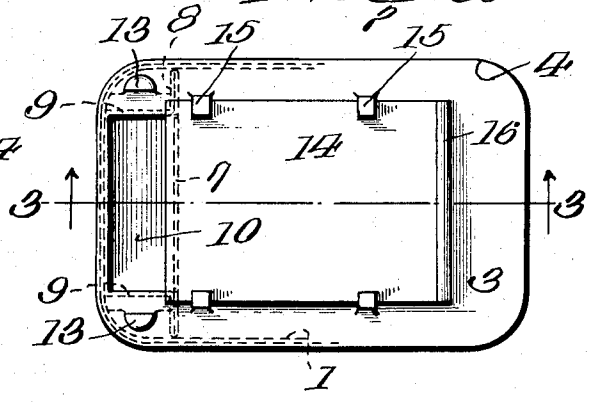


FIG. 3.

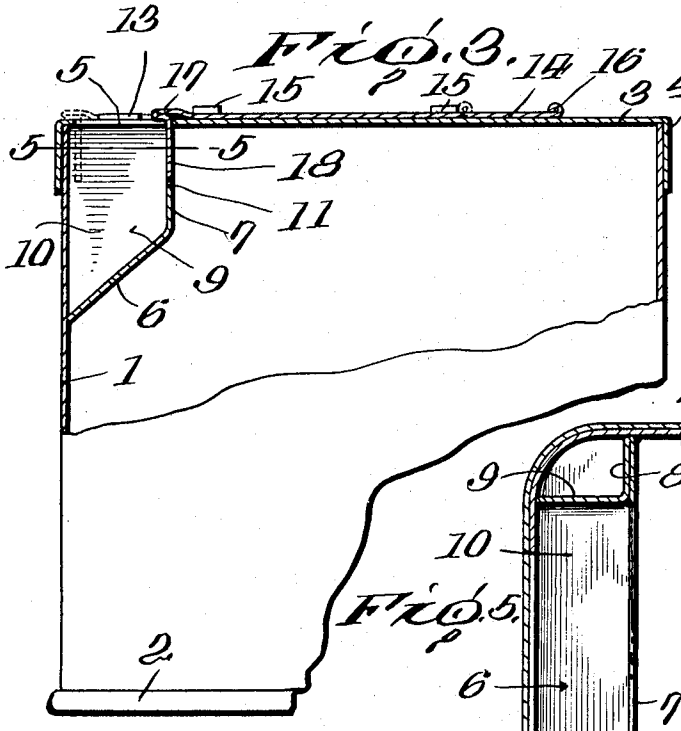


FIG. 4.

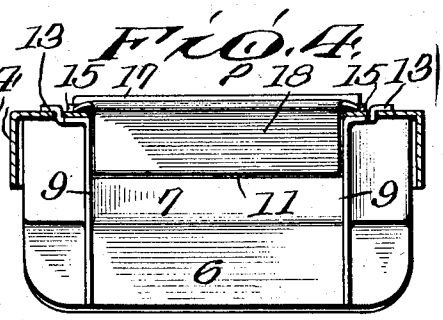


FIG. 5.

FIG. 7.

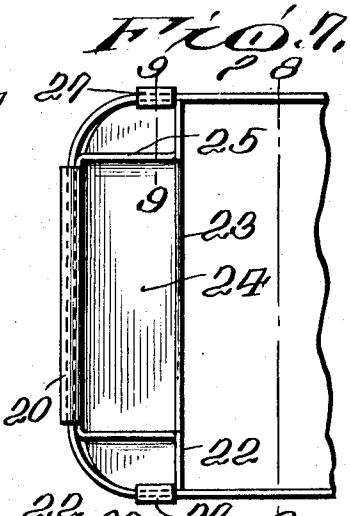


FIG. 6.

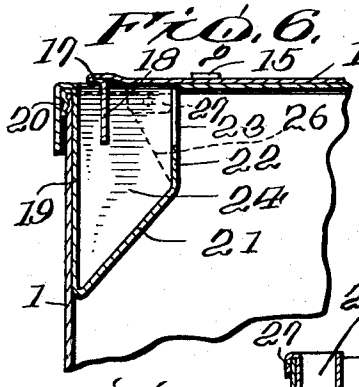


FIG. 8.

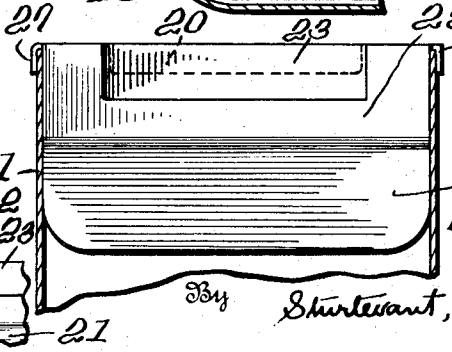
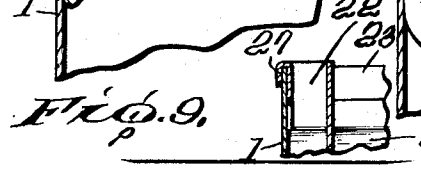


FIG. 9.



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DISPENSING CAN

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Application May 23, 1933. Serial No. 672,504

5 Claims. (Cl. 221—98)

The invention relates to new and useful improvements in a dispensing can which is adapted for dispensing a measured amount of powdered material. In my co-pending application Serial No. 661,371, filed March 17, 1933, there is shown and described a dispensing can wherein the can top has an exterior opening, and within the can is a measuring compartment which is directly beneath the opening in the can top, and which has an opening in the side wall thereof leading to the interior of the can. The cover is provided with a depending member which closes this interior opening when the opening through the can top is uncovered. The present invention is an improvement on the construction of the measuring compartment of my prior application.

An object of the invention is to form a measuring compartment which is so constructed that the contents of the can may be completely dispensed through said measuring compartment without trapping any of the contents in the can when said can is nearly empty.

In the drawing—

Figure 1 is a plan view of the can embodying the improvements with the cover for the opening in the can top closed;

Fig. 2 is a similar view but showing the cover as moved to open position;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2, on an enlarged scale;

Fig. 4 is a sectional view through the can top with said can top removed from the can body, and showing in side view the measuring compartment which is attached to and supported by the can top;

Fig. 5 is a sectional view on the line 5—5 of Fig. 3;

Fig. 6 is a view similar to Fig. 3, but showing a modified form of construction and with the cover only partially open;

Fig. 7 is a plan view of the construction shown in Fig. 6, with the can top removed;

Fig. 8 is a sectional view on the line 8—8 of Fig. 1, and

Fig. 9 is a sectional view on the line 9—9 of Fig. 7.

In the dispensing can of my prior application, the measuring compartment extends only part way across the can body and is also spaced away from the wall of the can body. In order to avoid any difficulty in dispensing through the measuring compartment the entire contents of the can by trapping the contents in the rear of the compartment and ends thereof, I have devised my present invention in which the measuring compartment is constructed of sheet metal and is so formed that the front wall of the compartment extends all the way across the can, and the rear wall of the compartment is either the rear wall of the can body or contacts therewith.

It is thought that the invention will be better understood by a detail description of the construction as illustrated in the drawing. This dispensing can, as shown in Figures 1 to 5, inclusive, consists of a body portion 1 having a bottom end secured thereto by a double seam 2. The upper end of the can body is open and is closed by a can top 3 having a depending flange 4 which slips down outside of the wall of the can body and makes frictional gripping contact therewith. In this form of the invention, the measuring compartment is carried by the can top. In the can top is a dispensing opening 5 which will be referred to as the exterior opening of the dispensing can. The measuring compartment is made from sheet metal which is bent so as to provide an inclined bottom portion 6 and a vertical front wall portion 7. The ends of the vertical portion 7 of the wall are bent back upon themselves as indicated at 8. These portions 8 are bent at right angles to the vertical wall 7, as indicated at 9. This forms vertical portions which are the end walls of the measuring compartment which is indicated at 10. Said end walls 9 extend below the vertical wall 7 and make contact with the inclined wall 6, as shown in Fig. 3. The wall 7 terminates at the line 11, thus providing an opening thereabove, which is the interior opening of the dispensing can through which the contents of the dispensing can may be directed into the measuring compartment 10. This interior opening extends only from the wall 9 at one end of the compartment 10 to the wall 9 at the other end of said compartment. The walls 9, 9 are bent outwardly so as to lie in a horizontal plane, and each wall is provided at its outer end with a lug 13 which extends through the slot in the can top and is bent over on to the outer face of the can top for the purpose of rigidly supporting the measuring compartment on the can top. The exterior opening 5 through the can top is closed by a cover 14 which slides beneath lugs 15, 15 cut from the can top and overlying the cover. The cover is provided with a rolled bead 16 which forms an upstanding rib to aid in the opening and closing of the cover.

The cover at its forward end is bent upwardly slightly at 17 and thence downwardly and inwardly and then again downwardly, as indicated at 18. This forms a cover for the interior open-

ing in the wall 7 of the measuring compartment. When the cover is in closed position, the upwardly bent portion 17 will pass over the top of the can top at the outer side of the exterior opening, thus closing the same. When the cover is in the position shown in Figures 2 and 3, the exterior opening 5 is uncovered and the interior opening 18 is closed. When the cover, however, is in the position shown in Fig. 1, and in the broken line position in Fig. 3, then the interior opening is uncovered and the exterior opening 5 is closed. At this time, if the can is turned on its side, or upside down, the contents thereof will flow into the measuring compartment, filling said compartment. When the can is righted and the cover 14 moved to the position shown in Fig. 3, it will strip the contents in the measuring compartment above the line 11 which is the upper edge of the wall 7 at the interior opening, and force this surplus content through the interior opening back into the can. This leaves in the measuring compartment a content which fills said compartment to the lower edge of the interior opening. The compartment is so proportioned that this is the desired measured amount of material. The interior opening is now closed, and by turning the container to an inclined position, the contents may be poured from this measuring compartment without dispensing any of the contents of the can other than that in the measuring compartment. By continued opening and closing of the cover and the turning of the can, the entire contents of the can may be measured and dispensed through the exterior opening. When the contents of the can have been nearly all dispensed, whatever remains in the can will face along the inclined wall 6 and enter through the interior opening into the measuring compartment. This wall 6 extends all the way from one side wall of the can to the other, and therefore, there are no pockets at the ends of the measuring compartment, or in rear thereof, in which the contents may be trapped, as in my prior structure.

It will be noted that the measuring compartment and the cover for controlling both the exterior and the interior openings, are all carried by the can top, and this can top may be readily applied to any can which is dimensioned so that it will slip onto the same. In other words, this can top is a dispensing can top which may be applied to the standard form of can with the usual slip cover, merely by removing the usual slip cover and replacing it with this dispensing slip cover.

In Figures 6 to 8, inclusive, there is shown a slightly modified form of the invention in which the measuring compartment is attached to the can body instead of to the cover. In this form of the invention the measuring compartment is made from a sheet of metal which is bent so as to provide a rear wall 19. This rear wall 19 is bent over the wall of the can body and caused to tightly contact therewith. It is also preferably indented as indicated at 20 in order to more firmly connect the wall to the can body. The metal sheet is also bent upwardly to form an inclined wall 21 and a vertical wall 22 having an opening 23 therethrough which is the interior opening leading from the measuring compartment 24 to the interior of the can body. The wall 19 only extends the length of the opening 23 in the vertical wall 22, and is bent inwardly so as to form end walls 25, 25 for the measuring compartment. These end walls are shaped so that they terminate along the inclined wall 21 and along the vertical wall 22, extending to the upper end thereof. The vertical wall 22 at its opposite ends has portions 26 bent at right angles thereto and extending above and folded over the upper edge of the side wall of the can, as indicated at 27. This folded over portion may be indented as indicated in Fig. 8, for firmly joining the portion 27 to the wall of the can body. The cover 14 is constructed in the same manner as the cover shown in Fig. 1, and has sliding movement beneath the lugs 15 in the can top. Said cover is provided with a raised portion 17 and a depending portion 18 which serves to close the interior opening 23. In this form of the invention, the walls 21 and 22 extend all the way across the can body. The opening 23 extends only part way across the can body, but is the full width of the measuring compartment 24, which extends from one wall 25 to the other wall 25 thereof. The manner of dispensing the contents of the can is precisely the same as that described in connection with the construction shown in Figures 1 to 5, inclusive.

It is obvious that minor changes in the details of construction may be made without departing from the spirit of the invention as set forth in the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters-Patent, is—

1. A dispensing can comprising a body portion, a can top for closing said body portion, said can top having an opening therethrough, a measuring compartment within said can body having a bottom wall extending from one side wall to the other and inclining upwardly from the end wall into the body portion of the can, and a vertical wall extending upwardly to the can top from said inclined wall and having an opening therethrough forming an interior opening through which the contents of the can may be passed into said measuring compartment, a cover for closing the opening in the can top, said cover having a depending member adjacent the forward end thereof which serves to close the interior opening when the cover is moved for uncovering said exterior opening.

2. A dispensing can comprising a body portion, a can top for closing said body portion, said can top having an opening therethrough, a sheet metal member shaped so as to form a measuring compartment supported wholly from said can top and including a bottom wall extending from one side wall to the other of the can body and inclining upwardly and inwardly from the end wall of said can body, a vertical wall extending upwardly to the can top from said inclined wall and having an opening therethrough forming an interior opening through which the contents of the can may pass into the measuring compartment, and a cover for closing the opening in the can top, said cover having a depending member adjacent the forward end thereof which serves to close the interior opening when the cover is moved for uncovering said exterior opening.

3. A dispensing can comprising a body portion, a can top for closing said body portion, said can top having an opening therethrough, a sheet metal member shaped so as to form a measuring compartment supported wholly from said can top and including a bottom wall extending from one side wall to the other and inclining upwardly from the end wall into the body portion of the can and a vertical wall extending upwardly to the

can top from said inclined wall and having an opening therethrough forming an interior opening through which the contents of the can may be passed into said measuring compartment, said opening being disposed centrally of the wall and extending only part way from one side wall to the other, said member being bent so as to form end walls for the measuring compartment, and a cover for closing the opening in the can top, said cover having a depending member adjacent the forward end thereof which serves to close the interior opening when the cover is moved for uncovering said exterior opening.

4. A dispensing can comprising a body portion, a can top for closing said body portion, said can top having an opening therethrough, a sheet metal member shaped so as to form a measuring compartment supported wholly by said can body and including a rear wall folded over the end wall of the can body at the upper edge thereof, said rear wall being formed integral with an inclined bottom wall extending upwardly into the body portion of the can, said inclined bottom wall being formed integral with a vertical wall extending to the can top, said vertical wall having an opening therethrough forming an interior opening through which the contents of the can may be passed into said measuring compartment, and a cover for closing the opening in the can top, said cover having a depending member adjacent the forward end thereof which serves to close the interior opening when the cover is moved for uncovering said exterior opening.

5. A dispensing can comprising a body portion, a can top for closing said body portion, said can top having an opening therethrough, a sheet metal member shaped so as to form a measuring compartment supported wholly by said can body and including a rear wall folded over the end wall of the can body at the upper edge thereof, said rear wall being formed integral with an inclined bottom wall extending upwardly into the body portion of the can, said inclined bottom wall being formed integral with a vertical wall extending to the can top, said vertical wall having an opening therethrough forming an interior opening through which the contents of the can may be passed into said measuring compartment, said opening in the vertical wall being disposed centrally of the wall and extending only part way from one side wall to the other, said metal member being bent so as to provide end walls for said measuring compartment disposed adjacent the ends of said opening, and a cover for closing the opening in the can top, said cover having a depending member adjacent the forward end thereof which serves to close the interior opening when the cover is moved for uncovering said exterior opening.

FREDERICK A. PRAHL.