Jan. 25, 1938. W. T. COX 2,106,629

MERCHANDISING PACKAGE

Filed Sept. 1, 1936

Fig. 1.

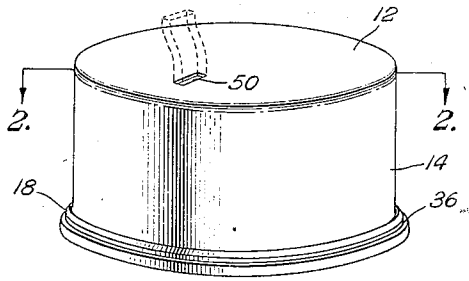


Fig. 2.

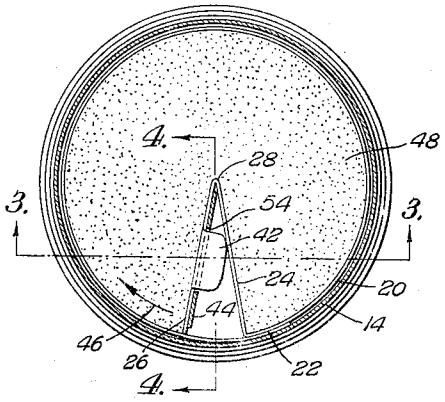


Fig. 3.

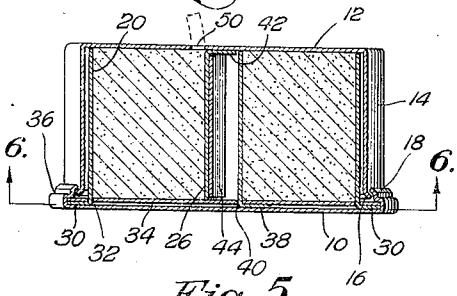


Fig. 4.

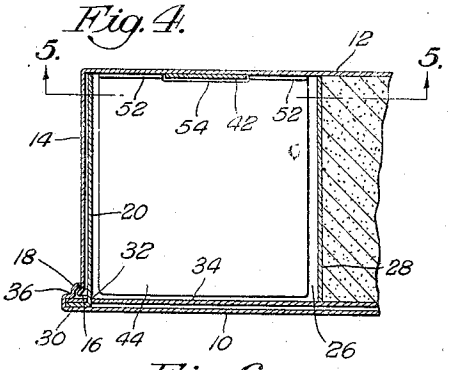


Fig. 5.

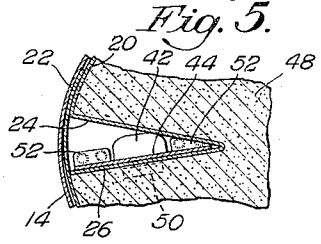


Fig. 6.

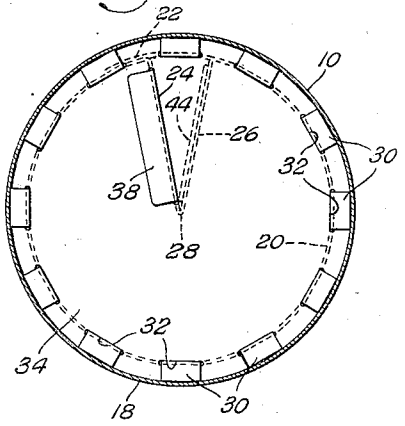


Fig. 7.

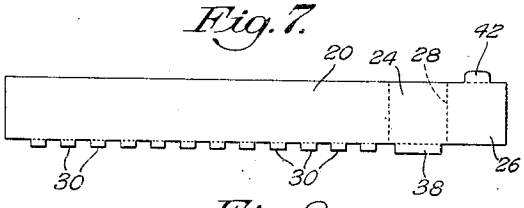
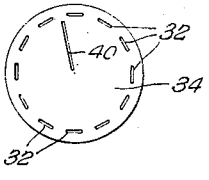


Fig. 8.



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UNITED STATES PATENT OFFICE

2,106,629

MERCHANDISING PACKAGE

Walter T. Cox, Chicago, Ill.

Application September 1, 1936, Serial No. 98,974

5 Claims. (Cl. 221—78)

My invention relates to the packaging of materials of a plastic nature, such as face creams, soap, shaving soap, etc., and includes among its objects and advantages the provision of an improved container embodying means for extruding the contents therefrom.

In the accompanying drawing:

Fig. 1 is a perspective view of a box embodying the invention;

Fig. 2 is a sectional view along the line 2—2 of Fig. 1;

Fig. 3 is a sectional view along the line 3—3 of Fig. 2;

Fig. 4 is a sectional view along the line 4—4 of Fig. 2;

Fig. 5 is a sectional view along the line 5—5 of Fig. 4;

Fig. 6 is a sectional view along the line 6—6 of Fig. 3;

Fig. 7 is a view illustrating a blank from which a portion of the box is constructed; and

Fig. 8 is a view of a box part cooperating with the blank illustrated in Fig. 7.

In the embodiment selected to illustrate my invention, I make use of a metallic bottom 10 to which I rotatably connect a metallic cover 12. The flange 14 of the cover 12 is flared at 16 and loosely retained within the flange 18 of the bottom 10. Within the cover 12 I mount a liner 20 of such material as stiff paper or fiber, treated to render it impervious to moisture. This liner has an outside diameter slightly less than the inside diameter of the flange 14 so as to permit free rotation of the cover 12 about the liner and within the flange 18.

Fig. 7 illustrates the blank from which the liner is formed. This liner is in the nature of a strip having sufficient length to define a complete circle arranged in overlapping relation, as at 22, and to provide a stationary wall 24 including an extruding element 26 integrally but hingedly connected with the wall at 28. The hinged connection may consist in weakening or scoring the material of the liner 20 at the location of the hinge.

The lower end of the liner 20 includes a plurality of tabs 30 which project through slots 32 in a bottom liner 34 of the same material as the liner 20. These tabs are bent underneath the bottom liner 34, as illustrated in Figs. 3 and 4. The flange 18 is depressed at 36 for pressing the peripheral margin of the bottom liner 34 and the tabs 30 firmly against the bottom 10, thereby connecting the parts into a unitary structure. While the liner 20 and the bottom liner 34 are firmly connected into a unitary structure, the cover 12 may be rotated freely about the liner 20.

The bottom edge of the stationary wall 24 terminates in a tab 38 which projects through a slot 40 in the bottom liner 34 and is bent underneath the latter in the same way as the tab 30. I make the tab 38 substantially coextensive in length with the wall 24. The upper edge of the extruding element 26 terminates in a tab 42 which is bent at right angles to the extruding element and arranged in contacting relation with the inner surface of the cover 12. To the inner surface of the cover 12 I fixedly connect a pressure plate 44 which is positioned between the stationary wall 24 and the extruding element 26 and lies against the latter for urging the extruding element in the direction of the arrow 46. By holding the bottom 10 in one hand and rotating the cover 12 with the other hand, the extruding element 26 may be rotated in the direction of the arrow 46 for exerting pressure on the plastic contents 48 to extrude the material through the opening 50 in the cover 12.

I arrange the pressure plate 44 in parallel relation with the extruding element 26 and provide the pressure plate with two tabs 52 which are welded to the cover. I recess the upper edge of the pressure plate 44 at 54 for accommodating the tab 42.

I prefer to make the opening 50 of rectangular configuration and position the opening with one side substantially aligned with the extruding element 26. In this way, the entire contents of the box may be extruded. In operation, a slight rotation of the cover 12 with respect to the bottom 10 will extrude a considerable quantity of the material 48. After the desired quantity has been extruded, the cover may be rotated slightly in the opposite direction, which brings the tab 42 underneath the opening 50 to establish a closure for the opening. The extruding mechanism is of relatively simple construction in that the liner 20 is formed as an integral part of the stationary wall 24 and the extruding element 26. The bottom liner 34 and the tabs 30 are firmly pinched within the flange 18 so as to connect the parts into a well assembled structure. The tab 34 lends good bracing action to the stationary wall 24, while the pressure plate 44 lends good support to the pressure element 26 in that the plate is substantially coextensive in area with the element.

While I have indicated the liner 20 as constituting material such as paper, the liner may be constructed of sheet metal. The metal may

be scored to provide the hinge **20** in the same way as the material previously described. I arrange the axis of the hinge **20** to coincide with the axis of the container.

Without further elaboration, the foregoing will so fully explain my invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

I claim:

1. A device of the type described comprising a base part and a cylindrical part rotatably related therewith, said parts being so constructed and arranged as to provide a container for plastic material, a cylindrical liner including a bottom positioned inside the cylindrical part and fixedly connected with the base part, said liner including an integral extension having a length equal to the inside diameter of the liner, said extension being bendable along a line coinciding with the axis of the cylindrical part, to provide a fixed wall and an extruding element, said fixed wall being fixedly connected with said bottom, and an operating connection between the extruding element and said cylindrical part for actuating the extruding element upon rotation of the base part or the cylindrical part relatively to the other, the latter being provided with an outlet opening.

2. A device of the type described comprising a base part and a cylindrical part rotatably related therewith, said parts being so constructed and arranged as to provide a container for plastic material, a cylindrical liner positioned inside the cylindrical part and fixedly connected with the base part, said cylindrical liner being provided with an extension shaped to provide a wall fixedly connected with the base part and an extruding element operatively connected with said cylindrical part, said extruding element being actuated upon rotation of either of the base part or the cylindrical part relatively to the other, and a pressure element fixedly connected with said cylindrical part for urging the extruding element in the extruding direction.

3. A device of the type described comprising two box parts movably related and so arranged as to provide a container for plastic materials, one of said box parts being provided with an outlet opening, a wall fixedly connected with one of the box parts, an extruding element hingedly connected with said wall and connected for movement with the other box part for extruding material through the outlet opening when either box part is moved relatively to the other, and a pressure element fixedly connected with one of said box parts for exerting pressure on the extruding element.

4. A device of the type described comprising two box parts movably related and so constructed and arranged as to provide a container for plastic material, one of said box parts being provided with an outlet opening, a wall fixedly connected with one of the box parts, an extruding element hingedly connected with said wall and connected for movement with the other box part for extruding material through the outlet opening when either box part is moved relatively to the other, an operating connection between the last mentioned box part and said extruding element, said operating connection including a closure for said opening.

5. In a device of the type described, a base part and a cylindrical part rotatably related therewith, said parts being so constructed and arranged as to provide a container for plastic material, a cylindrical liner positioned inside the cylindrical part, said cylindrical liner being provided with a slotted bottom, tabs carried by the liner and passed through said slots and bent back against said bottom, said liner including an extension bent back upon itself to provide a wall and an extruding element, said wall being fixedly connected with said bottom, and a pressure plate fixedly connected with one of said parts for urging the extruding element in the extruding direction, one of said parts being provided with an outlet opening.

WALTER T. COX.