June 11, 1935. A. RATCLIFF 2,004,218

CONTAINER

Filed March 25, 1933

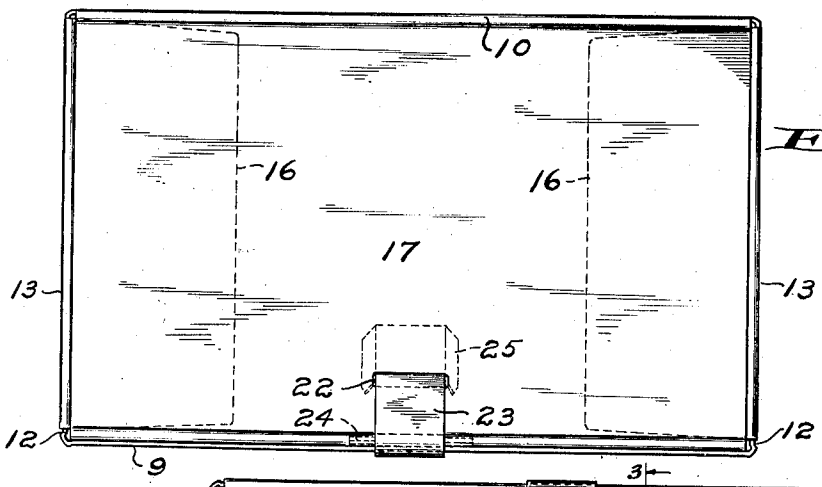


Fig. 1.

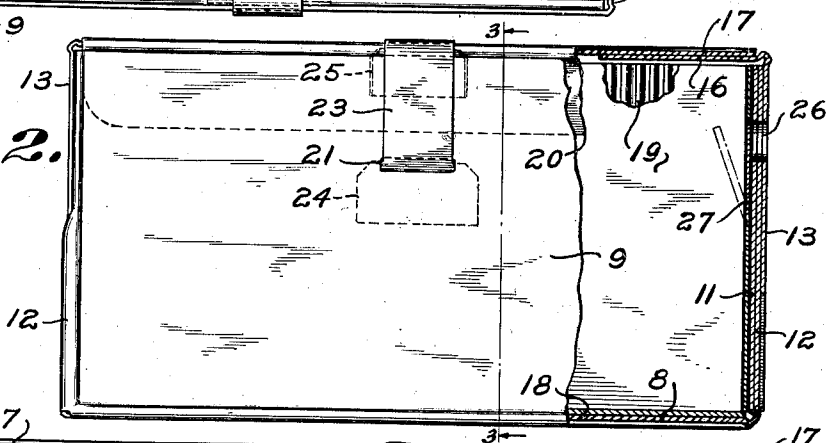


Fig. 2.

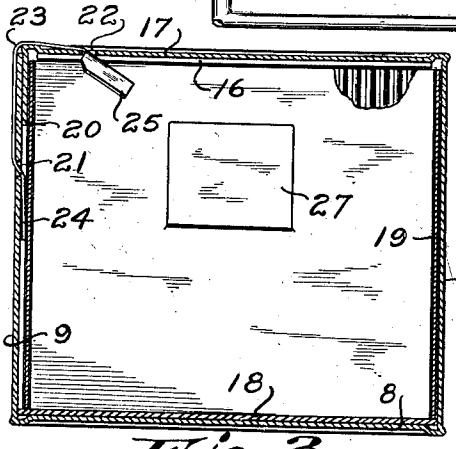


Fig. 3.

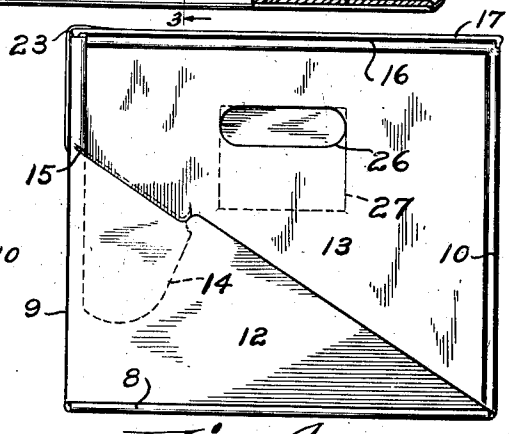


Fig. 4.

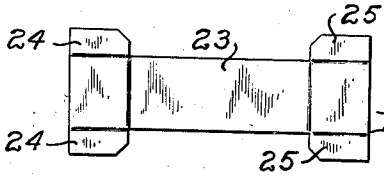


Fig. 5.

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Patented June 11, 1935 2,004,218

UNITED STATES PATENT OFFICE

2,004,218

CONTAINER

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Application March 25, 1933, Serial No. 662,693

2 Claims. (Cl. 229—45)

The present invention relates in general to improvements in the construction of containers for concealing or confining articles such as bottles or packages.

An object of the invention is to provide a bottle container or the like, which is simple and compact in construction, and which is moreover highly effective in use.

Another object of the invention is to provide an improved seal for a paper box or the like, which will effectively retain the cover in closed position while permitting re-use of the box after the seal has been broken.

A further object of the invention is to provide improved structure for enabling convenient handling of a box structure, without exposing the interior of the container.

Still another object of the invention is to provide an improved paper box structure especially adapted to hold beer bottles or the like.

Another object of the invention is to provide a moisture-proof container constructed of paper or the like, which is amply reenforced to permit stacking when loaded without danger of collapse, but which may be knocked-down when empty.

These and other objects and advantages will be apparent from the following detailed description.

A clear conception of embodiments of the several features of the improvement, and of the mode of constructing and of utilizing containers built in accordance with the invention, may be had by referring to the drawing accompanying and forming a part of this specification in which like reference characters designate the same or similar parts in the several views.

Fig. 1 is a full top view of a closed paper box having the cover retained in closed position with an improved sealing device;

Fig. 2 is a part sectional front elevation of the improved box and sealing device;

Fig. 3 is a transverse vertical section through the box, taken along the line 3—3 of Fig. 2;

Fig. 4 is a full end view of the closed box; and

Fig. 5 is a plan view of one of the improved sealing devices.

While the improvements have been illustrated as being applied to a paper box especially adapted for the reception and storage of beer bottles or the like, it is not intended to unnecessarily limit the scope by such specific disclosure, since some of the features are obviously more generally applicable to other forms and types of containers.

Referring to the drawing, the improved box structure comprises generally an envelope formed of a single blank of stiff and relatively heavy paper or fiber board, coated on the surfaces and at the edges with water resistant wax or other substance, and scored to permit convenient assembly or collapse of the box. The bottom 8 of the box has the front wall 9 and the rear wall 10 formed integral with the front and rear edges thereof, and also has inner reenforcing plates 11 formed integral with its end edges. The main end walls 12 are formed integral with the side edges of the front wall 9 and are foldable so as to lie flat against the outer surfaces of the end plates 11, and auxiliary end walls 13 formed integral with the opposite side edges of the rear wall 10 are adapted to be folded over the outer surfaces of the end walls 12 and to be held in assembled position by means of tongues 14 insertable through slots 15 in the walls 12. The upper edges of the outer end walls 13 have integral top flaps 16 capable of being folded inwardly over the interior of the box, and a cover 17 is formed integral with the upper edge of the rear wall 10 and is adapted to fold downwardly over the top flaps 16 to complete the enclosure. It will be understood, that this box structure may be knocked-down or collapsed by merely withdrawing the tongues 14 from the slots 15, and subsequently folding the cover 17, end walls 12, 13, plates 11 and walls 9, 10 against each other.

Disposed within the assembled box structure, is a lining comprising a bottom plate 18 and a vertical liner 19, both formed of relatively inexpensive material such as corrugated paper board. This lining snugly fits the interior of the box structure and the top flaps 16 of the outer end walls 13 are foldable over the top edge of the end walls of the liner 19, while the cover tongue 20 is adapted to be inserted between the upper portions of the front wall 9 and the adjacent portion of the liner. The front wall 9 is provided with an elongated horizontal slot 21 disposed in proximity to the lower edge of the tongue 20 when the cover 17 is closed, and the cover 17 is also provided with a similar slot 22. These slots 21, 22 are adapted to cooperate with the improved sealing device 23 as shown in Figs. 1 to 4 inclusive, in order to positively prevent opening of the cover 17 and to hold the same tightly closed.

The improved sealing device 23 is shown in detail in Fig. 5 and is preferably formed of a single blank of flexible but relatively stiff and tough material such as strong paper or fiber board. The opposite ends of the blank are provided with side tongues 24, 25 and the intervening portion is of substantially the same width as the length of the

slots 21, 22 of the box. One end of the sealing device 23 is insertable through the slot 21 by temporarily folding the tongues 24 against the adjacent body portion sufficiently to permit such insertion, and the tongues 24 will spring back into the position shown in Fig. 2, between the front wall 9 and the liner 19 after the insertion has been made. The opposite end of the sealing device 23 is likewise insertable through the cover slot 22 when the cover 17 has been closed, by temporarily folding the tongues 25 against the adjacent body portion of the device 23 sufficiently to permit such insertion. After the tongues have passed through the slot 22, they will snap outwardly to the position shown in Figs. 1, 2 and 3, and the body portion of the sealing device 23 will then be locked firmly over the corner of the box as indicated in Fig. 3. Subsequent opening of the box can be effected only by tearing or cutting the sealing device 23 into two parts.

The end walls 12, 13 and the adjacent plates 11 are moreover provided with alined handle openings 26 as shown in Figs. 2 and 4, and in order to permit free use of these openings for insertion of the fingers, the liner 19 is preferably provided with cut-outs 27 which will swing inwardly as indicated in dot and dash lines at the right of Fig. 2, when the hand is applied to lift the box structure. These cut-outs 27 serve the dual purpose of maintaining a tight closure for the interior of the box, and of preventing tampering through the openings 26, with the tongues 25 of the sealing device. The loading within the box will ordinarily prevent the cut-outs 27 from being swung inwardly to a greater extent than is necessary for insertion of the fingers, and will thus guard the inner locking portions of the sealing device 23.

It is believed that the foregoing detailed description of the box structure, of the seal therefor, and of the means for facilitating handling of the box and for protecting the seal, is sufficient to convey a clear idea of the improved features. The interior of the box may be provided with any desired means for holding the bottles or packages in spaced relationship, and the waterproofing of the structure is extremely important when the structure is utilized to confine beer bottles or the like, because of the excessive moisture prevailing in breweries. By virtue of the fact that the improved sealing device does not necessitate damaging of the box structure, during application or removal of the device 23, the box itself may be constructed of relatively durable material and re-used when the bottles or the container are empty. The double end walls 12, 13 and the plates 11 provide triple end thickness, thereby producing a good grip at the handle openings 26, and also permitting stacking of the boxes without danger of collapse. The box is also reenforced by the liners 18, 19 which may be replaced when the box is used over and over, and these liners also insure a perfect closure and prevent the sealing device from being tampered with.

It should be understood that it is not desired to limit the invention to the exact details of construction herein shown and described, for various modifications within the scope of the claims may occur to persons skilled in the art.

It is claimed and desired to secure by Letters Patent:

1. In a container, a cover and walls cooperable to provide an enclosure, a sealing device releasable without destruction only from within said enclosure, some of said walls having handle openings therein, and means within the container for preventing access to said sealing means from within the enclosure.

2. In a container, a cover and walls cooperable to provide an enclosure, opposite of said walls having handle openings therein, and a liner for said walls having deflectable flaps for permitting insertion of the fingers through said openings and for sealing said openings upon removal of the fingers therefrom.

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