Oct. 18, 1938. C. J. BALIN 2,133,736

CONTAINER

Filed June 17, 1937

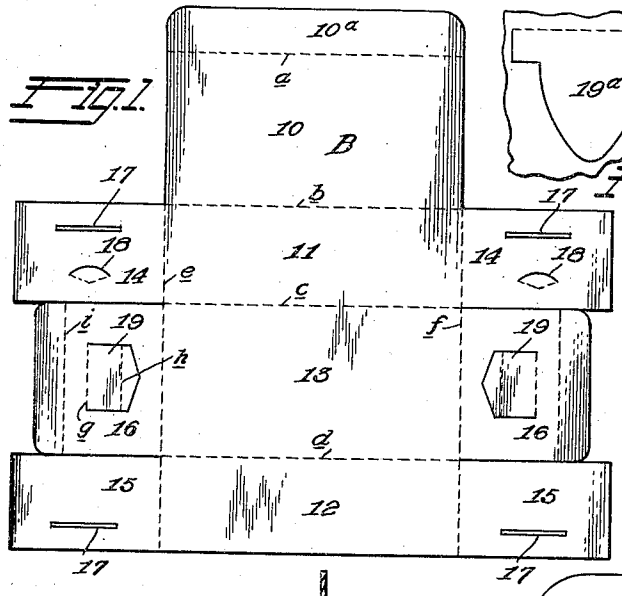


Fig. 1.

Fig. 5.

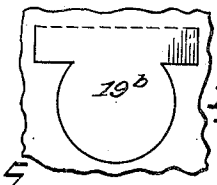


Fig. 6.

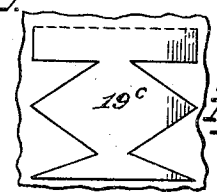


Fig. 7.

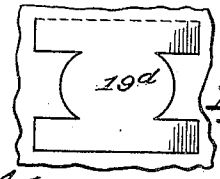


Fig. 8.

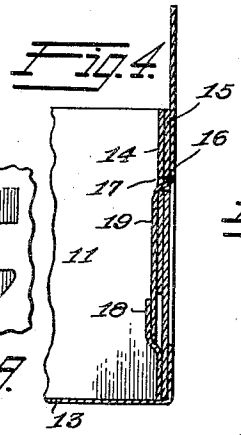


Fig. 4.

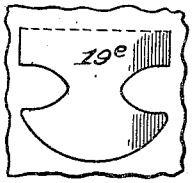


Fig. 9.

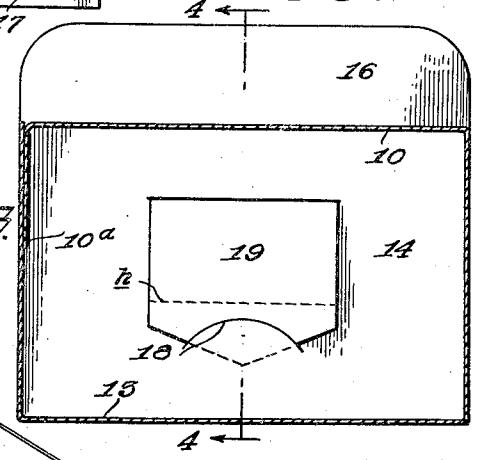


Fig. 3.

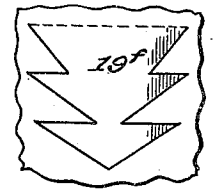


Fig. 10.

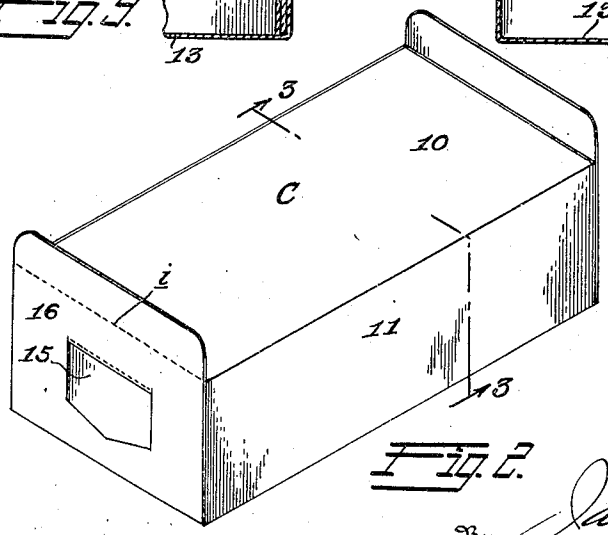


Fig. 2.

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2,133,736

CONTAINER

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Application June 17, 1937, Serial No. 148,796

7 Claims. (Cl. 229—35)

The present invention relates to a container.

More specifically, the invention relates to a container or box of the collapsible type embodying in its construction a unitary blank so formed that the box can be readily set up for use or knocked down for shipping or storing.

Boxes of this character have been long known and used, but have in most instances failed to meet the maximum requirements of devices of this character, which requirements are simplicity in construction, facility in assembling, rigidity of construction, and neatness in appearance of the completed box.

It is a primary object of the invention to provide a container or box embodying a unitary blank of simple construction and so formed that the box can be expeditiously constructed therefrom, the box being strong, secure against disassembly, and neat in appearance.

It is a further object of the invention to provide a blank of cardboard or like material which is stamped as a unit and embodies relatively simple flaps, tabs, and cooperating slits as well as fold lines, whereby a box of maximum rigidity can be readily constructed therefrom, and whereby the blanks, due to the unitary construction, can be conveniently transported or stored.

A still further object of the invention is the provision of a collapsible box embodying securing tabs of ornamental form cut from the material of the box, whereby when the tabs are in locked position, portions of the box are exposed through the openings defined by the displaced tabs, thus providing an ornamental appearance as well as effective means for identifying different merchandise.

With the above objects in view as well as others that will become obvious in the course of the following disclosure, reference will be made to the accompanying drawing forming part of same, and wherein:

Figure 1 is a plan view of the improved blank in a preferred embodiment thereof.

Fig. 2 is a perspective view of a box constructed from the blank disclosed in Fig. 1.

Fig. 3 is a transverse sectional view in a plane represented by line 3—3 in Fig. 2.

Fig. 4 is a sectional view in a plane represented by line 4—4 in Fig. 3.

Figures 5 to 10 inclusive are fragmental plan views disclosing various modified forms of the ornamental securing tabs.

Referring to the drawing by reference characters and wherein like characters designate like parts, B designates a blank which is preferably formed from relatively thin cardboard and is of unitary construction.

The blank B is provided with a plurality of parallel and longitudinal fold lines *a*, *b*, *c*, and *d* for providing a top or cover 10, opposite sides 11 and 12 and a bottom 13 when the blank is folded for providing a container C, as indicated in Fig. 2.

The blank B is further provided with transverse fold lines *e* and *f* outward of which fold lines the blank is cut in continuation of the fold lines *c* and *d* thereby providing flaps 14, 15 and 16 which cooperate in providing the opposite ends of the container C represented in Fig. 2.

The flaps 14 and 15 are each provided with a longitudinal slit 17 and the flaps 14 are each provided with an arcuate slit 18 which, in the assembled position of the blank, are in vertically spaced relation to the slits 17 for a purpose hereinafter described.

The flaps 16 are each provided with a tab 19 which is cut from said flap and is bendable on the fold line *g*, the tabs 19 each being provided with a fold line *h* for a purpose later described.

The blank B is formed of a single piece of cardboard whereby a container as represented in Fig. 2 can be expeditiously constructed therefrom and which is accomplished as follows. The blank B is first folded inwardly on the fold lines *c* and *d*, simultaneous with which the flaps 14 and 15 are folded inwardly on the fold lines *e* and *f* with the flaps 14 inwardly of the flaps 15, after which the flaps 16 are folded on the fold lines *e* and *f* vertically and into parallelism with the flaps 14 and 15 and exteriorly of the flaps 15.

The slits 17 are alined when flaps 14 and 15 are brought into vertical contacting relation, and upon folding the flaps 16 and tabs 19 carried thereby are bent on the lines *g* into substantially horizontal position and entered through the alined slits 17 after which the free ends of the tabs 19 are inserted within the arcuate slits 18 in the inner flaps 14, as is clearly indicated in Figures 3 and 4, the fold lines *h* permitting bending of the tabs to facilitate entry thereof into the slits 18.

The blank B folded as just described provides a box or container having a bottom, sides and cover of single thickness, while the opposite ends are of triple thickness, as each of the ends embodies the superimposed flaps 14, 15 and 16.

The cover 10 is hingedly connected with the side 11 by means of the fold line *b* and the fold line *a* provides a flap 10*a* which, upon closing the cover, is inserted within the side 12. It will be seen from Figs. 2, 3 and 4 that the flaps 16 extend vertically above the flaps 14 and 15 for providing an attractive appearance to the container, and the flaps 16 may be provided with fold lines *i* whereby the projecting portions of the flaps 16 may be readily bent for disposal of such projections beneath the cover 10 if so desired to

facilitate the storage and shipping of merchandise within the containers.

The construction of the ends not only lends rigidity to the container but, due to the fact that the flaps **15** are exposed through the openings formed by the displaced tabs **19**, an ornamental appearance is provided on the opposite ends of the box, the exposed portions of flaps **15** being of the contour of the tabs **19** and such exposed portions being inset the thickness of flaps **16**, thus providing a highly ornamental effect as well as providing suitable spaces for labels, trade marks, etc. Furthermore, the flaps **15** at such exposed portions may be painted or variously decorated to further enhance the esthetic effect of the completed container.

Tabs, corresponding to those indicated at **19**, of various other shapes may be provided whereby containers of different appearances or for designating different lines of merchandise may be constructed. In Figs. 5 to 10 inclusive are represented modified forms of tabs and are designated on the drawing as **19***a*, **19***b*, **19***c*, **19***d*, **19***e* and **19***f*, respectively. These tabs will function in the same manner as tabs **19** for holding the folded blank in box-forming position, but will present different appearances to the ends of the box as the exposed portions of flaps **15** will be of the contour of these respective tabs, and if such exposed portions be painted or otherwise decorated highly ornamental appearances can be given to the box.

With the various forms of tabs illustrated it is of course to be understood that the shape and relative location of the slits **18** may have to be modified accordingly.

Thus it will be seen that the construction and interlocking feature of the end flaps not only contribute to the construction of a box of maximum rigidity, but provide in addition thereto a highly esthetic appearance as well as effective means for designating various lines of merchandise.

In the construction of the blanks, the interlocking tabs may be cut from the flaps **16** of any desired form to suit the varied requirements of packers and shippers of different merchandise, and their respective lines of goods may be readily indicated by labels, trade-marks or other suitable indications provided by the exposed portions of flaps **15** resulting from the displaced tabs which are interlocked with the slits **18** in the flaps **14**.

The end construction not only affords rigidity to the box, but the manner in which the tabs **19** are interlocked with the flaps **14** and **15** is such that there is no danger of the container becoming inadvertently disassembled due to the fact that the tabs **19** extend through the alined slits **17** adjacent the tops of flaps **14** and **15** and then project within the slits **18** in the flaps **14** vertically below the alined slits **17**.

It will be seen from the foregoing disclosure that in accordance with my invention a blank is provided which is of simple construction and embodies fold lines and cooperating tabs and slits, whereby a container can be expeditiously constructed which is relatively rigid, ornamental in appearance and is not subject to becoming inadvertently disassembled.

While I have disclosed certain specific embodiments of my invention, nevertheless the same are to be considered as illustrative only and not restrictive, the scope of the invention being defined in the subjoined claims.

What I claim and desire to secure by U. S. Letters Patent is:

1. A collapsible container comprising a bottom, sides, cover, and ends; each of said ends comprising three contacting flaps, the two inner of said flaps being provided with alined slits adjacent the tops thereof, the outer of said flaps being provided with a tab removably engaged within the alined slits, and a slit in the inner of said flaps below said alined slits for removably receiving the end of said tab.

2. A collapsible container comprising a bottom, sides, cover, and ends; each of the ends comprising an outer flap having a tab cut therefrom and hingedly connected therewith, and an inner flap having spaced slits for receiving the tab adjacent its hinged connection and its free end respectively, whereby the flaps are positively interlocked against separation.

3. A collapsible container comprising a bottom, sides, cover and ends; each of the ends comprising an outer flap having a depending tab cut therefrom and hingedly connected therewith, an inner flap having a slit adjacent the hinged connection of the tab for projection of the tab therethrough in depending position on the inner side of the inner flap, and a slit in the inner flap below the first named slit for receiving the free end of the tab.

4. A blank for a collapsible container comprising a main body for folding on parallel lines to form the bottom, opposite sides, cover and cover flap, inner end flaps projecting from opposite ends of one side and arranged to be folded at right angles thereto, intermediate end flaps projecting from opposite ends of the other side and arranged to be folded at right angles thereto and into contact with the first named flaps, other end flaps projecting from opposite ends of the bottom and arranged to be folded at right angles thereto and into contact with said intermediate flaps, the inner and intermediate flaps having slits for horizontal alinement in the folded position of the flaps, and the outer flaps having centrally disposed tabs for projection through said alined slits in depending engagement with the inner sides of said inner flaps in the folded position of the outer flaps.

5. The structure defined in claim 4 wherein the inner end flaps are each provided with an additional slit for receiving the free end of the respective tabs.

6. The structure defined in claim 4 wherein the inner and intermediate flaps are of a length equal to the width of the bottom, and of a width equal to the height of the sides, and wherein the outer flaps are of a width equal to the width of the bottom and of a height greater than the height of the sides.

7. A collapsible container comprising a bottom, sides, cover, and ends; each of the ends comprising inner, intermediate and outer flaps, the outer flap being cut to provide a tab having an ornamental free edge, the inner and intermediate flaps having alined slits for projection of said tab therethrough into engagement with the inner side of the inner flap whereby the intermediate flap is exposed in an area corresponding with that of the deflected tab, and an interlocking connection between the free end of the tab and the inner flap for maintaining the flaps in contacting relation.

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