July 15, 1930. R. A. LAMBERT 1,770,618

DISPLAY BOX

Filed May 13, 1927 2 Sheets-Sheet 1

FIG. 2

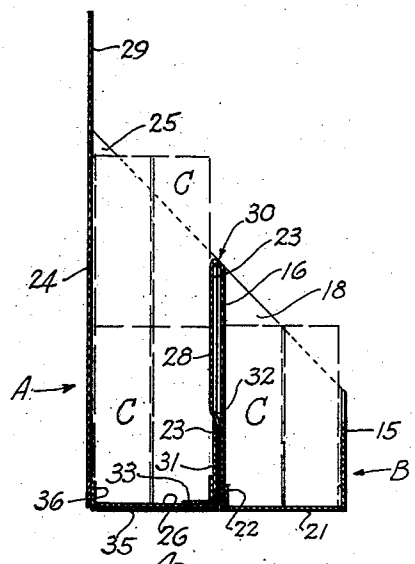


FIG. 1

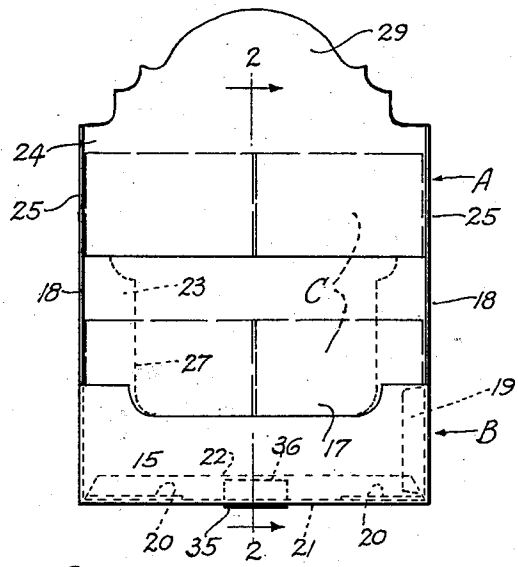


FIG. 5

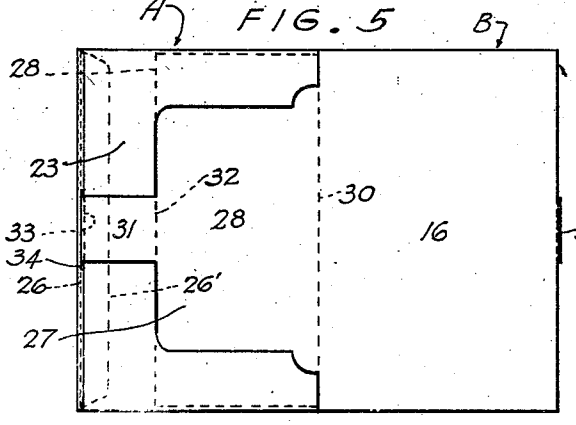


FIG. 3

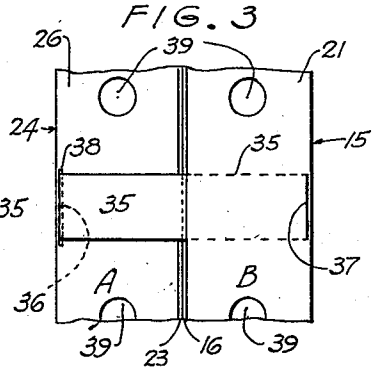
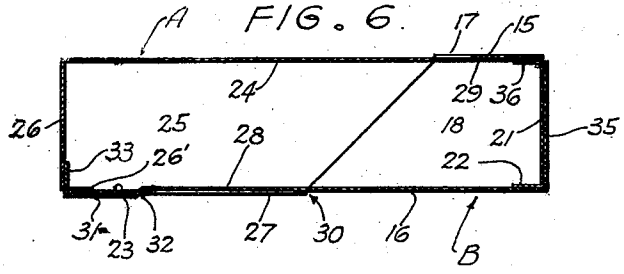


FIG. 6



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July 15, 1930. R. A. LAMBERT 1,770,618

DISPLAY BOX

Filed May 13, 1927 2 Sheets-Sheet 2

FIG. 4

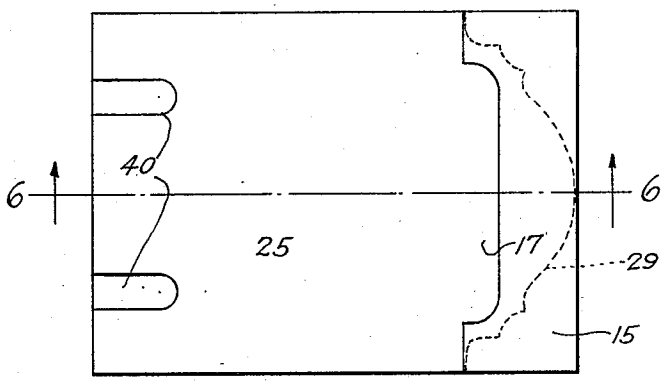


FIG. 7 FIG. 8 FIG. 9 FIG. 10 FIG. 11

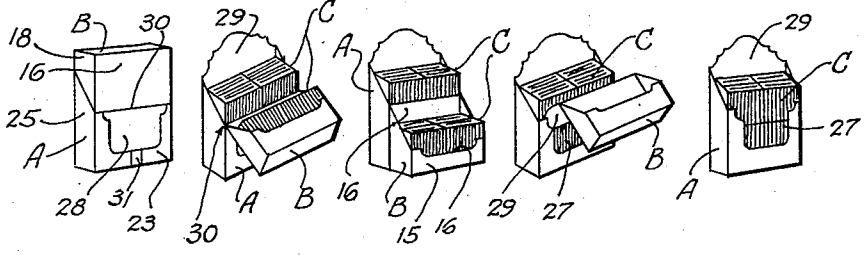
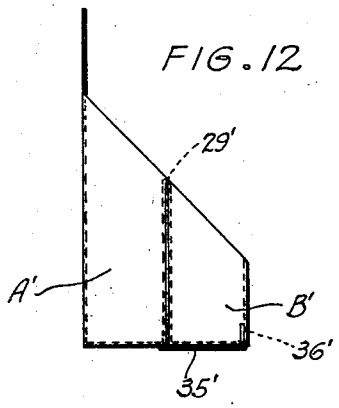


FIG. 12



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UNITED STATES PATENT OFFICE

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DISPLAY BOX

Application filed May 13, 1927. Serial No. 191,205.

This invention relates to an improved box, which is designed to serve, in the first instance, as a shipping container for merchandise and to thereafter be used by the merchant to display such merchandise on the counter.

The invention, in some of its aspects, provides improvements in the display box disclosed in my copending application Serial No. 724,990, filed July 9, 1924. Some features of the invention, however, are capable of use in connection with other forms of display boxes and are not confined to the particular form disclosed in said application.

The display box of said application, as well as that disclosed herein as one illustrative embodiment of the present invention, is of that general type in which two box sections, each having one open end, are hingedly connected so that they may be swung from a position, wherein the two sections lie one in continuation of the other and completely enclose the articles, to a position wherein one section lies in front of the other and permits the articles contained therein to be displayed in an attractive fashion. The arrangement is such that the bases of the two box sections, when moved to display position, lie in a common plane and afford a broad, flat, stable support, without necessitating easels, props and the like. The arrangement is also such that the back wall of the front box section lies substantially contiguous with the front wall of the back section. The back box section extends above the front box section so that portions of articles contained in the back section are displayed but at a higher level than those displayed in the front section.

According to one feature of this invention, the two box sections are made as separate units, which are interconnected so as to permit convenient detachment, when desired, as well as to permit them to normally function in the same general manner as the display box of said application. This arrangement enables one section to be removed and discarded, when empty, leaving the other section serving as an independent unit and affording an attractive display box unmarred by an empty attached section, as in the case of my prior display box. There are also several other advantages of this construction which will later be set forth herein.

Another feature of the invention consists in the provision of means for holding these two, or any other similarly interfitted box sections together. This arrangement is particularly important when the box sections are positioned for shipping. At that time, the open ends of the two separate box units abut and an extension of one wall of each box slips partially into the other box to hold the units in line. There is, however, nothing to prevent longitudinal separation of the two box units and this invention is directed to simple means for overcoming the difficulty. This feature of the invention is equally applicable to other display boxes having open ends which abut and interfit to form a shipping container.

Another feature of the invention consists in the provision of a flap which is connected to one box section and is adapted to be folded over upon and to extend across the base of the other box section and to be interlocked with the latter, whereby the two sections may be positively tied together when in display position. This flap functions independently of the box structure in the sense that it can be operated without opening the bottom closure flaps of the box, as was necessary in my prior display box. This feature of the invention is equally applicable to either the prior or the present type of box and is independent of whether or not the two box sections are interengaged separate units or are integrally connected units formed from a single blank.

Other features of the invention will appear in the following description and will be pointed out in the appended claims.

The invention will be disclosed with reference to the accompanying drawings, in which:—

Fig. 1 is a front elevational view of the display box with the sections thereof disposed in display position;

Fig. 2 is a sectional elevation taken on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary bottom plan view of Fig. 1;

Figs. 4 and 5 are top and bottom plan views, respectively, of the box when the sections thereof are disposed in shipping position;

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 4;

Figs. 7, 8, 9, 10 and 11 are small scale perspective views illustrating the manner of using the display box; and

Fig. 12 is a side elevational view showing a display box of the type disclosed in my prior application and embodying one of the features of this invention.

Referring to Figs. 1 to 3, the display box consists of two separate box units A and B which are generally similar in construction and differ mainly in that one box, as A, is higher than the other box, as B. Each unit is made up of a tubular box body (herein shown as of rectangular cross section) having a closed lower end or base and an open upper end.

The front wall 15 of section B is lower than its back wall 16 and is, or may be, cut away as at 17, the better to display the articles therebehind. The side walls 18 slope from the top of the back wall down to the top of the front wall, but the upper edges of the side walls do not necessarily have to be straight as shown. The side walls 18 are integral with the back wall 16 and one of them is also integral with front wall 15. The other side wall 13 is joined to the front wall 15 by a glued flap 19. The bottom closure is of common form and comprises short inwardly extending side flaps 20 integral with and foldably connected one to the lower edge of each side wall and a flap 21 integral with and foldably connected to the lower edge of front wall 15. Flap 21 has an upstanding tab 22 adapted to extend vertically upward and tightly fit between the back wall 15 and the back edges of side flaps 20.

The unit A is similarly constructed and its front, back, side and bottom walls are designated 23, 24, 25 and 26, respectively. It is to be noted that the front wall 23 is substantially equal in height to that of the back wall 16 and that the back wall 24 is higher than the front wall 23. The upper edges of side walls 25, as shown, are straight and sloping but they may be otherwise formed for the primary consideration is only to have the upper edges of side walls 25 abut with the corresponding edges of side walls 18 when the sections are disposed in shipping position and form a complete enclosure for the articles. The front wall 23 is preferably recessed as at 27, the better to display the goods therebehind and also to make it easy to fill the box or to remove articles therefrom.

The back walls 16 and 23 have parts 28 and 29, respectively, which extend above the level of the upper edges of their respective walls. The extension 29 forms a display panel which may be printed or lithographed with advertising matter and the upper edge of which may be cut to an attractive contour. The extension 28 may also serve to some extent for display purposes, if desired. However, in the particular type of box disclosed, this extension is used primarily for another purpose which is clearly shown in Fig. 2. The extension 28 is foldable along the line 30 and is adapted to be folded backwardly and into parallel relation with back wall 16 and to extend down into the box unit A, lying between the front wall 23 thereof and the front faces of the articles C contained therein. The extension or flap 28 is thus frictionally held in place. Due to this connection and the line of fold 30, the box sections may be swung, the one relatively to the other from closed or shipping position to open or display position in the same manner as disclosed in the aforesaid application.

The box is shown in closed or shipping position in Figs. 4 to 6. In such position the two units are disposed one in continuation of the other with their open ends in abutment to form a complete enclosure for the articles. It is to be noted that the extension 28 of box unit B fits within box unit A and that the diagonally opposite extension 29 of box unit A fits within box unit B. When these two units are first assembled for shipping, the extension 28 has not been bent along line of fold 30 and it is consequently a stiff extension lying in the same plane as the wall 16, to which it is attached, in the same manner as is extension 29. There are then two independent box units each having a stiff flap extension upstanding from one of its side walls. The flap of each box unit slides smoothly inside the other box unit when the two are brought into abutment. The two units are equally capable of sliding longitudinally out of engagement unless some means are provided to prevent.

In Figs. 5 and 6, I show, by way of illustrative example, one means for preventing the difficulty just alluded to. Such means consists of a flap 31, which is or may be an integral extension of the part 28 and preferably connected thereto for folding about a line of fold 32. Flap 31 is adapted to extend along the outer face of front wall 23 of box A to the bottom edge thereof and is interlocked with such box by means of a tab 33 which enters a slot 34 formed in the tab 26′ of the bottom closure flap 26 of box A. Thus, the two boxes are tied together so as to prevent separation thereof in a longitudinal direction, while being shipped. The flap 31, by reason of the interlocking of its tab 33 with bottom closure flap 26, also serves to hold the latter securely in place during shipment. Other means, later to be described, serve to hold the bottom closure flap 26 of box A in place in a somewhat similar manner.

When the container is to be used for dis-

play purposes, the connection 31 does not need to be disturbed for it serves as an additional means of holding the part 28 to box A so that the two boxes are securely connected for relative swinging movement about line of fold 30. It is not necessary, however, to have the flap 31 to insure proper operation, in so far as such swinging movement is concerned, and the flap is primarily necessary to hold the boxes together during their shipment. With the box A standing on its base 26 and box B superposed thereon in inverted relation, as shown in Fig. 7, one grasps the box B and swings it downwardly as indicated in Fig. 8 about line of fold 30 as an axis until the two boxes occupy the relative positions shown in Fig. 9. The bases of the two boxes then lie in the same plane and the back wall 16 of box B lies in contiguous relation with the front wall 23 of box A as shown in Fig. 2. In order to hold the parts in this relationship, a flap 35 foldably connected to the lower edge of back wall 16 of box B is provided. Flap 35, during shipment of the container, lies across the bottom closure flap 21 of box B, as indicated in dotted lines in Fig. 3, and as clearly shown in Fig. 6, the flap is held in such position by a tab 36 which is at that time inserted in a slit 37 formed in the bottom closure flap 21 at its hinge line connection with the lower edge of front wall 15. Flap 35 then serves to hold flap 21 from opening during shipment of the container. When the box sections are moved into display position, tab 36 is withdrawn from slit 37 and flap 35 is folded backwardly across the bottom closure flap 26 of box A into the position shown by full lines in Fig. 3 and interlocked with box A by inserting the tab 35 in a slit 38. The latter is formed in bottom closure flap 26 at its hinge line connection with the lower edge of back wall 24.

Thus, the two box sections may be tied together and held against swinging movement while in display position and this is effected without in any way disturbing either of the bottom closure flaps 21 or 26 as is necessary with my prior display box. The bottom closure flaps 21 and 26 in order to best serve their intended purpose must be tightly held in place and this makes it inconvenient to use either of them to do the work of flap 35. While a skilled box maker will understand how to use flaps 21 or 26 for the locking function and can readily do what is necessary in order so to utilize them, the dealers who use these boxes are not so skillful and frequently do not understand what needs to be done even though proper directions are given on the box. If they do try to withdraw a bottom closure flap 21 or 26 the result is often that the goods slide out and cause the dealer no end of trouble. It is then important not to disturb the flaps 21 or 26 in order to lock the boxes together and the flap 35 overcomes all the difficulties which have been encountered heretofore. The flap 35 may itself carry the necessary printed directions on that side thereof which is visible when its tab 36 is inserted in slot 37, so that the operation necessary to interlock the two boxes will be plainly apparent. As a matter of fact, the location and arrangement of flap 35 are such that the purpose of it is plainly apparent even to those who cannot read.

This same idea of an additional flap for locking the two sections of the display box together may be applied to a box of the type disclosed in the aforesaid application, as has been indicated in Fig. 12. Here the two box units A′ and B′ are integral but connected to swing, the one relatively to the other, about line 29′ as an axis. A flap 35′ on one box unit as A′ is adapted to underlie the base of the other box unit, as B′ and be interlocked therewith, as by a tab 36′. According to some features of the invention, the locking flap, such as 35 or 35′, is independent of whether the box units are integrally connected or are separate units placed in and display relationship above described.

When the parts occupy display position, as in Fig. 9, the box B contains one tier of articles, which may, however, comprise more than one row as shown. In the back box B are two tiers of articles and the articles of the upper tier are displayed at a level above those in box A,—a fair part of the articles in the upper tier of the back box being visible above the back wall 16 of box B. The front wall 15 of the latter is cut away, as at 17, to display as much as possible of the articles contained in box B. As the articles are sold off, the front box B eventually becomes empty. To leave the empty box B in front of box A renders the display unattractive, wherefore provision has been made to enable box B to be conveniently removed. To do this, box B is swung upwardly enough to gain access to flap 31 and its tab 33 is withdrawn from slot 34. Then box B is lifted and, as it is lifted, flap 28 is withdrawn from the back box B, as indicated in Fig. 10. This leaves the back box standing alone and serving of itself as a unit display container, all as shown in Fig. 11. The recess 27 in front wall 23 of box B is, or may be, deep enough to display the articles in both of the tiers therein.

As a convenience, I provide holes, such as 39 in the bottom closure flaps 21 and 26 (Fig. 3) through which one may insert a finger and push upwardly on the article C when and if necessary to facilitate its removal. I may also provide slots, such as shown at 40 in Fig. 4, for a similar purpose.

By making the two box sections as separate units, other advantages are secured. The extent and configuration of the display

panel 27 can be varied without affecting the extent and configuration of front wall 15. In the display box of my prior application, the upper edge of the display panel 29 corresponded in configuration to the upper edge of front wall 15. These two edges abutted when the boxes were disposed in shipping position. That box was formed from a single blank and the two edges, referred to, were formed at the same time by a single cut in the blank. To make the panel 29 higher meant making front wall 15 correspondingly lower. With the present scheme, this is avoided. The parts 29 and 15 are not mutually dependent. They can and do overlap, as shown in Fig. 4, and may if desired be of different configuration as shown.

With the prior one piece construction, the overlapped glued seam in the front box section had to come in its back wall. This wall, being in part visible above the articles C, is used for display and it is therefore printed or lithographed. The seam, referred to, interfered with the printing and also with the appearance of the box. By making the box units separately, the seam can be located at one front corner, as shown at 19 in Fig. 1, and thereby rendered inconspicuous, leaving the back wall 16 as a one-piece, smooth, flat and unbroken member to carry the printing.

The invention has been disclosed herein, in an embodiment at present preferred for illustrative purposes, but the scope of the invention is defined by the appended claims rather than by the foregoing description.

What I claim is:

1. A foldable cardboard display box, comprising, two box sections each comprising foldably connected upright walls and a suitable closure wall for one end of the box section, the other end of each box section being open, said sections being connected together adjacent their open ends for relative swinging movement and movable into a position such that they lie in parallel and contiguous relation with their end closure walls disposed in the same plane, and means on one box section movable without disturbing the relationship of said foldably connected walls to engage and interlock with the other box section when said sections occupy said position for holding said sections tied together in said relation.

2. A display box, comprising, two tubular box sections each open at one end and having at the opposite end a hinged flap with a tab thereon for insertion into the tubular box section to form an end closure, said sections being connected together adjacent their open ends for relative swinging movement and movable into a position such that they lie in parallel and contiguous relation with their end closure flaps disposed in the same plane, and a locking flap hingedly connected to one box section on the side thereof opposite from that to which its end flap is hingedly connected and adapted when in one position to extend across said end flap, and when in another position to extend across the end flap of the other box section, said locking flap having a tab and each end flap having a slot near its hinge line to receive said tab.

3. A combined shipping and display box comprising, two box sections each constructed of cardboard and each constructed so as to effectively retain and display articles contained therein; each of said sections having parallel front and back walls, connecting side walls and a bottom wall closing one end of the box section; the other end of each box section being open when the box sections are disposed in position to display the articles, said sections being hingedly connected so that they may be moved from a position, wherein each side, front and back wall of one section lies in continuation of the corresponding wall of the other section and wherein the articles are completely enclosed, to a position wherein one section is disposed in back of the other with the front wall of the back section and the back wall of the front section in substantially contiguous relation, said contiguous walls being of equal height but the back wall of the back section being of greater height and the front wall of the front section being of less height, whereby articles contained in the front section will be visible above its low front wall and other articles in the back section will be visible above its low front wall, said sections being movable from display position to closed position and vice versa without displacing the articles therein, said bottom walls when the box sections are in display position being located in a common plane and forming a stable supporting base and the only supporting means for the box, and means independent of the aforesaid walls for connecting the box sections together and holding them together in parallel relation while in display position.

4. A combined shipping and display box comprising, two box sections each constructed of cardboard and each constructed so as to effectively retain and display articles contained therein; each of said sections having parallel front and back walls, connecting side walls and a bottom wall closing one end of the box section; the other end of each box section being open when the box sections are disposed in position to display the articles, said sections being hingedly connected so that they may be moved from a position, wherein each side, front and back wall of one section lies in continuation of the corresponding wall of the other section and wherein the articles are completely enclosed, to a position wherein one section is disposed in back of the other with the front wall of the back section and the back wall of the front section in sub-

stantially contiguous relation, said contiguous walls being of equal height but the back wall of the back section being of greater height and the front wall of the front section being of less height, whereby articles contained in the front section will be visible above its low front wall and other articles in the back section will be visible above its low front wall, said sections being movable from display position to closed position and vice versa without displacing the articles therein, said bottom walls when the box sections are in display position being located in a common plane and forming a stable supporting base and the only supporting means for the box, and a flap additional to and separate from the bottom wall and hingedly connected to one box section near the base thereof and having a tab adapted to be inserted into the other box section through the base thereof to tie the two sections together and hold them in parallel relation while in display position.

5. A container comprising a pair of boxes adapted to be disposed top to top as a closed shipping package or side by side as a dispensing package, a sheet extending from the edge of such side of one box and folding over the edge of such side of the other box to provide a hinging connection between the boxes, and interengageable but conveniently detachable means for holding said sheet and the last named box together independently of the contents of the boxes.

In testimony whereof I have affixed my signature.

RUSSELL A. LAMBERT.