June 3, 1930. H. K. POWELL 1,761,232

DISPLAY BOX

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Fig. 1.

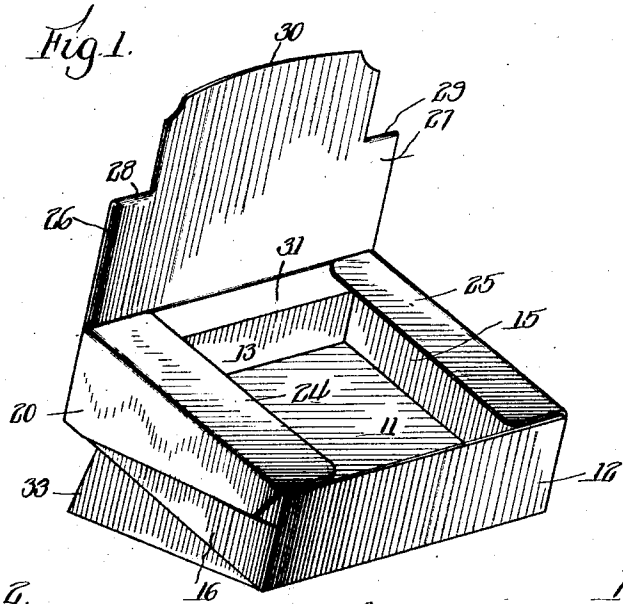


Fig. 2.

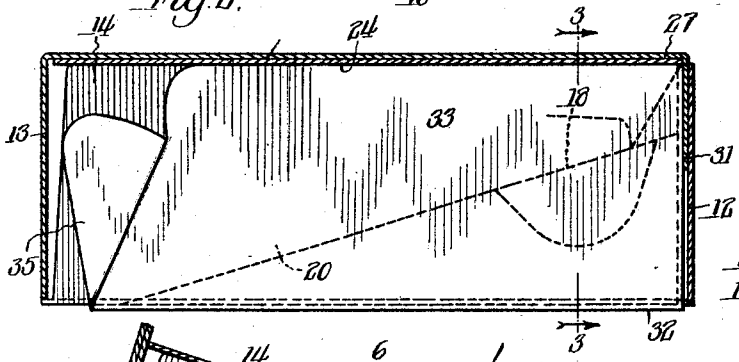


Fig. 3.

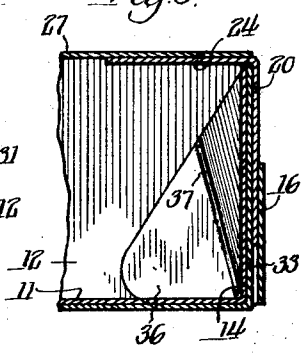


Fig. 4.

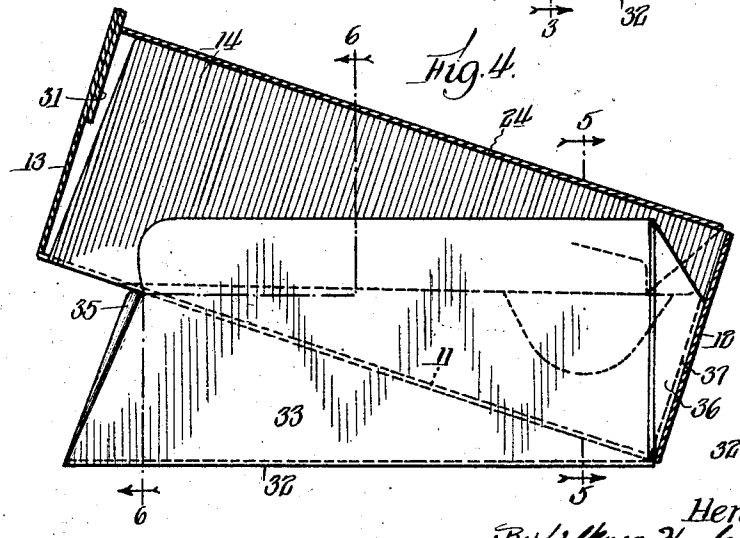
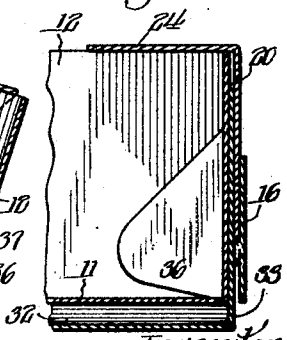


Fig. 5.



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Fig. 6.

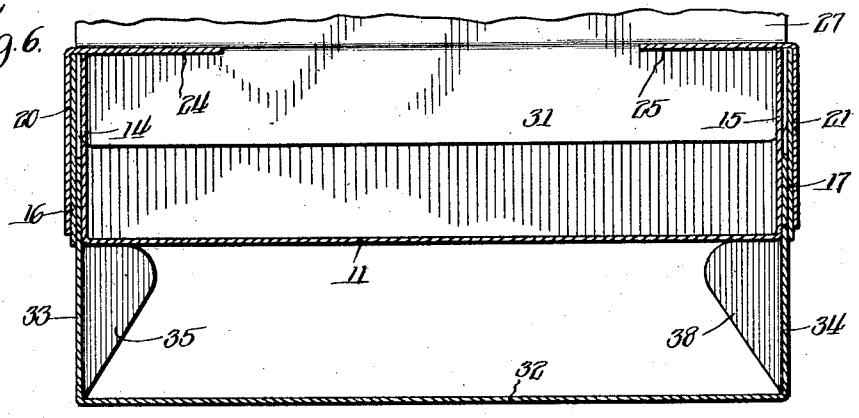


Fig. 7.

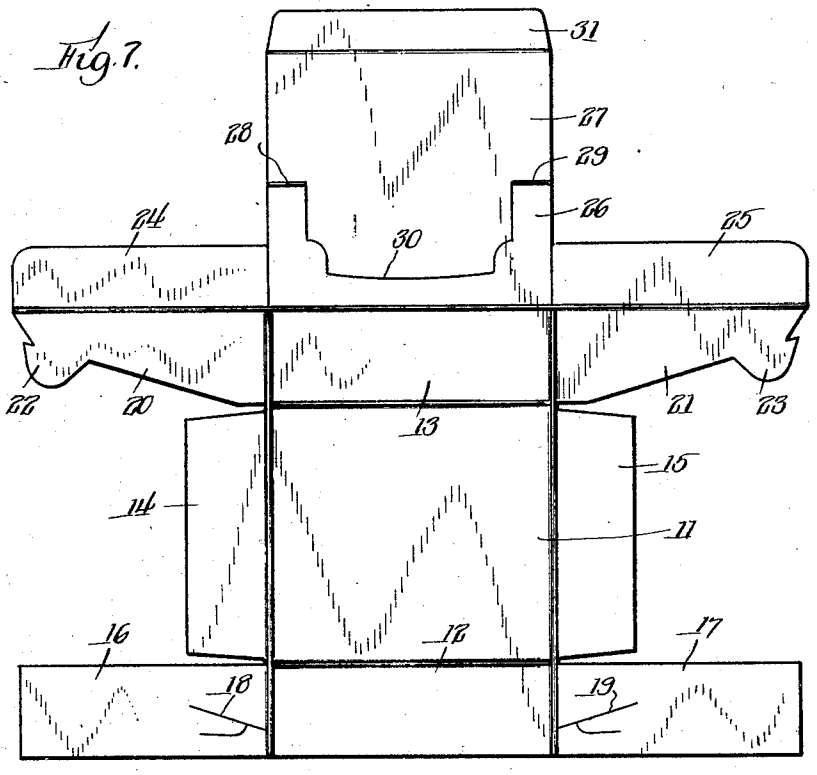
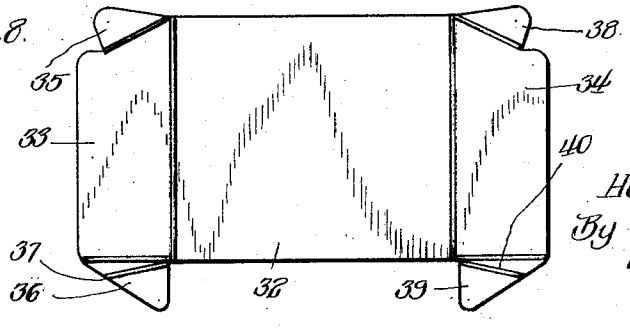


Fig. 8.



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UNITED STATES PATENT OFFICE

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DISPLAY BOX

Application filed November 9, 1927. Serial No. 232,027.

This invention relates to a new and improved display box and more particularly to a display box construction having a separate member permanently incorporated within the box and adapted for adjustment for display purposes.

A large number of designs of display boxes are now in use in which various portions of the box are used to support the box in an inclined position so as to more effectively display the contents of the box. In many instances the box is supported by folding the cover under which requires a special form of cover usually longer than that necessary for cover purposes only. In most such constructions the supporting means for the box are not directly connected to the box at the point of support but merely through a folded over extension. This renders the support somewhat unstable as the box may slip upon the support loosely placed underneath it.

All of these prior constructions having integral supporting means require a special form of blank, and special scoring, cutting and printing dies. My present invention relates to the use of a separately formed member for support purposes, this member being permanently incorporated in the box without materially increasing the size of the box. It has the additional feature of advantage that the supporting element may or may not be used with the box, as desired. In this case, the same dies used for forming the box may be used whether the box is to be eventually used as a display box or not. This results in economy as the two separate full sets of dies are not required.

It is an object of the present invention to provide a new and improved box construction having a separable supporting member.

It is a further object to provide a construction of this character in which the supporting means is rigidly connected to the box adjacent the points of support.

It is also an object to provide a construction which is simple in design, requires a minimum of material and affords a rigid construction.

Other and further objects will appear as the description proceeds.

I have illustrated in the accompanying drawings one preferred form of my construction.

In the drawings—

Figure 1 is a perspective view of the box in the display position;

Figure 2 is a section of the box with the adjacent side members of the box removed and indicated in broken lines;

Figure 3 is a section taken on line 3—3 of Figure 2;

Figure 4 is a section somewhat similar to Figure 2 but showing the box in the display position;

Figure 5 is a fragmentary section taken on line 5—5 of Figure 4;

Figure 6 is a section taken on line 6—6 of Figure 4;

Figure 7 is a plan view of the box blank; and

Figure 8 is a plan view of the supporting member blank.

Referring first to Figure 7, the box comprises a unitary blank divided into various sections folded upon scored lines, these scorings being indicated in the figure by double lines. The box comprises the bottom 11, front 12 and back 13. The inside side flaps 14 and 15 are connected to the sides of the bottom 11. The front side flaps 16 and 17 are connected to the front 12 and are provided with the slits 18 and 19. The back side flaps 20 and 21 are connected to the back member 13 and are provided with the notched tongues 22 and 23 adapted for insertion into the slits 18 and 19 of the front side flaps 16 and 17. The flaps 20 and 21 are provided with the portions 24 and 25 which are adapted to be bent over the top of the goods placed in the box. The top of the box consists of the two portions 26 and 27 which are connected by the scored portions 28 and 29 and are cut apart along the slitted line 30. The top portion 27 also has connected thereto the retaining flap 31.

The supporting member shown in plan in Figure 8 comprises the central bottom or body portion 32 and the side portions 33 and 34. The side portion 33 is provided with the supporting flap 35 and the retaining flap 36 which latter has an intermediate scoring

at 37. The side portion 34 is similarly provided with the supporting flap 38 and the retaining flap 39 having the intermediate scoring 40. As will be clear from an examination of the assembled figures of the drawing, particularly Figure 1, in the assembly of the box the side flaps 14 and 15 are bent upwardly, the front and back, 12 and 13, are similarly bent to a vertical position and the sets of side flaps are swung around to form the sides, these flaps extending outside of the flaps 14 and 15. The flaps 16 and 17 are located inside of the flaps 20 and 21 and the lugs 22 and 23 are inserted in their respective slits to retain the box in assembled position. The flaps 24 and 25 are bent down as clearly shown in Figure 1. When the box is closed the flap 31 is inserted between the front ends of the flaps 24 and 25 and the front 12 of the box.

The supporting member shown in Figure 8 will be folded into the box as the box is assembled, this member first being placed underneath the bottom 11 of the box. The flaps 36 and 39 are located above the flaps 16 and 17 and remain within the box and against the inside of the front 12 when the box is fully formed. The side portions 33 and 34 of the supporting member together with the lugs 35 and 38, are located between the flaps 14 and 16, and 15 and 17 when the box is fully assembled. For display purposes the cover is opened and the top bent upon the scored lines 28 and 29 and the flap 31 inserted between the rear ends of the flaps 24 and 25 and the back 13 of the box.

The bottom portion 32 of the supporting member is located underneath the bottom of the box proper and by grasping the rear edge of the member 32 it is drawn down until the upper edges of the lugs 35 and 38 clear the bottom of the box. These lugs 35 and 38 are then bent inwardly towards each other on the scored line and serve to support the box. It will be noted that when the box and support are in the normal position the lugs 36 and 39 will be bent upon the scored lines separating them from the side members 33 and 34 and will lie against the front of the box. As the supporting member is drawn down these lugs will slide across the front of the box until with the members in the supporting position, the scored lines 37 and 40 will be located inside of the front corners of the box and the lugs will be bent on these lines.

It will be readily apparent that when the display feature is not desired, the display member may be omitted in assembling the box so that the same dies will serve for display and non-display boxes. An additional feature lies in the fact that it is not necessary to make the entire box of material of sufficient rigidity to serve as a display support. The box proper may be formed of lighter material and the display element of heavier somewhat rigid material capable of bearing the load of the box and its contents.

It will be understood that my display support member may be used with other forms of boxes than that shown and I contemplate such changes and modifications as come within the spirit and scope of the appended claims.

I claim:

1. In combination, a folded box having side members and a box supporting element, said element having portions located between the box side members and a portion joined to the lower edges of the side portions and underlying the box bottom.

2. In combination, a folded box having side members and a box supporting element, said element having portions located between the box side members, a portion underlying the box bottom and having part of the portions located between the box and side members adapted to be bent to engage the box bottom.

3. In combination, a folded box having side members and a box supporting element, said element having portions located between the box side members and inside the front of the box, and a portion underlying the box bottom.

4. In combination, a folded box having a front and a plurality of adjacent side members, a separate supporting element normally carried by the box substantially within its contour, said element having side portions extending between the adjacent box side members from below and a portion continuous with said side portions extending across underneath the box bottom.

5. In combination, a folded box having a front and a plurality of adjacent side members, a separate supporting element normally carried by the box substantially within its contour, said element having side portions extending between the adjacent box side members, a portion extending across underneath the box bottom and flap portions extending from the side portions around against the inside of the box front.

6. In combination, a folded box having a front and a plurality of adjacent side members, a separate supporting element normally carried by the box substantially within its contour, said element having side portions extending between the adjacent box side members, a portion extending across underneath the box bottom and flap portions extending from the side portions around against the inside of the box front there being scorings formed at the junctions of the flap portions and side portions, the scorings fitting into the box corner with the display member in normal position.

7. In combination, a folded box having a front and a plurality of adjacent side members, a separate supporting element normally carried by the box substantially within its

contour, said element having side portions extending between the adjacent box side members, a portion extending across underneath the box bottom and flap portions extending from the side portions around against the inside of the box front there being scorings formed at the junctions of the flap portions and side portions, the scorings fitting into the box corner with the display member in normal position, the display member being adapted to be drawn away from the box bottom to display position and additional scorings fitting in the corners when the parts are in display position.

8. In combination, a folded box having a front and a plurality of adjacent side members, a separate supporting element normally carried by the box substantially within its contour, said element having side portions extending between the adjacent box side members, a portion extending across underneath the box bottom and lugs on the side portions adapted to be bent under the box bottom in display position.

Signed at Chicago, Illinois, this 4th day of November, 1927.

HENRY K. POWELL.