Jan. 24, 1956 H. P. McGOVERN 2,732,121

DISPLAY BOX

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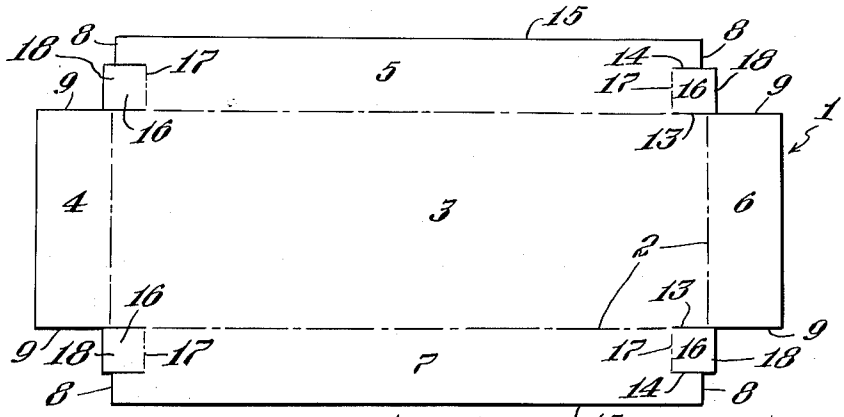


Fig. 1

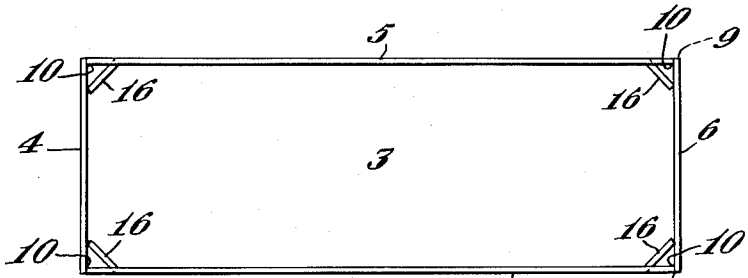


Fig. 2

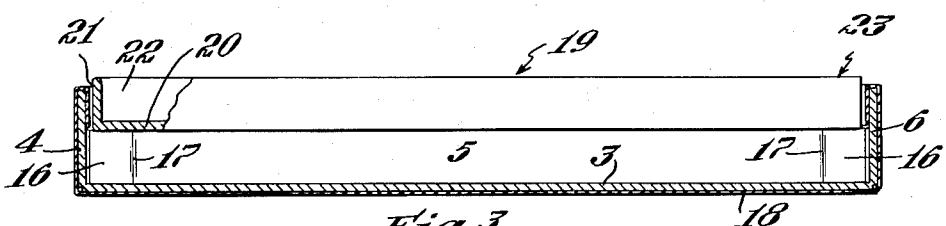


Fig. 3

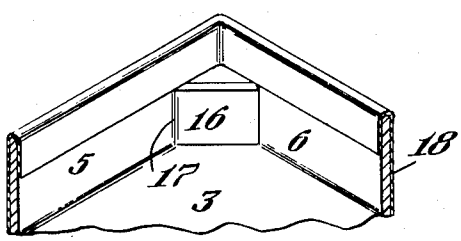


Fig. 5

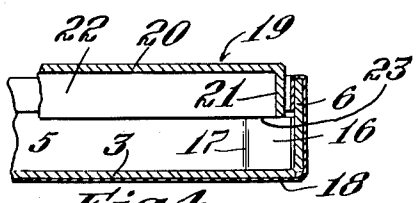


Fig. 4

Inventor
Henry P. McGovern
by Roberts, Cushman & Grover
Att'ys.

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DISPLAY BOX

Henry P. McGovern, Fayville, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a corporation of Massachusetts

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2 Claims. (Cl. 229—32)

This invention relates to display boxes and more particularly to the type of display box in which a first box section telescopically receives for display purposes a second box section which may be either a tray, false bottom or a box body. Where the second box section is a box body, it is customarily shallower than the first box section and is telescopically received into the first box section in one position when the box is used for display purposes and in an inverted position when the box is used for storage or shipping purposes.

One object of the present invention is to provide a display box of the character described which will facilitate the disposition of the second box section into desired display position within the first box section, will insure the maintenance and support of the same in such position and against accidental displacement and, where the second box section is a box body, will also insure limiting the extent to which the sections may be telescoped relative to each other when used for storage or shipping purposes to facilitate opening of the box and to prevent crushing of the articles contained in the box.

Other objects of the present invention are to provide a display box of the character described which is durable and reliable in construction eliminating any danger of the parts becoming inadvertently displaced through rough handling to defeat the foregoing objects, which is extremely simple to manufacture and economical in materials and which is attractive in appearance.

In one aspect the invention involves a box blank comprising a panel having lines of fold defining a base and side wall sections, said side wall sections being foldable normal to the base with their ends meeting to form corners, at least one of the side wall sections having at least at one of its ends spaced cuts extending inwardly therefrom lengthwise of the said one side wall section and spaced inwardly from the outer edge thereof defining a bendable flap, the flap having an extension beyond the end of the said one side wall section.

In another aspect the invention involves a box section comprising a base, side walls normal and connected to the base and meeting at their ends to form corners, at least one of the side walls having at least at one of its ends an integral flap spaced inwardly from the outer edge of the said one side wall and extending obliquely across the adjoining corner into engagement with the inner face of the adjoining side wall to provide a stop. More specifically, the flap is defined by spaced cuts extending inwardly from said one end lengthwise of said one side wall and spaced inwardly from the outer edge thereof, the flap being bent inwardly and extending obliquely across the adjoining corner and the flap having an extension beyond said one end of said one side wall.

In another aspect a second box section comprising at least a base is telescopically received into the first box section and rests on said stops. The second box section may comprise a base and side walls normal and connected thereto, the side walls being of a height substantially

equal to the space between the outer edge and the flap of said one side wall of the first box section.

For the purposes of illustration, a preferred embodiment of the invention is shown in the accompanying drawings in which

Fig. 1 is a plan view of the blank from which a first box section is made;

Fig. 2 is a plan view of the blank of Fig. 1 folded into a first box section;

Fig. 3 is an enlarged longitudinal section of a completely assembled box showing in elevation and with parts broken away a box body disposed in display position within the first box section;

Fig. 4 is a fragmentary view similar to Fig. 3 showing the box body disposed in inverted position for storage or shipping purposes;

Fig. 5 is an enlarged fragmentary perspective view of one corner of the first box section of Fig. 3.

Referring to Fig. 1 of the drawings, the blank from which the first box section is constructed comprises a panel **1** of suitable relatively rigid material, as for example cardboard, the panel being divided by lines of fold **2** into a base section **3** and side wall sections **4**, **5**, **6** and **7**.

Side wall sections **5** and **7** have at their opposite ends **8** spaced cuts **13** and **14** extending inwardly from said ends lengthwise of said side wall sections and spaced from the outer edge **15** of said side wall sections to define integral flaps **16** bendable along lines of bend **17**. The flaps are provided at their outer ends with extensions **18** extending beyond the ends **8** of said side wall sections **5** and **7** (Fig. 1).

To form the first box section from the blank the side wall sections **5** and **7** are folded along the fold lines **2** to a position normal to the base to form side walls (Fig. 2), the side wall sections **4** and **6** being foldable along the fold lines **2** to a similar position with the ends **8** and **9** of adjoining side walls meeting to form corners **10**. The flaps **16** are bent inwardly along the lines of bend **17** to extend obliquely across the corners **10**, the side walls **4** and **6** then being folded normal to the base which brings the free ends of the flaps into engagement with the inner faces of said walls **4** and **6**, thereby to provide a stop at each corner of the first box section. The side walls are held in position by suitable means here shown as the conventional covering layer **18** (Fig. 3) of relatively thin decorative sheet material which extends over the outer faces of the base section and side walls and thence over the outer edges **15** of the side walls onto the inner faces of the side walls and which is bonded to each of said faces by suitable means as adhesive.

Because of the relative rigidity of the side wall material the flaps tend to return to the plane defined by the inner faces of the side walls **5** and **7** respectively from which they were bent, thereby resiliently to maintain the free ends of the flaps from accidental displacement from their engaging position with the adjoining side walls **4** and **6**.

Referring to Fig. 3, a second box section **19** which is capable of serving both as a tray and as a box body has a base **20** and side walls **21** and **22** normal and connected to the base, said side walls being shallower than the side walls **4**, **5**, **6** and **7** of the first box section and of a height substantially equal to the space between the cuts **14** and the outer edges **15** of the side walls **5** and **7** of the first box section. As shown in Fig. 3 the second box section **19** is telescopically received into the first box section with its base resting on the stops **16** and as thus disposed is in position for display purposes. When in use as a box body for shipping or storage purposes the second box section **19** is inverted into the position shown in Fig. 4 in which it is again telescopically received into

the first box section with portions of the outer edges **23** of the side walls adjacent the corners resting on the stops **16**, the stops thereby limiting the extent to which the two sections may be telescoped relative to each other.

While in the above embodiment the second box section **19** was described as of a construction capable of serving both as a tray and as a box body and the first box section was described as having a flap at each corner, it is understood that said second box section may constitute only a tray or a false bottom in which case it need have only a base or if it has side walls they need not be limited in height and that the second box section may have flaps at only two adjacent corners to permit the tray to be disposed in an inclined display position with respect to the bottom **3**.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all modifications and equivalents which fall within the scope of the appended claims.

I claim:

1. A box blank comprising a sheet having lines of fold defining a base and side walls, the side walls being rectangular and their lengths being substantially equal to the corresponding dimensions of the base, certain side walls having pairs of spaced cuts extending thereinto from the ends thereof toward the opposite ends, one cut of each pair being intermediate the fold line and outer edge of the side wall and the other cut being along the fold line, the portions of the side walls between the pairs of cuts being extended to form flaps the inner ends of which are disposed within the outline of the side walls and the outer ends of which project beyond the ends of the side walls, whereby when the sides are folded to form a box the flaps extend obliquely across the corners of the box without attachment at their free ends.

2. A box comprising a base, side walls integrally connected to the base at fold lines with their outer edges directed away from the base and with their ends meeting at the corners, the side walls being rectangular and their lengths being substantially equal to the corresponding dimensions of the base, certain side walls having pairs of spaced cuts extending thereinto from the ends thereof toward the opposite ends, one cut of each pair being intermediate the fold line and outer edge of the side wall and the other cut being along the fold line, the portions of the side walls between the pairs of cuts being extended to form flaps the inner ends of which are disposed within the outline of the side walls and the outer ends of which project beyond the ends of the side walls, each flap being bent inwardly and extending obliquely across a corner of the box respectively with its free end bearing on the inner face of the adjoining side wall.

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