

United States Patent

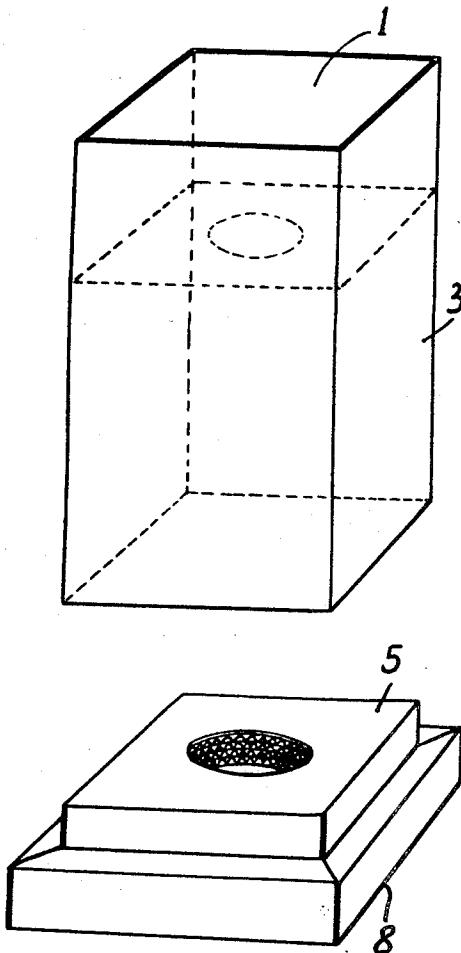
[11] 3,565,322

[72] Inventor Nelly Cerf
Neuilly, France
[21] Appl. No. 832,295
[22] Filed June 11, 1969
[45] Patented Feb. 23, 1971
[73] Assignee Cartonnages Et Imprimeries De L'Isle De
France Et Societe D'Etudes De Cartonnages
Reunis
Puteau, France
[32] Priority June 21, 1968
[33] France
[31] 156017

[56] References Cited
UNITED STATES PATENTS
2,349,020 5/1944 Throckmorton 229/89
FOREIGN PATENTS
233,152 5/1925 Great Britain 229/39B
Primary Examiner—David M. Bockenek
Attorney—Pierce, Scheffler and Parker

[54] CARDBOARD PACKINGS
10 Claims, 15 Drawing Figs.
[52] U.S. Cl. 229/23;
229/89; 206/46; 217/52
[51] Int. Cl. B65d 85/00
[50] Field of Search. 229/23, 14
(C), 39 (B), 89, 93; 206/46 (Fr); 217/52, 53

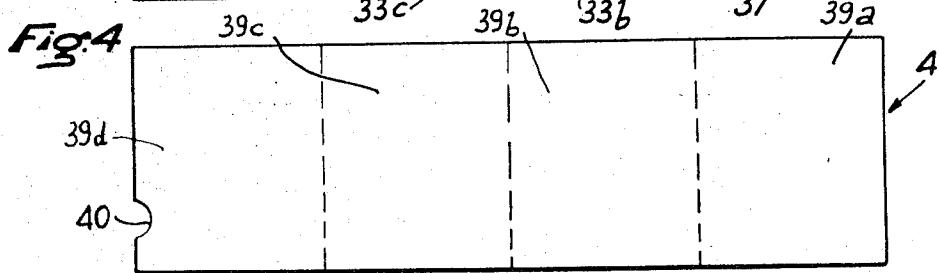
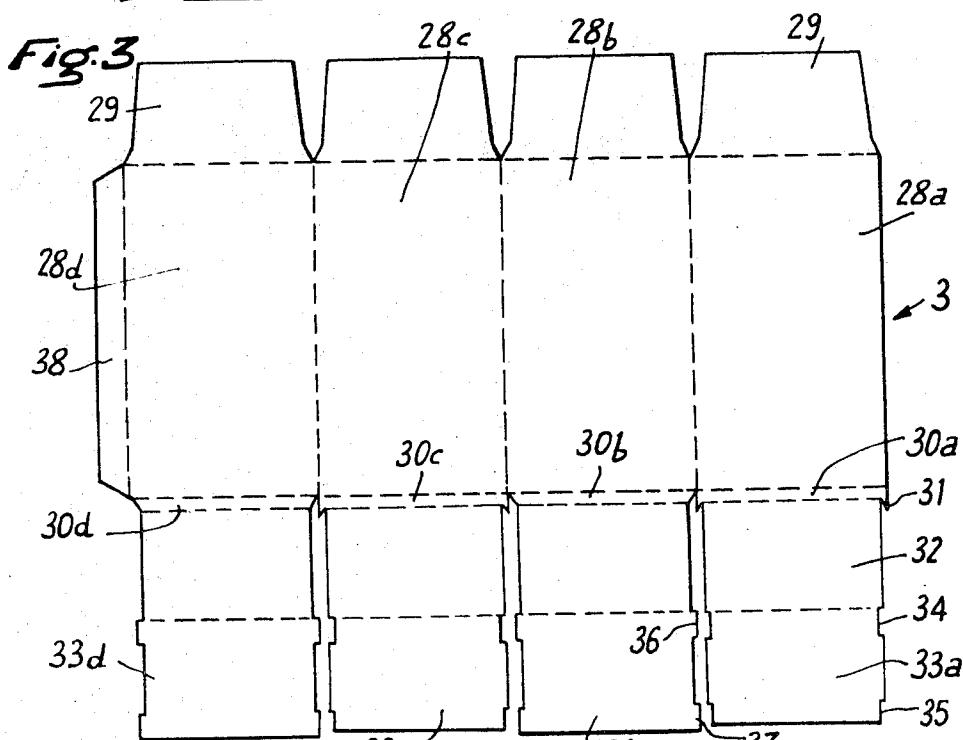
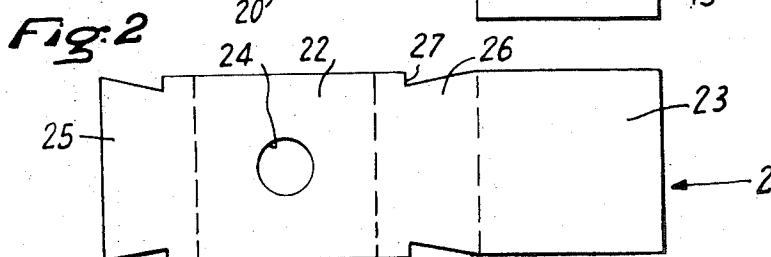
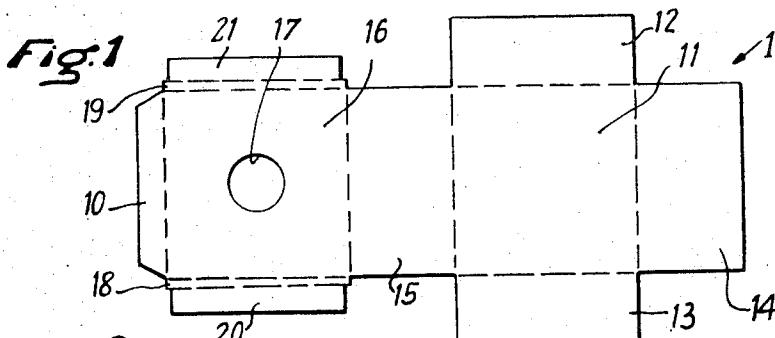
ABSTRACT: A combined cardboard packing and display pedestal for an article such as a bottle comprises a base including a recess for receiving the bottom of the article and a removable cover which rests upon the base and encloses the main body portion of the article, the cover member being provided with a top including a transverse panel including an aperture in alignment with the recess in the base for receiving and supporting the upper end of the article against movement. The base and cover are erected from blanks of cardboard material and are reinforced with liners of corrugated cardboard also erected from blanks. Shims of corrugated cardboard provided with a recess are stacked within the erected base to build thickness into the base recess.



PATENTED FEB 23 1971

3,565,322

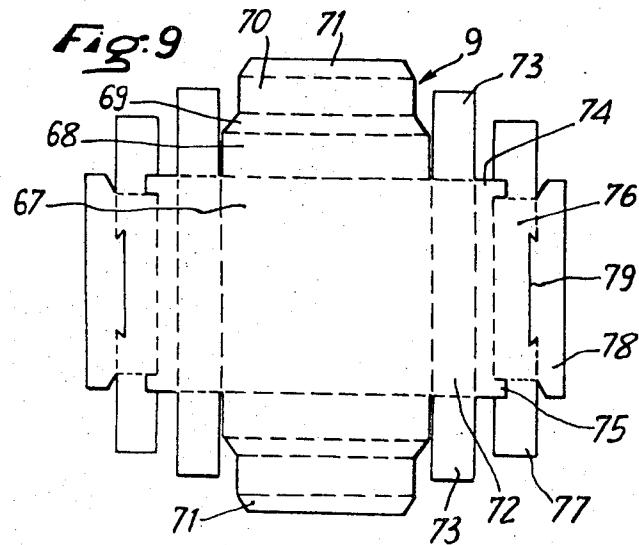
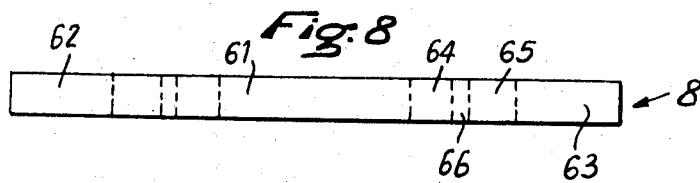
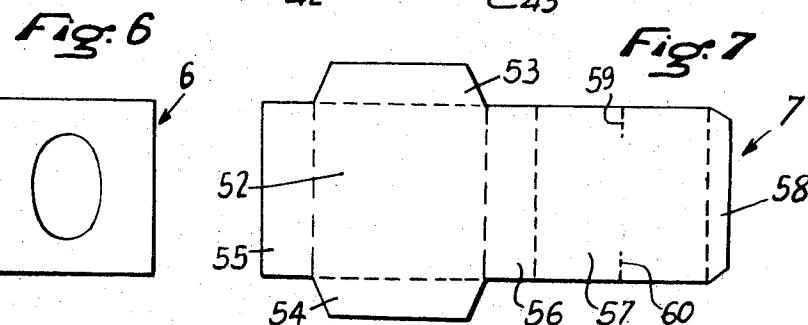
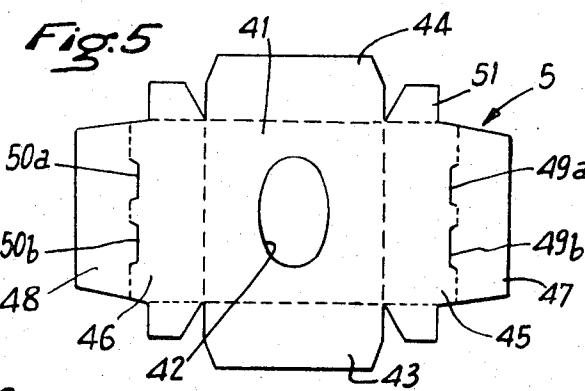
SHEET 1 OF 4



PATENTED FEB 23 1971

3,565,322

SHEET 2 OF 4



PATENTED FEB 23 1971

3,565,322

SHEET 3 OF 4

Fig.10

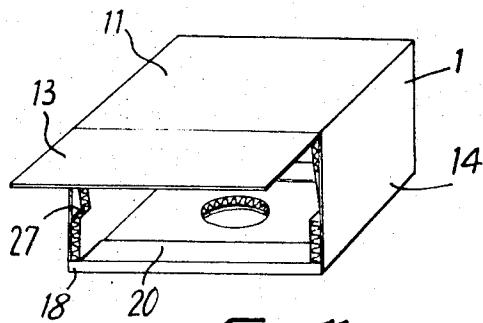


Fig.11

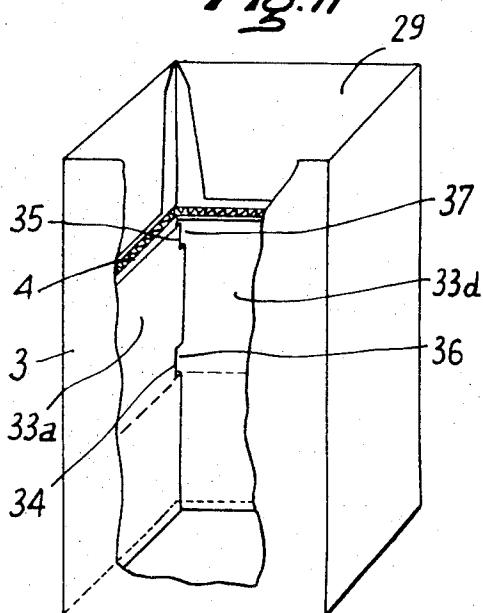
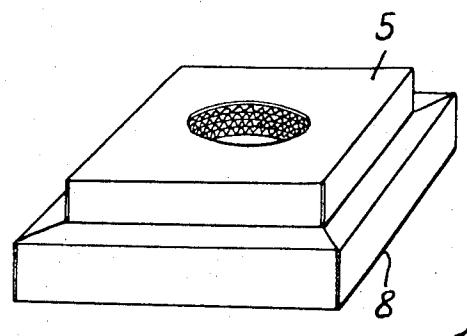
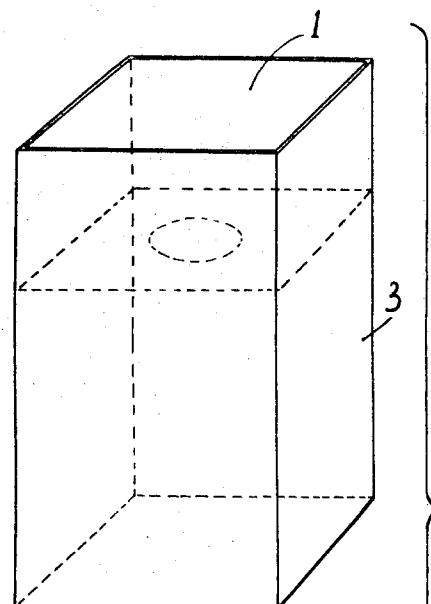


Fig.15



PATENTED FEB 23 1971

3,565,322

SHEET 4 OF 4

Fig. 12

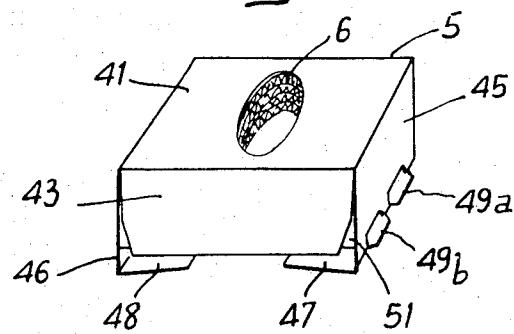


Fig. 13

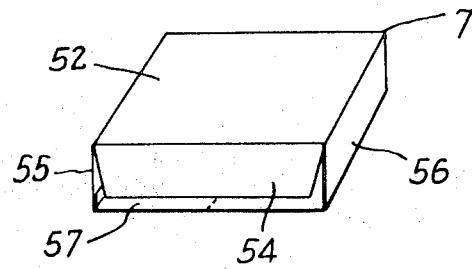
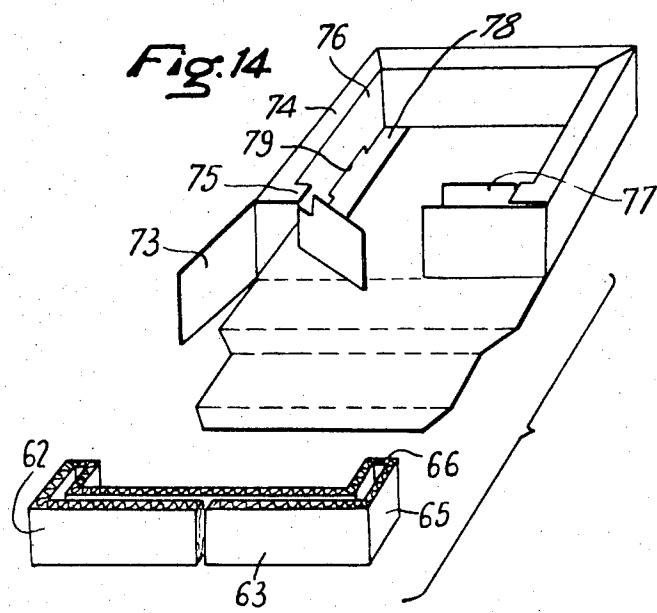


Fig. 14



CARDBOARD PACKINGS

This invention relates to a two-part cardboard packing of the kind whose base forms, for instance, a bottle pedestal, the cover being removable from the base so as to enable the bottle to be displayed in an upright position on the base, and the cover having a transversely extending panel member provided with an aperture for receiving the upper end of the bottle and which serves for centering and locating the bottle.

Packings of this kind are known in the form of "mounted" boxes which have disadvantages. First, once they become sizeable, boxes of this kind become difficult to devise. Second, the box needs preparing if it is to be able to be given decorative patterns, particulars of the brand and maker and so on. Third, boxes of this kind present a space problem which it is difficult to solve.

To obviate such disadvantages while retaining the special advantages of the mounted box, this invention relates to a cardboard packing wherein the base and the cover are each formed by erection and assembly of a number of folded and possibly glued blanks, corrugated cardboard linings being provided to strengthen the assembly.

By way of example and to assist in an understanding of the description, in the accompanying drawings:

FIG. 1 is a spreadout view of the thin cardboard blank forming the top part of the packing according to the invention;

FIG. 2 is a spreadout view of the corrugated cardboard blank which after packing strengthens the blank shown in FIG. 1;

FIG. 3 is a spreadout view of the thin cardboard blank forming the body of the cover of the packing according to the invention;

FIG. 4 is a spreadout view of the corrugated cardboard blank which after assembly strengthens the blank shown in FIG. 3;

FIG. 5 is a spreadout view of the thin cardboard blank forming the base of the packing according to the invention;

FIG. 6 is a spreadout view of one of the corrugated cardboard thickness shims which line a part of the base of the packing according to the invention;

FIG. 7 is a spreadout view of the thin cardboard blank which forms the bottom abutment of the base shown in FIG. 5 and which bears the thickness shims shown in FIG. 6;

FIG. 8 is a spreadout view of one of the two corrugated cardboard blanks adapted to strengthen the bottom member of the packing according to the invention;

FIG. 9 is a spread-out view of the thin cardboard blank forming the bottom member of the packing according to the invention;

FIG. 10 is a perspective view showing the top part of the packing during assembly, such part comprising two components erected from the blanks shown in FIGS. 1 and 2, respectively;

FIG. 11 is an exploded perspective view of the body of the packing cover after assembly, the body comprising two components erected from the blanks shown in FIGS. 3 and 4, respectively;

FIG. 12 is a perspective view of the base erected from the blank shown in FIG. 5 and including the thickness shims shown in FIG. 6, after assembly;

FIG. 13 is a perspective view of the base abutment after erection from the blank of FIG. 7 after assembly but before inclusion within the erected base below the shims;

FIG. 14 is a perspective view of the bottom member during erection from the blank of FIG. 9, the blank of FIG. 8 being shown after erection and before being placed in the bottom member; and

FIG. 15 is a perspective view of the packing according to the invention open and after assembly.

Referring to the drawings, a blank 1 in FIG. 1 comprises a square surface 11 which forms the top surface of the packing and which is bounded by four fold lines. The surface 11 bears two flaps 12, 13 and two surfaces 14, 15 which form the two lateral surfaces of the top part of the packing. The two flaps

12, 13 are shorter than the surfaces 14, 15. Articulated to surface 15 is a second square surface 16 forming the bottom surface of the top part of the packing and formed with a central aperture 17 and, opposite the surface 15, with a tongue 10 which is glued to surface 14 after assembly after the blank 1 is erected. The other two edges of surface 16 each have a tongue 18, 19 each with a respective flap 20, 21. The width of the tongues 18, 19 corresponds to the thickness of a corrugated cardboard blank 2 which helps to strengthen the top part of the packing.

Referring to FIG. 2, the blank 2 has two square surfaces 22, 23; surface 22 is formed with a circular aperture 24 corresponding to the aperture 17 and has two lateral surfaces each formed with recesses, as 27, in which the flaps 12, 13 are engageable by pivoting.

Referring to FIG. 3, a blank 3 which, after erection forms the main body or cover of the combination packing and display pedestal, comprises four identical lateral surfaces 28a to 28d each having a flap 29 at one end. Surface 28d also has a tongue 38 which is glued to the surface 28a after erection. The surfaces which are opposite one another after assembly, i.e., the pair 28a, 28c and the pair 28b, 28d have at their other end identical series of pairs of flaps.

Flaps 30a to 30d are adapted to take up the thickness of the corrugated reinforcement member 4. The flaps 30b, 30d have a lateral cut face, whereas the flaps 30a and 30c have two pointed corners 31. Four flaps 32 are separated from the flaps 30 by a fold line, are identical to one another, and each have opposite the flap 30 a flap 33. The flaps 33a, 33c are formed with a fold recess 34 on their two sides and with a similar recess 35 at their end. Opposite these recesses the flaps 33b, 33d have protuberances 36, 37.

Referring to FIG. 4, a corrugated cardboard blank 4 which serves to internally reinforce the wall structure of the main cover body 3 comprises four substantially rectangular surfaces 39a-39, of a height substantially equal to the total length of the flaps 32, 33. One of the end surfaces, for instance, the surface 39d, can be formed with a recess, as 40.

Referring to FIG. 5, a blank 5, which when erected forms the base has a square surface 41 formed with an orifice 42 which, in the example shown, is elliptical; on two of its opposite sides the blank 5 has two flaps 43, 44 with their corners cutoff. Articulated to the other two sides are two lateral surfaces 45, 46 of the packing base, each of the latter surfaces being edged by two identical flaps, as 51. There is a flap 47, 48 on that side of the lateral surfaces 45, 46 which is opposite the surface 41. The fold line via which the flap 47 or 48 pivots is partially cut to leave two tongues 49a, 49b for the flap 47 and 50a, 50b for the flap 48. When the base is erected by folding, the tongues 49a, 49b, 50a, 50b project on both sides of the base.

Referring to FIG. 6, corrugated cardboard thickness shims 6 are formed with a central orifice identical to the orifice or aperture 42.

Referring to FIG. 7, a blank 7 which when erected and placed within the base forms a bottom abutment for the bottle when inserted in the base recess has a square surface 52 edged on two opposite sides by flaps 53, 54 and on the other two sides by two lateral surfaces 55, 56 of the bottom abutment of the packing base. Surface 56 bears a second square surface 57 edged on the opposite side by a tongue 58 which is glued to surface 55 after erection of the blank. Surface 57 is also formed with the beginning 59, 60 of two fold lines near its free edges, the axis of the beginnings 59, 60 being parallel to the fold via which surface 57 can pivot relatively to surface 56.

Referring to FIG. 8, a strip 8, whose height is substantially the height of the packing bottom member, comprises a central portion 61, of a width substantially equal to the width of such bottom member, and two side flaps 62, 63 which are folded on the central portion 61 and which are of substantially half the length thereof. Between portion 61 and each side flap 62, 63 the strip 8 has two narrow bands 64, 65 separated by a tongue 66 whose length corresponds to the thickness of that part of the packing bottom member which projects outside the base.

Referring to FIG. 9, a blank 9 which when erected forms the bottom member of the packing and receives the base 5, comprises a square surface 67 having a series of flaps 68—71 on two opposite sides. The flaps 68, 70 are of substantially the same width as the height of the base; the width of the flap 69 corresponds to the thickness of that part of the bottom member which projects outside the base; and the flap 71 is adapted to be placed flat on the square surface 67 upon assembly of the base. On the other two opposite sides the square surface 67 has flaps articulated to one another, namely and consecutively, a flap 72 forming the outside lateral surface of the base and having on its two minor sides flaps 73 adapted to be placed on the inside against the flaps 68; a flap 74 forming the base top surface and having two rigid tongues 75 adapted to be placed flat below the flaps 69; and a flap 76 forming the inner lateral surface of the base and having two side flaps 77 adapted to be placed against the flaps 70 during assembly. A flap 78 is pivoted to flap 76 by way of a fold line interrupted in its central slit portion by a portion 79 offset laterally of the fold line so as to leave an aperture in the bottom of the bottom member after assembly. The base tongues 49a, 49b and 50a, 50b of FIG. 5 are introducible into the latter aperture. The flaps 78 are placed flat on the bottom of the base towards the center thereof, whereas the flaps 71 are slid below the lateral thickness of the base.

The assembly procedure for the various parts which make up the packing according to the invention can be followed with reference to FIGS. 10—14.

Referring to FIG. 10, the blank 1 is erected and the tongue 10 is glued to the flap 14, the folded blank 2 being introduced into the blank 1, the apertures 17 and 24 being in registration with one another. The flaps 18, 20 and 19, 21 are then folded. The flaps 20, 21 are retained against surface 22 by slight deformation of the lining 2 near the fold lines. To enable the top part (FIG. 10) of the box to be introduced into the body FIG. 11) thereof, the flaps 12, 13 can retract into the recesses 27 in the lining 2.

Referring to FIG. 11, the cover body is assembled by gluing tongue 38 to surface 28a of blank 3, the blank 4 being in position, whereafter the top flaps 29 are folded. In the bottom part the two flaps 30a, 30c are first folded, whereafter the flaps 32, 33a, 33c are folded and are placed against the lining 4 and remain in position because of the slight deformation of the lining 4. The flaps 30b, 30d are then folded and cover the pointed parts 31 of the flaps 30a, 30c to give the assembly satisfactory stiffness at the corners. The flaps 32, 33b, 33d are then placed against the lining 4. During this stage the recesses 34, 35 cooperate with the protuberances 36, 37 respectively to lock the body of the packing box in position.

To form the bottom abutment of the base, the blank 7 is erected and the end surface 58 glued to the opposite end surface 55 (FIG. 13) and its flaps 53, 54 folded. Thickness shims 6 (to the number of four in the example shown) are placed on surface 52 of the bottom abutment and below surface 41 of blank 5, the apertures registering with one another. The flaps 45, 46 are then folded, and so are their lateral flaps 51, followed by the flaps 43, 44, whereafter the flaps 47, 48 are folded below the bottom surface 57 of the base abutment 7, the tongues 49, 50 projecting.

To form the bottom member or base proper of the packing, the flaps 72, 74, 76 of the blank depicted in FIG. 9 are bent at right-angles and the flap 78 is engaged with the base end 67 towards the inside. The lining 8 is then positioned, after folding as shown in FIG. 14. The two bent portions are introduced between the flaps 72 and 76, the side flaps 77 having been placed in the central portion 61, the flaps 73 being outside the folded parts 62, 63. The lining 8 partially covers the ends of the flaps 78 to retain the same. The flaps 68 to 71 are then all folded in the same direction, the flaps 71 being slid below the lining 8 above the projecting end of the flaps 78, so that the various elements of the base proper are locked in position. The base 5 is then introduced into the central cavity of the bottom member 5 and the tongues 49, 50 slide into the apertures 79 and thus lock the base in the bottom member to form the bottom part of the packing.

FIG. 15 shows the packing according to the invention ready for use with its cover and base, the cover sliding with reduced friction on that part of the base 5 which projects from the bottom member 8.

5 This packing is of use more particularly for the display of bottles, for instance of perfume. The recess in the base 5 is adapted to receive the bottom of the bottle and is adapted in shape to bottle shape. The aperture in the top of the packing is adapted to receive the bottle stopper and is adapted in shape thereto.

10 As compared with a mounted and covered box, the packing according to the invention has a number of advantages including ease of cutting the flat blanks, the fact that the blanks can be printed on directly, and easy storage flat before assembly until the time of use; all these features help to reduce the cost of the packing.

I claim:

1. A combined cardboard packing and display pedestal for an article such as a bottle comprising a pedestal base having a recess for receiving the bottom of the bottle, and a removable cover for said base including a main body portion adapted to rest upon the base and which provides the sidewalls for the packing and a top provided with a transverse member located beneath and spaced from the end wall and having an aperture 15 in alignment with said recess in said base for receiving and centering the upper portion of the bottle, said pedestal base and removable cover being erected from cardboard blanks, and corrugated paperboard lining the walls of said pedestal base and cover for reinforcing the same.

20 2. A combined cardboard packing and display pedestal as defined in claim 1 wherein said pedestal base comprises a first blank which when erected forms an upwardly projecting and bottom member and a second blank which when erected forms the actual base with the recess therein and is embedded in said bottom member, said erected second blank including locking tongues which are received in slits located on the inside of said erected bottom member.

25 3. A combined cardboard packing and display pedestal as defined in claim 2 wherein said second erected blank forming the actual base with the recess therein includes a stack of corrugated paperboard shims which are recessed to establish the base recess and which further includes a third blank which when erected forms an abutment for the base of the bottle and is located within said second erected blank below said shims.

30 4. A combined cardboard packing and display pedestal as defined in claim 2 wherein said first blank includes a square surface forming an end and having two first identical series of four consecutive flaps on two of its opposite sides and, on the other two opposite sides, two second identical series of four consecutive flaps of which the first and third have lateral fold-over tongues, the third and fourth flaps being separated by a partial blank which upon folding remains clear of the slit adapted to cooperate with the locking tongues of said second erected blank.

35 5. A combined cardboard packing and display pedestal as defined in claim 4 and which further includes lining strips of corrugated paperboard reinforcing the walls of said erected first blank, said lining strips being positioned between said lateral tongues subsequent to the folding of said second series of flaps and prior to folding of said first series of flaps.

40 6. A combined cardboard packing and display pedestal as defined in claim 2 wherein said second blank includes a rectangular surface having on two of its opposite sides two series of two consecutive flaps separated by a part which upon folding remains clear of said locking tongues.

45 7. A combined cardboard packing and display pedestal as defined in claim 1 wherein the main body portion of said removable cover for said base is erected from a fourth blank which comprises four adjacent elongated rectangular surfaces 50 having on their minor sides a single flap at the top and a series of three consecutive flaps at the bottom, those surfaces which are opposite one another after folding having identical flaps, the third flap being formed alternately in each series with recesses and protuberances which cooperate lockingly with 55 one another after folding.

8. A combined cardboard packing and display pedestal as defined in claim 7 wherein the top of said removable cover member is erected from a fifth blank having two spaced-apart rectangular surfaces one of which establishes said transverse member provided with the aperture for receiving the upper portion of the bottle, and which includes on two opposite sides thereof two series of two consecutive flaps which form after erection an abutment for the said single flaps on said fourth blank.

9. A combined cardboard packing and display pedestal as

defined in claim 8 wherein said fifth blank after erection includes a corrugated paperboard reinforcing liner having two lateral surfaces provided with recesses to permit retraction of the two flaps of said fifth blank during assembly of the main body portion of the cover with the top.

10. A combined cardboard packing and display pedestal as defined in claim 9 wherein the reinforcing liner for said fifth blank establishes a bearing abutment therefor during assembly of the main body portion of the cover with the top.