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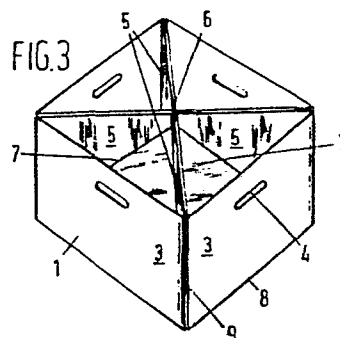
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54 **A box for packaging and shipping flowers and the like.**

57 A box (1), for example for packaging and shipping flowers and the like. The box is folded and set-up from a blank, including a rectangular ground or base panel (10), four sidewalls (3) linked to the ground or base panel by means of folding-lines (8), and flaps (5) linked to the sidewalls and to each other by means of folding-lines (7). The flaps extend into the space enclosed by the box up to the centre of the box to provide compartments therein. There are further provided means for fixing the sidewalls relatively to each other in the set-up condition of the box. A slip-over box or cover (2) is provided, whose height is considerably in excess of the height of the sidewalls of the box.



Title: A box for packaging and shipping flowers and the like.

This invention relates to a box, for example for packaging and shipping flowers and the like, folded and set-up from a blank, said blank including a rectangular ground or base panel, four sidewalls linked to said ground or base panel by means of folding-lines, and flaps linked to said sidewalls and to each other by means of folding-lines, said flaps extending into the space enclosed by the box, there being further provided means for fixing the sidewalls relatively to each other in the set-up condition of the box.

A similar box, but then in particular for the shipment of chicks, is disclosed in US-A-2,134,051.

The packaging and shipping of flowers involve many problems. Practice hitherto has been for the grower to pick the flowers, bundle them, and subsequently take them to the auction in "dry" condition. From there they may be transported to the wholesaler or retailer in a bucket with water. Round buckets cause much loss in space during storage and transportation, and so increase cost. Another disadvantage is that the flowers stand dry for a shorter or longer period of time, and so deteriorate in quality.

It is an object of the present invention to improve the prior box. According to the invention, this object is achieved by the blank being so shaped and so folded that the flaps extend up to the centre of the box. The blanks can be efficiently stored in large quantities, and prior to use be set-up to form a box in a simple manner. The shape of the box should of course be fixed. This can be effected in a simple manner by fixing the sidewalls in their relative positions, for example, by interconnecting the flaps. If the flaps remain interconnected at the corners between the sidewalls, the flaps remain freely rotatable relatively to the box corner with which the flap in question is connected.

This has the advantage that, if the box is square, the flaps extend through the centre of the box and divide it into compartments. As the flaps are freely rotatable, the division into compartments is quite flexible, which greatly simplifies
5 positioning the last bunches of flowers. In order to prevent the flaps from interfering with each other in the middle of the box, the flaps can be shortened by cutting out portions at the corners of the blank.

If the box is made of a water-tight material,
10 the flowers can also be shipped with them in water.

The box can be closed by providing it with a slip-over box or cover, whose height is considerably larger than the height of the sidewalls of the box. By virtue of this, the box also permits flowers being packed and shipped in
15 it which extend above the box.

The sidewalls of the box and the slip-over box or cover can be provided with grip apertures which in the assembled condition or shipping condition of the box are each in registry with another in pairs, so that when the
20 grips are engaged both the box and the slip-over box or cover are removed. The slip-over box or cover has the further advantage that it can be used as a stand or display for use when selling the contents of the box. The slip-over box or cover is further excellently suitable for use as
25 an advertising surface both during transport and sale.

For the sake of completeness it is noted that a box divided into compartments by flaps is known per se from US-A-2,710,133. The blank used therein, however, is much more complicated than that according to the present
30 invention. In addition, when the box is folded as in the US patent, it cannot be water-tight.

A box according to the present invention for packaging and shipping flowers will now be described in more detail with reference to the accompanying drawings, in which:

35 Fig. 1 shows a perspective view of a box with a slip-over box or cover, taken apart;

Fig. 2 shows a perspective view of the slip-over box or cover of Fig. 1;

Fig. 3 shows a perspective view of the box of Fig. 1;

5 Fig. 4 shows a plan view of the box of Fig. 3; and

Fig. 5 shows a blank of the box according to the present invention.

10 As shown in Fig. 1, a box for packaging and shipping flowers or the like comprises a box 1 for actually containing the flowers and a slip-over box or cover 2.

Box 1 is folded from a square blank as shown in Fig. 5. As shown, the blank is provided with four folding lines 8, respectively parallel to the four edges of the blank. The folding lines 8 enclose a ground panel 10. Folding lines 9, which are continuations from folding lines 8, define squares in the corners of the blank. In these squares, diagonal folding lines 7 extend from the corner point of the blank to the point where the folding lines 9 intersect. Two folding lines 9 and a folding line 8 thus define a sidewall 3. By setting-up the blank, the box according to the invention is formed with a ground panel 10, sidewalls 3, and inwardly directed flaps 5. Flaps 5 divide the box into compartments in which bunches of flowers, not shown, can be placed (Fig. 3). The box shape can be stabilized by fixing means. Preferably such fixation is effected by interconnecting flaps 5 at the corners between the sidewalls 3, so that flaps 5 remain freely rotatable relatively to the corner, thereby creating a flexible division into compartments. To prevent the flaps 5 from interfering with each other in the centre of the box, flaps 5 are shortened somewhat by cutting out pieces along lines 6 at the corner points of the blank.

35 When the blank is made of water-tight material, e.g. corrugated cardboard with a water-tight coating of, for example, wax, flowers can be transported in water.

To close the top of the box, it can be provided with the slip-over box or cover 2, referred to hereinbefore, which has a top panel and four sidewalls (Fig. 2). The height of the slip-over box or cover 2, i.e. the sidewalls thereof, is considerably in excess of the height of the sidewalls 3 of box 1, to permit long-stemmed flowers to be packaged in the box. The slip-over box or cover can additionally serve as a support or stand for the box for the purpose of displaying the flowers. If desired, the walls of the slip-over box or cover can be provided with suitable advertising.

To facilitate handling the box assembly, grip openings 4 are formed in the four sidewalls of box 1 and slip-over box or cover 2 in such a manner that, in the assembled condition, grip openings 4 of box 1 and slip-over box or cover 2 are respectively in alignment.

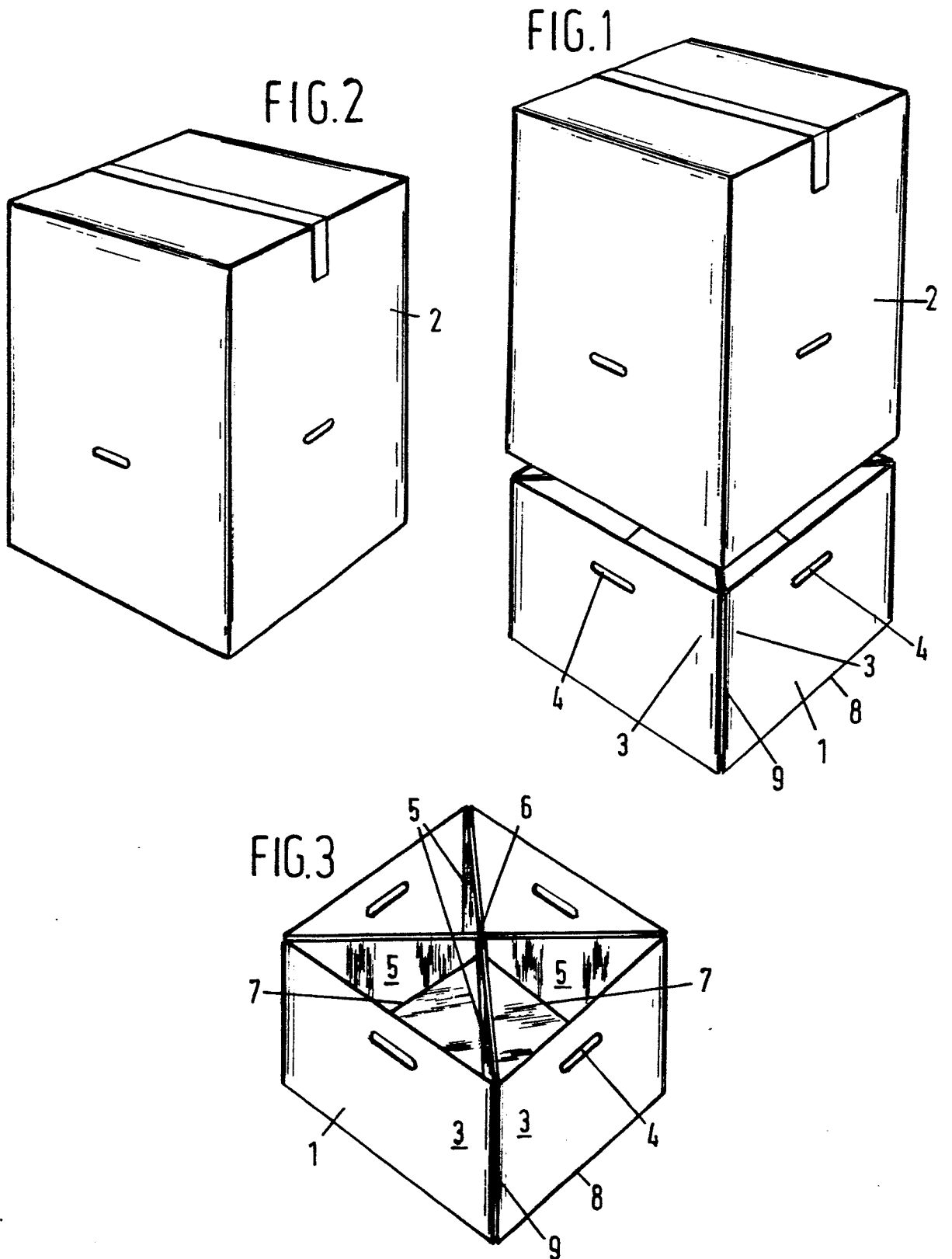
In addition to the advantages referred to hereinbefore, the invention has the advantage that repacking is unnecessary, so that the risk of transmitting diseases is minimized.

A further important point is that even the last bunch of flowers present in a box according to this invention keeps standing in a substantially upright position so that it is attractively presented and vendible.

In this embodiment the invention is shown and described with reference to the packaging and shipping of flowers. It will be clear, however, that the invention is also applicable to the packing and shipping of other products. Furthermore, in addition to the embodiment shown, other embodiments and modifications are possible without departing from the scope of the invention.

Claims

1. A box, for example for packaging and shipping flowers and the like, folded and set-up from a blank, said blank including a rectangular ground or base panel, four sidewalls linked to said ground or base panel by means of folding-lines, and flaps linked to said sidewalls and to each other by means of folding-lines, said flaps extending into the space enclosed by the box, there being further provided means for fixing the sidewalls relatively to each other in the set-up condition of the box, characterized in that the blank is so shaped and so folded that the flaps extend up to the centre of the box.
2. A box according to claim 1, characterized in that the flaps have been shortened by cutting-out parts at the corners of the blank.
3. A box according to claim 1 or 2, and further comprising a slip-over box or cover of a height considerably in excess of the height of the sidewalls of the box.
4. A box with slip-over box or cover according to claim 3, characterized in that the sidewalls of the box and the slip-over box or cover are provided with grip openings which in the assembled condition or shipping condition of the box are respectively in registry with each other.



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FIG. 4

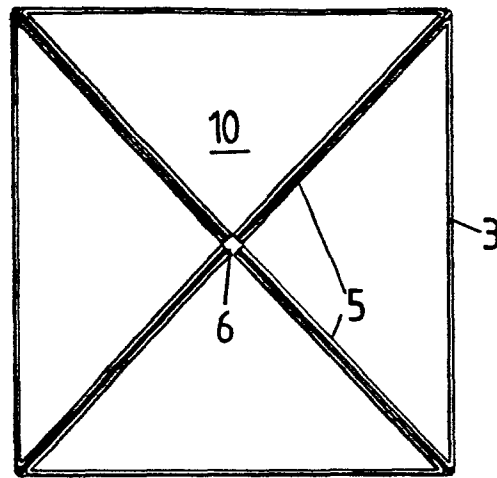
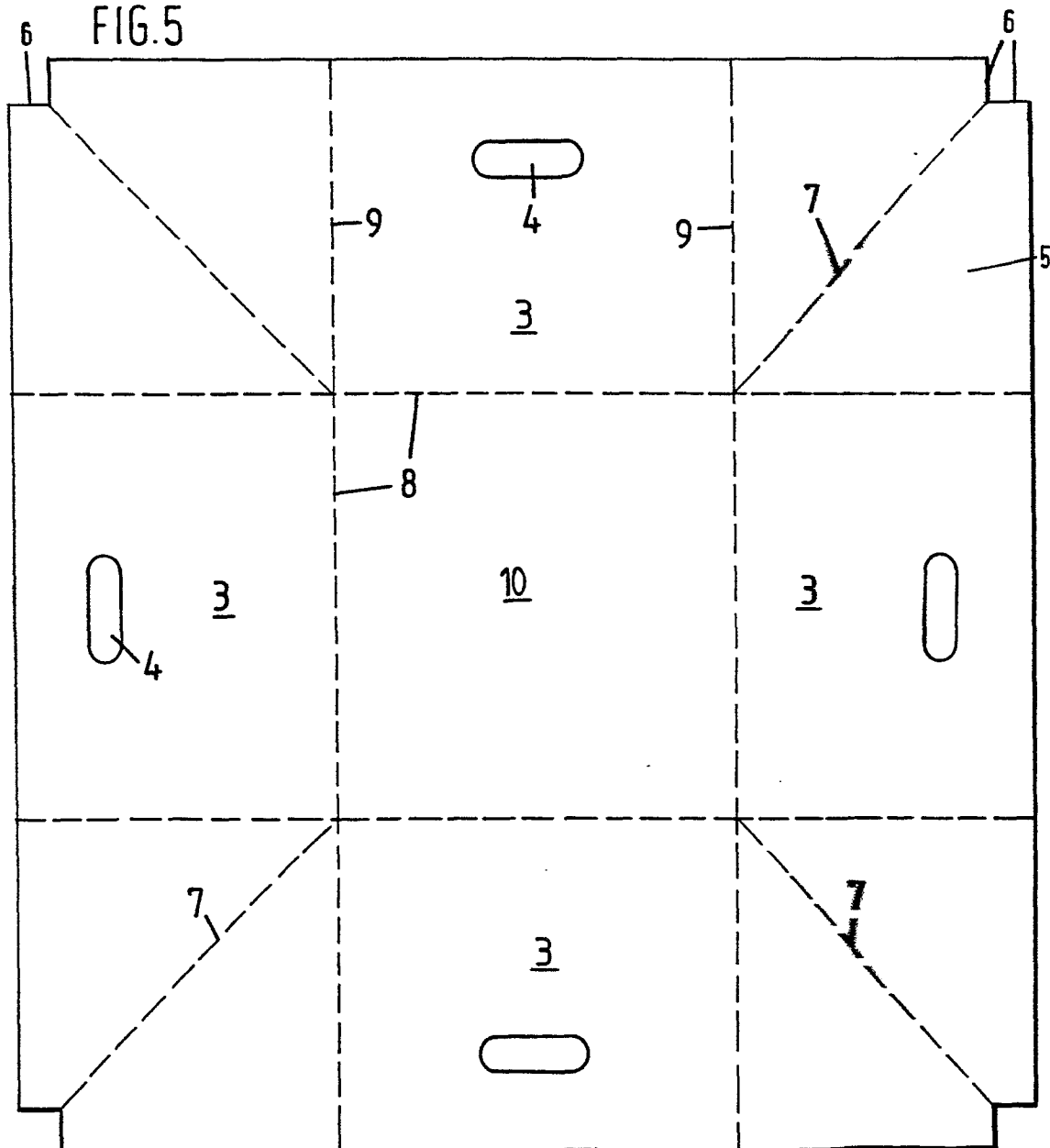


FIG. 5





European Patent
Office

EUROPEAN SEARCH REPORT

0164795

Application number

EP 85 20 0844

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
D,X	US-A-2 710 133 (REPKING) * Column 2, line 50 - column 4, line 4; figures 1-3 *	1	B 65 D 85/50 B 65 D 5/50
D,A	--- US-A-2 134 051 (KIRBY) * Column 3, line 8 - column 4, line 49; figures 1-6 *	1	
A	--- US-A-3 343 744 (MORELL) * Column 2, line 14 - column 4, line 32; figures 1-5 *	1	
A	--- DE-A-2 612 463 (LIMBURG) * Page 11, line 27 - page 12, line 22; figures 1-4 *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28-08-1985	Examiner SCHMID R.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			