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

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Description

This invention relates to a blank for a box comprising two pairs of fold lines which define

—a square or rectangular bottom panel;

—and four corner braces, each corner brace comprising two triangular panels joined to each other by a fold line extending from a point at which a fold line of the first pair of fold lines and a fold line of the second pair of fold lines intersect each other, and joined by said fold lines of the first and second pairs respectively to two contiguous side panels.

A similar blank is disclosed in US—A—2,134,051. The blank of this box, however, has been developed for the shipment of chickens. The blank of this box is provided with a plurality of nicks necessary for interconnecting the walls and braces of the box, said nicks further being necessary for a proper venting: this means that, after folding, leakages will be produced at the angular point, so that this blank is unsuitable for functioning as shipping box for flowers with water.

It is an object of this invention to eliminate this drawback.

According to this invention, this object is achieved in that

—the blank is made of a waterproof material, for example is coated or impregnated on one side with a waterproof liner;

—and the side panels have a minimum height such that when the blank is folded about all its fold lines into its set-up condition to form a box, the corner braces extend up to the centre of the box, thus forming two partitions extending over the whole diagonals of the bottom panel.

The invention also relates to a box made by folding said blank about all its fold lines and directing the corner braces towards one another, whereby the liner extends on the inner surface of the box.

The invention also relates to an assembly of the box, described hereinbefore, and a cover box, which is considerably higher than the side panels of the box.

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:

Fig. 1 shows a perspective view of a box with a cover, taken apart;

Fig. 2 shows a perspective view of the cover of Fig. 1;

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

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.

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 cover 2.

The 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 bottom 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 side panel 3. By setting-up the blank, the box according to the invention is formed with a bottom panel 10, side panels 3, and inwardly directed braces 5. Braces 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 braces 5 at the corners between the sidewalls 3, so that braces 5 remain freely rotatable relatively to the corner, thereby creating a flexible division into compartments. To prevent the braces 5 from interfering with each other in the centre of the box, braces 5 are shortened somewhat by cutting out pieces along lines 6 at the corner points of the blank.

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 cover 2, referred to hereinbefore, which has a top panel and four sidewalls (Fig. 2). The height of the cover 2, i.e. the sidewalls thereof, is considerably in excess of the height of the side panels 3 of box 1, to permit long-stemmed flowers to be packaged in the box. The 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 cover can be provided with suitable advertising.

To facilitate handling the box assembly, grip openings 4 are formed in the four side panels of the box 1 and cover 2 in such a manner that, in the assembled condition, grip openings 4 of the box 1 and 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: So it is also possible to use impregnated paper instead of a coated liner.

Claims

1. A blank for a box comprising two pairs of fold lines (8, 9) which define

—a square or rectangular bottom panel (10);

—and four corner braces (5), each corner brace (5) comprising two triangular panels joined to each other by a fold line (7) extending from a point at which a fold line of the first pair of fold lines and a fold line of the second pair of fold lines intersect each other, and joined by said fold lines of the first and second pairs respectively to two contiguous side panels (3) characterized in that,

—the blank is made of a waterproof material, for example is coated or impregnated on one side with a waterproof liner;

—and the side panels (3) have a minimum height such that when the blank is folded about all its fold lines into its set-up condition to form a box, the corner braces (5) extend up to the centre of the box, thus forming two partitions extending over the hole diagonals of the bottom panel (10).

2. A box made by folding the blank of claim 1 about all its fold lines and directing the corner braces (5) towards one another, whereby the liner extends on the inner surface of the box.

3. An assembly of the box according to claim 2 and a cover box (2) which is considerably higher than the height of the side panels (3).

4. An assembly according to claim 3, characterized in that the side panels (3) of the box and the cover box (2) are provided with grip openings (4) which in the assembled condition or shipping condition of the box are respectively in registry with each other.

Patentansprüche

1. Zuschnitt für eine Schachtel mit zwei Paar Faltlinien (8, 9), die ein quadratisches oder rechteckiges Bodenfeld (10) und vier Eckverstrebnungsabschnitte (5) definieren, wobei jeder Eckverstrebnungsabschnitt (5) zwei dreieckige, durch eine Faltlinie (7) miteinander verbundene Felder enthält und die Faltlinie (7) sich von einem Punkt aus erstreckt, an dem sich eine Faltlinie des ersten Faltlinienpaares und eine Faltlinie des zweiten Faltlinienpaares schneiden, und wobei diese Eckverstrebnungsabschnitte über die genannten Faltlinien des ersten bzw. zweiten Paares mit zwei angrenzenden Seitenfeldern (3) verbunden sind, dadurch gekennzeichnet, daß der Zuschnitt aus einem wasserfesten Material besteht, beispielsweise auf einer Seite imprägniert oder mit einer wasserfesten Auskleidung versehen ist, daß die Seitenfelder (3) eine Mindesthöhe aufweisen, so daß, wenn der Zuschnitt entlang aller seiner Faltlinien in seine zusammengefaltete Schachtelform gebracht worden ist, die Eckverstrebnungsabschnitte (5) sich bis zur Mitte der Schachtel erstrecken und so zwei Abtrennungen bilden, die sich über die volle Länge der Diagonalen des Bodenfeldes (10) erstrecken.

2. Schachtel, hergestellt durch Falten des Zuschnitts nach Anspruch 1 entlang aller seiner Faltlinien und Hinwendung der Eckverstrebnungsabschnitte (5) zueinander, so daß die wasserfeste Auskleidung sich auf der Innenseite der Schachtel befindet.

3. Anordnung aus Schachtel nach Anspruch 2 und einer Deckelschachtel (2), die wesentlich höher ist als die Höhe der Seitenfelder (3).

4. Anordnung nach Anspruch 3, dadurch gekennzeichnet, daß die Seitenfelder (3) der Schachtel und die Deckelschachtel (2) mit Grifföffnungen (4) versehen sind, die bei zusammengesetztem bzw. versandbarem Zustand der Anordnung jeweils übereinander ausgerichtet sind.

Revendications

1. Plaque pour former une boîte comprenant deux paires de lignes de pliage (8, 9) qui délimitent

—un panneau de fond carré ou rectangulaire (10);

—et quatre entretoises d'angle (5), chaque entretoise d'angle (5) comprenant deux panneaux triangulaires assemblés entre eux par une ligne de pliage (7) allant d'un point d'intersection d'une ligne de pliage de la première paire des lignes de pliage avec une ligne de pliage de la seconde paire de lignes de pliage, et assemblés par lesdites lignes de pliage de la première et de la seconde paires respectivement aux deux panneaux latéraux contigus (3), caractérisée par le fait que:

la plaque est fabriquée en un matériau étanche à l'eau comme par exemple un matériau recouvert ou imprégné sur une face avec un revêtement étanche à l'eau;

et des panneaux latéraux (3) ayant une hauteur minimale telle qu'au moment où la plaque est pliée sur toutes ses lignes de pliage dans son état de montage pour former une boîte, les entretoises d'angle (5) s'étendent jusqu'au centre de la boîte, en formant ainsi deux cloisons placées sur toute la longueur des diagonales du panneau de fond (10).

2. Boîte obtenue en pliant la plaque de la revendication 1 sur toutes ses lignes de pliage et en orientant les entretoises d'angle (5) l'une vers l'autre, de façon que le revêtement s'étende sur la surface intérieure de la boîte.

3. Ensemble de boîte selon la revendication 2, et un couvercle de boîte (2) qui est nettement plus haut que la hauteur des panneaux latéraux (3).

4. Ensemble selon la revendication 3, caractérisé par le fait que les panneaux latéraux (3) de la boîte et le couvercle de boîte (2) présentent des ouvertures formant poignées (4) qui à l'état assemblé ou dans les conditions d'expédition de la boîte sont respectivement en coïncidence entre elles.



