

March 27, 1956

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2,739,701

BLANK FOR FLOWER SUPPORTING CARTON

Filed June 6, 1952

2 Sheets-Sheet 1

Fig. 1

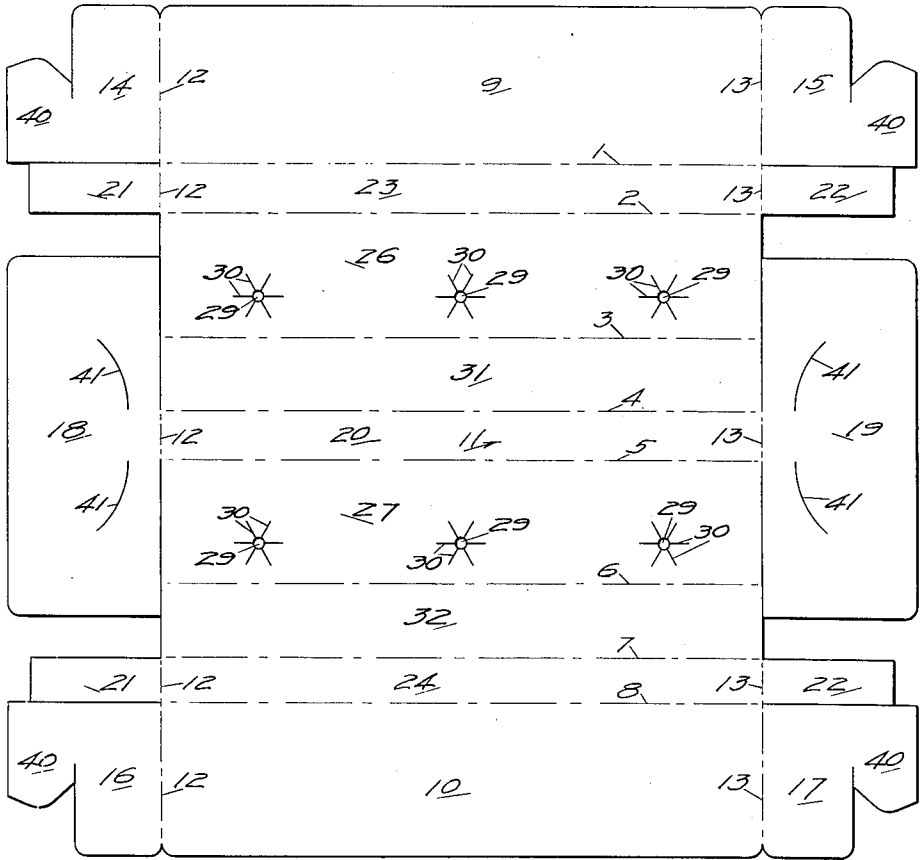
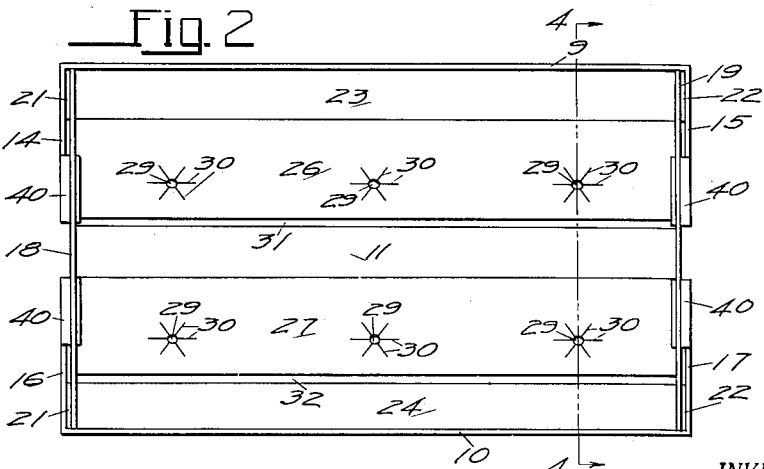


Fig. 2



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Fig. 3

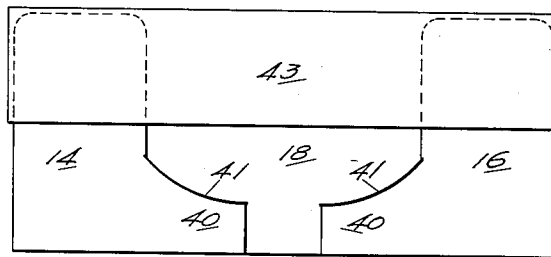


Fig. 4

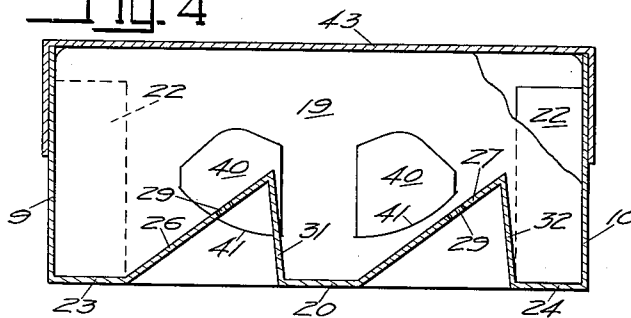
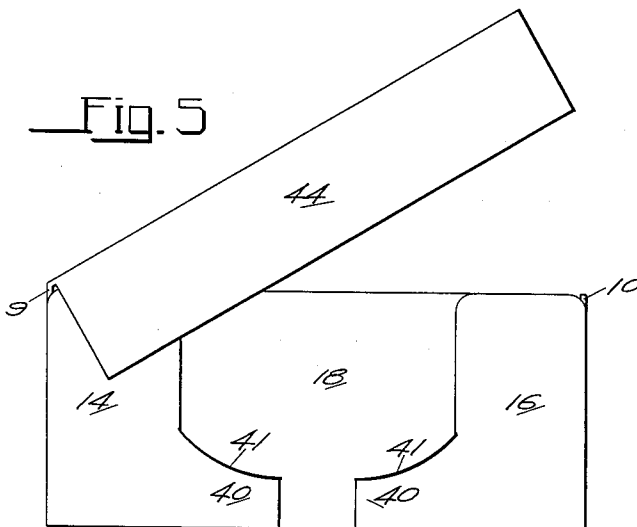


Fig. 5



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BLANK FOR FLOWER SUPPORTING CARTON

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1 Claim. (Cl. 206—45.19)

This invention relates to a flower carton, such as is suitable for use in shipping gardenias and the like, and for holding and displaying said gardenias.

Gardenias, camellias and similar blossoms have relatively large calices and during their shipping, handling and display, they must be firmly supported in spaced relation from each other and from any foreign object, such as the carton, holder, wrapper, cover etc.

The most suitable holders for the blossoms have been found to be sheet material, such as cardboard, formed to provide an inclined portion that is apertured for the calyx and stem, the latter projecting from the lower side of such portion, and the elevated edge of the inclined portion is spaced above a support, such as the bottom of a box, by a downward extension of the said inclined portion. Such a holder is seen in United States Letters Patent 2,358,295, issued September 19, 1944, to P. Bacigalupi.

The principal difficulties encountered in the use of prior gardenia holders are the difficulty of assembling the holders in the cartons so they will be rigid with the latter, and the excessive cost of the cartons and holders due to their separate structure, and the exorbitant cost of labor in the assembly of the holders and cartons and the packing of the gardenias.

One of the principal objects of this invention is the provision of a carton made from a single sheet of material, such as cardboard which may or may not have a cover integral therewith, and the bottom wall of which carton is foldable to provide rigidly supported inclined apertured sections on which the blossoms are supported, and which bottom wall is rigidly held in folded position against distortion thereof when loaded and handled.

Other objects and advantages will be seen in the description and drawings.

In the drawings, Fig. 1 is a plan view of a blank from which the carton may be formed, the carton being of the folding type and not a set-up carton.

Fig. 2 is a top plan view of a carton when folded from the blank of Fig. 1.

Fig. 3 is an end elevational view of the carton, both ends being the same. A removable cover is shown in place on the carton.

Fig. 4 is a sectional view along line 4—4 of Fig. 2, a removable cover being indicated on the carton.

Fig. 5 is a view similar to Fig. 3 but showing a carton in which the cover may be integral with the blank and carton, the cover being slightly open to show the connection between it and the carton.

In the detailed description, the term "carton" is intended to refer to the body of the container, and does not necessarily include a cover, although a cover may be provided, and usually is. However, the carton could be wrapped in transparent material such as regenerated cellulose or chlorinated rubber under certain conditions.

It is to also be understood that the words "folding creases" are not intended to necessarily restrict the structure in which creases (in the sense used in the industry) are employed. The material may be creased, scored, or

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weakened along fold lines in any suitable manner to facilitate folding the material.

In detail, the blank from which the carton is formed with a plurality of spaced parallel folding creases in a row extending in the direction of one dimension of the blank (vertically in Fig. 1), said creases being numbered 1, 2, 3, 4, 5, 6, 7 and 8 starting from the top in Fig. 1.

The end creases 1 and 8 define the junctures between the marginal portions 9, 10, and the portion of the blank that is between said marginal portions. Said portions 9, 10 form two of the opposed side walls of the carton when the latter is formed, and the portion that lies between said creases 1 and 8 forms the bottom 11 of the carton.

A pair of folding creases 12, 13 extend perpendicularly of the creases 1 to 8 and these creases 12, 13 define the junctures between locking flaps 14, 15 that are in extension of the side wall 9, and the junctures between similar locking flaps 16, 17 and the side wall 10, and the junctures between end walls 18, 19 and the central portion 20 of the bottom wall 11, and the junctures between extensions 21, 22 and the portions of the bottom wall that adjoin the side walls 9, 10.

While the walls 9, 10 have been designated "side walls" and walls 18, 19 have been designated "end walls," virtually all of these walls are side walls, and the difference in designations is not intended to be any restriction on the dimensions of said walls.

Referring specifically to the bottom wall 11, it will be seen that the parts designated 20, 24, 23 and respectively lying between creases 4, 5 and 1, 2, and 7, 8 may be of the same width. These parts are coplanar and horizontal when the carton is formed, and perpendicular to the side and end walls, with parts 23, 24 adjoining the side walls 9, 10 while part 20 connects at its ends with the central portion of the lower edges of end walls 18, 19.

The portions 26, 27 lying between creases 2, 3 and 5, 6 are relatively wide as compared with parts 23, 24 and said portions 26, 27 are each formed with apertures 29 that are equally spaced from each other longitudinally of portions 26, 27, and that are positioned closer to creases 3, 6 than to creases 2, 5 at points about a third the distance across said portions 26, 27 transversely thereof.

Radially extending cuts 30 extend to the edges of apertures 29 to enable the marginal portions of the apertures to yieldably bend to one side of portions 26, 27 under the expanding force of the stem or calyx of a blossom that is adapted to extend through each aperture. When such blossom is in position, the segments between the slits or cuts 30 will yieldably grip the calyx.

The portions 31, 32 between creases 3, 4 and 6, 7 are slightly wider than the parts 20, 23, 24, but are of the same width relative to each other.

The end walls 18, 19 are connected with the bottom wall only at the ends of the central part 20 of said bottom wall, and the extensions 21, 22 are not joined to locking flaps 14, 15 or 16, 17 therefore the bottom wall may be folded along creases 2 to 7 inclusive, and side walls 9, 10 may be bent to opposed relation perpendicular to the adjoining parts 23, 24 of said bottom wall.

In so folding the bottom wall, the parts 20, 23, 24 as already mentioned, are coplanar. The portions 31, 32 are bent to generally perpendicular relationship to the parts 20, 24 with which they directly connect, and this will cause the apertured portions 26, 27 to slant upwardly from the creases 2, 5 and they will be supported in said inclined position by the portions 31, 32.

The folding of the portions of the bottom wall along creases 2 to 7 inclusive as above explained will bring the opposed side walls 9, 10 closer together than before said folding, and when the end walls 18, 19 are folded to the same side as side walls 9, 10, the ends of said end walls will be in substantially adjoining relation to the

ends of side walls 9, 10. The extensions 21, 22 are then folded to overlie the marginal portions of end walls 18, 19 that are adjacent to said extensions, after which the locking flaps 14, 15 and 16, 17 are adapted to be brought to positions overlying the extensions 21, 22 as well as the marginal portions of the end walls that are adjacent to said flaps.

The outer end of each locking flap is formed with an upwardly projecting locking tab 40 that is slightly greater than half the vertical width of each flap, but its lower edge is aligned with the lower edge of the flap, and said lower edge of the flap is substantially coplanar with the parts 20, 23, 24 of the bottom wall.

The overall horizontal length of each flap 14 to 17 including the tab 40 is virtually equal to the distance between the part 20 and either side wall 9, 10 and formed in each end wall 18, 19 is a pair of arcuately extending slits 41 through which each locking tab 40 is adapted to be upwardly inserted when the locking flaps are swung to positions overlying the extensions 21, 22.

The fact that the locking flaps 14 to 17 inclusive extend almost to the centers of end walls 18, 19 with their lower edges coplanar with the parts 20, 23, 24 of the bottom wall facilitates the "squaring up" of the carton when the latter is placed on a supporting surface, such as a table. If any of the locking tabs should not be in locking position in slits 41, the positioning of the carton on a table will immediately cause the tabs to move into complete locking relation and all of the lower edges of the locking flaps will move into coplanar relationship with each other and with the parts 20, 23, 24. This is what is meant by "squaring" the carton after it is set up.

When the extensions 21, 22 are between the locking tabs and the end walls, it will be seen that they extend about the full width of said end walls (vertically) and that one of their edges is in adjoining relation to each end of the side walls 9, 10. Thus any upward pressure on the bottom wall, and particularly on parts 23, 24 will be resisted by the engagement between extensions 21, 22 and the side wall adjacent thereto. This is important, for otherwise the bottom wall would readily be pushed upwardly in handling the carton in the usual manner, with the likelihood of the petals of the gardenias being injured.

The upward insertion of the locking tabs through slits 41 results in the bottom of the carton being supported by the locking flaps near the center of the bottom against downward movement of said bottom wall under the load therein. This is quite important in the present instance since the end walls 18, 19 are connected with the bottom wall only at the ends of the central part 20 of said bottom wall. Without the support afforded by the locking flaps the central portion of the bottom wall would readily sag under handling, particularly after the carton is loaded.

It is pertinent to note that the shape of the blank lends itself to cutting from cardboard stock with the minimum of waste.

A separate conventional cover 43 (Fig. 3) may be made for each carton, or either of the side walls 9, 10 may be extended to provide a cover 44 hinged thereto (Fig. 5). The cover structure is optional, no claim being specifically made thereto.

We claim:

A blank for forming a carton and flower support comprising; a single, generally rectangular sheet of cardboard having a central portion for providing a bottom wall for the carton and marginal portions therearound for providing two opposed side walls and two opposed end walls extending upwardly from said bottom wall when said sheet is folded to form a carton, a plurality of spaced, parallel folding creases in a row the end creases of which define the junctures between said side walls and said bottom wall, said bottom wall including a central horizontal section disposed between a pair of said folding creases and a pair of foldable adjoining sections disposed between said central section and each of said end creases foldable upwardly to positions with one of each such adjoining section included at an angle of about 45 degrees relative to horizontal to form a flower support and with the other substantially vertical, said end walls being integrally secured to the ends of said central section only and terminating in free end portions extending across the ends of said foldable sections and substantially to the ends of said side walls when the sheet is folded to form said carton, folding creases in said sheet defining the junctures between said central section and said end walls, locking flaps on the ends of said side walls in longitudinal extension thereof and having upwardly directed locking tabs at the outer ends of said flaps, cuts formed in said end walls for receiving said tabs when said side and said end walls are vertical for holding said foldable sections in folded position and for holding said end walls and side walls together and vertical, folding creases formed in said sheet defining the junctures between said flaps and said side walls, said bottom further having end sections respectively adjoining said end creases, said central section and said end sections being coplanar and extensions on the ends of said end sections having substantially the same width as said end sections and being foldable upwardly to substantially the full height of said end walls and to positions between said locking flaps and said end walls and substantially in engagement with said side walls when said sheet is folded to form said carton.

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