June 26, 1956 D. S. SHINODA 2,752,035

FLORAL PACKAGING UNIT

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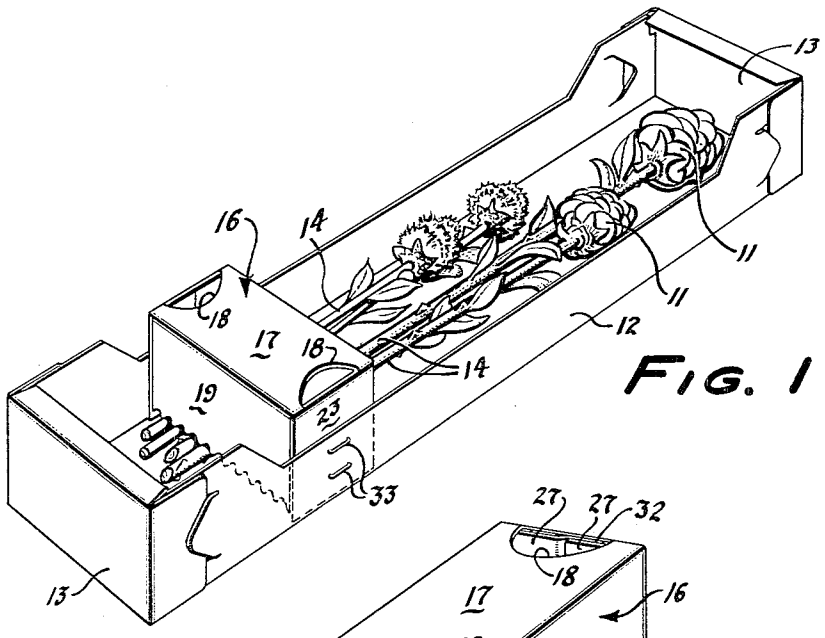


FIG. 1

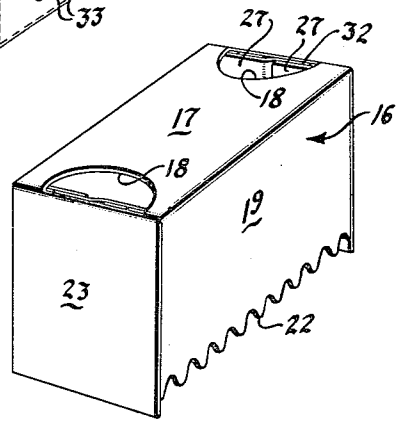


FIG. 4

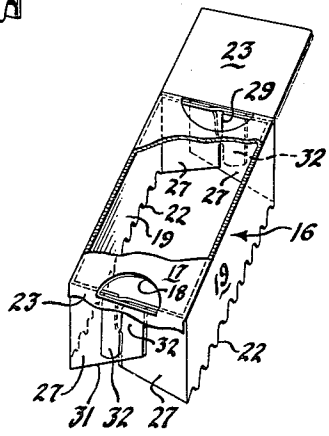


FIG. 3

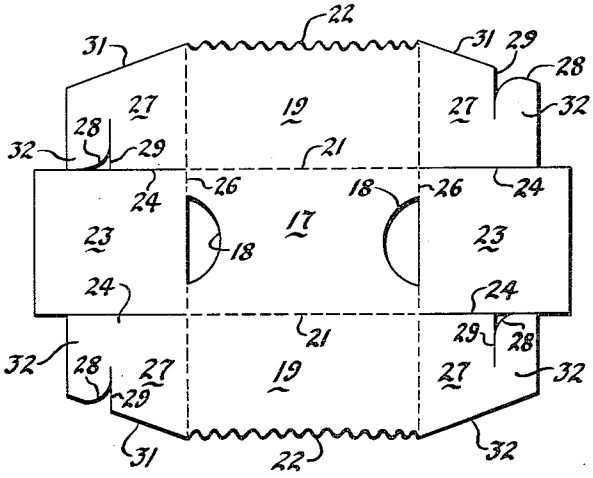


FIG. 2

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FLORAL PACKAGING UNIT

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1 Claim. (Cl. 206—45.14)

This invention relates to a new and improved floral packaging unit.

One of the problems involved in the merchandising and transportation of cut flowers is the fact that after the florist spends considerable time and artistic effort in arranging and packaging the flowers in a box, they frequently become disarranged before reaching the consumer which destroys in large measure the attractiveness of the arrangement. Various means have been employed to secure the blossoms or stems in a container in which they are shipped, but these have been generally unsatisfactory either from the standpoint of the results obtained by the use thereof, by the difficulty and time consumed in securing the stem, or for other reasons. The present invention therefore includes a cleat which may be fastened to a conventional open top tray or box for packaging cut flowers, which cleat when in position holds the stems of the flowers against disarrangement during transportation from the florist to the consumer.

The invention employs a cleat which fits transversely across an open top tray or box, which cleat may be secured in position by the use of conventional fastening means such as staples which fasten the cleat to the sides of the tray or box. To facilitate fastening by means of conventional wire staples, apertures are formed in the cleat which permit the anvil portion of a staple fastener to fit inside of the cleat so that staples can be conveniently attached.

Another feature of the invention is the fact that the transverse bottom edges of the cleat are serrated so as to more effectively engage the stems of the flowers and hold them against movement. In addition, the serrated edges are preferably elevated slightly above the level of the bottom of the tray to prevent unnecessary damage to the stems.

The present invention, therefore, affords an effective, inexpensive, labor saving device which may be used with a conventional tray or open-top box to hold the stems against dislodgement once the flowers are arranged in the tray. The versatility of the cleat is such that it may be positioned in any desired place in the tray depending upon the length of the stems and arrangement of the flowers.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views.

In the drawings:

Fig. 1 is a perspective showing a tray of flowers with the cleat attached.

Fig. 2 is a plan of the blank of the cleat.

Fig. 3 is a perspective partly broken away in section showing the cleat in process of being assembled.

Fig. 4 is a perspective of the cleat prior to being installed in a tray.

In Fig. 1 of the accompanying drawings there is shown a spray of flowers **11** arranged inside a conventional

open top tray **12**, commonly used for transportation of such blossoms from the florist to the consumer. It will be understood that the details of the construction of the tray **12** form no part of the present invention. However, it is noted that such a tray frequently comprises an elongated paper-board open-top box which is relatively shallow and of a width sufficient to accommodate conventional arrangements of cut flowers as shown in the drawings. The ends **13** of the tray may be formed in any suitable manner as well understood in the set-up carton industry. The tray **12**, as illustrated in the drawings, is designed for use with cut flowers having relatively long stems, and in Fig. 1 is shown a few such flowers arranged with their stems **14** lying lengthwise in the box. It will be understood that depending upon the type and number of flowers, the particular arrangement may be varied. Thus, instead of all of the stems **14** extending in one direction, the blossoms may be placed at each end and the stems extend toward the center. The variety of different ways in which the stems may be arranged within the tray is one of the difficulties encountered in securing the stems in place in more conventional ways, and a primary object of the present invention is to secure the stems when once arranged in any one of a variety of different ways.

The blank for the cleat **16** which is used to secure the stems is shown in Fig. 2. A central rectangular top panel **17** is employed having a width equal to the width of the tray **12** and any desired length. On the side edges of the top panel **17**, cut-outs **18** which may be arcuate, rectangular or any other desired shape, are formed. The purpose of these cut-outs **18** is to enable the anvil of a stapling machine to be inserted therein, and hence the size of each cut-out must be adequate to accommodate such anvil.

On the top and bottom of the top panel **17** are side panels **19** which are separated from the center panel by transverse fold lines **21**. The outer edges **22** of the side panels **19** are serrated for the purpose of holding the stems **14** in place, as will more fully appear hereinafter. On either end of the center panel are end panels **23** formed by inwardly extending slits **24** aligned with the fold lines **21** and separated from the center panel **17** by fold lines **26** which extend into the cut-out portions **18**. At each corner of the blank are end flaps **27** separated from the side panels **19** by fold lines **26** which extend beyond lines **21**, and separated from end panels **23** by slits **24**. The details of construction of the end flaps **27** form no part of this invention, but alternate flaps **27** are formed with arcuate and tangential straight longitudinal slits **28** and **29** extending inwardly of the flaps from either a slit line **24** or the slanted upper or lower marginal edges **31** of flaps **27**. The locking ears **32** formed by the slits **28** and **29** overlap and interlock when the cleat is assembled to maintain the end flaps **27** and side panels **19** in position perpendicular to the top panel **17**.

In assembling the cleat, the ears **32** are interlocked and overlapped as shown particularly in Fig. 3, and the end panels **23** folded down over the end flaps **27** as shown in Fig. 4. It will be noted that in assembled position the end panels **23** of the cleat are longer than the side panels **19**, thus elevating the serrated bottom edges **22** of the side panels above the level of the lower edge of the end panels **23**.

The cleat **16** is inserted in the box **12** after the flowers **11** are arranged in desired fashion. The cleat is placed in the most effective position to hold the stems **14** in place. More specifically, the cleat **16** is pushed down until the bottom edges of the end panels **23** engage the bottom of the tray whereupon the serrated bottom edges **22** of the side panels **19** engage and hold the stems **14** in place. The anvil of a stapling machine may then be inserted through the cut-out apertures **18** and staples **33**

are driven through the sides of the tray 12 and through end panels 23 and end flaps 27 of the cleat, thereby holding the cleat in position once it is stapled.

The arrangement of the cleat with respect to the stems of the flowers prevents disarrangement of the flowers after they have once been placed in the tray and the cleat applied. Upon arrival to the consumer, the stems may be easily withdrawn by slipping them through the gaps in edges 22, or the cleats can be easily removed by tearing the staples 33 away from the side of the tray.

Although the invention has been described in some detail by way of illustration and example for purpose of clarity and understanding, it is understood that certain changes and modifications may be practiced within the scope of the invention as limited only by the scope of the claim appended hereto.

What is claimed is:

In combination: an elongate open top tray having parallel upright sides for containing flowers having elongate stems; a cleat shaped and proportioned for removable insertion in said open top tray transversely thereof with opposite ends engaging the upright sides of said tray; said cleat comprising a rectangular box-like unit open at its bottom and the bottoms of said cleat ends resting on the bottom of said tray; the bottoms of the sides of the cleat which extend transversely of the tray terminating short of the bottoms of said cleat ends and the bottom edges of said cleat sides formed with a plurality of spaced serrations defining flower stem engaging members disposed above the bottom of the tray; each serration in one side of said cleat aligned with a like serration formed in the opposite side of said cleat; first and second tool access openings formed in the top panel of said box-like cleat structure and disposed adjacent opposite ends thereof to permit insertion of a fastening tool interiorly of said box-like cleat adjacent the points of joinder of cleat ends to tray sides.

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