

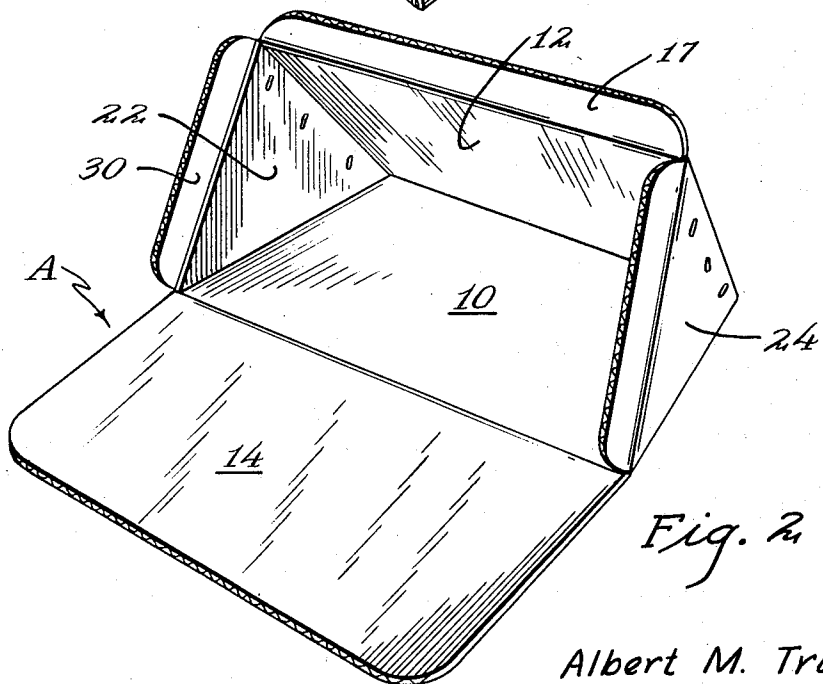
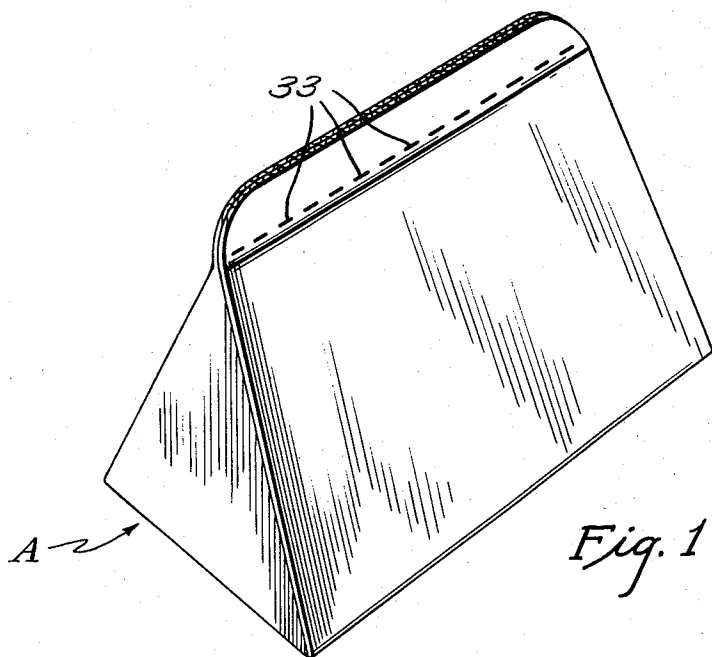
Nov. 17, 1959

A. M. TRAVIS
PLANT PACKAGE

2,913,161

Filed June 15, 1953

3 Sheets-Sheet 1



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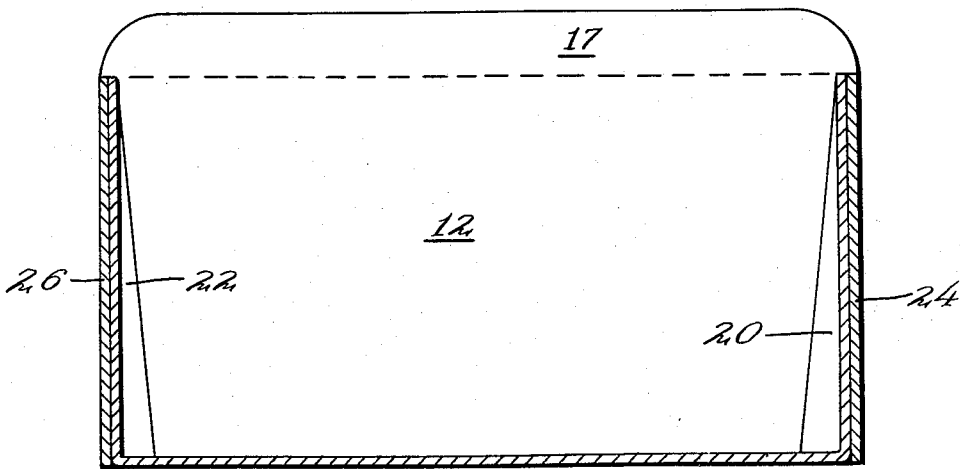
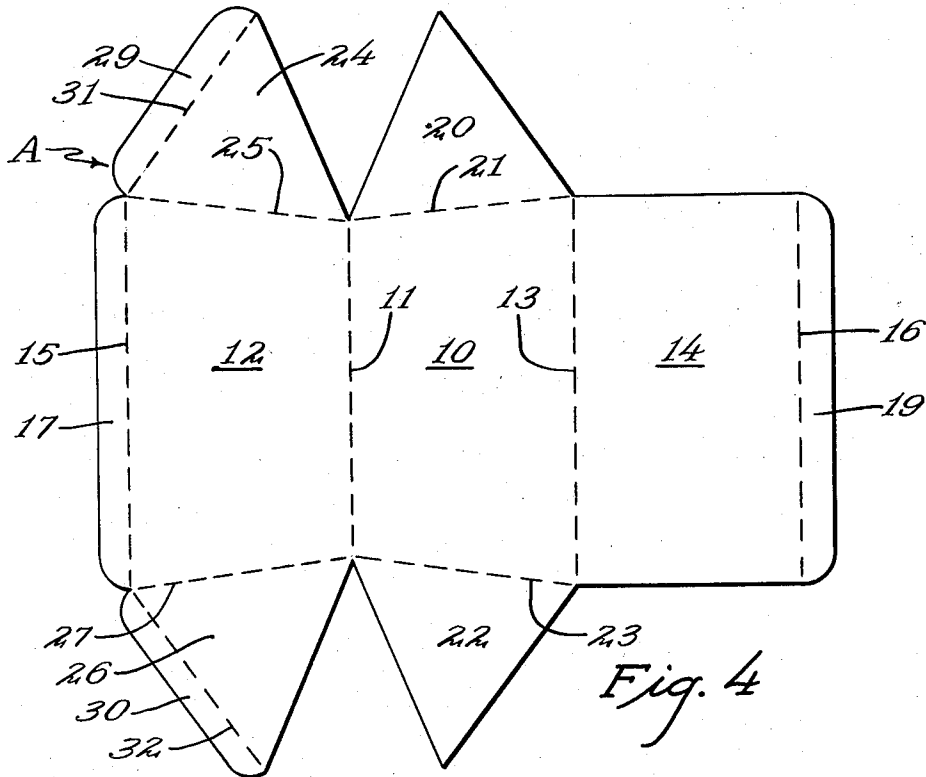
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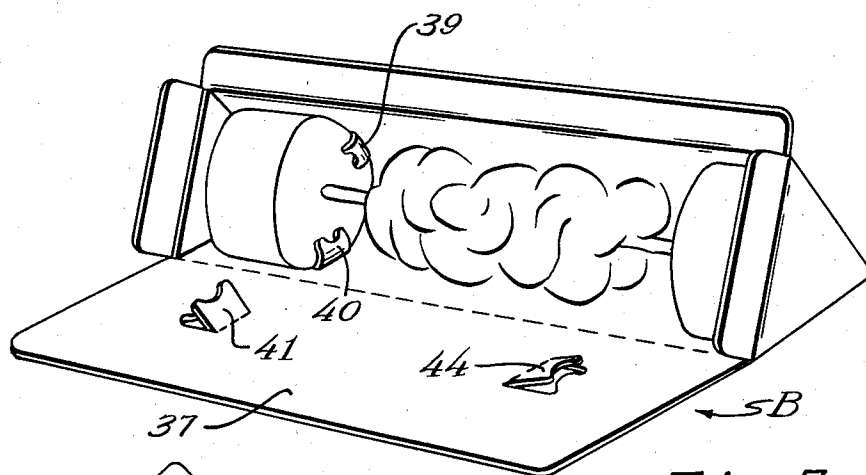


Fig. 5

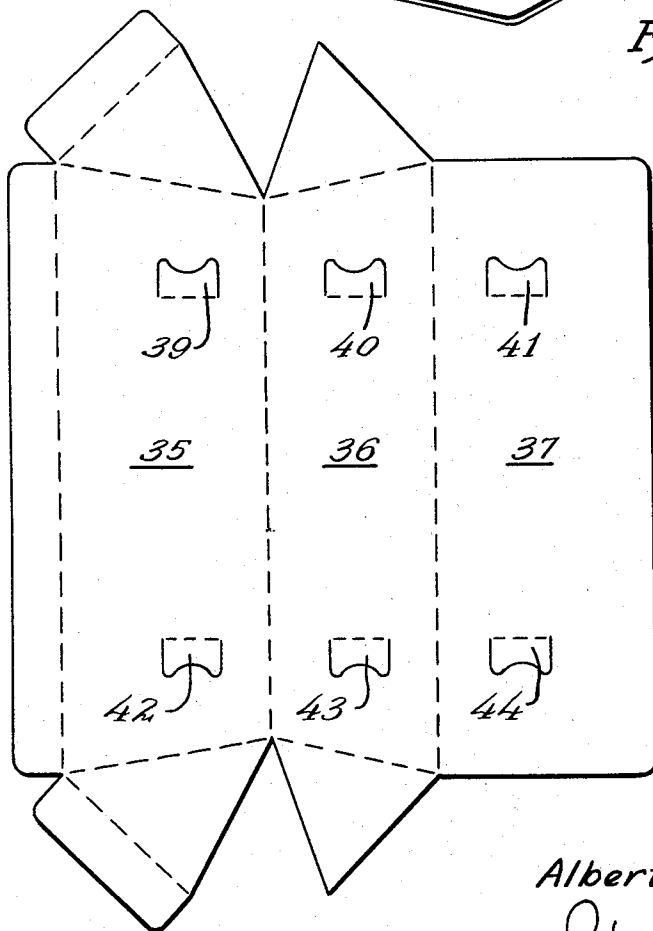


Fig. 6

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2,913,161

PLANT PACKAGE

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1 Claim. (Cl. 229—22)

This invention relates to an improvement in plant packages and deals particularly with a package in which a plant may be shipped and which acts to protect the plant during shipment.

Considerable difficulty has been experienced in the ship-ment of small plants. One of these difficulties lies in the fact that the plants are usually packed in containers of rectangular shape and during shipment, other heavier packages are piled upon them. Due to the fact that the plants do not completely fill the package, the container will not sufficiently resist crushing to prevent injury to the tops of the plants when other heavier containers are piled upon them.

An object of the present invention lies in the provi-sion of a container for plants and the like which is gen-erally triangular in form. The containers, when shaped in this manner, can be piled one upon the other with comparative ease, but it is difficult to pile other heavier packages on top of the same. As a result, much of the damage during shipment has been eliminated.

A feature of the present invention lies in the provision of a plant package which is easy to seal. The package formed is provided with a pair of flanges which project from the package. One flange projects from the body portion of the package while the other projects from the cover thereof. These flanges may be secured to-gether by stitching or other suitable means to form an effective seal. The stitches may be readily applied by a hand stapling unit or the like, which is readily available at low cost. Most containers previously used for the pur-pose could not be closed in this manner.

A further feature of the invention resides in the pro- vision of a plant package which is shaped to provide protection for the plant. The plants shipped are usually contained in paper pots or the like. A single pot may be positioned at one end with the tops of the plants extend- ing toward the opposite end. Similarly, a plurality of pots or other plant holders may be placed at each end of the package, for bulk shipping.

These and other objects and novel features of the in- vention will be more clearly and fully set forth in the following specification and claim:

In the drawings forming a part of the specification, Figure 1 is a perspective view of my plant package show- ing the construction thereof.

Figure 2 is a perspective view of the plant package in open form.

Figure 3 is a vertical sectional view through the package.

Figure 4 is a diagrammatic view of the blank from which the package is formed.

Figure 5 is a perspective view of a slightly modified form of plant package designed to support one or two plants during shipment.

Figure 6 is a diagrammatic view of the package blank of the structure shown in Figure 5.

The plant package is indicated in general by the letter A. The package is provided with a bottom panel 10,

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which is foldably connected at 11 to a side wall panel 12. The bottom panel 10 is also connected along a fold line 13 to a wall panel 14. The wall panels 12 and 14 are foldably connected along parallel fold lines 15 and 16 to locking flanges 17 and 19 respectively. It is desirable that the plant packages telescope or nest together in open form so that the packages may be set up previous to the packing operation. Accordingly, the fold line 11 is shorter than the fold lines 13 and 15 and the bottom panel 10 and wall panel 12 taper in form, being widest at the fold lines 13 and 15 and narrowest at the fold line 11. In other words, the panels 10 and 12 are quadri- laterals, which are frustums of similar triangles.

A triangular flap 20 is hingedly connected to one side of the panel 10 along a fold line 21 and a similar triangular flap 22 is hingedly connected to the opposite side of the bottom panel 10 along a fold line 23. A triangular flap 24 is hingedly connected to one side of the panel 12 along a fold line 25 while a similar triangular flap 26 is foldably connected to the panel 12 along a fold line 27. Short flanges 29 and 30 are foldably connected to corresponding edges of the panels 24 and 26 along fold lines 31 and 32 respectively. These flanges are designed to extend along opposite edges of the carton when the same is erected.

The carton blanks A are shaped and stored in the flat condition illustrated in Figure 4. From time to time the cartons are set up into the form shown in Figure 2 of the drawings. In setting up the container A, the flaps 20 and 22 are folded to substantially right angles with the panel 10 and the panels 24 and 26 are also folded to right angles with the panel 12. The panel 12 or the panel 10, is swung through 120° along the fold line 12 and the flap 24 overlies the flap 20 and the flap 26 overlies the flap 22. The flaps 20 and 24 are then stitched or otherwise secured together as are also the flaps 22 and 26.

When in the form illustrated in Figure 4, the con- tainers taper in width so that one will nest into the other. In other words, the fold line 11 of one container will be in parallel spaced relation to the similar fold line of the next adjoining container. Thus the packages can be erected and contained in a relatively small space.

When it is desired to use the package, the plant or plants are inserted into the package in a manner to protect both the roots and the top. The flanges 29 and 30 are then folded into right angular relation with the flaps 24 and 26 to which they are hinged. The flap 14 is next folded to overlie the flanges 29 and 30, and the flange 19 is folded into surface contact with the cor- responding flange 17. Staples or stitches such as 33 may be inserted through the flanges 17 and 19 to connect these parts and to hold the container closed. During shipment, the triangular packages may fit one upon an- other with relative ease. However, if a rectangular package is placed upon the container A it lacks stability and will fall off. Therefore, in usual practice, the plant packages may be shipped by parcel post or express without damaging the contents.

If desired, the fold line 16 may be omitted and the flange 16 may comprise an integral extension of the top panel 14 with no line of fold therebetween. In this case the fold line 15 permits the flange 17 to fold flush with the extending edge portion 19 of the cover panel 14.

It should also be noted that the two flanges 17 and 19, which ordinarily project from the top of the package form a cushion to prevent crushing of the package. These flaps or flanges when combined, are resistant to bending and act to prevent distortion of the container. Also, the triangular shape of the package adds strength to the structure and provides no flat top surface which may be crushed inwardly with comparative ease.

I have described the package as having a panel 10 which forms the bottom panel and panels 12 and 14 which form wall panels. In actual practice, the panels may be differently positioned and any of these panels as well as either end of the container, may actually form the bottom of the package.

In Figures 5 and 6 of the drawings I disclose a modified form of package B which is designed to contain one or two plants, in usual form. This package is virtually identical to the package A previously described, but is longer in proportion to the panel widths. The panels 35, 36 and 37, which correspond to the panels 12, 10 and 14 of the package A are merely longer and narrower than the corresponding panels of package A.

One of the main points of difference between the packages A and B lies in the provision of tabs or ears in each of the panels to hold the plants in position. Tabs 39, 40 and 41 are provided near one end of each of the panels 35, 36 and 37, respectively. These tabs are preferably equally spaced from one end of the package, and hinged at the tab ends most remote from this package end. Accordingly, the tabs 39, 40 and 41, when bent inwardly at an acute angle to their normal positions, can engage against the base portion of the plant. The plant bases are bulbular due to the encircling earth about the plant roots.

A similar series of tabs 42, 43 and 44 are provided in the panels 35, 36 and 37 near the ends thereof opposite the ends next adjacent to the tabs 39, 40 and 41. The tabs 42, 43 and 44 are hinged at their ends most remote from the nearest package end, and are designed to fold inwardly to hold a plant base in position. In Figure 5 the ears 42, 43 and 44 engage against the plant end, while the ears 39, 40 and 41 engage the plant's other end. The tops of the plants are supported in overlapping relation.

In accordance with the patent statutes I have described

the principles of construction and operation of my method for producing plant packages, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claim without departing from the spirit of my invention.

I claim:

A plant package including a first trapezoidal panel, a second trapezoidal panel, these first and second panels being integrally connected along the shorter of their parallel sides, the corresponding end edges of the trapezoidal panels being at equal obtuse angles to the connection along the shorter of the parallel sides, and a third panel of generally rectangular shape connected to the longer of the parallel sides of the second panel, an end flange connected to the longer of the parallel edges of the first panel, said third panel being outwardly folded into face contact with said end flange, and triangular end flaps connected to the ends of said first and second panels and secured in overlapping relation to hold said first and second panels at an acute angle to each other.

References Cited in the file of this patent

UNITED STATES PATENTS

218,479	Bolchini	Aug. 12, 1879
443,397	Mack	Dec. 23, 1890
715,442	Van Horn	Dec. 9, 1902
928,423	Belson	July 20, 1909
1,299,503	Pente	Apr. 8, 1919
1,598,235	Barbieri	Aug. 31, 1926
1,669,617	Kennedy	May 15, 1928
2,118,322	Mohler	May 24, 1938
2,340,373	Gardner	Feb. 1, 1944
2,549,023	Shinoda	Apr. 17, 1951

FOREIGN PATENTS

512,344	Great Britain	Sept. 1, 1939
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