

March 24, 1953

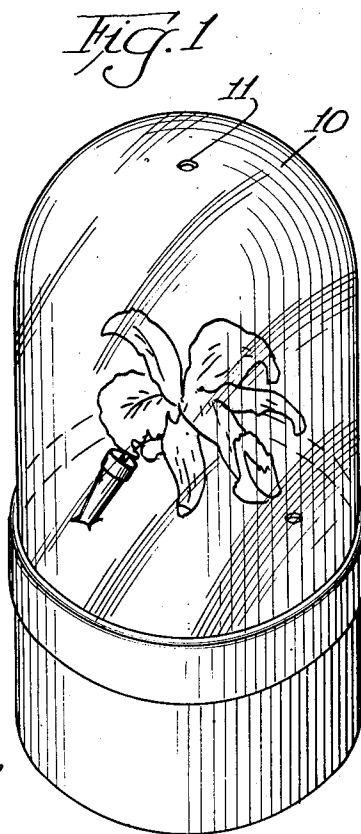
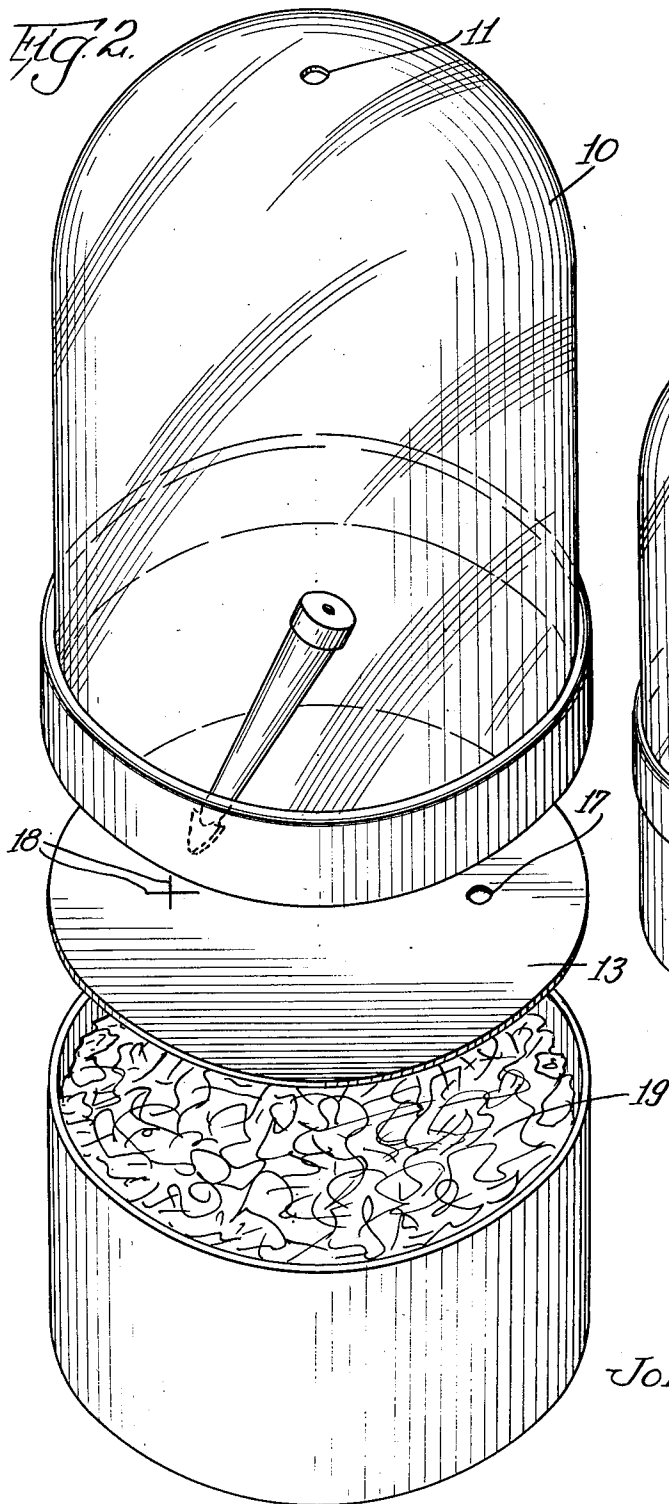
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2,632,286

BLOSSOM PRESERVING AND DISPLAY CONTAINER

Filed Oct. 17, 1949

3 Sheets-Sheet 1



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Fig. 3

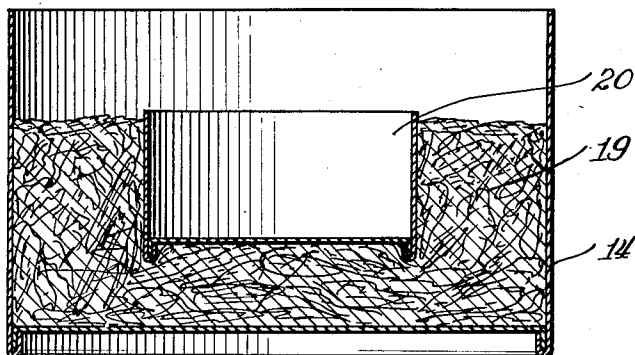
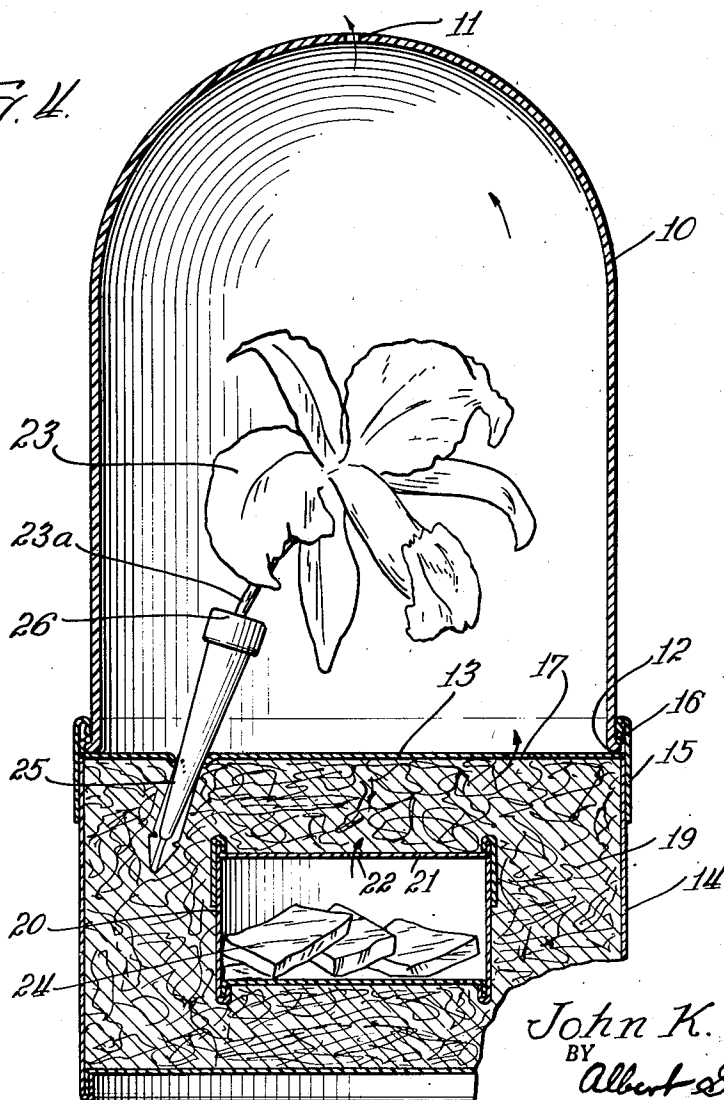


Fig. 4



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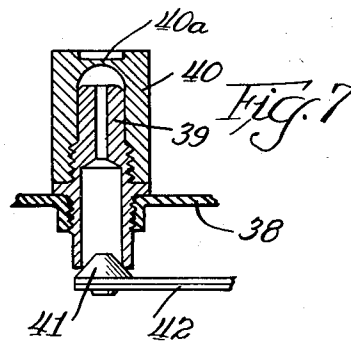
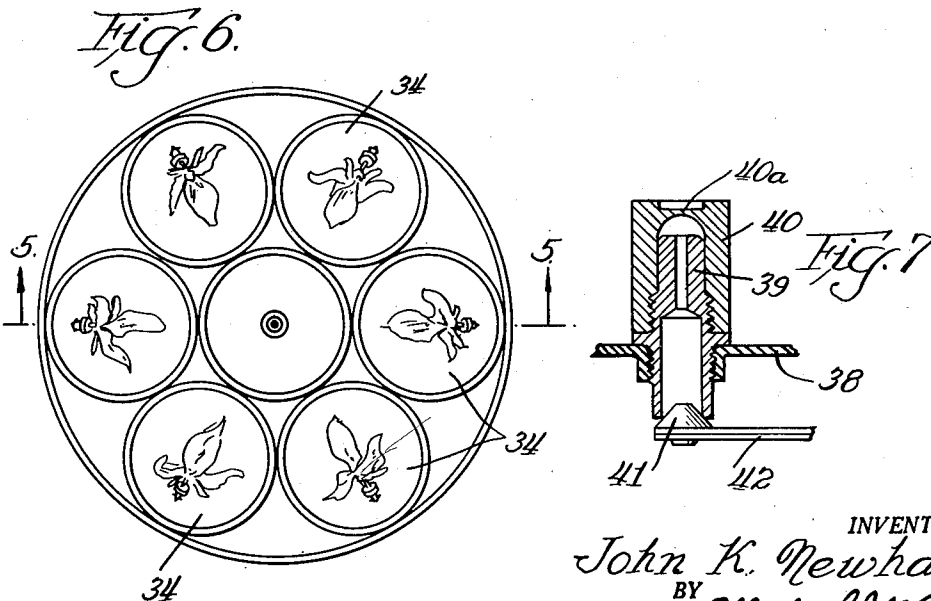
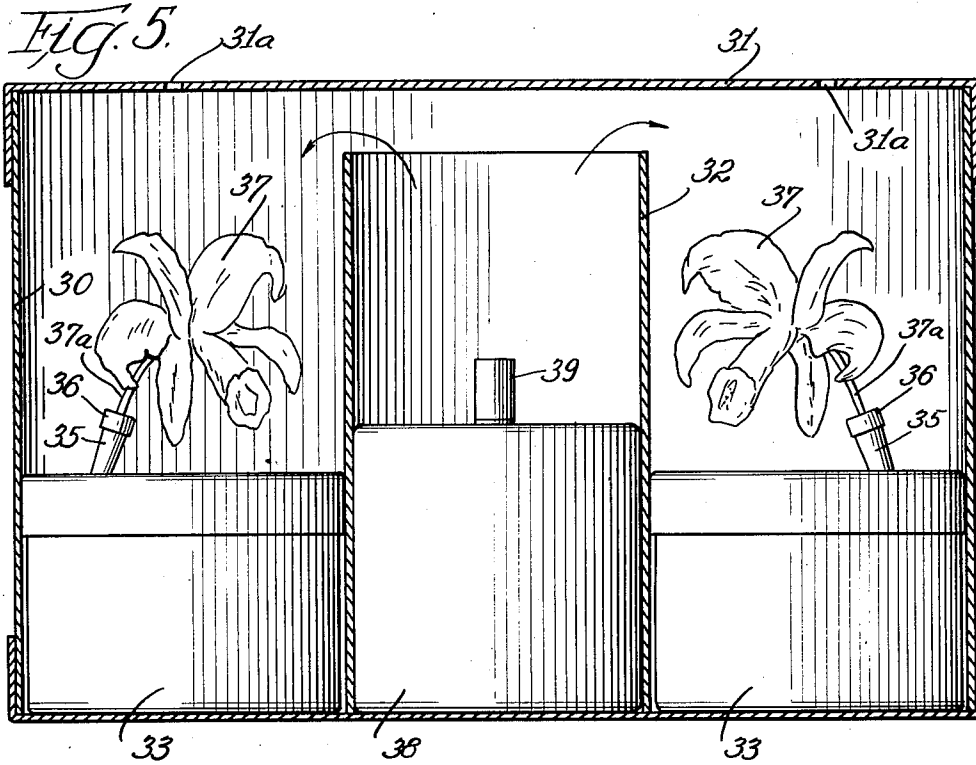
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UNITED STATES PATENT OFFICE

2,632,286

BLOSSOM PRESERVING AND DISPLAY
CONTAINER

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Application October 17, 1949, Serial No. 121,864

2 Claims. (Cl. 47-41)

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My invention contemplates and provides an improved container in which flower blossoms and arrangements thereof, e. g. orchids and corsages formed thereof, may be shipped, preserved and displayed.

A principal object of this invention is to provide a container of simple and sturdy construction, having a transparent wall portion through which an appropriately supported blossom is visible, in which the blossom may be protected during shipment and display by refrigeration and an ambient of CO₂.

This principal object together with corollary objects, features and advantages are set forth in the following description of specific embodiments of my invention and illustrated in the accompanying drawings wherein:

Fig. 1 is a perspective view of my improved container;

Fig. 2 is an exploded perspective view of the same;

Fig. 3 is a vertical axial sectional view of the container base and its Dry Ice receptacle as they appear before the placement of the Dry Ice in the receptacle;

Fig. 4 is a vertical axial sectional view of the container in use;

Fig. 5 is a vertical axial sectional view of a modified form of my improved container which may be regarded as taken on the line 5-5 of Fig. 6;

Fig. 6 is a top plan view of the container of Fig. 5 as it appears with its cover removed;

Fig. 7 is an axial sectional view of the CO₂ nozzle of Figs. 5 and 6 and its associated thermostatic valve.

Similar characters of reference indicate similar parts throughout the several views.

Referring first to Figs. 1 to 4 inclusive, 10 indicates a dome of transparent plastic material which is provided in its uppermost portion with an air escape opening 11.

The lower edges of dome 10, which desirably is conformed to present an annular flange 12 rests upon a cardboard bulkhead 13 which in turn rests upon the upper edge of a circular cardboard base 14. The bulkhead 13 is removably held against the upper edge of base 14, and the dome 10 is removably held against the bulkhead by a collar 15 which frictionally embraces both the lower portion of the dome and the upper portion of the base and has an intumed lip 16 bearing against the dome flange 12.

Bulkhead 13 is provided with a CO₂ escape opening 17 and a pair of short intersecting slits

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18-18 disposed substantially at right angles to each other.

Confined by the base 14 and the bulkhead 13 is a packing of water-absorbent heat insulating material 19, such as moss, leaves or the like, in which is nested a Dry Ice receptacle 20 in the nature of a cardboard box having a cover 21 provided with a CO₂ escape opening 22.

A raiser and shipper of orchids or other flower blossoms oftentimes will find it convenient to keep in his freeze box a supply of the bases 14 each partially filled with water absorbent heat insulating material 19 in which is nested an uncovered Dry Ice receptacle 20. (See Fig. 3.) Before being placed in the freeze box such partial filling of the material 19 desirably is moistened with water which becomes frozen to retard somewhat the sublimation of the Dry Ice later placed in the receptacle 20 and then to contribute desirable humidity to the atmosphere of the interior of dome 10.

When an orchid 23 or other blossom is to be packaged for preservation and shipment and/or display, a quantity of Dry Ice 24 is placed in a receptacle 20, of a base 14 taken from the freeze box, a cover 21 is fitted to such receptacle and sufficient additional material 19 is placed in the base substantially to fill it. A bulkhead 13 is then caused to overlie the base. Then there is thrust through the cross-slit portion of the bulkhead the jointed lower end of an elongated vial 25 which preferably contains a small quantity of water and is provided with an aperture stopper 26 through which extends the stem 23a of the blossom 23. A dome 10 is then positioned upon the bulkhead 13 and the collar 15 associated with that dome is slipped down around the upper portion of base 14 snugly and firmly to clamp the bulkhead between the dome and the base. The blossom 23 is now packaged for preservation and shipment and/or display for sale.

The sublimation of the Dry Ice 24, and the melting of the frozen water content of the insulating material 19, establish and for a substantial period of time maintain a desirably low temperature within the dome 10, and the CO₂ resultant from the sublimation of the Dry Ice rises through the opening 22 of the Dry Ice receptacle cover 21, the upper stratum of the material 19, and the bulkhead opening 17 to displace all air from the dome interior outwardly through the dome opening 11, and to create for the blossom 23 an ambient of CO₂ which nourishes the blossom, and shields it from oxidation, and is sufficiently humid to contribute re-vitalizing water vapor to

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its pedal pores as liquid water is absorbed by its stem from the water content of vial 25.

If necessary or desirable the Dry Ice 24 may be replenished while the packaged blossom is on display for sale or is in the hands of an ultimate consumer. However, an ultimate consumer usually merely places the packaged blossom in a household refrigerator between wearings of the blossom.

The embodiment of my invention shown in Figs. 5, 6 and 7 comprises a cardboard or other comparable box 30 having a cover 31. Cover 31 is provided with small air escape openings 31a—31a. Secured to the central portion of the box bottom and rising therefrom is a standpipe 32 which suitably consists of a cardboard tube.

Disposed in circular arrangement within box 30 and around standpipe 31 are the relatively small boxes 33, each of which has its cover 34 slit or apertured for the reception of a water-containing vial 35 having an apertured stoppet 36 through which extends the stem 37a of an orchid or other blossom 37. Each box 33 may contain a supply of water-moistened moss or other water-absorbent material (not shown) which suitably, but not necessarily, has its water content frozen as a preliminary to the packaging of the blossoms 37—37.

Disposed and retained in the lower portion of standpipe 32 is a metallic receptacle 38 of CO₂ under pressure. Such receptacle is provided with a discharge nozzle 39 pointing upwardly. Such nozzle suitably is provided with a threaded-on cap 40 having a relatively thin central top wall portion 40a. Entry of CO₂ into nozzle 39 from receptacle 38 proper is controlled by a conical valve member 41 carried by the free end of a bi-metallic reed 42 having its other end (not shown) fixed to and in direct contact with the side wall of receptacle 38.

With all of the package parts, except cover 31, and the blossoms 37—37 disposed as shown in Fig. 5, the thin portion 40a of nozzle cap 40 is ruptured with a pointed instrument and the cover 31 is quickly placed on box 30. Thereafter CO₂ escapes from the nozzle 39 (but without directly impinging upon any of the blossoms

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37—37) to reduce the temperature within box 12, to displace air from such box through cover apertures 31a—31a and to establish a CO₂ ambient for the blossoms 37—37. When the temperature of the side wall of receptacle 38 attains a predetermined low, the reed 42 responds to seat valve 41 and thereby shut off escape of CO₂ through nozzle 39 until further refrigeration of the interior of box 30 is in order.

The package of Figs 5 and 6 may have its cover formed wholly or in part of transparent material, or such cover may be formed of ordinary opaque cardboard as shown.

Having thus illustrated and described my invention what I claim and desire to secure by United States Letters Patent is:

1. A blossom-preserving device comprising a container having a vented top and a bottom, a partition extending across the container in spaced relation to the top and bottom so as to constitute a false bottom, a mass of moisture-absorbent material extending from the bottom to the partition, a receptacle for Dry Ice nested in the said material in spaced relation to the partition and having an escape opening, and a holder for the stem of the blossom projecting through the partition so as to be adapted to cause the blossom to lie in the space between the partition and the top of the container.

2. A device as specified in claim 1, the top of the container and the portion thereof between the partition and the top being transparent to permit the device to display the blossom and the holder, the display being enhanced by the hiding of the absorbent material and the Dry-Ice holder beneath the partition.

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