

Nov. 24, 1964

DUNCAN TONG

3,158,524

ARTIFICIAL FLORAL DISPLAY

Filed May 12, 1961

2 Sheets-Sheet 1

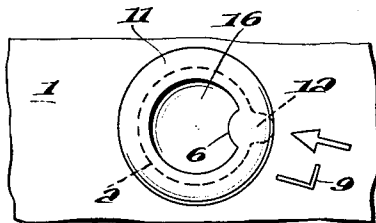
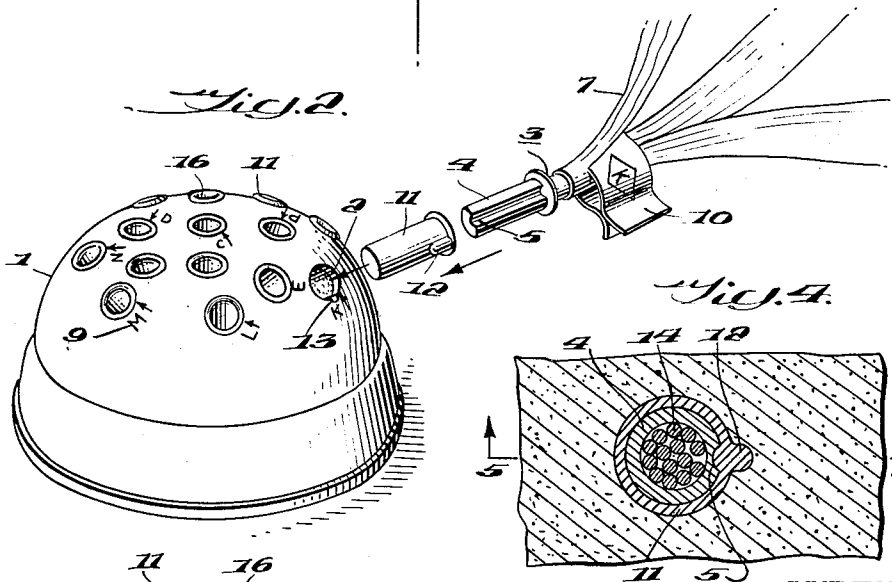
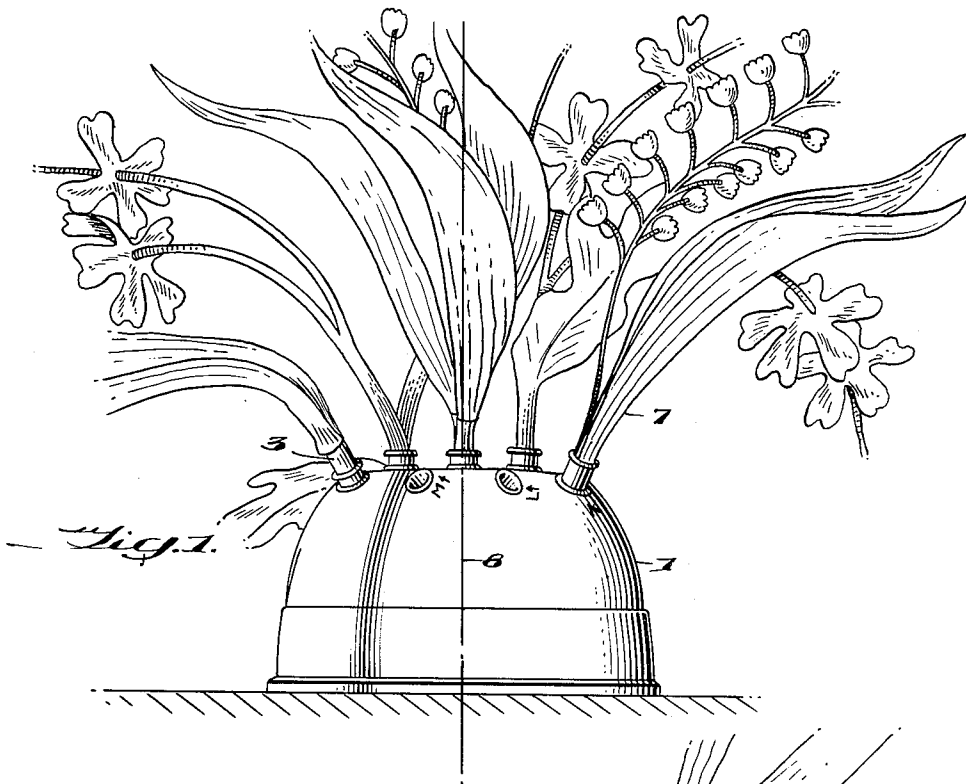


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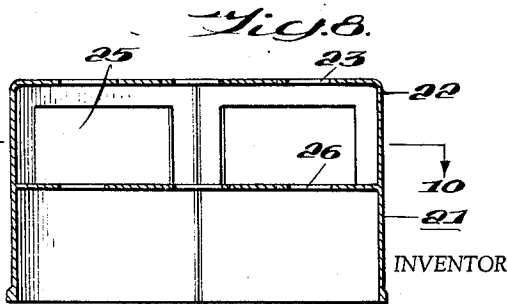
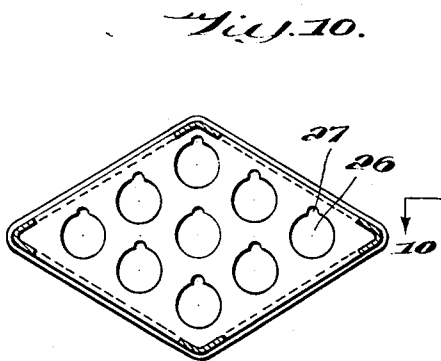
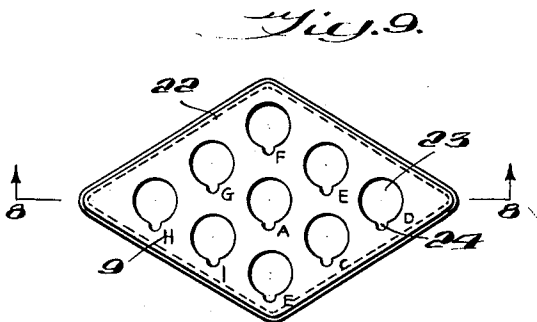
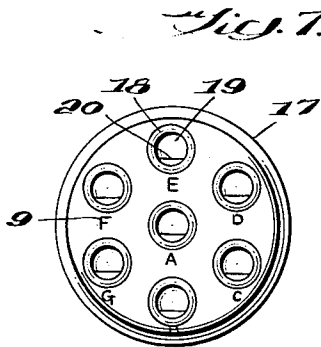
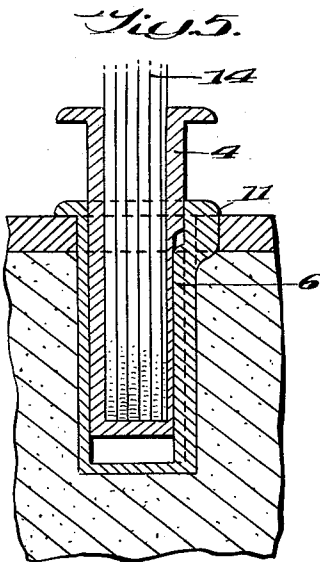
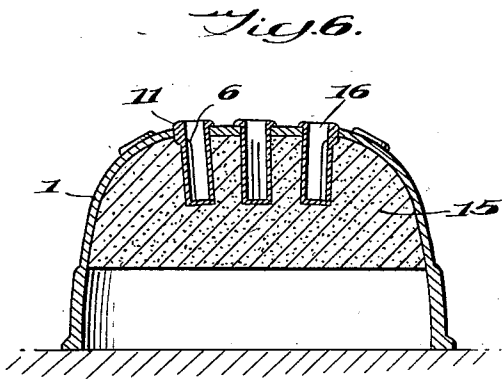
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DUNCAN TONG
ARTIFICIAL FLORAL DISPLAY

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2 Sheets-Sheet 2



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3,158,524

ARTIFICIAL FLORAL DISPLAY

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5 Claims. (Cl. 161-27)

This invention relates to floral displays and in particular to floral displays artificially simulated from plastic material and the like.

Such displays customarily comprise a base having a number of flower stems extending upwardly from it and each bearing a floral array which lends to a specific floral arrangement selected by the manufacturer.

The display is marketed through retailers who receive it from the manufacturer with the various floral array assembled intact on the base in the arrangement selected by the manufacturer.

While his product is not expensive to ship from the standpoint of its body or weight, in order to preserve his floral arrangement, the artificial floral display manufacturer has found it necessary to ship his product in containers having large bulk or volume and has experienced the extra expense attendant with this.

An object of the present invention is to provide an artificial floral display having a predetermined floral arrangement yet adapted for shipping in containers having low volume relative to those previously used and as a higher density item having a more favorable shipping rate.

Another object of the invention is the provision of an artificial floral display having a predetermined floral arrangement, which can be shipped in a disassembled state and reassembled by the retailer or his customer in accordance with the predetermined arrangement.

Still another object is the provision of such a display wherein the stems are removably keyed to the base within the preselected floral arrangement.

Other objects will become apparent from the description following and the claims appended thereto.

According to the present invention, the base for the artificial floral display has a plurality of holes therein and a corresponding number of artificial flower stems are arranged on the base about a vertical plane therethrough, with each stem having a floral array affixed thereon and one end portion thereof extending into a hole. Means are provided on the base and the stem end portion for removably keying the stem to the base at a predetermined angle taken horizontally from the vertical plane whereby the floral array on the stem is disposed within the predetermined floral arrangement about the plane.

The means for removably keying the stem to the base can be disposed on the exterior surface of the base at or adjacent to the mouth of the hole, but it is preferred that this keying means be disposed in the hole so as to be obscured from view when the floral display is fully assembled. For example, the wall of the hole and the stem end portion can have means which will mutually engage to serve this purpose.

In one embodiment of the invention, the keying means includes complementary key and key-way means extending longitudinally of the stem end portion and the wall of the hole to orient the stem in the hole at the predetermined angle. Thus the hole may have a longitudinally extending key-way in the wall thereof and the stem end portion a longitudinally extending complementary key thereon for engagement in the key-way. Or the key may extend along the wall of the hole and the key-way in the stem end portion.

In another embodiment, the hole and the stem end portion have complementary cylindrical cross-sections which are truncated to removably key the stem to the base at

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the predetermined angle. Other means adapted to this purpose are equally applicable.

A still further embodiment of the invention includes a superstructure on the base defining holes spaced above the holes in the base. In the assembled floral display, the stems extend through the superstructure holes and each of the superstructure holes has keying means corresponding to the keying means in the holes in the base but disposed at a different angle taken horizontally from the vertical plane, whereby locking rotation of the stem is needed to insert the stem end portion in its corresponding hole in the base. Thus while the stem remains removably keyed to the base, there are means for locking it to the base until such time as certain positive steps are taken to disengage it from the base.

The holes in the base in any of the embodiments can be defined by root elements each engaged in a bore in the base and restrained from turning therein.

Preferably the stem end portion includes a cap engaged over the stem. Depending on manufacturing methods employed, the stem itself may comprise a plurality of fibers bundled together and each carrying part of the floral array on the stem.

A floral display incorporating the invention can be disassembled by the manufacturer for packing in shipping cartons adapted to hold the most compact arrangement of the base and the stems, and when received by the retailer or bought by his customer, can be reassembled with the assurance that each stem will be oriented relative to the base in the floral arrangement intended by the manufacturer. Ordinarily however some further instruction to the retailer or his customer will be necessary, unless the correspondence between each stem and a specific hole in the base is apparent. This can be accomplished through written instructions accompanying the display carton or through the use of a sample display. The invention, in its preferred form, calls for the use of an identification marking adjacent each hole and some identification means on each stem to indicate the correspondence between the stem and a specific hole in the base. By inserting the stem in a hole having a common identification therewith, the floral arrangement selected by the manufacturer can be developed, and once having matched each stem with a hole the retailer or his customer can be assured that he has developed a floral arrangement identical with that originally designed and constructed by the manufacturer.

The invention will be better understood with reference to the attached drawings wherein:

FIG. 1 is a perspective view of an artificial floral display according to the invention;

FIG. 2 is an exploded view of the principal components in the display of FIG. 1, including representatively a flower stem and a root element therefor;

FIG. 3 is a plan view of one bore in the floral display base of FIG. 1, said bore having a root element keyed therein;

FIG. 4 is a cross-sectional view of the same bore having a stem and a root element keyed therein;

FIG. 5 is another cross-sectional view of the bore taken along the line 5-5 of FIG. 4;

FIG. 6 is a cross-sectional view of the base of FIG. 1;

FIG. 7 is a plan view of a second embodiment of the invention using a different keying arrangement;

FIG. 8 is a cross-sectional view of a still further embodiment of the invention, taken along the line 8-8 of FIG. 9;

FIG. 9 is a plan view of this additional embodiment; and

FIG. 10 is a cross-sectional view thereof taken along the line 10-10 of FIG. 8.

The floral display base 1 of FIGS. 1 and 2 has a plurality of bores 2 therein, each of which has a root element 11

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engaged within it and keyed to the base 1 through complementary keys 12 and key-ways 13 on the root element and the base, respectively. At least a portion of the bores, and thus the root elements as well, extend upwardly at an angle to the vertical axis of the base. An imaginary plane 8 extends through the base.

The root element 11 defines a hole 16 having a longitudinally extending rib or key 6 on the wall thereof.

One stem of the floral arrangement intended for the base 1, has a floral display 7 thereon and at one end thereof an end cap 4 having a longitudinally extending slot or key-way 5 therein. The key-way 5 and the key 6 are complementary. The stem 3 is mounted on the base 1 by inserting the end cap 4 into the hole 16 as the key 6 engages slidably in the key-way 5. Inasmuch as the end cap 4 can be inserted into the hole 16 only in this fashion, the end cap, and thus the stem as well, assumes an orientation in the hole and an angular relationship with the plane 8, as intended by the manufacturer in his original design.

The stem 3 comprises a plurality of fibers 14 bundled together, as seen in FIG. 4, and each carrying a part of the floral display 7 on the stem. The end cap 4 is engaged over the bundled ends of the fibers. Certain components of the floral display 7 may be engaged over the stem proper, as seen in FIG. 2.

To insert the stem in the hole intended by the manufacturer in his original design, reference is made to the identification markings 9 adjacent each bore 2 and to the tabs 10 on the stems. By matching each stem with a bore having common identification, the design can be developed on the base. The root elements 11 are identical and have a common angular relationship between the key 12 and the rib 6, thereby assuring that the angular disposition of the stem in the base is dictated by the relative position of the key-way 13 in the wall of the bore 2. Obviously, the root elements may be dispensed with.

In the embodiment of FIG. 7, the root elements 18 in the base 17 define holes 19 each having a cylindrical cross-section truncated at 20. In this way, a stem end portion having a complementary truncated cylindrical cross-section can assume only a single orientation in the hole 19 and thus a definite angular relationship with the vertical plane about which the floral arrangement selected by the manufacturer is disposed. Markings 9 are provided, as in the case of the earlier embodiment, so as to facilitate insertion of each stem in the hole 19 intended by the manufacturer in his original design.

An additional embodiment shown in FIGS. 8-10 includes a base 21 having a superstructure 22 thereon which defines holes 23 and which is in the form of a canopy spaced by the clearance 25 from the base proper and the holes 26 therein. Each hole 23 has a key-way 24 in the wall thereof, and similarly each hole 26 has a key-way 27 in the wall thereof. Thus the holes 23 have keying means corresponding to those of the holes 26. However, the keying means of the respective holes are disposed at a different angle taken horizontally from the imaginary vertical plane for this embodiment, such that once the stem end portion has been inserted through a hole 23, locking rotation is needed to insert it in its corresponding hole 26 in the base proper.

In the case of each embodiment, when a stem has been mounted on the base in its corresponding bore or hole, the floral array 7 thereon will lend to the overall floral arrangement of the design about the plane 8.

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The resultant floral display stands erect through the ballast of weights in the base, such as the weight 15 seen in FIG. 6 in the case of the first embodiment.

Although the invention has been described in considerable detail with reference to certain preferred embodiments thereof, it will be understood that variations and modifications can be effected without departing from the spirit and scope of the invention as described hereinabove and as defined in the appended claims.

I claim:

1. The combination of a base for an artificial floral display, said base having a plurality of holes therein, a corresponding number of artificial flower stems each having a floral array fixed thereon and one end portion thereof extending into a hole, and means in the hole for removably keying the stem to the base at a predetermined angle taken horizontally from a vertical plane through the base whereby the floral array displayed thereon is disposed within a predetermined floral arrangement about the plane, said means for removably keying the stem to the base including a longitudinally extending key-way in the wall of the hole and a longitudinally extending complementary key on the stem end portion.

2. The combination according to claim 1 wherein each of said holes is defined by a hollow root element engaged in a bore in the base and restrained from turning therein, the said root element having a base portion for limiting the depth of insertion of the said stem end portion.

3. The combination according to claim 1 wherein said stem end portion includes a cap engaged over the stem.

4. For an artificial floral display having a predetermined floral arrangement, the combination comprising: a base element defining a plurality of spaced holes; a hollow root element insertable into each of said holes; a key on one of said elements engageable with a key way defined by other of said elements to permit insertion of the root element at a fixed predetermined angle to said base; a hollow end cap insertable into said hollow root element; keying means associated with the interior of said root element and the exterior of said end cap to permit insertion of the end cap into the root element at a fixed predetermined angle; and at least one artificial stem having a floral array fixed thereon and one end portion thereof fixed in the hollow end cap in a predetermined manner.

5. The combination according to claim 4, wherein said hollow root element includes a base portion for limiting the depth of insertion of said end cap into the root element.

References Cited by the Examiner

UNITED STATES PATENTS

720,132	2/03	Green.	
1,196,312	8/16	Stuck.	
1,221,709	4/17	Dyett.	
1,439,769	12/22	Smith.	
1,472,798	11/23	Gyllsdorff	285-401 XR
1,725,373	8/29	Rosenwald.	
2,261,326	11/41	Atkisson et al.	
2,773,707	12/56	Fraser	285-401 XR
2,981,033	4/61	Cheetwood	47-41.1
3,087,280	4/63	Seliger	47-41

FOREIGN PATENTS

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