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B. L. LEVINSON

2,773,590

DISPLAY CONTAINER

Filed Jan. 8, 1954

2 Sheets-Sheet 1

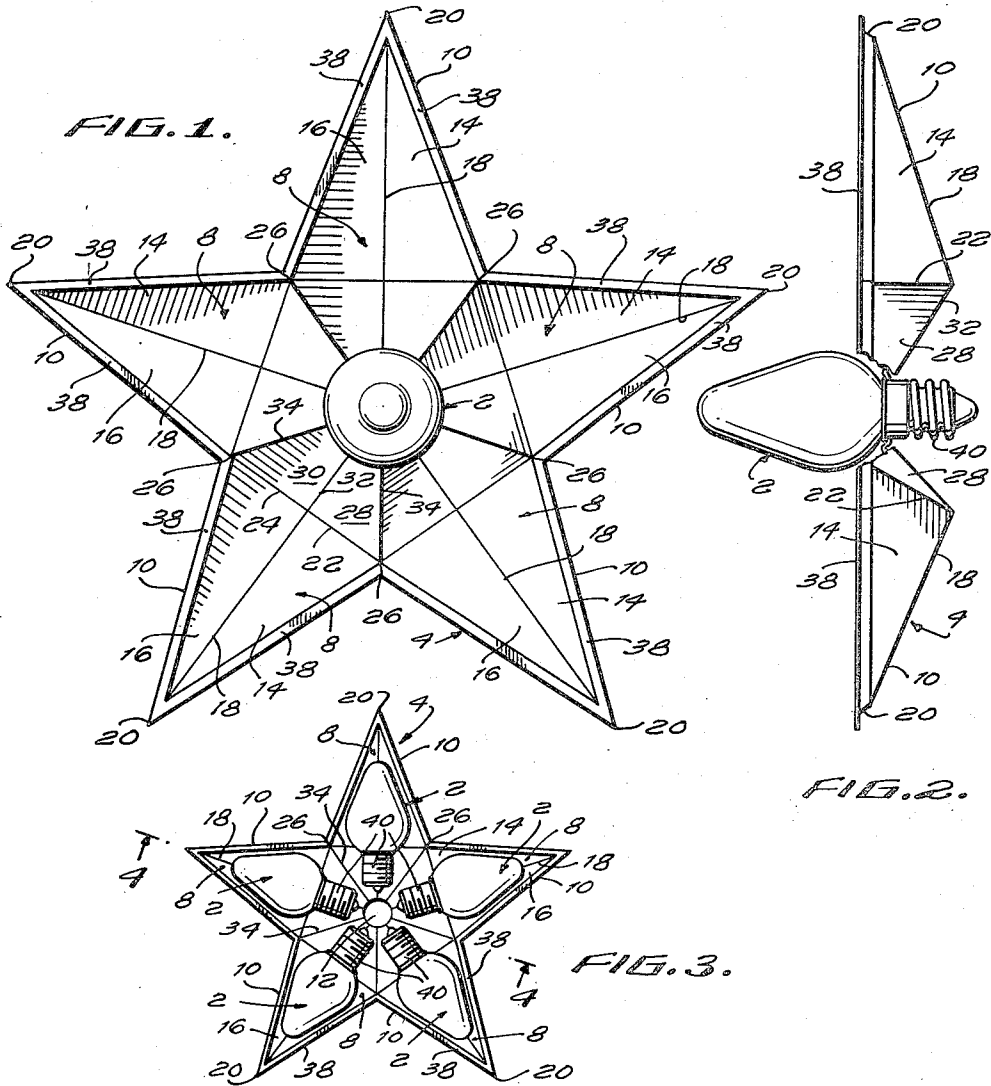


FIG. 2.

FIG. 3.

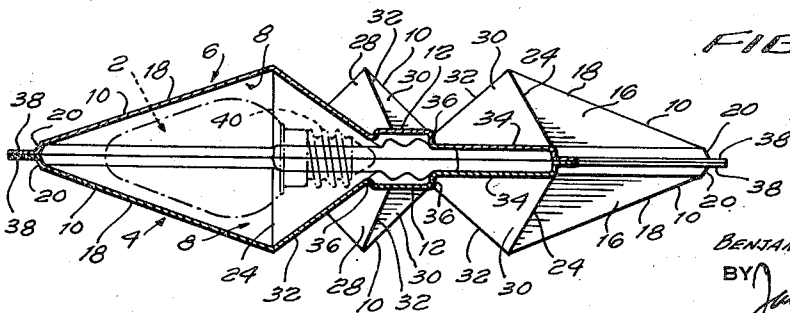


FIG. 4.

INVENTOR
BENJAMIN L. LEVINSON
BY *James A. Franklin*
ATTORNEYS

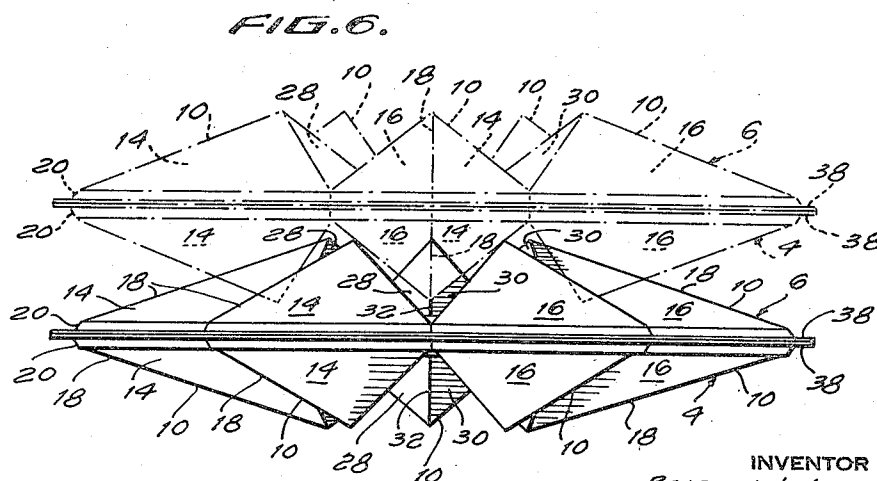
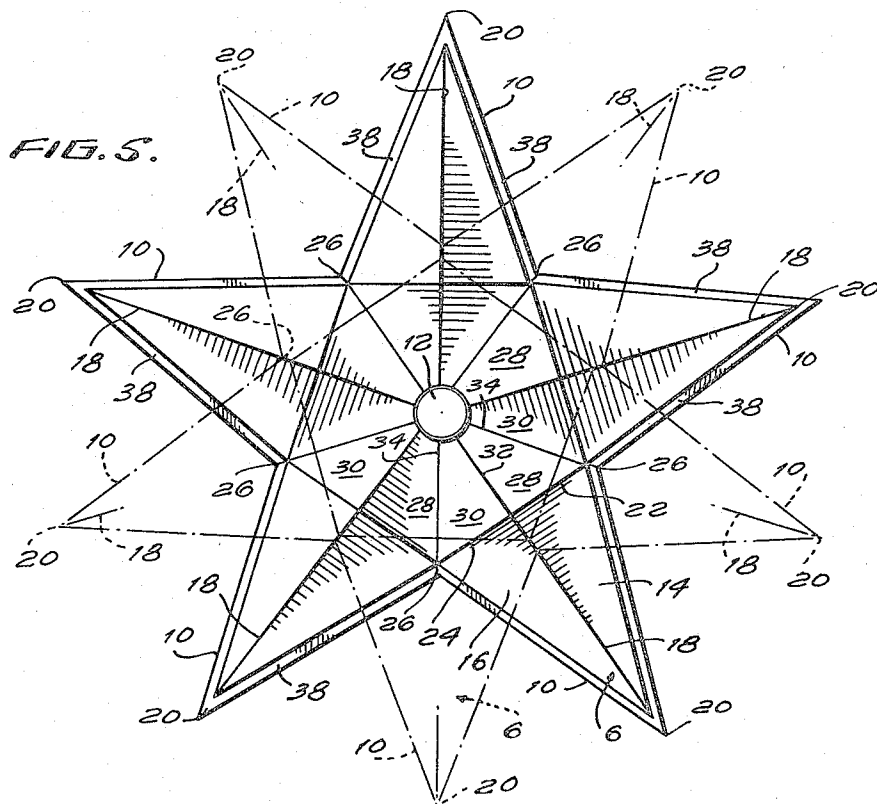
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2 Sheets-Sheet 2



INVENTOR
BENJAMIN L. LEVINSON

BY *James and Franklin*
ATTORNEYS

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DISPLAY CONTAINER

Benjamin L. Levinson, Groton, Conn., assignor to Royal Electric Company, Inc., Westerly, R. I., a corporation of Rhode Island

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16 Claims. (Cl. 206—45.34)

The present invention relates to an attractive stackable container the contents of which are visible, and in particular to such a container specially adapted for holding a plurality of light bulbs. The invention further relates to such a container which, after it has been opened and the light bulbs have been removed therefrom, does not completely lose its usefulness, but instead may be employed in conjunction with a light bulb as a light reflector of novel design.

The advantageousness, from a sales promotion point of view, of packaging products in such a manner that they are visible and attractively arranged within the package is well known. The desirability of designing the package itself so that it independently is an attractive and unusual structure, of independent utility, is less widely realized. It may be assumed that less attention has been paid to the structure of the package itself than to the art work imprinted on it because in almost all instances the packages, once they have been opened and emptied of their contents, are discarded. In some instances, as with various items of jewelry, the containers are sufficiently substantial so that they may continue to be used after their contents have been removed, but they are still adapted to be used as containers.

In accordance with the present invention a container is produced which has the following features:

(a) It has an unusual configuration in and of itself, thus initially catching the eye of a potential purchaser.

(b) It permits its contents to be seen while they are retained in position.

(c) It holds the contents arranged in an unconventional manner so as to produce a particularly arresting and attractive display.

(d) After the contents of the container have been removed, a portion of the container may still be usefully employed and, which is most significant, may be used for a purpose quite remote from that for which it was initially employed.

(e) The containers are not only stackable one on the other but, when stacked, they produce an eye-arresting display the appearance of which is strikingly different from the appearance of an individual container and is more than that produced merely by placing a plurality of such individual containers in a single pile.

More specifically, the display container of the present invention is designed for use in the packaging and sale of sets of light bulbs, and particularly small-size colored light bulbs such as those utilized as Christmas tree ornaments and the like. The container is in the shape of a star, and is here specifically illustrated as a five-pointed star. The container is so constructed as to define a plurality of compartments, one for each star point, each compartment being of a size and shape such as to securely hold an individual light bulb. One portion of the container is transparent so that the bulbs are visible, the bulbs being arranged so as to radiate out from the center of the container toward the tips of the points, thereby pro-

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ducing an attractive flower-like or sunburst appearance. The upper and lower walls of the individual bulb-holding compartments of the assembled container are concave when viewed from the interior of the container and convex when viewed from the outside thereof, the convexities, preferably defined by a plurality of substantially straight walls angularly related to one another, defining cooperating mountains and valleys which permit superposed containers to be stacked in axial alignment and in interested relationship. The arrangement is such that the star points of one container will be rotationally staggered with respect to the star points of the container thereunder, thus producing an extremely eye-catching display effect.

In addition, the container is preferably constructed of two similarly shaped sections meeting along the medial plane of the assembled container, one of those sections having inside walls which are light-reflective. The central portion of that container section is provided with a wall part which, while normally secured to the section so as to protect the contents of the container, is severable from that section after the container has been opened so as to produce an aperture through which the base of one of the bulbs may be passed. The container section under discussion may then be used as a faceted star-shaped light reflector for use with that bulb, the bulb and reflector together constituting an unusual illuminated ornament.

Despite the fact that the container includes structure which is useable for an entirely different purpose after the contents of the container has been removed, the container may nevertheless be rapidly and inexpensively manufactured at a cost, when appreciable quantities are involved, no greater than that of conventional containers which have none or few of the features above set forth.

To the accomplishment of the above and to such other objects as may hereinafter appear, the present invention relates to the structure of a container as defined in the appended claims and as described in this specification, taken together with the accompanying drawings, in which:

Fig. 1 is a top plan view of the light-reflective container section in use as a reflector, and with a bulb operatively associated therewith;

Fig. 2 is a side elevational view thereof, the central portion being broken away;

Fig. 3 is a top plan view, on a reduced scale, of one of the container sections and illustrating one manner in which light bulbs may be arranged therein;

Fig. 4 is a cross sectional view, taken along the line 4—4 of Fig. 3, of the completely assembled container, the bulbs therein being shown in phantom;

Fig. 5 is a top plan view, on an enlarged scale, showing the manner in which two containers may be stacked in axially aligned relation, the lower container being shown in solid lines and the upper container in phantom lines; and

Fig. 6 is a side elevational view of the stacked assembly of Fig. 5.

The container of the present invention is here specifically illustrated for the display and packaging of small-size and preferably colored pear-shaped light bulbs 2 of the type employed, for example, as illuminated ornaments for Christmas trees. The container itself comprises a pair of sections 4 and 6 each having a similar star-shaped outline when viewed in plan, the form here specifically disclosed involving a five-pointed star. Since the configuration of the two sections 4 and 6 may be substantially similar, a description of one will suffice for the other, the same reference numerals being applied to the corresponding parts.

Each section comprises a plurality of receptacle portions 8, concave when viewed from the open face of the section, there being one receptacle portion 8 for each star point 10 but the star point 10 constituting only a part of the receptacle portion 8, the latter extending radially inwardly beyond the wide end of the star point 10 toward but short of a central portion 12 defined, as here specifically illustrated, by a substantially flat wall of circular periphery. Each of the star points 10 is defined by a pair of walls 14 and 16 inclined upwardly and outwardly from a line of intersection 18 which extends downwardly and radially inwardly from the tip 20 of a star point 10. The radial inner ends of the walls 14 and 16 are defined by lines 22 and 24 which incline upwardly and outwardly from the radial inner end of the line 18 and which terminate at the corners 26 between the star points 10. Walls 28 and 30 extend radially inwardly from the lines 22 and 24 respectively, those walls intersecting at line 32 which is inclined upwardly and radially inwardly from, and is radially aligned with, the line 18. The outer ends of the walls 28 and 30 intersect adjacent walls 30 or 28 respectively from adjacent receptacle portions 8 along radial lines 34 which are preferably horizontal and are here shown as slightly raised above the level of the wall defining the central portion 12, connecting walls 36 being provided to connect the central portion wall 12 with the walls 28 and 30. The periphery of the container section is defined by the exposed ends of the walls 14 and 16 and conforms to the star-shape of the section. Horizontal flanges 38 are provided along that periphery.

It will therefore be apparent that each receptacle portion 8 is concave when viewed from the open face of the container section and is defined by four angularly related walls 14, 16, 28 and 30, each substantially planar in nature and defining a facet which greatly adds to the brilliance of the appearance of the structure.

While each of the container sections 4 and 6 are preferably of the same type, they are preferably not of identical construction. Both are advantageously formed of some moldable plastic material for ease of fabrication, but the section 6, for convenience hereinafter termed the top section, is desirably formed of transparent material, at least over its receptacle portions 8, while the other section 4, for convenience hereinafter termed the bottom section, is preferably formed of some material such that the inner surfaces of its walls are light-reflective. It has been found that extremely effective results are obtained if the bottom section 4 is formed of a substantially opaque colored material. Because the light-reflective bottom section 4 will be utilized as a light-reflector, as will be described more in detail below, it is usually desirable that it be formed of thicker or more substantial material in order that it will not be too flimsy for use, whereas the upper container section 6, discarded once the container has been opened, need not be as strong structurally.

The wall 12 defining the central portion of the bottom and light-reflective section 4 is preferably surrounded by a score line or other weakening so that it may be severed from the remainder of the section 4 when desired. The size of the wall 12, or at least the portion thereof adapted to be severed from the section 4, is closely the same as the size of the base 40 of a light bulb 2, so that the latter may be slid therethrough, the section 4 preferably remaining in frictional engagement therewith, as may best be seen from Fig. 2. In this condition the bulb 2 with the section 4 attached may have its base 40 screwed into any appropriate socket, after which the section 4 will function as an attractive and effective star-shaped light reflector, the angularly related walls 14, 16, 28 and 30 thereof functioning as facets reflecting the light in different directions and thus producing a particularly brilliant and attractive effect.

In use as a container the individual bulbs 2 are placed within the individual receptacle portions 8 of the bottom container section 4, the receptacle portions 8 being of

sufficient size to accommodate at least half of the height of the bulbs 2. The bulbs are arranged so that their longitudinal axes radiate out from the center of the section 4 toward the tips 20 of the star points 10. A particularly pleasing effect is obtained when, as specifically illustrated, the bulbs 2 are oriented with their bases 40 directed toward the central portion 20 of the section 4. This produces a visual effect similar to a flower or a sunburst. The upper section 6 is then placed on top of the lower section 4 with the flanges 38 of the two sections in engagement, the receptacle portions 8 in the upper container section 6 thus mating with the receptacle portions 8 in the lower container section 4 so as to define individual compartments within each of which an individual bulb 2 is retained. The two container sections 4 and 6 are then secured together, as by heat sealing the flanges 38 when the container sections are formed of thermoplastic material, or by any other appropriate means. The bottom section 4, being substantially opaque and having light-reflective inner surfaces, and also preferably being of a color contrasting or blending with the colors of the bulbs 2 in an attractive manner, sets off and displays the bulbs, which are visible through the transparent upper container section 6.

The container structure of the present invention is particularly well adapted for stacking, this being an important feature in view of the fact that point-of-sale displays usually require that individual packages be piled one on the other, and the fragile contents of these particular containers render it necessary that such piles be reliably prevented from toppling. Because of the particular orientation of the walls 14, 16, 28 and 30, the upper surface of each upper section 6, along the lines 22, 24, is defined by a plurality of mountains and valleys, the lower surfaces of the lower sections 4 being correspondingly shaped. Therefore, individual assembled containers may readily be stacked one above the other in axially aligned relation by causing the mountains on the undersurfaces of the lower section 4 of a given container to fit into the valleys between the mountains on the upper surface of the upper section 6 of the container immediately therebelow. Because of the abrupt angularity of the walls, a firm and reliable interlock will result, inhibiting relative rotation of any of the containers with respect to the others and also preventing a container from sliding laterally with respect to another, since any such lateral or rotative movement must be accomplished in conjunction with a substantial degree of vertical movement, the latter being prevented by the weight of the container and its contents.

In addition, because of the particular shape and configuration of the assembled containers, and particularly the fact that the star points 10 of one container will, when that container is properly stacked, be positioned between the star point 10 of the containers immediately thereabove and therebelow, the stacking will produce a display of strikingly different appearance, all angles and spines, as it were, the display value of which would be hard to overestimate.

Despite all of the numerous advantageous features of the construction of the present invention, as described above, the individual container sections may be very readily manufactured at extremely low cost, the only appreciable item of expense being the formation of dies for the molding of the individual container sections 4 and 6 from suitable plastic material, and where quantity production is entailed the cost of such dies is readily amortized.

While but a single embodiment of the present invention has been here disclosed, it will be apparent that variations may be made in the specific details thereof without departing from the spirit of the invention as defined in the following claims.

I claim:

1. A display container comprising a pair of similar sec-

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tions each having a star-shaped periphery when viewed in plan and comprising a plurality of receptacle portions concave both laterally and longitudinally, each including a star point and radiating from a common central portion, said sections having engaging peripheral surfaces and being secured together with their respective receptacle portions registering and opening toward one another so as to define individual compartments, one of said sections being transparent over at least part of its receptacle portions, whereby articles placed within said compartments will be retained and visible therein, the inner surfaces of one of said sections being at least in part light-reflective and the compartments being of a size to hold light bulbs, the common central portion of said light-reflective section including a web scored to permit ready severance from said section and of a size such as, when severed, to leave an opening of closely the same size as the base of one of said light bulbs, whereby said light-reflective section, after severance of said web, is useable as a light reflector for one of said bulbs.

2. The display container of claim 1, in which the inner surfaces defining said receptacle portions of said light-reflective section comprise angularly related substantially flat light-reflective surfaces, whereby a brilliant and striking reflective effect is obtained.

3. The display container of claim 1, in which said light reflective section is substantially opaque and in which said section other than said light reflective section is transparent.

4. The display container of claim 1, in which said light reflective section is substantially opaque and in which said section other than said light reflective section is transparent, both sections being made of plastic material and having engaging flanges at their peripheral surfaces which are sealed together.

5. The display container of claim 1, in which the external surfaces of the radially inner part of each of said sections are defined by mountains and valleys angularly arranged around said part, each mountain defining a part of a receptacle portion, the peaks of said mountains being higher than those surfaces of said sections radially inwardly and radially outwardly disposed therefrom, said containers being nestable one above the other in axially aligned relation by causing the mountains of the bottom section of one container to rest inside the valleys on the top section of the container therebelow.

6. A display container comprising a pair of similar sections each having a star-shaped periphery when viewed in plan and comprising a comparatively small central portion with concave receptacle portions radiating out therefrom, one for each point of the star, each star point constituting a part of a receptacle portion and being defined by walls meeting along a radial line inclined downwardly from the tip of said point, said walls being inclined upwardly and outwardly from said line and extending radially inwardly short of said central portion from the tip of said point, the upper edges of said walls defining the periphery of said part, the remainder of each receptacle portion being defined by walls meeting along a radial line intersecting said first mentioned radial line and inclined upwardly therefrom toward said central portion, said walls being inclined upwardly and outwardly from said line and intersecting the adjacent walls of adjacent receptacle portions, said sections being secured together with their corresponding receptacle portions registering and opening toward one another so as to define individual compartments, one of said sections being transparent over its receptacle portions, whereby articles placed within said compartments will be retained and visible therein.

7. The display container of claim 6, in which inner surfaces of the walls of one of said sections are light-reflective and in which the compartments are of a size to hold light bulbs, the common central portion of said light-reflective section including a web scored to permit

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ready severance from said section and of a size such as, when severed, to leave an opening of closely the same size as the base of one of said bulbs, whereby said light-reflective section, after severance of said web, is useable as a light reflector for one of said bulbs.

8. The display container of claim 7, in which said light reflective section is substantially opaque and in which said section other than said light reflective section is transparent.

9. The display container of claim 6, in which said light reflective section is substantially opaque and in which said section other than said light reflective section is transparent, both sections being made of plastic material and having engaging flanges at the upper edges of the walls defining said star points, said flanges being sealed together.

10. The display container of claim 6, in which the walls defining said remainder of each receptacle portion intersect at a level higher than that of said central portion, connecting walls being provided between said central portion and the radially inner ends of said walls.

11. A display container comprising a pair of similar sections each having a star-shaped periphery when viewed in plan and comprising a plurality of concave receptacle portions each including a star point and radiating from a common central portion, said sections having engaging peripheral surfaces and being secured together with their respective receptacle portions registering and opening toward one another so as to define individual compartments, one of said sections being transparent over its receptacle portions, whereby articles placed within said compartments will be retained and visible therein, the inner surfaces of one of said sections being light-reflective and the compartments being of a size to hold light bulbs, the common central portion of said light-reflective section including a web scored to permit ready severance from said section and of a size such, when severed, as to leave an opening of closely the same size as the base of one of said bulbs, whereby said light-reflective section, after severance of said web, is useable as a light reflector for one of said bulbs.

12. The display container of claim 11, in which the inner surfaces defining said receptacle portions of said light-reflective section comprise angularly related substantially flat light-reflective surfaces, whereby a brilliant and striking reflective effect is obtained.

13. The display container of claim 11, in which said light-reflective section is substantially opaque and in which said section other than said light-reflective section is transparent.

14. The display container of claim 11, in which said light-reflective section is substantially opaque and in which said section other than said light-reflective section is transparent, both sections being made of plastic material and having engaging flanges at their peripheral surfaces which are sealed together.

15. The display container of claim 11, in which the external surfaces of the radially inner part of each of said sections are defined by mountains and valleys angularly arranged around said part, each mountain defining a part of a receptacle portion, the peaks of said mountains being higher than those surfaces of said sections radially inwardly and radially outwardly disposed therefrom, said containers being nestable one above the other in axially aligned relation by causing the mountains of the bottom section of one container to rest inside the valleys on the top section of the container therebelow.

16. A display container comprising a pair of similar sections each having a star-shaped periphery when viewed in plan and comprising a plurality of receptacle portions concave both laterally and longitudinally, each including a star point and radiating from a common central portion, said sections having engaging peripheral surfaces and being secured together with their respective receptacle portions registering and opening toward one another so as to define individual compartments, one of

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said sections being transparent over at least part of its receptacle portions, whereby articles placed within said compartments will be retained and visible therein, the external surfaces of the radially inner part of each of said sections being defined by mountains by valleys angularly arranged around said part, each mountain defining a part of a receptacle portion, the peaks of said mountains being higher than those surfaces of said sections radially inwardly and radially outwardly disposed therefrom, said containers being nestable one above the other in axially aligned relation by causing the mountains of the bottom section of one container to nest inside the valleys on the top section of the container therebelow.

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10
1,933,338
2,660,529
2,671,286

8

References Cited in the file of this patent

UNITED STATES PATENTS

Plishker ----- Oct. 31, 1933
Bloom ----- Nov. 24, 1953
Hansen ----- Mar. 9, 1954

FOREIGN PATENTS

200,976
11,613
329,477
1,101,226
861,668
Great Britain ----- July 26, 1923
Netherland ----- Dec. 15, 1924
Italy ----- Sept. 10, 1935
France ----- Oct. 24, 1951
Germany ----- Jan. 5, 1953