United States Patent [19]

Oglesbee

[11] **3,913,778**

[45] **Oct. 21, 1975**

[54] **PACKAGE FOR TUMBLERS AND THE LIKE**

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[73] Assignee: **Anchor Hocking Corporation,** Lancaster, Ohio

[22] Filed: **Sept. 13, 1974**

[21] Appl. No.: **505,643**

[52] **U.S. Cl.** **220/23.83;** 206/162; 206/203; 206/427; 211/74

[51] **Int. Cl.²** **B65D 85/30;** B65D 21/02

[58] **Field of Search** ..... 206/162, 203, 427; 220/23.83, 23.4; 211/74, 76; 224/48 A

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[57] **ABSTRACT**

A molded plastic package is described for the storage, shipment, display, and serving of articles such as tumblers. The package has a molded base including spaced cup-like receptacles for the article bottoms. An elongated molded plastic rod, having a finger grip at its top, adjustably connects the base to a molded plastic cover using integrally formed plastic locks. The lock connection between the rod and the base includes means for varying the spacing between the cover and the base for packing and handling tumblers of differing heights. The cover includes article grips corresponding in number and position to the receptacles in the base for gripping the upper portions of the packaged articles.

10 Claims, 7 Drawing Figures

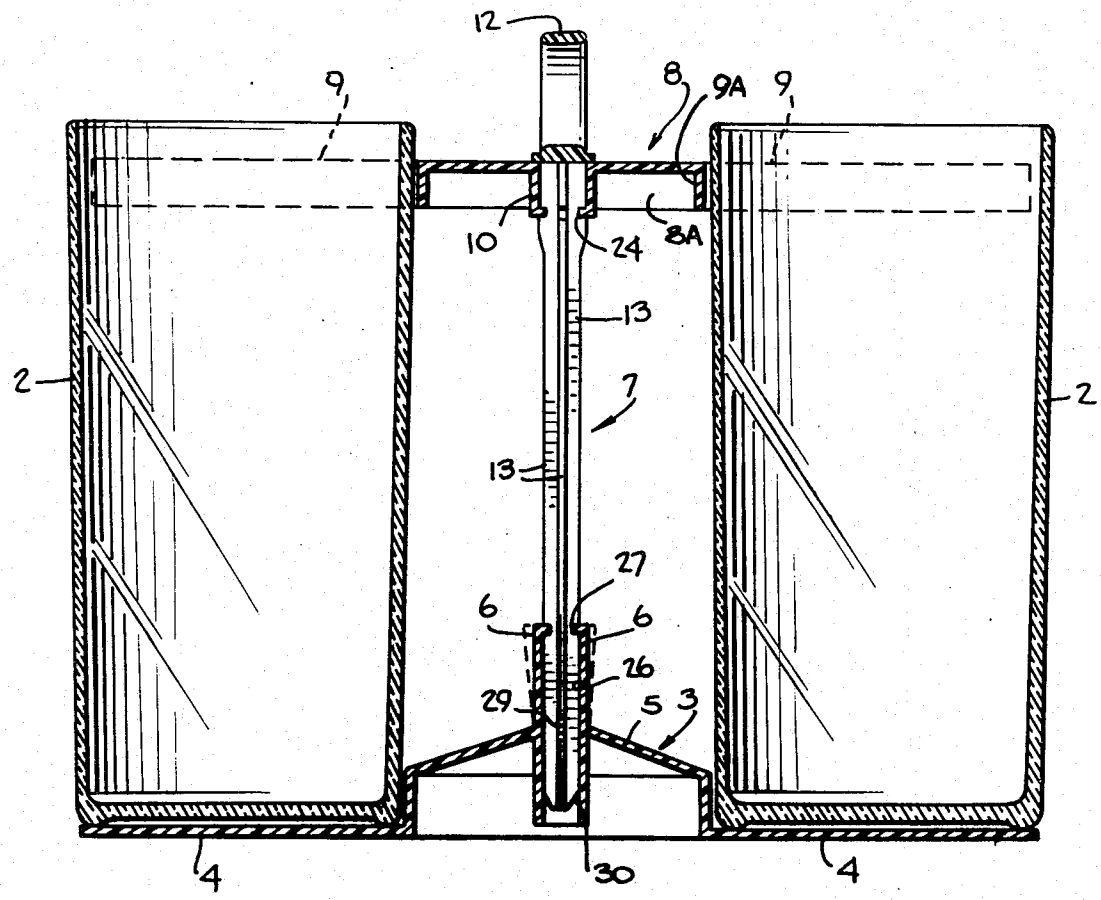


Fig. 1.

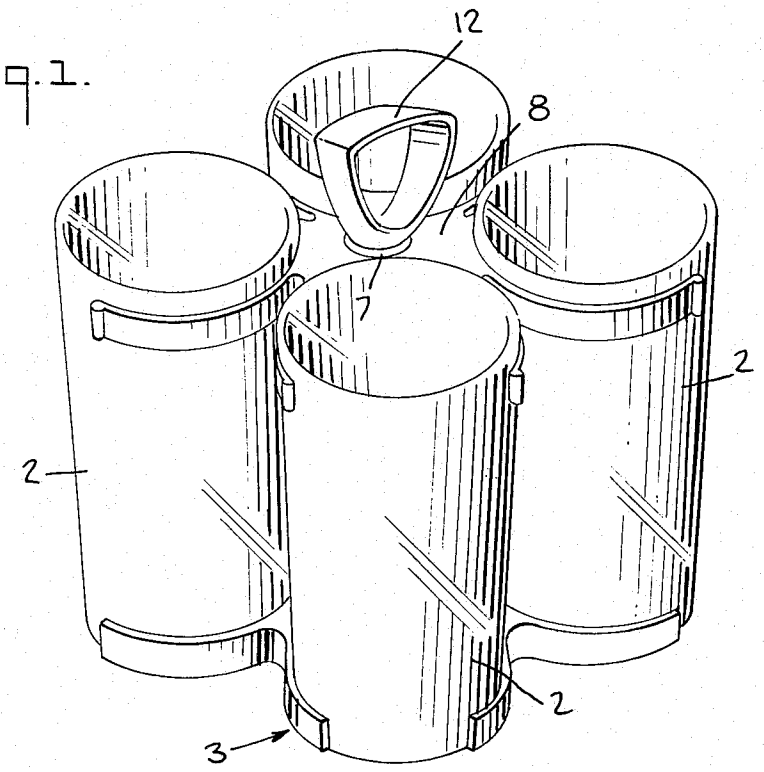


Fig. 6.

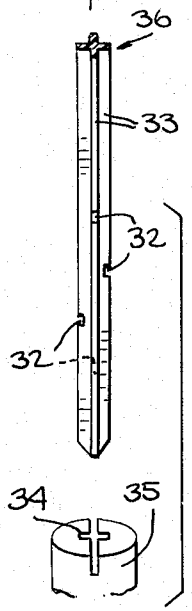


Fig. 2.

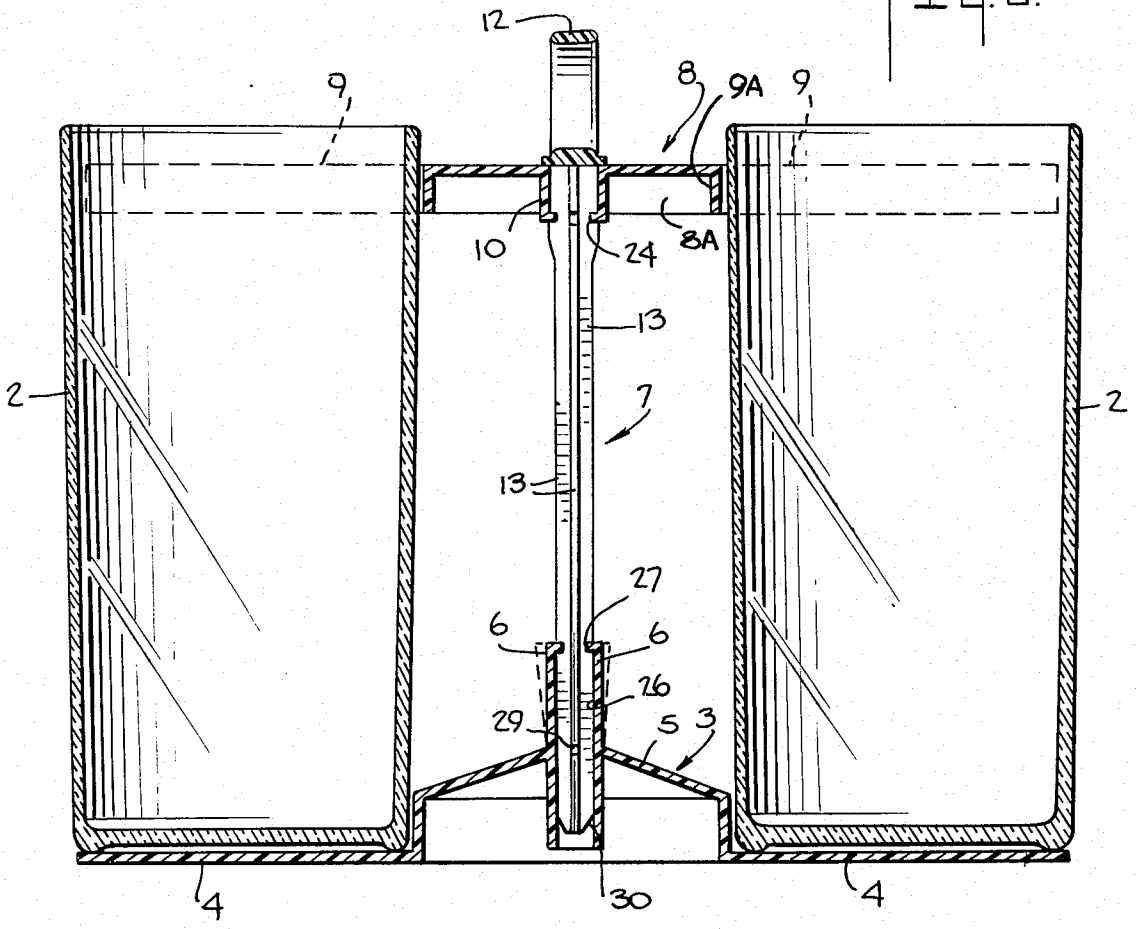


Fig. 7.

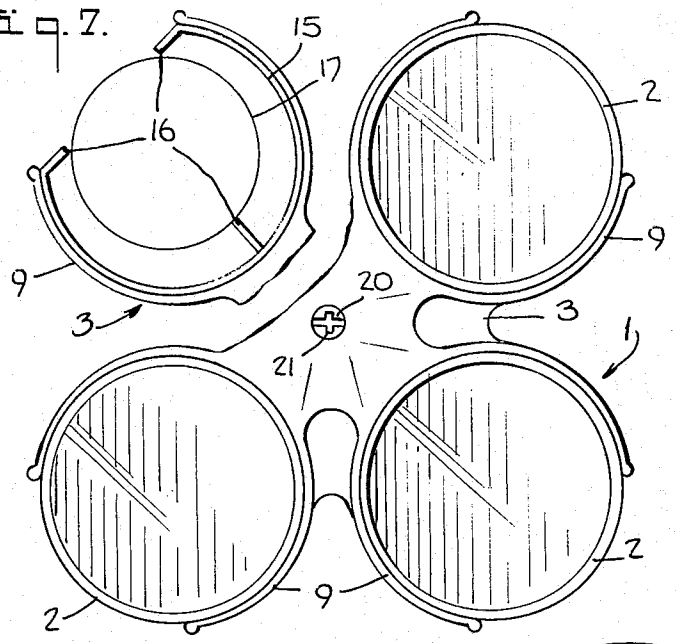


Fig. 4.

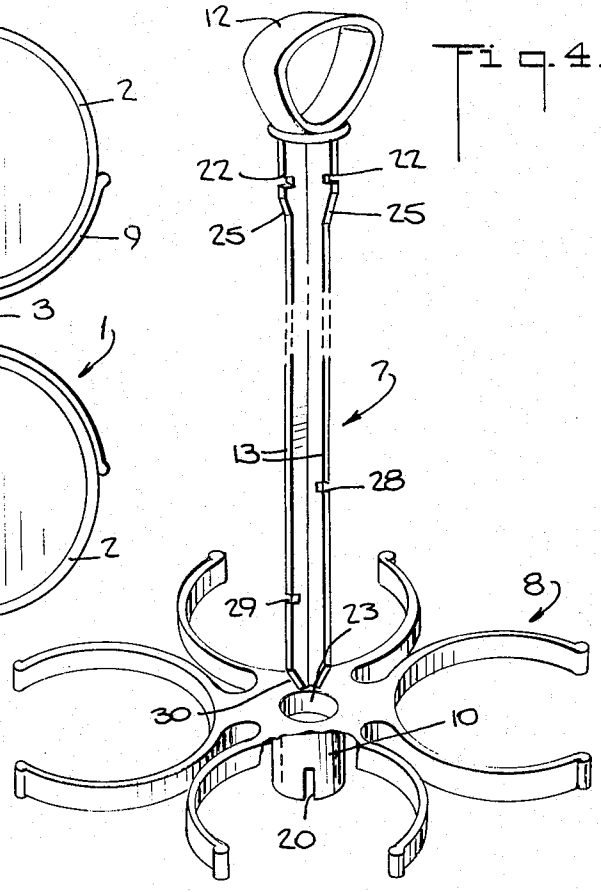
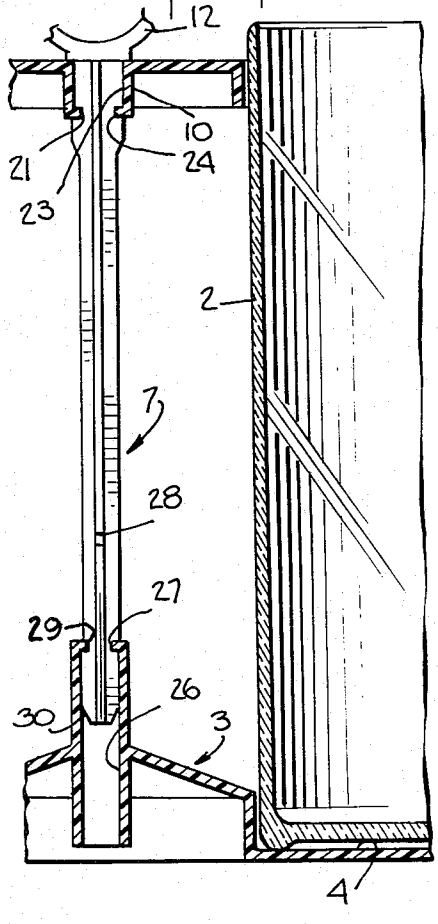
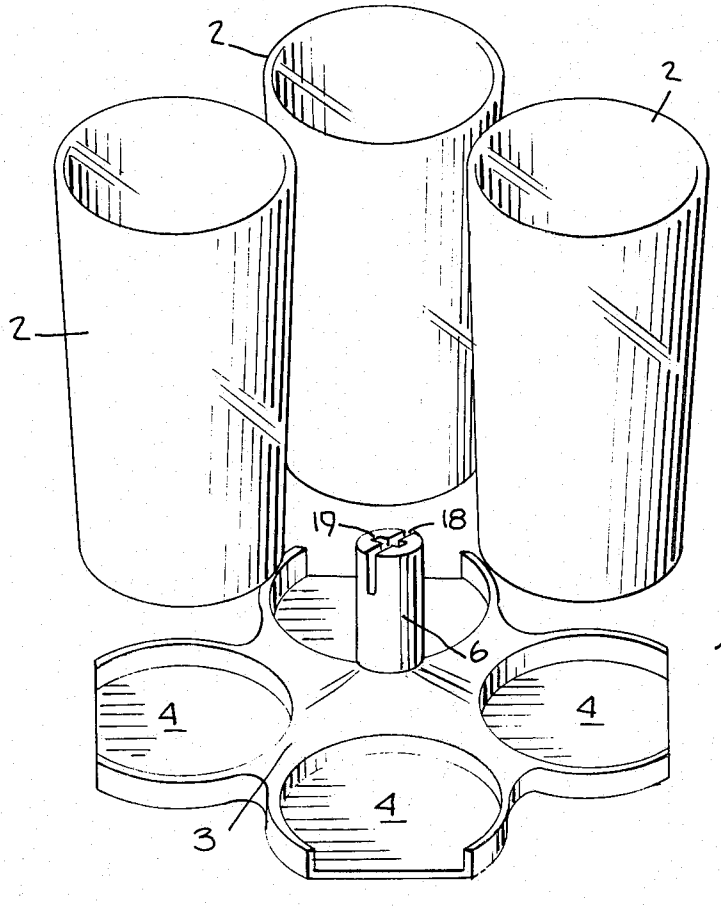


Fig. 8.

Fig. 5.





PACKAGE FOR TUMBLERS AND THE LIKE

BACKGROUND OF THE INVENTION

This invention relates to an improved plastic package for articles such as glass or plastic tumblers and the like. More particularly, the invention provides an improved molded plastic package for the shipment, display, and serving of the articles, and provides one which is particularly adapted both for the packing of and for the handling of such articles of differing sizes.

The package is an improvement upon those described in the Richard K. Oglesbee U.S. Pat. Nos. 3,693,830 dated Sept. 26, 1972 and 3,760,974 dated Sept. 25, 1973, both entitled PACKAGES FOR TUMBLERS AND THE LIKE, and the package described in U.S patent application Ser. No. 388,408 of Raymond C. Frey filed on Aug. 15, 1973, now U.S. Pat. No. 3,888,348 which is similarly titled.

These earlier disclosed packages provide means for storing, shipping, and displaying tumblers and similar articles which are inexpensive, convenient, and attractive. The package of the present invention provides similar desirable features and, in addition, is more easily assembled and loaded with articles of differing sizes and provides an improved serving caddy. These improvements make the package more adaptable for use with higher speed packing operations and additionally increase the suitability of the package for secondary use as a server or caddy. As will be more fully described below, these results are obtained particularly by an improved connecting post and by its cooperating and adjustable connecting means on the base and cover portions of the package.

Accordingly, an object of the present invention is to provide an improved package for articles such as tumblers and the like.

Another object of the invention is to provide a strong and lightweight shipping and display package for glass articles such as tumblers of differing sizes.

Another object of the invention is to provide a shipping and display package for articles such as tumblers where the articles may be removed and replaced without removing the package cover.

Another object of the invention is to provide an improved package for tumblers and the like with improved assembly locking means providing an easy packing operation.

Another object of the invention is to provide a package for distribution and display which also may be used as a server or caddy for tumblers and the like.

Other and further objects of the invention will be obvious upon an understanding of the illustrative embodiment about to be described or will be indicated in the appended claims, and various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of the invention has been chosen for purposes of illustration and description and is shown in the accompanying drawings, forming a part of the specification, wherein:

FIG. 1 is a perspective view of a preferred embodiment of the package containing tumblers.

FIG. 2 is a vertical sectional view of the package of FIG. 1.

FIG. 3 is a top plan view of the package.

FIG. 4 is an exploded perspective view of the package.

FIG. 5 is a fragmentary vertical sectional view of the package as assembled to contain relatively tall tumblers.

FIG. 6 is a fragmentary perspective view of another embodiment of the post and the base post lock.

FIG. 7 is a fragmentary top plan view of another embodiment of the package base.

DESCRIPTION OF THE PREFERRED EMBODIMENT

FIG. 1 illustrates a preferred embodiment of the package 1 for shipping, displaying, or serving four cylindrical tumblers 2. The package 1 includes a bottom tray or base 3 having four spaced cup-like receptacles 4 to receive the bottoms of the tumblers 2. The central portion 5 of the base 3 includes a post lock 6 for receiving and engaging a stem or a post 7 which passes through and is adjustably attached to the base 3 by the lock 6, as will be more fully described below. A cover 8 has four spaced article receiving brackets or clips which are proportioned to frictionally engage the tops or rims of the stored tumblers 2. The post 7 is attached to the cover 8 by a post lock 10.

The base 3 is preferably molded as a single unit including the center portion 5 and the post lock 6 and the outwardly positioned article engaging receptacles 4 which have a cup-like form including a rim 15. Because the base 3 is molded as a unit, the method of manufacture is adapted to the optical positioning of short flange members 16 (FIG. 7) at spaced positions on the article engaging rims 15. The flanges 16 are formed in varying lengths for articles of differing sizes by using removable plugs in the mold used to form the base 3. The mold for the base includes a number of slots corresponding to the positions of flanges 16. During the molding operation, a plug is inserted in all or portions of the slots to control the flange lengths. Three flanges 16 are illustrated, for example, in FIG. 7 for engaging spaced portions of a container bottom having a circumference shown by the circle 17. Where the package 1 is to be used for a tumbler 2 with a base of the receptacle 4 size, these flanges 16 are eliminated as is illustrated in FIGS. 1–5.

The cover 8 is also conveniently molded as a single member including the post lock 10. Downwardly depending flanges 8A are preferably provided on the underside of the cover 8 which act to stiffen the cover 8 together with the innermost portions 9a of the grips 9.

The four article rim clips 9 are molded integrally with the other portions of the cover 8. Each clip 9 forms the major portion of a circle with an open portion being positioned at the outermost section of the clip 9. In order to provide for a grip on the articles 2, the clips 9 preferably have a substantial vertical dimension giving each of the clips 9 an elongated cross-section as illustrated in FIG. 2.

A preferred embodiment of the post 7 is illustrated in FIG. 4. A finger grip or handle 12 is molded integrally with the upper portion of the post 7. The portion of the post extending downwardly from the finger grip 12 preferably comprises a plurality of elongated splines 13. The post 7 illustrated, for example, has four splines 13 which form a cross in cross-section. The splines 13 are received in complementary slots 18 and 19 in the post lock 6 in the base 3 and slots 20 and 21 in the post

lock 10 on the cover 8. Notches 22 are formed in the upper portion of the post splines 13 for engaging the cover post lock 10. The locking action between the notches 22 on the post 7 and the post lock 10 is illustrated in FIGS. 2 and 5.

Post lock 10 has a center aperture 23 for receiving the post splines 13 above the slotted lower end portion containing the slots 20 and 21. The slot 20 extends to the outer edges of the post lock 10 and up the sides (FIGS. 3 and 4) to receive the full width of two opposite splines 13 on the post 7. The other slot 21 is shortened so that its end portions form lugs 24 which engage two spaced notches 22 on the post 7 as seen in FIGS. 2 and 5. The base 3 cover 8 and post 7 of the package 1 may be conveniently shipped in unassembled form to the packing station. The post 7 is then attached to the cover 8 by being slipped downwardly through the center aperture 23 in the post lock 10 until the notches 22 in two opposite splines 13 are engaged by spaced lugs 24 of the post lock 10. Notches 22 are provided on all of the splines 13 to facilitate the assembly by eliminating any need to orient the post 7 as it is inserted into the post lock 10. The entry of the lugs 24 into the notches 22 is facilitated by the flexible nature of the plastic from which the lock 10 is formed, the slots 20, and by the provision of flared locking cams 25 on the splines 13 immediately below the notches 22.

The post lock 6 on the base 3 has a similar hollow post receiving aperture 26 together with the slotted top portion including the full slot 18 and the shortened slot 19 (FIG. 4) to provide slot engaging lugs 27 for engaging either notches 28 (FIG. 2) or 29 (FIG. 5). Tapered ends 30 on the splines 13 facilitate the passage of the splines 13 into the shortened slot 19 and facilitate a spreading action of the post lock 6 at slot 18 during assembly, as illustrated in dash-dot lines in FIG. 2.

The provision of one set of notches 29 on a pair of opposite splines 13 near the bottom end of the post 7 and a second set of notches 28 on the remaining pair of splines 13 at an elevated position permits the package to be assembled with differing cover heights for articles of differing heights. Thus, for shorter tumblers 2, as illustrated in FIG. 2, the upper notches 28 are used for the attachment by orienting the splines 13 having the notches 28 so that they pass into the short slot 19 in the post lock 6. Where higher tumblers 2' are packaged, as illustrated in FIG. 5, the post 7 is rotated before assembly so that splines 13 having the lower notches 29 are engaged by the shorter slot 29 of the post lock 6.

FIG. 6 illustrates an alternate embodiment providing for four differing cover 8 heights. In this embodiment one notch 32 is provided in each of the splines 33 with all of the notches 32 being at differing heights. Only one shortened slot end 34 is formed in the post lock 35 for engaging one of the notches 32. The post 36 is rotated so that the appropriate notch 32 for the desired height is on the spline 33 which enters the short slot end 34 of the post lock 35. Should further height adjustments be desired during assembly, additional splines may be used as, for example, six splines with six differently positioned notches on the six splines.

With the cover 8 in place, the package 1 is useful for initial distribution and display of articles and it may also be used as a server or caddy for tumblers. The relatively large opening provided in the clips 9 having an arc of about 90° or so permits the tumblers 2 to be pulled outwardly from the clips 9. During the initial packing, the packages 1 may be located with the cover 8 in place or the assembled cover 8 and post 7 may be slipped into loaded base 3.

When the tumblers or other articles 2 are positioned in the package 1, the cover 8 and the base 3 combine to support and to protect the packaged articles thereby preventing damage to the articles 2 particularly in the case of glass tumblers.

The package provides a secure and convenient container which at the same time is attractive and provides a visual display of the packaged articles. A package is also provided which is conveniently stacked or fitted within a larger corrugated board or other shipping container for storage and shipment and which may thereafter be removed as a unit for display by a retailer. The customer may pick up and inspect the tumblers without opening or otherwise destroying the package and he may take the tumblers away as a unit and continue to use the package as a storage rack or serving caddy. The package is seen to be both inexpensive and adjustable for use with articles of differing size and to be adapted for manufacture from inexpensive molded plastic portions. The resulting package is easily loaded using hand or automatic packaging operations with the cover in place. The preferred plastic molded form gives a moisture resistant package which may be stored in either moist or dry areas.

As various changes may be made in the form, construction and arrangement of the parts herein without departing from the spirit and scope of the invention and without sacrificing any of its advantages, it is to be understood that all matter herein is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim:

1. An improved package for a plurality of articles comprising the combination of:
   - a base with a plurality of receptacles for receiving the lowermost portions of the articles;
   - an elongated post extending upwardly from a central portion of said base;
   - a base engaging means on said post comprising one or more notches in said post;
   - a resilient lug means on said base engaging one or more of said notches on said post;
   - a cover including an aperture at its central portion for engaging an upper portion of said post and having a plurality of article engaging grips positioned on and directed outwardly from the central portion of said cover for releasably engaging upper portions of the articles; and
   - the number of said grips corresponding to the number of said article receptacles in said base and one clip being positioned above each receptacle.

2. The package as claimed in claim 1 which further comprises a cover lock means on the upper portion of said post, and a resilient member on said cover engaging said cover lock means.

3. The package as claimed in claim 2 in which said cover lock means on said post comprises one or more notches in said post, and said resilient member on said cover comprises one or more lugs engaging one or more of said notches.

4. The package as claimed in claim 1 in which said elongated post comprises a plurality of splines and said base engaging means comprises a plurality of notches with one notch on one spline being axially spaced from

a notch on another spline whereby said post may be attached to said base at two differing positions.

5. The package as claimed in claim **4** in which said post comprises four splines providing said post with a cross-shaped cross-section and in which one of said notches is positioned on each spline with the notches on one pair of alternate splines having the same positions axially of said post and being axially spaced from a pair of similarly positioned notches on the other pair of splines.

6. An improved package for cylindrical articles comprising the combination of:

a base with a plurality of receptacles for receiving the lowermost portions of the articles;

an elongated post extending upwardly from a central portion of said base having a plurality of splines;

a base engaging notch on one of said post splines;

a slotted resilient member on said base including a lug engaging the notch on said post splines;

a cover including an aperture at its central portion for engaging an upper portion of said post and having a plurality of article engaging grips positioned on and directed outwardly from the central portion of said cover and including semicircular resilient members for releasably engaging upper portions of the articles;

means for locking said cover to said post, and;

the number of said grips corresponding to the number of said article receptacles in said base and one clip being positioned above each receptacle.

7. An improved package for a plurality of articles comprising the combination of:

a base with a plurality of receptacles for receiving the lowermost portions of the articles;

an elongated post extending upwardly from a central portion of said base having one or more splines;

a base engaging means on said post comprising one or more notches formed in one or more of said splines;

a resilient member on said base engaging the base engaging means on said post;

a cover including an aperture at its central portion for engaging an upper portion of said post and having a plurality of article engaging grips positioned on and directed outwardly from the central portion of said cover for releasably engaging upper portions of the articles; and

the number of said grips corresponding to the number of said article receptacles in said base and one clip being positioned above each receptacle.

8. The package as claimed in claim **7** which further comprises one or more notches on said splines adjacent the upper portion of said post, and a resiliently mounted lug on said cover for engaging one of said notches.

9. The package as claimed in claim **8** in which said cover comprises slots adjacent to said aperture for receiving said splines, and said lug comprising the end of one slot.

10. The package as claimed in claim **7** in which said resilient member on said base comprises slots for receiving said splines, and at least one slot end is positioned for engaging one of said notches.

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