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CONTAINER AND PACKAGE

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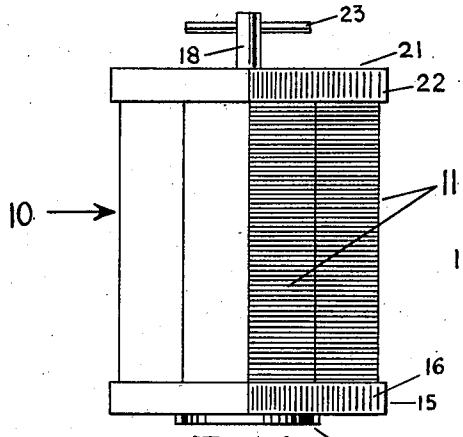

Fig. 1

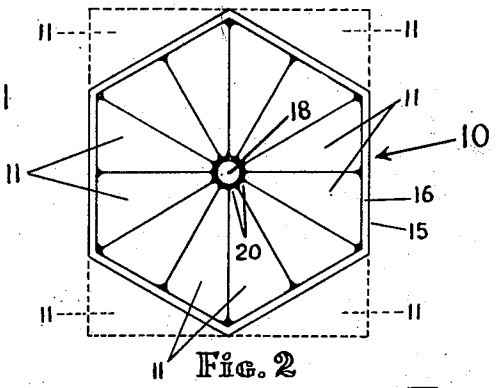

Fig. 2

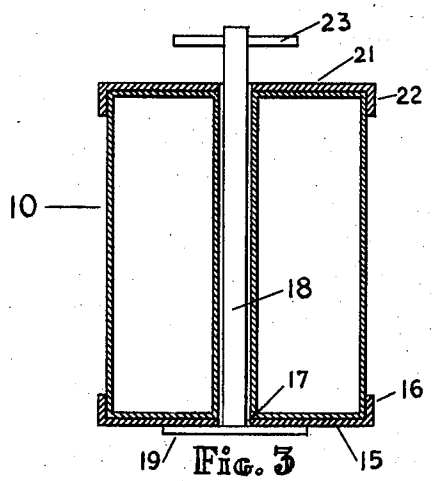

Fig. 3

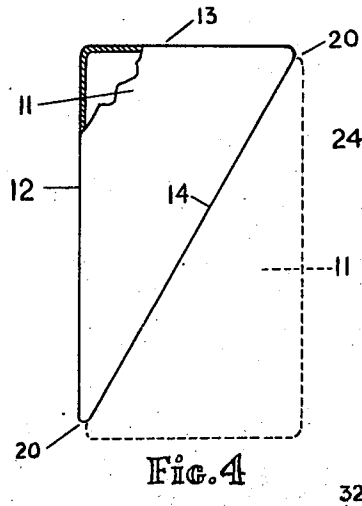

Fig. 4

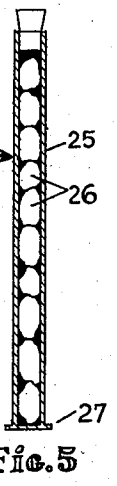

Fig. 5

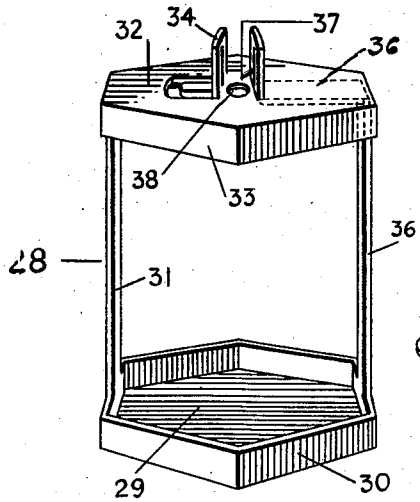

Fig. 6

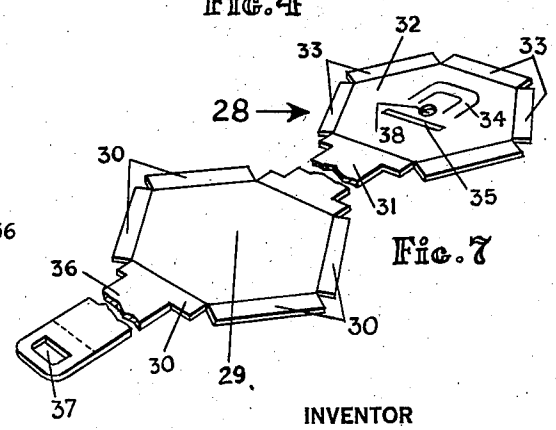

Fig. 7

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CONTAINER AND PACKAGE

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Application July 25, 1936, Serial No. 92,597

10 Claims. (Cl. 206—65)

This invention relates to new and useful improvements in containers and packages and has for an object to provide a container of such shape that a plurality of the containers may be packed in any of various sizes and shapes of boxes or cartons without the loss of space.

Another object is to provide containers having the characteristics indicated and which are designed for assembly into attractive displays and into packages convenient for carrying and storage.

A further object is to provide a package for the convenient assembly and carrying of a plurality of the containers of the invention.

An additional object is to provide a package as indicated and which is of simple and inexpensive construction.

Other objects and advantages will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawing wherein satisfactory embodiments of the invention are shown. However it is to be understood that the invention is not limited to the details disclosed but includes all such variations and modifications as fall within the spirit of the invention and the scope of the appended claims.

In the drawing:

Fig. 1 is a side elevational view showing a package made up in accordance with the present invention;

Fig. 2 is a top plan view thereof, the cover being omitted;

Fig. 3 is a vertical sectional view through the package, a pair of the containers being shown in section;

Fig. 4 is an enlarged end elevational view of a container of the invention;

Fig. 5 is a sectional view of a cooling unit which may be employed;

Fig. 6 is a perspective view showing a modified form of package means set up as when in use; and

Fig. 7 is a perspective view of the package means of Fig. 6 while in flat condition, prior to being set up for use.

Referring in detail to the drawing and at first particularly to Figs. 1 through 5 the package generally designated 10 includes twelve containers 11 each comprising a hollow elongated body which may be of metal for the containing of beer or other liquid or of other material as required. Each container as shown in Fig. 2 and on an enlarged scale in Fig. 4 is generally triangular as viewed from the end or in transverse section and the containers are so made up that their sides (see particularly Fig. 4) 12 and 13 are at ninety degrees to one another while the sides 13 and 14 are at sixty degrees to one another and the sides 12 and 14 are at thirty degrees to one another. With this construction the containers may be packed in a box or carton without the loss of space as will later be described.

The package 10 includes a base 15 generally hexagonal and including an integral upstanding flange 16. Through the center of the base is an opening 17 providing a passage for a lifting rod 18 to the lower end of which is fixed a button 19 of a diameter considerably greater than that of the opening 17. The radius of the base is slightly greater than the width of a wall 12 of a container 11. These containers are disposed on the base with two containers to each side of the base and with two containers at the same side of the base arranged with their sides 12 against one another. Thus the outer edges of each two containers from a straight line, the sides or walls 13 being at right-angles to the sides or walls 12.

At their apexes or at the juncture of their walls 12 and 14 the containers are rounded off as at 20 and therefore when the containers are arranged as shown their apexes are spaced from one another and define a center passage through which the lifting rod 18 extends. In the present arrangement the portion of the container of least width is the apex, it being recognized that owing to the cutting off of the container at 20 there is no true apex to a container 11. However the smaller portion of the container is for convenience referred to as the apex. Figs. 2 and 3 clearly show the manner in which the containers are arranged in side-by-side contacting relation with their outer walls or edges 13 against the upstanding flange 16 whereby the containers are positioned.

Over the upper ends of the containers a cover member 21 is positioned and the same includes a depending flange 22. Such cover member and its flange are hexagonal and the sides of the flange engage the outer edges of the containers to help hold them in their proper relative positions. Lifting rod 18 extends through the cover and a pin or key piece 23 passes transversely through the upper portion of the rod to provide a hand or finger piece by means of which the package may be lifted and carried.

From the foregoing it will be seen that owing to the construction of the containers they may be packed solid in the hexagonal base. There is no waste space between the various containers and

an attractive package is formed. If desired the lifting rod 18 is omitted and the package may be enclosed by wrapping paper or by card board and wrapping paper. The package may be easily transported from place to place and is convenient for carrying on picnics etc. and also being very compact occupies but a relatively small space in a refrigerator or the like. Package 10 made up of a dozen containers is a unit of sale and the goods made up into the package is an inducement for the sale of the number of containers making the package.

With the package resting on the button 19 the base 15, top or cover 21 and the containers on the base may be turned around or about the lifting rod 18. The containers are easily removed from the package one at a time since all that is necessary to permit such removal is the raising or elevating of the cover member on the lifting rod 18 to dispose the flange of the cover above the upper ends of the containers.

When shipping to a store the base, cover, lifting rod, etc. may be shipped knocked down and in that case the containers are arranged relatively to form rectangles as suggested by Fig. 4 of the drawing. There a pair of the containers 11 are shown with their walls 14 in engagement, one container being indicated by dotted lines. From this figure it will be apparent that the containers may be packed solid for shipping and also for placing in a refrigerator or the like when there are less than the number of containers required to make a package.

If it is desired to ship the containers made up into packages 10, by placing a plurality of such packages in a carton then the spaces between the packages may be filled by the insertion of other individual containers into such spaces. Thus as suggested by the dotted lines in Fig. 2 the placing of the individual containers against the outer sides of the package 10 forms the latter into a rectangular package. Of course if desired the diameter of the base and cover may be increased so that additional containers may be stacked about the dozen containers arranged as here shown. Other stacking arrangements of the containers will suggest themselves.

For the purpose of making up a picnic package the lifting rod 18 may be omitted and in its place a cooling unit 24 (Fig. 5) substituted. This unit will be arranged in the central space defined by the apexes of the containers and comprises a tube 25 receiving ice or "Dry-Ice" 26 and is closed at its upper end as by a cork or the like. At its lower end it may be provided with a flange 27 of a diameter slightly larger than that of the opening 17 in the base through which the lifting rod 18 passes.

Figs. 6 and 7 show a modified arrangement comprising a one-piece construction of packaging element 28. Fig. 7 shows the element in its flat or blanked condition and Fig. 6 shows it folded. The element comprises a hexagonal base 29 having an upstanding flange 30 from one side of which extends a strap-like part 31 integral with an edge of a cover or top 32. This cover or top is hexagonal and includes a depending flange 33 and in addition has a portion lanced and pressed therefrom providing a handle 34. Adjacent the handle the top has a slot 35 the purpose of which will presently appear.

Also integral with a portion of the flange 30 is a straplike member 36 the upper or outer end portion of which is cut-out to provide an opening 37 whereby a handle is formed. In assembling the element 28, after the portions are in their places forming the flanges 30 and 33, the containers are arranged in the base and then the free or outer end of the strap 36 is passed through the slot 35 and the cover 32 is pushed into place with its flange about the upper ends of the containers. The two handles then form means whereby the package may be lifted and carried from place to place.

The entire package element 28 of Figs. 6 and 7 as well as the base 15 and the cover or top 21 of Figs. 1, 2 and 3 are preferably formed of card board or other inexpensive material whereby when the goods are used there is no necessity for the return of the package or the packaging elements. In the case of the package including the element 28 the cooling unit 24 may be arranged in the center space or passage defined by the container of the package and in such instance rests on the base 29. An opening 38 in the cover 32 provides for the introduction of the cooling unit.

Having thus set forth the nature of my invention, what I claim is:

1. A package comprising a hexagonal base having an upstanding flange, generally triangularly shaped containers on said base and arranged in side-by-side contacting relation with a thirty degree apex of each toward the center of the base and stopping short thereof to leave a center passage, a hexagonal cover on the upper ends of the containers and including a depending flange engaging the outer edges of the containers, a strap connecting an edge portion of the base with an edge portion of the cover, a second strap connected with the base and having a portion at the upper side of the cover and forming a handle, and a second handle comprising a piece partially lanced from and pressed from the cover.

2. A package comprising a hexagonal base having an upstanding flange, generally triangularly shaped containers on said base and arranged in side-by-side contacting relation with a thirty degree apex of each toward the center of the base and stopping short thereof to leave a center passage, a hexagonal cover on the upper ends of the containers and including a depending flange engaging the outer edges of the containers a strap connecting an edge portion of the base with an edge portion of the cover, a second strap connected with the base and having a portion extending through the cover from the inner side thereof and forming a handle and a second handle adjacent said first handle and connected with the cover.

3. A package comprising a polygonal base having an upstanding flange, flat sided triangularly shaped containers on said base and arranged in side-by-side contacting relation with a thirty degree apex of each toward the center of the base and stopping short thereof to leave a center passage, a polygonal cover on the upper ends of the containers and including a depending flange engaging the outer edges of the containers, a strap connecting an adge portion of the base with an edge portion of the cover, a second strap connected with the base and having a portion at the upper side of the cover and forming a handle, and a second handle comprising a piece partially lanced from and pressed from the cover.

4. A package comprising a polygonal base having an upstanding flange, flat-sided triangularly shaped containers on said base and arranged in side-by-side contacting relation with a thirty degree apex of each toward the center of the base

and stopping short thereof to leave a center passage, a polygonal cover on the upper ends of the containers and including a depending flange engaging the outer edges of the containers, a strap connecting an edge portion of the base with an edge portion of the cover, a second strap connected with the base and having a portion extending through the cover from the inner side thereof and forming a handle, and a second handle adjacent said first handle and connected with the cover.

5. In a container for liquid, a closed elongated liquid-tight body of metal, said body generally triangular in transverse section and comprising flat sides and flat ends, said body having its sides disposed to form angles of approximately ninety, sixty and thirty degrees at the respective corners thereof, and said container having the edges of its sides forming the thirty degree angle connected short of an apex whereby when a series of the containers are arranged in side-by-side relation with their sides forming the thirty degree angle in contact and with their third sides outlining a hexagon there is a center space enclosed by such connected edges.

6. A package comprising a hexagonal base, independent generally triangularly shaped containers on said base and arranged in side-by-side contacting relation each with an apex toward the center of the base and stopping short thereof to leave a center passage, an upstanding flange about and carried by the edge of said base and engaging the outer edges of said containers, a hexagonal cover on the upper ends of said containers, a depending flange about and carried by the outer edge of said cover and engaging the outer edges of said containers, and a lifting rod extending through the base, center passage and cover.

7. A package comprising a polygonal base, independent flat-sided triangularly shaped containers on the base in side-by-side contacting relation each with an apex toward the center of the base but stopping short thereof to leave a center passage, an upstanding flange about and carried by the edge of said base and engaging the outer edges of said containers, a polygonal cover on the upper ends of said containers, a depending flange about and carried by the edge of the cover and engaging the outer edges of said containers, and a lifting rod extending through the base, center passage and cover.

8. A package comprising a polygonal base, independent flat-sided generally triangularly shaped liquid-tight containers having their lower ends on said base, said containers independently removable from the base and arranged in side-by-side contacting relation each with an apex toward a common center, an upstanding flange carried by the edges of said base and engaging the outer edges of said containers, a polygonal cover on the upper ends of said containers, and a depending flange carried by said cover and engaging the outer edges of said containers.

9. A package comprising a hexagonal base, independent flat-sided generally triangularly shaped liquid-tight containers having their lower ends on said base, said containers independently removable from the base and arranged in side-by-side contacting relation each with an apex toward a common center, an upstanding flange carried by the edges of said base and engaging the outer edges of said containers, a hexagonal cover on the upper ends of said containers, and a depending flange carried by said cover and engaging the outer edges of said containers.

10. A package comprising a straight sided base, independent flat sided triangularly shaped liquid-tight containers having their lower ends on the base, said containers each having its sides disposed to form angles of approximately ninety, sixty and thirty degrees at the respective corners thereof, said containers independently removable from the base and arranged in side-by-side contacting relation with their thirty degree apexes toward a common center, an upstanding flange carried by the edges of the base and engaging the outer edges of the containers, a straight sided cover on the upper ends of the containers, and a depending flange carried by said cover and engaging the outer edges of said containers.

ALEXANDER L. FLAMM.