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MOUNTS FOR OBJECTS SUCH AS GLASSWARE, PARTICULARLY FOR
TRANSPORTATION AND DISPLAY
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FIG. 1

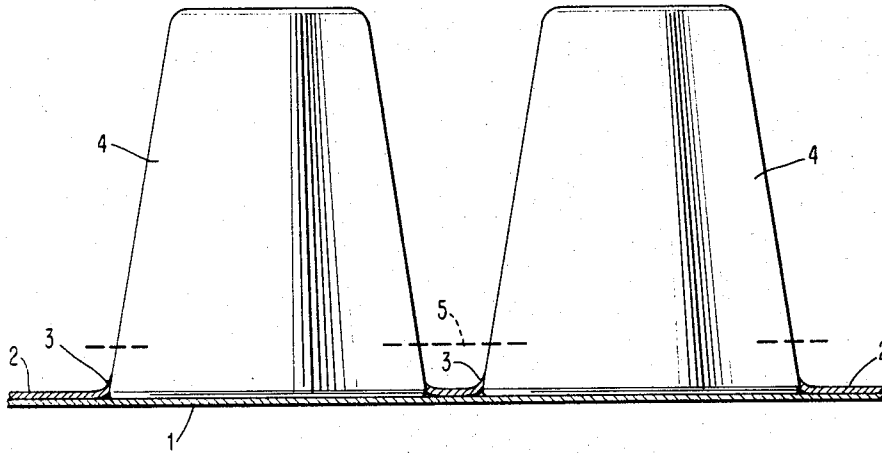


FIG. 2

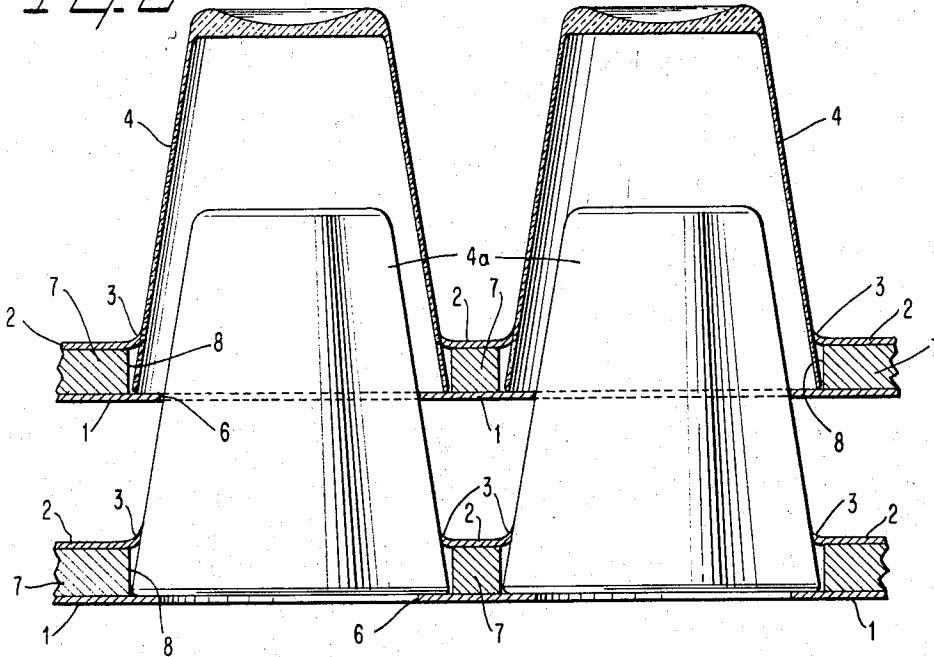
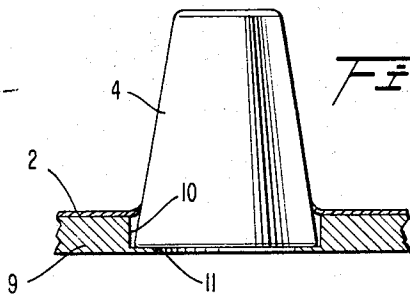


FIG. 3



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**MOUNTS FOR OBJECTS SUCH AS GLASSWARE,
PARTICULARLY FOR TRANSPORTATION AND
DISPLAY**

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40,606

6 Claims. (Cl. 211—41)

ABSTRACT OF THE DISCLOSURE

A mount for the transport and display, especially of fragile articles such as glassware. The articles are arranged orderly on a backing plate or sheet, with their rims or bases of larger cross-sectional contour in contact therewith. A second plate has apertures correspondingly orderly arranged and each of which has a shape corresponding to the contour of the article in contact with the first or backing plate, but of slightly smaller size. After the articles are arranged upon the first plate, the second plate is moved downwardly into adjacent relation with the first, with each aperture therein passing over and fitting snugly about its respective article at a location near the contour thereof in contact with the first plate. The two plates are then secured together as by adhesive or by interposed spacers. The internal rims of the apertures may be upturned slightly in final position, by contact with the articles. The articles are thereby firmly held to the first plate and protected in packaging and transport. They are also attractively displayed. The first or backing plate may have apertures therein each concentric with but of smaller size than the corresponding apertures in the second plate. In the case of drinking glasses for example, the apertures in the first plate may be sized to fit down, a predetermined distance over the glasses of an underlying package or set, thus enabling orderly nesting and protection against breakage of the articles.

The invention relates to mounts for objects having adjoining sections of different size which enable the objects to be packed securely for transportation or display and which achieve nesting without risk of breakage or surface damage. The invention is applicable inter alia to conical objects such as glass tumblers and it will be described in relation to that particular use, it being obvious that it is equally applicable to any objects which have a plurality of adjoining cross sections of different size. It is an object of the invention to mount such objects side-by-side without risk of breakage, and in nested position without risk of contact.

The objects of the invention are accomplished, generally speaking, by a mount for objects having adjoining sections of different size which comprises a first plate having an area of support for the larger section, a second plate having a hole of less size than the larger section and approximating that of the smaller section, and means to join the plates together in tight fitting relation to said sections.

The above and further objects and novel features of the present invention will more fully appear from the following detailed description when the same is read in connection with the accompanying drawings. It is to be expressly understood, however, that the drawings are for the purpose of illustration only and are not intended as a definition of the limits of the invention, reference for this latter purpose being had primarily to the appended claims.

In the drawings, wherein like reference characters refer to like parts throughout the several views,

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FIGURE 1 is a vertical section through a portion of a mount for tumblers showing two tumblers in position; FIGURE 2 is a section similar to FIGURE 1, of a modified form, showing two sets of articles in nested position; and

FIGURE 3 shows a third modification.

Brief summary of the invention

The invention comprises generally a backing plate or sheet on which articles, especially fragile articles like drinking glasses, are orderly arranged in spaced relation, and to which they are held in such arrangement, by a second plate or sheet having similarly arranged apertures each fitting down snugly about a respective one of the articles, at a location closely adjacent the first plate. The two plates are then secured together as by adhesive or interposed spacers, so that they cooperate to firmly hold each article to the first plate.

Referring now to FIGURE 1, a first plate 1 is provided upon which the glasses 4 rest. The glasses may be said to have a cross section of one size adjacent this plate and a cross section of lesser size somewhat thereabove, for example at the level indicated by dash line 5. A second plate 2 is provided which has holes of size and shape approximating that of the tumblers at the level 5. This plate may be provided on one side with areas of adhesive not shown. This plate is dropped over the tumbler, comes to rest at the level 5, and is forced down until it makes contact with plate 1, to which it attaches itself by the adhesive, the edge of the holes being distended as indicated at 3, FIGURES 1 and 2, and tightened about the tumblers and anchoring them firmly in place. In this operation, the edges of the holes are bent up out of the general level of the plate as indicated in FIGURE 1, forming a brace for the object which is angularly disposed and quite strong.

The first plate of FIGURE 1 may be of flexible or inflexible material but the second plate is of material which is flexible, at least in the area which engages the object. It will be understood that the objects can be of any shape and that the holes in the plate will conform.

In FIGURE 2 nested layers of objects are illustrated. In this case the plates 1 are provided with holes 6 of diameter less than that of the rim of the tumbler so that the plate rides on the lower tumblers 4a in the position shown. Another modification occurs in that spacers 7 are employed between the upper plate 2 and the lower plate 1. These spacers may be of any suitable material and may be attached to the upper and lower plates in any convenient way, for example by adhesive. They need not completely encircle the tumblers but they should provide adequate support for the upper plates. The lower plates 1 provide the tumblers with circular areas of support 8.

In FIGURE 3 there is shown a modification in which the spacers 7 and areas of support 8 are unitary as indicated at 9, for instance being formed of the same material with appropriate differences in size 10, 11.

It will be perceived that the mount comprises a first plate having areas of support for the object and a second plate parallel to it which is provided with holes, the objects being gripped between the plates and the plates being attached one to the other between the objects.

According to a particularly advantageous form of the invention the holes in the second plate are of less diameter than the objects to which they are applied and are of a material capable of being warped to form angularly aligned bracing areas.

According to another characteristic of the invention the plates have coaxial holes, that in the supporting plate as distinguished from the bracing plate being adapted to rest upon the objects so that they will be supported in nested and spaced relation. In objects of material strength

such as certain types of glassware the nests may include a substantial number of coaxially aligned objects.

According to another characteristic of the invention the rigidity of the mount is increased by introducing a spacer between the plates, the spacer being provided with openings coaxial with those of the plates and of a size at least equal to that of the large end of the object. These spacers may be sufficiently strong to afford great rigidity and material protection to the assemblage. The diameter of the spacers 7 may be equal to, greater, or less than that of the larger section of the object but if that diameter is less the spacer will itself rest upon the side of the tumbler and form a part of the brace, the initial portion of which is the plate 2. In that case, also, the spacer 7 will not necessarily be attached to the plate 1 which will act exclusively to support the lower end of the object and, possibly, to be supported by the lower objects in the nest.

The foregoing examples show various modes of realization and the drawings illustrate the mounting and nesting of glass tumblers for display and shipment, the tumblers resting on the lower plate and being braced by the upper plate.

During the preparation of the plates to provide holes, tongues may be provided to project axially which can be appropriately aligned for visibility and marked with indicia of origin, of quality and the like.

The plates can be formed of various materials such as heavy cardboard, impregnated or not with plastics, rubber of various degrees of rigidity, organic plastics being exemplary.

Outstanding characteristics of the new mount are strength, compact convenience, and superior appearance. The objects mounted in this way are attractive and constitute an excellent method of packaging objects which are normally sold in groups, for example six tumblers. Another advantage is ease of application. Another advantage is substantially complete display of all parts of all objects. The mount permits objects to be handled with less risk of breakage than individual objects of the same type. During transportation, breakage loss is greatly reduced.

The mounts can be of any size to fit any object.

As many apparently widely different embodiments of the present invention may be made without departing from the spirit and scope thereof, it is to be understood that the invention is not limited to the specific embodiments.

What is claimed is:

1. A mount comprising a first backing plate a plurality of articles orderly arranged in spaced relation upon and in contact with said first plate, each said article having a sectional form decreasing in size upwardly from said first plate, a second plate having apertures therethrough arranged similarly to the arrangement of articles upon said first plate, each said aperture conforming to the contour of the article at its area of contact with said first plate, but of slightly smaller size than said contour, and fitting down snugly over and about a respective one of said articles, and means fixedly and integrally securing said plates together.

2. The mount of claim 1, said last-named means comprising an adhesive securing said plates together in surface-to-surface contact.

3. The mount of claim 1, said last-named means comprising spacers interposed between and attached to each said plate in surrounding relation with each said article.

4. The mount of claim 1, there being a plurality of apertures in and through said first plate, each being of a size less than, and in underlying registration with, a respective one of the apertures in said second plate.

5. The mount of claim 4, said articles being of generally inverted frusto-conical external form, each said aperture in said first plate having a size equal to the size of its corresponding article at a section of said article above and spaced from said first plate.

6. The mount of claim 1, there being a plurality of apertures in and through said first plate, each of a size equal to and in registration with a respective one of the apertures in said second plate, each said aperture in said first plate having a radially and inwardly extending flange integrally coplanar with its lower surface to form a supporting rim for the respective article emplaced therein.

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