Feb. 23, 1965 E. J. KNAPP ETAL 3,170,569

PACKAGING PARTS

Filed April 26, 1963

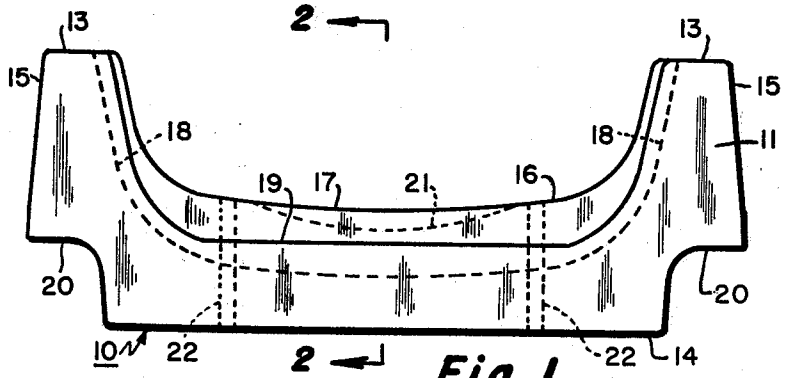


Fig. 1

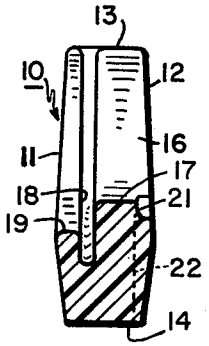


Fig. 2

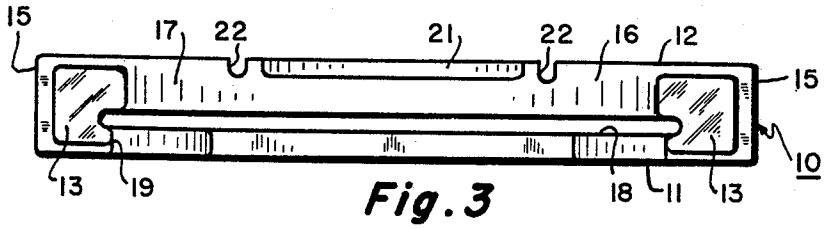


Fig. 3

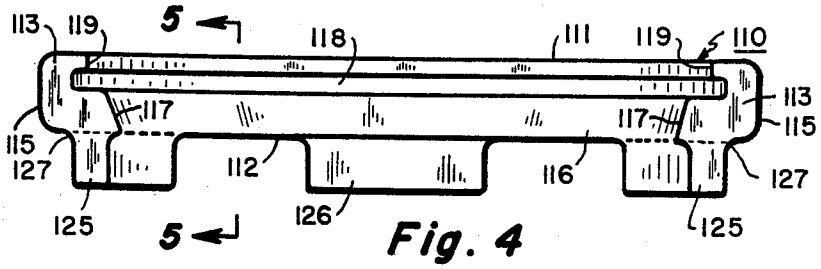


Fig. 4

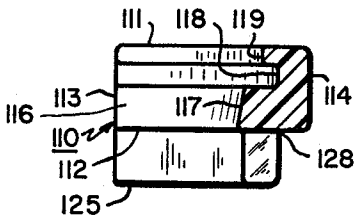


Fig. 5

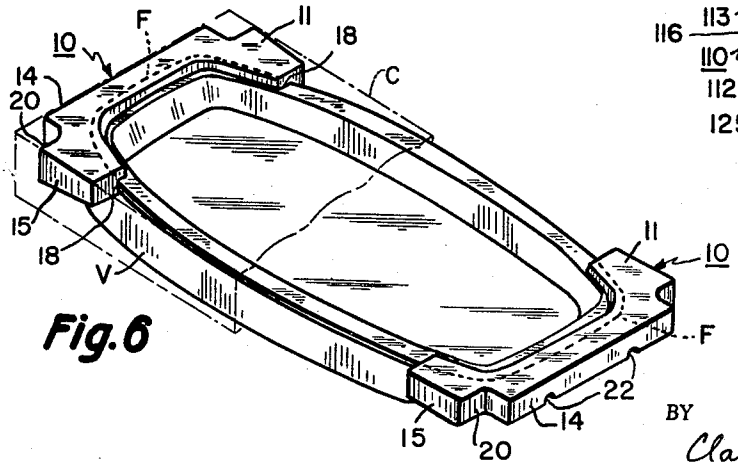


Fig. 6

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PACKAGING PARTS

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This invention relates to an improved packaging medium for cushionably retaining a flanged vessel within an outer closure, and more particularly to inexpensive lightweight unitarily-molded packaging parts for receiving and cushionably retaining flanged end portions of a shallow vessel in impact-resistant orientation within an enclosing carton.

In the past, it has been customary to package shallow vessels having end flanges such as platters, roasting pans, and the like, in numerous corrugated parts, excelsior, and various types of separators. The use of excelsior has always been objectionable to both the ultimate consumer and the retail merchant due to the inherent untidiness necessarily produced when unpackaging the items. The use of multiple corrugated parts has also been objectionable to the retail merchant due to the difficulty encountered in reinserting such parts when repackaging the item after display or examination of the consumer. In addition, due to the number of corrugated pieces utilized and the numerous folds required with such known packaging media, manufacturers found that not only did the excessive time required for packaging subject them to substantial labor costs, but also the additional weight of the packaging media increased their shipping costs.

Our invention includes a pair of novel unitary lightweight slide-on end packaging parts or receptacles for packaging flanged vessels in impact-resistant orientation within a carton. Each receptacle of the pair is identical with the other, and is provided with a recessed portion formed to complement the end wall of the vessel to be packaged. A groove, usually of curvilinear configuration, is formed in the body portion of each end pack or receptacle, and is forwardly opened in communication with the recessed portion to receive an end flange formed on the vessel to be packaged. The receptacle is formed so that the entire contents of the package may be easily removed from or repackaged within an outer carton as a unit, by merely removing the ware having the end packs positioned thereon from, or reinserting it within, the outer carton.

The receptacle is preferably formed of light-weight foamed plastic material, such as foamed polystyrene, and is easily slid on each end of the ware to be packaged. As a result, not only are labor costs materially reduced, due to the minimum time required to assemble the package, but also shipping costs are materially reduced due to the reduction in weight over the previously required corrugated parts.

It thus has been an object of our invention to provide an improved packaging media for simplifying and expediting the packaging of vessels having flange portions.

A further object of our invention has been to provide a unitary light-weight receptacle for retaining flanged end portions of a shallow vessel in protective impact-resistant orientation within an enclosing carton or container.

A further object of our invention has been to provide a pair of identical foamed plastic receptacles or end-packs for protectively retaining a shallow vessel having flanged end portions in a protected relationship within a package in such a manner so that the vessel and end packs may be easily removed and reinserted into the package as a unit.

These and other objects of our invention will be more apparent to those skilled in the art from the following disclosure and accompanying drawings in which:

FIG. 1 is a top plan view of an end packaging part embodying our invention;

FIG. 2 is an elevational view in section taken along lines 2—2 of FIG. 1;

FIG. 3 is a front view of the end pack shown in FIG. 1;

FIG. 4 is a front view of a further embodiment of our invention illustrating the utilization of spacer or cushioning lugs to provide additional impact resistance;

FIG. 5 is an elevational view in section taken along lines 5—5 of FIG. 4; and,

FIG. 6 is a perspective view of a pair of end packs, such as shown in FIGURES 1 through 3, in operable position upon a shallow vessel, such as a roaster or platter, as positioned within an enlclosing container fragmentally illustrated in chain lines.

Referring now to the drawings, and particularly FIGS. 1 through 3, a receptacle or end pack is shown at 10 having an upper surface 11, a lower surface 12, a forward or front surface 13, a back or rearward surface 14, and side surfaces 15. The receptacle is provided with a recessed portion 16 having a forward face 17 formed to complement an end wall of the article or vessel to be packaged. A groove 18 is formed in the body portion of the receptacle or end pack 10 to cushionably receive therewithin a flanged end portion of the vessel to be packaged. A portion of the upper wall bounding the groove 18 may be removed or relieved to form an upper open portion 19, which not only conforms to the general configuration of the inner edge of the vessel's flanged portion, but also facilitates the insertion of such flanged portion within the groove 18.

Recessed corner portions 20 may be provided between the back surface 14 and side surfaces 15 to reduce the transmission of impact from associated corner portions of an enclosing carton to the packaged ware. Also, to facilitate the packaging of a support cradle for the shallow ware vessel in a common carton, a relieved portion 21 and a pair of channels 22 may be formed in the bottom surface 12 of the receptacle 10 to snugly receive portions of such cradle in cushioned spaced apart relationship with the shallow ware member.

Referring now to FIGURES 4 and 5, a further embodiment of our invention is shown comprising a receptacle or end pack 110 having an upper surface 111, a lower surface 112, a front surface 113, a rear surface 114, and a pair of side surfaces 115. A recessed portion 116 having a forward surface 117 to complement an end wall of an article to be packaged is formed in the receptacle 110. In addition, a grooved portion 118 having a bounding portion removed at 119 is formed within the body portion of the receptacle. From the foregoing, it can be seen that the packaging part or end-pack receptacle 110 is fairly similar to the construction of the part or end pack 10. However, to provide improved cushioning and higher impact resistance, the receptacle 110 is provided with a pair of end-cushioning lugs or bosses 125 and a central cushioning lug or boss 126 formed integral with the bottom surface 112. As shown, the end cushioning lugs 125 may be recessed from the side surfaces 115 by recessed portions 127, and from the back surface 114 by recessed portions 128. The center cushioning lug 126 may be similarly recessed from the back surface 114.

Referring now to FIG. 6, a shallow vessel V such as a platter or roasting pan is shown having a pair of receptacles or end packs embodying out invention positioned thereon. For the purposes of illustration, the end packs 10 shown in FIGURES 1 through 3 have been utilized. As can be seen, a flange F on each end of the vessel V is positioned within a groove 18 of each of the receptacles

or end packs **10**, thus cushionably protecting the flanged end portions of the vessel V. When positioned within the closure such as an enclosing carton C, shown fragmentally in chain lines, the side surfaces **15**, the back surface **14**, and the top surface **11** of the receptacle **10** are adapted to cooperatively engage the inner side wall surfaces, inner end wall surface, and inner front or upper wall surface, respectively, of the enclosing carton to thereby position the ware in fixed orientation within such carton and cushionably retain the flanged end portions of such ware in spaced-apart relationship with the bounding walls of such carton. The receptacles **110** are spaced from the high impact corner areas of the carton by recessed portions **20**, thereby reducing the transmission of impact from these susceptible areas to the packaged ware.

Although we have disclosed the now preferred embodiments of our invention, it will be apparent to those skilled in the art that various changes and modifications may be made thereto without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. A combination unitary light-weight packaging part of foamed plastic material and a shallow vessel having end flange portions, wherein one such packaging part is positioned on a flanged portion at each end of said vessel, said packaging part comprising; a receptacle having a unitary body portion with top, bottom, front, back and side surfaces; a recessed portion communicating with said front surface and extending between said top and bottom surfaces having a configuration complementary to an end wall of the vessel; a forwardly opened groove communicating with said recessed portion and receiving a flanged end portion on the vessel, said side and top surfaces of the part cooperating with inner wall surfaces of an enclosing container to fixably position the article therein and

cushionably maintain the flanged end portions of the article in spaced-apart relationship with the bounding wall of the container.

2. An improved packaging part as defined in claim 1 wherein recessed portions are formed adjacent the corners forming the intersection of said back surface and said side surfaces to reduce the transmission of impact to the packaged vessel from blows imparted to such susceptible corner regions.

3. An improved packaging part as defined in claim 1 wherein the body portion of said receptacle is formed with a relieved portion extending between said top surface and said groove to thus facilitate the positionment of said packaging part upon a flanged portion of the vessel.

4. An improved packaging part as defined in claim 1 wherein a plurality of cushioning lugs are formed integral with said body portion and extend from said bottom surface to increase impact resistance and cushionability of said receptacle.

5. An improved packaging part as defined in claim 1 wherein said unitary body portion is formed of foamed polystyrene.

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