

Nov. 9, 1965

E. J. KNAPP ETAL

3,216,561

MULTIPLE END PACKING PROTECTOR

Filed Oct. 3, 1963

3 Sheets-Sheet 1

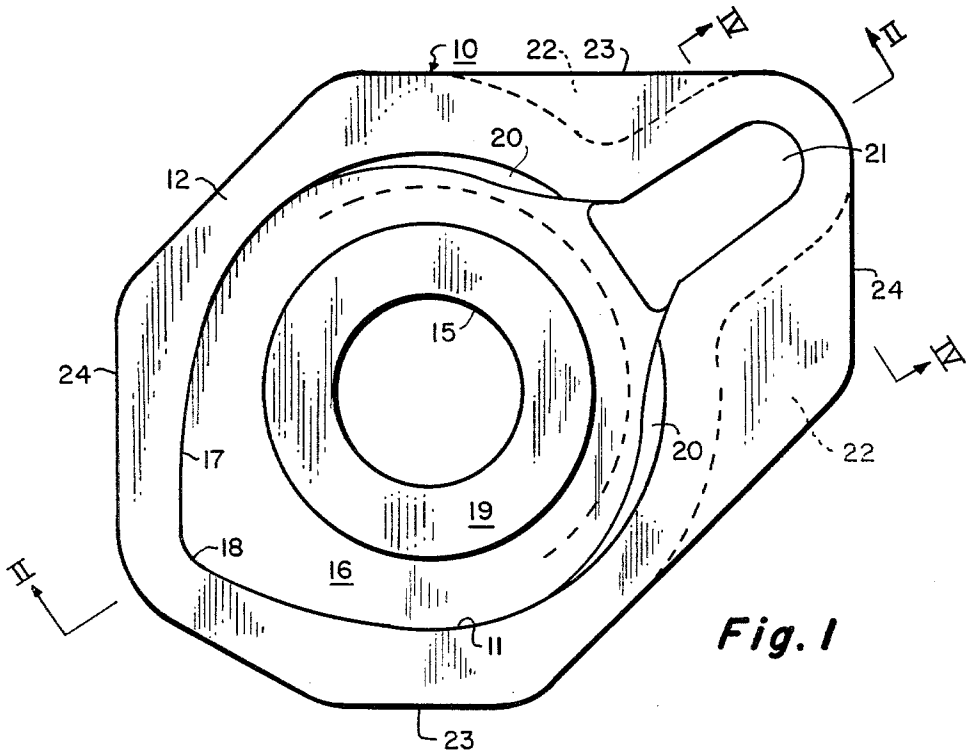


Fig. 1

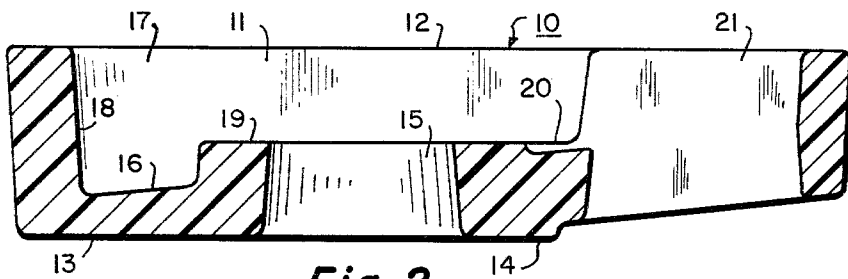


Fig. 2

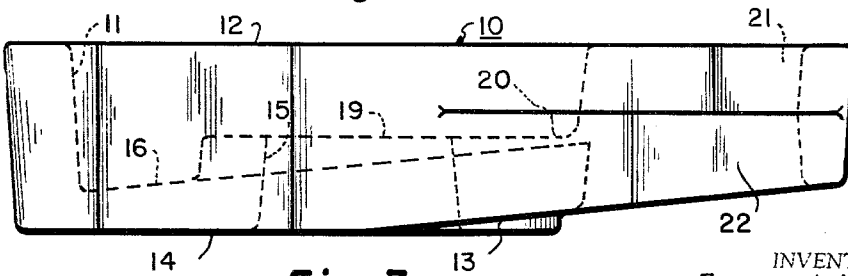


Fig. 3

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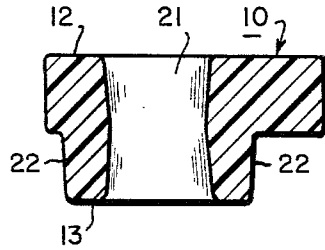


Fig. 4

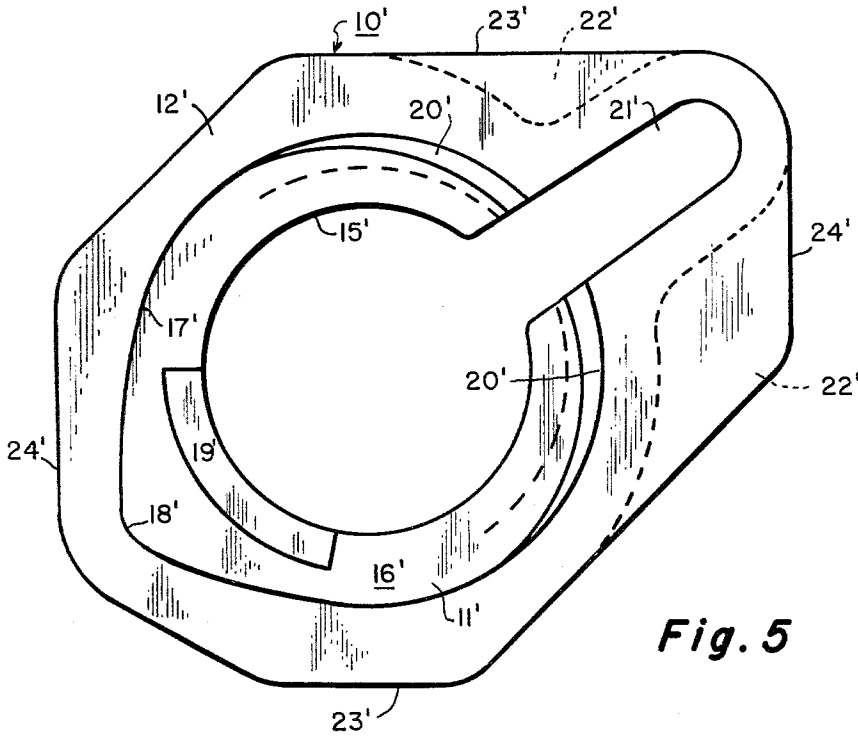


Fig. 5

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Fig. 6

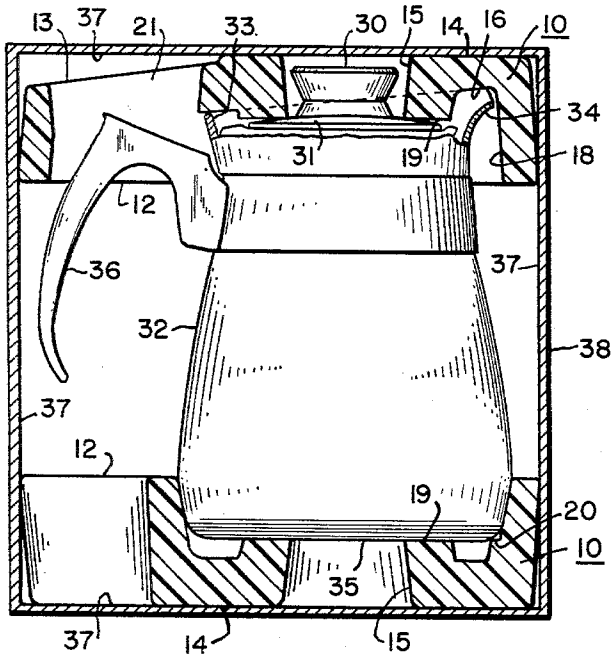
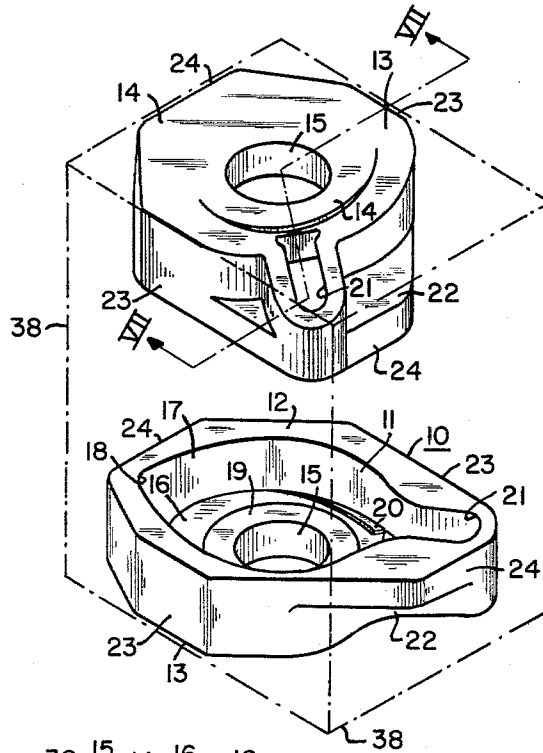


Fig. 7

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MULTIPLE END PACKING PROTECTOR

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2 Claims. (Cl. 206-46)

This invention relates to a unitary device for packaging frangible articles, and more particularly to a lightweight foamed plastic packaging protector positionable both upon and beneath a handled pouring vessel to be packaged so as to retain such vessel in a protected impact-resistant orientation within an enclosing carton.

In the past, it has been customary to package frangible articles, such as vitreous and ceramic coffee pots, tea kettles and the like, with numerous corrugated parts, excelsior, and various types of corrugated separators. The use of excelsior has always been objectionable to both the element consumer and the retail merchant due to the inherent untidiness produced when unpacking the article. 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 by the consumer. In addition, due to the number of corrugated pieces necessitated and the numerous folds required with such 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 increased the shipping costs.

Our invention includes a novel, lightweight unitary packaging protector for packaging a handled-vessel, such as a coffee pot, tea kettle, and the like in a cushioned impact-resistant orientation within an enclosing carton. The protector is provided with a contoured recess in one face thereof and a substantially flat portion on the opposite face. The contoured recess is structured so as to complementarily receive both the tapered upper pouring end of the article to be packaged and the lower or base portion of such article.

The contoured recess has a flattened portion therein, which together with the substantially planar portion on the opposite side of such recess, cooperate to maintain the packaged article in an upright position when the bottom of the article is positioned within such recess. A handle-receiving pocket communicates with the recessed portion to complementarily receive a portion of the handle secured to the packaged article. In addition, the protector is provided with two pairs of opposed side surfaces for cooperably engaging inner surfaces of an enclosing carton so as to position the packaged article in cushioned spaced-apart relationship from side wall portions of such carton.

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

A further object of our invention has been to provide a unitary lightweight packaging protector for retaining a handled frangible article in a protective impact-resistant orientation within an enclosing carton.

A further object of our invention has been to provide a foamed plastic packaging protector contoured to complementarily receive both the upper tapered pouring end of a handled-vessel and the lower base end thereof, wherein one such protector may be positioned upon the pouring vessel and another positioned beneath the vessel to retain the vessel in an upright cushioned spaced-apart relationship with wall portions of a packaging or shipping container.

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:

FIGURE 1 is a plan view illustrating the contoured recess or inner surface formed in one face of a packaging protector embodying our invention;

FIGURE 2 is an elevational view in section taken along line II—II of FIGURE 1;

FIGURE 3 is a side elevational view of the protector shown in FIGURE 2;

FIGURE 4 is an elevational view in section taken along line IV—IV of FIGURE 1;

FIGURE 5 is a plan view illustrating the contoured recess of a further embodiment of our invention;

FIGURE 6 is a perspective view illustrating the positionment of a pair of packaging protectors within an enclosing carton, shown in chain lines; and

FIGURE 7 is a sectional view in elevation illustrating the cooperative relationship of a pair of packaging protectors with a packaged vessel positioned within an enclosing carton, as would be seen along line VII—VII of FIGURE 6.

Referring now to the drawings, and particularly FIGURES 1 through 4, a packaging protector is shown having a unitary body portion 10. The body portion is preferably formed of a lightweight low density material which possess shock absorbing properties, such as foamed or expanded plastic materials. We prefer to mold-form the body 10 out of foamed polystyrene, and thereby produce a durable lightweight body portion having excellent packaging properties.

The unitary body portion 10 is shown having a contoured recess 11 formed in a face 12. An opposite face 13 is shown having a substantially planar or flat portion 14. A circular opening 15, adapted to receive a knob 30 on a cover portion 31 of an article 32 to be packaged (see also FIGURE 7), extends through the body portion 10 and communicates with the contoured recess 11 and face 13.

The contoured recess 11 has a slanted or inclined inner surface 16, adapted to complementarily receive upper edge portions 33 of a tapered pouring collar which may be formed on a vessel 32 to be packaged. Side wall portions 17 of the recess 11 are contoured at one end to form a nose portion 18 for receiving a pouring spout 34 of such collar. An arcuate or annular planar portion 19, substantially parallel with the flat portion 14, is formed about the opening 15 for receiving and supporting the bottom 35 of the vessel 32 to be packaged. A pair of arcuately-extending planar surfaces 20 lie substantially within the same plane as the surface 19 to form a complimentary supporting surface with the surface 19, so that the article to be packaged may be adequately supported in an upright or vertical position when the bottom thereof is placed downwardly within the recess 11.

A handle-receiving pocket 21 extends through the body portion 10, adjacent one end thereof, and communicates with the contoured recessed portion 11 to receive portions of a handle 36 formed on the vessel or article 32 to be packaged. The body portion 10 may be relieved, such as at 22 adjacent the pocket 21, to minimize the weight of the packaging protector. The body portion 10 is provided with two pairs of opposed side wall surfaces 23—23, 24—24, which are adapted to cooperably engage inner surfaces 37 of an enclosing carton 38 or package so as to maintain the packaged article in cushioned spaced-apart relationship with the side wall portions of such carton.

From the foregoing it can be seen that the packaging protector 10 is adapted to both overlie the top portion and receive the bottom portion of a ware vessel to be packaged. In operation, one protector functions as a

support or base for the article to be packaged. The article, such as vessel 32, is positioned downwardly within the recess 11 and contacts the annular planar portion 19 and arcuately extending planar surfaces 20 which, with the planar or flat portion 14, maintain the article in an upright position, while the bounding walls of the recessed portion 11 cushionably protect the bottom portion of the article. A second packaging protector is positioned downwardly over the top of the article or vessel 32 to be packaged, with the slanted or inclined inner surface 16 complementarily receiving edge portions 33 of a tapered pouring collar formed on the article, the circular opening 15 complementarily receiving a knob 30 on a cover portion 31 of the article 32, and the handle-receiving pocket 21 enclosing portions of a handle 36 secured to the article. When the article and the top and bottom packaging protectors are positioned within an enclosing carton 38, the opposed side wall surfaces 23—23, 24—24, cooperably engage inner side wall surfaces 37 of the enclosing carton to maintain the packaged article in cushioned spaced-apart relationship with respect to the walls of such carton.

Referring now to FIGURE 5, a modified packaging protector is shown which is similar in many respects to that illustrated in FIGURE 1. Like parts of FIGURE 5, which are similar to the identical parts of FIGURE 1, are numbered the same as in FIGURE 1 but with a prime (') suffix. In the embodiment shown in FIGURE 5, the handle receiving pocket 21' not only communicates with the contoured recess 11', but also the circular or arcuate opening 15' which may be somewhat enlarged. Further, the planar support portion 19' of modified protector 10', which cooperates with the arcuately-extending planar surfaces 20' to support the bottom of an article to be packaged, does not extend completely about the opening 15' but rather is of an arcuate configuration extending partially about such opening. However, the modified protector 10' operates and functions in the identical manner as that described for the protector 10.

Although we have set forth the 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.

We claim:

1. In combination with a frangible covered pouring vessel having a projecting handle, and an enclosing carton for packaging such vessel, a pair of improved lightweight packaging protectors cushionably packaging the vessel within the enclosing carton wherein one such protector cooperatively receives a bottom portion of such vessel to form a cushioned base support therefor and another such protector cooperatively overlies the upper portion of such vessel to maintain it in a cushioned impact-resistant orientation with bounding walls of the enclosing carton which comprises, a unitary body portion of foamed plastic material, a contoured recess formed in one face of said body portion, a substantially flat portion formed on an opposite face of such body portion, a circular opening formed through said body

portion in communication with said contoured recess to receive a knobular cover portion of the packaged vessel, said contoured recess having an inclined planar inner surface adapted to complementarily receive upper edge portions of the packaged vessel, a handle-receiving pocket extending through said body portion and communicating with said contoured recessed portion to receive portions of a handle formed on the packaged vessel, an arcuately-extending planar portion formed in said contoured recess adjacent said circular opening, a pair of spaced-apart planar surfaces lying substantially within the same plane as said arcuately-extending planar portion, said planar surfaces and said arcuately-extending planar portion being substantially parallel to said flat portion so as to receive a bottom portion of the packaged vessel and support such vessel in an upright position.

2. In combination with a handled pouring vessel and an enclosing carton for packaging the same, improved packaging protectors for maintaining the pouring vessel in a protected impact-resistant orientation within the enclosing carton wherein one such packing protector is positioned under and receives the lower end of such vessel and provides a cushioned support base therefor, and another of such packing protectors is positioned on and complementarily overlies upper end portions of the pouring vessel which comprises, a unitary body portion formed of foamed polystyrene, a contoured recess formed in one face of said unitary body portion, a substantially flat portion formed on an opposite face of said body portion, a circular opening formed through said body portion and communicating with said recess to receive a knobular cover member of the pouring vessel to be packaged, said contoured recess having a slanted inner surface to complementarily receive upper edge portions of such pouring vessel, a handle-receiving pocket extending through said body portion and communicating with said contoured recess for protectively receiving a portion of the handle on such vessel, a planar-surfaced arcuate portion formed in said contoured recess adjacent said circular opening, a pair of arcuately-extending planar surfaces spaced apart from and lying substantially within the same plane as said planar-surfaced arcuate portion for, together with said planar surfaced arcuate portion, receiving the bottom of the vessel to be packaged and maintain such vessel in a vertical position, and at least one pair of opposed outer side surfaces formed on said body portion for cooperatively engaging inner wall surfaces of an enclosing carton to position the pouring vessel in cushioned spaced-apart relationship from the bounding walls of such carton.

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