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PACKING TRAY

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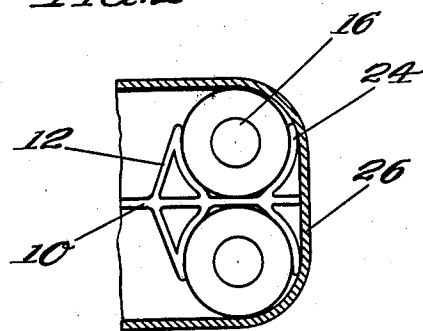
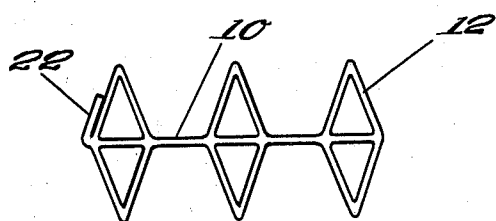
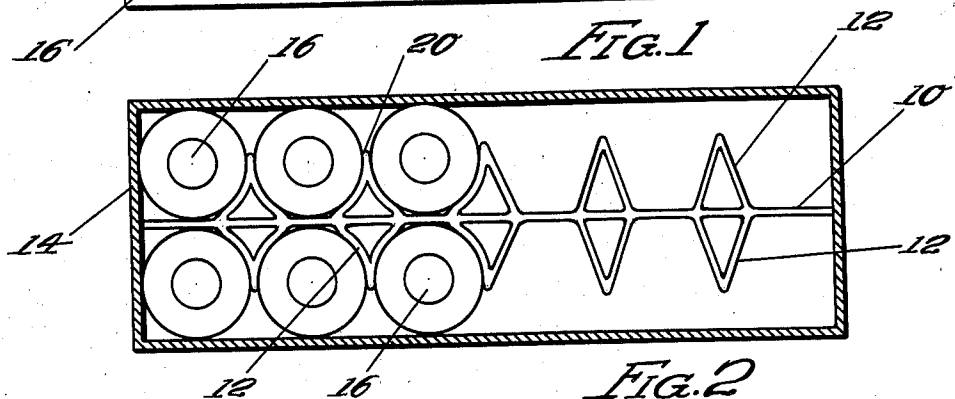
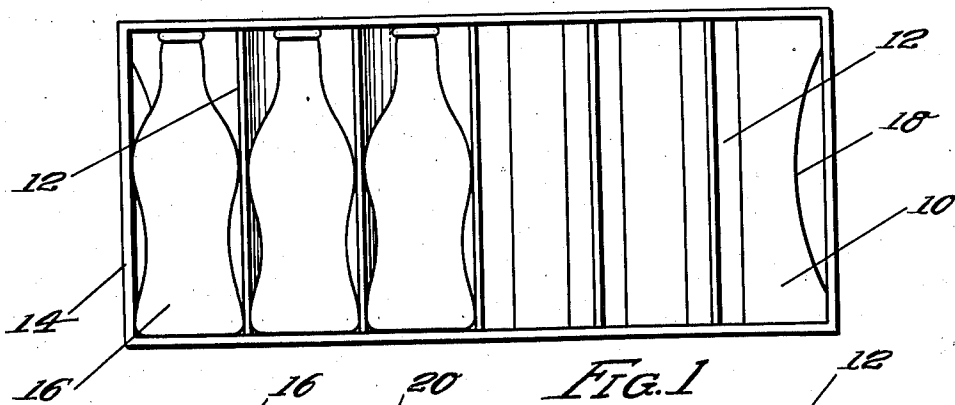


FIG. 3

FIG. 4

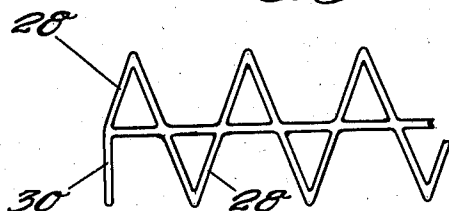


FIG. 5

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PACKING TRAY

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1 Claim. (Cl. 217—19)

This invention relates to an improved packing tray, and has for one of its principal objects the provision of a packing tray which in a single unit will be capable of doing double duty, and which may be of some cheap material such as molded paper pulp or the like while at the same time affording a highly satisfactory cushioning and packing article.

One of the important objects of this invention is to provide a combination cushioning and packing tray which can be used particularly for the packing of bottles or other similar fragile articles, and which, being previously prepared in proper shapes to correspond with the sizes and dimensions of the bottles and their containers, can be easily fitted into the container, and which will effectually cushion the bottles or other articles for handling, shipping and transportation purposes.

Another important object of the invention resides in the provision of a tray composed of molded wood pulp or other resilient material which shall have integral extensions in the forms of ridges which ridges shall partially surround and effectively grip the articles to be packed while at the same time being slightly deformed by the articles so as to afford a satisfactory tight fit, and also effectively preventing contact with adjacent articles, preventing breakage.

Another and still further important object of the invention resides in the provision of a packing tray which can be used with or without surrounding containers and either singly or in combination with similar trays to provide a satisfactory package for practically any kind, size or shape of fragile article.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawing and following specification.

The invention, in a preferred form, is illustrated in the drawing and is hereinafter more fully described.

In the drawing:

Figure 1 is a top plan view of a container for bottles, showing the improved packing tray of this invention used therewith.

Figure 2 is an end view of the container shown in Figure 1, illustrating the bottles in position and showing particularly the construction and operation of the packing tray itself.

Figure 3 is a detail view of one end of the packing tray, showing the same without a surrounding container, and illustrating other uses thereof.

Figure 4 shows a modified form of the tray, showing the same as adapted for use with a covering of material which need not be stiff as the ordinary container.

Figure 5 shows another modification of the invention.

As shown in the drawing:

The reference numeral 10 indicates generally the body portion of the improved packing tray of this invention, the same comprising a rectangular or similarly shaped sheet of molded wood pulp, cardboard, or some other somewhat resilient material, and which has mounted thereon or formed integral therewith a plurality of ridge-like elements 12, preferably formed in V-shape as indicated and which are also composed of the same material as that of the body 10.

As best illustrated in Figures 1 and 2, the tray is adapted to be used in connection with a fairly stiff and solid container 14 of any suitable size for containing a desired number of bottles 16 as, for example, one dozen as shown. Obviously, the bottles may be of any size or shape, and furthermore, the tray may be used with other articles, particularly fragile articles which require careful packing and handling.

The tray may be laid flat in the container or positioned endwise therein, depending upon the size and shape of the container, and the nature of the articles to be packed, and for purposes of handling and convenience, the ends of the tray are cut away as shown at 18 in Figure 1 to provide a hand-hold and also to allow the escape of air when the tray is laid flat into a container which is of substantially the same size, as in the example shown in Figure 1.

The ridge elements 12 are so shaped and of a material and with sufficient thickness so that they may be slightly deformed as shown in Figure 2 when the bottles or other articles are placed therein and in the container, thereby providing a close fit, and avoiding rattling and consequent breakage. It will be noted that the apices of the ridges 12 project slightly beyond the adjacent contacting points of the largest diameters of the bottles 16, thereby providing an adequate protection.

The tray may be used without a container as in the embodiment shown in Figure 3, and in such a case, the projecting end 22 of the element 10 may be bent upwardly or downwardly, or may be completely cut off as shown in the right-hand side of Figure 3, the tray then forming a supporting cradle for the articles to be packed, which may then simply be wrapped in paper or the like,

whereby a suitable package is provided for a smaller number of bottles or similar articles which package insures against breakage and provides an ease in carrying.

5 A modification of this feature is shown in Figure 4 whereby half sections 24 of the ridge elements 12 are provided at the ends of the base portion 10, these allowing of the suitable gripping of one side of a bottle 16 and providing an
10 end cushioning effect which in this instance is particularly valuable when the bottles are wrapped in material more flexible than the ordinary wooden or cardboard container, such as heavy paper or the like 26.

15 Here again a very satisfactory package results for practically any number of bottles up to the limit which can be contained in a tray, and obviously, the tray may be separated into portions for carrying smaller numbers of bottles or the
20 like.

A still further modification is illustrated in Figure 5 wherein ridge elements 28 are staggered with relation to each other, so that bottles on the top of the tray will not be in alignment with
25 those under the tray, and additionally, a half extension 30 of one of the ridge elements may be provided at the end for further protection of the end bottle.

30 After filling a tray, both top and bottom, two additional trays may be placed one on top and another on bottom of articles, thereby completely enclosing articles packed along their full length, and leaving only both ends of the articles exposed.

35 In some cases, due to the shape and size of the article to be packed, the ridges may be molded or pre-formed somewhat in the shape shown in Figure 2 so as to avoid the necessity of pushing the articles down into the V sections which is particularly desirable in the event of very fragile
40 items.

This method of construction, with the ridges or extensions both on top and bottom of the

common separator or tray body, enables packing of two bottles or other articles one above the other with the use of only one tray, and thereby enabling the said tray to perform a double duty.

5 It will be evident that herein is provided a simple, speedy and economical manner and means for packing any multiple of items one above the other with but one tray in a container for handling or other transportation purposes which, while positively insuring the safety of the articles packed, also provides a handy and compact
10 package for two or more articles up to any reasonable amount and which, if desired, may be used over again for quite a number of times without losing its efficiency, or, if only used once, can
15 be readily discarded on account of the original low cost.

We are aware that many changes may be made and numerous details of construction varied throughout the device herein described, in a wide
20 range without departing from the principles of the invention, and we, therefore, do not purpose limiting the patent granted hereon otherwise than as necessitated by the prior art.

We claim as our invention:

25 A double duty packing tray, comprising a molded flat rectangular body, and transverse ridge-like partitions integral with the body on both faces thereof in opposed relationship, both the body and partitions formed of a substantially
30 thick and fairly resilient material such as paper pulp, the ridge-like partitions being of V-shape and hollow adapted to be deformed upon insertion of articles in the tray, and half portions
35 of the ridge elements at the ends of the tray, the tray adapted for the containing and packaging of fragile articles, with a surrounding container of relatively thin but stiff material, and of a shape and size to correspond with the dimensions of the tray and the packaged articles.
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