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DIVIDER FOR PACKING CONTAINER AND THE LIKE

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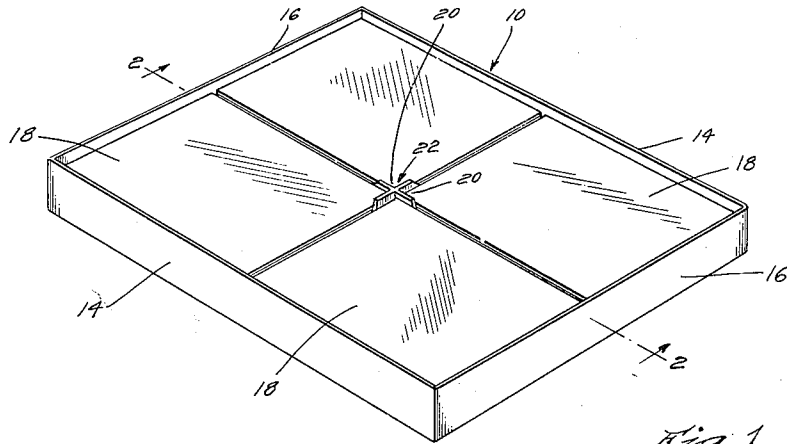


Fig. 1

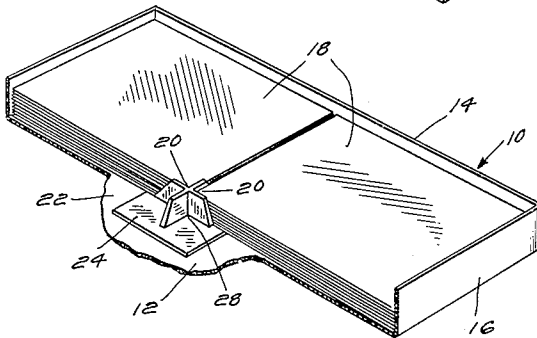


Fig. 2

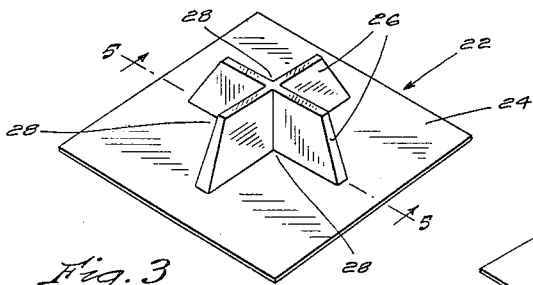


Fig. 3

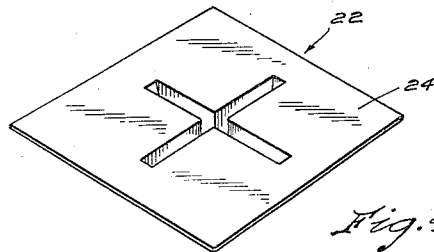


Fig. 4

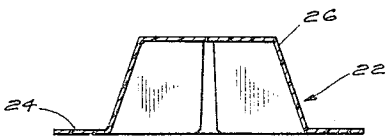


Fig. 5

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DIVIDER FOR PACKING CONTAINER AND THE LIKE

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2 Claims. (Cl. 206—63)

The instant invention relates generally to boxes and containers, and more particularly to boxes and containers of the type utilized in connection with the packaging, shipment and display of greeting cards and the like.

A primary object of the instant invention is the provision of novel and improved divider means for boxes and containers of the type above described.

An additional important object of my invention is the provision of an integral, one-piece divider insert which may be readily and easily positioned in a box for dividing same into a plurality of separate compartments.

Another object of the instant invention is the provision of a divider insert which is simple and inexpensive to manufacture but which, nevertheless, is durable and effective in use.

A further object of this invention is the provision of a divider insert of the general character described, which insert is constructed of molded plastic, such as by vacuum forming, whereupon the divider is extremely lightweight and attractive.

Still another object of my invention is the provision of a novel and improved divider insert which is extremely easy to assemble when the boxes are being packed thereby cutting down on production time and expense.

Other objects, features and advantages of the invention will become apparent as the description thereof proceeds when considered in connection with the accompanying illustrative drawings.

In the drawings which illustrate the best mode presently contemplated by me for carrying out my invention:

Fig. 1 is a perspective view of a packed box utilizing my novel and improved divider insert;

Fig. 2 is a section taken on line 2—2 of Fig. 1 except that for purposes of illustration the divider insert has not been sectioned;

Fig. 3 is a perspective detail, on an enlarged scale, of my divider insert per se;

Fig. 4 is a bottom view thereof; and

Fig. 5 is a section taken on line 5—5 of Fig. 3.

It has been found desirable to provide a simplified but yet effective means for dividing a box or container into individualized compartments. More specifically, it is common practice to pack stationery and particularly greeting cards and the like within one box or container in separate side-by-side stacks. As will be obvious, in order to keep the stacks separate and free from intermingling, it is necessary that some sort of divider means be provided for defining separate and distinct compartments.

Heretofore, numerous approaches have been made toward the solution of this problem, most of these approaches involving the use of cardboard partitions or the like which either must be glued to the bottom wall of the box or which at the very least require a certain amount of manipulation of foldable tabs and the like. This particular type of divider structure has generally proven to be unsatisfactory, the main reasons being the additional operations required which in turn raise pro-

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duction time and cost, plus the fact that this type of partition is structurally weak and does not maintain any appreciable spaced relation between adjacent stacks, particularly where the divider does not extend for the entire length and width of its associated box.

The instant invention takes an entirely new approach in solving the above discussed problem, the basic concept involved being the provision of an integral, one-piece, molded plastic divider insert which may be freely positioned within any box or container for dividing or partitioning the latter for the reception of separate and distinct stacks. Since the entire insert may be molded, such as by vacuum forming, it is amazingly simple and inexpensive to manufacture, and yet, the end product is rugged and durable, as well as being highly attractive in appearance when in actual use.

Referring now to the drawings, there is shown a box 10 having a bottom wall 12 and upstanding side and end walls 14 and 16, respectively. The box 10 is of standard construction and may be made of cardboard or any other desirable material. In configuration, the box 10 may be of any desirable shape although the rectangular configuration shown and illustrated is the most usual.

The box 10 is adapted for packing, shipping and displaying a plurality of stacked articles 18 which may be envelopes, greeting cards, or any other flat, card-like article. For maximum utilization of space, the cards 18 are stacked in a plurality of individual stacks, there being shown in Fig. 1 four such stacks, each having its innermost corner 20 adjacent the center portion of the box 10.

In order to keep the stacks separate and distinct and to prevent intermingling and mutilation of the edge portions of adjacent cards, there is provided in accordance with the instant invention a divider insert shown generally at 22 (Figs. 3 through 5). As will be noted, the insert 22 is of integral, one-piece construction and is formed of molded plastic, such as acetate, preferably by the vacuum forming method. The insert 22 comprises a base portion 24 from which integrally extends a pair of upright hollow walls 26, the said walls crossing each other in substantially perpendicular relation whereby to provide four substantially right-angled corners 28.

In operation and use, and as will be seen most clearly in Figs. 1 and 2, the insert 22 is freely positioned at approximately the center of box 10 with the walls 26 extending upwardly in substantially parallel relation to the side and end walls 14 and 16, respectively. The cards 18 are then placed in the box in four stacks, it being understood that the inner corner 20 of each stack is snugly received within one of the corners 28 of the divider insert 22. If desired, the insert 22 could be secured to bottom wall 12 of box 10 such as by gluing or the like, but it has been found in practice that such is not necessary, since once the cards 18 have been stacked in the box in the manner indicated, the stacks themselves will serve to maintain the insert in position. As will be noted, it is only necessary that the divider walls 26 extend for a relatively short distance in each direction, although, preferably, the base portion 24 is slightly larger so that an appreciable degree of contact is made between said base and the stacks transposed thereon. Thus, the weight of the stacks tend to prevent the insert from shifting or sliding around, which movement might cause mutilation of the card edges. Actually, there will be very little tendency for the insert 22 to shift or move in any direction, since, as afore indicated, the engagement of the stacks with walls 26 will serve to prevent such movement.

Although the hollow construction of the walls 26 is a natural consequence where vacuum forming is utilized in the manufacture of the inserts 22, this particular structure is nevertheless desirable for two important reasons. First of all, the thickness of the walls 26 provides a de-

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sired spaced relation between adjacent stacks; and secondly, the fact that said walls are hollow results in a certain degree of flexibility, whereupon if the cards are a tight fit within the box 10 and the divider insert 22, the walls 26 will yield sufficiently so as to make mutilation of the card edges unlikely.

As will be obvious, the plastic construction of the inserts 22 readily lends them to being gaily and attractively colored, and at the same time, the smooth surface of the plastic enables the cards to be slid to and from packed position with a minimum of difficulty. Also, as an aid to the insertion and removal of the cards 18, the walls 26 may taper slightly in thickness toward their upper extremity. As will be obvious, this will result in the uppermost cards being slightly more loosely arranged within their respective stacks than the lowermost cards, but the basic advantage of this arrangement is the simplicity with which each stack of cards may be inserted in its respective compartment by the person doing the packaging. This arrangement, plus the integral, one-piece construction of the device 22 and the fact that there are no tabs or the like to be manipulated, enables the boxes 10 to be packaged with a great degree of rapidity, thereby cutting down on production time and cost. At the same time, and as will be apparent from Fig. 1, the completely packed box has a neat and attractive appearance which belies the simplicity and inexpensiveness of the instant arrangement.

It will be understood that the height of the walls 26 is not critical, with the exception of the fact that in most cases their height will be slightly less than that of the walls in its associated box. Also, if desired, the walls 26 could extend to the edges of base portion 24, or, on the other hand, the said base portion could be made even larger with respect to the walls 26 than illustrated.

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While there is shown and described herein certain specific structure embodying the invention, it will be manifest to those skilled in the art that various modifications and rearrangements of the parts may be made without departing from the spirit and scope of the underlying inventive concept and that the same is not limited to the particular forms herein shown and described except in so far as indicated by the scope of the appended claims.

I claim:

1. In combination, a box having a bottom wall and upstanding side and end walls, means dividing said box into at least four separate compartments, said means comprising an integral, one-piece plastic insert freely positioned on said bottom wall, said insert having a flat base portion substantially smaller than said box bottom wall so as to be freely shiftable with respect thereto, a pair of upwardly extending walls crossing each other in substantially perpendicular relation whereby to define four individual corners, and the combination further comprising four individual stacks of flat, card-like articles, the inner corner of each stack being positioned on said insert base and in one of the four insert corners.

2. The combination of claim 1 further characterized in that said insert walls are of hollow construction.

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