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MAILING PACKAGE

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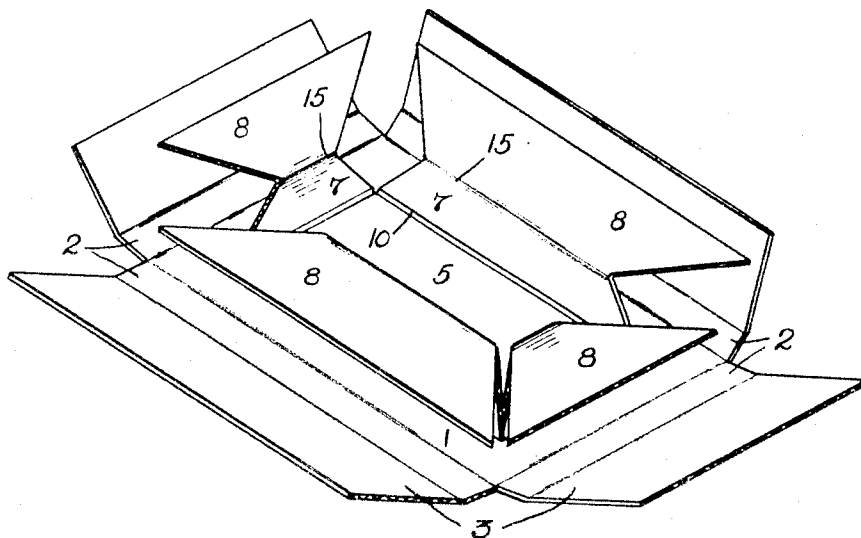


Fig. 1

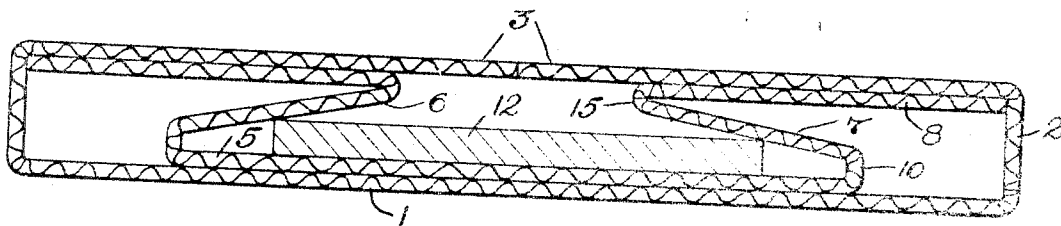


Fig. 2

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UNITED STATES PATENT OFFICE

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MAILING PACKAGE

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2 Claims. (Cl. 206—62)

This invention relates to packages for protecting articles against both external damage and shifting in the package in mail, express or other shipment, and is particularly designed for the carriage of electrotpe plates and other flat objects, although not limited thereto.

One of the principal objects is to provide a package in which the article contained will be held by a combined clamping and cushioning action, effective upon objects of the character in question through a considerable size range, thus avoiding the necessity of fitting the box to the contents, or carrying in stock a large assortment of box sizes.

Further purposes are the provision of such a box which is simple to manufacture, assemble, pack and close, and which is susceptible of re-use.

More particularly my invention comprises an outer casing, and an inner element which serves the several purposes of inner container, spacer, clamp, cushion, and added protection for the contained object when the outer covering is closed.

To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawing and the following description set forth in detail certain structure embodying the invention, such disclosed means constituting, however, but one of various structural forms in which the principle of the invention may be used.

In the accompanying drawing:

Fig. 1 is a perspective of my improved package, complete but open and empty;

Fig. 2 is a transverse vertical median section through the packed and closed container.

The embodiment of the invention here shown comprises a rectangular outer container consisting preferably of a single blank folded along lines to define bottom 1, sides 2 and cover flaps 3, and a preferably unitary container folded along lines to define bottom 5 and clamping flaps 6, all constructed of stiff but somewhat resilient material, of which corrugated board is the most satisfactory example.

In detail, the clamping flaps comprise the inwardly directed panels 7 and the top wings 8 connected thereto along fold lines 15. The ends of the panels and wings are diagonally cut in such a manner as to fall into abutting or nearly abutting relation, and not overlap when the inner container is enfolded by the outer. The parts are so proportioned that the outer edges of the wings 8 fit against the side walls 2 of the outer container,

as shown in Fig. 2, when closed ready for shipment.

Preferably the panels 7 spring from the bottom 5 at a slight elevation 10, which elevation is equal to or somewhat less than the height of the electrotpe or other packed object 12, so that the panels 7 will bear down upon 12 with a spring action but without breaking, but at the same time hold the object firmly in place against sliding in any direction. Inasmuch as the gripping and cushioning action is by pressure and not by an exact fit of the parts, it will be apparent that a considerable variation in length, width and thickness of the object packed can be accommodated within any given size of box. Thus the edges of 15 the object may be borne upon by the resilient clamping action of the panel 7 anywhere from near the rise 10 to near the fold line 15. The natural resiliency of the material tends to spring the clamping flaps 6 up into the partially open position illustrated in Fig. 1, so that in effect the fold line 15 becomes a compression spring in the closed container, Fig. 2 tending to cause a spread between the panels 7 and wings 8, and thus giving both a clamping and a cushioning action.

Inasmuch as the bottom 5 of the inner container forms an inner pad, it will be observed that the contained object 12 is not only firmly held in position, but also protected by a double layer of the corrugated board or other box material on one side, and spaced away from the outer container wall on the other side, so that any injury to the outer container will not readily be carried on to the object 12.

Although Fig. 2 shows a section across the narrower dimension of the container of Fig. 1, it will be apparent that the action of the end clamping flaps is the same as of the side clamping flaps. It will also be evident from the foregoing description that although a complete measure of security is afforded by having clamping flaps both at sides and at ends, the principles of the invention could be applied by the use of only two clamping flaps. It will also be apparent that although the box illustrated as an embodiment of my invention is of conventional rectangular form, that the principles are susceptible of application to other polygonal shapes.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the structure herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:

1. A package consisting of inner and outer containers, the inner comprising a plurality of elements Z-shaped in cross section, with a bottom
5 common to all the Z-shaped elements composed of the bottom bar of each Z, opposite panels inclined inwardly over said bottom, and top flanges outwardly directed over said inclined panels, and
10 an outer container of internal base area to receive said inner container snugly and of internal height greater than three times the thickness of the inner container material and less than the width of an inclined panel.

2. A package comprising inner and outer containers, the outer container including bottom, sides and top, and the inner container comprising a bottom, panels folded along the edge of said bottom and in over said bottom, and wings folded
5 along those edges of the foregoing panels which are non-adjacent the bottom, said wings extending outward against the under sides of the outer container lid, and the height of said outer container being such as to maintain said panels at
10 an acute angle to the bottom when the outer lid is closed.

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