

[54] **RESTRAINING TAPE FOR MAIL
PACKAGING**

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229/43

[51] Int. Cl. **B65d 1/34, B65d 63/00**

[58] Field of Search ... **206/73, 74, 72, 65 B, DIG. 18;**
229/43; 220/74; 150/14

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[57]

ABSTRACT

There is described an arrangement for transporting first-class letters in which the letters are stacked edgewise in an elongated plastic tray. A paper band of sufficient length to bridge the length of the tray and to provide end portions which overlap the sides of the tray is provided, with a pressure-sensitive adhesive on the end portions for securing the tape in place to hold the letters in the tray.

2 Claims, 3 Drawing Figures

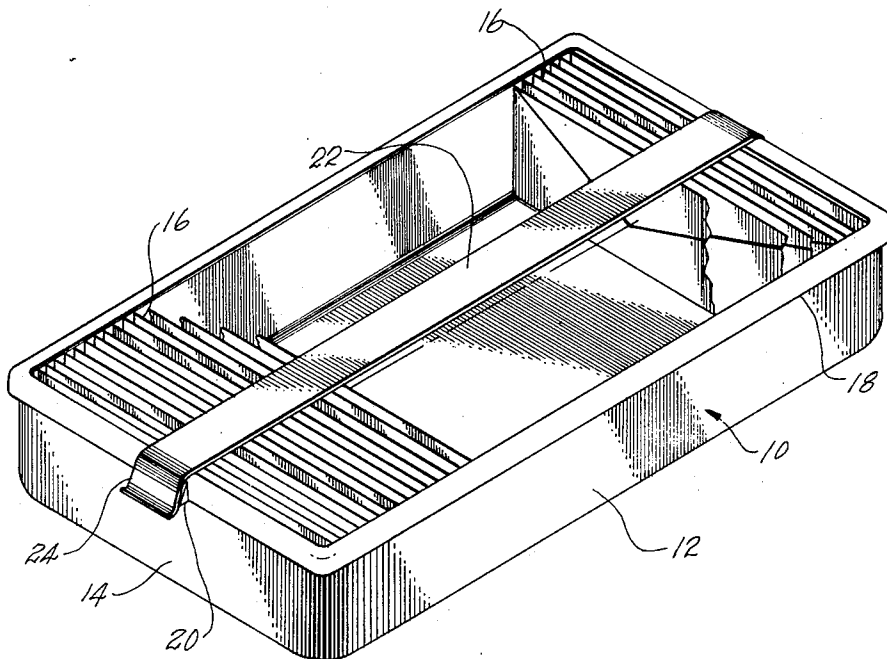


FIG. 1

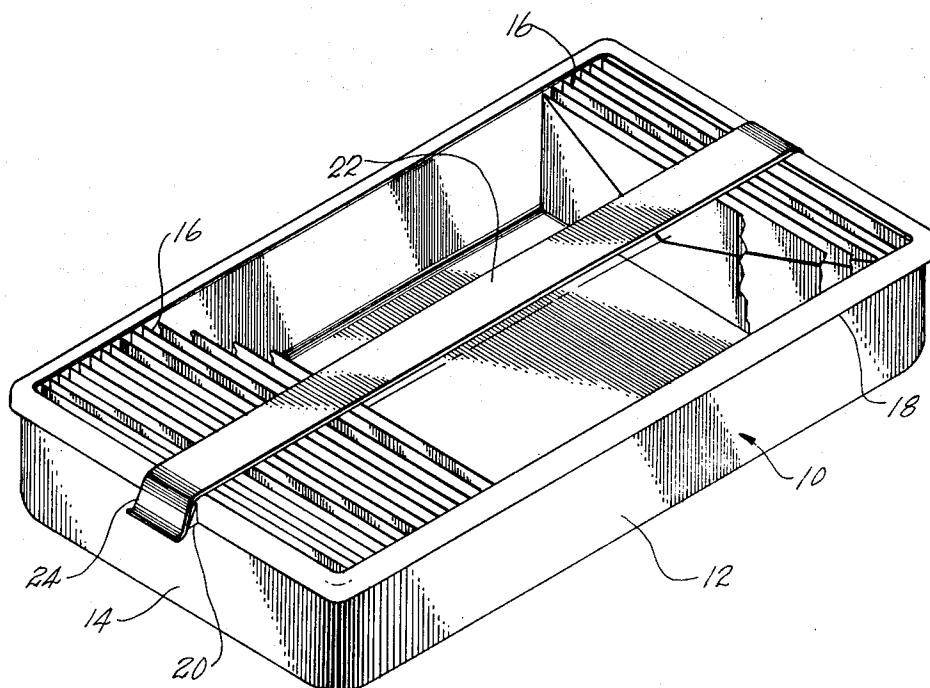


FIG. 2

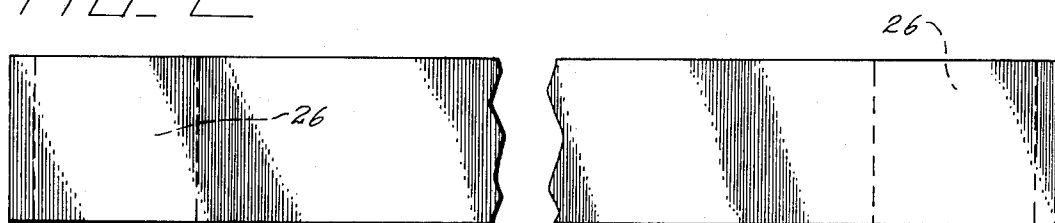
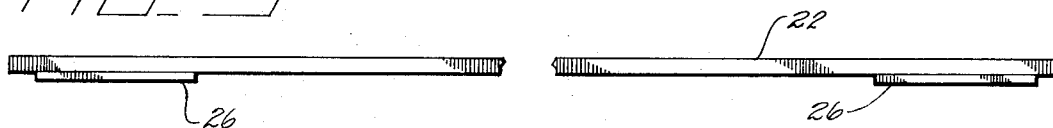


FIG. 3



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RESTRAINING TAPE FOR MAIL PACKAGING**FIELD OF THE INVENTION**

This invention relates to packaging of mail, and more particularly, is concerned with a restraining tape for temporarily holding stacked mail in an open tray.

BACKGROUND OF THE INVENTION

In an effort to simplify and expedite the handling of first-class mail, the post office has instituted various methods for the sender of the mail to bind or package the first-class letters before mailing. Where the sender is a person or organization which sends large quantities of first-class mail, the post office has provided open plastic trays in which the envelopes can be stacked edgewise, the mail being held in place by wedging it between the end walls of the tray. Sometimes if the letters are packed too tightly, the letters will bulge upwardly in the center of the stack of envelopes causing the letters to spill out of the tray, or the tray may become tipped during transit to and from the post office, causing the letters to spill out of the tray. The present invention is directed to an improved arrangement for temporarily securing the envelopes in position in the tray so that even if the tray is tipped, the letters cannot spill out.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention can best be understood by reference to the accompanying drawing, wherein:

FIG. 1 is a perspective view of the transporting tray with the envelope restraining unit in place;

FIG. 2 is a plan view of the restraining tape of the present invention; and

FIG. 3 is a side view of the tape with the thickness of the various layers being exaggerated to make them stand out.

DETAILED DESCRIPTION

Referring to the drawing in detail, the numeral 10 indicates an open tray of a type used for transporting first-class mail. The tray is preferably molded of a single piece of plastic to provide a pair of opposing sidewalls 12 and a pair of opposing end walls 14. Side walls 12 are preferably spaced a distance slightly greater than the length of a standard full-size first-class envelope so that the envelopes can be stacked with their longitudinal edges down against the bottom of the tray, the stack of envelopes being indicated generally at 16. Enough envelopes are stacked together so as to wedge between the end walls 14, holding the envelopes in an upright stacked position in the tray. The tray is formed with a lip 18 which extends around the upper periphery of the tray to reinforce and stiffen the upper edge of the end and side walls. The lip is formed with a pair of integral handles 20 at either end which project

downwardly providing a flat vertical surface at either end of the tray. The handles 20 permit the tray to be easily picked up by curling the fingers under the lower edge of the handles.

According to the improvement of the present invention, a tape 22 is provided which, when in position, bridges the length of the tray between the end walls 14. The tape or band 22 has end portions 24 which extend downwardly over the handles 20. These end portions, as best seen in FIGS. 2 and 3, are provided on one side with a coating of pressure-sensitive adhesive, as indicated at 26. The pressure-sensitive adhesive grips the flat vertical surfaces formed by the handle 20 to hold the tape 22 in place. Because the surfaces to which the end portions of the tape 22 adhere are substantially vertical, the forces exerted on the pressure-sensitive adhesive are primarily in shear, thus providing a strong anchor to the tape.

Preferably the tape itself is made of a strong kraft paper 2 to 3 inches in width. The back surface is coated with a silicone material or other suitable material to which the pressure-sensitive adhesive does not readily adhere. This permits the tapes to be cut and stacked together. Each tape can be readily peeled off from the stack since the pressure-sensitive adhesive does not adhere to the backing of the adjacent tape. The tapes are sufficiently inexpensive that they can be used once at the time the envelopes are stacked in the tray for delivery at the post office. The tapes can then be removed and discarded. It will be seen that the tapes prevent any accidental spillage of the envelopes from the open tray while the trays are being moved about. In fact the trays can be tipped on their sides or even overturned without the envelopes falling out of the tray.

What is claimed is:

1. Apparatus for transporting letters during mailing comprising an open tray having a width corresponding to the length of standard size business letter envelopes, whereby letters can be stacked edge down along the length of the tray, the sides of the tray being deeper than the narrow width of a standard envelope, whereby the letters when stacked on edge in the tray do not project above the edge of the tray, the tray having a folded top edge around the open top of the tray, the folded edge being doubled back along a portion of the side of the box to form a handle under which the user's finger can be inserted to lift the tray, the double-back portion forming a flat vertical surface, a restraining band extending lengthwise over the open top of the tray, the band extending over the folded edges and downwardly along said flat vertical surfaces at each end, and a pressure-sensitive adhesive affixed to the band adjacent each end, the adhesive gripping said vertical surfaces to hold the band in place.

2. Apparatus of claim 1 wherein the band is made of broad paper tape.

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