

[54] **LABEL PACKAGE ASSEMBLY**
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[56] **References Cited**

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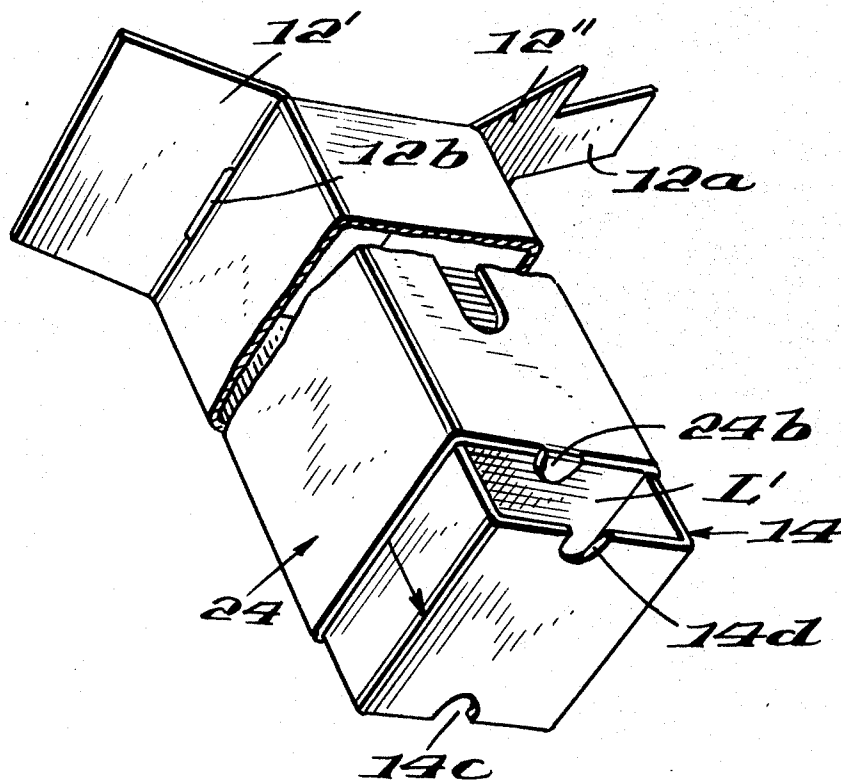
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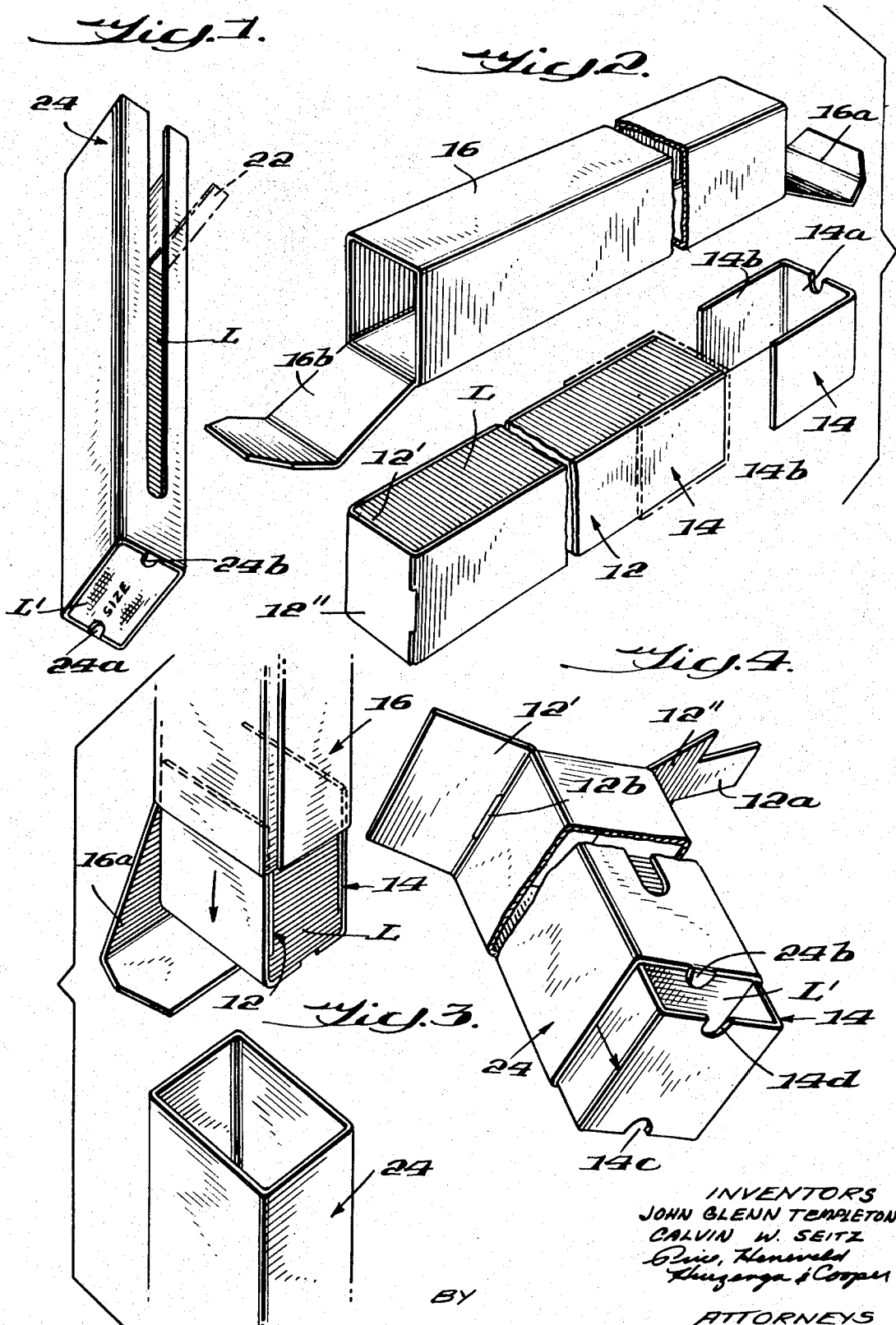
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[57] **ABSTRACT**

Retention and dispersing apparatus for relatively small sheet-like items such as clothing labels, involving an elongated container retaining a stack of the items for individual controlled dispensing out one end.

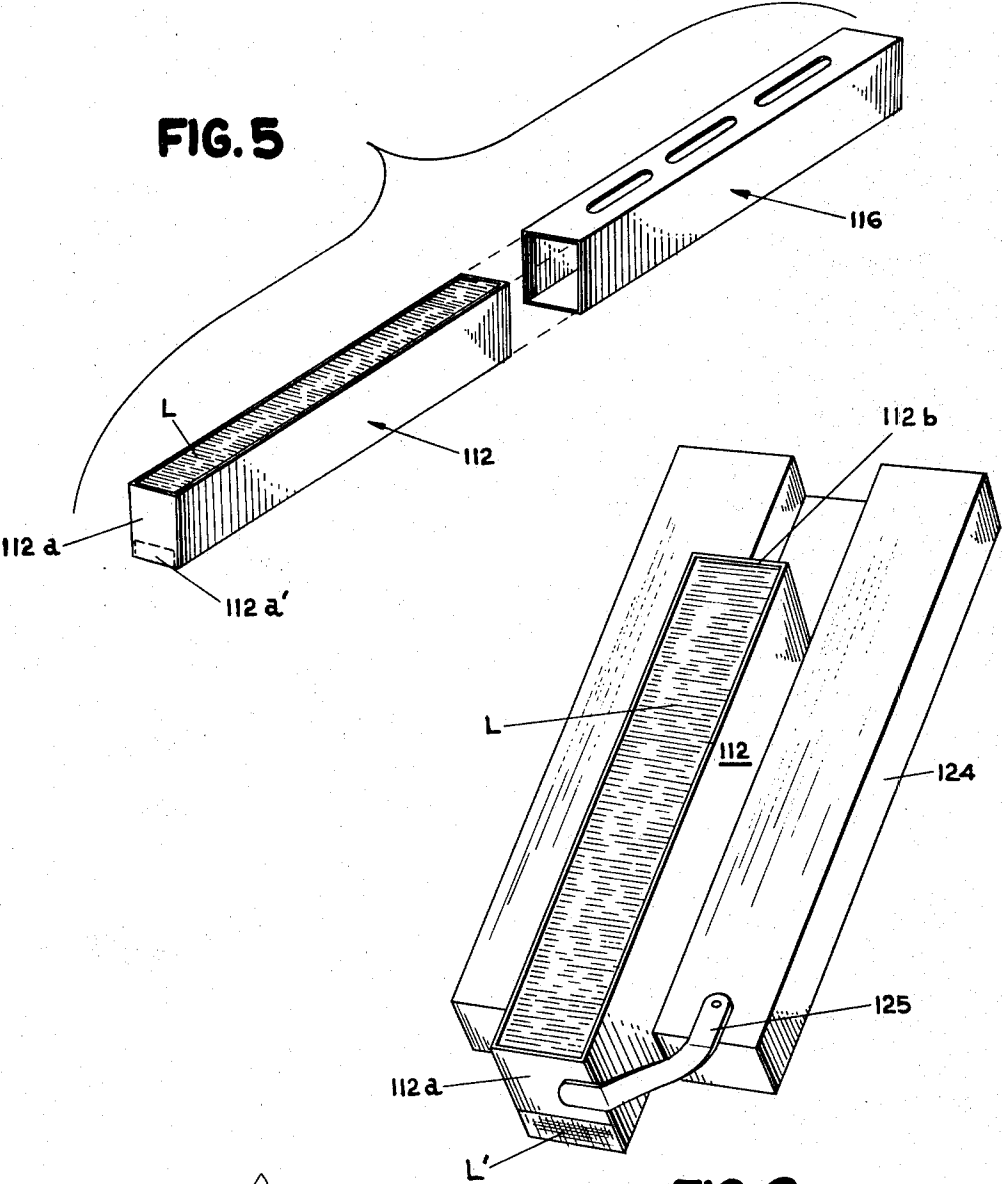
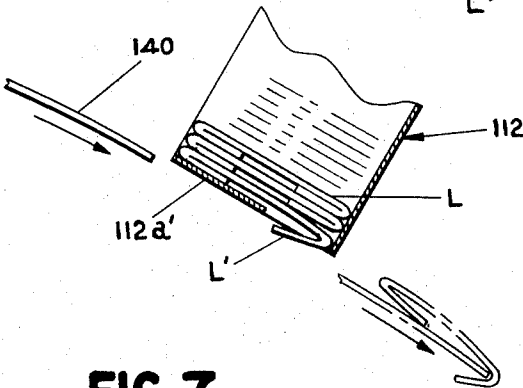
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LABEL PACKAGE ASSEMBLY

RELATED APPLICATIONS

This is a continuation in part of copending application titled Label Package Assembly, Ser. No. 718,770, filed Apr. 4, 1968.

BACKGROUND OF THE INVENTION

This invention relates to packaging and dispersing of sheet-like items, and more particularly to novel label packaging means that enables the labels to be individually removed from a stack without requiring initial transfer of the stack from the packaging means.

Since the invention has particular application to clothing labels, it will be generally explained in relation thereto. However, within the broadest aspects of the concept presented, it could be adapted to other relatively small sheet-like items.

Typically, clothing manufacturers purchase cloth labels in packs, each of which has a stack of like labels retained in a shipping and handling container or carton of some type. To attach individual labels to clothing items, a sewing machine operator carefully removes the stack of labels from the container, and usually inserts them into a retainer mounted to or adjacent the sewing machine so that individual labels can be picked off, manually or mechanically, one at a time, and attached. This transfer operation regularly causes a substantial number of labels to be dropped, misaligned, improperly folded, or otherwise positioned to cause potential disruption of automatic removal mechanism or to slow manual removal and attachment. Hence, many clothing manufacturers still employ the older method wherein the manual operator simply repeatedly grasps a bunch of labels from the container, lays them in a pile, and picks them up one at a time for attachment.

If the stack were always completely organized, this would be a tremendous advantage. Moreover, such organization would also enable the clothing manufacturer to dependably and rapidly print supplemental indicia such as sizes, etc. on selected stacks of labels as necessary, rather than having to order relatively small quantities of various custom printed labels from the label manufacturer, as is done at present.

SUMMARY OF THE INVENTION

The primary object of this invention is to provide novel retention and dispensing apparatus for small sheet-like articles, especially clothing labels, which removes the previous necessity of transferring stacks of labels from their shipping and handling containers to separate retention means allowing individual label removal. The novel apparatus employs a special shipping and handling container construction that fits in a container receiving guide, so that the stack of labels remains completely and dependably organized in properly oriented position, in its original container, yet allowing individual label removal therefrom as necessary, manually or mechanically. The container has special removable end closure means to allow controlled dispersing of the labels.

These and other objects of this invention will become apparent from the following specification and the drawings wherein FIGS. 1-4 illustrate one embodiment and FIGS. 5-7 illustrate a second embodiment.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a stack of labels inserted into a fixed label retainer-dispensing guide;

FIG. 2 is an exploded view of a complete label pack and shipping and handling container assembly;

FIG. 3 is a fragmentary perspective view showing the insertion of the label pack assembly into guide means;

FIG. 4 is a fragmentary perspective view of the assembly in FIG. 3, showing the removal of the special end element of the container assembly from the guide and inserted stack of labels;

FIG. 5 is a perspective view of the package assembly showing the second embodiment;

FIG. 6 is a perspective view of a portion of the assembly in FIG. 5 combined with a guide; and

FIG. 7 is a fragmentary, enlarged, sectional view of the lower dispensing end of the package portion in FIG. 6.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIRST EMBODIMENT

Referring now specifically to FIGS. 1-4 of the drawings, a stack of labels *L* is shown retained in a shipping and handling container means which may include a tray 12, and a special end closure member 14 for the tray, both of which are adapted to be slidably inserted into the container jacket 16. The tray 12 includes an open side into which the stack of labels can be inserted, the other three sides being enclosed, and both ends being enclosed. At least one end of the tray is enclosed by the special closure member 14, while the other end may be enclosed by a pair of suitable overlapping flaps 12' and 12'' or any other suitable means. In the form shown, flap 12'' has a tab 12a which is inserted through a correspondingly configured slot 12b in flap 12'.

The special closure member 14, in the form illustrated, comprises a basically U-shaped member, including an end panel 14a and a pair of parallel side panels or legs 14b. This sleeve slidably interfits with the end portion of tray 12 to close the end by end panel 14a, as illustrated for example in phantom lines in FIG. 2. As illustrated, the side panels 14b fit against the outside of the side panels of tray 12. Alternatively, these may fit adjacent the inside faces of the side panels of tray 12 so that the sleeve forms a type of plug. Also, instead of the sleeve being the simple U-shaped configuration shown, it could be a cap type sleeve having four side panels 14b so as to fit over the entire end portion of tray 12.

The tray type of container is preferred because the open side allows a biasing member 22 (FIG. 1) to be readily inserted into engagement with the upper end label when in the dispenser, in a manner to be described hereinafter. However, the tray may be substituted by a tube having all four sides enclosed, or a slot in one side, if this is desirable for certain types of operations. Also, the tray is preferably shown for use with a jacket 16 that encloses the tray, and has end flaps 16a and 16b for making a completely enclosed shipping container. Alternatively, however, if a tube is used in place of tray 12 for example, the ends of the tubes may be surrounded by suitable additional

coverings, as of plastic, so that the structure is enclosed for shipping purposes. Therefore, it is conceivable that the actual shipping container may vary somewhat within the concept presented herein. However, at least one end of the tube or tray 12 must be enclosed only by the removable special element 14 in the manner described above. The purpose of this will be understood more fully from the following description.

In the novel combination, the shipping container, or at least portion 12 of the entire shipping assembly, is actually used as a part of the combination, because it has a special cooperation with a fixed label retaining and dispensing guide that is attached adjacent or to the sewing machine, and/or alternatively adjacent or to the printing machine which is to add supplemental printed indicia to the labels.

When the labels are to be attached to a garment, for example, or to be individually printed, for example, guide 24 and labels L will be in the condition illustrated in FIG. 1. That is, the bottom-most label L' will be in a position to be dispensed, but the stack of labels will be retained in the guide as by label retention elements or means 24a and 24b projecting from opposite sides of the guide and extending partially, i.e. a small fraction into the area of the open lower end of the guide. The relatively small sheet-like cloth labels are small enough in size to be self supporting when supported at their edges so that they will be retained in position by such member or portions 24a and 24b, but can be individually removed from the guide, as by suction means applied to the end-most lower label L'. This removal occurs because of temporary curved deformation of the label, and if desired, temporary deformation of elements 24a and 24b. These elements are normally removably attached to the guide 24 which may be of metal, plastic, or the like. They may be relatively rigid, or alternatively may be resiliently flexible but of sufficient strength to retain the stack of labels in the guide even when placed under a biasing force as of gravity and/or preferably of supplemental biasing means 22 such as a weight, a spring biased finger 22, or the like.

When the clothing manufacturer receives a pack of labels in their shipping container means, he transfers the entire stack of labels into fixed guide 24 while being able to retain them in properly oriented and organized fashion. This is done by removing tray 12 from jacket 16 (if a tray and jacket are used) while retaining end member 14 in its enveloping relationship to prevent any of the labels from springing out of the package from their tightly packed condition. This can be readily done by projecting the tray with enclosure member 14 out of sleeve 16 (as indicated by the arrow in FIG. 3), and into the receiving opening, preferably on the upper end, of guide 24. The operator takes special effort to manually retain the member 14 in the proper position against the label stack during this transfer. The width and breadth dimension of guide 24 are just slightly larger than the width and breadth of the tray with member 14 attached, so that the label pack can be readily inserted neatly into guide 24, but with the dimensions being close enough that a frictional sliding engagement occurs between member 14 and guide 24 to prevent member 14 from falling or springing off the lower end of the label pack as the unit is inserted. When the label pack is completely inserted into guide

24, special end member 14 is removed out the lower open discharge end of the guide in the manner illustrated in FIG. 4. If label retention elements 24a and 24b are rigid, special correspondingly positioned cutouts 14c and 14d are provided on opposite edges of member 14 to enable this member to be removed readily from the lower open end of guide 24. If members 24a and 24b are resiliently flexible however, they can be temporarily deformed while unit 14 is withdrawn from the bottom of the assembly. This entire loading operation is relatively simple and can be accomplished in a few moments time. The entire stack of labels is retained in proper position during loading, and is subsequently maintained as by biasing finger 22 that projects through the side slot in guide 24 and against the upper end of the stack, so that the lowermost label L' is always immediately available for removal.

SECOND EMBODIMENT

Referring now to FIGS. 5-7, the stack of labels L are retained in shipping and handling container means formed of tray 112 and sleeve or jacket 116 into which tray 112 is slidably interfitted.

Tray 112 normally has an open side into which the stack of labels may be inserted, the other three sides being basically enclosed. The sides of the tray container define a cross sectional area approximately equal to the area of the particular labels placed therein. Initially both ends 112a and 112b are enclosed. End 112a has a portion 112a' which is defined by a perforated perimeter. Portion 112a' is spaced from the open side of the tray, with one edge adjacent the closed side of the tray opposite said open side, with two edges adjacent the closed tray sides adjacent said open side, and with the fourth edge spaced from both said open side and the closed side opposite said open side. Perforated portion 112a' is removable by tearing along its perforated edges to expose a portion of the endmost label L'. The remaining portion of end 112a retains the label stack in the container tray, but allows the endmost label to be removed by definite force applied to such label to segregate it from the remaining labels in the stack.

In use of the second embodiment assembly, labels L are packed in tray 112 which is slidably inserted into jacket 116 for shipment. Upon receiving the labels, the clothing manufacturer, for example, slides off jacket 116, tears out end portion 112a', and inserts the tray with labels in a vertically tilted guide 124 which may be a simple retainer with a suitable stop 125 for setting its vertical position. With the carton so positioned, the labels may be individually removed manually, or mechanically. For example, with end folded labels, the pressure of the stack on the lowermost label L' causes one end fold to protrude out the special end opening in the container. This allows it to be engaged by a blade 140 moving closely to and generally parallel to the end and the label, to snag and pull label L' from the container as illustrated in phantom in FIG. 7. Suitable biasing means (not shown) may engage the label stack to press them toward this discharge end.

Instead of guide 124, outer jacket 116 can also serve as a guide for the tray if desired.

It is realized that, once this invention and its usage are understood, such seem relatively simple. Indeed, its

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very simplicity is one of its chief advantages, in view of the significant production improvement it achieves. Clothing labels and the like can be maintained completely organized in closely packed condition, without becoming disoriented, misplaced, folded, or the like, while the labels are rapidly transferred from their shipping condition to their dispensing condition available for usage.

It is conceivable that various minor additional constructional variations could be incorporated to adapt the invention to a particular situation, dispenser, or machine, without departing from the concept presented. Hence, the invention is intended to be limited only by the scope of the appended claims, and the reasonably equivalent structures to those defined therein.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows.

1. A dispensing assembly for small sheet-like items comprising: an elongated retainer-dispenser guide having an opening for receiving a stack of sheet-like items and an open end for allowing discharge of individual

items; said guide having stack retention means extending partially across said open end to retain a stack of items in said guide but allow individual item removal with temporary deformation thereof; an elongated item-stack container being slightly smaller than said guide and configured to be slidably received by said guide through said opening; an end of said container including means slidably interfitted therewith for retaining sheet-like items neatly arrayed in said container during insertion of said container into said guide; said means being slidably removable from said guide out said open end to expose successive items to said open end of said guide after such insertion.

2. The assembly in claim 1 wherein said means includes a sleeve member.

3. The assembly in claim 2 wherein said sleeve member is a U-shaped member.

4. The assembly in claim 1 wherein said container is a tray having an open side face, and said guide has a slot on the corresponding side face for insertion of a stack biasing means.

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