Jan. 3, 1967 H. S. MEYERS 3,295,741

SHIPPING FOLDERS

Filed June 1, 1965

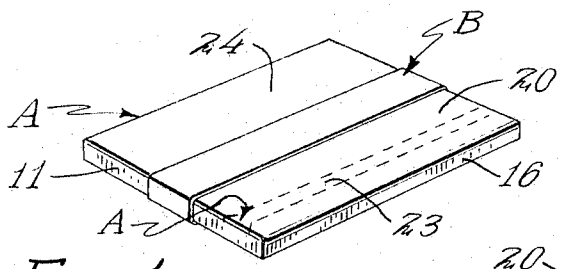


FIG. 1

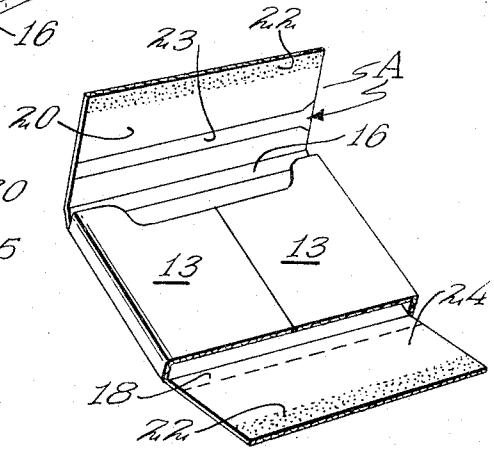


FIG. 2

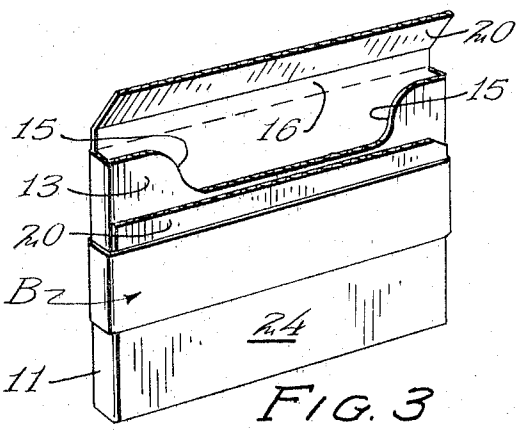


FIG. 3

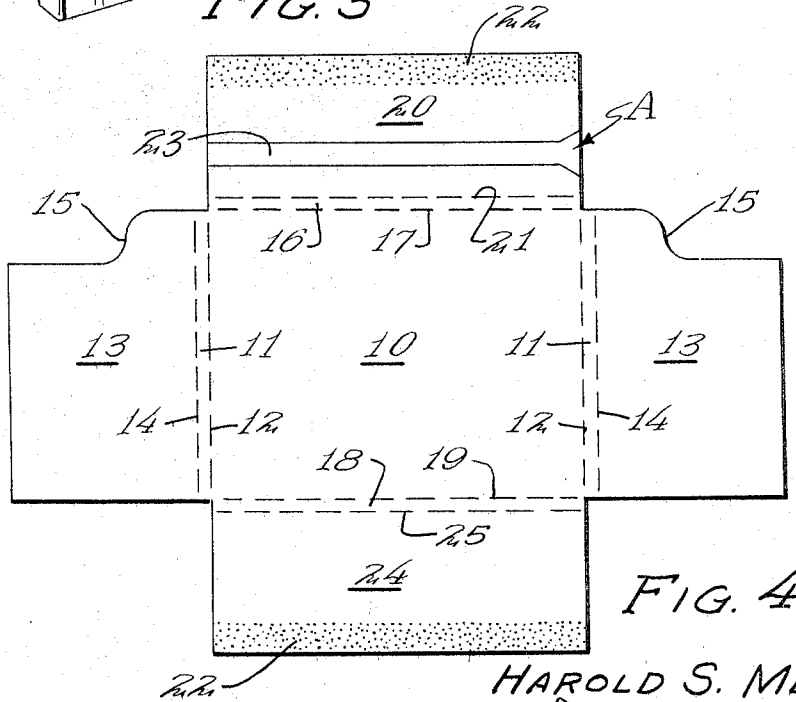


FIG. 4

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SHIPPING FOLDERS

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This invention relates to an improvement in shipping folders and in particular relates to corrugated shipping folders for use in the high production packaging of an item with length and width but with minimal depth.

Many items which have length and width but which lack depth or thickness must be packaged for shipment. The shipping folder must fit snugly in all dimensions and lend itself to high volume use. For example, a coporation with thousands of stockholders may wish to mail the annual report to each stockholder. It is desirable that the report arrive in the hands of the stockholder in good condition, but it is also desirable that the funds expended in packaging and mailing be kept at a minimum. A package which arrives in the hands of a party unsolicited, must be easily opened. Provision has been made for any of several easy opening devices in my present invention. Another example of the need for my present invention may be found in the phonograph record business. In recent years, record clubs have gained in popularity. The need for a record shipping folder has grown with these clubs. The folder must fit snugly around the record in length and width as well as in depth in order to afford maximum protection during shipment.

It is an object of my present invention to supply a folder which may be folded to snugly enclose an item in length and width yet maintain minimum thickness.

Another object of my present invention is to supply a folder adaptable for high speed production packaging.

A further object of my shipping folder resides in the incorporation of an easy opening device which allows one to open the folder quickly without destroying the folder. Therefore, the folder may continue to be used to protect the item packed. An example of easy opening devices may be found in U.S. Patents 2,706,076 and 3,141,598, both of which are assigned to Waldorf Paper Products Company.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification,

FIGURE 1 is a perspective view of the shipping folder in closed position, the view showing the shipping folder closed by means of a tape closure.

FIGURE 2 is a perspective view of the shipping folder showing the folder of FIGURE 1 in partially closed position.

FIGURE 3 is a perspective view of the shipping folder of FIGURE 1 showing the shipping folder after the opening device has been removed to expose the contents for easy removal.

FIGURE 4 is a diagrammatic view of the blank from which the shipping folder is formed.

The manner in which the shipping folder is made is best illustrated in FIGURE 4, the diagrammatic view of the blank from which the folder is formed. The folder includes back wall panel **10** having opposed parallel side edges and opposed parallel top and bottom edges. Side wall panels **11** having opposed parallel side edges and opposed parallel top and bottom edges are hingedly connected along the side edges thereof to each side edge of the back wall panel **10** along fold lines **12**. Front wall flaps **13** having opposed parallel side edges and opposed parallel top and bottom edges are hingedly connected along the side edges thereof to the side edges

of each side wall panel **11** along fold lines **14**. Front wall flaps **13** have a portion of the flap cut away **15** for easy removal of the item packed within the shipping folder. Top wall panel **16** having opposed parallel first and second side edges and opposed parallel end edges is hingedly connected along the first side edge thereof to the top edge of the back wall panel **10** along fold line **17**. Bottom wall panel **18** having opposed parallel first and second side edges and opposed parallel end edges is hingedly connected along the first side edge thereof to the bottom edge of back wall panel **10** along fold line **19**.

Top closure flap **20**, having opposed parallel first and second side edges and opposed parallel end edges is hingedly connected along the first side edge thereof to the second side edge of top wall panel **16** along fold line **21**. In the preferred embodiment of my invention, an adhesive **22** is pre-applied adjacent the second side edge and on the inside facing surface of top closure flap **20**. Any of several adhesives or methods may be used. For example a water activated adhesive may be used or a conventional hide glue adhesive applied immediately prior to sealing the shipping folder for shipment. An easy opening device **23** is located on top closure flap **20** lying between fold line **21** and parallel thereto and adhesive strip **22**. The easy opening device is located so that when the top closure flap **20** is opened the contents of the shipping folder are exposed for easy removal. The easy opening device **23** consists of spaced side by side weakened parallel lines in the inner liner, the weakened lines located transverse to the corrugations so that by grasping the end A of the easy opening device and pulling outwardly, the inner liner will rip through the corrugated medium and outer liner and form a continuous tear strip, thereby opening the shipping folder.

Bottom closure flap **24** having opposed parallel first and second side edges and opposed parallel end edges is hingedly connected along the first side edge thereof to the second side edge of bottom wall panel **18** along fold line **25**. In the preferred embodiment an adhesive **22** is pre-applied adjacent the second side edge and on the inside facing surface of bottom closure flap **24**.

FIGURE 2 is a perspective view of the shipping folder in partially closed position. Top and bottom closure flaps **20** and **24**, respectively, are shown, with pre-applied adhesive strips **22** in position, immediately prior to sealing the shipping folder.

Front wall flaps **13** are shown folded inwardly into edge abutting relation; in position to receive the top and bottom closure flaps **20** and **24** which will be folded into face contact with the front wall flaps and sealed thereto. The easy opening device **23** on the top closure flap is superimposed on the cutaway portion **15** of the front wall flaps **13** so that when the folder is opened the cutaway portion is exposed.

FIGURE 1 shows the shipping folder ready for shipment. This perspective drawing shows an alternate method of sealing the shipping folder. A tape B, such as water activated paper tape, is applied to the outside surfaces of top and bottom closure flaps after the flaps have been folded inwardly into edge abutting relation and into face contact with front wall flaps **13**. The tape B is placed on the surface adjacent the second side edges of the flaps which, in closed position, are in edge abutting relation.

FIGURE 3 shows the shipping folder with the easy opening tear strip removed. The shipping folder in the drawing shows the alternate tape closure. Also shown is the cutaway portion **15** of the front wall flaps **13** for the easy removal of the item packed. The tear strip is posi-

tioned so that when removed the entire cutaway portion is exposed when the top closure flap is lifted upwardly.

In operation the shipping folder is placed in the production line as shown in FIGURE 4. In automated packaging the direction of travel of the folder is typically that of following a front wall flap B. The item to be packaged is first placed on back wall panel **10** which should correspond to the length and width of the item being packed. As the folder and item progress through the automatic packaging process, side wall panels **11**, having a depth equal to the depth of the item being packaged, are plowed upwardly. Front wall flaps **13** are then plowed inwardly, into face contact with the item being packed, and into edge abutting relation. Simultaneously, the adhesive strip **22** may be activated or applied by utilizing rollers which effect a straight line gluing pattern. Top and bottom wall panels **16** and **18** having a depth equal to the depth of the item being packed plus the thickness of the folder material, are plowed upwardly. Top and bottom closure flaps **20** and **24** are then folded inwardly, into edge abutting relation, and into face contact with front wall flaps **13**, thereby sealing the folder for shipment.

The alternate method, taping the top and bottom closure flaps together, may, of course, be utilized, as well as a manual packing procedure utilizing either a pre-applied adhesive or a tape closure.

The shipping folder of my present invention may be reused since the folder is not destroyed when opened. This is true whether the top closure flap **20** and bottom closure flap **24** are secured by tape or by glue. As seen in FIGURE 3, the easy opening device is removed yet the folder remains intact for future use to protect the item which was shipped.

In accordance with the patent statutes, I have described the principles of construction and operation of my improvement in shipping folders; and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A shipping folder for use in shipping and storage including:

a back wall panel having opposed parallel side edges and opposed parallel top and bottom edges,

side wall panels having opposed parallel first and second side edges and opposed parallel top and bottom edges hingedly connected along the first side edge thereof to the side edges of said back wall panel, each of said side wall panels folded upwardly from said back wall panel,

front wall flaps hingedly connected to each second side edge of said side wall panels and folded inwardly into edge abutting relation and into spaced parallel relation with said back wall panel, said front wall flaps when in edge abutting relation including a generally rectangularly shaped cutaway portion bounded on the sides by side cut lines communicating with the upper edges of said front wall flaps and spaced a substantial distance from the side edges of said front wall flaps parallel thereto, and on the bottom by a bottom cut line parallel to the top edge of said front wall flaps and intersecting the side cut lines,

top and bottom wall panels having opposed parallel first and second side edges and opposed parallel end edges hingedly connected along the first side edges thereof to the top and bottom edges of said back wall panel and folded upwardly,

a top closure flap having opposed parallel first and second side edges and opposed parallel end edges hingedly connected along the first side edge thereof to the second side edge of said top wall panel and folded inwardly into face contact with said front wall flaps including means for severing said top closure flap along a line parallel to a side edge thereof, said last named line being a substantial distance from the second side edge and substantially superimposed on the bottom cut line of said front wall flaps when overlying said front wall flaps, and

a bottom closure flap having opposed parallel first and second side edges and opposed parallel end edges hingedly connected along the first side edge thereof to the second side edge of said bottom wall panel and folded inwardly into face contact with said front wall flaps and into edge abutting relation with said top closure flap,

means for securing said top and bottom closure flaps in face contact with said front wall flaps,

the portion of said top closure flap between said severing means and the second side edge of said top wall panel adapted to be in unsecured relation to said front wall flaps when said top closure flap is severed, and

the portion of said top closure flap between said severing means and the second side edge of said top closure flap adapted to remain in secured relation to said front wall flaps when said top closure flap is severed.

2. The structure of claim **1** and in which said means for securing said top and bottom closure flaps includes an adhesive strip of substantial width parallel and adjacent to the second side edge of said top closure flap adhered to said front wall flaps below the bottom cut line, and an adhesive strip of substantial width parallel and adjacent to the second side edge of said bottom closure flap adhered to said front wall flaps.

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