

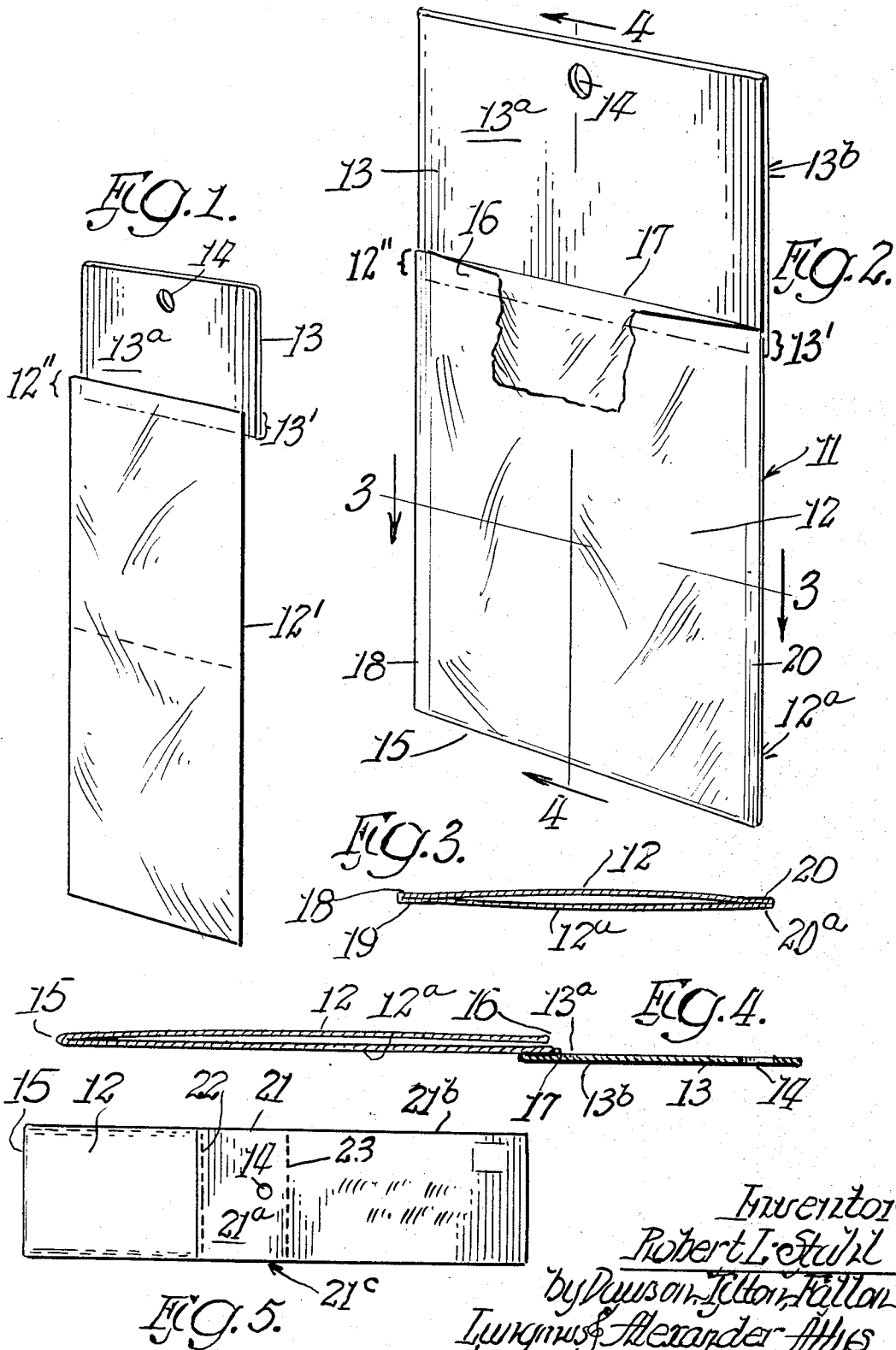
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PACKAGE CONSTRUCTION

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PACKAGE CONSTRUCTION

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 1 Claim. (Cl. 229—55)

This is a continuation of application Ser. No. 403,872, filed Oct. 14, 1964.

This invention relates to a package construction and, more particularly, to a package including a plastic envelope heat-sealed on its outside surface to one side of a paperboard, or the like, card member.

In a conventional polyethylene bag-type package, a plastic-coated paper or cardboard member is inserted between the bag's polyethylene sheets at one end of the package. The insert and polyethylene sheets are then heat-sealed together to form an air-tight package. Since both sides of the insert are involved in the sealing operation, they must both be coated with a layer of heat-sealable material, usually polyethylene. These coatings, however, have interfered with subsequent printing of the insert since the plastic surfaces thereof do not readily accept ink. In addition, with this card insert arrangement, the structural stability provided by the card member to the flexible plastic envelope is greatly limited by the insert's being positioned at only one end of the package.

It is, therefore, an object of the present invention to provide an improved package construction.

Another object is to provide a package, including a plastic envelope having a card heat-sealed thereto, wherein only one side of the card is secured to the envelope, enabling the other side to be free to serve a variety of uses.

Still another object is to provide a package having a card secured to the outside surface thereof, which card includes a surface adapted to accept ink from conventional printing equipment.

A further object is to provide a package having a plastic envelope and a fibrous card bonded to the outside surface thereof, wherein the card is provided with a surface which can be specially treated in accordance with the needs of the user, without adversely affecting the bond between the card and envelope.

Another object is to provide a package including a transparent plastic envelope with a card portion heat-sealed thereto, wherein the card is equipped with a detachable end portion, enabling the package to serve as a mailer.

Other objects and advantages of the present invention may be seen in the details of construction and operation set down in this specification.

The invention will be explained in conjunction with the illustrated embodiment in the accompanying drawing, wherein—

FIGURE 1 is a perspective view of a package construction embodying principles of the present invention, illustrated in a partially assembled condition;

FIGURE 2 is a perspective view of the package illustrated in FIGURE 1, with a portion thereof broken away, showing the film sheet folded on itself and heat-sealed along the sides;

FIGURE 3 is a transverse sectional view, taken along the line 3—3 of FIGURE 2;

FIGURE 4 is a longitudinal sectional view, taken along the line 4—4 of FIGURE 2; and

FIGURE 5 is a front elevational view of another embodiment of the present invention.

In the embodiment illustrated in FIGURES 1—4, the reference numeral 11 designates generally a package, including an envelope 12 secured on its back outer surface

12a to a card 13. A hole 14 is provided in card 13, enabling the package to be hung from a hanger.

Materials of construction can, of course, be varied in accordance with the properties desired and the nature of the goods to be packaged. For example, polyethylene sheets of between 0.0015" and 0.004" have been used to provide durable, transparent, air-tight envelopes suitable for packaging a wide variety of articles. Similarly, card 13 can be made from a multitude of relatively stiff materials such as paper and cardboard. In particular, paper-board stock weighing approximately 100 lbs. per ream has been advantageously used to make the cards 13.

Attachment of card 13 to envelope 12 can be done in a variety of ways. A particularly effective technique which lends itself to economical high speed production is to coat surface 13a with a polyethylene layer of about 0.0005" and then heat-seal the board to the envelope. In this regard, it is important to note that since surface 13b is not used for securement purposes, it can be left uncoated. This enables the bag purchaser, either before or after the time of filling, to use the reverse side (13b) for printing, without having to make special arrangements to insure acceptance of the ink on the plastic surface. Similarly, if desired, surface 13b is also free to be specially treated to fit any particular needs of the user. For example, surface 13b could be coated with some material which would function with the contents of the package.

The method of making one of the bags of the present invention is illustrated in FIGURE 1. As is shown therein, a thermoplastic-coated board 13 and a heat-sealable thermoplastic film sheet 12' of substantially the same width are laid out so that their end portions 13' and 12' overlap. Sheet 12' is then heat-sealed to board surfaces 13a. As was mentioned above, since board surface 13b is not involved in the attachment operation, it can therefore be left uncoated, or, if desired, specially treated. After film sheet 12' is secured to board surface 13a, the sheet is then folded on itself to form a folded edge 15 at one end and first and second edge portions 16 and 17, respectively, at the other end. The mating transverse sides 18—19 and 20—20a are then heat-sealed together to form the open-ended package construction of FIGURE 2. If desired, the envelope 12 may be formed from a thermoplastic tubing rather than the polyethylene sheet described in connection with the method of FIGURE 1. In using the back surface thereof is bonded to the coated side of the card 13 and one of the open ends is heat-sealed. If desired, both ends may be left open so that the bag purchaser may insert the items to be packaged from either end and heat-seal both ends simultaneously.

In FIGURE 5, another embodiment of the present invention is illustrated. As is shown therein, a polyethylene envelope 12 is heat-sealed to a card 21 along a heat-seal seam 22, shown in phantom. Since envelope 12 is bonded to the reverse side (the one not illustrated) of card 21, side 21a is uncoated, enabling it to accept ink from conventional printing equipment such as an addressograph machine. This enables the bag purchaser, before or after the bag has been filled and sealed, to use side 21 as an address-bearing side. In addition, card 21 may be provided with a line of weakness 23 which enables end portion 21b to be detached therefrom, leaving an identifying stub portion 21c attached to the bag 12.

While the mailer may be of any size, depending upon the goods to be packaged therein, it has been found advantageous to use this arrangement for objects which will fit in a bag having a width of about 3¼" (approximately the same width as a postal card). This then permits the detachable end portion 21b to be of postal card size. Such postal card arrangements are suitable both for sending the packaged goods through the mails and as a means for facilitating customer reordering of items. With

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regard to this latter use, the customer keeps the entire package, including envelope 12 and card 21, in storage until he requires the use of the item packaged therein. Upon using this item, he then detaches the reorder postal card 21b, which is already addressed to the product supplier, and deposits it in the mail.

While in the foregoing specification this invention has been described in considerable detail, it will be apparent to those skilled in the art that the invention is susceptible to other embodiments, and that many of the details described herein can be varied considerably without departing from the spirit and scope of the invention.

I claim:

A bag construction comprising an open-ended envelope constructed of flexible plastic material, said envelope including a pair of substantially coextensive opposed panels having aligned edges defining said open end, a strip member composed of substantially stiffer material than said envelope secured on one side thereof to the outer surface

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of one of said panels adjacent said open end and thereby extending in overlapping relation with said one panel, said strip member being generally rectangular and having a substantial dimension transverse to said envelope open end and in relation to the length of said aligned edges, the overlap of said strip member relative to said one panel constituting (a minor portion) of said dimension whereby said strip member is adapted to be flexed parallel to said dimension to arcuately deform the same and develop a mouth between said aligned edges without applying excessive stress to the area of securement of said envelope to said stiffener member.

References Cited

UNITED STATES PATENTS

3,097,788	7/1963	Nichols	-----	229—55
3,187,903	6/1965	Oltz	-----	150—1 X

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