Oct. 22, 1963 T. M. GUILFOYLE 3,107,842

RECLOSABLE BAG

Filed Jan. 23, 1961

Fig. 1

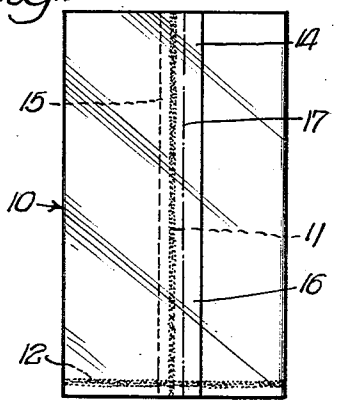


Fig. 2

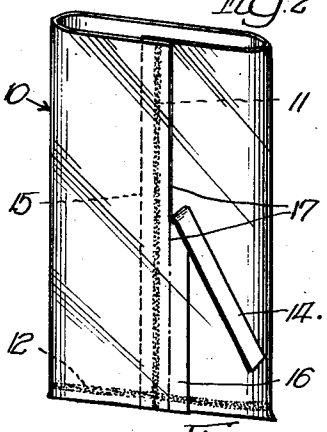


Fig. 3

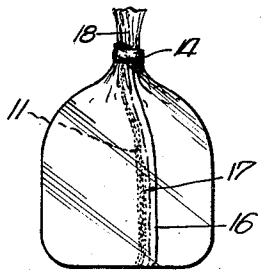


Fig. 4

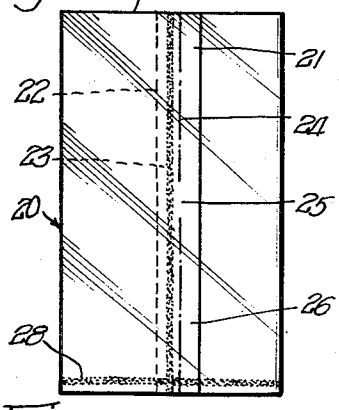


Fig. 5

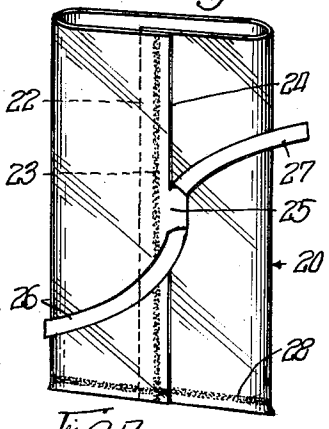


Fig. 8

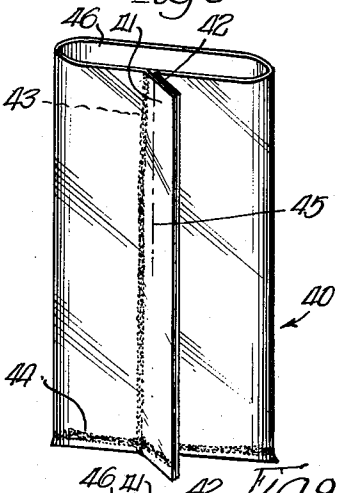


Fig. 6

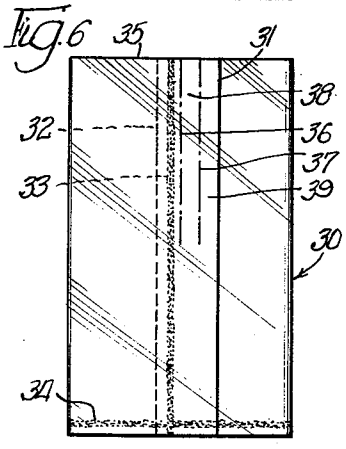


Fig. 7

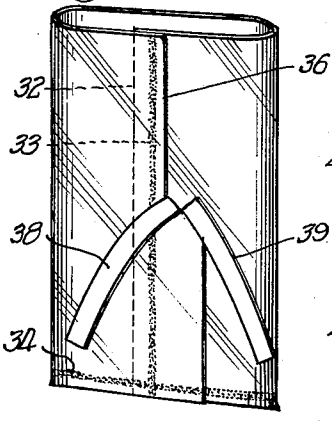
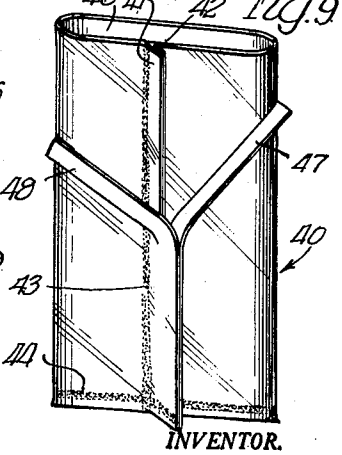


Fig. 9



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RECLOSABLE BAG

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1 Claim. (Cl. 229—62)

This invention relates to receptacles and is more particularly concerned with improvements in a bag which is formed of relatively flexible sheet material.

It is a general object of the invention to provide a bag which is formed of flexible sheet or film material and which has incorporated therein a readily removable strip forming section of the sheet or film which is adapted to be separated, wholly or in part, from the body of the bag and used as a tie in reclosing the bag after a portion of the contents has been removed therefrom.

It is a more specific object of the invention to provide a bag which is formed of a generally rectangular sheet of flexible film or similar material which sheet is foldable so as to bring the margins at opposite ends thereof into juxtaposed relation for forming therein a connecting seam with one or both of the margins having portions extending beyond the seam and divided therefrom by a tearing line so as to permit a strip to be torn loose, either wholly or in part, whereby to provide a tie for the bag when it is in partially filled condition.

It is another object of the invention to provide a bag formed of a rectangular sheet of flexible, heat sealable, plastic film which is folded into tube formation with marginal portions of the sheet overlapped and heat sealed to provide a seam, with at least one of the margins extending on the outside of the wall of the tube and having a weakening line parallel with the seam which is spaced inwardly of the terminal edge whereby to permit the extending portion to be torn therefrom without disturbing the adjoining seam.

It is a further object of the invention to provide a bag formed from a rectangular sheet of relatively flexible sheet material which is folded upon itself with the margins at opposite ends thereof overlapped and connected by a longitudinal seam, at least one of said margins lying on the outside of the bag body and having a relatively narrow strip forming portion extending outwardly of the seam, and separation lines parallel with the seam and extending from opposite ends of the bag to points intermediate the ends thereof whereby the strip portion may be torn along said separation lines so as to free the ends thereof for use as a tie for the bag.

It is another object of the invention to provide a bag formed from a generally rectangular sheet of flexible material which is folded into tubular form with the margins at opposite ends of said sheet being brought into face-to-face relation and connected by a seam formation which extends longitudinally of the tube, a margin on the outside of the tube having a terminal portion which extends beyond the seam formation and which is separated therefrom by a pair of parallel spaced separation lines extending from one end of the bag whereby strips of said terminal portion may be torn loose from one end of the bag along said separation lines to form a tie for the bag.

These and other objects and advantages of the invention will be apparent from a consideration of the several forms of bag structures which are shown by way of illustration in the accompanying drawings wherein:

FIGURE 1 is an elevation of a bag which is formed from a sheet of heat sealable plastic film material and which incorporates the principles of the invention;

FIGURE 2 is a perspective view of the bag of FIGURE 1 with the tie strip partially torn loose;

FIGURE 3 is an elevation of the bag of FIGURE 1 in partially filled condition and with the top or mouth end thereof gathered and held in closed position by the tie strip;

FIGURE 4 is an elevation of a modified form of the bag;

FIGURE 5 is a perspective view of the form of the bag of FIGURE 4 with the tie strip torn loose;

FIGURE 6 is an elevation of another modification of the bag;

FIGURE 7 is a perspective view of the bag of FIGURE 6 with the tie strip forming portions torn loose;

FIGURE 8 is a perspective view of still another form of the bag; and

FIGURE 9 is a perspective view of the bag of FIGURE 8 with the tear strip forming portions torn loose.

Referring first to FIGURES 1 to 3 of the drawings, there is illustrated a bag 10 which, as shown in FIGURE 1, is in the form of a flattened tubular section with a longitudinal or axially extending seam 11 and a transversely extending cross seam 12 closing one end which forms the bottom of the bag. The other end of the tubular section is open and forms the mouth 13 for the bag.

The bag 10 is formed by folding upon itself a generally rectangular sheet of bag forming material with marginal portions at opposite ends of the sheet being overlapped as indicated at 14 and 15 and being sealed together on a line or narrow strip so as to provide the longitudinal seam 11. The one end of the bag is then closed by forming the cross seal or seam 12, leaving the other end open for filling the bag. The one sheet margin 14 which is on the outside of the tubular section extends beyond the seam or sealed area 11 and provides a strip portion 16 which is of substantial width and which is separated from the seam 11 by a perforation line 17, the latter extending the full length of the tubular section.

The bag 10 may be fabricated from a variety of materials, for example, a plastic film material such as polyethylene. The bag 10 has the appearance of a normal pillow-type bag except for the extended portion of the material at the seam 11 and the perforation line 17 which provides the tie forming member 16.

In using the bag 10 (FIGURES 2 and 3) it may be opened up, filled with merchandise and the mouth 13 closed by any suitable seam formation. When it is desired to open the bag the seam forming portion may be removed or the seal broken at either end thereof and the tie strip 16 may be torn loose, as indicated in FIGURE 2, along the perforation line 17. Thereafter, the strip 16 may be used to tie the gathered end 18 of the partially emptied bag 10 as illustrated in FIGURE 3. Thus the strip 16 provides a convenient, built-in tie member which is an integral portion of the bag until it is desired to use the same when it may be readily freed from the bag and employed in closing the bag.

In FIGURES 4 and 5, the bag 20 which is illustrated may be formed from a rectangular sheet of plastic film or other suitable sheet material by folding the sheet into flattened tubular form with marginal portions 21 and 22 at opposite ends of the sheet being overlapped and connected by heat sealing or other seal forming operations to provide a longitudinal seam 23. The one margin 21 of the sheet extends a substantial distance beyond the seam area 23 and is provided with a perforation or severance line 24 extending inwardly from opposite ends thereof and terminating at an unperforated portion 25 so as to permit opposite ends of the margin 21 to be torn loose, as illustrated in FIGURE 5, thereby providing a tie member comprising two end sections 26 and 27 which remain connected to the bag at the area indicated at 25. The one end of the bag 20 is provided with a cross seam

28 and the opposite end 29 is unsealed ready for filling. The bag is adapted to be filled and closed and the tie members 26 and 27 used to reclose the bag 20 in the same manner as the tie 16 in the bag 10 of FIGURE 1.

In FIGURES 6 and 7, the bag 30 which is illustrated is also formed of a rectangular sheet of flexible plastic film or like material by folding into tube formation with the margins 31 and 32 at opposite ends of the sheet being overlapped and connected by heat sealing to form a longitudinal seam 33. The one end of the bag 30 is provided with a cross seam 34, leaving the other end open at 35 for filling. The one margin 31 extends a substantial distance beyond the seam line 33 and is provided with a pair of spaced perforation lines 36 and 37 which are parallel with the seam line 33 and extend only partially the length of the tube section. The perforation or tearing lines 36 and 37 divide the one end of the margin 31 into two strip forming portions 38 and 39 which may be separated from each other and from the remainder of the bag material by tearing along the lines 36 and 37 as indicated in FIGURE 7 so as to provide two strip ends 38 and 39 which are adapted to remain integrally connected with the bag and which may be used as tie members in reclosing the bag.

In FIGURES 8 and 9 the bag 40, which is illustrated, is formed from a rectangular sheet of plastic film or other suitable material with the sheet being folded upon itself to bring the margins 41 and 42 at opposite ends thereof into face-to-face relation forming two plies which are connected or sealed to each other on a seam forming line 43, which seam is spaced inwardly of the edges of the sheet margins 41 and 42. The tubular section thus formed may be flattened with the fin-type seam provided by the margins 41 and 42 approximately in the center of the tubular section and a cross seam 44 provided at the one end to close the tube and form an open top bag. The marginal portions 41 and 42 which form the fin-type seam are perforated at 45 with the perforations extending through both plies of the film and with the perforation line extending a substantial distance from the mouth end 46 of the bag towards the closed end thereof so that terminal portions of the margins 41 and 42 may be torn loose, as indicated in FIGURE 9, to provide tie forming strip members 47 and 48 for reclosing the bag.

While particular materials and specific details of construction have been described in connection with the several forms of the bag which are illustrated in the drawings, it will be understood that other suitable materials and equivalent details of construction may be resorted to within the spirit of the invention.

I claim:

A bag formed of a flexible sheet of thermoplastic film material which is folded upon itself into flattened tubular form, said bag having a longitudinal heat sealed seam and a transverse heat sealed cross seam at one end thereof, a relatively narrow strip forming portion of the film material extending outwardly of the longitudinal seam and having a weakened severance line substantially parallel with and extending the full length of the longitudinal seam along which the material will readily tear whereby to provide a relatively narrow strip which may be separated from the free edge of the longitudinal seam portion and used as a tie member to be wrapped around the gathered mouth of the bag.

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