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ART OF PACKAGING COMMODITIES

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Fig. 1

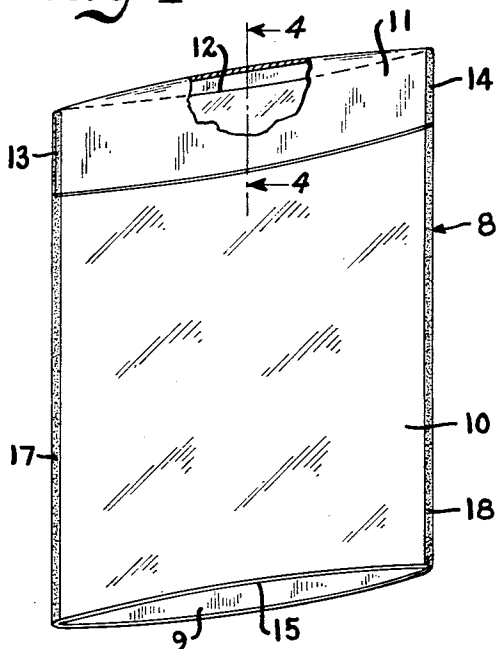


Fig. 4

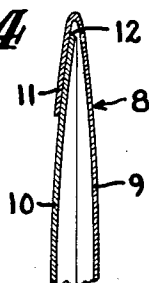


Fig. 2

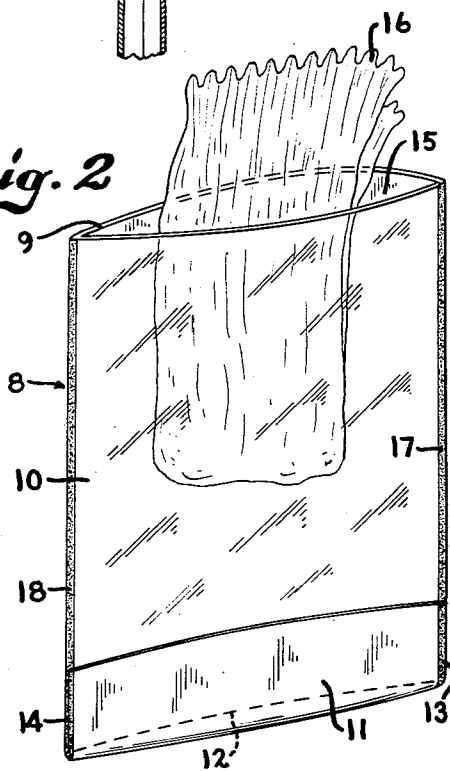


Fig. 3

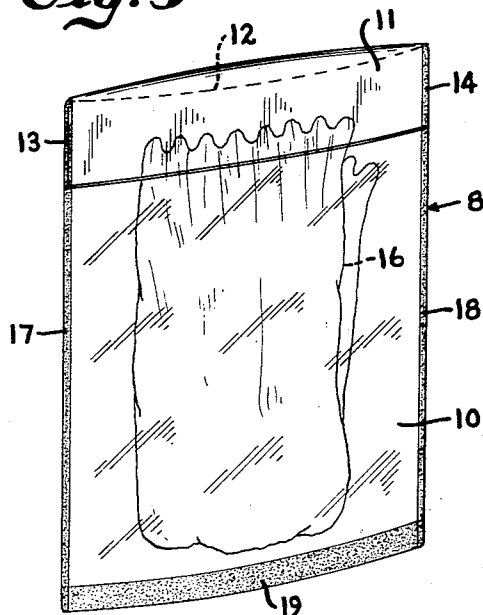
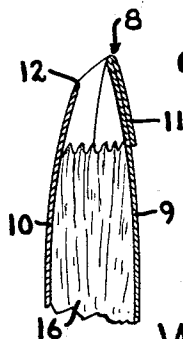


Fig. 5



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ART OF PACKAGING COMMODITIES

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7 Claims. (Cl. 53-29)

The present invention relates generally to improvements in the art of packaging commodities, and relates more particularly to improvements in the construction and use of flexible bag-like commodity containers adapted to be loaded from one end and unloaded from the other end.

A primary object of this invention is to provide a novel and improved commodity bag which is extremely simple and durable in construction and which may be readily supplied with the commodity to be packaged and subsequently sealed with ready access to the commodity being provided from the side or edge of the bag remote from the side used for loading.

In the packaging field, it has, of course, been common practice to provide flexible bag-like containers of tubular formation sealed at one end to form the bag bottom and open at the other end to provide a commodity receiving mouth or access opening which may be closed as by means of a closure flap after the container has been loaded. In some instances, it has been necessary or desirable to seal or partially seal the closure flap to the adjacent side wall of the bag to either retain the closure flap in closed position or to satisfactorily protectively confine the commodity. However, in the merchandising of certain commodities such as articles of clothing, linens, and the like, it is desirable to utilize a wrapper which will provide ready access to the commodity for inspection by the customer; and for use in such instances, it has been heretofore proposed to provide a flexible bag-like container of tubular formation sealed across one end and having a closure flap covering the opposite end and secured only along the opposite side edges to the adjacent side wall of the container to thereby permit the flap to be swung or folded back over the mouth of the container for access to the commodity packaged therein. While this type of container has enjoyed a certain amount of commercial success due to the fact that the packaged commodity is normally protected quite adequately while at the same time being readily accessible, it has been found that the loading of these containers with the commodity is slow and time-consuming due to the fact that the closure flap must be manually distorted and folded back to permit insertion of the commodity through the bag mouth; and in an attempt to obviate this difficulty and expedite the loading operation, it has also heretofore been proposed to initially form the container with the opposite ends of the closure flap sealed in open position to the adjacent side wall so that the bag may be furnished to the packager of the product or commodity in open condition. This type of construction in which the closure flap is initially formed in open condition does facilitate the loading operation, but after the commodity has been inserted within the container, it is then necessary to manually distort and swing the open closure to a position covering the open end of the bag to thereby confine the commodity for merchandising purposes, and this operation is also time-consuming and expensive. In addition, since the ends of the closure flap are generally sealed to the adjacent wall during formation of the longitudinal side seam seals, it is apparent that the subsequent swinging of the flap to closed position will result in reversal of the seal at the ends of the flap and disruption in the continuity and appearance of the side wall edges.

It is therefore a more specific object of the invention to provide an improved commodity bag of this general type and method of loading the same which obviates all

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of the aforementioned disadvantages and objections heretofore attendant these devices.

Another specific object of my present invention is to provide an improved flexible bag-like commodity container which embodies a protective closure flap extending across the mouth portion but which may be nevertheless supplied with the commodity to be packaged in an extremely rapid and economical manner.

Another specific object of this invention is to provide an improved commodity container embodying a closure flap at one end which is initially sealed along its opposite ends to the adjacent side wall in a position closing the end of the container while means are provided for facilitating loading or filling of the container with the desired commodity without need for in any way disturbing the closure flap.

Still another specific object of the present invention is to provide an improved tubular flexible bag-like container having one end effectively covered by a closure flap and adapted to be loaded from the opposite end which may be subsequently sealed to confine the commodity within the container, the commodity being thereafter freely accessible through the end covered by the flap.

An additional specific object of the present invention is to provide an improved method of loading a container of this type in which the access opening is normally covered by a protective closure flap.

These and other specific objects and advantages of the invention will become apparent from the following detailed description.

A clear conception of the features constituting the present invention and illustrating the steps of the improved method and the mode of utilizing the improvements may be had by referring to the drawing accompanying and forming a part of this specification wherein like reference characters designate the same or similar parts in the several views.

FIG. 1 is at perspective side and end view of a typical empty bag-like container embodying the invention and showing the closure flap in its normal closed position with the opposite end of the container left unsealed, a portion of the closure flap being broken away for sake of clarity;

FIG. 2 is another side and end perspective view of the container showing the same in the process of being loaded or supplied with a commodity;

FIG. 3 is still another side and end perspective view of the loaded container with the initial loading opening being sealed to confine the commodity therein;

FIG. 4 is a fragmentary section through the access opening portion and closure flap of the container taken along the line 4-4 of FIG. 1, the closure flap being shown in its normal closed position; and

FIG. 5 is a similar fragmentary section showing the closure flap reversed or folded back upon the other wall of the container to thereby permit access to the packaged commodity.

While the improvements have been shown and described herein as being particularly applicable to a bag having an elongated tubular body formed of heat sealable material and in which the seams and seals are formed by application of heat and pressure with the improved bag being especially advantageously used in the packaging of certain commodities, it is not desired or intended to limit or restrict the invention by reason of such specific embodiments. It is also contemplated that certain specific descriptive terms used herein shall be given the broadest possible interpretation consistent with the disclosure.

Referring to the drawing, the commodity bag shown therein as embodying the invention comprises, in general, a tubular commodity confining body 8 formed of flexible sheet material and normally disposed in flat condition to thereby provide adjacent side walls 9, 10. In accordance

with the improvement, one of the walls, shown herein as being wall 9, is provided with an integral end extension or flap forming portion 11 at one end thereof extending beyond the adjacent end of the other wall 10, the flap portion 11 being folded over the adjacent end 12 of the wall 10 and being secured thereto along its opposite end edges as at 13, 14 to normally close the one end of the tubular body 8; and the end of the tubular body 8 remote from the closure flap 11 is initially left open and unsealed as at 15 to provide unrestricted access to the body 8 for supplying a commodity 16 thereto as shown in FIG. 2.

In the production of the improved bag, the tubular commodity confining body 8 may be conveniently formed of a pair of superimposed sheets 9, 10 of thermoplastic material such as rubber hydrochloride or polyethylene film of the same width but of different lengths; and the flap forming portion 11 may be initially folded over the adjacent end 12 of the wall 10 with the walls 9, 10 and the flap 11 all being secured to each other along the opposite edges 17, 18 of the sheets and the respective ends 13, 14 of the flap 11 in single heat sealing operations. In this regard, it is obvious that the seals may be formed with the aid of ordinary commercially available heat sealing equipment in a customary manner, and when the flap 11 is thus sealed along its opposite ends to the adjacent edges of the side wall 10, that end of the container 8 is normally closed but provides restricted access to the interior of the body by merely raising the unsecured medial portion of the flap and folding it back upon the wall 9 as shown in FIG. 5. This operation is, of course, a manual operation which need not be resorted to in the filling of the body 8 with the commodity 16 since the loading of the bag is performed through the opposite open end 15. After the body 8 has been thus constructed and after the commodity 16 has been inserted within the container through the unrestricted open end 15, it is only necessary for the packager to transversely seal the end of the tubular body remote from the closure flap 11 as shown at 19 in FIG. 3, and this sealing operation may likewise be accomplished with simple heat sealing apparatus incorporating a hot sealing bar. The commodity is thus confined within the tubular container or bag 8, and subsequent access to the contents 16 may be readily had by prospective purchasers or by clerks dispensing the commodity in stores.

From the foregoing detailed description, it is believed apparent that the present invention contemplates the provision of a novel commodity bag which may be quickly and readily filled or supplied with the desired commodity and which nevertheless provides subsequent access to the commodity in a simple manner and without need for releasing any seals in order to obtain such access. As indicated, the invention contemplates the provision of a tubular container normally disposed in flat condition and having an open end covered by a closure flap secured at its opposite ends to one of the side walls so as to normally close that end of the container, the opposite end of the container being open and unsealed to permit free and unrestricted insertion of the commodity therethrough with the unrestricted open end being thereafter sealed transversely thereacross to confine the commodity. The improved container completely obviates the need for folding back or otherwise manually distorting the closure 11 in order to fill the same with a commodity, and it also obviates the need for manually reversing the bag closure 11 over the adjacent end of the tubular body as in cases wherein the flap 11 is normally initially secured in open position.

It is not desired to limit this invention to the exact details of construction or to the precise mode of use herein shown and described, since various modifications within the scope of the appended claims may occur to persons skilled in the art to which this invention pertains.

I claim:

1. A commodity bag comprising, a tubular commodity confining body formed of flexible sheet material and normally disposed in flat condition to provide adjacent side walls having their adjacent edges sealed together to form a seam along each edge of the bag, one of said walls being provided with an integral flap forming portion at one end thereof extending beyond the adjacent end of the other wall, said flap portion being folded over said adjacent end of said other wall and being secured thereto along its opposite end edges and in said seams to provide a normally closed restricted access opening at one end of said tubular body, the end of said tubular body remote from said closure flap being initially open and unsealed to provide unrestricted access to said body for supplying a commodity thereto.

2. A commodity bag comprising, a tubular commodity confining body formed of flexible sheet material and normally disposed in flat condition to provide first and second side walls having their adjacent edges sealed together to form a seam along each edge of the bag, the first of said walls being provided with an integral flap forming portion at one end thereof extending beyond the adjacent end of the second wall for the full width of said wall, said flap portion being folded over said adjacent end of said second wall and being secured only to the side edges of said second wall by sealing the opposite end edges of said flap portion in said seams to normally close one end of said tubular body while providing restricted access thereto, said walls at the end thereof remote from said closure flap being initially unattached to provide unrestricted access to said body from said end for supplying a commodity thereto.

3. A commodity bag comprising, a normally flat tubular commodity confining body formed of a pair of superimposed sheets of flexible material forming front and rear walls having their adjacent edges sealed together to form a seam along each edge of the bag, said front wall being provided with an integral flap forming portion at one end thereof extending beyond the adjacent end of the rear wall, said flap portion being of the same width as said walls and being folded over said adjacent end of said rear wall, said front and rear walls and said flap all being secured to each other along common opposite edges to normally close one end of said tubular body while providing access thereto between said flap and said side walls, said walls at the end thereof remote from said closure flap being initially unattached to provide unrestricted access to said body from said end for supplying a commodity thereto.

4. The method of packaging a commodity, which comprises, providing a tubular wrapper having its opposite ends open, restricting access to one of the ends of the wrapper by means of a flap formed integral with one side of the wrapper and secured only at its ends to the other side wall of the wrapper, supplying the commodity to the wrapper through the end thereof remote from the flap, and thereafter transversely sealing the end of the wrapper through which the commodity has been supplied.

5. The method of packaging a commodity, which comprises, providing a tubular wrapper having its opposite ends open, closing one of the ends of the wrapper by means of a flap formed integral with one side of the wrapper and extending beyond and folded over the end of the other side wall and secured thereto only at its opposite ends, supplying the commodity to the wrapper through the end thereof remote from the closure flap, and thereafter transversely sealing the side walls to each other at the end of the wrapper through which the commodity has been supplied.

6. A merchandise container comprising a pair of superposed sheets composed of pieces of seamable container material each sheet having a pair of side edges in registry with the corresponding side edges of the other, seams securing the contiguous side edges together to form a

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tubular body open at both ends, one tube end defining a filling opening through which merchandise can be introduced into said body, one of said sheets having at the opposite tube end an integral elongation coextensive in width with said sheet and doubled back over the adjacent end of the other sheet to define a protective flap for that end of the tubular body, the lateral edges of said flap being engaged by said seams to secure said flap edges to the corresponding side edges of the tubular body, whereby the interior of the body remains accessible through the passage beneath said flap after the filling opening at the opposite end has been closed.

7. A method of making a merchandise package of the character described, which consists in first making a merchandise container in the form of a tubular body open at both ends and provided at one of said ends with a turned-back protective flap; said tubular body being made by arranging a pair of sheets of seamable container material in superposed relation with the side edges of one

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sheet in registry with the corresponding side edges of the other, providing a flap-defining elongation on one of said sheets at one end thereof and turning it back to overlie the adjacent end of the other sheet, and seaming together the contiguous side edges of said sheets and causing said seams also to engage the lateral edges of said turned-back flap; then introducing merchandise into said tubular body through the end opposite said flap; and finally seaming together the margins of said sheets at said filling end.

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