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DISPLAY WINDOW BAG

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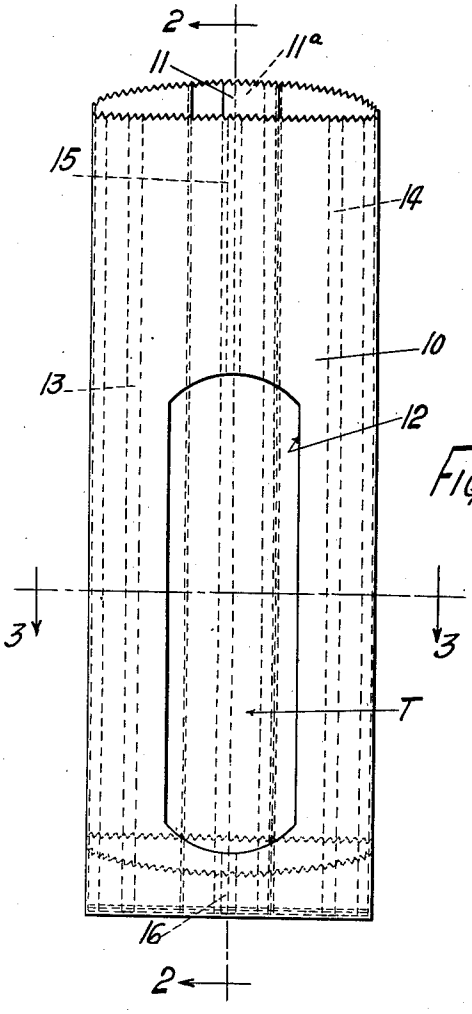


FIG. 1

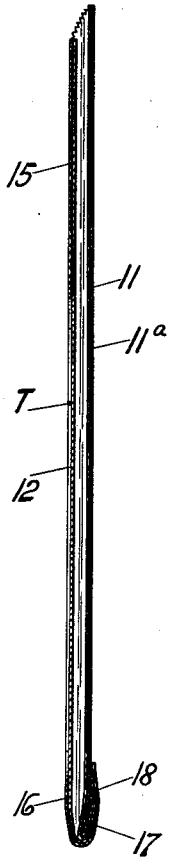


FIG. 2

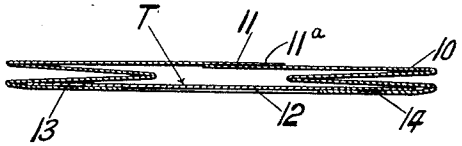


FIG. 3

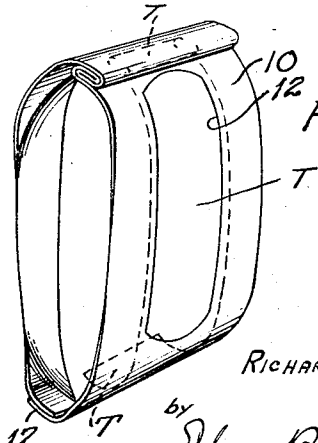


FIG. 4

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DISPLAY WINDOW BAG

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3 Claims. (Cl. 229—53)

This invention relates to display window bags.

Heretofore there have been many attempts to provide effective display window bags but such bags as heretofore provided have not been entirely satisfactory due to the tendency of the windows to peel or loosen and the bags to become disrupted by handling and by temperature and humidity changes.

In accordance with one of the prior practices, window-openings are cut in a continuous web of paper and patches of transparent material are adhesively secured over said openings. The cutting and feeding of the transparent patches into proper registry with the window openings require more or less complicated procedure and apparatus and these become easily loosened by flexure of the bag and by friction of materials on the upper edges thereof on filling the bags, etc.

In accordance with another prior practice, a composite tube made of strips of paper and transparent material secured together in parallel relation is formed into bags having a display portion the full length thereof. This when formed into bags, provides a free, non-reinforced edge of the transparent material at the top of the bag and provides an area of non-reinforced, transparent material at the bottom of the bag.

The general purpose of the present invention is to provide a bag with an entirely enclosed window opening formed therein and covered by a sheet of transparent material extending substantially the full length of the bag and preferably secured throughout its length thereto. By this construction the transparent material is reinforced from the top to the bottom of the bag by the paper of the bag except at the area over said opening and is folded and preferably sealed or anchored in the folds of the bag so that there is no tendency for separation of the transparent material and so that there are no exposed, non-reinforced edges of transparent material in the bags or wrappers or non-reinforced areas in the folds to be torn, loosened or disrupted upon enclosing commodities with the bags or wrappers.

A further purpose of the invention is to provide a bag or wrapper capable of economical manufacture by simple, economical procedure and apparatus.

The foregoing and other purpose of the invention are attained in the display window bag and by the procedure and equipment illustrated in the accompanying drawing and described somewhat in detail in the succeeding paragraphs. It is to be understood that the invention is not limited to the form thereof illustrated and described.

Of the accompanying drawing,

Figure 1 is a front elevation of a display window bag embodying the invention;

Figure 2 is a longitudinal section on line 2—2 of Figure 1;

Figure 3 is a transverse section somewhat enlarged in line 3—3 of Figure 1; and

Figure 4 is a perspective view of a bag when filled and closed about its contents.

Referring to the drawing, showing the invention, the numeral 10 indicates the body of a bag formed of a tube of paper with the usual seam 11 at the back of the bag and formed with the window opening 12 in the face of the bag intermediate the ends of the tube. The seam 11 may be secured by the usual strip of adhesive 11^a. The wall of the tube may comprise the usual front and rear portions and the connecting side portions, which latter may be of the usual bellows type as shown.

On the rear of the front face of the bag a continuous strip of transparent material T, such as a sheet comprising a cellulose derivative which may be a product obtainable upon the market under the trade name "Cellophane," is secured longitudinally substantially from the top to the bottom of the bag preferably by continuous strips 13 and 14 of adhesive at each side of the opening and strips 15 and 16 respectively above and below the opening 12.

The transparent material T preferably extends substantially the full length of the tube from which the bag is formed so that it extends into the bottom fold 17 of the bag, the adhesive strips 13, 14 and 16 also preferably extending into said fold. The fold is preferably secured by an adhesive strip 18 in the usual way. Any form of fold to provide the bottom may be used such as the simple fold shown or the fold heretofore used in providing a flat-bottom bag.

By this construction it will be apparent that the transparent material is so incorporated in the bag that there is no tendency for separation of the transparent material from the flexing of the bag in inserting materials therein or in folding the top portion of or handling the filled bags. The transparent material being secured the full length of the bag and also anchored in the bottom fold or seam, it will flex with the material of the bag as required when filled and closed about its contents as shown in Figure 4 without separation. There are no exposed free edges

of the transparent material subject to tearing and there are no areas of unsupported transparent material in or adjacent the bottom of the bags to be loosened or disrupted by flexing or pressure, nor are there any transverse parts between the transparent material and the body of the bag on the inside thereof to be loosened by the longitudinal flexure to which the bag is subjected in folding the top portion to enclose its contents or subject to being loosened by the bag filling operations or by bag filling tools. This bag may be manufactured by the use of the simple equipment and by the economical procedure.

Modifications of the invention may be resorted to without departing from the spirit thereof or the scope of the appended claims.

What is claimed is:—

1. A bag comprising a tube of flexible relatively opaque material having front and rear wall portions and side wall portions of the bellows type, the bottom end of said tube having wall portions thereof lapped and secured together to provide a bottom for the bag, said tube having an opening in its front wall intermediate its ends and entirely surrounded by the opaque material, and a strip of strong flexible relatively transparent material extending along the inside of the tube substantially throughout its length to close said opening, said strip being adhesively secured to the inside of the tube, the lower end of the strip being anchored in the lapped and secured wall portions in the bottom of the bag, said bag being adapted to be shaped to an open position by expanding the bellows type side walls.

2. A bag comprising a tube of flexible relatively opaque material having front and rear wall portions and side wall portions for holding the front and rear wall portions apart whereby the bag is adapted to receive a bulky commodity, the front wall portion having an opening therein intermediate its ends, a strip of strong flexible relatively transparent material extending longitudinally along the tube substantially throughout its length and adhering to the tube so as to close said opening, one end of said tube having its wall portions connected together to provide a closed bottom for the bag with one end of said transparent strip anchored in the connected wall portions, the other end of said tube providing the top of the bag.

3. A bag comprising a tube of flexible relatively opaque material having an opening in the wall thereof intermediate its ends and a strip of strong flexible relatively transparent material extending substantially from end to end of said tube to close said opening and adhering to said tube, one end of said tube having its wall portions secured together with one end of said strip anchored in the seam thus made to provide a bottom for the bag, the other end of said tube providing the top thereof, said tube having a wall structure with front and rear portions and side portions for connecting the front and rear portions in spaced apart relation whereby the bag will open to an expanded condition with its mouth open to receive a bulky commodity therein.

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