

Sept. 28, 1943.

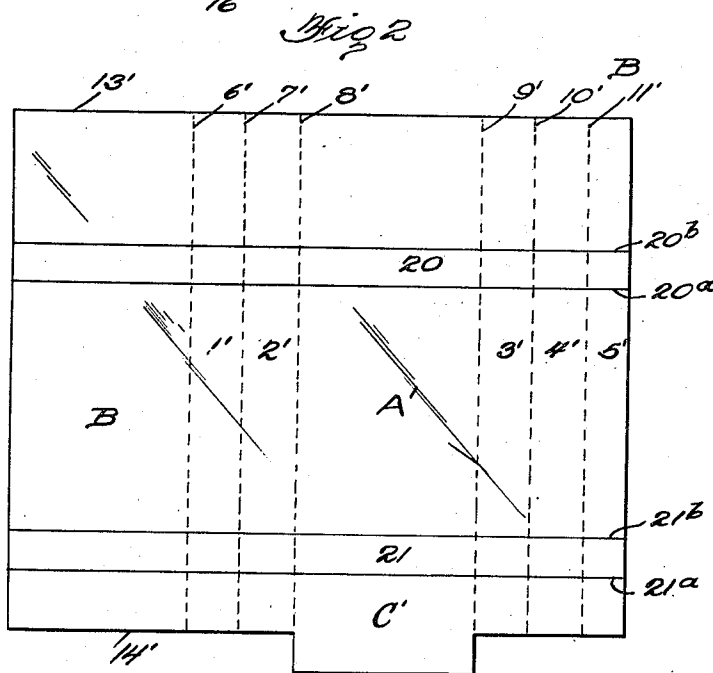
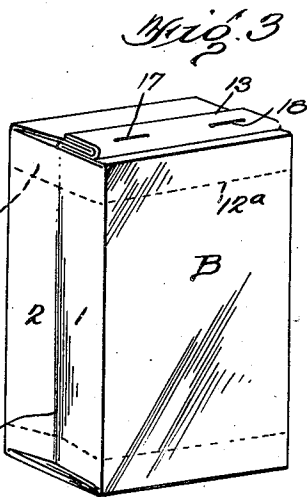
J. F. AMES

2,330,255

SEMICARTON

Filed June 14, 1939

2 Sheets-Sheet 1



Sept. 28, 1943.

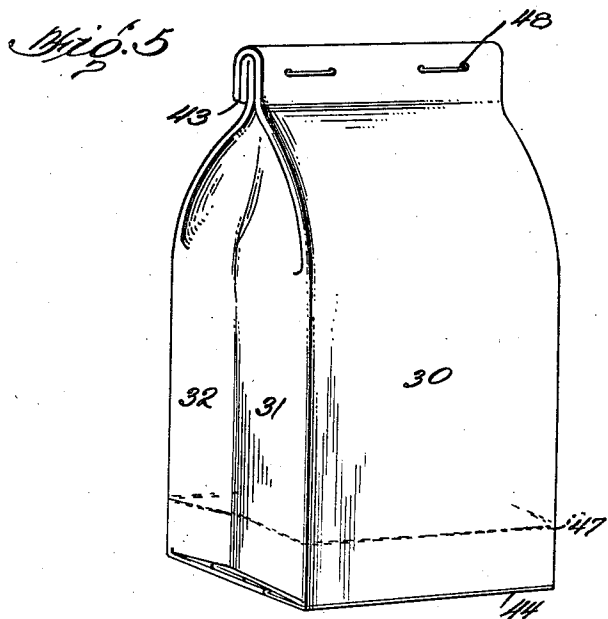
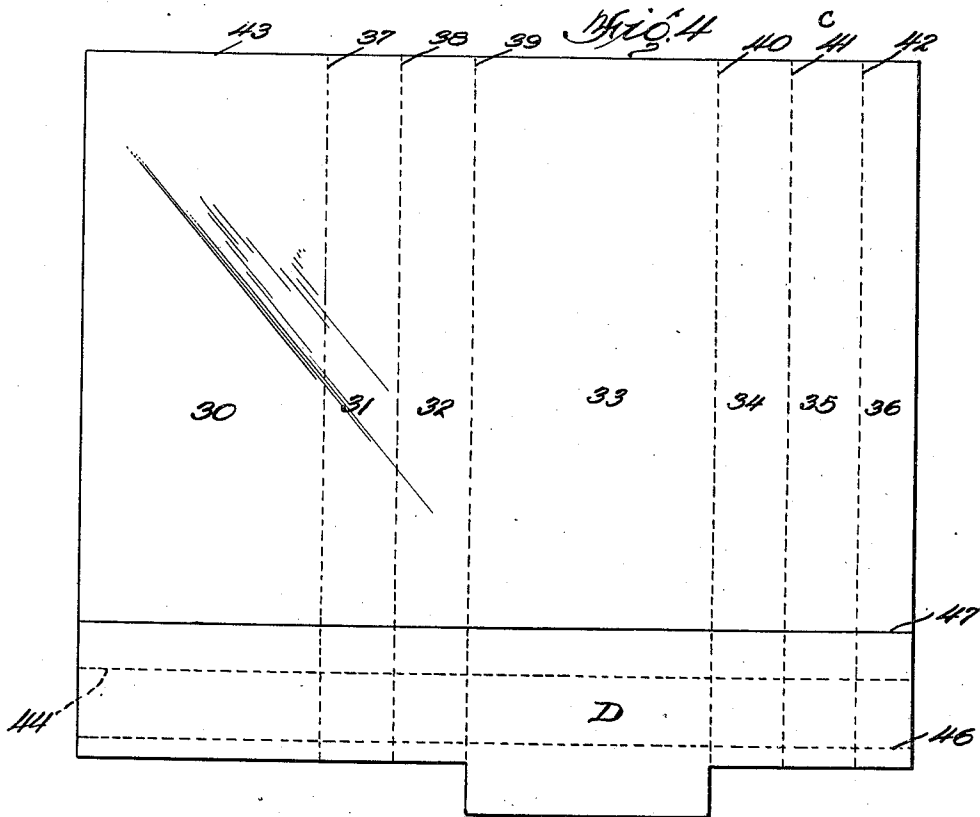
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SEMICARTON

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2 Sheets-Sheet 2



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SEMICARTON

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3 Claims. (Cl. 229—55)

This invention relating as indicated to a semi-carton, is more particularly directed to the provision of a paper bag which will have the general appearance of a cardboard carton.

More particularly, the invention is directed to a bag which will be provided with relatively sharp corners between the bottom portion and the main or body portion of the bag.

It is also an object of the invention to provide sharp corners between the body portion and the top portion of the bag so that the bag when filled will closely simulate a carton composed of cardboard or other relatively stiff material.

Another object of the invention is to provide a bag of relatively stiff paper insofar as the body and top are concerned with a bottom portion of relatively light weight paper so that the bottom may be easily folded. This last named object is particularly advantageous in connection with bags of smaller sizes since relatively heavy paper cannot be easily folded and unfolded during filling of the bag.

It is a further object of the invention to decrease the cost of paper bags by providing the same with inexpensive thin paper bottoms.

A still further object of the invention is to provide sharp corners at the top and/or the bottom of the vertical walls of the bag when filled, by applying paper tape to the interior of such vertical walls.

Another object of the invention is to provide sharp corners between the bottom and the vertical walls of the bag by overlapping a separable bottom portion onto the body portion of the bag, thus providing a lamination which is stiffer than a single ply of paper and which construction can be used instead of using a single blank with a piece of paper tape on the vertical walls adjacent the bottom portion.

To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims; the annexed drawings and the following description setting forth in detail one product constituting, however, but one of the various applications of the principles of my invention.

In the accompanying drawings:

Fig. 1 is a plan view looking toward the interior surface of a bag blank composed of two pieces.

Fig. 2 is a plan view similar to Fig. 1 of a one-piece integral blank.

Fig. 3 is a perspective view of the blank shown in Fig. 1 when assembled and filled.

Fig. 4 is a plan view similar to Fig. 1 of a modification.

Fig. 5 is a perspective view of the blank shown in Fig. 4, assembled and filled.

Referring now to the drawings, and more particularly to Fig. 1, it will be seen that the body portion of the blank is composed of a front portion A, rear portion B, connected by means of the side portions 1 and 2. Side portions 3 and 4 extend from the front portion A and an overlapping portion 5 is connected to the side portion 4.

The crease lines 6, 7, 8, 9, 10 and 11 separate the various portions as shown in Fig. 1, these being the lines along which the blank is creased so that it may be readily folded into a bellows type bag.

The body portion of the bag blank is generally rectangular in shape and has an upper edge 13 and a lower edge 14. A separable bottom portion, generally indicated at C, is attached to the body portion by any suitable means such as adhesive 19. It will, of course, be understood that the bottom portion C may be united to the body portion by stitching, pasting or stapling. It is to be noted that the bottom portion C overlaps the body portion a predetermined distance and that the bottom portion is attached to the interior surface of the body portion. When the blank shown in Fig. 1 is assembled the overlapping portion 5 will be united to the interior of the rear portion B and the bottom will be closed in any suitable manner after which the bag is ready for filling. When material is placed in the bag it will assume the shape shown in Fig. 3 and sharp corners between the vertically extending surfaces A, B, 1, 2, 3 and 4 and the bottom and top will result due to the provision of tape 12 and the lamination comprising the overlap of the bottom C upon the body portion. The tape 12 is preferably a strip of paper which in actual practice has proven to lend rigidity and stiffness to the vertical walls.

The sharp corner at the bottom of the vertical walls is also obtained because the thin paper of the bottom C readily bends at right angles. This type of construction is particularly advantageous in the manufacture of small bags since the bottom C can be easily creased and the bellows type folds can be made which is not true where relatively stiff heavy paper is used.

The blank shown in Fig. 2 is adapted for bags of larger sizes as in this instance the entire blank is composed of an integral piece of material and

where large bags are contemplated the heavier bottom is necessary and the folds in the bottom can be readily made. This blank is quite similar to the blank shown in Fig. 1 except that the front portion A', rear portion B', and connecting side portions 1', 2', 3' and 4', as well as the bottom portion C' are all composed of a single piece. The blank is creased along the line 6', 7', 8', 9', 10' and 11', so that the same may be readily folded into a bellows type bag. Reinforcing and stiffening tapes 20 and 21 are applied to the interior surface of the bag, the tape 20 being spaced a predetermined distance from the upper edge 13' of the blank, this distance depending upon the weight of the contents to be subsequently placed in the bag. The tape 21 is placed a predetermined distance from the lower edge 14' and extends parallel thereto. This bag is assembled in the same manner as the blank of Fig. 1, the overlapping portion 5' being united to the rear portion B' and the bottom then being closed preferably by pasting, although stitching or stapling may be used if desired. When this bag is assembled and filled it will have exactly the same appearance as the bag shown in Fig. 3 since the tape 21, in Fig. 2, performs the function of the overlap in Fig. 1.

The blank shown in Fig. 4 is the most inexpensive form of the three constructions since no tape is used and the bottom portion is composed of inexpensive material. In this embodiment the blank comprises a rear portion 30, side portion 31 and 32, front portion 33 and the side portion 34 and 35, there being an overlapping portion 36 connected to the portion 35. The bottom portion D is composed of relatively thin paper whereas the body portion is composed of thick paper and the bottom portion is overlapped a predetermined distance above the lower edge 44 so that a sharp corner results when the bag is assembled and filled, as shown in Fig. 5.

It will be noted that no tape is necessary as the lamination occurring at the bottom of the vertical portions will render the vertical portions adjacent the bottom relatively rigid. This blank is particularly adapted for the manufacture of small inexpensive bags.

From the foregoing it will be seen that I have provided a paper bag which has all of the outward appearances of a cardboard carton but which is cheaper to manufacture. It will also be noted that this result can be obtained by using a one-piece blank of stiff material in the manufacture of large bags and by using a two-piece blank in the manufacture of small bags.

It will be seen that the bottom folds which have heretofore presented a problem when using single ply stiff paper can be readily made since such folds are made in paper that is much thinner than the paper of the body portion.

Finally, it will be observed that I have provided a bag having smooth unbroken vertical walls with neat appearing sharp corners, thus increasing the sales appeal of a container made of the cheapest form of material.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the means and the steps herein disclosed, provided those stated by any of the following claims or their equivalent be employed.

I therefore particularly point out and distinctly claim as my invention:

1. A bellows-type bag having integral bottom, front, rear and side portions with said front, rear and side portions extending vertically and said bottom portion lying in a flat plane, extending substantially horizontally, the inner surfaces of the vertically extending portions only, of said bag, adjacent said bottom portion, having a lining of tape contacting and extending a predetermined distance above said bottom portion, from the plane of said bottom portion, said bag when filled, presenting sharply defined horizontal and vertical surfaces, said side portions being at right angles to said front and rear portions.

2. A bag having top, front, rear and side portions with said front, rear and side portions extending vertically and said top portion lying in a flat plane extending substantially horizontally, the inner surfaces of the vertically extending portions only of said bag adjacent said top portion having a lining of tape contacting and extending a predetermined distance downwardly from the plane of said top portion, whereby sharply defined horizontal and vertical surfaces are obtained, all of said portions comprising an integral piece of paper.

3. A bag having top, bottom, front, rear and side portions with said front, rear and side portions extending vertically and said top and bottom portions lying in flat parallel planes, extending substantially horizontally, the vertically extending portions of said bag adjacent said bottom portion being laminated a predetermined distance above said bottom portion and said vertically extending portions also being laminated adjacent said top portion a predetermined distance below said top portion, said laminations being formed, by applying a strip of paper tape to the interior of said bag, immediately above said bottom portion and by applying another strip immediately below said top portion, the lower edge of the bottom strip and the upper edge of the top strip lying respectively, in the planes of the bottom and top portions.

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