

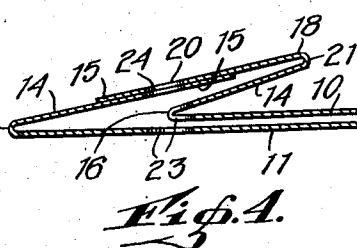
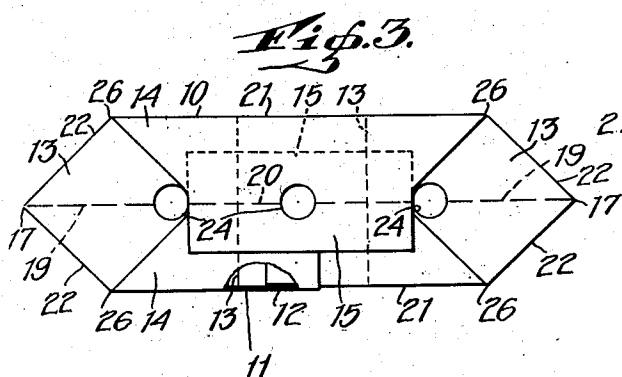
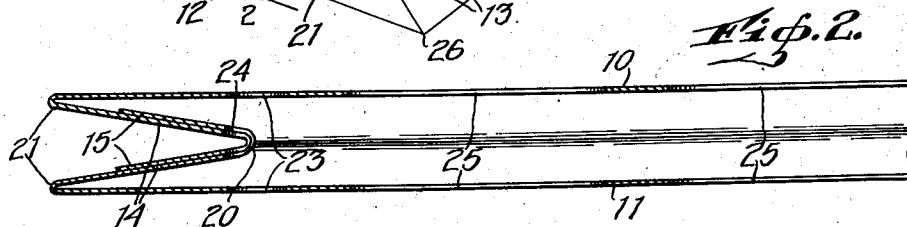
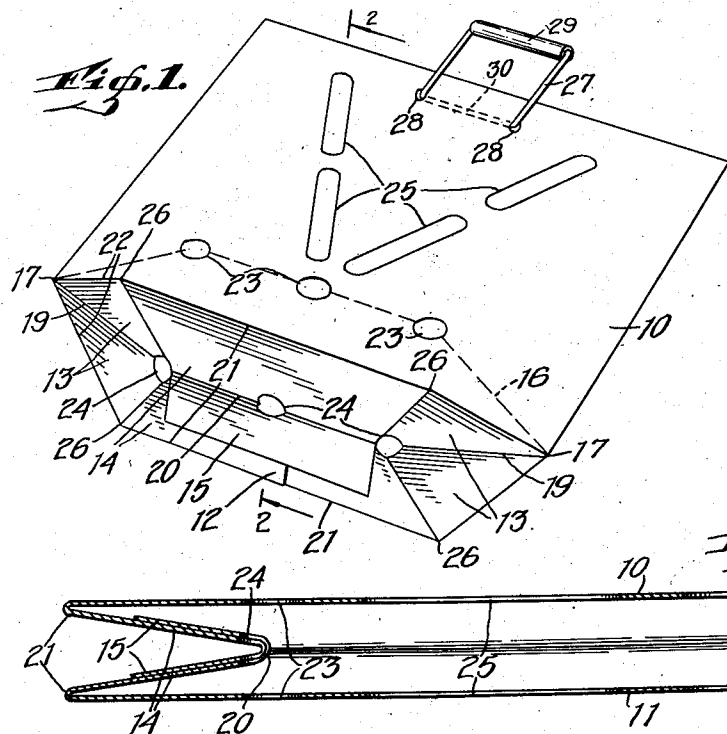
Nov. 28, 1944.

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2,363,971

VENTILATED SHOPPING BAGS AND THE METHOD OF CONSTRUCTING THE SAME

Filed July 1, 1943



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2,363,971

VENTILATED SHOPPING BAG AND THE
METHOD OF CONSTRUCTING THE SAME

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Application July 1, 1943, Serial No. 493,029

6 Claims. (Cl. 93—35)

This invention relates to shopping bags employed for supporting a plurality of independent articles or packages therein to facilitate the shopping problem and carrying of purchases. The object of the invention is to provide a paper bag structure having handles on the upper open end thereof with apertures or openings in the bottom and side walls of the bag, and extending to a point near the upper edge thereof. The further object being to so position the apertures or openings as to not materially weaken the bag structure while at the same time distributing the openings sufficiently to provide circulation of air throughout the entire bag structure. A still further object being to provide a simple method of producing bags of the kind under consideration by punching the apertures or openings in the bag when in an abnormally folded position.

These and other objects in view of the invention consist in a bag structure of the character defined, constructed in accordance with the method more fully hereinafter set forth.

Fig. 1 is a perspective view showing the bottom and one side of a bag with the bottom in extended position.

Fig. 2 is a diagrammatic sectional view substantially on the line 2—2 of Fig. 1, illustrating the method of punching or cutting the apertures or openings in the various wall portions of the bag.

Fig. 3 is a bottom plan view of the bag extended, illustrating the arrangement of the apertures in the bottom wall, with part of the construction broken away and in section and more completely illustrating the formation of the bottom wall of the bag; and

Fig. 4 is a view similar to Fig. 2, showing the normal folded position of the bag.

Shopping bags have been produced in many types and kinds, but for purposes of illustration, the present bag is of what might be called the short wall, or squatty type. These bags are made from a single sheet of paper folded and assembled in accordance with conventional practises to produce two side walls 10 and 11, the sheet having overlapped portions, as indicated at 12, note Fig. 3, which are glued together in forming the complete annular wall structure of the bag.

The bottom of the bag is formed by inwardly extending end bottom wall portions 13 which are glued to side bottom wall portions 14, the latter having overlapping tongue members 15 which are glued together.

The illustration in Fig. 4 of the drawing is diagrammatic in the sense that the overlapped parts of the side walls 12 are indicated as single wall

portions in order to simplify the illustration, and in Fig. 2, which represents abnormal folding of the bag in order to portray the method of producing the bag. The wall portions are shown in a spaced relationship for clarity, but it will be understood that in the piercing or cutting operation later described, the walls will be disposed one upon the other, and this operation will be performed on a number of bags in order to increase production.

In many instances the store-keepers are giving away bags of the kind under consideration for convenience to the shopper, and further in expediting the wrapping problem. This also dispenses with the use of other wrapping paper and tying cord, or with the use of conventional paper bag containers. In other words, the merchandise itself may be placed directly in the bag, and this is particularly true in purchases of fruits and vegetables, as well as other packaged or pre-wrapped goods.

Considering Fig. 1 of the drawing, it will be apparent that the wall 10 is scored to provide a fold 16 along the line joining the corners 17, so that part of the bottom of the bag, the part 18 shown in Fig. 4, rests upon the upper surface of the wall 10. This is the position assumed by the bag when shipped to the dealer or consumer. Folds or score lines 19 are provided in the end bottom wall portions extending from the points 17 to the side bottom parts 14, and these score or fold lines also extend through the parts 14 or the overlapped portions 15 thereof, as indicated at 20. This permits the bag to be folded in the manner indicated in Fig. 2, with all of the bottom wall parts arranged upon each other within boundaries of the side walls 10 and 11, with the lower folded side edges 21 of these walls arranged in common alinement, and with the bevelled edges 22 also in common alinement.

With the bag in the folded position described, and as diagrammatically shown in Fig. 2, the walls 10 and 11, as well as the walls 13, 15 are pierced to form in one operation three alined apertures 23 in the walls 10 and 11, near the lower edges 21 thereof, and three corresponding apertures 24 alined with the apertures 23 in the bottom wall of the bag. The central aperture being arranged in the parts 15, whereas the end apertures are primarily arranged in the wall parts 13.

In this same operation two pairs of divergingly arranged elongated apertures 25 are formed in the walls 10 and 11 to produce on these walls and in conjunction with the central aperture 23 on each wall, a substantial V formation. The elon-

gated apertures 25 spread over the major portion of the surface area of the side walls 10 and 11, particularly when the bag is in a normal filled condition, at which time, the width of the side walls 10 and 11 is defined by the corners 26, and not by the corners 17. In other words, an imaginary fold line takes place across the bottom of the bag between pairs of points 26 on each end portion thereof.

From the foregoing it will be apparent, particularly in considering Fig. 2 of the drawing that the apertures 24 are formed simultaneously in forming the apertures 23, and the location of the apertures 23 in the walls 10 and 11 will be such as to bring the center of these apertures in alinement with the folds 19—20, if it is desired to produce apertures 24 of the same form and size as the apertures 23.

In connection with shape and form of apertures, it will be apparent that the contour of these apertures may be varied to suit customer's requirements. However, from the standpoint of maintaining strength in the resulting bag, apertures of the general type and kind disclosed will be preferable.

In Fig. 1 of the drawing is indicated at 27 a handle member on the wall 10, this handle member comprises a cord looped through two apertures 28 in the upper portion of the bag, and having the ends anchored within a tubular sleeve 29, which may form the handle proper. Although in some uses the portion 30 is extended, and the sleeve 29 assumes the position of the portion 30 shown in Fig. 1. In some bags, handle cords are extended completely around the bag, and it will be apparent that the apertures 25 will facilitate threading of such cords around the bag in conventional manners, and will dispense with the necessity of adding other perforations.

With bags of the kind under consideration, it will be apparent that air will be free to circulate through the entire interior of the bag, through the side walls, as well as upwardly through the bottom wall. This will operate to preserve the contents of the bag, particularly in a long period of transportation or in any delay which may take place in the removal of the products from the bag. On the other hand, where large quantities of a certain vegetable, for example, potatoes are purchased, the potatoes may be retained in the bag until consumed, and the ventilated apertures will operate to keep the potatoes in proper condition during the storage period. This would also apply to other types and kinds of vegetables as well as fruits.

With the present construction it will be apparent that end wall portions of the bag are left solid and are unperforated, and as these walls are the walls which are usually strained in the packaging of merchandise in the bag, any tendency to rupture or tear the bag is dispensed with. The strains to which the side walls 10 and 11 are subjected is minimized, and unless sharp articles are carelessly placed in the bag to rupture the apertured portions of these walls, there should be no occasion for any difficulty in this regard.

In this connection it will be understood that the diverging elongated apertures produces what might be termed tapering wall portions, which will facilitate feeding of articles into the bag, and at the same time this arrangement of the apertures does not materially weaken the wall structure of the bag.

Having fully described my invention, what I

claim as new and desire to secure by Letters Patent is:

1. The method of producing ventilated shopping bags, which comprises folding the bottom wall portion of a shopping bag centrally and longitudinally to form thereof two halves and two disposed side walls in common alinement upon each other and upon said folded bottom walls, then perforating the lower portion of the side walls at spaced intervals, and simultaneously perforating folded portions of the bottom wall at the fold therein to form on the resulting bag apertures in the bottom and both side walls which are in common alinement.

2. The method of producing ventilated shopping bags, which comprises folding the bottom wall portion of a shopping bag centrally and longitudinally to form thereof two halves and two disposed side walls in common alinement upon each other and upon said folded bottom walls, then perforating the lower portion of the side walls at spaced intervals, and simultaneously perforating folded portions of the bottom wall at the fold therein to form on the resulting bag apertures in the bottom and both side walls which are in common alinement, and forming in said perforating operation other alined apertures in proposed walls only of said bag.

3. The method of ventilating paper shopping bags, which comprises piercing predetermined sections of superimposed wall portions of the bag when in flat position to form on the bottom and opposed side walls of the resulting bag spaced ventilating apertures, and forming the apertures in the bottom wall simultaneously in forming corresponding and alined apertures in said side walls.

4. The method of ventilating paper shopping bags, which comprises piercing predetermined sections of superimposed wall portions of the bag when in flat position to form on the bottom and opposed side walls of the resulting bag spaced ventilating apertures, forming the apertures in the bottom wall simultaneously in forming corresponding and alined apertures in said side walls, and forming other apertures in said side walls in diverging relationship to one of the last mentioned apertures in said side walls.

5. The method of ventilating paper shopping bags of the class described, which comprises arranging a predetermined number of bags one upon the other in registering alinement with bottom wall forming portions of each bag folded centrally and longitudinally, then piercing all of said bags through the side wall portions and through the folds of the bottom wall portions to form on the resulting bags openings in the bottom and side walls thereof in registering alinement with each other.

6. The method of ventilating paper shopping bags of the class described, which comprises arranging a predetermined number of bags one upon the other in registering alinement with bottom wall forming portions of each bag folded centrally and longitudinally, then piercing all of said bags through the side wall portions and through the folds of the bottom wall portions to form on the resulting bags openings in the bottom and side walls thereof in registering alinement with each other, and simultaneously forming on the side wall portions only of said bags, series of elongated apertures arranged in end to end relationship in each series.