Feb. 8, 1955 C. H. WEISHEIMER 2,701,680

CARRYING HANDLE AND CLOSURE FOR PAPER BAGS

Original Filed May 5, 1945

Fig. 1.

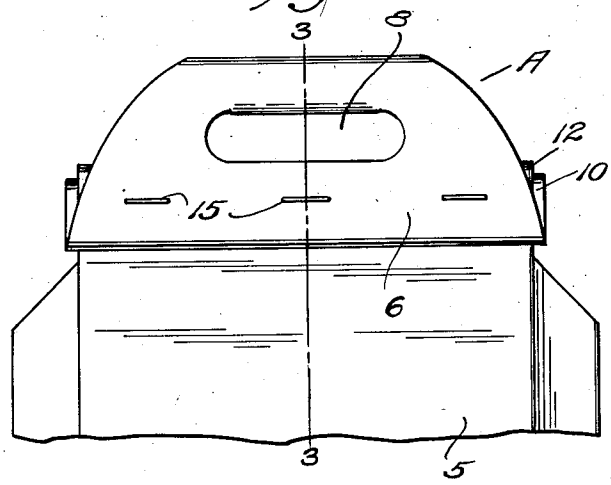


Fig. 2.

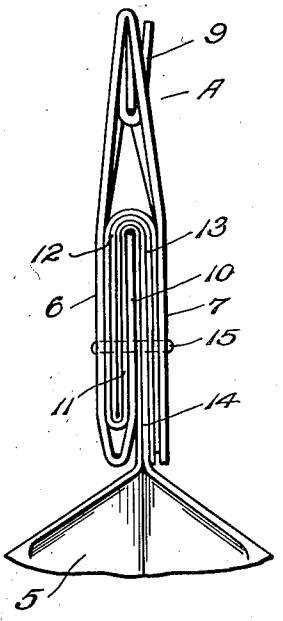


Fig. 3.

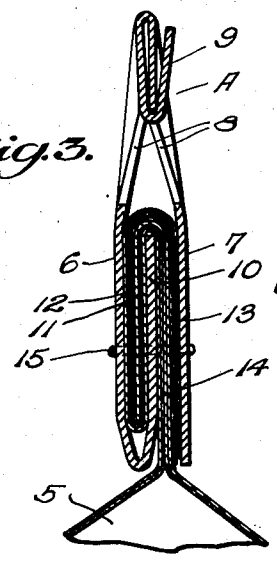
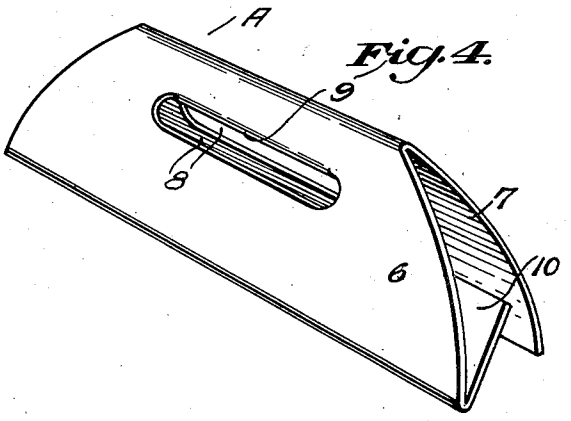


Fig. 4.



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CARRYING HANDLE AND CLOSURE FOR PAPER BAGS

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Substituted for abandoned application Serial No. 592,250, May 5, 1945. This application August 3, 1950, Serial No. 177,475

2 Claims. (Cl. 229—62)

The object of this invention is to provide a combined closure and handle member for bags or sacks, whereby through the use of said member, a bag containing fluent materials may be effectively closed and sealed and provision made by which the filled container may be conveniently handled and carried.

Wheat flour is now commonly packed and sold in paper bags containing five, ten and twenty-five pounds. Such bags are awkward and heavy for the customer to carry and the present invention has for another object to provide a handle member composed of a blank of paperboard material which is adapted to be folded in a manner to engage and grip the folds of the openable or upper end of the bag, in order to seal and close the upper end of the bag and provide multiple layers of folded materials by which the strength or carrying capacity of the bag is increased with the handle member maintained in the central or middle regions of the bag in proper weight distributing relationship therewith.

It is a further object of the invention to provide a handle member of economical construction and one characterized by its high mechanical strength.

This application is filed as a substitution for applicant's original application, Serial No. 592,250 filed May 5, 1945.

For a further understanding of the invention, reference is to be had to the following description and the accompanying drawing, wherein:

Fig. 1 is a fragmentary front elevational view of the upper portion of a paper bag provided with the combined closure and carrying member forming the present invention;

Fig. 2 is a side elevational view thereof on a somewhat larger scale;

Fig. 3 is a vertical sectional view on the plane indicated by the line 3—3 of Fig. 1;

Fig. 4 is a detail perspective view disclosing the closure and carrying member detached from the bag.

Referring more particularly to the drawings, the numeral 5 designates a common form of paper bag having side pleats or gussets and known as a bellows-sided type. This type of bag, when opened, presents a substantially square or rectangular appearance. Such bags are commonly used in the packing of fluent materials, such as wheat flour and the like. In order to close the end of such a bag, after the same has been filled, and to provide a convenient carrying means therefor, the present invention provides a handle member which is designated in its entirety by the letter A. The handle member is formed preferably from a single blank of a material such as paperboard. The exact nature of the sheet material of which my improved handle member is made will vary widely with the size and weight of the bag or other package with which it is associated. For small and relatively light packages, a heavy tough grade of paper may be used. For heavier packages, I may use advantageously different grades of paperboard or tag board. For still larger and heavier bags, fiberboard of the proper thickness can be employed. If desired, such materials may be reinforced with fabrics, or may have threads or strands incorporated in the paper itself, to give it the necessary strength.

The blank from which the handle member is formed is folded centrally to provide side walls 6 and 7. These walls are formed with aligned slots 8 for the reception of the fingers of a person carrying the bag, so that the upper region of the handle member may be gripped in

a convenient and secure manner. To reinforce this particular portion of the handle member, the wall 6 is formed with an inwardly and upwardly directed flap 9 which covers or surrounds the upper edge of the slot 8, in the side wall 7. By this arrangement, the upper part of the handle member comprises three thicknesses of material which provide a substantial body or gripping region, and one which will not be apt to cut into the fingers of one gripping the same. It will also be noted that the side wall 6 terminates at its lower edge in an upwardly and inwardly disposed securing extension 10, the latter being arranged between the walls 6 and 7.

In applying the handle member to a bag of the type disclosed in the drawing, the bag, after being filled, has its open upper end portion folded over the upper edge of the extension 10 and thence downwardly, as at 11, along the side of said extension, the same being then folded upwardly as at 12, the fold 12 lying immediately adjacent to the inner surface of the side wall 6. After forming the fold 12, the material of the paper bag is folded over the extension 10 and thence downwardly, as at 13, the fold 13 being positioned between the inner surface of the side wall 7 and the upwardly extending flat plies 14 of the bag. With the use of the securing extension 10, it will be observed that the handle member presents three wall thicknesses where it is joined with the bag, said thicknesses comprising the side walls 6 and 7 and the central extension 10.

In addition to these thicknesses of material, the bag itself is folded to present the four folds, indicated by the reference numerals 11, 12, 13 and 14, and it will be understood that each of these individual folds is composed of a multiplicity of paper plies from which the bag 5 is formed. These plies and folds are united by metallic staples or brads or other equivalent fasteners 15, which pass through all thicknesses of the joined materials, maintaining the same in relatively close and firmly united order. In this connection, it is within the scope of the invention to employ various cements or adhesives in uniting the inner-folded elements to maintain the same in tightly joined relationship. By this arrangement, the handle and closure member is disposed in the center or longitudinal middle region of the bag so that the weight suspended therefrom is equally balanced on both sides of the handle member. Due to the inclusion of the extension 10 of the handle member, the weight of the bag is concentrated largely on the upper edge of said extension, which, due to its height and rigidity, readily absorbs the applied stresses and relieves the staples or brads 15 of undue strain. A bag so formed is completely sealed, its contents will not sift out and furthermore the filled bag may be carried with maximum convenience.

If desired, the handle member may possess an outlined configuration resembling a motor vehicle, airplane or the like, so that when the handle is removed from the bag, it may be employed in the capacity of a toy for use by children.

I claim:

1. In combination with a paper bag having an open end, a handle member and closure for application to the open end of said bag, said handle member and closure comprising a blank of paperboard material folded longitudinally and medially thereof to provide spaced side walls, one of said side walls at its lower edge merging into an upwardly directed flap extension arranged vertically between said side walls, said flap extension being of lesser height than the folded handle member and being substantially coextensive with the length thereof, the material constituting the open end of said bag being extended upwardly to one side of said flap extension, turned over the upper edge thereof and directed downwardly to engage the opposite side of said flap extension, the said bag material being then folded and directed upwardly in engagement with the inner surface of one of said side walls and folded over the top of said flap extension and directed downwardly in engagement with the other of said side walls, whereby to provide a multiplicity of folds on each side of said flap extension, and mechanical fastening devices passing through said side walls, paper bag folds and said flap extension to fixedly unite the handle

member with said bag and close the open end of the latter.

2. In combination with a paper bag having an open end, a handle member and closure for application to the open end of said bag, said handle member and closure comprising a blank of paperboard material folded longitudinally and medially thereof to provide spaced side walls, one of said side walls at its lower edge merging into an upwardly directed flap extension arranged vertically between said side walls, said flap extension being of lesser height than the folded handle member and being substantially coextensive with the length thereof, the material constituting the open end of said bag being extended upwardly to one side of said flap extension, turned over the upper edge thereof and directed downwardly to engage the opposite side of said flap extension, the said bag material being then folded and directed upwardly in engagement with the inner surface of one of said side walls and folded over the top of said flap extension and directed downwardly in engagement with the other of said side walls, whereby to provide a multiplicity of folds on each side of said flap extension, and mechanical fastening devices passing through said side walls, paper bag folds and said flap extension to fixedly unite the handle member with said bag and close the open end of the latter, the side walls above said flap extension and paper bag folds being formed with registering slots for the reception of the fingers of one carrying the bag.

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