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PAPER OR LIKE BAG

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ABSTRACT OF THE DISCLOSURE

Paper or like bag with a double turned up bottom having a lip at its bottom edge to provide an improved sift proof bag.

This invention relates to bags made of paper, film, foil or other sheet material and includes laminations of any or all of these and the invention is applicable to flat and gusseted bags. The object of the invention is to provide a bag which has, as far as possible, a sift proof bottom.

According to this invention a paper or like bag comprises front and back panels, one panel of which (hereinafter called the front panel) is longer at the bottom than the other to provide a lip, a bottom portion of the said bag being formed by a first transverse fold line and a transverse area of adhesion uniting the said lip to the back panel to form a first turned up portion and a second transverse fold line above said first fold line and a second transverse area of adhesion between the said first turned up portion and said back panel to provide a double turned up portion at the bottom of the bag.

One form of this invention as applied to a gusseted bag, is illustrated in the accompanying drawing, wherein:

FIG. 1 is a perspective view of the bottom portion of the bag.

FIG. 2 is a transverse section of the bag.

FIG. 3 shows diagrammatically to an exaggerated scale a section of the end portion of the bag before folding.

FIG. 4 shows a section of the end portion of the bag after the first turned up portion is made.

FIG. 5 shows a section of the end portion of the completed bag.

Referring to the drawing, the bag comprises a front panel 2 and a back panel 3 in which panel 3 there is a longitudinal lap joint seam 5 made in the usual way. The sides of the bag are provided with gussets 6. The front panel 2 is longer than the back panel 3 at the bottom of the bag providing a lip 7. The bottom portion of the bag is provided with first and second transverse fold lines 8 and 9 and first and second transverse areas of adhesion 10 and 11.

In order to form the bottom of the bag the bottom portion is folded about the first fold line 8 and the lip 7 on the front panel 2 is adhered to the back panel 3 by the area of adhesion 10 providing a first turned up portion. This condition is shown in FIG. 4. The end por-

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tion of the bag is again folded about the fold line 9, preferably turning in upon itself the outer portion of the lip 7, and the first turned up portion adhered to the back panel 3 by the area of adhesion 11 providing a double turned up portion.

The manufacture of the bag length is carried out by conventional methods e.g., by providing the gussets in the web and forming the longitudinal seam in the usual way. Bag lengths are cut from the web so that the front panel of each bag is longer than the back panel at the bottom to provide a lip on the front panel. The advantage of this arrangement is that when the bag bottom is folded about the line 8 the lip is used to provide the first seal which by itself provides a closure against the loss of material contained within the bag. When the first folded end portion of the bag is folded about the line 9 and adhered this provides a second seal. Thus if the said first seal allows the material to pass, the said second seal and fold will prevent the material from leaking out. This distinguishes the invention from the case where there is no lip and a double folding and adhesion is provided. In such case the first adhesion only seals portions of the back panel together and ensures that first fold stays in position. It is the second adhesion which provides the positive seal against leakage. If a double positive sealing is required with a straight cut bag it is necessary to apply the adhesive between the inner surfaces of both front and back panels incurring a further adhering operation.

The top of the bag of course has a lip on the back panel necessitated by providing a lip on the front panel at the bottom of the bag and this feature is advantageous to facilitate filling the bag.

The areas of adhesion are usually made with glue but can be made with a heat sealable coating or other adherent.

What I claim and desire to secure by Letters Patent is:

1. In a sift proof paper or like bag comprising front and back panels having inner and outer faces, one panel of which hereinafter called the front panel is longer at the bottom than the other to initially provide an exposed lip, the bottom portion of the said bag being formed by a first transverse fold line and a transverse line of adhesion uniting an inner face portion of said exposed lip to the outer face of the back panel to form a first turned up portion, and a second transverse fold line above said first line and a second transverse line of adhesion respectively on the outer face of the back panel above the said first turned up portion; uniting the said first turned up portion to said second transverse line of adhesion forming a double turned up portion at the bottom of the bag.

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