March 1, 1949. H. C. ORCHARD 2,463,302

SATCHEL BAG HAVING REINFORCED SIDE WALLS AND HANDLE

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FIG. 1

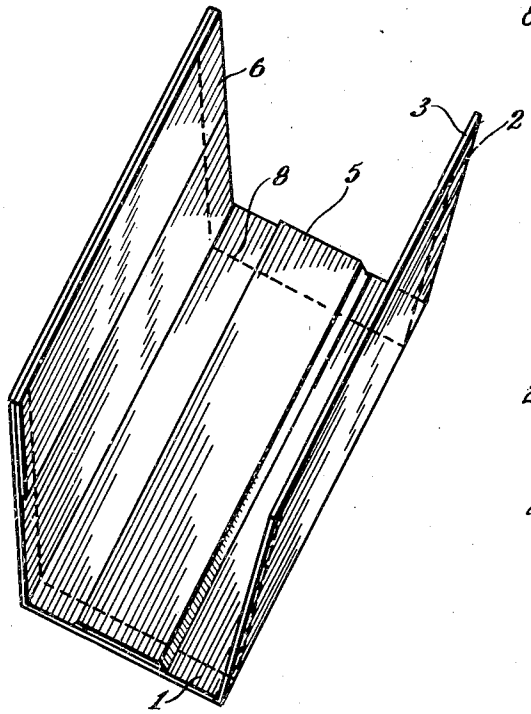


FIG. 3

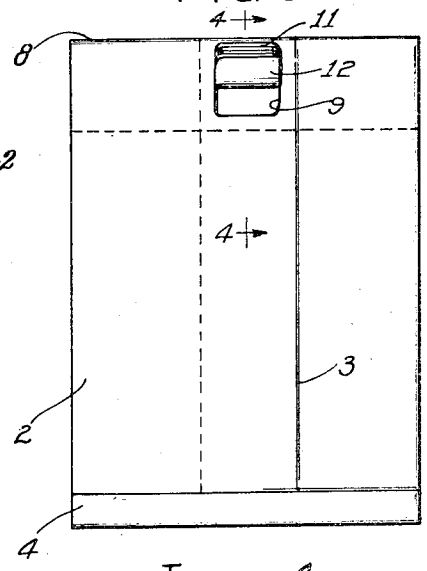


FIG. 4

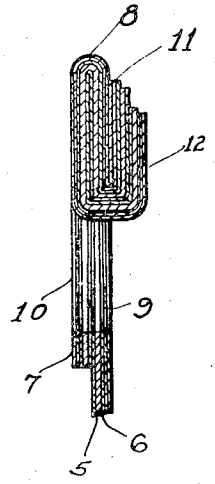
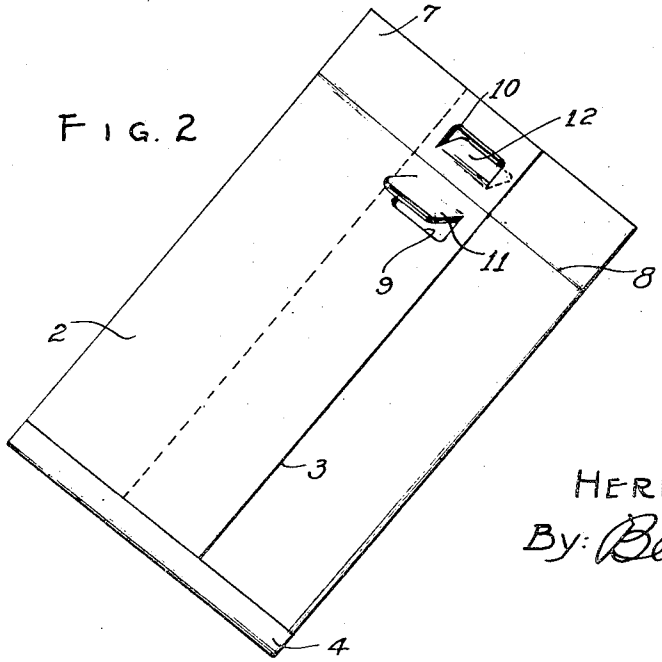


FIG. 2



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2,463,302

SATCHEL BAG HAVING REINFORCED SIDE WALLS AND HANDLE

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4 Claims. (Cl. 229—54)

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The invention relates to paper bags generally, but more particularly to paper bags of the carry-out type, and wherein the same are carried from adjacent the top of the bags.

My invention has among its objects to produce a bag of this type, sometimes called an envelope type of bag, that although having a median seam along one of its panels, said bag shall be so reinforced along its entire length as to build up both the front and rear panels to substantially equal strength as to load-carrying capabilities.

One of the principal objects of this invention is to so reinforce the seamed and the unseamed panels of the bag, that the reinforcing strip on the unseamed panel will be sufficiently heavier or stronger than the corresponding reinforcing strip along the seamed panel, that the resultant strength along the median width of both of said panels will be approximately equal.

A further object of my invention is to construct a paper bag of the kind described, that it will have registering finger-receiving apertures through the reinforced panels, and tongues struck out of said panels and foldably connected to an edge of each aperture, so that when all of the tongues are bent together as a unit and inserted through the registered apertures and thence brought upwardly against the exterior face of one of said panels, an extremely strong finger-receiving portion will thereby result, for carrying of the loaded bag, and with utmost comfort for the fingers.

An added object of this invention is to so construct the paper envelope bag of the kind described, that a foldable flap will be formed at the open end of each panel, whereby both flaps may be folded in unison, against one of said panels, to thereby close the open end of the bag.

A still further object of the invention is to provide a tongue and aperture in both of said flaps, these apertures registering with those preformed in the main body of the reinforced panels when the flaps are folded down against the one panel or the other, and so that when the tongues formed in said flaps are correlated with those of the panels, and all of these as a unit are inserted through all of the registered apertures and thence folded upwardly against one of the panels, the top of the bag will thus be closed to the extent required for such shopping purposes, and the flap tongues will add to the strength as well as the resultant comfort to the bag.

Additional objects of this invention are to provide a bag of the kind described, that is quite simple and inexpensive to make and use, neat in

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appearance and without having patches or the like that would tend to engage contents of the bag and thereby damage either the bag or said contents, extremely strong and sturdy throughout the load-carrying parts of the bag, of maximum comfort to the user while carrying the loaded bag, and which will be otherwise satisfactory and efficient for use wherever deemed applicable.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art to which this invention appertain, as will be more clearly apparent from the disclosures herein given.

To this end, my invention consists in the novel construction, combination and arrangement of parts herein shown and described, and the uses mentioned, as will be more clearly pointed out in the claims hereunto appended.

In the drawings, wherein like reference characters represent like or corresponding parts throughout the views,

Figure 1 is a perspective view of the bag blank before the hand-holes are formed, and showing the relative placement of the reinforcing strips;

Figure 2 is a perspective view of the finished bag, but with the tongues bent out of their normal plane;

Figure 3 is a plan view of the bag, ready for carrying; and

Figure 4 is a vertical cross-sectional view, taken substantially along the fragmentary line 4—4 of Fig. 3.

Referring more particularly to the drawings, wherein I have illustrated a preferred embodiment of my invention, there is shown a paper bag, used generally to carry out purchases from retail establishments, this type of bag being sometimes referred to as an envelope type of bag.

The body of the bag is most generally made of a single sheet of paper, and in the embodiment shown, is formed with a seam extending longitudinally of the bag and preferably arranged medially of the width of the bag, the seam edges overlapping so as to form a double thickness of material therealong of the desired width.

The bag is formed with the pair of opposed sides, faces or panels, 1 and 2, constituting the front and rear panels of the bag, and for the purposes of convenience the seamed panel is termed the rear panel.

The blank from which the bag is constructed is so shaped that the bag has a substantially rectangular outline, with said opposed panels 1 and 2 in registry, and with said rear panel provided

with said median longitudinal seam 3 of predetermined width and extending for the full length of the panels.

The bag bottom is formed by bringing the lowermost end upwardly and gluing or otherwise suitably adhering said folded portion against the outer face of said rear panel, to thus suitably close the bag, as indicated at 4.

Obviously, when the loaded bag is supported by its upper end, and approximately in the median of the bag width, the panel at its seam overlap is approximately twice as sturdy and strong in load-supporting capability as the other panel, as there is a double thickness of bag material along the seam.

I compensate for this difference in panel strength, in a novel manner, by building up the corresponding portion of the unseamed panel with a reinforcing strip, as will be more clearly hereinafter described.

However, I wish to strengthen and reinforce the rear panel 2 too, over and above its doubled strength as results from said seam overlap, and therefore apply reinforcing strips 5 and 6 to extend for the full length of the bag and of a width substantially equal to that of overlap at the seam, the strips 5 and 6 being glued or otherwise suitably adhered to the panel faces, preferably to the inside of the bag so as not to detract from the neatness in appearance of the bag. These paper strips are not short lengths or "patches," it is to be pointed out, and therefore there is no likelihood of their catching in the articles placed within the bag for carrying, and as a result there will be no damage to the bag or contents through such undesired interengagement between the bag and contents.

In order that both of the panels of the bag will be of equal strength as to load-carrying capabilities, and to so construct the bag to attain this result in a manner that is economical and commercially feasible on a regular production basis in the making of the bags, I so correlate these reinforcing strips that the built-up strength of the bags are substantially equal throughout the length of both the front and rear of the bag. To accomplish such a result, I use reinforcing strips 5 and 6 of unequal strength, the strip 5 that is adhered to the front panel being sufficiently stronger than the corresponding rear strip 6, as to compensate for the double thickness of bag material along said seam 3.

Therefore, although the rear panel of the bag is composed of the two thicknesses of seam overlap, plus the thickness of the reinforcing strip 6, thus making three thicknesses in all, the front panel has the same strength in the corresponding area as the rear panel, and is accomplished with but two thicknesses of material, namely the front panel itself and the reinforcement 5.

The type of paper bag herein shown is provided with a closure flap 7 at the upper or open end of one or both of the panels 1 and 2, foldably connected to the panel along the fold line 8 extending transversely across the full width of the bag, so that when the flap or flaps are folded downwardly, along said fold line, and brought against the exterior of one or the other of the panels, the open end of the bag will be then closed.

However, in order to maintain said flap closed, and to provide means whereby the bag may be conveniently and comfortably carried from adjacent the top of the bag, I have formed apertures 9 through the both panels and reinforcements

a predetermined distance below the said fold line 8, and of a size to permit one or more fingers of the person carrying the bag to be inserted therethrough, these apertures being in registry, of course.

A similar aperture is formed through the flap portion, as indicated at 10, said aperture being so arranged as to register with the apertures 9 when the flap is folded to bag closing position.

Tongues 11 and 12 are cut directly from the material of the reinforced bag, at the panels and flaps respectively, said apertures and tongues preferably being sufficiently smaller than the width of the seam overlap so as not to extend therebeyond. In other words, said apertures and tongues are provided in the strongest portions of the bag, preferably along the median width of the bag.

Said tongues are foldably connected at one edge to the corresponding bounding edge of said apertures, so that when the bag flap or flaps are folded downwardly, all of the tongues as a unit, may be bent or folded in one direction, through the registered apertures, and thence brought upwardly and pressed against the exterior face of the panel.

When the forefinger, or other fingers, are inserted through the tongues so folded after the flaps are folded to downward position, the fingers will maintain said tongues in place against the bag to interlock and prevent opening of the flaps, and what is most important, the many thicknesses of material along the fold lines of the tongues will make a nicely rounded fold line (or band) for engagement with the underside of said fingers. Obviously, such a grasp is extremely comfortable and adds to the desirability of the bag, and at the same time, makes for maximum strength against tearing of the bag through excess loading.

Insofar as interlocking is concerned, the tongues 11 might be dispensed with, but they do add to the strength of the bag for carrying when loaded, and most effectively add their thicknesses to the rounding of the folds of the combined tongues and make for increased comfort thereat for carrying.

Having thus described my invention, it is obvious that various immaterial changes may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, arrangement, construction and combination of parts herein shown and described, or the uses mentioned, except as limited by the state of the art to which this invention appertains, and the claims hereunto appended.

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

1. A paper bag comprising front and back panels, one of said panels having the material overlapped for substantially its entire length to form a centrally positioned double thickness portion in said panel, reinforcing strips of substantially the width of said overlapped portion and coextensive in length therewith adhered to said panels along its median width, the reinforcing strip secured to said overlapped panel being weaker than the other reinforcing strip so that both panels will be of approximately equal carrying strength, and means for carrying said bag from adjacent its upper end.

2. A paper bag of substantially rectangular shape and having a median longitudinal seam on one panel thereof for substantially the entire bag length, reinforcing strips of paper adhered to the

front and rear panels of the bag and of coextensive length and width as the seam overlap, the reinforcing strip secured to the unseamed panel being sufficiently stronger than the other to compensate for the seam overlap and make both panels of substantially equal load-carrying strength, finger-receiving apertures through both panels and reinforcing strips, and tongues struck up from the bag material at an edge of each aperture so that when said tongues are bent together through said apertures and brought upwardly against one panel the bag may be carried thereby.

3. A paper bag comprising front and back panels one of which has the material overlapped to form a longitudinally extending double thickness portion, and longitudinally extending reinforcing strips superimposed on both of said panels, one of said strips superimposed on said overlapped portion and substantially coextensive in length therewith, and the other reinforcing strip secured to the other panel and substantially coextensive in length therewith, said last-mentioned reinforcing strip being sufficiently stronger than the other reinforcing strip so that both panels of the bag thus reinforced will be of approximately equal carrying strength.

4. A paper bag having opposed front and rear panels, one of said panels having its side edges overlapped to form a longitudinal seam for substantially the length of the bag, a reinforcing strip of paper secured to said last-mentioned panel and of substantially coextensive length and width as said seam overlap, and a second reinforcing strip secured to the other panel and of substantially equal length therewith, said last-mentioned reinforcing strip being sufficiently stronger than the first reinforcing strip to compensate for the bag material in the seam overlap and to make both panels of the bag of substantially equal load-carrying strength.

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