March 25, 1930.

W. H. DEUBENER

PAPER SHOPPING BAG

Filed Aug. 17, 1928
The object of this invention is to make an improved durable paper shopping bag and one capable of being very economically manufactured and such as can be used by the masses in carrying groceries and the like and especially furnished by the chain store distributors of groceries and the like.

The chief feature of the invention consists in securing to each side of the open end of a paper bag capable of being folded a handle substantially D-shaped and formed primarily of compound corrugated paper board and preferably with the corrugations extending vertically, that is, longitudinally of the bag.

The handles can be reinforced if desired with a cloth covering or wrapping in the upper part thereof for the reasons hereinafter stated.

This shopping bag is so readily and economically made that it can be used by the poorest people as well as by the middle classes of people and it has unusual strength. The handles, although made of paper, are so made that they will not break in practical use. The surface thereof secured to the bag is relatively so great that it will not separate from the bag. The connection of the handles to the bag is so strong and durable that, if any break does occur, it will be in the bag below the handles, that is, the entire upper part of the bag will be torn away before the handles will separate from the bag.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings Fig. 1 is a perspective view of the bag in its perfected entirety. Fig. 2 is a side elevation of the upper portion of the bag with the remainder broken away and a surface layer at the upper part of the handle also broken away. Fig. 3 is a central vertical section taken on the line 3—3 of Fig. 2. Fig. 4 is a central vertical section of one side of the upper part of the bag and with modified cloth-covered handles secured thereto. Fig. 5 is a perspective view of a portion of a modified form of bag and handles.

The invention consists primarily of the paper bag 10 and a D-shaped handle 11 secured to each side of the mouth of the bag and made preferably of compound corrugated paper board as shown. The paper bag herein shown is of a type in common use. It is a folded bag so that when not in use it collapses to a perfectly flat condition and a large number of the bags can be packed or shipped one upon the other in very compact form. The ends have a folded or accordion-like section 110 capable of being collapsed or folded together or spread when the bag is opened or filled. The invention is not limited to the particular form of the bag.

The bag is provided with two similar parallel handles 11, one secured and preferably to the inner surface of each side of the bag near the top thereof. Each handle is substantially D-shaped in form, as shown in Fig. 2, and thus consists of a lower horizontal base portion secured by adhesive material 14 to the side of the bag, and a handle portion integral therewith and extending upwardly therefrom. One feature of the invention is the great extent of surface of the base portion 112 which is adhesively secured to the side of the bag and which, therefore, gives an unusually large handle surface united with the bag so as to make a very strong connection of the handle with the bag. The adhering surface of the handle can be increased by increasing the dimensions of the base 112 of the handle and especially increasing the length thereof beyond the upper portion of the handle by either or both of the extensions shown in Fig. 2 and to the desired length beyond the limit 100.

The handle is stamped out of the material of which it is composed so as to provide an opening through the upper and lower portions of the handle suitable for inserting the hand or fingers of the hand comfortably, and the width of the upper portion of the handle is sufficiently great to give it ample strength for supporting the load without tearing or breaking. To this end the handle is made of corrugated paper board of a compound character common in the market for various purposes and consisting of an internal corrugated layer 111 secured by adhesive material to the sides or cover portions consisting of plain sheets of paper as shown. The cor-
ruggations in said handle preferably extend vertically throughout both the lower or base portion 111 and the upper handle portion, as shown.

Since the corrugations in the handle and the stress or strain of the load or the lift are longitudinal of the paper bag, or vertical, a very strong and durable handle construction is afforded. The corrugations stiffen the base portion of the handle 112 in its connection with the sides of the bag and tends to maintain said parts in absolutely rigid condition. Likewise, the corrugations in the upper part of the handle aid materially in maintaining the rigid condition of the handle under a load. The handle will not collapse under load or crumple or wad up, but will retain its form in use with any load that the bag itself will withstand due to the corrugated and reenforcing construction of this type of handle.

One feature of the corrugated board handle, which might be formed in similar board material, is a sort of resiliency or slight compressibility together with considerable bulk permitting the formation of a comfortable grip having adequate strength.

When the bag is loaded and is being lifted or carried, it is in the form shown in Fig. 1 with the two handles parallel and adjacent to each other so as to be grasped by the fingers of one hand. This makes the preferred construction suitable for nearly every person and every sort of use. If it be preferred to cover the exposed edges of the handle made of corrugated paper board, the upper or the hand-held part thereof is covered by a layer of cloth 13, as shown in Fig. 4. That is a modified form and serves to make a smooth handle without exposed edges and such as to protect the corrugations and edges of the paper board from being affected by moisture from the hands so as to soften or yield to any extent.

In the modified form of the invention shown in Fig. 5, the D-shaped handle per se is substantially the same as hereinbefore described and is similarly numbered. The bag has its top edge 210 folded as at 211 to form a loop 212 and the hem 213 is pasted down upon bag to form a mouth. The D-shaped handle has its loop portion 111—112 extending beyond the bag through a slot 214 formed at the fold or adjacent the same. The handle elongated beyond 100 as at 14 and lying in loop 212 engages the fold 211 and is anchored thereby. However, the base 212 including extensions 14 may be adhesively secured by the hem 213 and also covered thereby.

The invention claimed is:

1. A paper shopping bag including a paper bag with its upper end open, and bulky D-shaped handles, each including but a single layer piece of corrugated paper board having the desired resiliency and compressibility therein, said handles being adhesively secured to the opposite sides of the bag at the upper end thereof, the corrugations in the board extending longitudinally of the bag and the base portion of the handle being adhesively secured to the bag side and being longer than the remainder of the handle and extending laterally thereof to increase the securing surface, the upper end of the bag having an integral hem with a slot therein adjacent the fold, the D-portions of the handle extending through and projecting beyond the slot and the base portion being included within the hem, the lateral extension of the base portion interlocking with the hem fold, and the hem being secured to the upper end of the bag in hem formation and to the handle base.

2. A paper shopping bag including a paper bag with its upper end open, bulky D-shaped handles each formed of corrugated paper board having the desired resiliency and compressibility therein, said handles being adhesively secured to the opposite sides of the bag at the upper end thereof, each handle having its corrugations extending longitudinally of the bag and being exposed at the handle end, and a cloth covering for the upper portion of each of said handles, the base portion of the handle being longer than the remainder of the handle and extending laterally thereof for increasing the securing surface of the handle, the upper end of the bag having an integral hem with a slot therein adjacent the fold, the D-portions extending through and projecting beyond the slot, the base portion being included within the hem with the lateral extension of the base portion interlocking with the hem fold, said hem being secured to the upper end of the bag in hem formation and to the handle base anchor ing the handle to the bag.

In witness whereof, I have hereunto affixed my signature.

WALTER H. DEUBENER.