April 9, 1940. D. BELCHER 2,196,184

CARRYING HANDLE FOR CONTAINERS

Filed Feb. 5, 1935 2 Sheets-Sheet 1

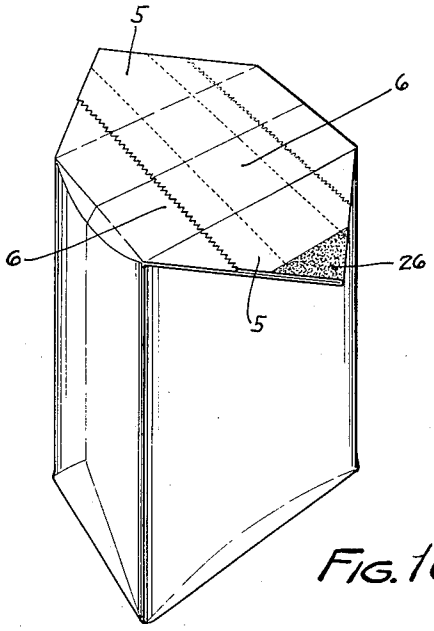


FIG. 10

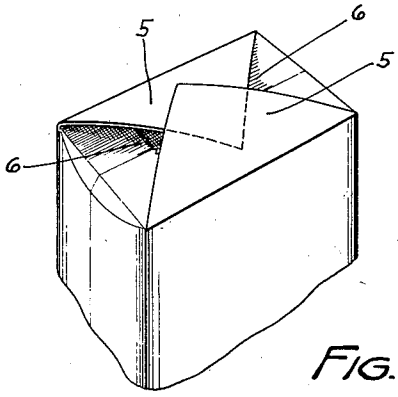


FIG. 8

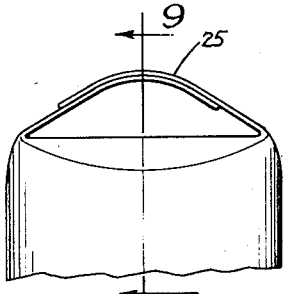


FIG. 9

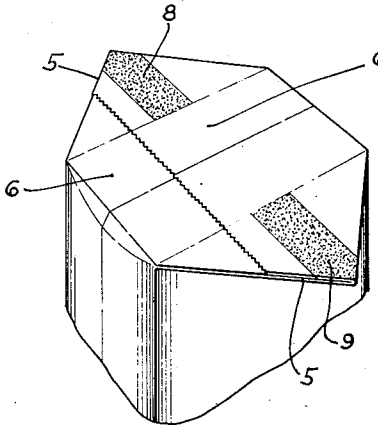


FIG. 3

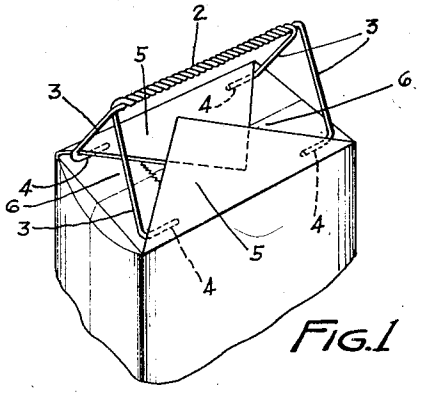


FIG. 1

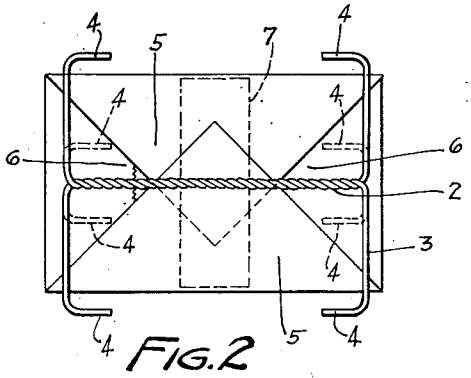


FIG. 2

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CARRYING HANDLE FOR CONTAINERS

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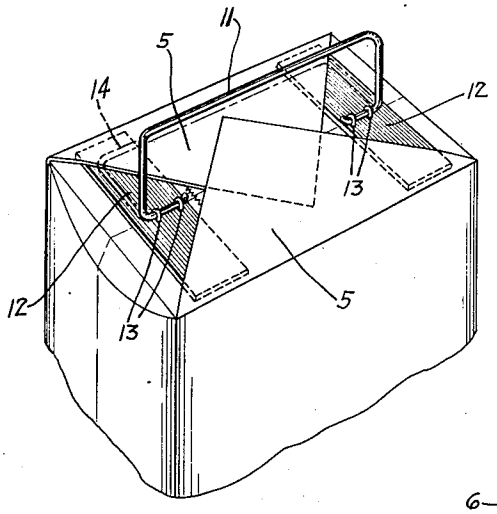


FIG. 4

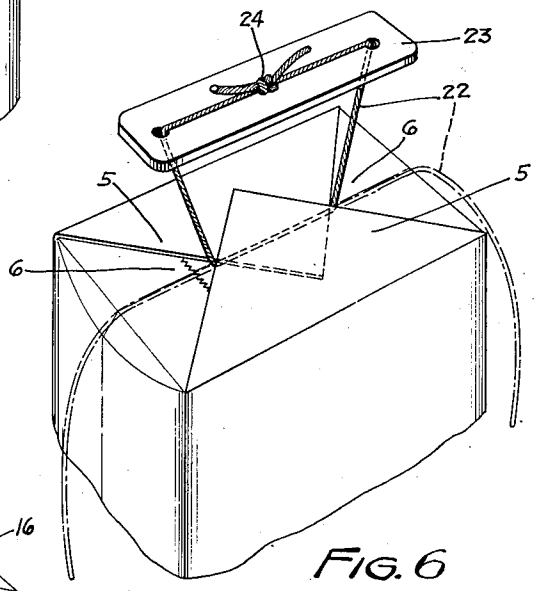


FIG. 6

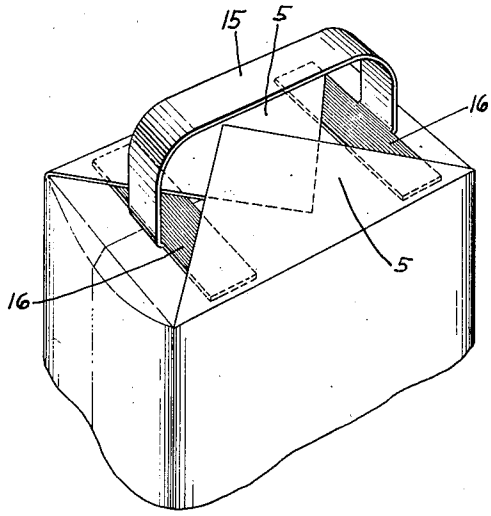


FIG. 5.

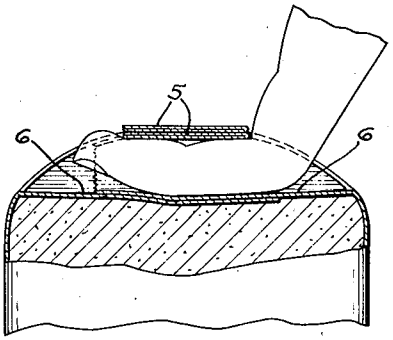


FIG. 9

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UNITED STATES PATENT OFFICE

2,196,184

CARRYING HANDLE FOR CONTAINERS

Daniel Belcher, Minneapolis, Minn., assignor to Bemis Bro. Bag Co., Minneapolis, Minn., a corporation of Missouri

Application February 5, 1935, Serial No. 5,965

6 Claims. (Cl. 229—54)

This invention relates to new and useful improvements in bag top closures and more particularly to a novel means for facilitating carrying a bag.

Small paper bags usually have their top wall portions suitably folded and secured together to seal the bag top. When the bags are thus sealed, they are rather inconvenient to carry or grasp because there is nothing on the bag body, whereby it may be conveniently grasped. It is therefore desirable that means be provided in connection with such a bag closure, whereby the bag may be conveniently grasped and carried in a convenient manner.

An object of the present invention, therefore, is to provide in combination with a bag closure, a carrying handle which may or may not be permanently secured thereto, and which is so disposed that it may be conveniently grasped to thereby facilitate carrying the container or bag.

A further object is to provide a carrying handle particularly applicable for use in connection with the bag top closures of the character disclosed in the patent to William J. Geimer, No. 1,833,675, wherein the top wall portions are folded inwardly over the bag body, one over the other, and suitably secured thereto by such means as gumming.

A further object is to provide a carrying handle of a suitable resilient material having projections adapted to be inserted between the folded top wall portions of the bag closure, thereby to detachably secure the handle to the bag body.

Other objects reside in the particular manner in which the bag top walls may be folded, whereby said wall portions or flaps may, in themselves, provide a suitable carrying handle; in the provision of a suitable cord interposed between the folded wall portions of the bag top during the operation of closing and sealing the bag, whereby said cord is permanently secured to the bag top, and the free ends may be suitably tied together to thereby provide a carrying handle; in the provision of a handle formed from a suitable spring wire comprising a plurality of resilient legs having inwardly turned terminals, adapted to be inserted between the folded wall portions of the sealed bag top, by simply bending or flexing said resilient legs, thereby to detachably secure the handle to the bag body; and in the provision of a simple and inexpensive handle which may readily be attached to a commercial type of bag closure.

Other objects of the invention will appear from the following description and accompanying drawings and will be pointed out in the annexed claims.

In the accompanying drawings, there have been disclosed structures designed to carry out the various objects of the invention, but it is to be understood that the invention is not confined to the exact features shown as various changes may be made within the scope of the claims which follow.

In the drawings:

Figure 1 is a perspective view of the upper portion of a bag top showing a handle detachably secured thereto;

Figure 2 is a top view of Figure 1, showing in full lines the position of the legs and terminals of the handle, when in normal expanded positions, and showing in dotted lines, the position of the terminals when inserted between the folded top wall portions of the bag;

Figure 3 is a perspective view showing the bag top partially closed, the shaded or stippled portions indicating the surfaces which are gummed to secure the side wall portions in sealing relation;

Figure 4 is a perspective view showing a carrying handle of slightly modified construction, in which suitable plate-like elements are pivotally secured to the terminals of the handle and adapted to be inserted between the folded wall portions of the bag top to attach the handle thereto;

Figure 5 is a view showing still another form of handle in which the latter is made out of sheet metal having plate-like end portions adapted to be inserted beneath the wall portions of the bag top, thereby to secure the handle to the bag;

Figure 6 shows another form in which a cord is secured between the folded wall portions of the bag top during the operation of closing the same, and the ends of which may be secured to a suitable handle member, as shown;

Figure 7 is a view showing certain wall portions of the bag top folded to provide a carrying handle;

Figure 8 is a perspective view of the top of the bag shown in Figure 7;

Figure 9 is a cross-sectional view on the line 9—9 of Figure 7, showing a finger engaged with the handle; and

Figure 10 is a perspective view of a bag showing the top wall portions thereof, partially folded into closing relation, and which differs from the form shown in Figure 3 in that the side wall portions which are folded against the end wall portions are not secured thereto by gumming.

The carrying handle shown in Figures 1 and 2 is formed of two pieces of spring wire suitably twisted together to provide a grip or handle portion 2 having a plurality of resilient legs 3, each of which is provided with an inwardly turned projection or terminal 4, adapted to be inserted beneath the side wall portions or flaps 5 of the closed bag top. In the bag top, shown in Figures 1 and 2, it is to be understood that the side wall flaps 5 are secured to the end walls 6 at the intermediate portion of the bag, by a suitable gum, indicated by the dotted lines 7 in Figure 2, and the shaded portions 8 and 9 in Figure 3. By thus gumming and securing the bag top walls in sealing relation, the projections 4 of the handle 2 may be inserted beneath the ungummed portions of side walls or flaps 5, as clearly illustrated in Figure 1. To insert the projections 4 beneath the wall portions 5, the legs 3 of the handle are pressed together, as indicated by the dotted lines in Figure 2, and they are then released and allowed to expand to the position shown in Figure 1, thereby detachably but firmly securing the handle to the bag top.

Figure 4 illustrates another construction in which the handle 11 is provided with plate elements 12—12, the ends of which are adapted to be inserted beneath the side wall portions 5, as illustrated, thereby to detachably secure the handle to the bag top. The handle is preferably secured to the plate members 12 by suitable staples 13, whereby it may be folded downwardly against the bag top, as indicated by the dotted lines 14. The handle 11 is preferably made from a suitable spring wire, whereby it may readily be flexed to permit the ends of the plate elements 12 to be inserted beneath the ungummed portions of the side walls 5 of the bag top.

In Figure 5, there is shown a handle member formed from a single piece of sheet metal suitably formed or shaped to provide a handle 15 having plate elements 16 adapted to be inserted beneath the top wall portions of the bag top in a manner similar to the plate elements 12, shown in Figure 4. The handle shown in Figure 5 is made from a suitable spring metal, whereby it may readily be flexed to permit the plate elements 16 to be inserted between the folded top wall portions of the bag top.

The handle shown in Figures 1, 4, and 5, may readily be attached to the commercial form of bag closure shown in these figures, and in which the folded top wall portions are gummed and secured together in the usual manner. In other words, the handle shown in Figures 1, 4, and 5, does not necessitate any special operations in the operation of closing and sealing the bag top, as they may readily be attached to bags of this particular type now in commercial use.

Figure 6 shows another form in which a suitable cord 22 is inlaid between the end and side wall flaps of the bag top when the latter are folded into closing and sealing relation, whereby said cord becomes permanently secured to the bag top. To provide a carrying handle, the ends of the cord 22 may be passed through apertures in a suitable hand grip 23 and tied together, as indicated at 24, whereby a convenient grip is provided. In some instances, it may be found desirable to omit the grip portion 23 and simply tie the ends of the cord together, whereby a suitable loop is provided, through which a finger may be inserted for carrying the bag.

Figures 7, 8, and 9 illustrate a construction in which the side flaps 5 of the bag top are so folded and secured together, so as to provide a carrying handle 25 in themselves, best shown in Figure 7. To provide the carrying handle 25 shown in Figure 7, only one of the side flaps or wall portions 5 is gummed, as shown at 26 in Figure 10, whereby when the ungummed flap or wall portion 5, shown in the upper portion of Figure 10, is folded over against the top of the bag body, as in Figure 8, it will not be secured thereto. The gummed flap 5 is then folded over the ungummed flap whereby the gum 26 will secure together said flaps in such manner that they may be separated from the lower or end wall portions 6—6, as best shown in Figures 7 and 9, and thereby provide a handle adapted to be engaged by the fingers, as illustrated in Figure 9.

The form shown in Figures 7, 8, and 9 does not require additional means to provide the carrying handle, said handle being formed by gumming and folding the side wall portions, as hereinbefore described.

The novel handle herein disclosed is very simple and inexpensive and provides means, whereby paper bags containing flour, and other comminuted materials, may be conveniently carried or transported from place to place, without having to grasp the body thereof, which, in the larger sizes of bags, is quite difficult.

The forms of handles shown in Figures 1, 4, and 5, as hereinbefore stated, do not require that any special or added operations be performed in the operation of closing and sealing the bag tops, but are constructed in such a manner that they may be quickly attached to a commercial type of bag of the character herein disclosed, and when once secured thereto, cannot readily become detached therefrom, without expanding or flexing the main handle portion. This is of particular advantage in that the handles may be used or not, as desired, and need only be attached to a bag, when a customer requests it. In the form shown in Figure 6, the carrying means is embodied in the construction of the bag top, when the top wall portions of the bag are closed and folded into sealing relation, and remain a permanent part of the bag until the latter is opened.

I claim as my invention:

1. The combination with a bag made of flexible foldable material and comprising a plurality of walls cooperating to provide the body of the bag and having portions forming the walls of the bag mouth, oppositely disposed walls of the bag mouth being folded inwardly over the contents of the bag body in overlapping relation and suitably secured together, whereby the remaining bag mouth walls provide oppositely disposed flaps, which flaps are subsequently folded into closing relation over said first-folded wall portions and suitably secured together to complete the sealing of the bag mouth, of a carrying handle comprising oppositely disposed resilient legs having terminals adapted to be inserted between ungummed portions of said first folded bag mouth walls and said flaps, when said legs are flexed, thereby to detachably secure the handle to the closed bag top.

2. The combination with a bag made of flexible foldable material and comprising a plurality of walls cooperating to provide the body of the bag and having portions forming the walls of the bag mouth, oppositely disposed walls of the bag mouth being folded inwardly over the contents of the bag body in overlapping relation and suitably secured together, whereby the remaining bag mouth walls provide oppositely disposed

flaps, which flaps are subsequently folded into closing relation over said first-folded wall portions and suitably secured together to complete the sealing of the bag mouth, of a carrying handle comprising a plurality of resilient legs having inwardly projecting terminals adapted to be inserted between ungummed portions of said first-folded wall portions and said flaps, from opposite sides of the bag top, thereby to secure the handle to the closed bag top.

3. The combination with a bag made of flexible foldable material comprising a plurality of walls cooperating to provide the body of the bag and having portions forming the walls of the bag mouth, oppositely disposed walls of the bag mouth being folded inwardly over the contents of the bag body in overlapping relation and suitably secured together, whereby the remaining bag mouth walls provide oppositely disposed flaps, which flaps are subsequently folded into closing relation over said first-folded wall portions and suitably secured together to complete the sealing of the bag mouth, of a carrying handle constructed of spring wire and comprising a handle portion having a pair of resilient legs at each end extending downwardly and outwardly from the handle portion, and said legs having offset terminals disposed in substantially parallel relation to the handle and adapted to be inserted between portions of said first-folded bag mouth walls and said flaps, thereby to detachably secure the handle to the closed bag top.

4. The combination with a bag made of flexible foldable material comprising a plurality of walls cooperating to provide the body of the bag and having portions forming the walls of the bag mouth, oppositely disposed walls of the bag mouth being folded inwardly over the contents of the bag body in overlapping relation and suitably secured together, whereby the remaining bag mouth walls provide oppositely disposed flaps, which flaps are subsequently folded into closing relation over said first-folded wall portions and suitably secured together to complete the sealing of the bag mouth, of a carrying handle for the bag comprising a grip portion having a pair of resilient legs at each end, and the legs of each pair extending downwardly and outwardly from the grip portion and having their lower ends provided with offset terminals, the terminals of one pair of legs facing the terminals of the other pair of said legs, whereby said terminals may be inserted between said first-folded bag mouth walls and said flaps, when said legs are inwardly flexed, the tension in said legs causing said terminals to move outwardly into operative positions beneath ungummed portions of the closed bag top walls.

5. A carrying handle for a container comprising a grip portion having a pair of resilient legs at each end extending downwardly and outwardly from said grip portion and provided at their lower ends with offset terminals, the terminals of one pair of legs facing the terminals of the other pair of said legs, said terminals being adapted to be inserted between folds of a closed bag top, thereby to detachably secure the handle thereto.

6. A carrying handle for a bag comprising wire elements suitably coiled together to provide a grip portion, and the end portions of said wire elements being bent at right-angles to said grip portion and forming resilient legs capable of being readily flexed, and said legs having terminals adapted to be inserted between folds of a closed bag top, thereby to detachably secure the handle to the bag top.

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