Dec. 4, 1962 K. W. DOMIGAN 3,066,846

BAG CLOSER

Filed June 9, 1960

Fig. 1

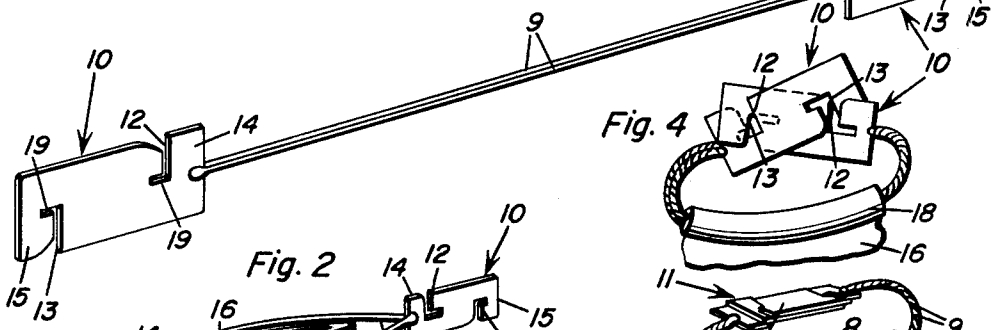


Fig. 2

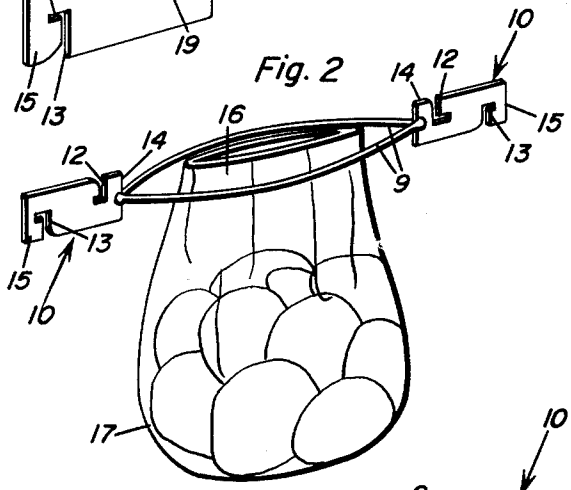


Fig. 3

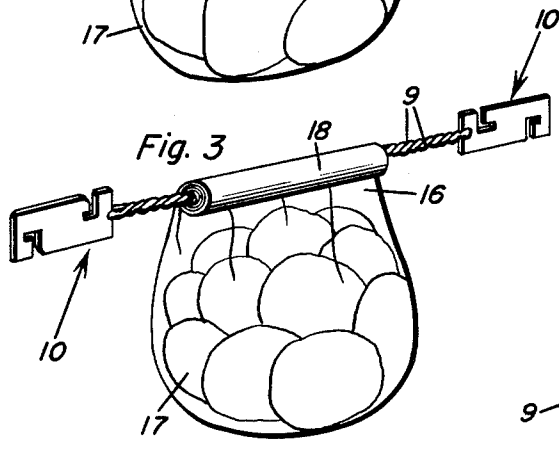


Fig. 4

Fig. 5

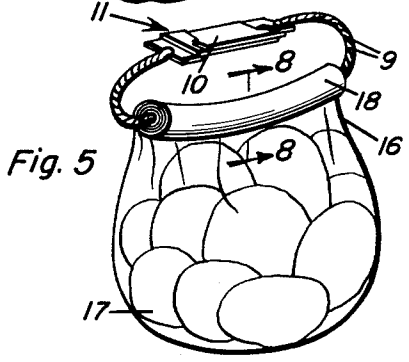


Fig. 6

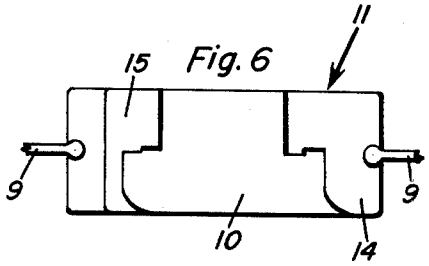


Fig. 7

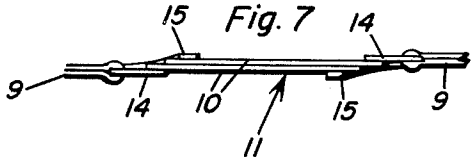
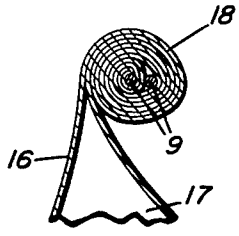


Fig. 8



Kenneth W. Domigan

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

United States Patent Office

3,066,846
Patented Dec. 4, 1962

3,066,846

BAG CLOSER

Kenneth W. Domigan, Fairborn, Ohio, assignor to Whirl-A-Seal Corporation, Middletown, Ohio, a corporation of Ohio

Filed June 9, 1960, Ser. No. 34,954
4 Claims. (Cl. 229—63)

This invention relates to new and useful improvements in closers particularly, although not necessarily, for bags of cellophane, polyethylene, etc., and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character which is adapted to both seal the bag and provide a convenient, comfortable carrying handle therefor.

Another very important object of the present invention is to provide a combined sealer and carrying handle of the aforementioned character which may be expeditiously applied to and removed from bags of various sizes.

Still another very important object of the invention is to provide a bag sealer and carrying handle of the character described which may be used on bags which have been substantially filled or only partially filled.

Another object of the invention is to provide a bag sealer and carrying handle which, if desired, may be re-used.

Other objects of the invention are to provide a bag sealer and carrying handle which will be comparatively simple in construction, strong, durable, of light weight and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a bag sealer and carrying handle constructed in accordance with the present invention;

FIGURE 2 is a perspective view, illustrating the first step in applying the device to a bag to be sealed;

FIGURE 3 is a perspective view, showing the second step;

FIGURE 4 is a perspective view, showing the connecting tabs or plates being interlocked to provide a handle;

FIGURE 5 is a perspective view, showing the device after its application to the bag has been completed;

FIGURE 6 is a top plan view of the handle;

FIGURE 7 is a view in side elevation thereof; and

FIGURE 8 is a view in transverse secion on an enlarged scale through the top portion of the bag, taken substantially on the line 8—8 of FIGURE 5.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a pair of thin, flexible strands 9 of wire or other suitable material. Of course, the strands 9 may be of any desired length. Secured in any suitable manner between the end portions of the strands 9 is a pair of elongated, bendable plates or tabs 10 of metal, plastic or other suitable material.

The tabs 10 are adapted to be interlocked in a manner to detachably connect the ends of the strands 9 and to provide a carrying handle 11. Toward this end, the tabs 10 are provided in their end portions with angular inner and outer slots 12 and 13, respectively, the inner end portions 19 of which, it will be noted, extend toward the free or outer ends of said tabs. The slots 12 and 13, which extend into the tabs 10 from the opposite longitudinal edges thereof, define inner and outer interlocking hooks or the like 14 and 15, respectively.

It is thought that the use of the device will be readily apparent from a consideration of the foregoing, taken in conjunction with the drawing. Briefly, the strands 9 are bowed outwardly as shown in FIGURE 2 of the drawing for receiving therebetween the neck portion 16 of a bag 17 to be sealed. The strands 9 are then drawn taut or straightened on the bag neck. The tabs 10 are then turned or twirled for twisting the strands 9 and folding or rolling the neck portion 16 of the bag (see FIGURE 3). The roll 18 thus formed closes and seals the bag in an obvious manner. The tabs 10 are then brought upwardly and inwardly over the bag and positioned angularly on each other substantially as shown in FIGURE 4 of the drawing to bring the slots 12 and 13 into opposed relation. With the end portions of the uppermost or top tab engaged under the corresponding portions of the lower or bottom tab, said tabs are turned in opposite directions relative to each other to bring said tabs into parallelism. Thus, the tabs are engaged with the inner ends of the slots 12 and 13. The tabs 10 are then moved longitudinally outwardly relative to each other for engagement in the longitudinally extending inner end portions 19 of the angular slots 12 and 13. Of course, to separate the tabs 10 and open the bag 17 the foregoing procedure is substantially reversed. The device may be readily applied to partially filled bags as well as to those which have been substantially filled. With the tabs 10 connected to provide the carrying handle 11 the strands 9 are prevented from untwisting and the neck portion of the bag from unrolling.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A bag closer comprising a pair of flexible, parallel wires for receiving the neck portion of a bag therebetween and adapted to be twisted together for rolling and closing said neck portion, and a pair of opposed, duplicate, flat, rectangular resilient plates mounted longitudinally on the ends of the wires, said plates having in their end portions angular slots extending transversely thereinto from the opposite longitudinal edges thereof and terminating in longitudinal inner end portions and providing hooks, the hooks of each plate being transversely and then longitudinally slidable in the slots of the other plate for interlockingly engaging the hooks, through said slots, with the opposite side of said other plate for detachably connecting the ends of the wires for preventing untwisting thereof and providing a carrying handle therebetween.

2. A bag closer in accordance with claim 1, wherein said longitudinal inner end portions of the slots extend toward the free ends of the plates.

3. A bag closer comprising a pair of parallel, closely adjacent resilient wires for receiving the neck portion of a bag therebetween, and a pair of resilient, elongated duplicate plates fixedly secured between the end portions of the pair of wires and extending longitudinally therefrom and providing means for twisting said wires together and rolling the neck portion of the bag thereon for closing the bag, said plates having transverse slots in their end portions extending thereinto from the opposite longitudinal edges thereof and including angularly extending inner end portions, said slots providing hooks on the plates, the hooks of each plate being transversely and then longitudinally slidable in the slots of the other plate

for interlockingly engaging the hooks, through said slots, with said other plate on the opposite side thereof for detachably connecting the ends of the wires in spaced relation for preventing untwisting thereof and providing a carrying handle therebetween.

4. A bag closer in accordance with claim 3, said angularly extending inner end portions of said slots extending longitudinally toward the free ends of the plates for slidably receiving the hooks when the plates are moved longitudinally away from each other.

References Cited in the file of this patent

UNITED STATES PATENTS

642,302	Davis	Jan. 30, 1900
676,213	Wand	June 11, 1901
820,301	Hale	May 8, 1906
835,455	Mortensen	Nov. 6, 1906
1,117,298	Zaar et al.	Nov. 17, 1914

FOREIGN PATENTS

766,709	France	Apr. 16, 1934