

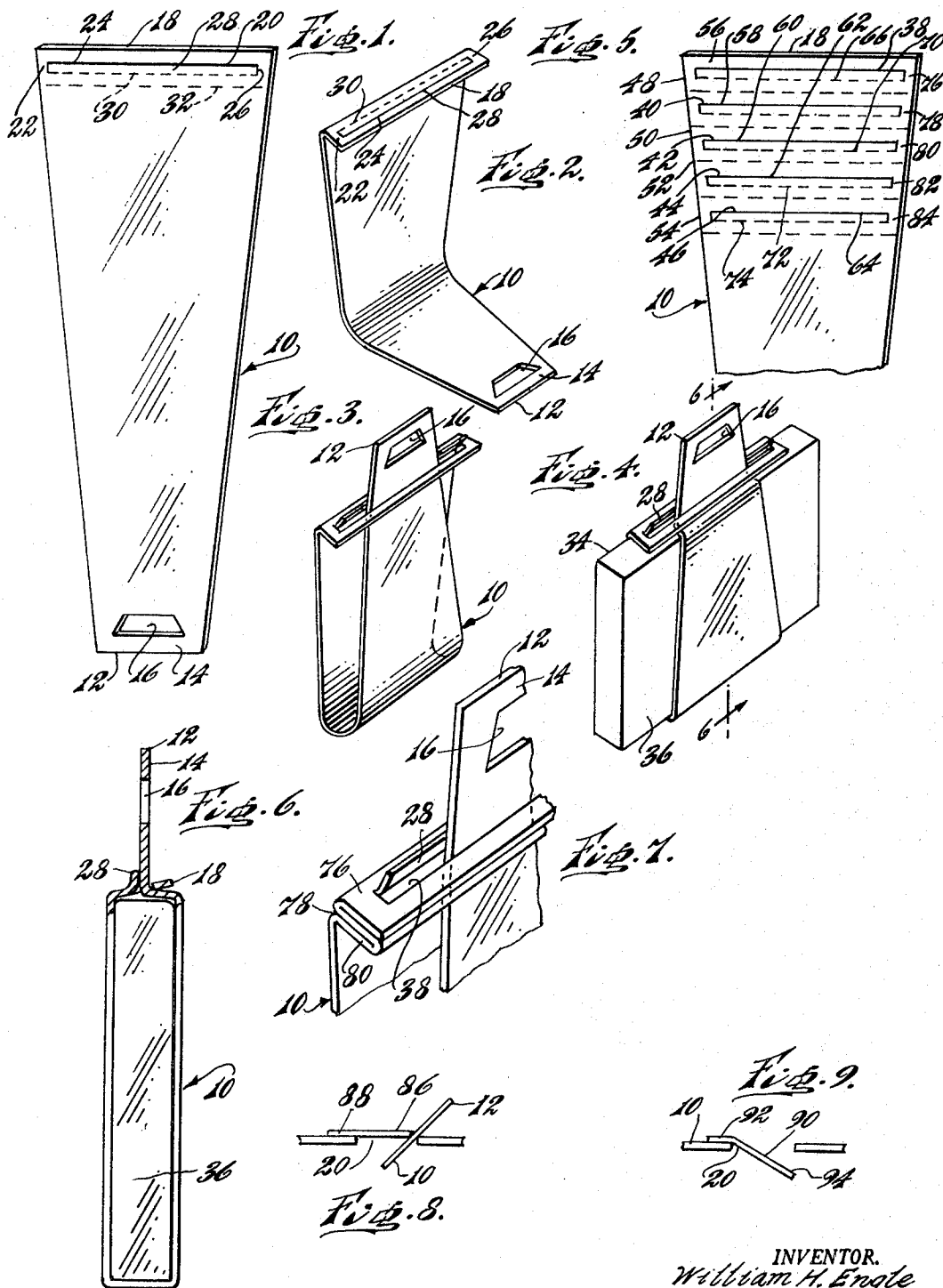
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FLEXIBLE PACKAGE CARRYING STRAP

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**FLEXIBLE PACKAGE CARRYING STRAP**  
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1 Claim

## ABSTRACT OF THE DISCLOSURE

The invention relates to an elongated flexible strip having a carrying handle at one end which is insertable within a transverse slot provided at the second end thereof to form a loop of adjustable size to encompass packages of varying outer dimensions for carrying purposes.

This invention relates to the general art of packaging and more particularly is directed to an elongated carrying member of extremely simple design suitable for wrapping about packages for conveniently carrying the same.

It is common practice at the present time when carrying cardboard packages of generally rectangular configuration, to place the same within a paper bag and then simply either grasp the bag by the open end or else to support the entire bag and parcel combination under the arm of the carrier. In cases when the bag is grasped by the open end, in many instances, this results in dropping the parcel inasmuch as the relatively sharp corners of the parcel tend to tear the paper bag due to the carrying pressures exerted by this method. Also, it is possible to drop the parcel entirely when carrying the bag and parcel under the arm, inasmuch as the parcel is not firmly grasped by the fingers of the carrier and thus accidents are more prone to occur.

Other methods of carrying parcels include tying the entire package with a string and then applying an external carrying handle to the string to facilitate grasping by the fingers. Also, in the case of lighter parcels, carrying handles have been applied directly to the package through the use of gummed attaching elements which are cemented directly to the exterior of the parcel. Both of these methods are generally satisfactory, but present certain shortcomings in that they are suitable only for single use service and also, usually require a considerable period of either wrapping or drying time before becoming suitable for use.

The instant invention seeks to improve over prior art devices in that a universal single, flexible strip can now be provided for use with packages of various sizes. The flexible strip is further suitable for multi-service use simply by removing one parcel and then inserting a second parcel. Extremely inexpensive materials can be used with the device and so the economy of the prior art carrying devices can be equalled while at the same time increasing both the utility and the efficiency. The instant invention improves over previously known carrying devices in that it is easily removable, it is readily adjustable for various sized parcels, and it may be conveniently and safely locked in position.

It is therefore an object of the instant invention to provide an improved carrying strap of the type set forth.

It is a further object of the instant invention to provide a single carrying strap that is suitable for use with various sized parcels.

It is another object of the instant invention to provide an improved carrying strap of elongated, flexible construction suitable for multi-service use.

It is another object of the instant invention to provide a novel carrying strap suitable for use with various sized parcels and provided with size adjusting means.

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It is another object of the instant invention to provide a novel carrying strap suitable for use with parcels of various sizes and provided with strap locking means.

It is another object of the instant invention to provide a novel carrying strap that may be readily applied to and removed from parcels of various external dimensions.

It is another object of the instant invention to provide a novel carrying strap that is extremely inexpensive in manufacture, simple in design, and troublefree when in use.

Other objects and a fuller understanding of the invention will be had by referring to the following description and claims of a preferred embodiment thereof, taken in conjunction with the accompanying drawings, wherein like reference characters refer to similar parts throughout the several views and in which:

FIG. 1 is a perspective view of the invention showing the strap in open position.

FIG. 2 is a perspective view of the invention showing the strap preliminarily folded prior to engaging a parcel.

FIG. 3 is a perspective view of the invention showing the carrying handle inserted through the locking slot.

FIG. 4 is a perspective view showing the carrying strap engaged about a parcel in carrying position.

FIG. 5 is a partial, perspective view of a modified end showing strap shortening means.

FIG. 6 is a cross sectional view taken along line 6—6 of FIG. 4 looking in the direction of the arrows.

FIG. 7 is an enlarged, partial perspective view showing the modified end of FIG. 5 used to shorten the length of the strap.

FIG. 8 is a partial, elevational view showing a handle locking device.

FIG. 9 is a partial, elevational view showing a modified handle locking device.

Although specific terms are used in the following description for the sake of clarity, these terms are intended to refer only to the particular structure of my invention selected for illustration in the drawings and are not intended to define or limit the scope of the invention.

Referring now to FIG. 1, I show an elongated, flexible carrying strap 10 comprising a single sheet of material of generally truncated triangular shape which may be manufactured of heavy paper, plastic, foil film, film plastic, cardboard, fiberglass or other suitable material strong enough and flexible enough to produce the desired results. It should be noted that size and particular shape illustrated are of a preferred embodiment thereof but that the invention is not restricted to the size or shape as illustrated. The shape of the carrying strap may be altered as necessary or desirable to achieve the results for which the carrying strap is being applied. Other external configurations such as rectangular, square, circular or any combination thereof may be employed by applying the principles hereinafter set forth and still fall within the scope of this invention.

As illustrated in FIG. 1, the carrying end 12 narrows to a carrying handle 14 which may be formed by die cutting or otherwise forming the opening 16 near the end 12 to inexpensively and conveniently form the carrying handle 14. Sufficient material should be left near the end 12 to provide adequate strength to carry a parcel 36 without tearing. The carrying strap 10 is comprised of a single sheet of material which widens from the carrying end 12 and terminates in a locking end 18. A locking slot 20 transversely penetrates the strap 10 near the locking end 18 thereof to receive the carrying end 12 as will hereinafter be more fully set forth. The locking slot 20 may comprise an elongated transverse, rectangular opening (not shown), preferably, the slot may be formed by die cutting along lines 22, 24, 26 to provide a

U-shaped cut as can be best observed in FIG. 1. In this manner, a flap 28 can be conveniently provided by folding along fold line 30. The flap 28 can be opened slightly to permit insertion of the end 12 and the natural resiliency of the material pushes the flap 28 against the end 12 for locking purposes. As can be observed in FIGS. 3 and 4, the flap 28 folds about fold line 30 upon introduction of the carrying end 12. The natural resistance of the material from which the strap is fabricated urges the flap 28 against the carrying end 12 and thereby operates to prevent the carrying end from being easily withdrawn once it is in place. Should the flap 28 be eliminated by completing the rectangular cut out space by cutting along line 30, a transverse receiving slot would be provided for insertion of the carrying end 12, but the locking feature would thereby be entirely lost. If desired, a transverse fold line 32 may be provided as shown in FIG. 1, spaced from the line 30 for conveniently bending the strap about one edge 34 of a rectangular parcel 36. See FIG. 4.

Referring now to FIGS. 5 and 7, a strap length adjusting construction applied to the locking end 18 of the carrying strap 10 is illustrated. In the modification shown, a plurality of locking slots 38, 40, 42, 44 and 46 are set forth with a plurality of spaced, transverse fold lines 48, 50, 52 and 54 provided intermediate and said slots. As previously stated, the slots 38, 40, 42 and 46 are preferably provided with locking flaps by employing U-shaped cuts. However, the entire rectangular segments defined between the cut lines 56, 58, 60, 62 and 64 and the respective fold lines 66, 68, 70, 72 and 74 may be removed to provide a plurality of spaced carrying end receiving openings by thus eliminating the locking flaps.

As can best be seen in FIG. 7, the overall length of the carrying strap 10 may be conveniently shortened by bending the end 18 about one or more fold lines 48, 50, 52 and 54. By employing accordion folds as illustrated in FIG. 7, two or more respective slots 38, 40, 42, 44, 46 can thereby be caused to overly one another so that the carrying end 12 may be inserted therethrough in the usual manner. It shall be noted that all flaps defined by the cut lines extend upwardly and serve in unison to lock the carrying end in the carrying position illustrated.

It should be noted that the number of locking slots are not determined by or limited to the number of slots illustrated in FIG. 5. The purpose of the multiple slots is to adjust the size of the flexible package carrying strap to fit various size parcels and any number of adjusting folds may thus be provided and still fall within the scope of this invention. As can be seen in FIG. 7, the shortening segments 76, 78 and 80 are employed to adjust the length of the carrying strap. As illustrated, the shortening segments 82, 84 are not so employed and therefore serve simply as a portion of the entire strap 10. It can be appreciated that the carrying strap 10 may be readily adjusted to several overall lengths simply by folding in accordance with the illustration of FIG. 7, two or more of the shortening segments 76, 78, 80, 82, 84 and then aligning the cut lines so that the carrying end 12 may be readily inserted therethrough. In this manner, the overall length of the carrying strap 10 can be readily reduced in size without lengthening the free length of the carrying end 12.

In FIG. 8, I show an alternate method of locking the carrying end 12 in the locking slot 20 by applying an external locking flap 86. The flap 86 may be constructed of materials similar to the carrying strap 10 and is hingedly applied over the slot 20 by affixing one edge 88 thereof to the strap construction in any well known manner such

as by a suitable cement. It should be noted that the flap 86 is comprised of a single length of material without any cuts or folds. In this manner, the locking flap 86 tends to remain in place over the slot 20 and thereby resists the upward pressure caused by the insertion of the carrying end 12, by applying an opposite pressure downwardly, thereby locking the carrying end 12 in position within the slot 20. It should be noted that such a construction finds utility when the parcel 36 is put to rest on a floor or a table. The locking constructions illustrated in FIGS. 1 through 7 function in conjunction with the downward weight of the parcel during the carrying procedure. Once the parcel is placed on a table or on the floor, the locking features relax and it is thereby possible that the carrying strap 10 could become disengaged from the parcel 36. The construction illustrated in FIG. 8 provides a positive locking feature under all conditions whether the parcel is being carried or at rest, and so may be universally employed when desired.

In FIG. 9, I show an alternate locking method wherein a flap 90 can be applied externally of the strap 10 by affixing one edge 92 thereof to the strap body 10 utilizing a suitable cement or the like. As illustrated, one edge 92 of the flap 90 is affixed to the top of the carrying strap 10 and the free edge 94 extends through the slot 20 and engages on the other side of the strap 10. It can thus be observed that in order to use this modification of a locking device, it is necessary to push the flap 90 downwardly to provide an opening between the edge 94 and the edge of the slot 20 to permit insertion of the carrying handle 14. The natural resiliency of the flap 90 tends to push the flap upwardly and thereby creates a pressure against the carrying end to lock it in position even when the parcel is placed upon a stationary surface.

What is claimed is:

1. A flexible package carrying strap comprising:

- (A) a unitary length of flat material having two ends,
  - (1) said material terminating at one end in a carrying end,
  - (2) said material terminating at its other said end in a locking end;
- (B) a plurality of shortening segments provided at the said locking end,
  - (1) said segments lying in spaced, parallel position,
  - (2) said segments being adaptable to fold respectively over one another in aligned relation,
    - (a) each said segment being provided with a locking flap;
- (C) carrying means provided in the said carrying end; and
- (D) carrying end receiving means provided in the said locking end, whereby a parcel may be conveniently transported by the said carrying strap.

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