Aug. 26, 1958 C. S. O'BRIEN, JR 2,849,171

BAG WITH TIE MEMBER FOR CLOSING AND CARRYING IT

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Fig. 1

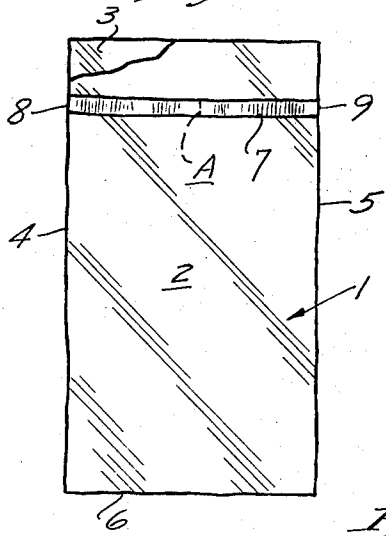


Fig. 3

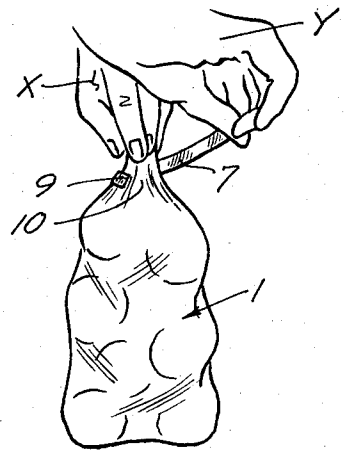


Fig. 2

Fig. 4

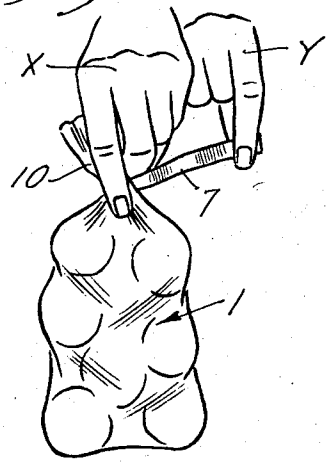
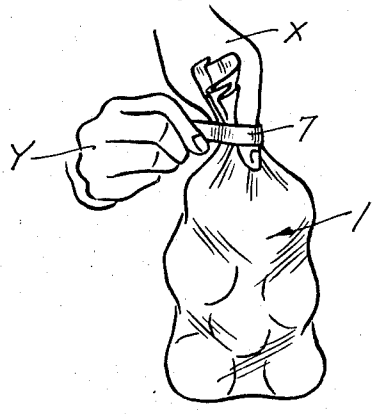


Fig. 5



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Fig. 6

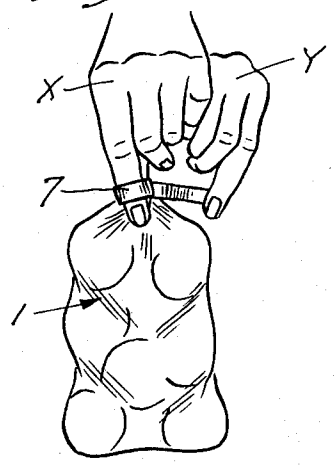


Fig. 7

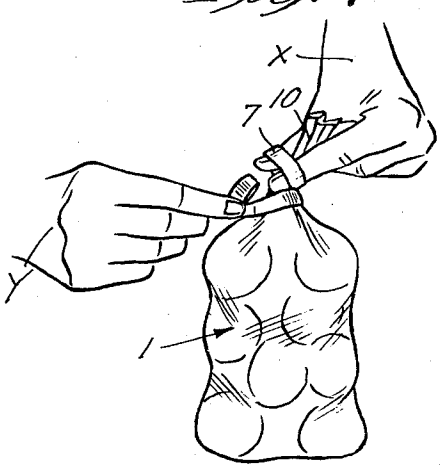


Fig. 8

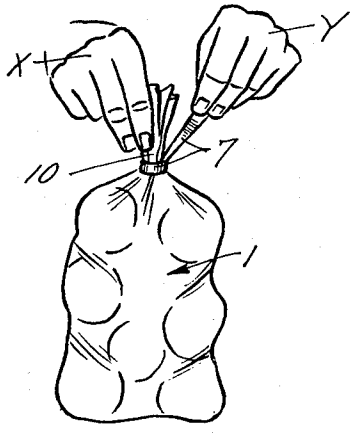
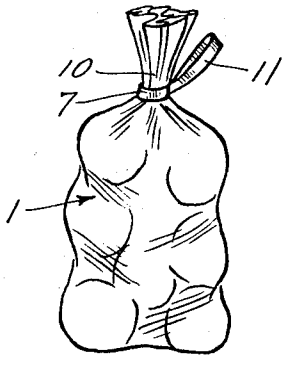


Fig. 9



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BAG WITH TIE MEMBER FOR CLOSING AND CARRYING IT

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Application August 31, 1953, Serial No. 377,307

3 Claims. (Cl. 229—63)

My invention relates generally to bag construction and more particularly to novel means for closing and carrying bags.

An important object of my invention is the provision of a bag having tie means attached thereto whereby the bag may be quickly and easily closed over the contents thereof to prevent escape of said contents.

Another object of my invention is the provision of a bag structure of the above type in which said tie member may be quickly and easily released to permit opening of the bag.

Still another object of my invention is the provision of a bag having a tie member attached thereto for the purpose set forth which may be utilized as a carrying handle for the bag.

A still further object of my invention is the provision of a bag having a tie member as set forth in which said tie member is anchored at its opposite ends to opposite side edges of the bag whereby to lie flat against the adjacent side wall of the bag when the bag is in flat form.

Another object of my invention is the provision of a bag and tie means therefor which is simple and inexpensive to produce, which is rugged in construction and which may be used repeatedly to store and carry various goods.

The above and still further highly important objects and advantages of my invention will become apparent from the following detailed specification, appended claims and attached drawings.

Referring to the drawings, which illustrate the invention, and in which like characters indicate like parts throughout the several views:

Fig. 1 is a view in front elevation of a bag and tie member therefor made in accordance with my invention;

Fig. 2 is a view in plan of the bag and tie member of Fig. 1;

Fig. 3 is a view in front elevation of the bag of Fig. 1, the open upper end portion thereof being gathered over the contents and the initial step in tying the bag closed;

Figs. 4, 5, 6, 7 and 8 are views corresponding to Fig. 3 but showing progressively advanced steps in the tying of the bag; and

Fig. 9 is a view in elevation showing the completed tie and carrying handle for the bag.

Referring with greater detail to the drawings, the numeral **1** indicates in its entirety a bag which may be made from any suitable sheet material but which is preferably made from synthetic resin such as polyethylene or the like. The bag **1** is made in flat form and comprises a front wall element **2** and a rear wall element **3**, said wall elements being joined together at their opposite side edges **4** and **5** by application of heat and pressure. Preferably, in the manufacture of this type of bag the sheet of material from which the bag is made is folded upon itself prior to the heat sealing or welding of the side edges **4** and **5** thereof to provide a closed bottom portion **6**. The material from which the bag is made may be opaque, translucent or transparent as desired.

An elongated flexible tie member **7** extends across the bag and is secured at its opposite ends to the opposite side edges **4** and **5** of the bag **1** adjacent the open upper end thereof. The tie member **7** may be of any suitable material but preferably and as shown is in the nature of a tape or ribbon of synthetic resin such as polyethylene. If desired, the tie member **7** may be contained within the bag **1** between the front and rear wall elements **2** and **3**. However, as shown, I prefer to position the tie member **7** on the exterior of the bag, the opposite ends of the same being anchored to the opposite side edges of the bag by welding and as indicated at **8** and **9** respectively. The tie member **7** may be of any suitable length if desired, although I have found in most instances that the tie member **7** may be utilized as hereinafter described to perform the function intended, if the tie member is of a length equal to the width of the bag. With this arrangement, the bags may be stored or shipped in a flat condition when empty, the tie members **7** lying flat against the adjacent wall surface of the bag and occupying the minimum of space.

My novel bag may be closed and tied in a quick and efficient manner as illustrated in Figs. 3 to 8 inclusive and as follows, to wit:

After the bag has been filled to the desired level, the open upper end of the bag is gathered above the contents as shown in Fig. 3 with the tie member **7** intermediate its ends disposed laterally outwardly of the gathered portion. While the upper end of the bag is held in its gathered condition by one hand X, the central portion of the tie member **7** is grasped by the fingers of the other hand Y and folded upon itself on a transverse fold line at substantially its central portion and as indicated at A in Fig. 1. The doubled tie member **7** is then wound about the gathered portion **10**. As the tie member **7** is thus wound about the gathered portion **10** the thumb and forefinger of the hand X are moved downwardly as indicated in Fig. 4 so that the tie member **7** passes outwardly around said thumb and forefinger, see Figs. 4, 5 and 6. The folded intermediate portion of the tie member is then passed upwardly between the folded portion **10** of the bag and the thumb and forefinger of the hand X as shown in Fig. 7, after which the same is pulled taut as indicated in Fig. 8. With reference to Fig. 9 it will be seen that the folded central portion of the tie member **7** forms a loop **11** by means of which the bag may be carried if desired. The above-mentioned operation results in a simple knot which may be quickly and easily untied when it is desired to open the bag to gain access to the contents thereof. With this arrangement the bag **1** may be opened and closed an indefinite number of times during the life of the bag.

It should be obvious that substantially the same result would be obtained if the tie member **7** were disposed within the bag **1**. In this event the tie member would project outwardly through the top of the bag when the upper end thereof is gathered above the contents. The tie would be equally effective as that above described. It should be further obvious that the bag above described can be tied closed by the tie member **7** in the same manner as that above described if the tie member **7** were secured at but one end to one side edge of the bag. Such an arrangement would result in a single length of the ribbon projecting outwardly from the knot in place of the loop **11** of Fig. 9.

My invention has been thoroughly tested and found to be completely satisfactory for the accomplishment of the objectives set forth; and while I have shown and described a commercial embodiment of my novel bag construction, it will be understood that the same is capable of modification without departure from the spirit and scope of the invention as defined in the claims.

What I claim is:

1. A tubular open-topped bag including opposed flat front and rear wall elements of flexible sheet material joined together at their side edges, and means for securing the open upper end of the bag in a closed condition, said means comprising an elongated flexible ribbon-like tie member of said sheet material extending transversely of one wall of said bag and normally in face-to-face contact with the outer surface of said one wall, said tie member being of a length coextensive with the width of the adjacent bag wall surface and being anchored at its opposite ends only to the opposite side edges of said adjacent wall in downwardly spaced relation to the upper end thereof, said tie member being foldable upon itself on a transverse fold line intermediate its ends when the upper end portion of the bag is gathered above the contents, and is adapted to be wrapped around the gathered portion of the bag, the folded central portion of said tie member being adapted to be passed upwardly between the gathered portion of the bag and the bag encircling porion of the tie member to provide a carrying loop.

2. A tubular open-topped bag made from thermoplastic sheet material and including opposed flat front and rear wall elements welded together at their side edges, and means for securing the open upper end of the bag in a closed condition, said means comprising a flat ribbon of thermoplastic material extending transversely of one wall of said bag and normally in face-to-face contact with said one wall, said ribbon being of a length coextensive with the width of the adjacent bag wall and being welded at its opposite ends only to the opposite side edges of said adjacent wall in downwardly spaced relation to the upper end thereof, said ribbon being foldable upon itself on a transverse fold line intermediate its ends when the upper end portion of the bag is gathered above the contents, and is adapted to be wrapped around the gathered portion of the bag, the folded central portion of said ribbon being adapted to be passed upwardly between the gathered portion of the bag and the bag encircling portion of the ribbon to provide a carrying loop.

3. A tubular open-topped flat bag including opposed front and rear wall elements of thin flexible sheet material directly joined together at their side and bottom edges, the upper open end portion of the bag being readily gathered about the contents in closing the same, and means for securing the gathered upper end of the bag in the closed condition, said means comprising an elongated pliable ribbon-like tie member of thin flexible sheet material extending transversely of one wall of said bag and normally in face-to-face contact with the outer surface of said one wall, said tie member being of a length coextensive with the width of the adjacent bag wall surface and being anchored at its opposite ends only to the opposite side edges of said adjacent wall in downwardly spaced relation to the upper end thereof, said tie member being adapted to be wrapped around the gathered portion of the bag when the upper end portion of the bag is gathered about the contents.

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