May 5, 1925.

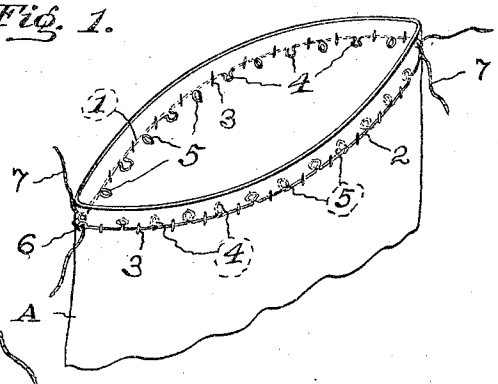
J. A. KAYE

1,536,105

BAG CLOSURE

Filed April 2, 1924

Fig. 1.



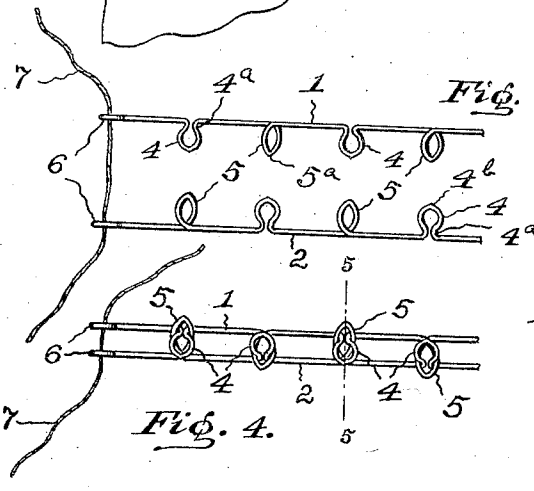


Fig. 3.

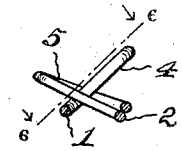


Fig. 5.

Fig. 4.

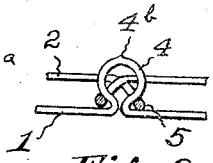


Fig. 6.

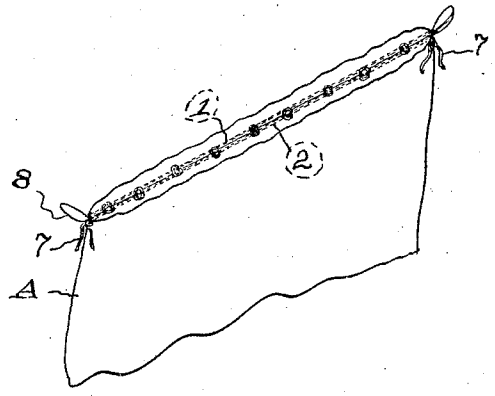


Fig. 2.

INVENTOR.

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ATTORNEYS

Patented May 5, 1925. 1,536,105

UNITED STATES PATENT OFFICE.

JOHN A. KAYE, OF SAULT STE. MARIE, ONTARIO, CANADA.

BAG CLOSURE.

Application filed April 2, 1924. Serial No. 703,655.

To all whom it may concern:

Be it known that I, JOHN A. KAYE, a subject of the King of Great Britain, residing at Sault Ste. Marie, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Bag Closures, of which the following is a specification.

The present invention relates to a detachable fastening means and has for its object to provide a device of this character which embodies novel features of construction whereby the mouth of a bag or the like can be easily and quickly closed and held in a closed position during the customary handling of the bag, although the bag can be readily opened at any time by pulling opposite sides of the mouth thereof apart with sufficient force to separate the fasteners.

Further objects of the invention are to provide a fastening device of this character which can be readily applied to the mouth of a bag or like container, and which provides a quick and effective means for releasably closing the bag, and which can be inexpensibly formed of wire.

One particular embodiment of the invention is shown and described in detail for illustrative purposes, although it will be understood that many modifications and changes can be made in the details of construction without departing from the spirit of the invention.

For a full understanding of the construction of the invention and the manner in which the same is to used reference is to be had to the following description and accompanying drawings in which,

Figure 1 is a perspective view of the mouth end of a bag with the fastening device applied thereto, the mouth of the bag being opened.

Figure 2 is a similar view with the mouth of the bag closed.

Figure 3 is an enlarged detail view of corresponding end portions of the wire members which are applied to opposite sides of the mouth of the bag, showing the corresponding fastening elements of the two wires separated from each other.

Figure 4 is a similar view with the corresponding fastening elements of the two wires in engagement with each other.

Figure 5 is a section view on the line 5—5 of Figure 4, and

Figure 6 is a sectional view on the line 6—6 of Figure 5.

Corresponding and like parts are referred to in the following description and indicated on all of the views of the drawing by like reference characters.

On Figures 1 and 2 of the drawings the fastening device is shown as applied to the mouth of a bag A which may be of any conventional construction and may be formed of any suitable material such as burlap, cotton fabric, paper or leather. Opposed wires 1 and 2 are applied to opposite sides of the mouth of the bag, and if desired may be permanently secured to the bag by suitable means, such as the stitching 3.

Each of the wires 1 and 2 is provided at intervals with crimped portions 4 which project laterally therefrom and have reduced neck portions 4^a. Each of the said wires is also provided at intervals with a series of coiled loops 5 and the wires are sufficiently resilient so that the coiled loops can be expanded to fit over the heads of the crimped portions 4 and then permitted to contract into engagement with the reduced neck portions 4^a of the crimps.

The crimped portions 4 of the wire 1 are arranged so that they will be opposite the coiled loops 5 of the wire 2 when the two wires are applied to opposite sides of the mouth of a bag. In a similar manner the crimps 4 of the wire 2 will then be opposite the loops 5 of the wire 1.

The coiled loops 5 have an elongated formation and terminate in ends 5^a which are preferably slightly pointed so that they will readily penetrate the material of a fabric or paper bags. Similarly the crimped portions preferably have pointed end portions 4^b which will penetrate the fabric or material of the bag. The wires 1 and 2 may be secured to either the outside or inside of the bag and when the wires are located on the outside of the bag the pointed ends of the crimped portions 4 and loops 5 will permit of the fastening elements 4 and 5 penetrating the bag material and projecting into the mouth of the bag so that they can be readily brought into or out of engagement with each other.

In order to close the mouth of the bag the coiled loops 5 of each of the wires are forcibly pushed over the enlarged outer end or head portions of the crimps 4 of the oppo-

site wire. The loops 5 will be expanded or enlarged as they are forced over the head portions of the crimps and will then contract around the reduced neck portions 4a of the crimps thereby providing snap fastening means for holding the mouth of the bag closed. After the snap fastening elements have been brought into engagement with each other the bag will remain closed during the customary handling thereof, although the mouth of the bag can be opened at any time by pulling upon opposite sides thereof with sufficient force to separate the fastening elements.

The ends of the wires 1 and 2 may terminate in eyes 6 and a cord 7 may be threaded through these eyes. One of these cords will thus be provided at each end of the mouth of the bag and these cords can be utilized for tying the loose fabric bag to provide the usual ears 8 on the bag.

The use of this fastener avoids the necessity of sewing up the mouth of the bag each time it is closed or of using wires or fastening devices which must be thrown away each time the bag is used. This fastening means can be readily opened and closed and is such as to permit the bag to be used repeatedly without tearing or mutilating the same in the opening and closing operation.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is,

1. A fastening device of the character described, including longitudinal bars arranged in an opposed relation and provided at intervals with headed projections and expansible loops, said expansible loops on each bar being arranged opposite to the headed projections on the opposite bar so as to snap over the heads and contract into engagement with the stems thereof.

2. A fastening device of the character described including opposed wire elements provided at intervals with bent portions forming corresponding headed projections and expansible resilient loops adapted to expand over the heads of the projections and contract into engagement with the stems thereof.

3. A fastening device of the character described including opposed wire elements provided at intervals with crimps having contracted neck portions, said wires being also provided at intervals with resilient loops, and the loops of one wire being adapted to snap over the crimped portions of the other wire to interlock with the reduced neck portions of the crimps.

4. A fastening device of the character described, including opposed wires provided at intervals with crimped portions having reduced necks and also with resilient coiled loops which are adapted to be snapped over the crimps and brought into an interlocking engagement with the reduced necks thereof, the crimps and loops being constructed to penetrate the sides of a bag or container before being brought into engagement with each other.

5. A fastening device of the character described including a pair of wire elements provided at intervals with laterally projecting bent portions which are adapted to interlock with each other and have pointed ends so that they can readily penetrate the sides of the bag or other container.

6. A fastening device of the character described including opposed wires provided at intervals with crimped portions having reduced necks and also with resilient coiled loops, the coiled loops being adapted to be snapped over the crimps and brought into an interlocking engagement with the reduced necks thereof, the crimps and loops having pointed ends so that they can permanently penetrate the sides of a bag or container.

In testimony whereof I affix my signature.

JOHN A. KAYE.