W. M. CHILDERS.

BAG CLOSURE.

APPLICATION FILED APR. 12, 1920.

1,368,545.

Patented Feb. 15, 1921.

Fig. 1.

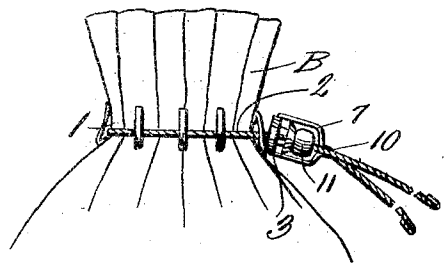


Fig. 2.

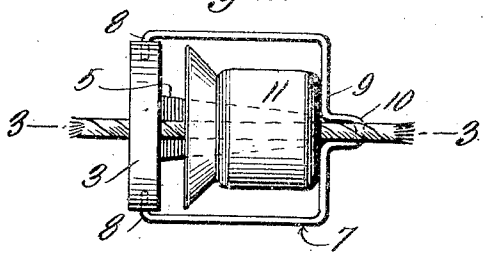


Fig. 3.

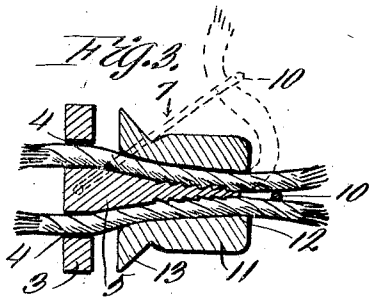


Fig. 4.

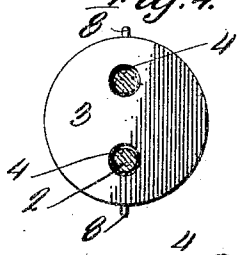


Fig. 5.

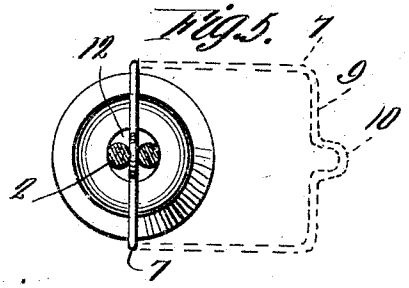
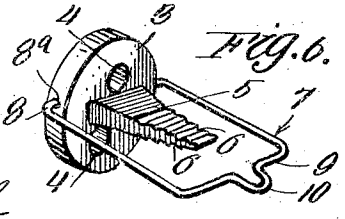


Fig. 6.



WITNESSES

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BAG-CLOSURE.

1,368,545. Specification of Letters Patent. Patented Feb. 15, 1921.

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To all whom it may concern:

Be it known that I, WALTER M. CHILDERS, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bag-Closures, of which the following is a specification.

This invention relates to bag closures.

The object of the invention is to provide a device of this character which may be easily opened and closed and effects a great saving in time.

Another object is to provide a cheaply constructed and efficient device of this character which avoids the necessity of tying knots and is always ready for use.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:

Figure 1 represents a side elevation of the upper portion of a bag equipped with this improved closure, shown in operative position.

Fig. 2 is an enlarged side elevation of the closing means detached.

Fig. 3 is a longitudinal section taken on the line 3—3 of Fig. 2.

Fig. 4 is a bottom plan view of the closure with the securing cord shown in section.

Fig. 5 is a top plan view with the locking bail shown in operative position in full lines and in inoperative position in dotted lines; and

Fig. 6 is a detail perspective view of the bail carried member of the locking device.

In the embodiment illustrated a bag B is shown which may be of any desired material and which has arranged on its outer faces longitudinally extending loops 1, through which a cord is designed to be passed around the bag for drawing it together at its mouth and closing it.

Mounted on the cord 2 is a locking device composed of two members one of which is in the form of a disk 3 of wood or any suitable material having spaced apertures 4 therein for the passage therethrough of the two ends of the cord as is shown clearly in the drawings. Projecting from the front face of the disk 3 between the apertures 4 is a wedge shaped member 5 provided on its opposite faces with ratchet teeth 6. This member 5 which has its larger end secured to the disk is preferably made integral therewith and extends in a plane at right angles to that occupied by the apertures 4.

A bail 7 has inturned fingers 8 pivotally mounted in sockets formed in the perimeter of the disk 3 at diametrically opposite points said sockets being in alinement with the side edges of the wedge member 5. This bail 7 has shoulders 9 formed by the connecting cross bar thereof which is provided with an outwardly projecting loop 10 midway the ends of said cross bar which is designed for a purpose presently to be described.

A coöperating locking member 11 is made in the form of a block here shown cylindrical with a tapered bore 12 extending longitudinally therethrough, the larger portion being formed at its inner end and designed to receive the wedge shaped member 5 as well as the two ends of the cord 2, as is shown clearly in Fig. 3. This member 11 preferably has a flange 13 at its inner end to assist in applying the device.

In the use of this device the ends of the cord 2 are threaded through the apertures 4 in disk 3 with the wedged shaped member of said disk extending outwardly between the cord ends, see Fig. 3. These ends are then passed through the bore of the member 11 and when said member is moved toward disk 3 said wedge shaped element 5 will enter between the ends of the cord spreading said ends and forcing them into clamping engagement with the side walls of bore 12, the teeth 6 of said member 5 biting into the cord and thus securely holding the parts in assembled position. To securely lock them in this position, the bail 7 is moved upwardly over the outer end of the member 11 by exerting a pull on one end of cord which engaging the loop 10 of said bail forces the bail up over the block 11 into locking position shown in Fig. 2, in which the shoulders 9 of the said bail engage the outer end of the block 11 on opposite sides of its

bore 12, and thereby securely lock the disk and block together with the cord 2 securely clamped between them.

When it is designed to release this locking device, the bail 7 is forced laterally out of engagement with the member 11 as shown in dotted line in Fig. 3 and a pull exerted either on block 11 or disk 3 will operate to separate these members and release the cord 2 so that the bag may be opened.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and the method of operation will be readily apparent to those skilled in the art to which the invention appertains and while I have described the principle of operation of the invention together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made as are within the scope of the claimed invention.

What is claimed is:—

1. The combination with a securing cord, of a member slidable on said cord, a second member coöperating with the first member to grip the cord, and means carried by one member for engaging the other to lock them together and in clamped position on the cord.

2. The combination with a securing cord, of a member slidable thereon, a coöperating member slidable on said cord, means for clamping the cord between said members, and a bail carried by one member and adapted to engage the other for locking said members in clamping position on the cord.

3. A securing device comprising a cord, a member having spaced apertures through which said cord is threaded, a wedge-shaped member projecting from one face of said member, a bail pivotally mounted on the perimeter of said member, a coöperating member having a bore extending therethrough to receive the ends of the cord and the wedge of said first-mentioned member, said bail being adapted to be swung over said coöperating member for locking it to said member.

4. A device in the class described comprising a securing cord, a plate having spaced apertures to receive the ends of the cord and to slide thereon, a wedge-shaped element projecting from one face of said plate, a bail pivotally connected to said disk and having an outwardly extending loop in the cross bar thereof, and a sleeve-like member mounted to slide on the ends of said cord outside of said plate and to receive said wedge-shaped member when in assembled position, said bail being adapted to swing over the other end of the sleeve and lock it to the plate.

5. A securing device comprising a cord, a member having spaced apertures to receive the end of the cord and to slide thereon, a wedge-shaped element projecting from one face of said member between said apertures, the wide faces of said wedge arranged in planes at right angles to that occupied by said apertures and a coöperating member having a bore extending therethrough to receive the end of the cord and the wedge of said first mentioned member.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER MANILY CHILDERS.

Witnesses:
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JAMES MCKEE.