

No. 697,710.

Patented Apr. 15, 1902.

L. G. GEBHARD & J. M. ROWLEY.

BAG FASTENER.

(Application filed June 1, 1901.)

(No Model.)

FIG. 1.

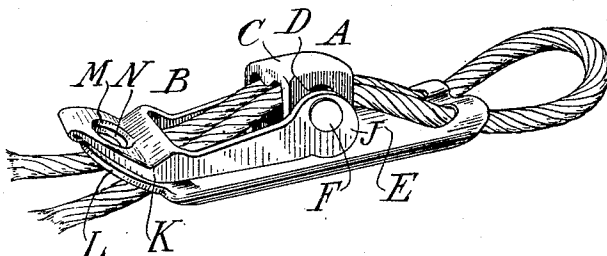


FIG. 2.

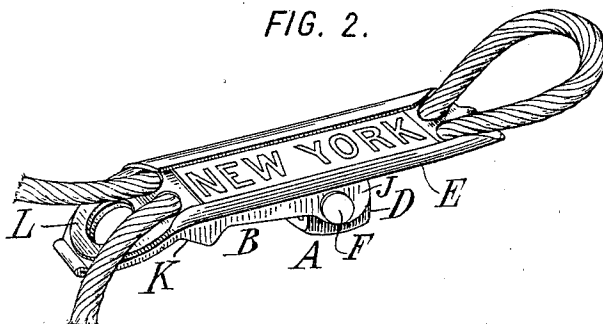


FIG. 3.

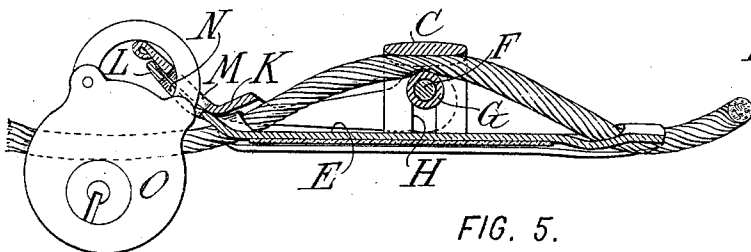


FIG. 4.

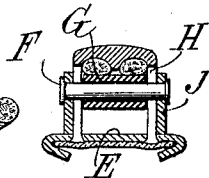


FIG. 5.

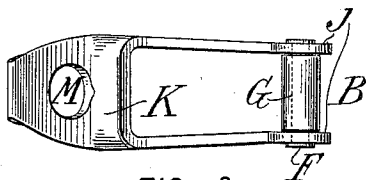
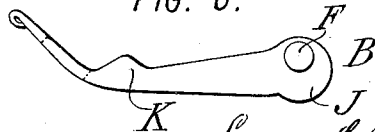


FIG. 6.



WITNESSES:

Rene P. Paine
Domino A. Maria

INVENTORS:

Lawrence G. Gebhard & James M. Rowley,

By Attorneys,

Arthur G. Orson & Co.

UNITED STATES PATENT OFFICE.

LAWRENCE G. GEBHARD AND JAMES M. ROWLEY, OF BUFFALO, NEW YORK.

BAG-FASTENER.

SPECIFICATION forming part of Letters Patent No. 697,710, dated April 15, 1902.

Application filed June 1, 1901. Serial No. 62,775. (No model.)

To all whom it may concern:

Be it known that we, LAWRENCE G. GEBHARD and JAMES M. ROWLEY, citizens of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and Useful Improvements in Bag-Fasteners, of which the following is a specification.

Our invention aims to provide a bag-fastener of the type in use in this and other countries for closing mail-bags. In this class of fasteners a heavy cord is run through and around the mouth of the bag, and its ends are drawn taut and then clamped by means of a clamp, to which a label is usually attached indicating the destination of the bag. Various types of these bag-fasteners, including clamping means and means for holding a tag, have been used, most of which, however, are found to be inconvenient to operate, or to produce a rubbing action on the cord, which soon wears out, or to possess other disadvantages which it is the purpose of our present invention to eliminate.

According to our present invention, also, a fastener is provided which is capable of being locked in its clamping position. With the form at present in use in this country it is necessary to provide two kinds of mail bags or pouches, one carrying a lock and used as a receptacle for letters containing money or the like and the other acting by the clamping of a line, as in our invention, but incapable of being locked, this form being used for second and third class mail. It is a source of inconvenience to have two kinds of pouches, since sometimes only one or two valuable letters are to be sent and a large locking-pouch is required to be used for these one or two letters, with another bag for the ordinary mail. By reason of the facility of locking our fastener in the clamping position of the parts one mail-bag would answer the purpose of two where there is only a small number of the valuable letters.

Referring to the accompanying drawings, which show an embodiment of our invention, Figure 1 is a perspective view of the clamp side of the fastener. Fig. 2 is a perspective view of the tag side of the same. Fig. 3 is a longitudinal section showing the parts locked

in the clamping position. Fig. 4 is a central cross-section through the clamping mechanism. Figs. 5 and 6 are a plan and a side elevation, respectively, of the movable clamping member and connected parts.

Preferably one of the clamping members of our improved fastener is connected to the main structure of the fastener. This we call the "fixed" clamping member. The other or movable clamping member is preferably guided in the desired direction normal to the cord and is forced toward the fixed member by means of a cam, so as to clamp the cord forcibly against the fixed member. Preferably, also, the movable clamping member forms the axle around the axis of which the cam moves.

A feature directed principally to the same purpose of avoiding abrasion of the rope and which is available either with or without the features above referred to is the arrangement of a roller on one of the clamping members, preferably on the movable member. This roller when the parts are brought together is perfectly immovable on the cord, though the pin upon which the roller is directly mounted has a slight rotation, which if it were brought in direct contact with the cord would tend to abrade the same.

Referring now to the drawings, A and B indicate as a whole the fixed and movable clamping members of the device. The fixed member A is composed, preferably, of a cross-piece C and a pair of side pieces D, connecting the same to the main plate. The attachment of the side pieces D to the plate E may be made in any desired manner—as, for example, by passing the lower ends thereof through the plate and swaging them, as shown in Fig. 4. Where our fastener is to be used for a double cord, as is usually the case, the under side of the cross-piece C is preferably grooved, as shown in Figs. 1 and 4, to hold the two cords apart.

The movable clamping member B preferably comprises a pin F, upon which is mounted a roller G. The pin is guided to move in the desired direction perpendicular to the rope by means of slots H in the side pieces D of the fixed member. Outside of the side pieces of the fixed member and on the pin F

are mounted a pair of cams J of approximately the shape shown in Figs. 1 and 6, this cam bearing on the plate E and as it is rotated about the pin F causing the movement of the pin in the guide-slots. The cams J are connected to, and preferably by being made integral therewith, an operating-arm K, which extends slightly beyond the end of the plate E. The shape of the cam should be made such that for use with a regulation-size cord the cam will just pass the dead-center as the arm K bears upon the plate E, so as to automatically hold the parts clamped and resist an unclamping movement of the arm.

For convenience the plate E carries apertures near each end, preferably two being used near each end where two cords are to be clamped. The end L is preferably bent upward for convenience, so as to allow the cord to pass out in approximately a straight line, the end of the operating-arm K being similarly bent. In the bent portions of the plate and the operating-arm or at any other point which would serve for the locking of the clamping members in operative position we arrange holes M and N, which register with each other—that is to say, which assume such a relative position that a padlock or the like may be attached thereto when the cam has been brought into position to clamp the cord. A suitable padlock is shown at O in Fig. 3 in position to hold the parts clamped. The under side of the plate E may be arranged to retain a tag, as shown in Fig. 2, by bending the edges over or by any other suitable means.

It will be seen that our invention provides a device for the purpose specified which is very convenient of operation and very easy to operate, the operating-arm being easily accessible and being of a good length and breadth, so as to be easily taken hold of. It will be seen also that by the improved clamping means, combined with means for locking the parts in the clamped position, it is unnecessary to provide a different set of mail-pouches for locking or for shipment unlocked. Our improved apparatus permits of the use of a single sort of fastener, which may be locked or not, at pleasure, being automatically held in the clamped position against ordinary accidents and being adapted for the addition of a padlock or the like, if necessary. It will be seen also that our invention provides a clamping means which clamps the cord with the greatest tightness by a direct normal movement of the clamping members and without any liability of abrading the cord, so that the life of the cord would be much greater than with any of the devices at present in use.

It will be understood, of course, that in the details and the separate parts of our improved device and in the arrangement of these parts with respect to each other a capability of considerable modification exists without departure from the spirit of our invention. It will be understood, therefore, that we do not limit ourselves to the particular embodiment of the invention illustrated and described, but hold our invention to cover all modifications of the same which contain substantially any or all of the novel features thereof.

What we claim is—

1. In a bag-fastener, the combination of a fixed clamping member, and a movable clamping member adapted to clamp a cord between them, and a cam-lever of which said movable clamping member forms the axle.

2. In a bag-fastener, the combination of a plate, a fixed clamping member carried by said plate, a movable clamping member, and a cam operated to bear against said plate to operate said movable member to clamp a cord.

3. In a bag-fastener, the combination of a fixed clamping member, a movable clamping member, a cam for operating said movable member to clamp a cord, and means for locking said cam when said movable member is in the clamping position.

4. In a bag-fastener, the combination of a plate, a fixed clamping member carried by said plate, a movable clamping member, and a cam adapted to bear against said plate to operate said movable member to clamp a cord, an operating-arm connected to said cam, said arm and said plate having holes adapted to register with each other in the clamping position of the parts.

5. In a bag-fastener, the combination of a plate E having holes at opposite ends for the reception of a cord, means intermediate of the ends for clamping said cord, and an operating-arm K for said clamping means, said plate and arm having holes adapted to register with each other in the clamping position of the parts.

6. In a bag-fastener, the combination of a plate carrying a clamping member, of an arm connected to a second clamping member and adapted to bear upon and extend beyond said plate in the clamping position of the parts.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

LAWRENCE G. GEBHARD.
JAMES M. ROWLEY.

Witnesses:

ELIJAH W. HOLT,
GREENLEAF S. VAN GORDER.