H. DUNN.

Bag-Fastener.

No. 198,086. Patented Dec. 11, 1877.

Fig. 1.

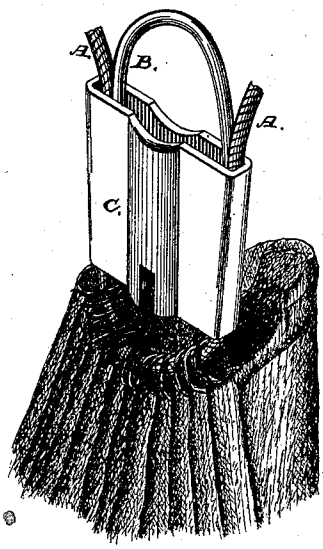


Fig. 2.

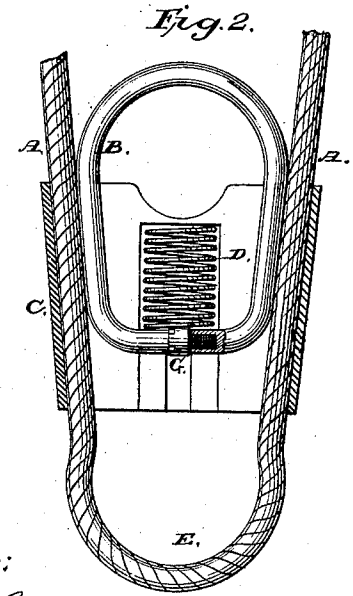
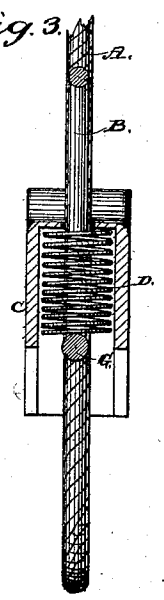


Fig. 3.



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UNITED STATES PATENT OFFICE.

HARRY DUNN, OF NASHVILLE, TENN., ASSIGNOR OF TWO-THIRDS HIS RIGHT TO HORACE H. HARRISON AND HARRY HARRISON, OF SAME PLACE.

IMPROVEMENT IN BAG-FASTENERS.

Specification forming part of Letters Patent No. **198,086**, dated December 11, 1877; application filed October 22, 1877.

To all whom it may concern:

Be it known that I, HARRY DUNN, a citizen of Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Bag-Fasteners; and I do hereby declare that the following specification, taken in connection with the drawings furnished, and forming a part of the same, is a clear, true, and complete description of my invention.

The object of my invention generally is to provide a light, simple, cheap, durable, adjustable, and effective fastener for bags or sacks, such as are used in the mail service and in the transportation of grain and such like matter.

In the accompanying drawings, Figure 1 represents one of my bag-fasteners in perspective, with a portion of a bag, showing a mode of attaching the fastener thereto. Fig. 2 is a central vertical section. Fig. 3 is a transverse central vertical section.

The same letters of reference refer to like parts in all the figures.

A A is a cord or its equivalent. B B is a skeleton adjustable wedge, the sides of which, in contact with the cord A A, slightly taper in the direction of its length. C C are the sides or walls of a case or envelope having two of its sides taper to correspond with the wedge B B. D is a compressed spiral spring, one end of which is resisted by the case C C, which there forms an abutment, and the other end reacts against the small end of the wedge, tending to press it into contact with the cord.

The action of the fastener is as follows: The loop E is passed around the mouth of a sack or bag, to which it may be attached by rings or similar devices, if desired. The case C C is then held in one hand, while the loop F is pulled with the other, till all the slack of the loop E has been taken up, and the bag is closed.

It will readily be seen that the wedge offers no obstruction to the drawing of the cord in this direction, because there is a tendency to draw the wedge out of the case; but an attempt to draw the cord in the contrary direction instantly results in the opposition of the wedge, which is drawn more tightly into the taper case and against the cord, in proportion to the force employed.

To open the bag, it is only necessary to grasp it with one hand and the larger or loop end of the skeleton wedge with the other, and pull in opposite directions. Thus one pull instantly closes a bag and another as quickly opens it.

It is necessary, to secure a reliable hold, that the taper of the wedge and of the case should be very slight. It is, therefore, evident that the reduction of the diameter of the cord by wear or compression would let the wedge travel forward until its small end protruded beyond the case, which is undesirable. Instead, therefore, of unduly lengthening the case, which would render it heavy and unsightly, I provide the screw G, which, by being partially unscrewed between the ends of the wedge, its width is increased to the same extent as the thickness of the cord has been diminished, and in this manner the wedge is easily and quickly restored to the effective position it occupied before the cord became reduced.

To prevent any accidental loosening of the wedge B B the ends of the cord A A are passed once or twice through the lower or loop end of the wedge B B.

Those parts of the case or wedge which come in contact with the cord may be serrated, and a non-expansive wedge may be used instead of the one described.

I am well aware that bag-fasteners, belt-fasteners, and also devices for holding reins, as heretofore constructed, have embodied wedges, cams, toothed levers, &c., in great variety, and that it has heretofore been proposed, in rein-holders and belt-fasteners, to employ an exterior casing with interior inclined sides and an interior wedge-shaped structure, between which and the exterior casing the reins or belts are fastened.

I am also aware that rein-holders have embodied a wedge or other clamping device, provided with a handle, by which it can be moved within the exterior casing, and also that a ball or other equivalent device within an exterior casing has been caused to maintain a holding

contact with the reins by means of a spring; but I am not aware that, before my invention, a bag-fastener was ever constructed which embodied an exterior casing, having inclined interior surfaces, in combination with a wedge forced into position within the casing by means of a spring, and provided with a handle, by which the power of the spring may be overcome and the wedge withdrawn from contact with the fastening-cord.

I claim as my invention and desire to secure by Letters Patent—

1. The combination, in a bag-fastener, of an exterior casing having inclined interior sides or surfaces, with an interior wedge, which is forced inward by a spring, is connected to the casing, and is provided with a handle by which the wedge may be withdrawn against its spring, substantially as described.

2. The combination, in a bag-fastener, of an exterior casing having interior inclined surfaces, with an expansive wedge-block, substantially as described, whereby the wedge-block may be adjusted to compress and hold cords of various sizes without protruding from the casing, as set forth.

HARRY DUNN.

Witnesses:
U. S. GOODWIN,
EDWARD TRABUE.