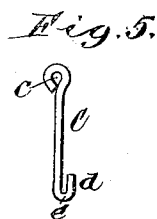
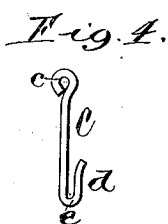
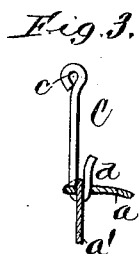
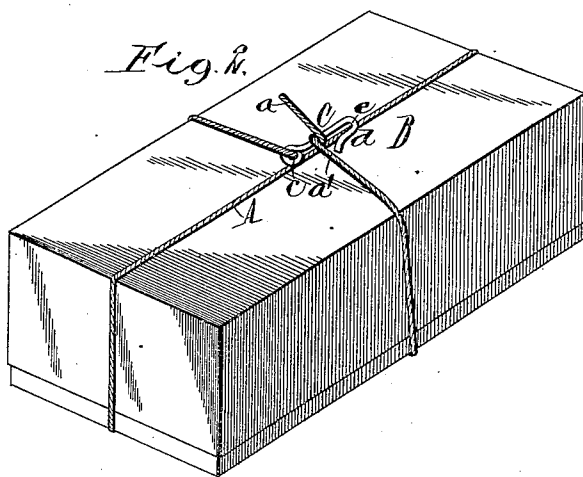
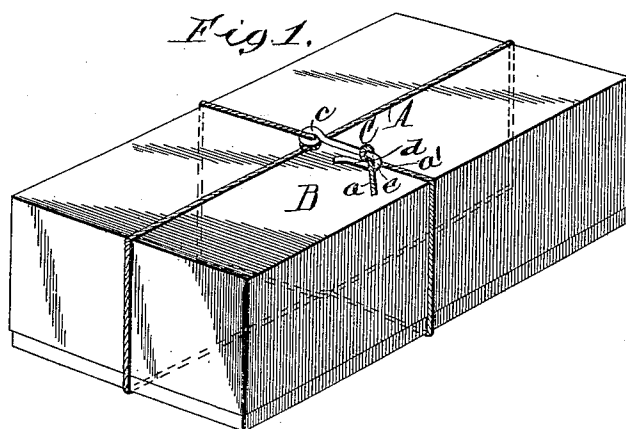


935,889.

A. E. BOULTON.
PACKAGE FASTENER.
APPLICATION FILED APR. 4, 1908.

Patented Oct. 5, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT E. BOULTON, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO JULIUS W. ROCHEVOT, OF BUFFALO, NEW YORK.

PACKAGE-FASTENER.

935,889.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed April 4, 1908. Serial No. 425,180.

To all whom it may concern:

Be it known that I, ALBERT E. BOULTON, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Package-Fasteners, of which the following is a specification.

This invention relates to the class of package ties or fasteners comprising a cord which is passed around the package and a hook-like device permanently secured to one end of the cord and detachably engaging its opposite free end.

One object of my invention is the provision of an inexpensive fastener of this character which while securely and reliably tying a package, permits the detachable end of the cord to be conveniently released for untying the package.

A further object is to provide a fastener which is practically free from sharp or projecting parts liable to catch on objects or tear or mutilate the tied articles, thus rendering the fastener especially desirable in post-offices for bundling letters and other mail matter.

In the accompanying drawings: Figure 1 is a perspective view of a package secured by the improved fastener. Fig. 2 is a similar view showing the free end of the cord wound or looped around the shank of the hook preparatory to drawing the loop into the bight of the hook. Fig. 3 is an elevation of the rear or reverse side of the hook and cord, showing the crossed position of the branches of the loop. Fig. 4 is a side elevation of the hook detached from the cord. Fig. 5 is a similar view of a slight modification of the hook.

Similar letters of reference indicate corresponding parts throughout the several views.

A indicates the twine or cord which is passed around a package, such as the box B shown in the drawings.

To one end of the cord is permanently secured a hook C, the shank of which is provided with an eye *c* or other suitable attachment for this purpose. The hook is preferably bent from a single piece of strong wire, but it may be made of cast or stamped metal, if desired. As shown in the drawings, the bill *d* of the hook is substantially parallel with its straight shank for some distance from the bend or bight *e* of the hook, and

the end of the bill may be curved outward, as shown in Figs. 1-4, or it may be straight and parallel with the shank, as shown in Fig. 5. The width of the throat or space between the shank of the hook and the straight portion of its bill is about as wide as the diameter of the cord, but not so narrow as to bind or grip a single thickness thereof.

In the use of the fastener, after passing the cord around the package, its free end is wound or looped once about the shank of the hook, as shown in Fig. 2, this being conveniently done by holding the hook in a nearly upright position with the bill toward the operator. The hook is then laid upon the package and the looped portion of the cord is pulled into the bight of the hook by seizing the free end of the cord, thus securing the package, as shown in Fig. 1. By thus drawing the loop of the cord into the bight of the hook, the free branch *a* is crossed or overlapped by the other branch *a'* which passes around one side of the package, as shown in Fig. 3, and at the same time the last-named branch is pinched or gripped between the opposing parallel sides of the shank and the bill of the hook, producing a secure fastening which is not liable to slip, and which grips more tightly the greater the tension on the cord. While normally preventing slipping of the looped cord in the direction necessary to release it, this fastening permits the cord to be drawn through the hook in the opposite direction for taking up its slack and tightening it. It will be noted that this secure gripping of the cord in the hook is obtained by forming but a single loop in the cord which can be quickly and conveniently done. The security of the fastening notwithstanding the use of such a single loop is due to the conjoint action of the hook and the loop of the cord, a practically double grip of the cord resulting from the overlapping of its loop-branches within the bight of the hook.

In order to untie the package, it is only necessary to pull up on the free end of the cord to raise the end of the hook, when the loop of the cord can be forced back on the shank sufficiently to loosen and release it.

While my improvement is generally useful as a package fastener, it is especially desirable for bundling letters and other mail matter in post offices, where it is important

that the fastener shall not only be reliable and permit of the ready tying and untying of the package, but shall be as free as possible from projecting parts liable to catch 5 on adjacent objects or packages, or to mutilate the mail matter. My improved fastener meets these requirements and is at the same time exceedingly simple in construction and can be cheaply produced.

10 I claim as my invention:

A package fastener, comprising a hook and a cord attached to the shank of the hook, the hook being formed of a single length of material no part whereof is inter-

posed between the front end thereof and the 15 shank of the hook, leaving an unobstructed throat between the shank and said end, the portion of said throat adjacent to the bight of the hook being about as wide as the diameter of the cord but not so narrow as to bind 20 a single thickness thereof.

Witness my hand this 31st day of March, 1908.

ALBERT E. BOULTON.

Witnesses:

C. F. GEYER,

JULIUS W. ROCHEVOT.