

No. 726,404.

PATENTED APR. 28, 1903.

D. A. CARPENTER.
DEVICE FOR TYING PACKAGES.
APPLICATION FILED JAN. 25, 1902.

NO MODEL.

Fig. 1.

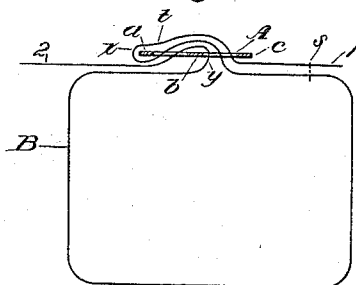


Fig. 2.

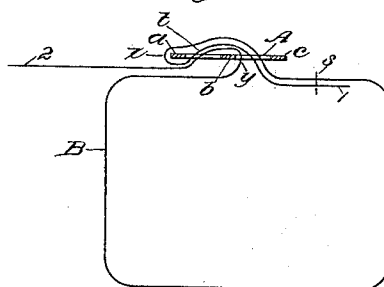


Fig. 3.

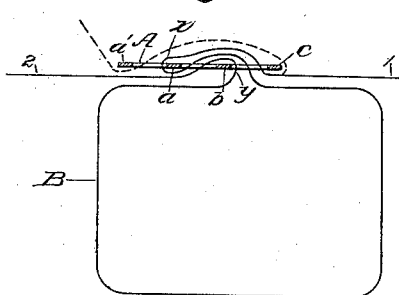


Fig. 4.

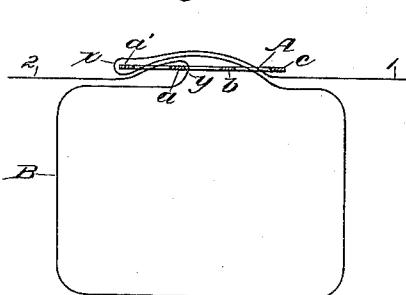
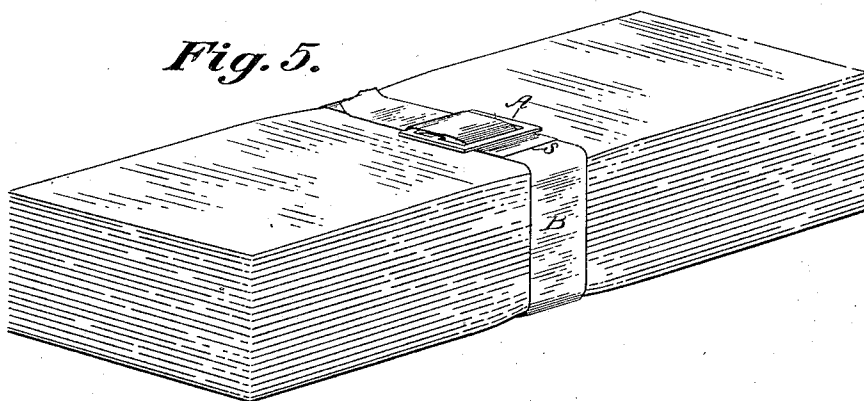


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

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DEVICE FOR TYING PACKAGES.

SPECIFICATION forming part of Letters Patent No. 726,404, dated April 28, 1903.

Application filed January 25, 1902. Serial No. 91,273. (No model.)

To all whom it may concern:

Be it known that I, DANIEL A. CARPENTER, a citizen of the United States, residing in the borough of Manhattan, city of New York, State of New York, have invented a certain new and useful Device for Tying Packages, of which the following is a specification.

This invention comprises a slotted plate or slide-buckle combined with a tape applied to it in a special manner, hereinafter described. It affords an economical and easily-manipulated means of securing packages of papers, &c.

In the accompanying drawings, Figure 1 shows a two-slot slide-buckle and the tape threaded through the slots in a manner contemplated by this invention. Fig. 2 illustrates another way of applying the tape. Fig. 3 shows a three-slot buckle and the applied tape; Fig. 4, a like buckle with a different arrangement of the plate, and Fig. 5 illustrates the application of the device to a package of folded documents.

The slide-buckle A is a mere slotted plate of suitable dimensions. In Figs. 1, 2, and 5 two slots are shown, while in Figs. 3 and 4 there is an additional slot.

In Fig. 1 the ends 1 2 of the tape B pass up through one slot, over the center bar *b*, and down through the other slot. The end 1 is then turned back over the end bar *a* and passed under the opposite end bar *c*. It may then be secured by stitching, as shown at *s*, or otherwise to the contiguous part of the tape B; but it is not necessary. The other end 2 must be left free and should be of appropriate length.

If a package of papers or bundle of any kind lies within the loop of the tape and the top and bottom edges of the plate or buckle A be grasped by the forefinger and thumb and the left-hand edge of the plate thrown up, obviously the end 2 of the tape may slip loosely around the center bar *b* to release the package, or it may be drawn outwardly to secure the package. In the latter case when the plate is released the strain of the tape draws it flat against the side of the package. The loop *x* of the tape end 1 draws in one direction against the cross-bar *a* and the loop *y* of the tape end 2 draws in opposite direction

against the cross-bar *b*, and the plate being by these strains held flat against the side of the package frictional contact of contiguous surfaces of the tape holds it securely. The arrangement is the same in Fig. 3, except there the plate has three slots, and consequently a fourth cross-bar *a'*. This construction has no advantage over that of Fig. 1. It may, however, appear more symmetrical, as both end bars *a'* and *c* are exposed.

In Fig. 4, which also shows a three-slot plate, the end 1 of the tape is passed up through the right-hand slot and down through the left-hand slot, while the end 2 passes upwardly through the middle slot and down through the slot at the left; otherwise the arrangement is precisely as in Fig. 1.

Fig. 2 shows an arrangement in which the fixed or stationary end 1 of the tape lies under the main part B. This is brought about as follows: The end 1 is threaded up through the slot at the right, then over and under the end bar *a*, then up through the left-hand slot, and down through the slot at the right. It should then be secured, as indicated at *s*, to the part of the tape lying above it. The other end, 2, is, as in Fig. 1, passed up through the right-hand slot and down through the one at the left.

If the end 1 terminated at *t*, Figs. 1 or 2, and were attached by stitching or otherwise to the underlying part thereof in Fig. 1 and to the overlying part thereof in Fig. 2, the device would be and behave in all respects as described. Of course an essential feature of this device is that the end 1 is applied to a cross-bar, as *a*, on that side of the plate from which the free end 2 of the tape extends in such a way as to draw upon the cross-bar in a direction opposite to that in which the strain of the end 2 is exerted. It is therefore not material how the end 1 is attached to its cross-bar. It might be done in a variety of ways.

If in the construction shown in Fig. 3 the tape end 1 were turned back and passed under the cross-bar *a'*, as shown in dotted lines, its extreme end could be grasped by the user to throw up the left-hand edge of the plate. The device would, however, behave and be in all material respects as already described.

I claim as my invention—

1. A package-tying device, comprising a slotted plate or slide-buckle having rigid cross-bars, and a tape having two loops extending freely past each other, a ply of each
5 loop extending through the same slot and each loop embracing a rigid cross-bar, the distance between the cross-bars embraced by the tape being much greater than the thick-
10 ness of the two plies of the tape passing through the slot.
2. A package-tying device comprising a slotted plate or slide-buckle provided with three cross-bars having fixed relation with
15 each other, and a tape having one end looped loosely around the central bar and extending out through one of the slots and the other end passed through the same slot and looped around the end bar at that side from which
20 the first-named end of the tape extends, the width of said slot being much greater than

the thickness of the two plies of the tape passing through it.

3. A package-tying device, comprising a plate slotted to form central and end cross-
25 bars and a tape, one end of which embraces the central cross-bar and forms an unobstructed loop extending from the bar which it embraces, past one end of the slotted plate, and the other end of which tape is looped
30 around the cross-bar of the frame beneath which the first-named end of the tape extends, the width of the slot between the central and end cross-bars being much greater than the thickness of the two plies of the tape which
35 pass through said slot.

In testimony whereof I have hereunto subscribed my name.

DANIEL A. CARPENTER.

Witnesses:

KATHARINE MACMAHON,
EDWARD C. DAVIDSON.