

(No Model.)

H. TOLLNER.
BOOK CARRIER.

No. 530,291.

Patented Dec. 4, 1894

Fig. 1.

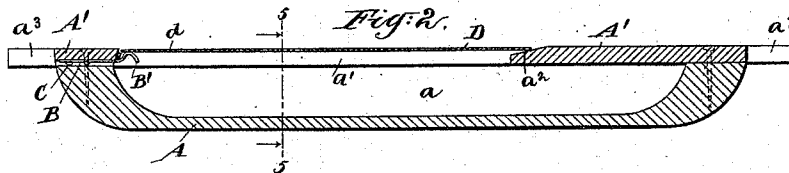
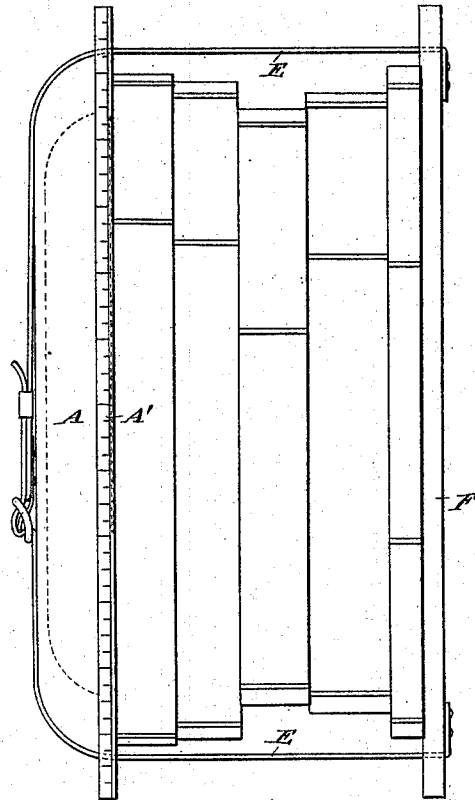
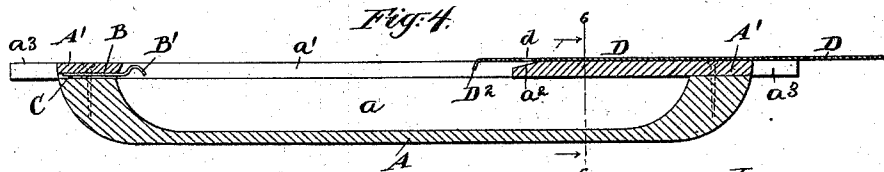
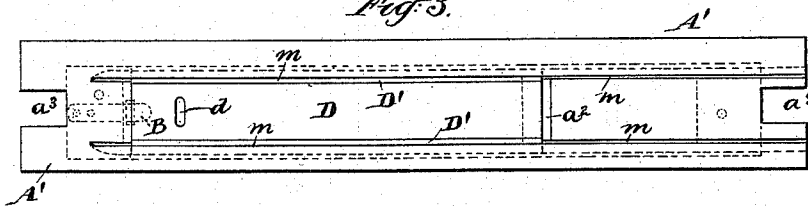
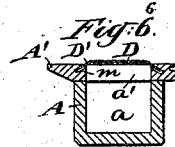
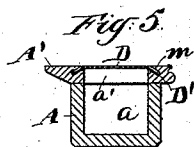


Fig. 3.



Witnesses:
Charles F. Searle.
H. F. Boyle.



Inventor:

Thos. Tollner
By James S. Sisson
Attorney

UNITED STATES PATENT OFFICE.

HUGO TOLLNER, OF BROOKLYN, NEW YORK.

BOOK-CARRIER.

SPECIFICATION forming part of Letters Patent No. 530,291, dated December 4, 1894.

Application filed September 12, 1894. Serial No. 522,804. (No model.)

To all whom it may concern:

Be it known that I, HUGO TOLLNER, a citizen of the United States, residing in Brooklyn, Kings county, in the State of New York, have invented a certain new and useful Improvement in Book-Carriers, of which the following is a specification.

My improved book carrier is of the class represented by the patent to me, dated November 28, 1893, No. 509,631, having a rigid portion which is adapted to receive and inclose pencils, pens and other articles for analogous uses, as erasers, and to hold them securely ready to be used when required and again stored in this receptacle. Two straps connected to the ends respectively of the rigid portion and provided with a buckle or analogous means for securing together, adapt the device for holding three or four or other number of moderate-sized books. The device is more especially adapted for school children. I have termed it a "combination carrier."

The present improvement is intended to overcome a difficulty of some magnitude due to the liability of the previous devices of this character, to become deranged on being subjected to any severe concussions, as being allowed to fall on the floor. The fastening or hinges of the cover of the pencil box, necessarily light, were liable to get out of order in the exigencies of ordinary use. I have discovered that a cover much less liable to accident may be formed mainly plane, of thin metal with a portion at each edge turned down at an angle of about thirty degrees, these edge portions sliding longitudinally of the box in correspondingly inclined saw-kerfs. I have devised a simple and convenient means of holding such cover reliably in the closed position.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a side elevation showing the device in use. The remaining figures show the box portion alone. Fig. 2 is a longitudinal vertical section, showing the box in the closed condition. Fig. 3 is a corresponding plan view. Fig. 4 is a section corresponding to Fig. 2, but showing the box in the partially open condition. Fig. 5 is a section on the line

5—5 in Fig. 2. Fig. 6 is a section on the line 6—6 in Fig. 4.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is the main body of the box, in one piece of maple or other approximately homogeneous wood having a long cavity *a* and A' is a thin portion permanently secured thereto by gluing and nailing. A large rectangular aperture *a'* occupies the central and main portion of this part A'. The remaining portions project over each end beyond the body A, the ends being provided with notches *a*³ for the straps. The edges also project beyond the body along each side and are finished by planing to serve as in my former patent, to allow the device to serve for ruling straight lines and for measuring.

In the upper face of the portion A' are two parallel grooves *m, m*, produced at the required inclination by sawing with a small saw which is kept in good order, and the presentation of the wood thereto is accurately gaged. The cover D is of sheet-steel, about No. 50. It is of a length corresponding to the length of the aperture *a'*. This cover is formed by stamping between suitable dies or otherwise so that the main portion is plane, with a wing D' on each edge bent downward to correspond with the inclination of the grooves *m*. The cover slides freely backward and forward with its wings D' received and guided in the grooves *m*, being easily moved longitudinally in both directions within the proper limits.

A spring B of thin metal, is firmly held by a screw C, in a narrow recess at one end of the body A, with its free end curved as indicated at B', and properly placed to receive the turned-down end of the cover, which latter is deflected nearly at right angles to the plane of the cover. After the cover has been properly engaged in the grooves *m, m*, this bending of the thin metal may be produced to the right extent by specially formed pliers.

The cover may be moved freely longitudinally of the box, its wings D' sliding in the grooves *m*, and the bent down portion D² will be of no effect while it is in the various intermediate positions, but when an attempt is made to draw the cover too far out the portion D² will engage with the adjacent portion of the

part A' and prevent it. When on the other hand the cover is thrust quite in, so that the box is completely closed, the bent-down portion D² will be held by the swelled portion B' of the spring. It will be seen that the completion of the inward movement of the cover to close the box, moves the portion D² in one direction past the swell B', deflecting it downward slightly in making this movement, after which the swell rises and locks the cover in the closed position. The commencement of the opening movement carries the bent-down portion D² in the opposite direction over the swell B'. The gentle force of the spring resists its movement in either direction, its principal use being to hold the cover in the locked position when it is thrust home.

The grooves *m* are a little wider than the wings D' which travel in them, the looseness being sufficient to allow the cover D to rise and sink to about the extent of the thickness of the metal of which it is composed. When the cover is fully home it is permitted to drop down the thickness of the metal so that the upper face of the cover is flush with the face of the part A'. This allows the device to be used in the inverted position as a ruler and to lie fairly on the table or on a book or paper, but when it is in the act of being drawn out or in it rides the thickness of the metal higher. A narrow portion of the face of the part A' adjacent to the rear end of the cover is beveled, as indicated at *a*², to allow the cover to rise with facility to the small extent required at the commencement of the withdrawing motion.

It will be observed that the interior of the box cannot be so fully made accessible as when the cover is hinged, as in my former patent, but it is not necessary that the entire interior of the box be exposed in order to allow proper access. The whole of the contents, or any desired pencil or pen, or similar articles, as an eraser or extra pen, may be taken out by inverting the device or by reaching in with the fingers into the portion of the interior which is exposed.

A hole *d* in the plane portion D of the cover affords facility for engaging it by a finger to effect the sliding motion in one direction or the other.

I propose to enamel or varnish and print the thin metal cover either for decoration or for use or both.

E, E, are the straps secured to the parallel bar F, and applying in the notches *a*³, *a*³ in the ends of the top A and serving with the parts described and the buckle to hold books

for school children and facilitate their preservation and transportation, as set forth in my patent referred to.

Modifications may be made in the details and proportions within wide limits. The bevel of the edges D' may be greater or less, taking care that the block of wood be presented to the saw which produces the grooves *m* so that the grooves shall be produced at a corresponding angle. I prefer that the grooves *m* shall not run the whole length of the device. This can be avoided by using small saws and traversing the wood only to the proper extent in forming these grooves, as will be understood by wood-workers.

There may be various devices, as tables, rules and instructions stamped or otherwise produced on the several surfaces. The inclination of the grooves *m*, *m*, and of the corresponding wings D' of the cover may be varied. Forty-five degrees may be preferable to the thirty degrees named above. Whatever the inclination of one, that of the other should correspond.

I claim as my invention—

1. The box A having the cavity *a* adapted to serve as a receptacle for pens and pencils, and provided with the top A' overhanging as shown, and having the central aperture *a'* nearly corresponding with the cavity *a*, the inclined grooves *m*, *m*, at the sides of the aperture *a'*, and the notches *a*³ at the ends, in combination with the straps E, E, and buckle G, and with the thin metallic cover D, having a wing D' along each edge set at an inclination corresponding to said grooves, all arranged for joint operation substantially as herein specified.

2. The box A having the cavity *a* adapted to serve as a receptacle, and provided with the top A' having the aperture *a'* nearly corresponding to the cavity *a* and having also the inclined grooves *m*, *m*, along the sides of such aperture, and the spring B having a rounded portion B' in combination with the thin sliding cover D having wings D' corresponding to the grooves *m*, *m*, and the turned down portion D², the latter arranged to engage said rounded portion of the spring and cause the cover to be retained thereby, all substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

HUGO TOLLNER.

Witnesses:

T. D. STETSON,
M. F. BOYLE.