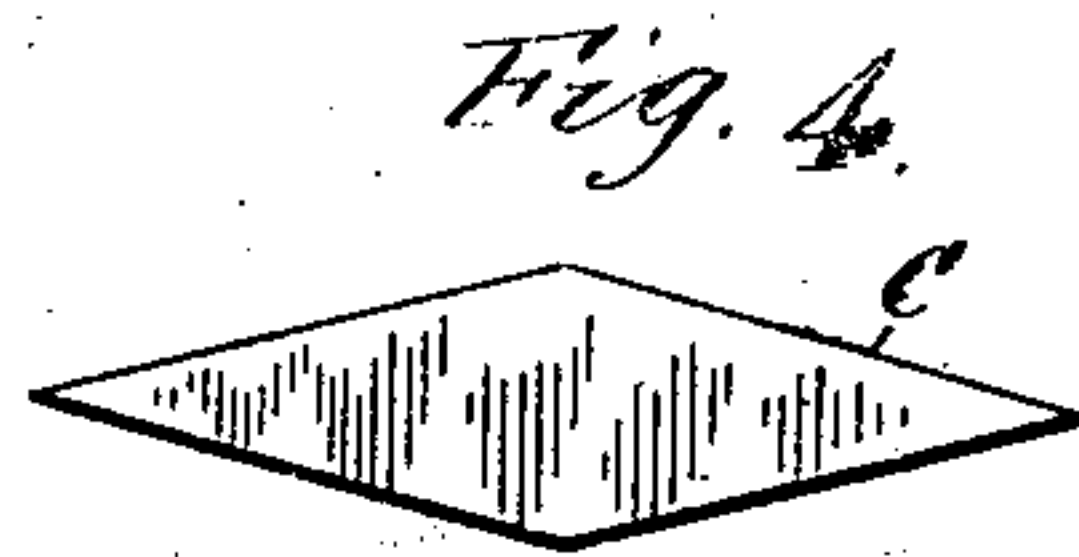
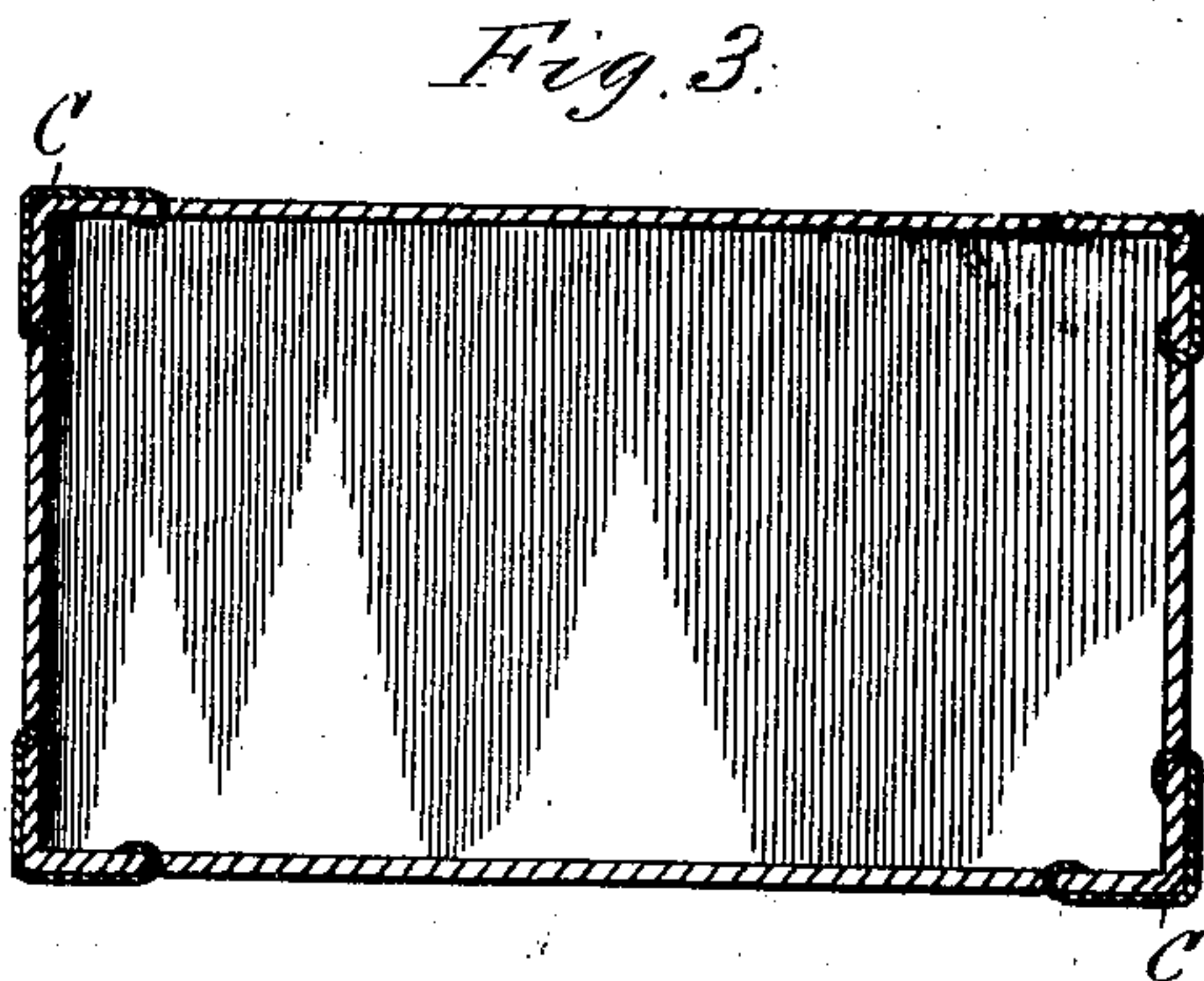
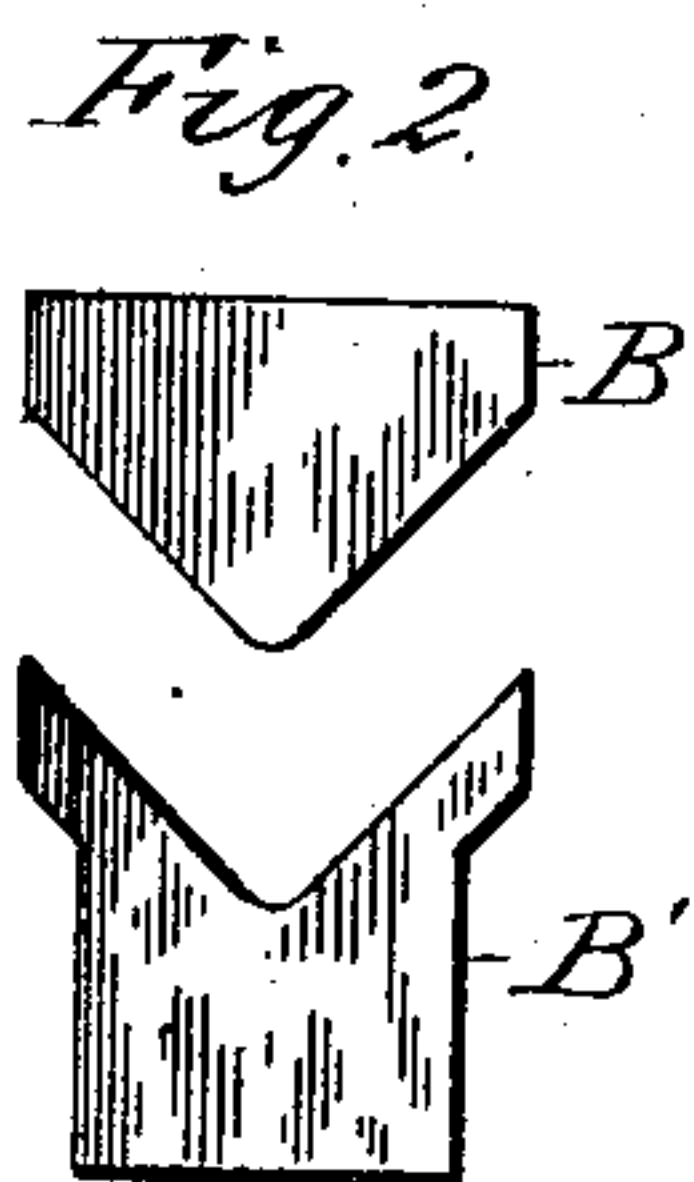
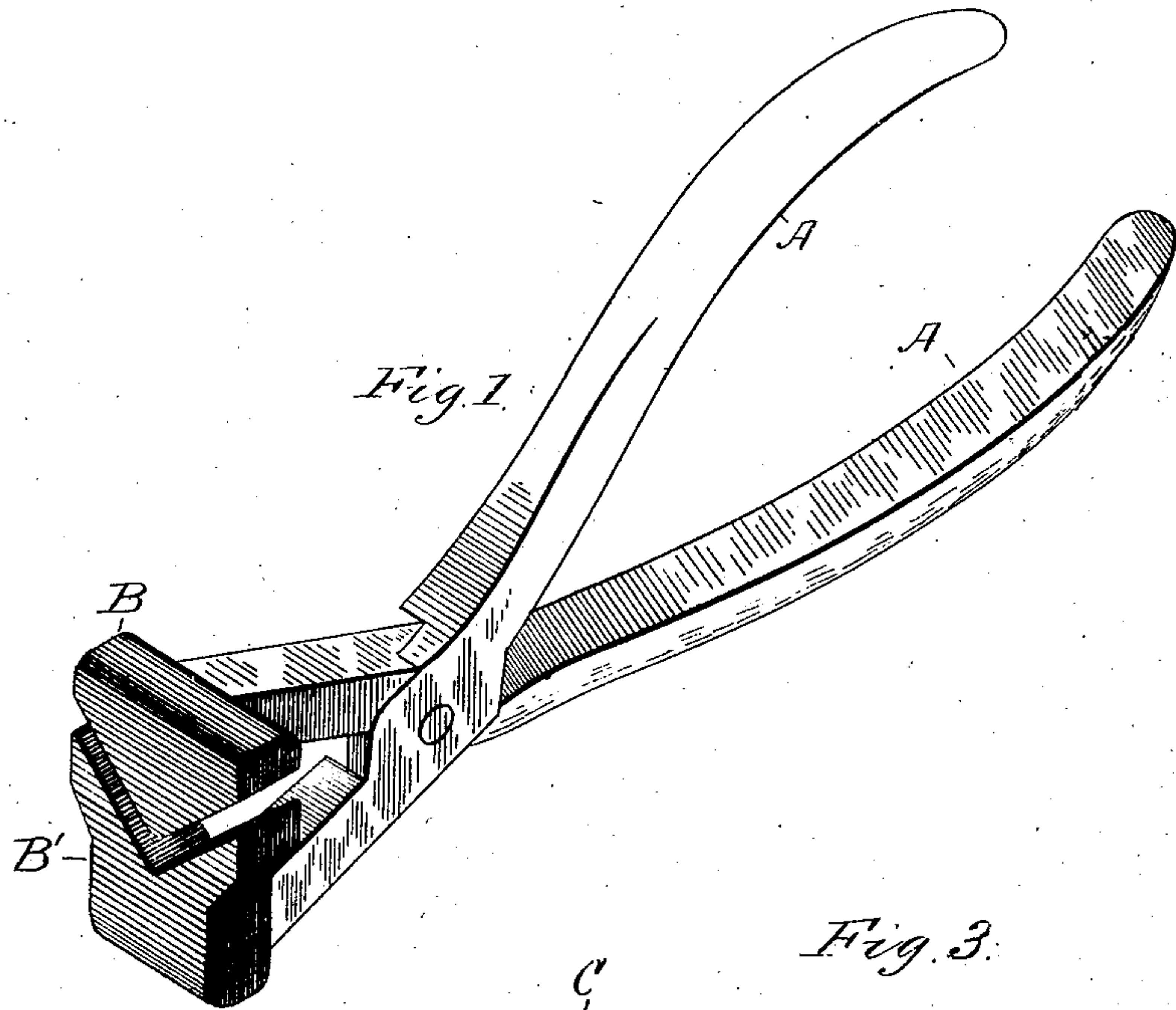


(No Model.)

T. A. TAYLOR.

PLIERS FOR SECURING FASTENERS TO THE CORNERS OF BOXES.
No. 371,639.

Patented Oct. 18, 1887.



Witnesses:
F. R. Stuart
L. Edward Bacon

Inventor.
Theodore H. Taylor
By Marble & Mason,
Attys.

UNITED STATES PATENT OFFICE.

THEODORE A. TAYLOR, OF POUGHKEEPSIE, NEW YORK.

PLIERS FOR SECURING FASTENERS TO THE CORNERS OF BOXES.

SPECIFICATION forming part of Letters Patent No. 371,639, dated October 18, 1887.

Application filed June 9, 1887. Serial No. 240,139. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. TAYLOR, a citizen of the United States, residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Pliers for Securing Fasteners to the Corners of Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to devices for attaching metallic clasps, fasteners, or supporters to the corners of pasteboard, paper, or other similar light forms of boxes; and it consists in the peculiar construction of the device, as will be hereinafter disclosed in the description and claims.

In all sorts of paper and pasteboard boxes there is a liability and tendency to give way or break open at the corners, or where the several planes are bent or united to form the boxes, which is a serious objection. To overcome this difficulty plates or clasps have been applied to the corners of boxes, so as to prevent their severance at these points; but, so far as I am aware, no device possessing the characteristics of mine has been provided for securing said plates or clasps in position. The object of my invention is to provide an improved device which will facilitate the attachment of metallic clasps or fasteners to the corners of pasteboard and similar boxes for strengthening or supporting and preventing the same from being broken out or torn. I attain this object by the device illustrated in the accompanying drawings, wherein the same letters of reference indicate the same parts, and in which—

Figure 1 represents a perspective view of my improved device. Fig. 2 is a front view of the jaws in open position, showing their peculiar construction. Fig. 3 is a horizontal section of a box, showing its corners supported and strengthened by clasps or fasteners applied by my improved device. Fig. 4 is a detail plan view of one of the clasps or fasteners which my improved device is intended to apply to the corners of boxes.

In the drawings, A A represent the handles of a pair of pliers, which are recessed and

pivoted at their fulcrum or crossing-point in the usual manner.

B B' indicate the enlarged heads or jaws of the pliers, which are formed on the outer ends of their arms. The jaw B is formed nearly triangular in shape, as shown in Figs. 1 and 2, while the jaw B' is formed with a nearly triangular-shaped recess in its face, which corresponds in size and shape to the opposite jaw, B. It follows from this construction of the jaws that when pressure is applied to the handles A A and the jaws are forced together the triangular-shaped jaw B snugly fits or fills the correspondingly-shaped recess in the opposite jaw, B'.

The devices to which I apply my pliers for strengthening the corners of boxes and preventing them from rupture are the fasteners or clasps C C, as shown in Figs. 3 and 4. They consist of flat inelastic pieces of metal—such as sheet-tin—formed with tapering shanks having sharp points or ends.

In the use of my pliers for attaching the clasps or fasteners I place the latter in position over the corners of the boxes, bend them angularly, and force their pointed ends through the sides thereof, so as to retain them in position for the time being. I then place the recessed jaw B' over the bent portion of the fastener outside of the corner of the box and the triangular-shaped jaw B inside of said corner, and then through the leverage of the handles force said jaws toward each other, and thus, owing to the inclination of the faces or sides of the jaw B, force down the pointed ends of the fastener against the sides of the box and securely fasten or clinch the same in place. The fasteners or supports can also be secured within the box-corners, if desired, by the same manipulation or operation of my improved pliers.

It is obvious that minor changes can be made in the forms of the jaws of my pliers without departing from the principle of my invention—as, for instance, I regard it as within the scope of my invention to so form their opposing surfaces or faces as to conform to boxes having rounded or other shaped corners; also, it is obvious that the forms of jaws which I have described and shown can be employed in machines operated by foot or other

power for applying fasteners to the corners of boxes in the construction of the latter in box-manufactories.

My pliers, constructed as described, are cheaply manufactured, simple, strong, easily handled, and not liable to get out of order, and will be found of great advantage and utility in constructing boxes with supported corners in the first instance, and in supplying fasteners to the corners of ruptured boxes in stores and analogous places.

Having thus fully described my invention and explained its use and operation, what I claim as new is—

1. A pair of pliers for securing clasps or fasteners to the corners of pasteboard and similar boxes, provided with enlarged jaws conforming in shape to the inside and outside

of the corners of said boxes, and operating to bend down or clinch the sharp points of said clasps or fasteners, substantially as described.

2. A pair of pliers for securing clasps or fasteners to the corners of pasteboard and similar boxes, provided with enlarged jaws, one of them being substantially triangular in shape and the other formed with a correspondingly-shaped recess, said jaws operating, when pressed toward each other, to bend down or clinch the sharp points of said clasps or fasteners, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

THEODORE A. TAYLOR.

Witnesses:

M. F. BEUTELL,
WM. H. DIAMOND.