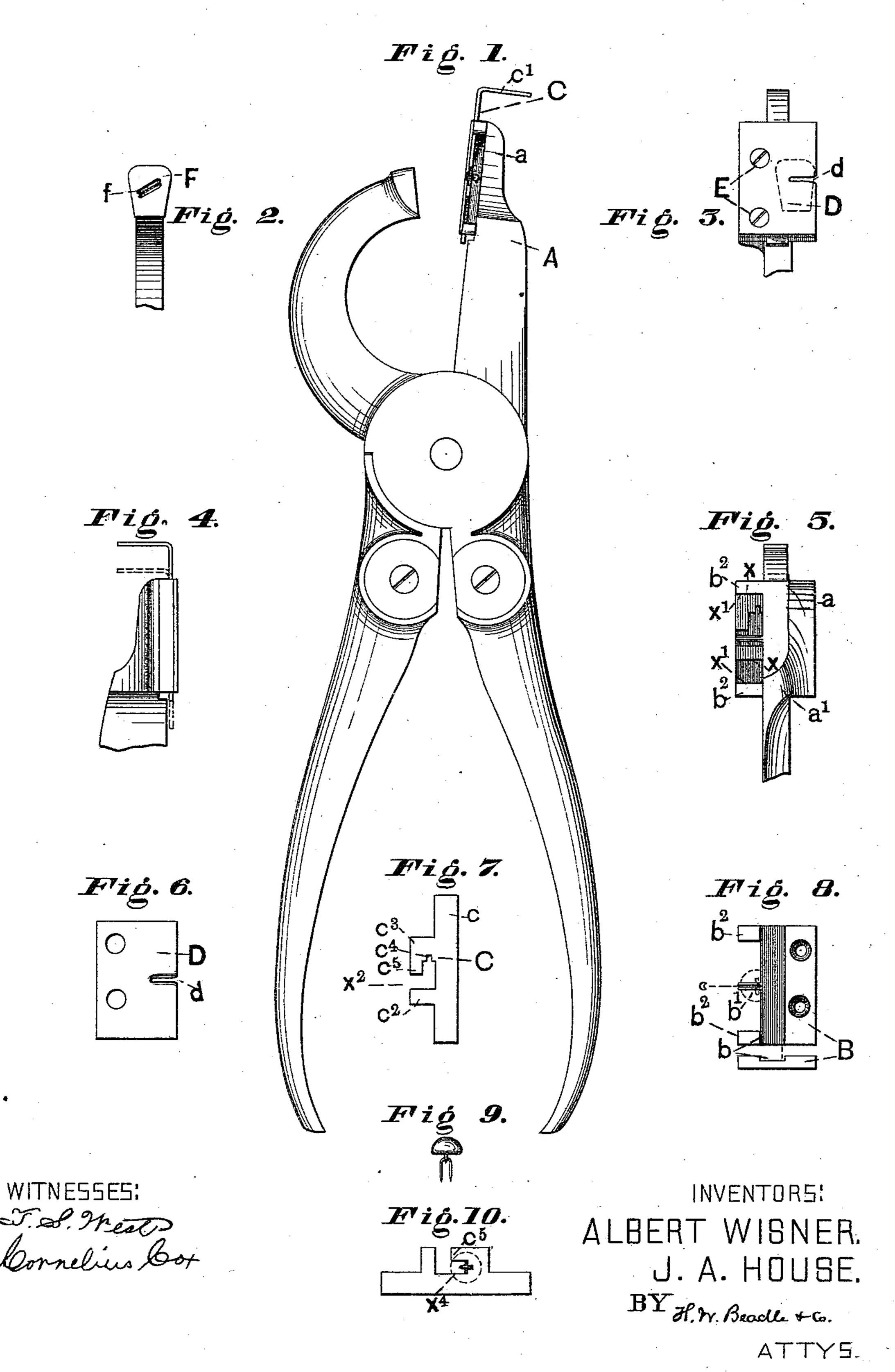
## A. WISNER & J. A. HOUSE. Tool for Attaching Buttons to Shoes.

No. 211,950.

Patented Feb. 4, 1879.



## UNITED STATES PATENT OFFICE.

ALBERT WISNER AND JAMES A. HOUSE, OF BRIDGEPORT, CONNECTICUT; SAID HOUSE ASSIGNOR TO SAID WISNER.

## IMPROVEMENT IN TOOLS FOR ATTACHING BUTTONS TO SHOES.

Specification forming part of Letters Patent No. 211,950, dated February 4, 1879; application filed December 11, 1878.

To all whom it may concern:

Be it known that we, Albert Wisner and James Alford House, of Bridgeport, county of Fairfield, State of Connecticut, have invented new and useful Improvements in Tools for Fastening Buttons to Shoes; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of tools for fastening buttons to shoes which is represented in the patent of Albert Wisner, March 6, 1878, No. 201,858, and our patent of July 23, 1878, No. 206,288; and consists, mainly, first, in the employment, in connection with the main jaw of a clamping-tool, of a pin adapted to pass through the eye of the button and hold the same in its proper position; second, in the combination, with said pin, of a slotted plate adapted to receive and hold the staple in its proper position; and, third, in the combination, with devices for holding the staple from movement in a forward and rearward direction, of a sliding plate for holding the staple, at the proper time, against movement to either side.

It further consists in certain details of construction, all of which will be fully described hereinafter.

In the drawings, Figure 1 represents a side elevation of an improved tool; Fig. 2, a face view of the smaller jaw; Fig. 3, a face view of the upper jaw and its attachments; Fig. 4, a side elevation of the upper jaw and its attachments; Fig. 5, a rear elevation of the upper jaw and its attachments; Fig. 6, a plan view of the slotted face-plate detached; Fig. 7, a plan view of the sliding plate C detached; Fig. 8, a plan and edge view of the plate B detached; Fig. 9, a side elevation of the button and staple, and Fig. 10 a plan view of the sliding plate with the button and staple in place.

To enable others skilled in the art to make and use our improved tool we will now proceed to describe fully its construction and manner of operation.

The general form and construction of the main portions of the tool are like the corresponding parts of the tool covered by our Patent No. 206,288, before referred to.

Certain marked points of difference, however, exist, and these will now be described in detail

detail.

A, Fig. 1, represents the main or upper jaw, which is provided at its front end with a projection, a, which is held by means of an angular base or attachment, a', Fig. 5, in position upon one side of the vertical plane of the lower jaw, as indicated in dotted lines, Fig. 3. B, Fig. 8, represents a plate adapted in size and shape to be attached to the projection a in such manner as to overhang the opposite jaw.

b represents a longitudinal recess formed in the inner face of the plate B, and  $b^1$  a pin projecting in a lateral direction from one side of the plate, as shown.  $b^2$   $b^2$  represent lateral projections at each end of the plate B, by means of which the cover-plate, hereinafter

referred to, is properly supported.

C, Figs. 1 and 7, represents a metal plate or bar having the main longitudinal portion c, Fig. 7, with bent end  $c^1$ , Fig. 1, to serve as a handle, and the lateral extensions  $c^2 c^3$ , Fig. 7, the latter of which is provided with a small recess,  $c^4$ , and a right-angled finger,  $c^5$ , as shown. This plate or bar C, when in its proper place in the tool, moves freely in a longitudinal direction in the recess b, Fig. 8, but is limited in its movement, and held against removal from the jaw by the contact of the proper faces x x, Fig. 5, of its extensions with the adjacent edges  $x^1$   $x^1$  of the projections  $b^2$   $b^2$  of the plate B.

D, Figs. 3 and 6, represents the cover-plate, consisting of a square piece of metal, adapted to cover the outline of plate B, which is provided upon one side with a central slot, d, as shown. This slot, it will be observed, when all the parts are united in the tool, is in line under the pin  $b^1$  of the plate B, as shown in Fig. 1. The slot also occupies a central position relatively to the opening  $x^2$ , Fig. 7, between the extensions  $c^2$   $c^3$  of the plate C, when the latter is in the position shown in Fig. 1.

E E, Fig. 3, represent securing-screws, by

means of which and proper openings the

plates B D are secured to the jawA.

The sliding plate C, it will be understood, is held in place when lying in the recess of the plates B by the cover-plate D, as shown in Fig. 3.

F, Fig. 2, represents the smaller or lower jaw, which is provided with diagonal double-

faced recess f, as shown.

When the parts of the tool are all in place, its operation, when used, is substantially as follows: The sliding plate C being in the position shown in Fig. 1, the eye of a button having a staple caught therein, as shown in Fig. 10, is slipped onto the pin  $b^1$ , Fig. 8, and moved up to the inner end of the same, as shown. By this action the staple is drawn into the central slot of the cover, by means of which it is securely held from movement in a forward or rearward direction. The sliding plate C then being moved in a rearward direction, as indicated in dotted lines, Fig. 4, its finger  $c^5$ , Fig. 10, and the opposite wall,  $x^4$ , of the main portion of the plate pass the staples and securely hold it on each side, as shown. When the parts are in this position, then it will be understood that the staple is held from movement in a forward and rearward direction by means of the slotted cover-plate D, and to each side by the sliding plate C. The staple thus being properly held, the tool may be applied to the leather, in the usual manner, for the purpose of fastening the button thereto. When the attachment has been thus made the sliding plate is moved in a forward direction for the purpose of releasing the staple to permit the removal of the button from the tool.

Some of the advantages of the described construction are as follows: The construction

of the tool is exceedingly simple and comparatively inexpensive, while at the same time it is effective in its action, and can be easily operated by any person. No springs whatever are employed, and hence the tool will last longer under hard usage.

Having thus described our invention, what we claim as new, and desire to secure by Let-

ters Patent, is—

1. The combination, with the main jaw of a clamping-tool, of a pin adapted to pass through the eye of a shoe-button, substantially as described.

2. In combination with a pin, substantially as described, adapted to hold the eye of a button, a slotted plate, substantially as described, adapted to hold the staple held by the eye against movement in a forward or rearward direction.

3. In combination with devices, substantially as described, for holding the staple from movement in a forward and rearward direction, a sliding plate, substantially as described, adapted to hold this staple against movement to either side.

4. In combination with the jaw A, having the projection a, the plate B, having the pin  $b^{1}$ , as and for the purpose described.

5. In combination with the jaw A and plates B, having the pin  $b^1$ , the slotted cover-plate C', as described.

This specification signed and witnessed this

6th day of December, 1878.

ALBERT WISNER.

JAMES ALFORD HOUSE.

Witnesses:

WILLIAM L. SHERWOOD, ARTHUR ELWOOD.