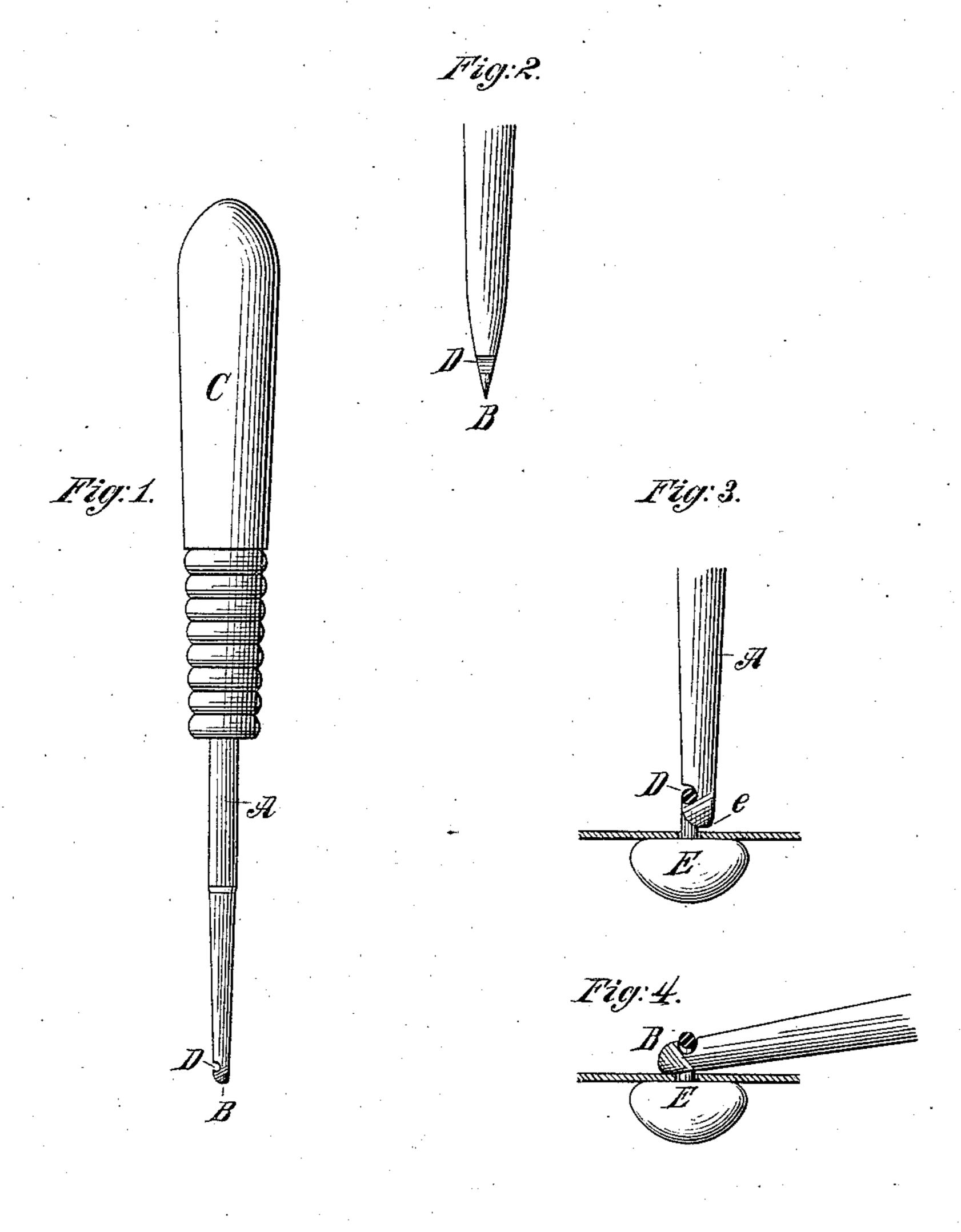
(No Model.)

R. & O. MILLER.

AWL FOR ATTACHING BUTTONS.

No. 312,491.

Patented Feb. 17, 1885.



Witnesses,

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United States Patent Office.

RUDOLPH MILLER, OF ORANGE, NEW JERSEY, AND OTTO MILLER, OF NEW YORK, N. Y.

AWL FOR ATTACHING BUTTONS.

SPECIFICATION forming part of Letters Patent No. 312,491, dated February 17, 1885.

Application filed July 30, 1884. (No model.)

To all whom it may concern:

Be it known that we, RUDOLPH MILLER, of Orange, Essex county, New Jersey, and Otto Miller, of the city, county, and State of New York, have invented a new and useful Improvement in Awls for Shoe-Buttons; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making

a part of this specification.

The object of our invention is to provide a tool for drawing instead of pushing the eye of a shoe-button through the shoe-leather, and to overcome thereby the difficulty and annoyance ordinarily attendant upon the insertion of the button preparatory to fastening it in the shoe by passing a retaining device through its eye, the tool being made not only to pierce the holes in the shoe for the insertion of the buttons, but also adapted for easily drawing the eye of the button through the hole so pierced in readiness to be secured by a metallic fastener.

It consists of an awl notched upon one side, near the end thereof, to engage the eye of a button, and sharpened at its end below the notch to form a cutting and piercing blade, as

hereinafter more fully described.

In the accompanying drawings, Figure 1 is an elevation of my improved shoe-button awl; Fig. 2, a view of its end on an enlarged sc 1; looking full toward the opening of the notch; Fig. 3, an enlarged view of the end of the awl, illustrating a button drawn thereby through the fabric; and Fig. 4, a similar view illustrating the awl in position to be removed from the eye of the button.

A represents the body of the awl; B its outer end; C its handle, and D a lateral notch
cut in the awl near to its extremity. The
body of the awl is made more or less tapering
toward its outer end. The notch D is cut in
the side thereof at about a right angle to its
length, and to a depth equal to the thickness
of the wire forming the eye of a shoe-button,
E, the bottom of the notch being semicircular
to correspond with the section of the wire.
The end of the awl is beveled off on either

50 side to form a terminal cutting edge or blade

(see Fig. 2) parallel with or in the same plane as the length of the notch, and this cuttingedge is preferably made with a sharp curve, (see Fig. 3,) the center, e, of the curve being removed to that side of the longitudinal axis 55 of the awl farthest from the notch. The notch D is placed so near to the end of the awl as that when it engages the button of the eye (see Fig. 3) the end of the awl may be turned freely through the eye (see Fig. 4) for ready 60 disengagement therefrom after it has been drawn through the body of the shoe. The body of the awl immediately above the notch is of the same diameter as below it, and the upper outer edge of the notch is in a right line 65 with its lower outer edge, so that said edges may not catch in the aperture pierced thereby. The body of the awl may be enlarged gradually in diameter from a point above the notch to permit of an enlargement of the ap- 70

erature by pushing the awl therein.

We are aware that a stiletto having a pointed end provided with a T-shaped slot or eye with hooked portions overhanging the eye, and constructed with flanges at its side so as 75 to cut a T-shaped opening in the material through which it is passed, has been described and claimed in Letters Patent No. 278,733; but our improvement differs essentially therefrom, in that instead of terminating in a long 8c point the end of our awl is comparatively short and stubby, and nearly as wide in one direction as the body thereof, being flattened and sharpened in the other direction to form a rounded cutting-blade; and, instead of hav- 85 ing a T-shaped eye considerably removed from the point and with overhanging hooked portions and lateral flanges it is provided with a simple lateral notch at right angles to the edge of the blade, and as close as possi- 90 ble thereto, and with a plain body without flanges or other projections therefrom.

Our awl is adapted specially to the drawing of the eye of a shoe-button through the body of the shoe independent of any fastener 95

or auxiliary device.

We claim as our invention—
A shoe-button awl constructed with a flattened end terminating in a curved terminal
cutting edge or blade, and with a lateral notch 100

above the cutting-edge at a right angle to the length thereof, and adapted to hook into the eye or shank of a button, the upper and lower outer edges of the notch being in the same 5 right line, substantially as and for the purpose herein set forth.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

MUDULPH MILLER.
OTTO MILLER. RUDOLPH MILLER.

Witnesses:

E. C. PERKINS, G. H. SPENCER.