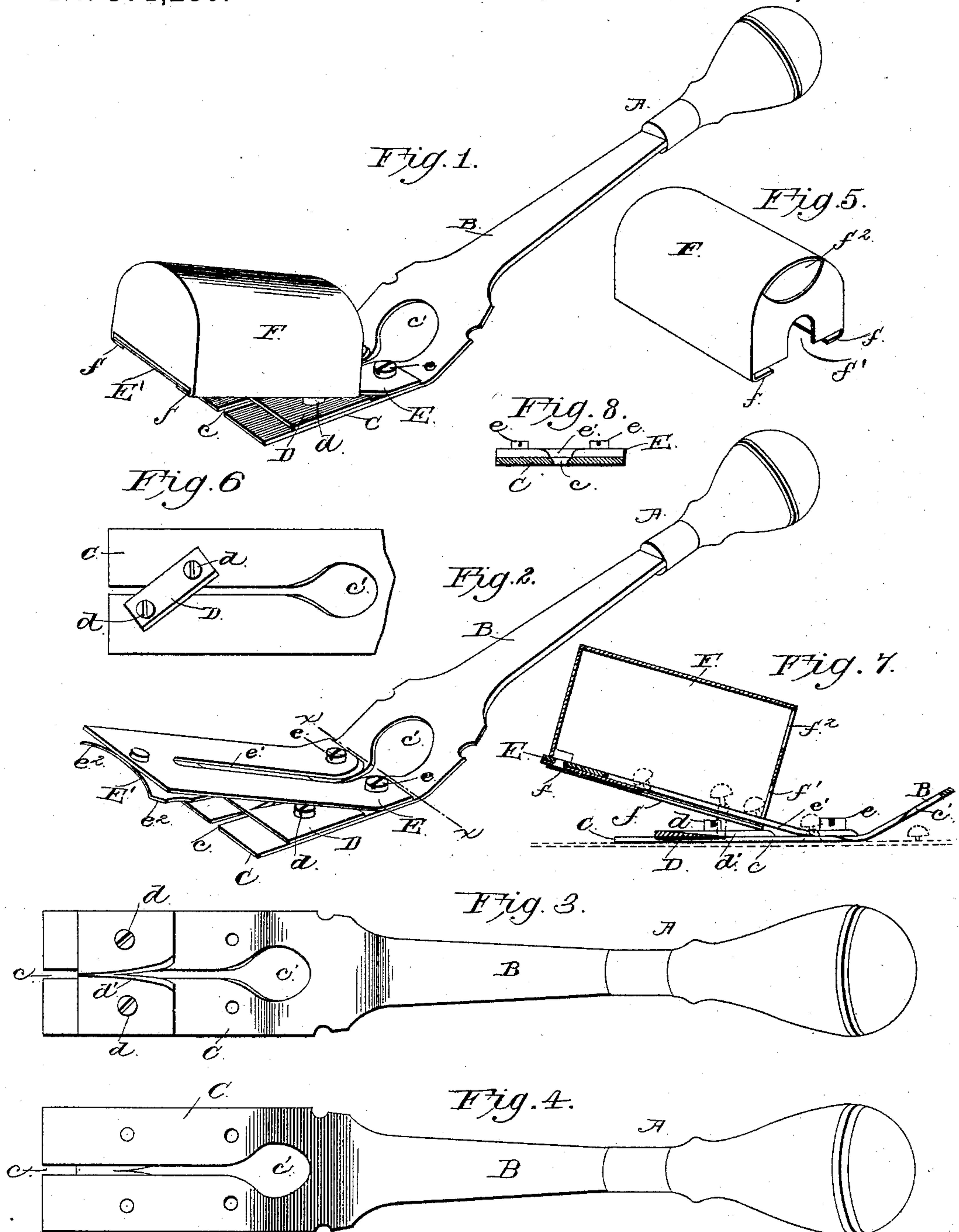


(No Model.)

D. L. SHARP.
SHOE BUTTON REMOVER.

No. 371,280.

Patented Oct. 11, 1887.



Witnesses

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DON LUCIUS SHARP, OF HORNELLSVILLE, NEW YORK.

SHOE-BUTTON REMOVER.

SPECIFICATION forming part of Letters Patent No. 371,280, dated October 11, 1887.

Application filed August 5, 1887. Serial No. 246,225. (No model.)

To all whom it may concern:

Be it known that I, DON LUCIUS SHARP, a citizen of the United States, residing at Hornellsville, in the county of Steuben and State of New York, have invented a new and useful Improvement in Shoe-Button Removers, of which the following is a specification.

My invention relates to an improvement in shoe-button removers; and it consists in the peculiar combination and arrangement of devices, which will be more fully hereinafter described, and particularly pointed out in the claims.

In buying button-shoes the purchaser invariably requests that the buttons as attached with cord or thread be removed and reset with the common metallic fasteners.

The object of my invention, therefore, is to provide a device for quickly removing the row of buttons sewed upon the shoes at the factory and avoiding the loss of time and labor heretofore spent in removing the said buttons separately. I attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a perspective view of my improved device. Fig. 2 is a similar view with the holder removed. Fig. 3 is a top plan view with button-holder supporting-plate removed. Fig. 4 is a bottom plan view. Fig. 5 is a detail perspective view of the holder. Fig. 6 is a detail view of a different form and arrangement of cutter. Fig. 7 is a longitudinal sectional view. Fig. 8 is a transverse section on line *x x* of Fig. 2.

A indicates the handle, B the tang of the instrument, and C the cutter-plate, integrally formed with the lower end of the tang B and curved downwardly therefrom, as illustrated. The plate C has a central slot, *c*, cut therethrough, which terminates at its inner end in an enlarged curved opening, *c'*. The upper edges of the slot *c*, adjacent to the opening *c'*, and of the front portion of the said opening are all slightly rounded, for a purpose which will be set forth hereinafter.

Upon the top surface of the plate C, nearer the front end thereof, a cutter or blade, D, is secured by machine-screws *d d*, as shown in

Fig. 3. This blade D is provided with a V-shaped cutting-slot, *d'*, which is adjusted over the slot *c* in the plate C. As shown in Fig. 6, the cutter D is shown in a different form and as arranged crosswise of the plate C.

On the rear portion of the plate C, adjacent to the opening *c'*, a spring-plate, E, is secured by set-screws *e*. This plate is also provided with a slot, *e'*, passing partially therethrough, and the slot *e'* opens out therefrom adjacent to the said opening *c'* in the plate C. The plate E, when mounted as above described, is at an angle above the plate C, and on the under side of its free raised end a contact-plate, E', is secured and has its front edges, *e''*, slightly bent downward.

A button-holder or hood, F, is adapted to be fitted over the plate E, and consists, essentially, of a metallic hood having its button side open and provided with flanges *f*, which slide over the edges of the plate E and are retained in connection therewith by the contact-plate E', which presses against the under side of the flanges *f*. The end of the hood adjacent to the opening *c'*, when mounted, is formed with an opening, *f'*, for the passage of the buttons therethrough, and above said opening a larger aperture, *f''*, is formed, through which the buttons pass in emptying the hood by turning the device entire upside down. The opposite or outer end of the hood is inclosed, which prevents the buttons passing through the hood at this point.

In using my improved device the operation is as follows: The shoe is drawn over the rounded end of a narrow board, which may be suitably mounted, so that the buttons will lie on a flat surface. The shoe is held by the sole with the left hand, while the instrument herein described is held in the right. The instrument is then adjusted over the lower button of the row, the said button passing through the opening *c'* in the cutter-plate C, and as the instrument is drawn toward the operator the button-shanks pass into the slot *c* of the plate C, and the buttons are gradually raised from the shoe by the plate E and pulled taut, so that the thread only engages with the cutter D. This operation takes place with each button, and by sweeping the instrument over the buttons, as above, they are cut asunder from the shoe

and pass into and are collected by the hood F, when they can be emptied therefrom by turning the instrument over, as hereinbefore set forth.

5 The form of cutter or blade, hood, and the general construction of the device can be changed and other forms substituted for those shown and described without in the least departing from the nature and principle of my
10 invention.

The novelty and utility of my improved device being obviously apparent and appreciable, it is unnecessary to further enlarge upon the same herein.

15 The purpose of the spring contact-plate E' at the termination of the slot e' in plate E is to force the button out of the slot into the holder F, the shanks of the button coming into contact with the spring-plate E' during the operation of the instrument, and by this contact
20 being projected into the holder.

Having thus described my invention, I claim—

25 1. The combination of the cutter-plate C, constructed as set forth, and having a suitable cutter mounted in connection therewith, the plate E, and the hood F, mounted on the plate E, substantially as described.

30 2. The combination of the slotted cutter-plate C, having a cutter-blade secured thereto, the inclined spring-plate E, the contact-plate E', secured to the under outer end thereof, and the hood F, of the construction set forth

and adapted to slide over the spring-plate E, substantially as described. 35

3. The combination, with the cutter-plate C and the cutter D, of the spring-plate E, substantially as described.

4. The combination, with the cutter-plate C, having the slot e and opening e', of the cutter-
40 blade D, having the V-shaped opening, substantially as described.

5. The combination, with the cutter-plate C, the cutter D, and the inclined spring-plate E, having a slot passing partially therethrough
45 and provided with a contact-releasing plate, E', of the hood F, having the bottom flange and the opening in one end thereof, as set forth, substantially as described.

6. In combination with the cutter-plate C, 50 carrying the cutter, the detachable hood fitted to one side of the guard-plate to catch the buttons therefrom, as set forth.

7. In combination with the cutter plate C, having the cutter, the spring plate E, hood F, 55 fitted to the spring-plate on one side of the guard-plate, and the contact releasing plate E', against which the buttons strike to be projected into the hood, as set forth.

In testimony that I claim the foregoing as
60 my own I have hereto affixed my signature in presence of two witnesses.

DON LUCIUS SHARP.

Witnesses:

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GEO. W. COMBS.