

(No Model.)

W. D. SCHIEFER.

DEVICE FOR DETACHING BUTTONS.

No. 379,609.

Patented Mar. 20, 1888.

FIG. 1.

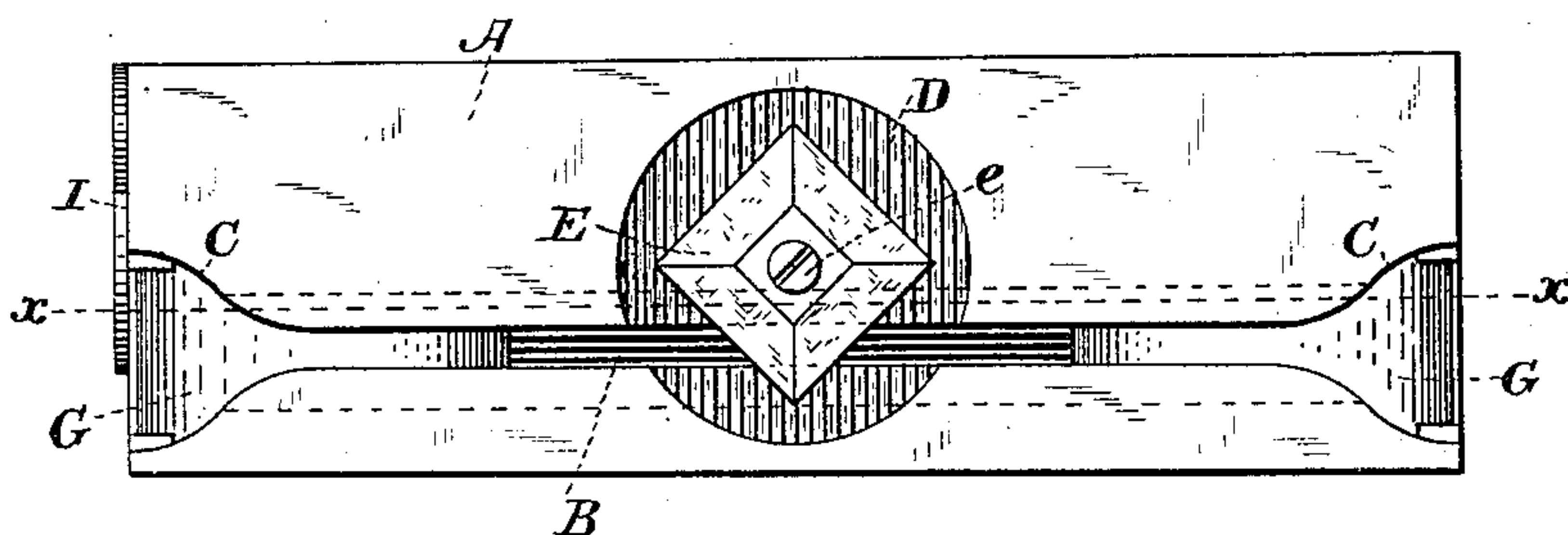


FIG - 3 -

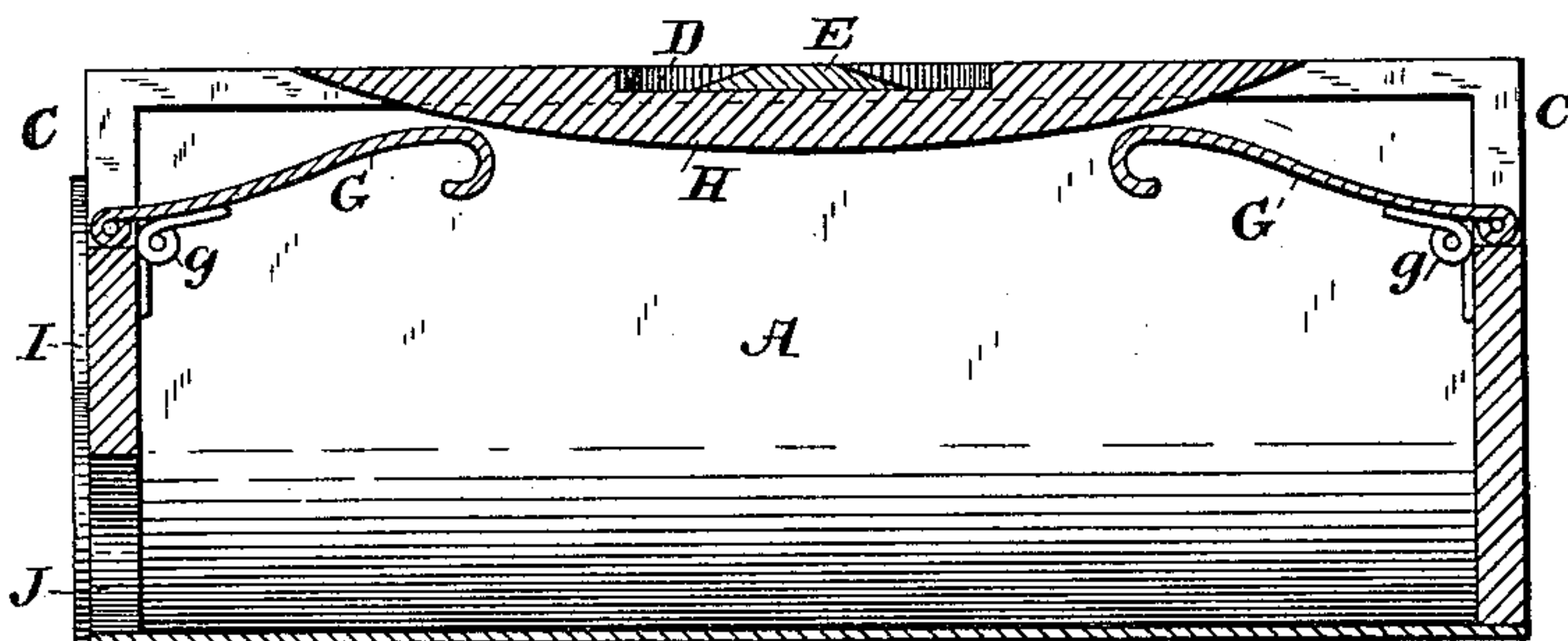


FIG - 2 -

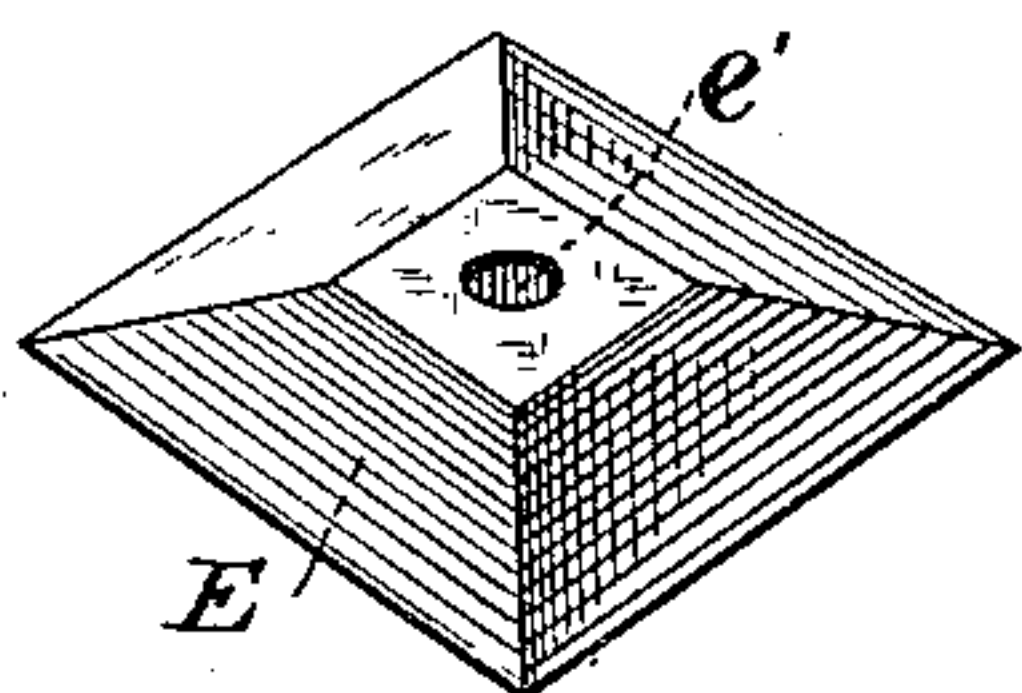
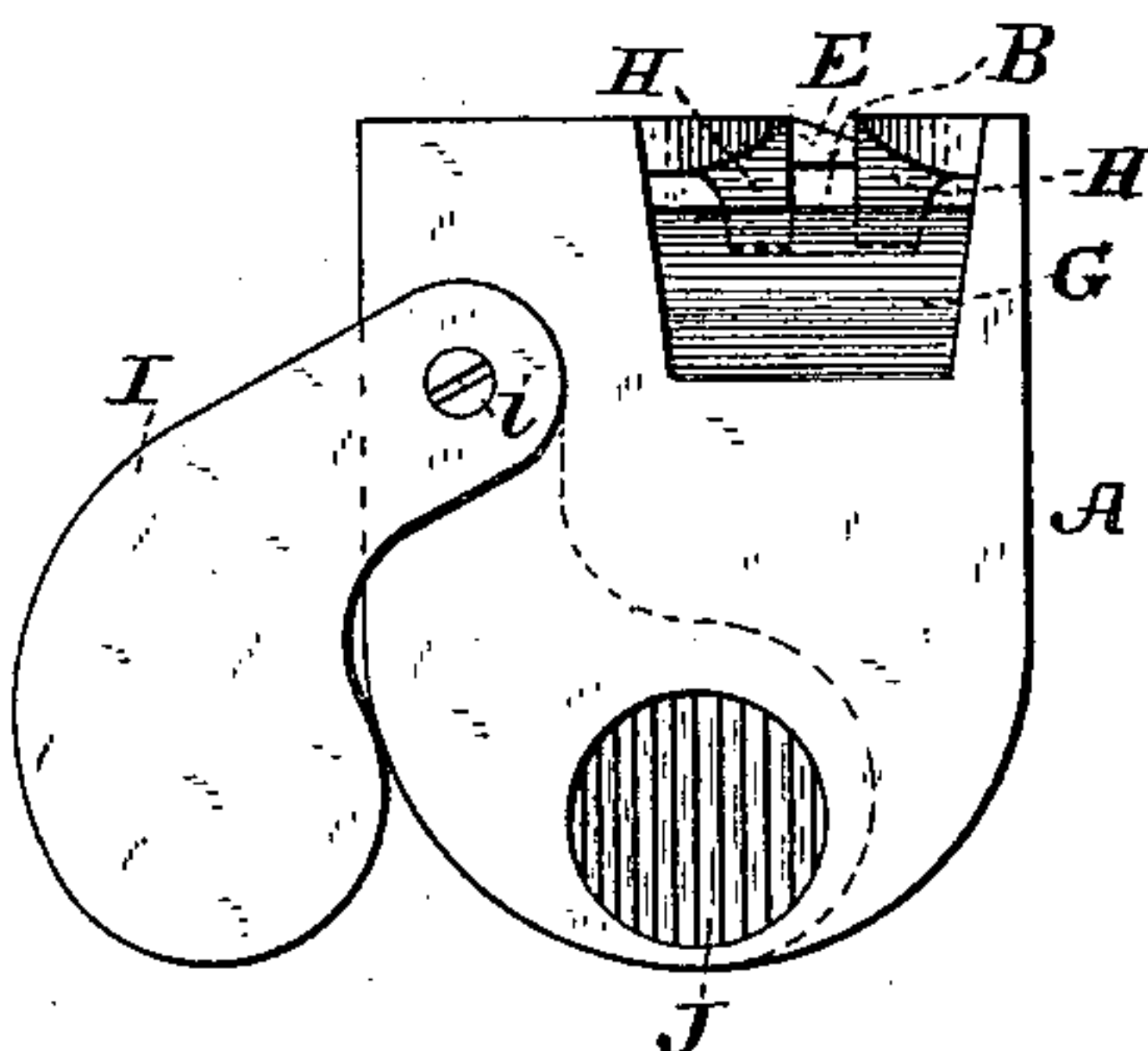


FIG. 4.



Attest:  
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William D. Schiefer,  
By A. M. Smith, atty.

# UNITED STATES PATENT OFFICE.

WILLIAM D. SCHIEFER, OF FORT WAYNE, INDIANA, ASSIGNOR OF ONE-HALF  
TO JOHN C. HUNT, OF CONCORD, MASSACHUSETTS.

## DEVICE FOR DETACHING BUTTONS.

SPECIFICATION forming part of Letters Patent No. 379,609, dated March 20, 1888.

Application filed December 14, 1887. Serial No. 257,837. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM D. SCHIEFER, of Fort Wayne, county of Allen, and State of Indiana, have invented a new and useful Improvement in Devices for Detaching Buttons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to an improvement in devices for detaching buttons from shoes and other articles; and it consists in the combination, with a hollow case for receiving the buttons, of a novel form of stationary cutter-blade for producing a shearing cut, and which is capable of being adjusted relatively to said casing for presenting a new cutting edge or face when the one in use is rendered dull; in the construction of the hollow case to accommodate said cutter-blade; in the combination, with the interior of said case, of the inclined spring-actuated plates or traps for preventing the escape of the detached buttons; in the combination, with the hollow case provided with an aperture, of a pivoted sliding plate or door, and in certain details of construction and arrangement, hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents my improved device in plan view. Fig. 2 is a perspective view of the cutter-blade detached. Fig. 3 is a vertical longitudinal section of the device on the line *xx* of Fig. 1; and Fig. 4 is an end elevation of the same, showing the pivoted sliding plate or door.

In the drawings similar letters of reference apply to like parts in the different figures.

A represents the hollow case, rounded on its lower face, as shown in Fig. 4, and made substantially flat on its upper or operative face. The upper or flat face of the hollow case is slotted its entire length, as shown at B, and where this slot approaches the ends of the casing it is expanded in width, as indicated at C C, which form mouths or entrances for the buttons, as will appear.

At or near midway of the case, on its flat face, and extending on either side of the slot B, is a circular depression or recess, D, of a

suitable depth, adapted to receive a stationary cutter-blade, E. Said cutter-blade is made, preferably, from a square piece of steel beveled and sharpened on its four sides—that is, said cutter is provided with four beveled cutting-edges, any one of which may be utilized. The said cutter-blade E is secured in position in the depression D by means of a screw, *e*, passing through a perforation, *e'*, in the center thereof and screwing into the case A. The cutter E is secured in fixed position diagonally of the upper or flat face of the case A, or substantially so—that is, with its cutting-edges at an angle of forty-five degrees to the sides of the case or the direction of the slot B—for a purpose that will be apparent.

The end walls of the casing A are each slotted or cut out, as shown in Fig. 4, and two plates or traps, G, are provided, each pivoted to the end wall or between the side walls of the casing and provided with suitable springs, *g g*, preferably of coiled wire, as shown, which act upon the plates or traps G and serve to hold the same against or in close proximity to two ribs or flanges, H H, which are formed on or secured to the under surface of the flat or top wall of the casing A. These flanges are rounded or curved on their lower edges, as shown in the sectional view, Fig. 3, and serve to force down or inward the head of the button as the shank thereof passes along through the slot B.

The operation of the device is as follows: The device is held in the hand of the operator and is advanced toward the button to be detached until said button enters the mouth or expanded entrance C of the groove B. It is thus caused to enter groove B, and at the same time the head of the button is acted upon by the flanges H H and drawn downward or inward thereby. Upon advancing farther the thread by which the button is attached to the shoe or other article is brought in contact with the oblique cutting-edge of the cutter E, thereby receiving a shearing cut, and is severed, the button falling into the interior of the casing A, where it remains. The head of the button, in moving along under the flanges H H, forces back the spring-actuated trap G, which returns



to its normal position after the button passes it and prevents escape of the buttons from the case A.

J designates an aperture in the wall of the case A, for permitting the removal of the buttons when desired, and I indicates a plate or door which is pivoted at i and slides upon the outer face of the wall of casing A, and serves to close said aperture, for an obvious purpose.

The number of cutting-edges of the cutter-blade E may be varied without departing from the spirit of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the hollow casing A, provided with the slot B, of the stationary cutter blade E, having a number of cutting-edges, and adapted to be adjusted as and for the purpose described.

2. The combination, with the hollow casing A, provided with the slot B, and the curved or rounded flanges H, and cutter, of the spring-

actuated traps G, substantially as and for the purpose described.

3. The combination, with the hollow casing A, provided with the slot B, cutter-blade, and aperture J, of the pivoted and sliding plate or door I, substantially as and for the purpose described.

4. The combination of the hollow casing provided with the longitudinal slot B and aperture J, the cutter-blade E, flanges H, spring-actuated traps G, and sliding plate or door I, all substantially as described.

5. The hollow case A, provided with the slot B and depression D, in combination with a stationary cutter-blade having a series of cutting-edges and adapted to be adjusted as and for the purpose described.

In testimony whereof I have hereunto set my hand this 12th day of December, A. D. 1887.

WILLIAM D. SCHIEFER.

Witnesses:

SAM. MILLER,  
JOHN LILLIE.