

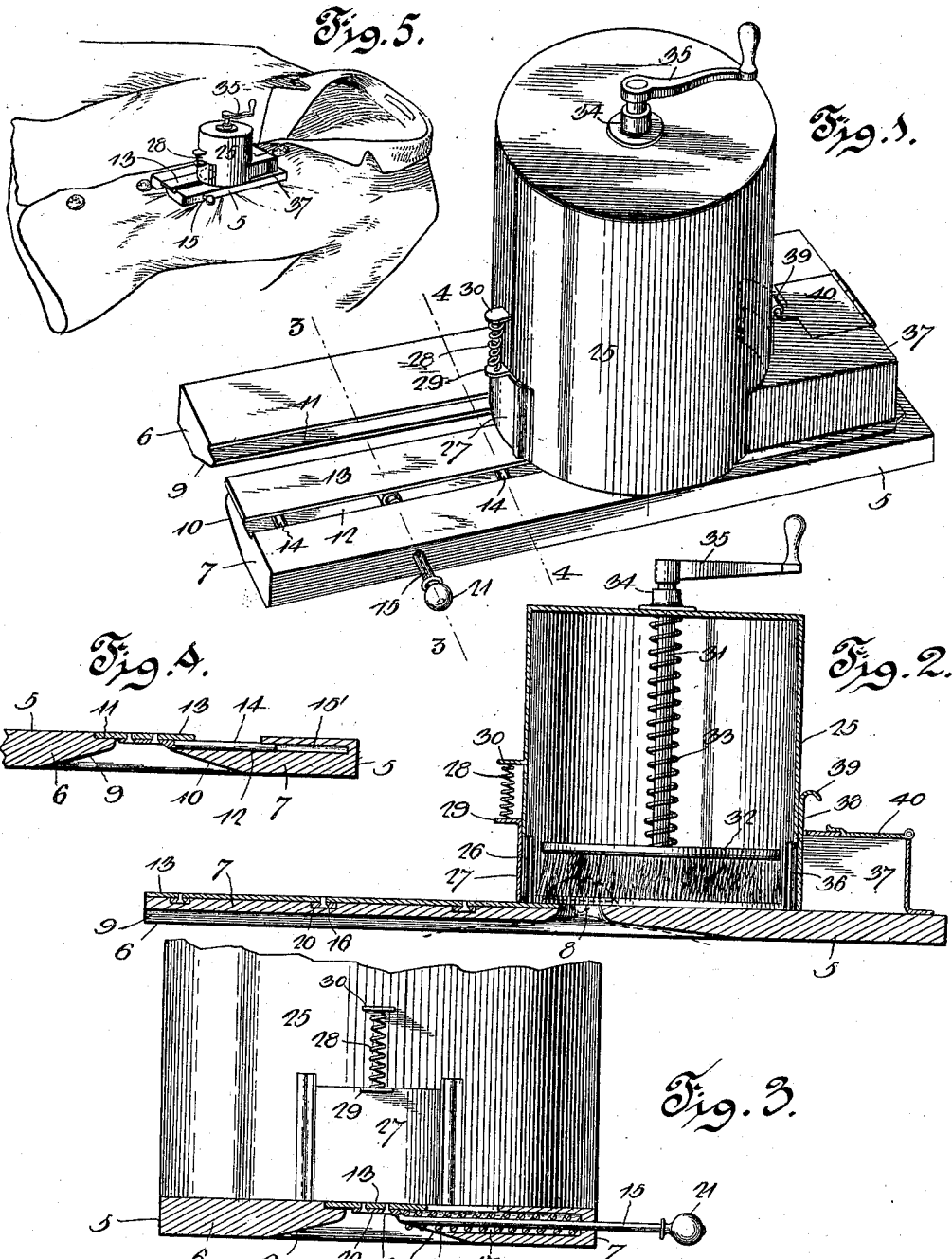
No. 646,896.

Patented Apr. 3, 1900.

H. A. DEITERS.  
BUTTON CLEANING DEVICE.

(Application filed Jan. 6, 1900.)

(No Model.)



Witnesses  
*J. G. Leutnerwill* By *H. A. Deiters,* Inventor  
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# UNITED STATES PATENT OFFICE.

HARRY A. DEITERS, OF SPENCER, WEST VIRGINIA, ASSIGNOR OF ONE-HALF  
TO E. L. BILL, OF SAME PLACE.

## BUTTON-CLEANING DEVICE.

SPECIFICATION forming part of Letters Patent No. 646,896, dated April 3, 1900.

Application filed January 6, 1900. Serial No. 576. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY A. DEITERS, a citizen of the United States, residing at Spencer, in the county of Roane and State of West Virginia, have invented a new and useful Button-Cleaning Device, of which the following is a specification.

This invention relates to cleaning or polishing devices in general, and more particularly to that class employed for polishing or cleaning buttons; and it has for one object to provide a construction which may be employed for the cleaning of metal buttons without removing them from a garment, a further object being to provide a structure which is rapid and efficient in its operation.

In the drawings forming a portion of this specification, and in which similar numerals of reference designate like and corresponding parts in the several views, Figure 1 is a perspective view showing the complete device. Fig. 2 is a central longitudinal section of the construction, the polishing-brush being shown in elevation. Fig. 3 is a section on line 3-3 of Fig. 1 and showing the shifting rod in elevation. Fig. 4 is a section on line 4-4 of Fig. 1, one of the guide-pins being in elevation. Fig. 5 is a perspective view illustrating a garment provided with buttons and the application of the present invention in its operative position.

Referring now to the drawings, the present invention comprises a base 5, one end portion of which is bifurcated to form arms 6 and 7, and at the inner end of the interspace between the arms 6 and 7 is formed a seat 8, adapted to receive the shank of a button passed through said interspace.

The arms 6 and 7 are beveled at their inner sides, as shown at 9 and 10, and at the inner edges thereof to permit ready application of the arms to receive the shank of the button in the interspace, and in the upper faces of the arms and at their inner edges are formed longitudinal recesses 11 and 12, of which the latter is much broader than the former.

In order to close the interspace between the arms 6 and 7, and which interspace forms a guideway for the shank of the button, a plate 13 is disposed slidably in the recess 12 and is provided in its under surface with guide-

pins 14, which are adapted to reciprocate in perforations 15' in the arm 7 as the plate 13 is moved transversely of the interspace or guideway, the plate being adapted to extend across the interspace and rest in the recess 11.

To hold the plate 13 normally projected to engage or lie in both recesses 11 and 12, a rod 15 is passed transversely through the arm 7 and is engaged at its inner end with the under side of the plate 13, as shown at 16. The rod 15 is disposed centrally of a recess 17, leading from the interspace between the arms to a point adjacent the outer edge of the arm, and in this recess is disposed a helical spring 19, which encircles the rod 15. This spring 19 bears at one end upon the supplemental plate 20, through the medium of which the rod 15 is attached to the plate 13, the opposite end of the helical spring having a bearing against the outer end of the recess 17. The outer end of the rod 15 is provided with a handle in the form of a knob 21, through the medium of which the plate 13 may be drawn against the tendency of the spring 19 to uncover the guideway to permit application or removal of a button.

Upon the base 5 is fixed a cylindrical casing 25, the center of which is disposed in the rear of the seat 8 and which casing has an opening 26 in its side adjacent the guideway, which opening is provided with a slidable door 27, which is held normally closed by means of a helical spring 28, which bears at one end against the finger-piece 29 of the door and at its opposite end against the projection 30 and the outer face of the casing.

Centrally of the casing 25 is journaled a shaft 31, at the lower end of which is fixed a cylindrical brush 32, which is held normally in operative relation to the base 5 through the medium of a helical spring 33, which encircles the shaft 31 and bears with its lower end against the head of the brush and its upper end against the top of the casing. This shaft 31 extends outwardly of the casing to a bearing 34, and upon its upper end is provided with a crank 35, through the medium of which the brush may be rotated to cause its bristles to pass transversely of the seat 8.

An opening 36 is formed in the casing 25 opposite the opening 26, and this opening 36

leads to a box 37, fixed to the base 5 and adapted to receive a polishing or cleaning compound in the form of a powder. A slidable door 38 is provided for the opening 36 and has a finger-piece 39, which extends above the box 37 and through the medium of which the door may be raised or lowered to permit and to cut off a supply of the powder to the casing 25. The box 37 has a filling-opening provided with a lid 40.

In operating the present device the box 37 is provided with a suitable powder, the rod 15 is withdrawn, and the door 27 is raised, when the button may be introduced to the seat 8 without removing it from the garment. When the button has entered the seat, the rod 15 is released to permit the plate 13 to close the guideway and the door 27 is permitted to close under the influence of the spring 28. When buttons of extreme height are introduced, it is of course desirable to raise the brush 32 to permit the ready passage of the button into the seat 8, after which the brush may be dropped into position. The door 38 is then raised to permit a supply of powder to the casing 25, after which the crank 35 may be operated to rotate the brush in engagement with the button and perform a cleaning or polishing operation, as will be readily understood. It will be seen that with the above structure the buttons may be easily and quickly polished, and when treated to a sufficient extent they may be withdrawn by first raising the door 27 and then withdrawing the plate 13.

Various modifications of the present invention may be made and any desired materials or proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A button-cleaning device comprising a base having a longitudinal slot and a button-seat at the inner end of the slot, a casing upon the base inclosing the seat and the adjacent end of the slot, an opening in a wall of the casing leading to the slot, a closure for said opening, a slide for closing the slot interiorly and exteriorly of the casing, and a brush

within the casing for engagement with a button in the seat.

2. A button-cleaning device comprising a base having a button-seat, and a guideway leading thereto, means for opening and closing the guideway, a brush mounted upon the base and adapted for movement transversely of the seat to engage and polish a button therein, an abradant-receptacle adjacent the seat for supplying an abradant to the brush, and means for regulating the supply of abradant to the brush.

3. A device for cleaning buttons, comprising a base having a button-seat, a casing inclosing the button-seat, a brush within the casing and adapted for operative movement with respect to the seat, and an abradant-receptacle communicating with the casing for supplying an abradant to the casing and the brush therein.

4. A device for cleaning buttons comprising a base provided with a button-seat, a casing upon the base and inclosing the seat, a brush within the casing and adapted for operative movement with respect to the seat, an abradant-receptacle communicating with the casing, and means for regulating the supply of abradant from the receptacle to the casing.

5. A button-cleaning device comprising a bifurcated base having a button-seat at the inner end of the bifurcation, a slidable plate adapted to open and close the interspace of the bifurcation, a casing inclosing the inner end of the bifurcation and the button-seat, a brush rotatably mounted in the casing, means for rotating the brush, means for holding the brush yieldably in operative relation to the button-seat, an abradant-receptacle communicating with the casing, and means for opening and closing the communication between said receptacle and the casing.

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

HARRY A. DEITERS.

Witnesses:

A. L. KELLEY,  
W. L. STARKEY.