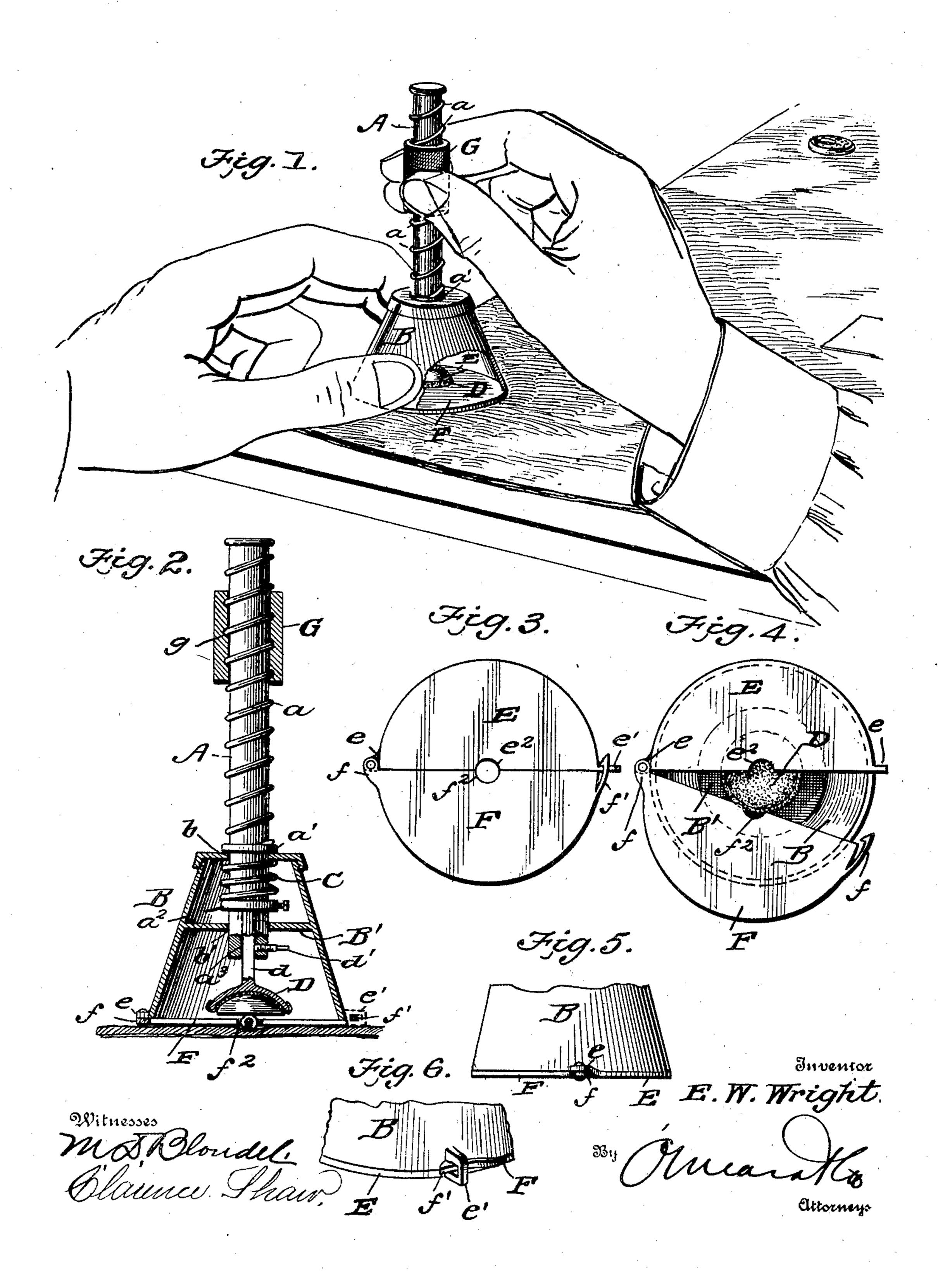
E. W. WRIGHT. BUTTON POLISHER.

(Application filed Mar. 30, 1901.)

(No Model.)



United States Patent Office.

ERNEST WM. WRIGHT, OF CHICAGO, ILLINOIS.

BUTTON-POLISHER.

SPECIFICATION forming part of Letters Patent No. 681,771, dated September 3, 1901.

Application filed March 30, 1901. Serial No. 53,667. (No model.)

To all whom it may concern:

Be it known that I, ERNEST WM. WRIGHT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Button-Polisher, of which the following is a specification.

My invention is an improvement in buttonpolishers, and has for its object to provide a
simple, economical, and portable device for
cleaning and polishing buttons and the like
while they remain attached to the garment
and to provide an attachment to protect the
garment or material to which the buttons are
attached.

Another object of my improvement is to provide a device that can be quickly and easily attached and detached to or from a button and when in position to be locked, so that the brush or polisher proper will be constantly held in engagement with a button while the brush is being operated.

With the above objects in view my invention also consists in the novel construction and combination of parts, as will be fully set forth in the following specification and pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improvement as in use, part of the casing being broken away to show the polisher. Fig. 2 is an enlarged sectional elevation of the same. Fig. 3 is an inverted plan view showing the device closed. Fig. 4 is a similar view of the device open. Fig. 5 is a detail view illustrating the hinge, and Fig. 6 a detail of the spring-catch and keeper.

In the drawings, A designates a shaft having a spirally-arranged rib or thread a formed thereon, which extends nearly the entire length of the shaft, terminating near the lower end thereof in a circumferential collar a', against the lower side of which is engaged the apex of a truncated cone B, the said apex having an opening b, through which the shaft A passes. Within the hood is fixedly disposed a diaphragm B', also provided with an opening b', that is designed to receive the lower end of the shaft, the said openings forming a bearing that prevents any lateral movement of the shaft. To hold the hood in position, I dispose about the shaft a spiral

spring C, which bears at its upper end against the under side of the apex of the hood and at its lower end against a collar a^2 , adjustably held on the shaft at a suitable distance above the diaphragm B'. The lower end of the shaft is provided with a bore a^3 of any suitable depth, that receives the shank d of a polisher D and is adjustably held in place 60 by a set-screw d'.

In order to securely attach the polisher to a button or other article to be cleaned and polished and to protect the fabric surrounding the same, I secure upon one side of the 65 hood a semicircular disk E, having a perforated ear e projecting therefrom, to which is pivotally connected an ear f of a similarshaped disk F. A spring-latch f' is provided on the disk F upon the edge opposite that of 70 the hinge, which is adapted to engage a keeper e', arranged at the juncture of the hood and disk E, and when the disk F is brought to engage the disk E the latch enters the keeper e' and locks the two members to- 75 gether. The abutting edges of the disks are provided with semicircular recesses e^2 and f^2 , that are arranged opposite each other and in alinement with the center of the polisher and that are adapted to encircle the shank of the 80 button and hold the same while it is being polished.

Upon the threaded portion of the shaft is positioned a sleeve G, having a spiral groove g, that meshes with the rib upon the shaft, 85 and by reciprocating the said sleeve causes the shaft to revolve, carrying the polisher with it, and as the latter is constantly held in engagement with the button it will be readily seen that by a few movements of the sleeve 90 the shaft is caused to revolve many times and a polish is soon obtained on the button. It will also be seen that the spring C forms the double purpose of holding the hood in place and pressing the polisher upon the but- 95 ton, the outward movement of the hood being limited by the set-screw d' at the lower end of the shaft.

The lower surface of the body of the polisher is made concaved and covered with felt, 100 wool, or any suitable material of a durable quality.

In operation the disk F is opened and the shank of a button is inserted between the lat-

ter and the disk E until the said shank engages the semicircular recesses e^2 and f^2 , when the disk F is closed and locked, the shaft in the meantime being pulled out against the ten-5 sion of the spring, which is then released, allowing the polisher to adjust itself upon the button. The latter is then revolved by reciprocating the sleeve G, which imparts a revolving motion to the shaft and polisher, the 10 movement being continued until a polish is obtained on the button, when the disk is released and the device is removed. It will thus be seen that the operation is exceedingly simple, requiring but a short time for adjust-15 ment, and by a single movement of the sleeve the polisher is revolved many times, there-

fore requiring but a few movements of the said sleeve to obtain a polish upon the button. I may find it desirable to make the meet-20 ing edges of the disks E and F beveled or rabbeted to form a tight joint between the disks, which prevents the dust sifting through the meeting edges of said disks upon the fab-

ric to which the button is attached.

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

1. In a device of the character described, the combination of a shaft, a hood adjustably 30 held thereon, disks held upon the lower end of the hood, a polishing device connected to the said shaft, and means for revolving the said polishing device, substantially as shown and described.

2. In a device of the character described, the combination of a shaft having a polisher held thereto, a hood slidably held upon the said shaft, a guide held within said hood, and means for revolving the said shaft, substan-40 tially as shown and described.

3. In a device of the character described the combination of a shaft, a hood adjustably held thereon, a collar formed on the said shaft for limiting the movement of the said hood,

45 and disks for closing the open outer end of the said hood, substantially as shown and described.

4. In a device of the character described,

the combination of a shaft having a spirallyarranged rib formed thereon and terminating 50 near the lower end of the shaft in a circumferential collar, a hood held upon the said shaft and provided with means for holding the said shaft and hood in vertical alinement, substantially as shown and described.

5. In a device of the character described, the combination of a shaft, a polisher held upon the end thereof, a hood held upon the shaft, a semicircular disk held upon the lower end thereof, a movable semicircular disk 60 pivoted to the said stationary disk, the said disk being provided with semicircular openings adapted to be brought into alinement when the said disks are brought together, and means for holding the said disks together, 65 substantially as shown and described.

6. In a device of the character described, the combination of a shaft having a plurality of collars formed upon the lower end thereof, a hood movably held between the said collars, 70 means for normally holding the said hood in engagement with one of the collars, a polisher held upon the lower end of the shaft within the said hood, and means for revolving the said polisher, substantially as shown and de-75 scribed.

7. In a device of the character described, the combination of a shaft, a hood held upon the lower end thereof, a semicircular disk fixedly held to the lower end of the said hood 80 and having a perforated ear formed on one side thereof and a keeper formed upon the opposite side thereof, a movable disk having a perforated ear adapted for engagement with the said ear on the stationary disk, its 85 opposite side having a spring-latch for engagement with the keeper, the said disks having their meeting edges provided with semicircular openings arranged in alinement, all arranged substantially as shown and de- 90 scribed.

ERNEST WM. WRIGHT.

Witnesses:

CARL C. W. ROHRBECK, JOSEPH THOMAS.