

No. 636, III.

Patented Oct. 31, 1899.

J. B. BUCHANAN.  
POLISHING DEVICE.

(Application filed Aug. 8, 1899.)

(No Model.)

Fig. 1.

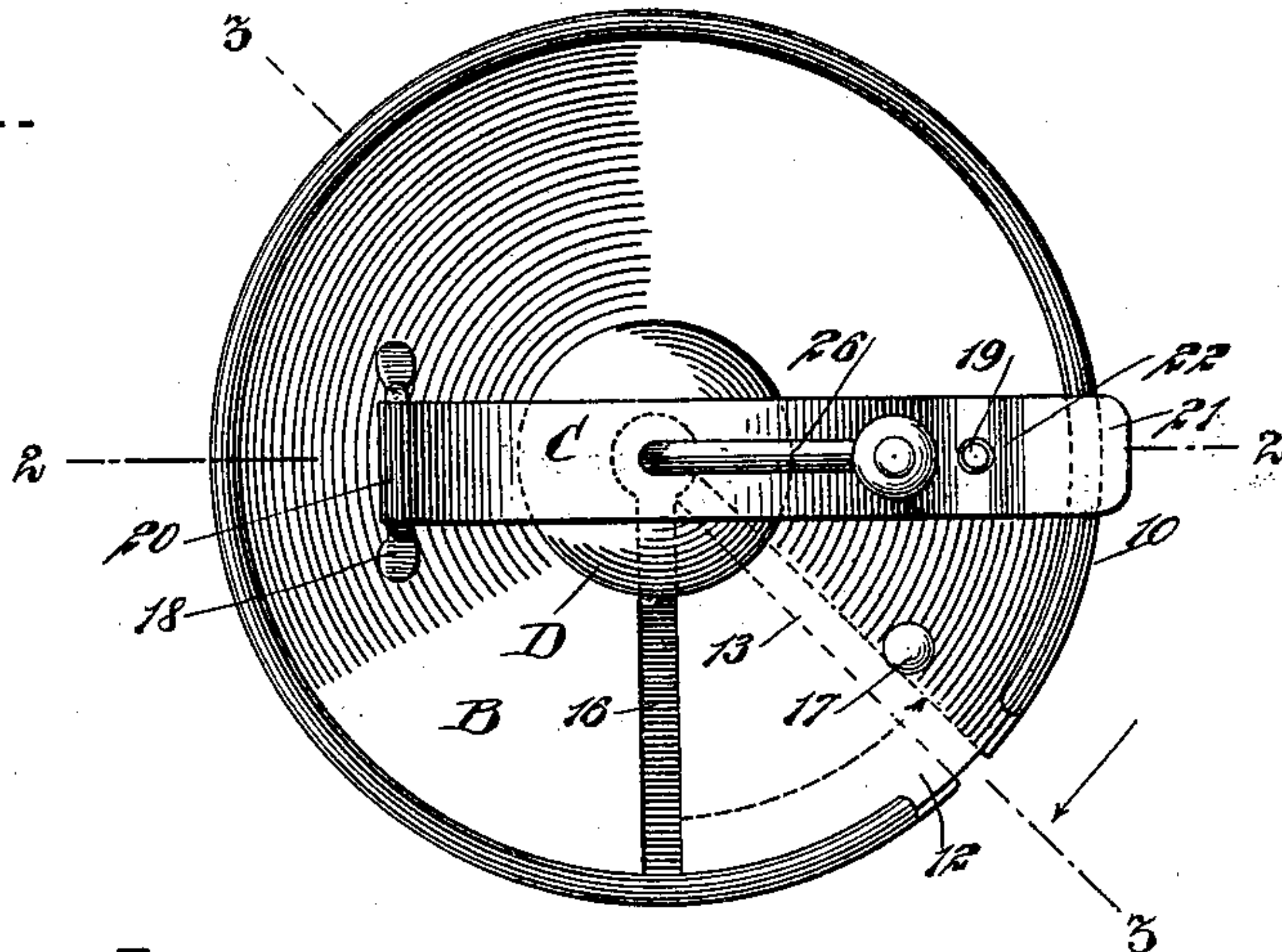


Fig. 3.

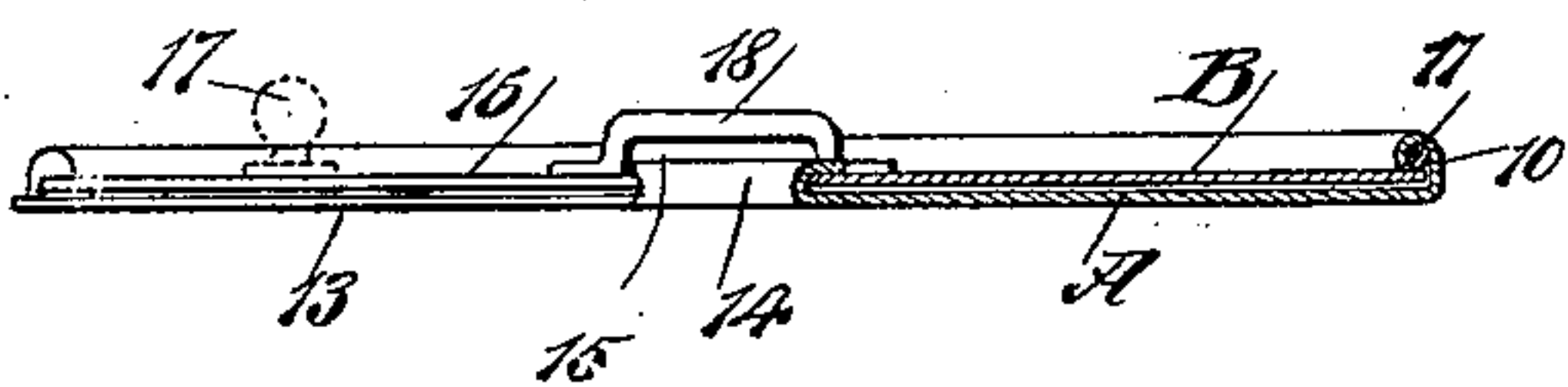


Fig. 2.

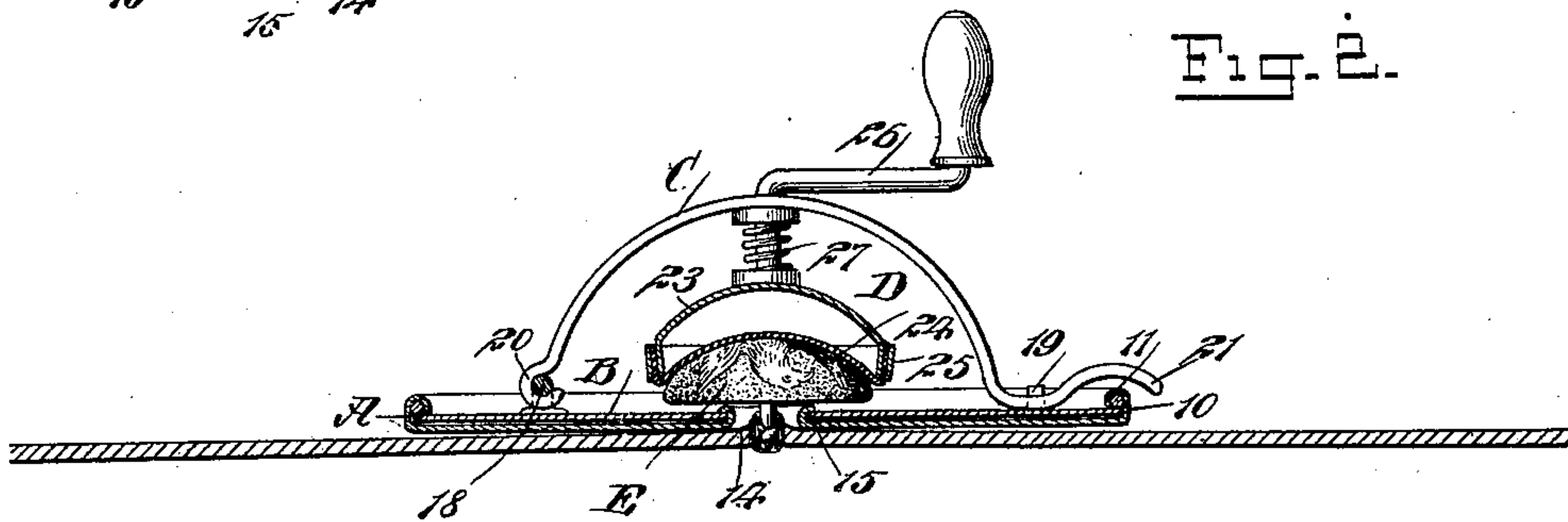
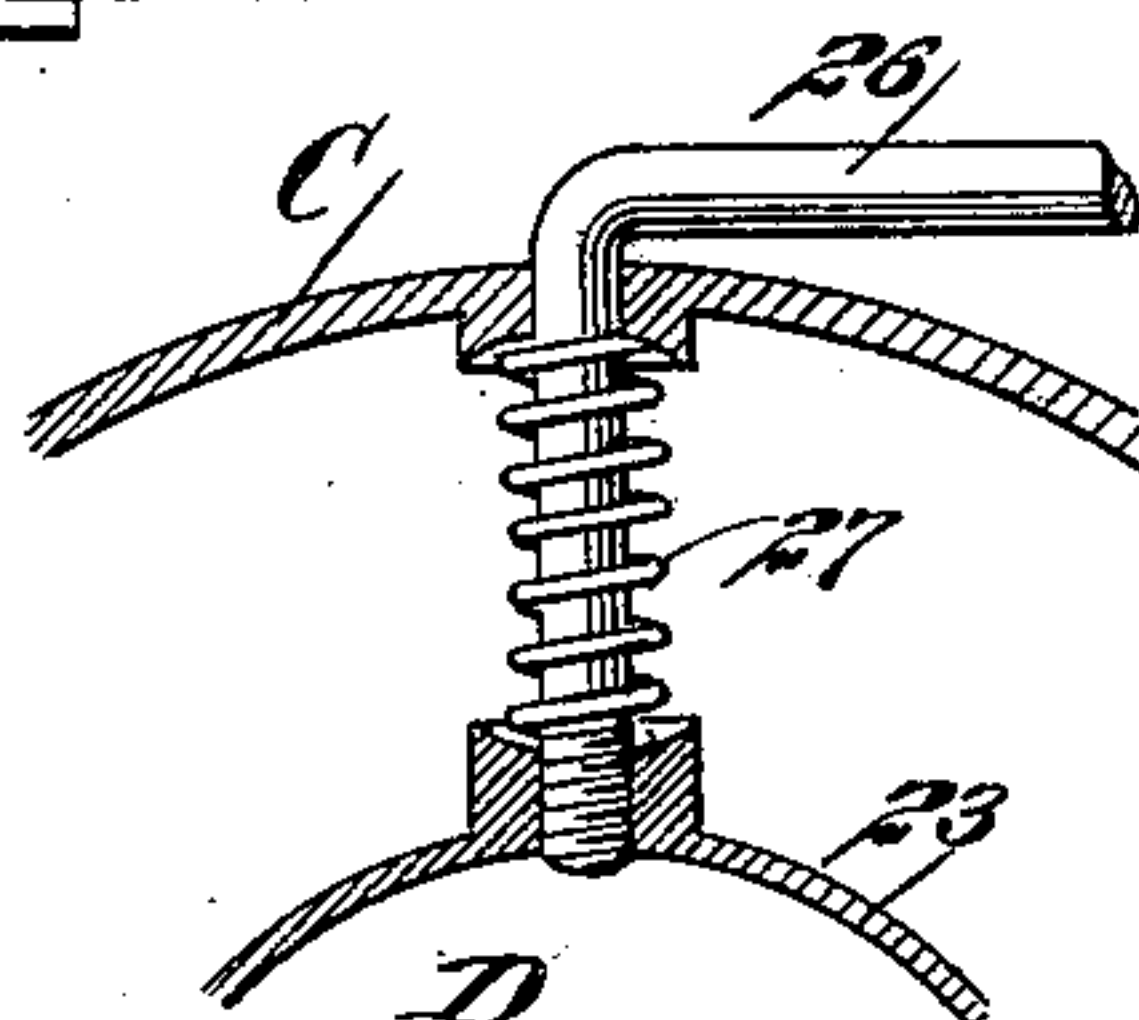


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JOHN B. BUCHANAN, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF  
TO ISAAC M. JACOBUS, OF SAME PLACE.

## POLISHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 636,111, dated October 31, 1899.

Application filed August 8, 1899. Serial No. 726,587. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN B. BUCHANAN, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Polishing Device, of which the following is a full, clear, and exact description.

The object of the invention is to provide a simple, economic, and portable device especially adapted for cleaning metal buttons or similar ornaments while still secured to garments or other articles and without injury to the material to which the button or article may be attached.

Another object of the invention is to so construct the polishing device that it may be quickly and conveniently applied and locked in position around the article to be operated upon and also so that the polishing member of the device may be readily brought to an engagement with the article to be polished, held in contact therewith, and manipulated or carried from engagement with the article whenever desired without interfering in the least with the position of the body of the device.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improved device. Fig. 2 is a section taken practically on the line 2 2 of Fig. 1. Fig. 3 is a section taken substantially on the line 3 3 of Fig. 1, and Fig. 4 is a detail sectional view illustrating the manner in which the polishing member is carried by its adjustable support.

The body of the device consists, preferably, of a base disk A and an upper disk B, adapted to turn upon the base or bottom disk. The base or bottom disk A is usually provided with a flange 10, which extends upward and is inwardly curved over a rod or wire 11, so that the upper inturned portion of the flange 10 is stiffened, and the peripheral portion of the upper disk B of the body has movement in the space between the bottom portion of the base disk A and the inturned portion

of the flange 10, as shown best in Fig. 2. The flange 10 is not continuous, but, as shown in Fig. 1, is provided with a space 12 between its ends, and at or about the central portion of the space 12 between the ends of the marginal flange 10 a radial slot 13 is produced in the bottom portion of the base disk A. This slot 13 extends to the central portion of the base disk, at which an eyeleted opening 14 is produced, the eyeleted opening being in direct communication with the slot 13. The eyelet 15 upon the central opening 14 of the base disk extends above the upper surface of said disk and is curved outwardly to form a guide for the central portion of the upper disk B, which central upper portion of the upper disk B is provided with an opening that fits snugly around the eyelet 15, as shown in Fig. 2. The upper disk B is also provided with a radial slot 16, extending from its periphery to its central opening, as shown in Fig. 1, and the slot 16 in the upper disk B may be brought in registry with the slot 13 in the lower or base disk A whenever it is desirable to adjust the device around the article to be polished. The bottom disk may be considered a stationary disk and the upper disk a movable one, and the upper disk B is preferably provided with a knob 17, whereby it may be readily turned upon the base disk.

The upper disk B is provided with an attached staple 18, located parallel with the slot 16, as shown in Fig. 1, and opposite said staple a pin 19 is located upon the upper disk B, as shown in Figs. 1 and 2. An arm C, which is preferably arched or bowed, is carried by the upper or movable disk B, and said bowed arm C is provided with a hook 20 or its equivalent at one end in order that it may be placed in pivotal engagement with the staple 18. The other end of the bowed or arched arm C is provided with a handle 21, and said handle has an aperture 22 produced therein, through which the pin 19 of the upper disk B is adapted to pass.

The polishing member D of the machine is carried by the arm C. This polishing member consists of an inverted-cup-shaped body 23, having straight or slightly-inclined side surfaces, and a polishing material 24 is stretched across the open or bottom end of the body 23



and is carried up at the outer face of the side surface of said body, as shown in Fig. 2, and this polishing material is held upon the body 23 by means of a ring or sleeve 25 or its equivalent that is slid over the upper portion of the polishing material and binds said upper portion of the material to the side surface of said body 23. The body 23 of the polishing member D is usually screwed upon the lower end of a crank-handle 26, the upper member of which handle extends up through the central portion of the supporting-arm C and turns loosely in said arm. The body 23 of the polishing member is normally forced downward by a spring 27, which is coiled around the vertical member of the crank-handle 26 and has bearing against the upper central portion of the polishing member and the under central portion of the supporting-arm C for the said member.

In operation the upper disk B is turned upon the lower or base disk A until the slots 13 and 16 in said disks are in registry or in vertical alinement. The eye of the button E to be polished is then received within the registering slots 13 and 16, the supporting-arm C having been carried back upon its pivot-point, and the body of the device is then moved toward the button E until the eye or shank of said button is received within the central opening of the body. The upper disk B is then turned upon the lower disk A of the body until the two slots 13 and 16 are out of registry, as shown in Fig. 1, thus effectually locking the device loosely around the button. The carrying-arm C is now placed in normal position—that is to say, it is made to span the button—and the opening 22 at the handle of the arm is made to receive the pin 19, thus locking the supporting-arm in operative position. When the supporting-arm C is thus placed in operative position, the polishing material of the polishing member D will be brought in engagement with the body of the button, as shown in Fig. 2, the spring 27 yielding sufficiently to permit said polishing member to properly adjust itself on the button, yet said spring 27 is sufficiently strong to hold the polishing-face of the polishing member in firm engagement with the body of the button. By pressing down on the handle of the supporting-arm C with one hand and quickly turning the polishing member D through the medium of the crank-handle 26 with the other hand the operator may

quickly and effectually impart a brilliant polish to the entire upper and side surfaces of a button of any size or an article of like character that is attached to a garment.

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

1. A device for polishing buttons or the like, comprising a base adapted to receive and retain the article to be polished, a polishing member, and means for supporting said member over the retaining section of the base and adjusting the said polishing member with relation to the base.

2. A polishing device, consisting of a base provided with adjustable members, each member being provided with a slot to receive a portion of the article to be polished and an opening with which said slot connects, a polishing member, a support for the polishing member carried by a member of the body, and means for rotating said polishing member, as described.

3. A polishing device, comprising a base constructed in two members mounted to turn one on the other, each base member being provided with a radial slot connecting with a central opening, a yoke having pivotal connection with one member of the base at one of its ends and locking engagement with the same member of the base at its opposite end, a handle carried by the said yoke, and a polishing-head carried by the said handle between the yoke and the base, the polishing-head being provided with means for detachably securing thereto a polishing material, as set forth.

4. A polishing device, consisting of two plates mounted to revolve one upon the other, each plate being provided with a radial slot extending from its margin to the center and meeting an opening at the center, a yoke pivotally attached to the uppermost plate, means for locking the yoke to said plate, a handle mounted to revolve in said yoke, a polishing-head connected with the handle, a tension device arranged to normally force the polishing-head downwardly in direction of the central opening in the plates, and means, substantially as described, for securing a polishing material to the polishing-head, as set forth.

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