

(No Model.)

A. G. DAVIS.
ELECTRIC PUSH BUTTON.

No. 358,109.

Patented Feb. 22, 1887.

FIG. 1.

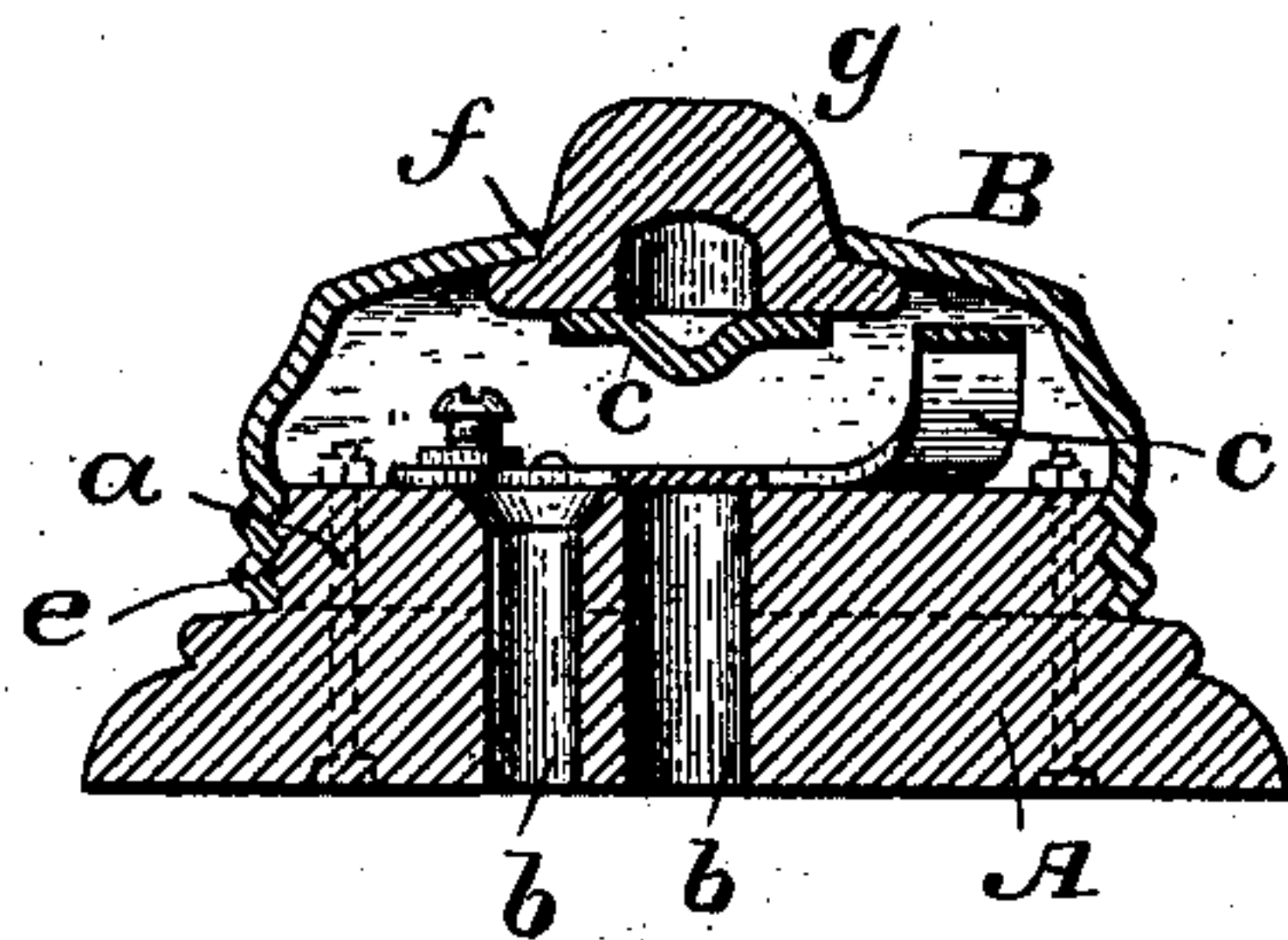


FIG. 2.

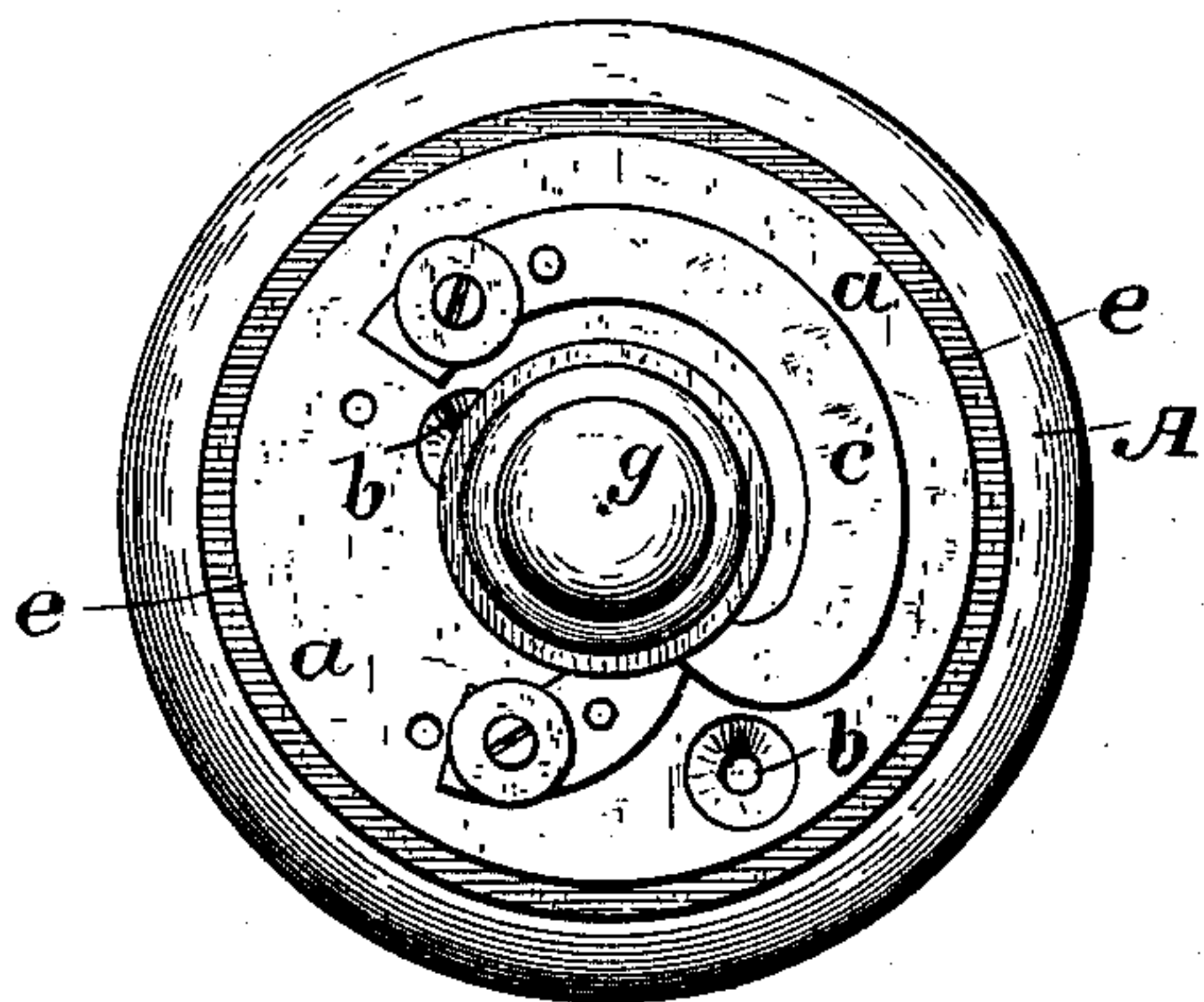
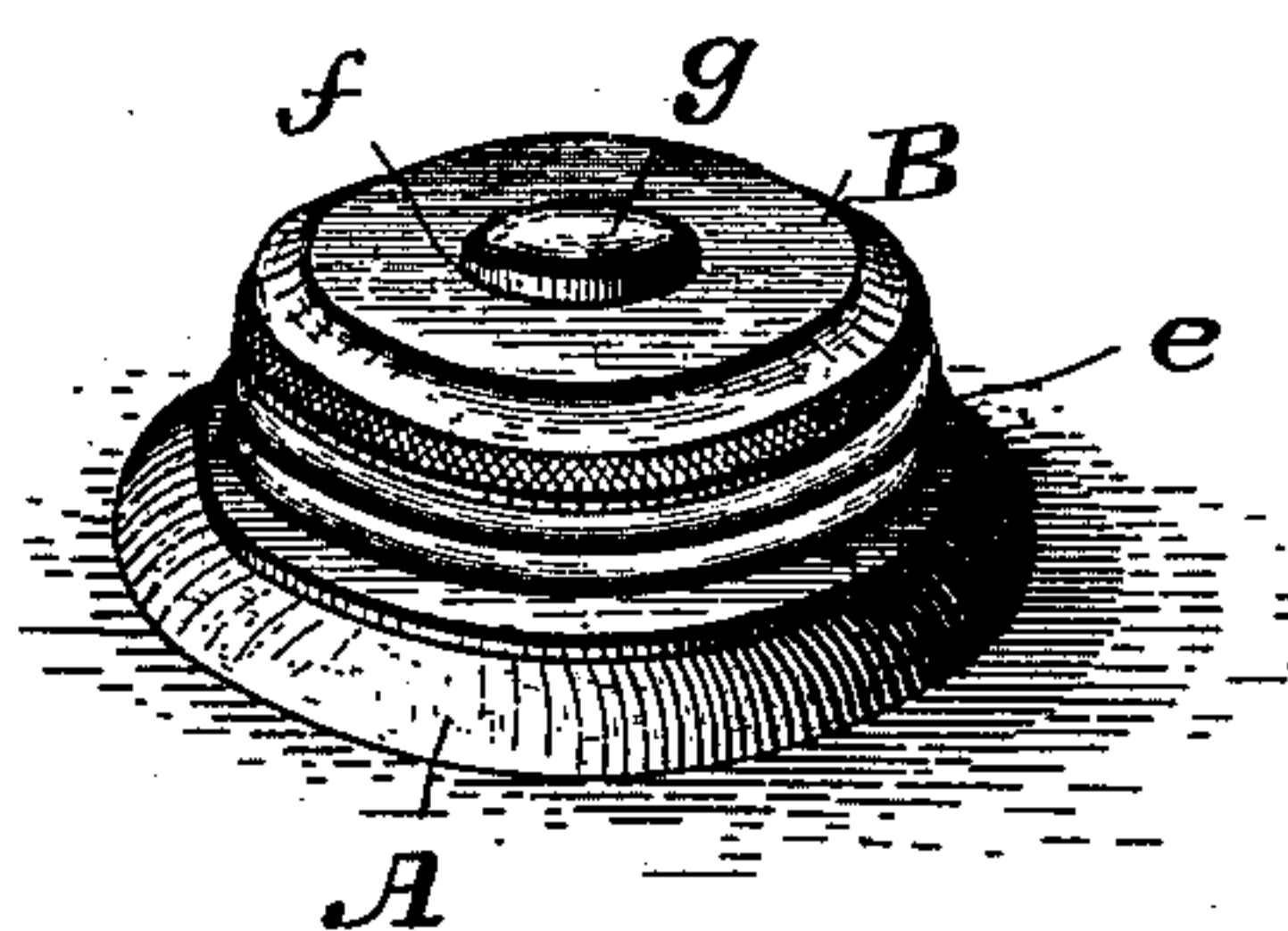


FIG. 3.



ATTEST.

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UNITED STATES PATENT OFFICE.

AUGUSTUS G. DAVIS, OF BALTIMORE, MARYLAND.

ELECTRIC PUSH-BUTTON.

SPECIFICATION forming part of Letters Patent No. 358,109, dated February 22, 1887.

Application filed June 16, 1886. Serial No. 205,351. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS G. DAVIS, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Electric Push-Buttons, of which the following is a specification.

This invention relates to certain new and useful improvements in "push-buttons" for opening and closing electric circuits by which to operate electrical calls or signals; and it consists, substantially, in such features of construction and combinations of parts as will hereinafter be distinctly described, and pointed out in the claims.

In inventions of this character it is desirable that the outer cap or cover which incloses the circuit-closing devices shall be removable or detachable from the supporting-base, by which ready access can be had to the interior for the repair and adjustment of such devices; and heretofore in making this provision it has been observed that the cost of the additional labor required in the formation or manufacture is, in a commercial sense, rather incompatible with what the completed article realizes when placed on the market. Heretofore it has been customary in some instances either to mold or cast a thread around the base projection and similarly provide the interior of the rim of the cap with a corresponding thread, by which the latter is secured or screwed to the former, or to form the cap and base projection with corresponding teats and grooves to form an interlocking connection when united. The operations necessarily resorted to in the manufacture of push-buttons embodying these constructions are found to be more or less tedious and expensive, and as a consequence thereof the cost of the completed article is rendered correspondingly great.

The object of my invention is to provide a push-button having a removable cap or cover which shall be cheap in first cost, simple in construction, and one which shall require little or no skill in the manufacture thereof.

Referring to the accompanying sheet of drawings, Figure 1 represents a central vertical sectional view of a push-button embodying the features of my invention. Fig. 2 represents a

top or plan view with the cap or cover removed, and Fig. 3 is a view thereof in perspective showing the cap in place.

In carrying my invention into effect I provide a base, A, of wood or other suitable non-conducting material, and form therewith or attach thereto a centrally-arranged projection, a, the usual holes, b b, being formed through both the base and projection for the passage of the wires or other electric conductors, which are properly connected to the spring-contact strips or circuit-closing devices c c. In constructing the base A, I either form the projection a thereon as an integral part, or I secure to the top of the base A a separate or sub-base of a slightly less diameter, and secure the two together in any suitable manner, the first construction named being preferred in some instances, while the second is resorted to in others. In either case I turn a continuous screw-thread, e, on the exterior or side of the projection or sub-base a by means of any suitable turning-lathe, and after the thread is formed I fit the projection with a metallic cap or cover, B, into the rim of which I form or indent a corresponding thread by the usual spinning or swaging machine process, and thus, it will be seen, the push-button case is quickly manufactured or fitted up. When the cap is thus fitted, it is removed and the proper attachment of the circuit-closing devices effected, whereupon the cap is replaced and the device is ready for use or connection with the wires comprising the circuit. The said metallic cap is provided with a central opening, f, through which the button g works to compress or bring the strips c c into electrical contact.

It is evident that, instead of forming the base with a projection, I may simply employ a perfectly flat base with a thread formed or turned in its outer side, and then conform the cap thereto; but I prefer the construction herein shown.

It will be seen that a push-button manufactured in accordance with my invention possesses characteristics which are valuable in a commercial sense, and in addition to its points of cheapness and simplicity it will be seen, also, that the cap or cover may be much more readily conformed to ornamental configura-

tions or designs than in former inventions of an analogous character.

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

1. An electric push-button provided with a detachable metallic cap or cover, substantially as described.

2. An electric push-button having its body screw-threaded externally, in combination with a removable metallic cap or cover fitting thereon by a corresponding screw-thread, substantially as described.

3. The combination, with the base having projection *a*, formed with a screw-thread on its exterior, of a metallic cap or cover fitted to such projection and having a corresponding thread, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AUGUSTUS G. DAVIS.

Witnesses:

JNO. T. MADDOX,
LOUIS DUNGAN.