

No. 635,172.

Patented Oct. 17, 1899.

A. C. MEIER.  
PUSH BUTTON.

(Application filed July 7, 1899.)

(No Model.)

Fig. 1.

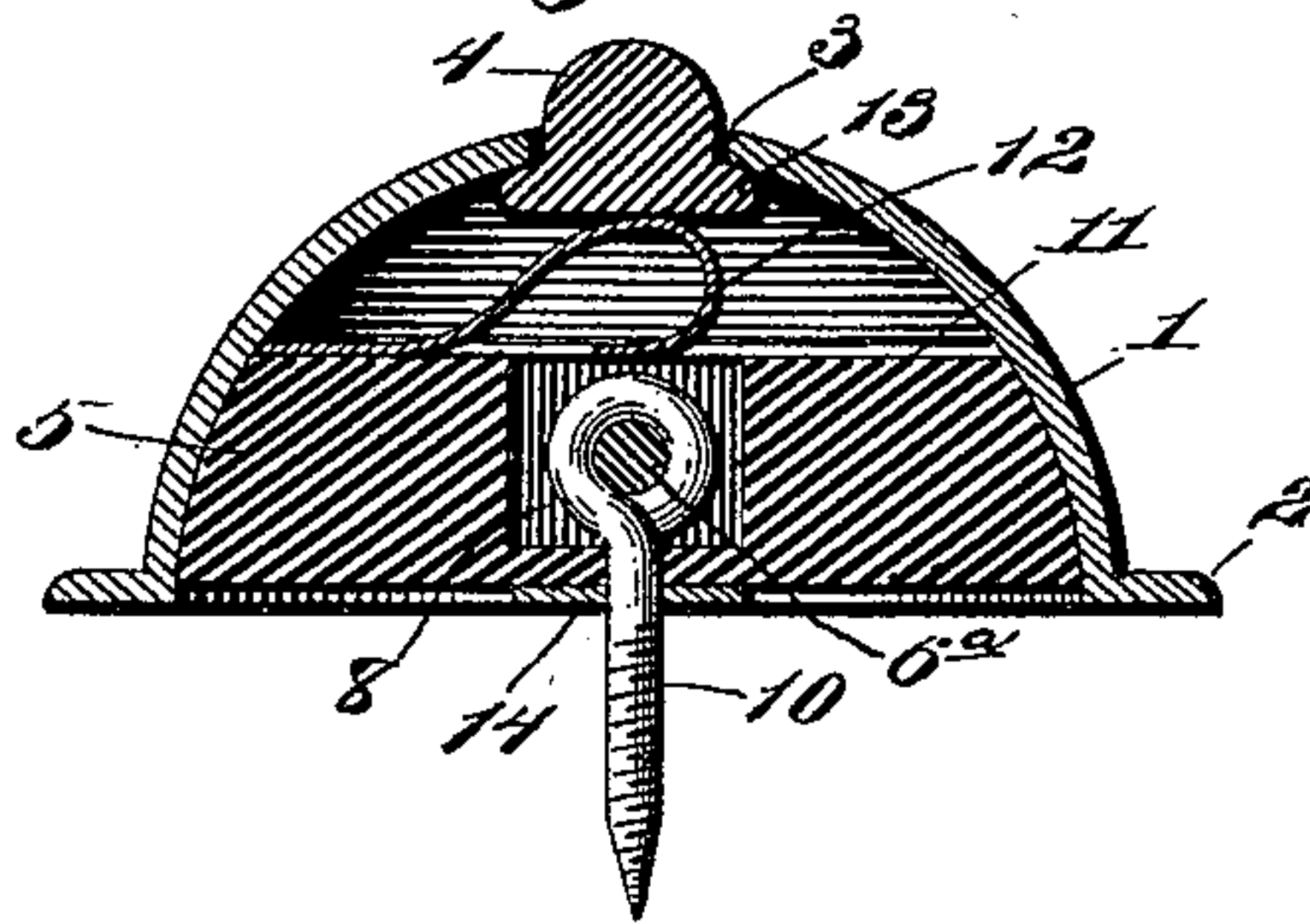


Fig. 2.

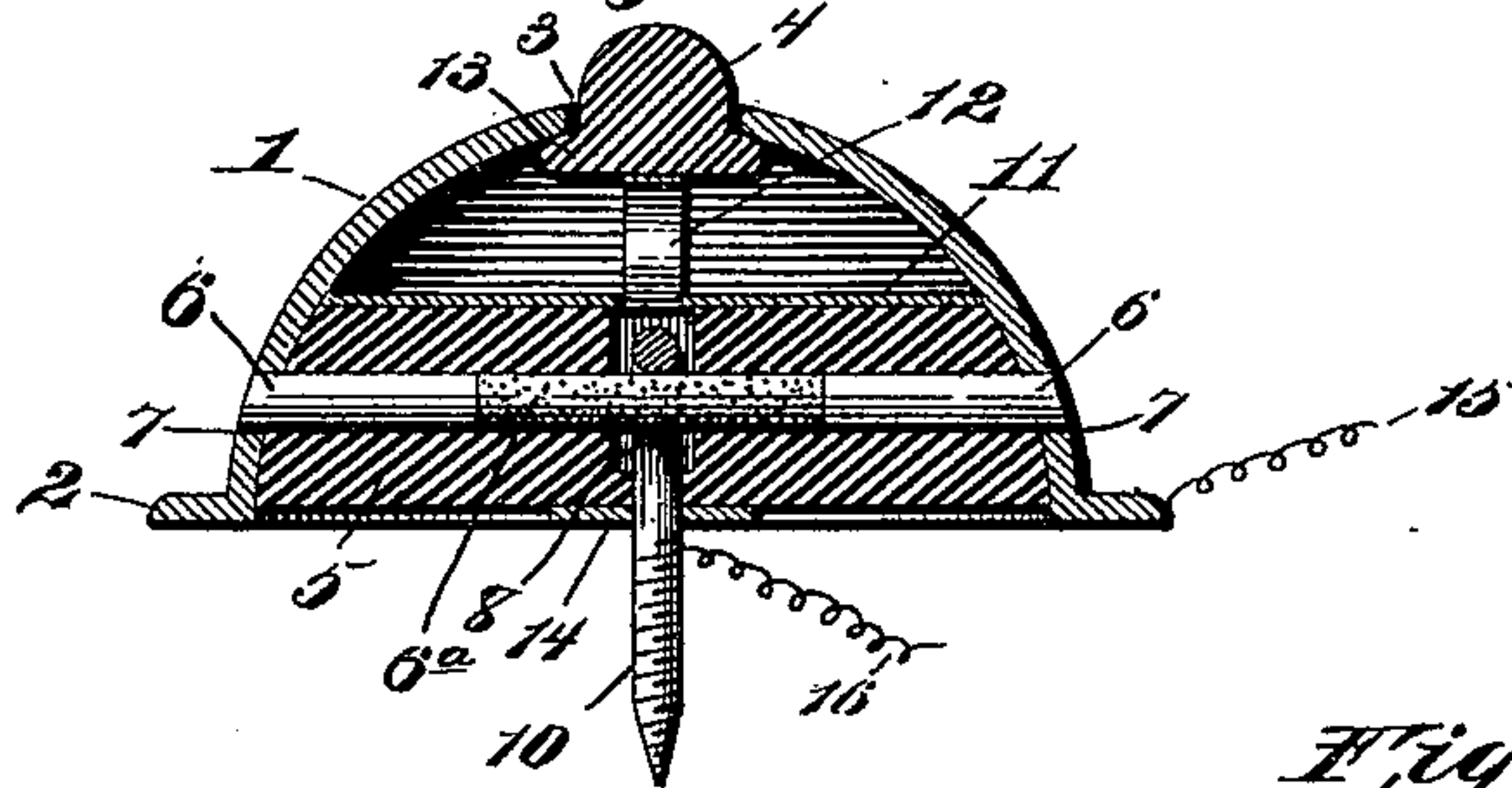


Fig. 3.

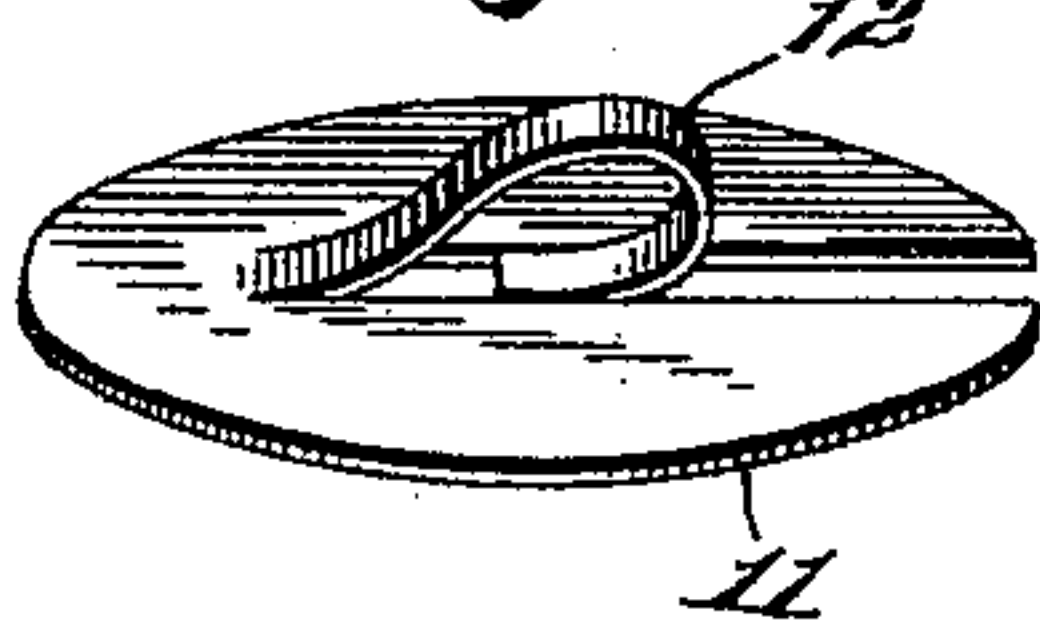
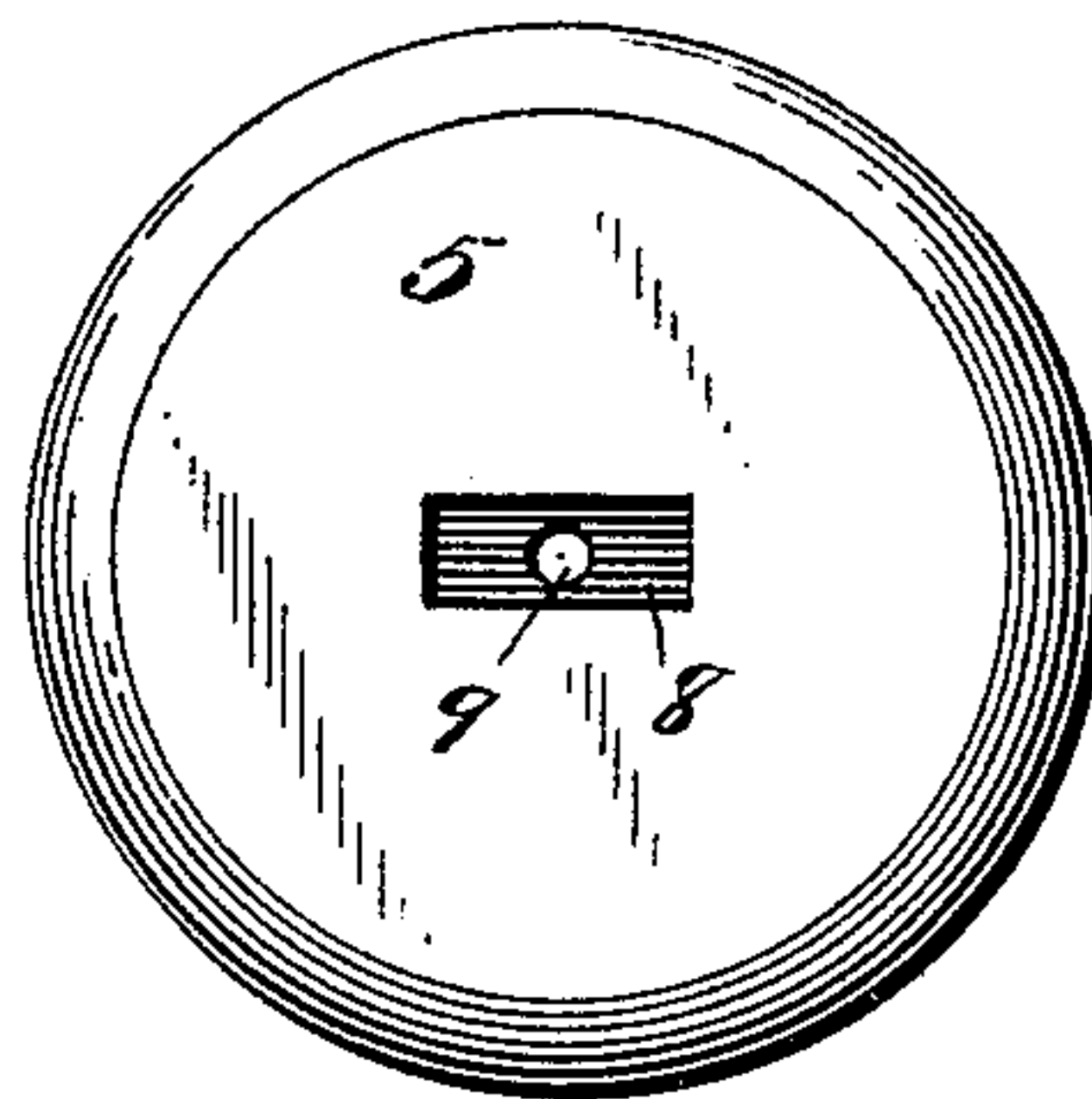


Fig. 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## PUSH-BUTTON.

SPECIFICATION forming part of Letters Patent No. 635,172, dated October 17, 1899.

Application filed July 7, 1899. Serial No. 723,078. (No model.)

*To all whom it may concern:*

Be it known that I, ADOLPH C. MEIER, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Push-Buttons, of which the following is a specification.

My invention relates to electrical push-buttons; and its primary object is to provide a push-button which may be screwed to position upon its support without the use of a screw-driver.

A further object of the invention is to provide a push-button of simple and inexpensive construction which will be effective and durable in use.

The construction of the improvement will be fully described hereinafter and its novel features pointed out in the appended claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a vertical section of a push-button embodying my invention. Fig. 2 is a similar section taken at right angles to that of Fig. 1. Fig. 3 is a detail perspective view of the metal diaphragm employed, with its integral spring; and Fig. 4 is a top plan view of the block or disk of insulating material to which the securing screw-eye of the device is attached.

The reference-numeral 1 designates a concavo-convex sheet-metal casing, preferably formed with a base-flange 2 and having a central opening 3 for the reception of a button 4.

Within the casing 1 is secured a disk 5, of rubber or other insulating material, by means of rods or pins 6, which extend through an opening in the disk and rest in openings 7, formed at opposite sides of the casing 1. The disk is formed on its upper side with a recess 8, which communicates with an opening 9. The recess 8 and opening 9 accommodate a screw-eye 10, the eye of which rests within the recess in position to permit a rod 6<sup>a</sup>, of wood, hard rubber, fiber, or other non-conducting material, to pass through it, as shown in Figs. 1 and 2. This rod 6<sup>a</sup> when the parts are assembled, as shown in Fig. 2, is in alignment with the pins or rods 6, which secure the disk 5, the inner ends of the rods 6 abutting against the ends of the insulating-rod 6<sup>a</sup>

and serves to insulate the screw-eye from the metallic casing 1.

11 designates a thin diaphragm of sheet metal, which is transversely slitted to form a tongue 12, the latter being bent upon itself to constitute a spring-contact. This diaphragm is secured upon the upper surface of the disk 5, so that the spring-tongue 12 is normally out of contact with the screw-eye and bears against the inner surface of the button 4, the latter having the usual annular retaining-flange 13. A brass washer 14 is fitted over the screw-eye below the disk 5, as shown.

One wire, 15, of the circuit controlled by the push-button is attached to the casing 1 and the other wire, 16, to the screw-eye. It will be apparent that the circuit will be closed by depressing the button 4, causing the spring-tongue 12 to contact with the screw-eye, the breaking of the circuit being effected by the retraction of the tongue.

To apply the push-button to a wall or other support, it is only necessary to screw the screw-eye into the support, turning the whole device bodily. This manner of attaching and detaching the device renders the use of a screw-driver unnecessary.

I claim—

1. An electrical push-button comprising a disk of non-conducting material; a non-rotatable screw-eye having its head or eye secured to said disk; an inclosing casing; a button and a spring-contact between the button and screw-eye.

2. An electrical push-button comprising a casing; a disk of insulating material recessed at its upper surface, and secured within the casing; a non-rotatable screw-eye extending through said disk, and insulated from the casing; a diaphragm above the disk formed with a spring-contact; and a button resting against said contact.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLPH C. MEIER.

Witnesses:

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OLLO H. OTTEN.