

No. 668,213.

W. T. PRINGLE.  
ATTACHMENT PLUG.  
(Application filed Dec. 18, 1899.)

Patented Feb. 19, 1901.

(No Model.)

FIG. 1.

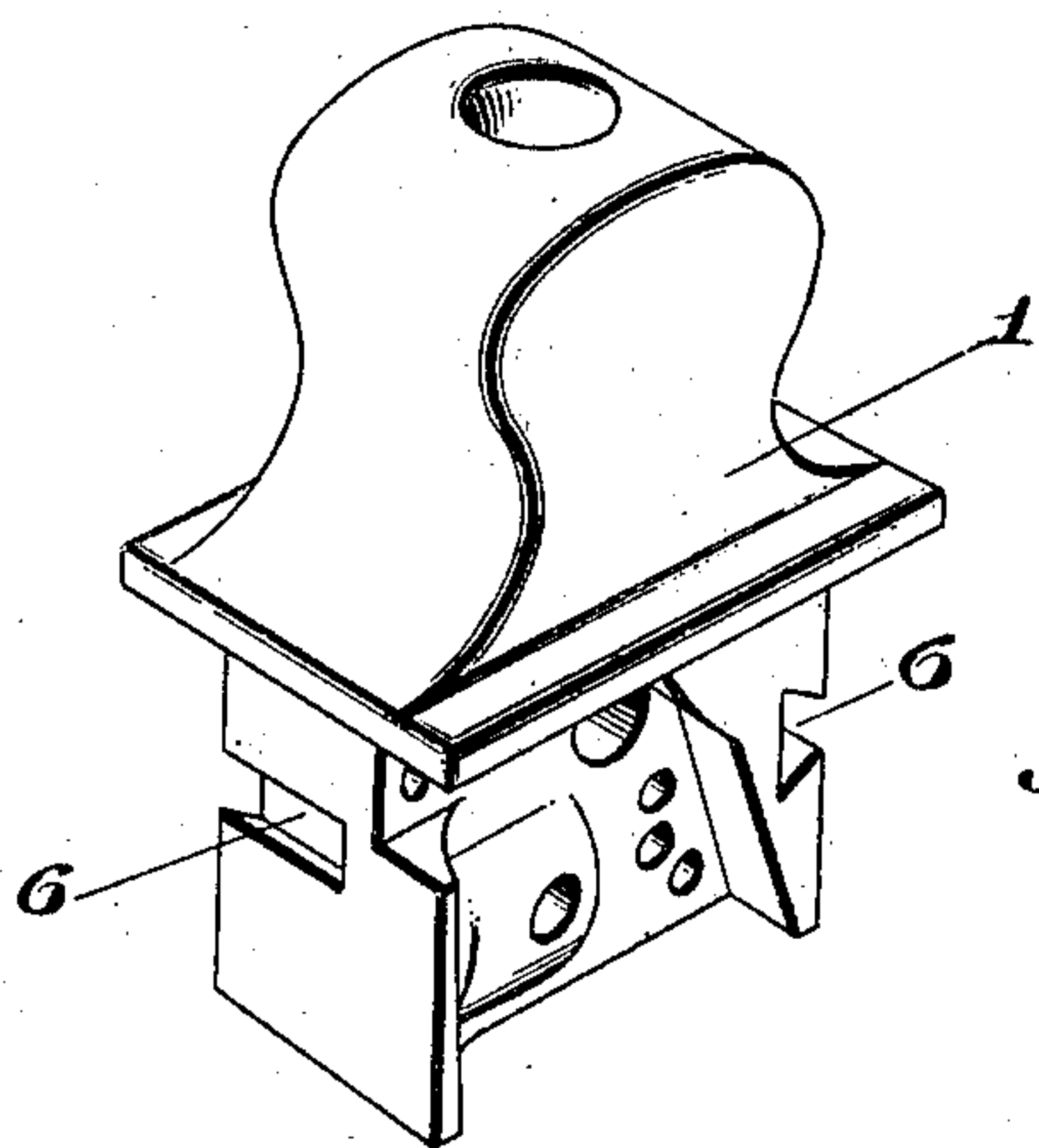


FIG. 2.

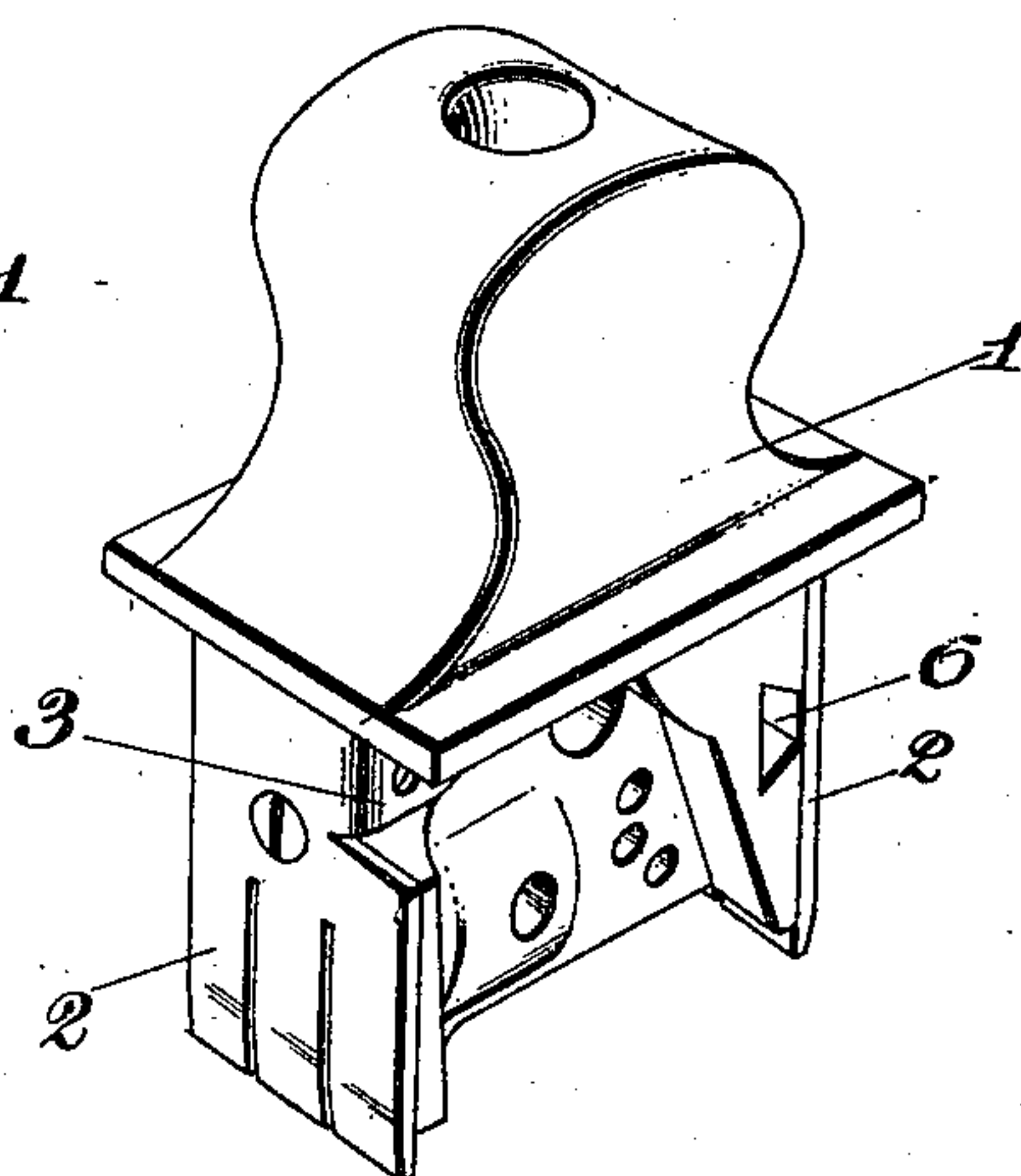


FIG. 3.

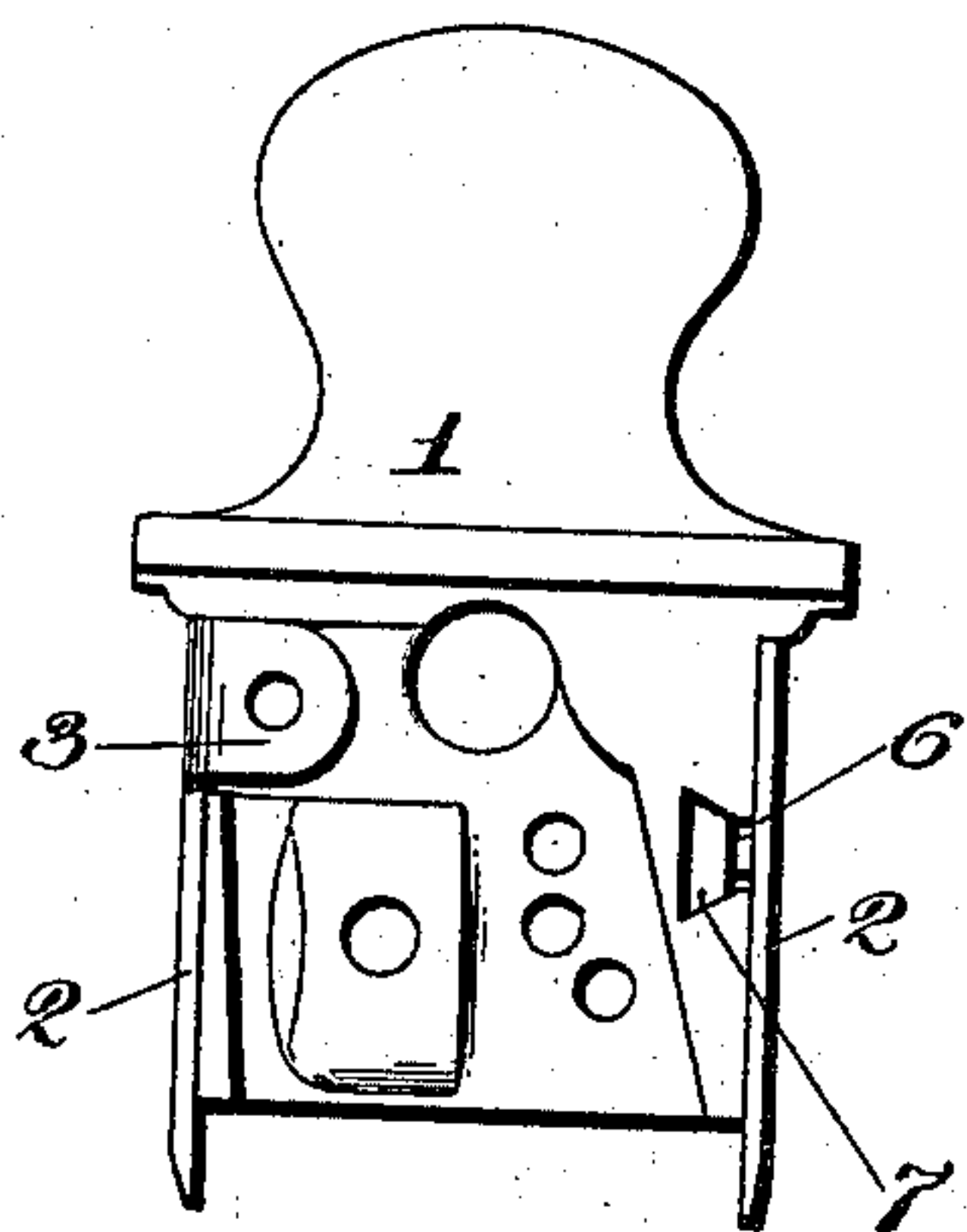


FIG. 4.

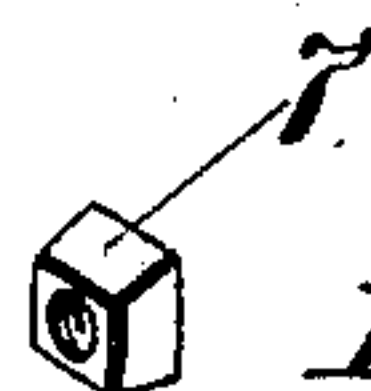
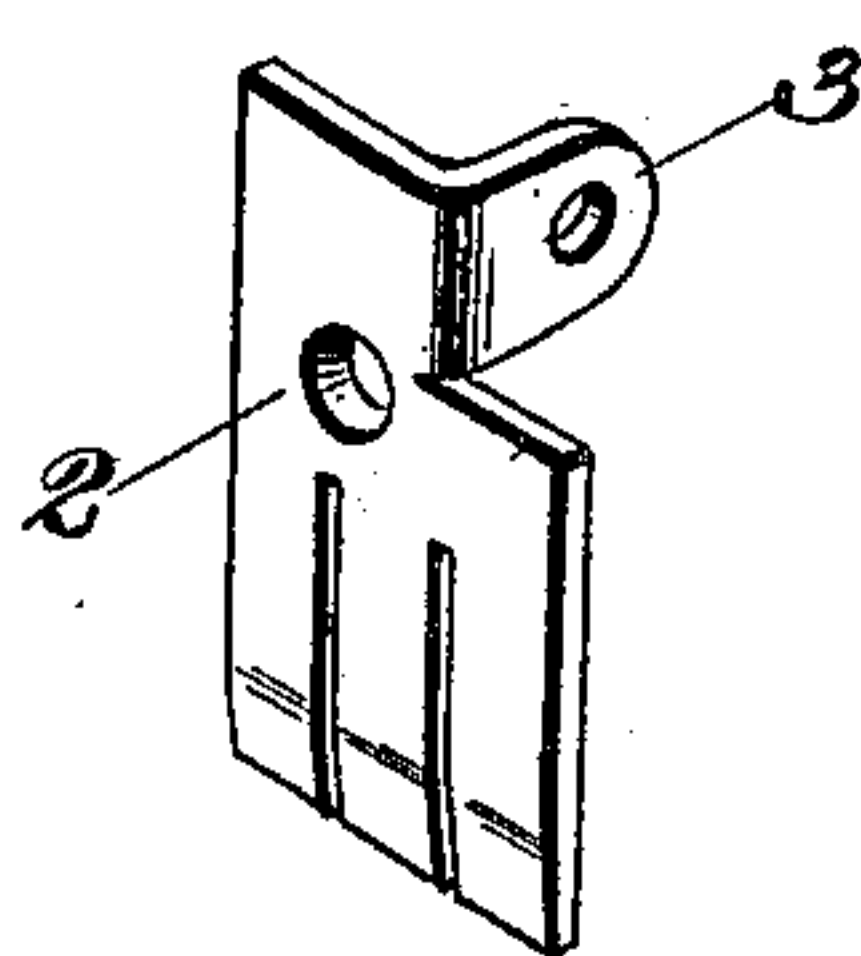


FIG. 5.

WITNESSES:

*Maesthoffmann*  
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INVENTOR

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*by Jno. C. Wasdale atty*

# UNITED STATES PATENT OFFICE.

WILLIAM T. PRINGLE, OF LANSDOWNE, PENNSYLVANIA.

## ATTACHMENT-PLUG.

SPECIFICATION forming part of Letters Patent No. 668,213, dated February 19, 1901.

Application filed December 18, 1899. Serial No. 740,688. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. PRINGLE, a citizen of the United States, residing at Lansdowne, in the county of Delaware and State of Pennsylvania, have invented a new and useful Attachment-Plug, of which the following is a specification.

My invention relates to attachment-plugs having contact-plates for connection and disconnection with the contact-terminals of the line, the object of my improvement being to afford means for securing the contact-plates to the non-metallic or insulating part of the plug; and my invention is especially applicable to plugs in which the insulating part is composed of non-workable substance, such as will not readily permit of threading for coöperation with the screws securing the metallic parts to the insulating part. I accomplish this object as shown in the accompanying drawings, in which—

Figure 1 is a perspective view of the insulating-plug with the contact-plates removed. Fig. 2 is a similar view with the contact-plates in place. Fig. 3 is a front elevation of the insulating-plug. Fig. 4 is a perspective view of one of the contact-plates. Fig. 5 is a perspective view of one of the keying-blocks.

Similar numerals refer to similar parts throughout the several views.

Referring to the drawings, 1 indicates the insulating portion of the plug; 2, the contact-plates, which are secured to the sides of the insulating-plug. These contact-plates 2 have right-angularly-disposed projecting members 3, which are adapted to lie upon the opposite sides of the insulating-block and adjacent to and at right angles with the sides upon which the contact-plates lie. These right-angularly-projecting members 3 are adapted to be connected either directly or through fuse-wires to the line-terminals. The apertures 6 (shown in Figs. 1, 2, and 3) are beveled and extend part way across the side of the plug and are adapted to receive the keying-blocks 7, (shown in Fig. 5,) each of which is provided with a threaded aperture to receive the screw as means for securing the contact-plates 2 to the insulating-plug. It will be noted that the limit of the apertured extension 6 prevents the movement of the keying-block, and consequently of the contact mem-

bers 2, in one direction, while the right-angularly-projecting members 3 prevent the movement of the plates 2 in the opposite direction. Thus is afforded convenient and efficient means for securing the plates to the insulating-plug where it is impossible to work screw-threads in the material of said insulating-plug. This is both novel and useful in view of the fact that the material heretofore composing said insulating portion of the plug has been expensive to produce in the form required and having to be of such composition as would permit of working screw-threads into the same has consequently been subject to the injurious effects of heavy currents of electricity.

The use of porcelain or an equivalent material, which is otherwise perfectly adapted as an insulator, has been impracticable heretofore because of the difficulty of securing the metallic parts thereto.

While I have shown a specific and convenient form of aperture and keying-block, it is obvious that these may be varied and still be within the scope of my invention.

What I claim is—

1. In an attachment-plug the combination of conductive contact-plates and a non-conducting part, the non-conducting part provided with apertures in its sides, keying-nuts adapted to occupy said apertures with limited movement in one direction to coöperate in securing the contact-plates, the contact-plates provided with right-angularly-projecting members to prevent the movement of the plates in the opposite direction, substantially as described.

2. In an attachment-plug, the combination of contact-plates, an insulating-block having upon its opposite sides channels of limited extension, keying-nuts residing in the channels limited as to their movement in one direction by the limit of the channel and as to the other direction by the contact-plate secured thereto, substantially as described.

3. In an attachment-plug the combination of contact-plates and a non-conductive block with mortises extending part way across its opposite sides, keying-nuts secured in said mortises to coöperate in securing the contact-plates, the contact-plates having right-angularly-projecting members adapted to lock the



keying-nuts within their respective cooperating mortises, substantially as described.

4. In an attachment-plug the combination of contact-plates and a non-conductive block with apertures of limited extension upon its opposite sides, the contact-plates having right-angularly-projecting members and keying members adapted to reside in said apertures to cooperate with the right-angularly-projecting members to secure the contact-plates to the block, substantially as described.

5. In an attachment-plug, the combination

of contact-plates, an insulating-block having apertures therein, keying members residing in the apertures, limited as to their respective movements in one direction by the limit of the apertures and in the other direction by the contact-plates secured thereto, substantially as described.

WM. T. PRINGLE.

Witnesses:

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