

No. 881,344.

PATENTED MAR. 10, 1908.

F. J. RUSSELL.
ELECTRICAL SIGN RECEPTACLE.

APPLICATION FILED APR. 5, 1907.

2 SHEETS—SHEET 2.

Fig. 5.

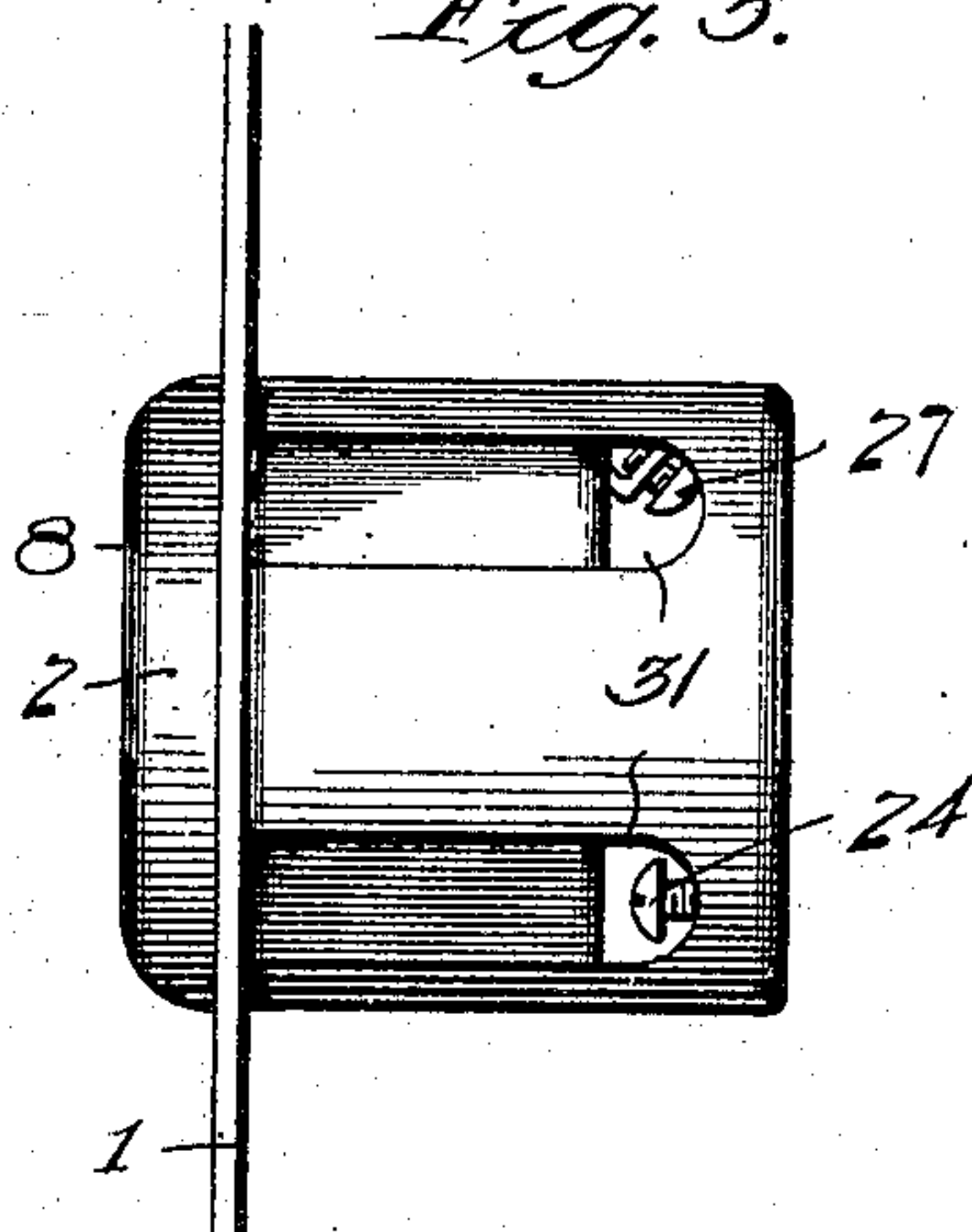


Fig. 6.

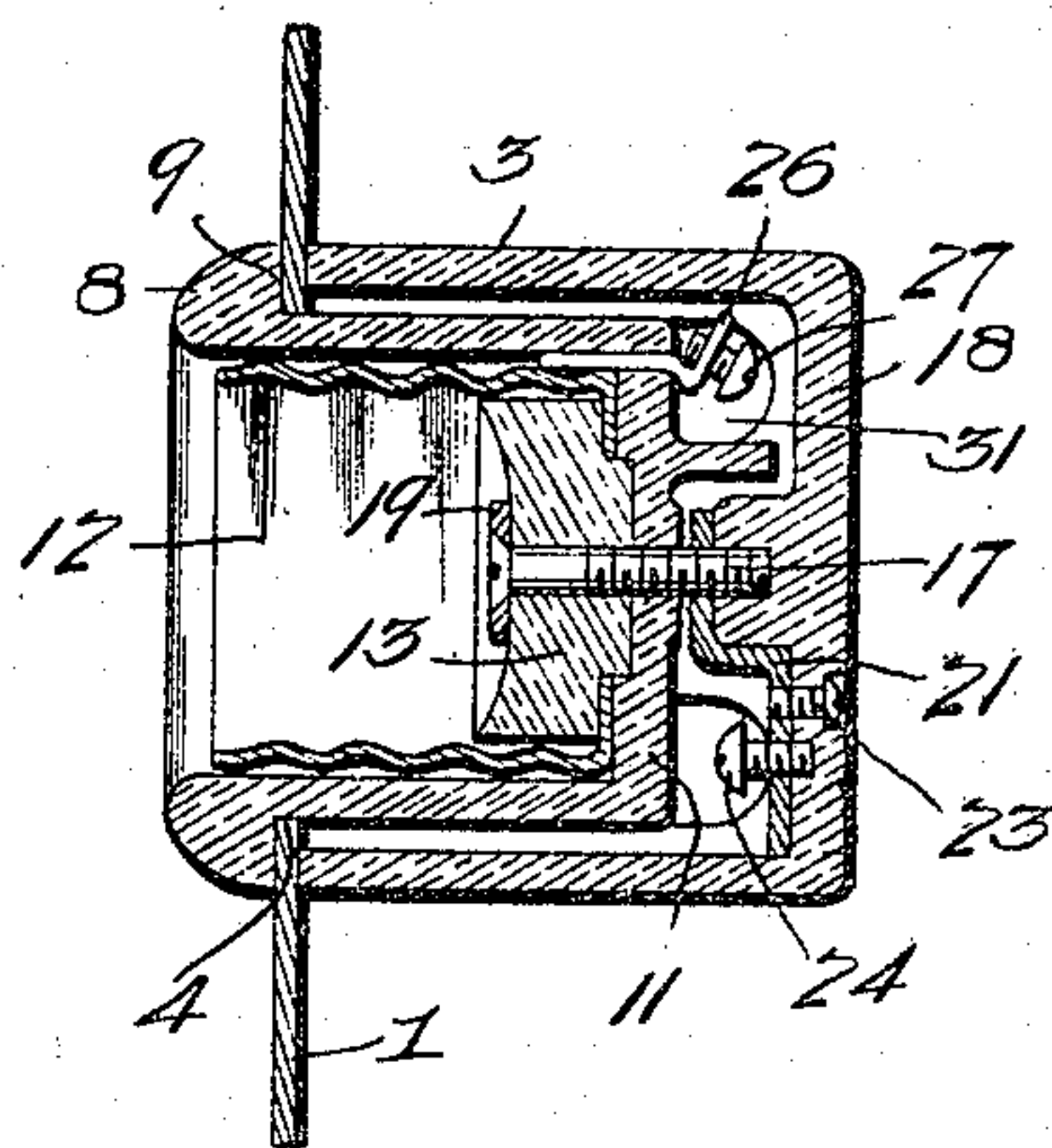
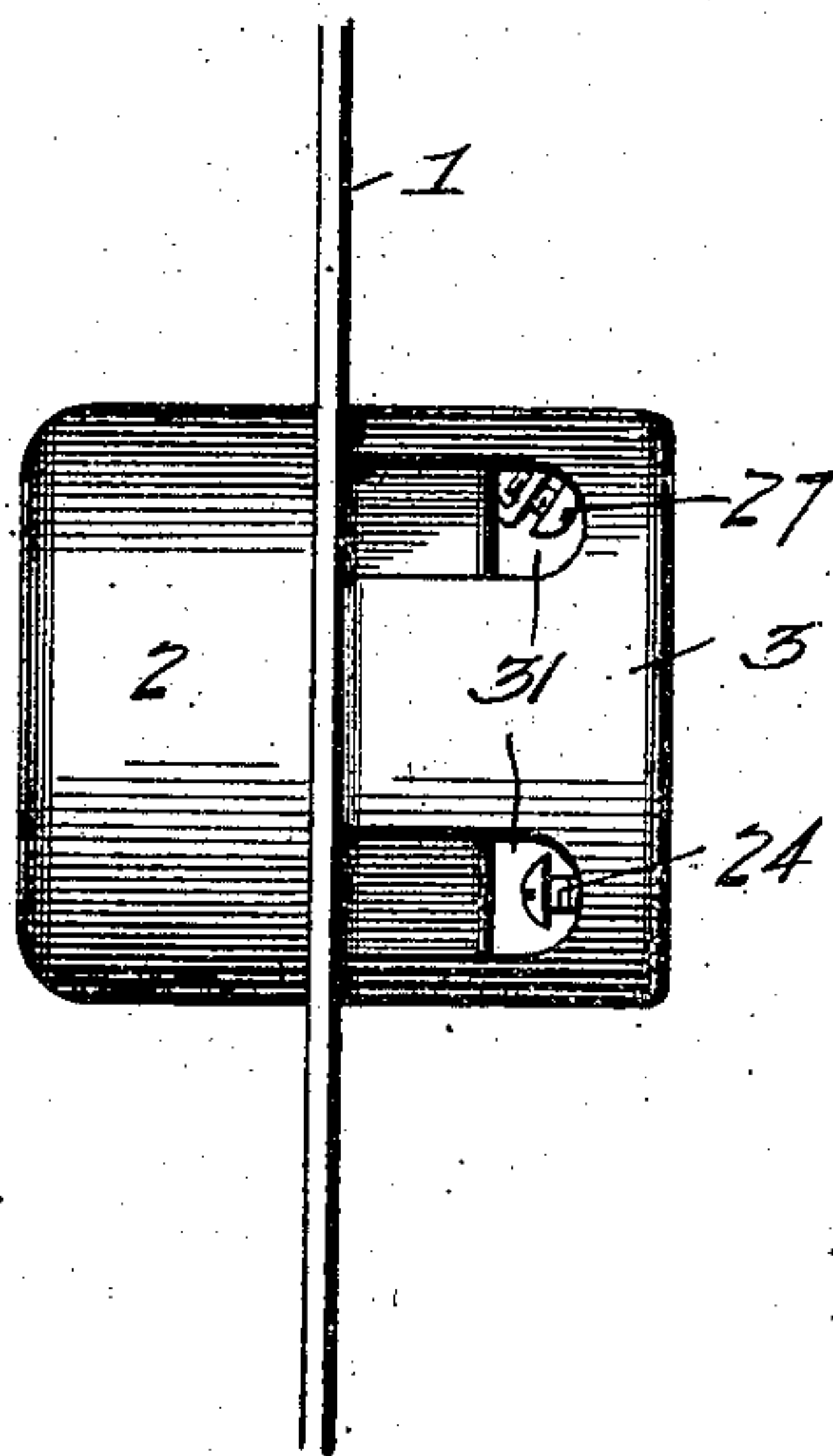


Fig. 7.



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2 SHEETS—SHEET 1.

Fig. 1.

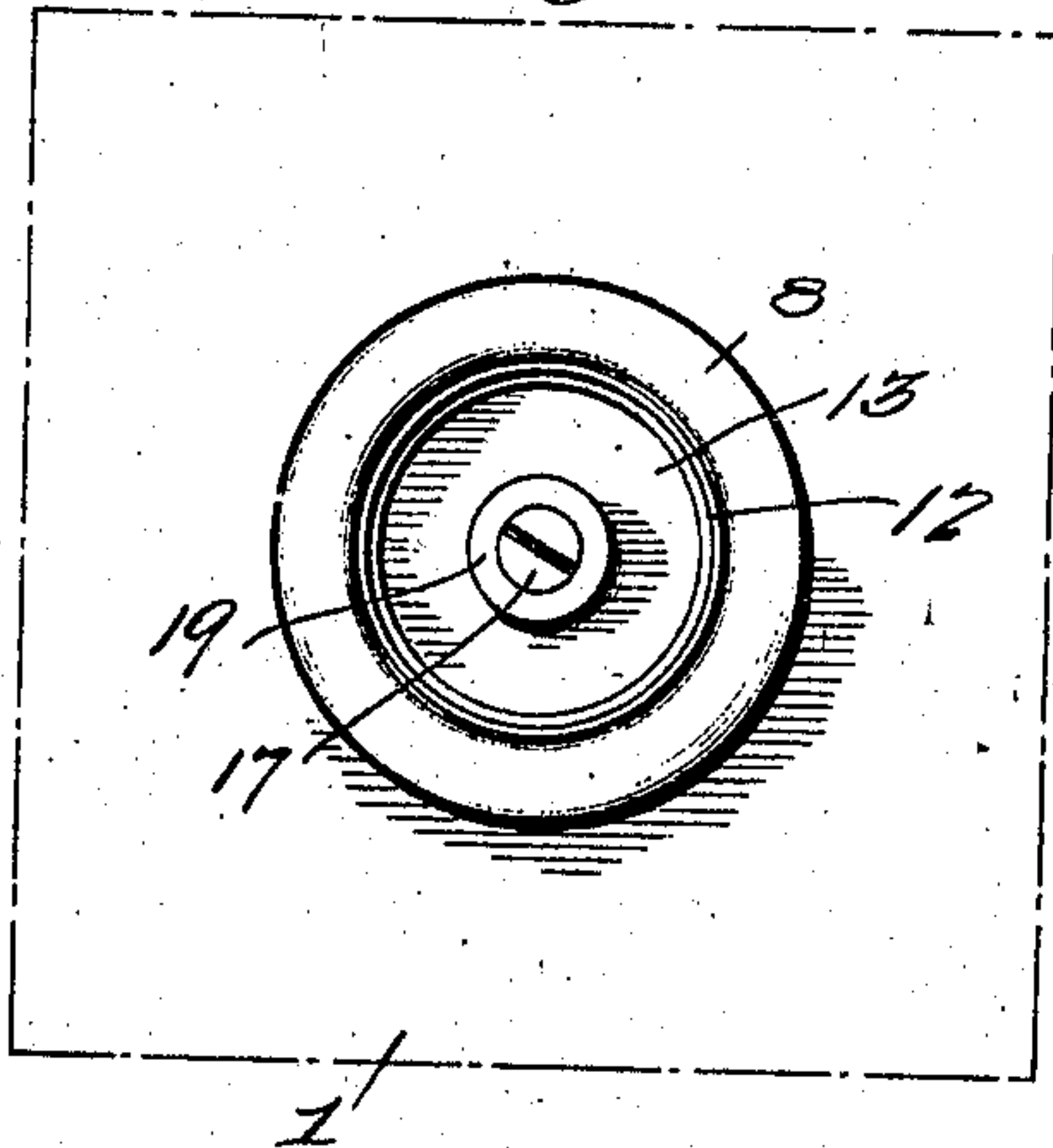


Fig. 2.

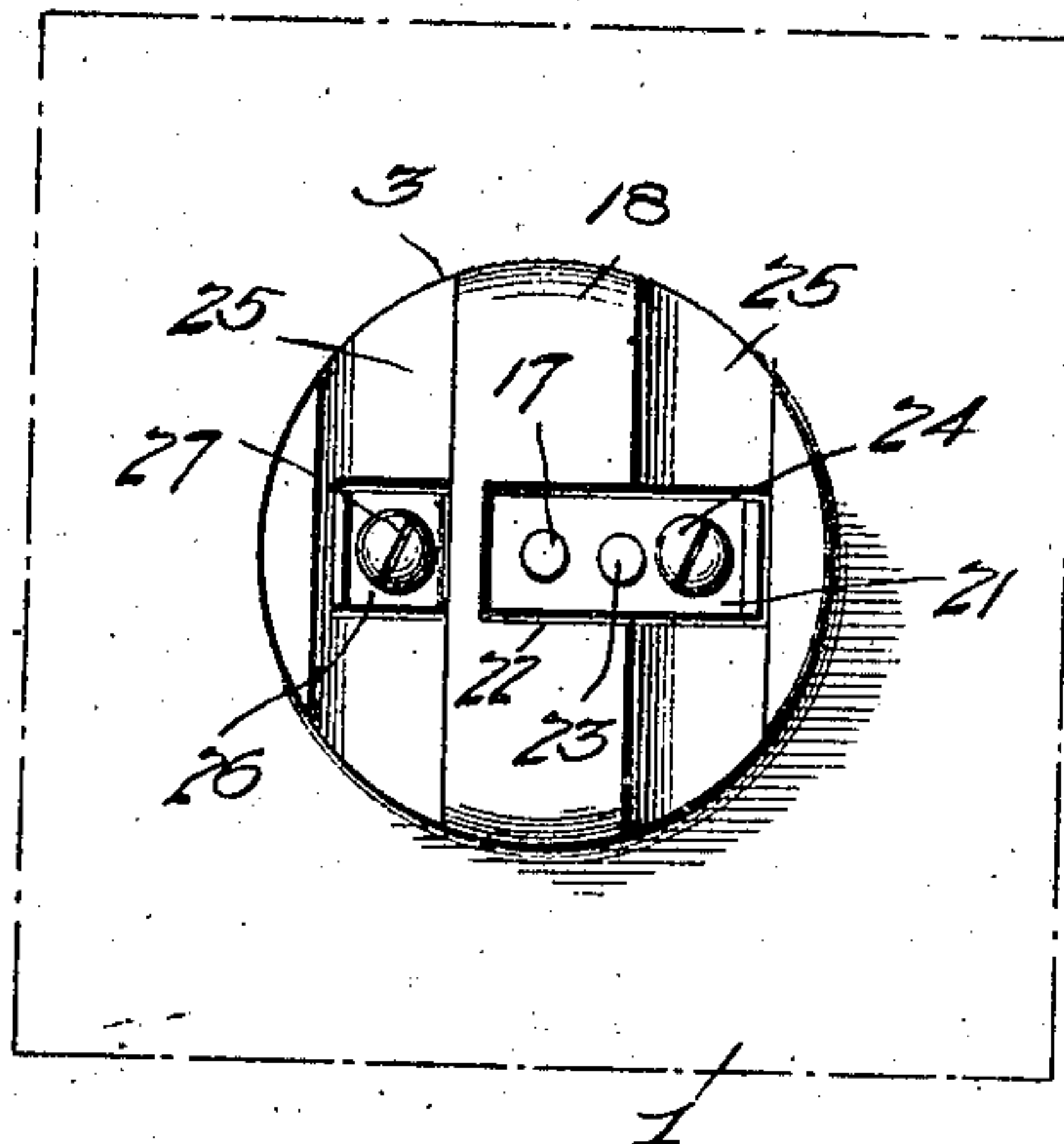


Fig. 3.

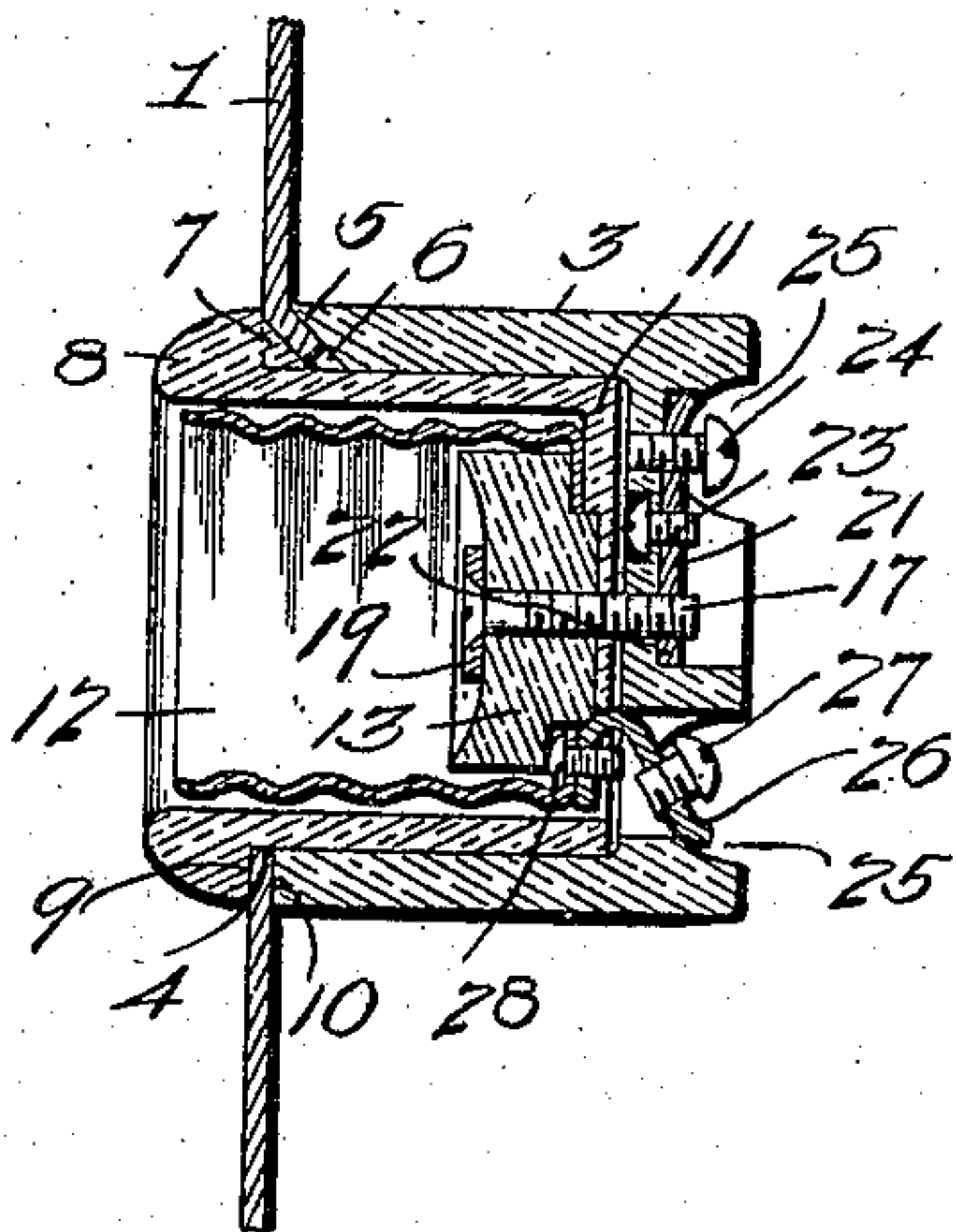
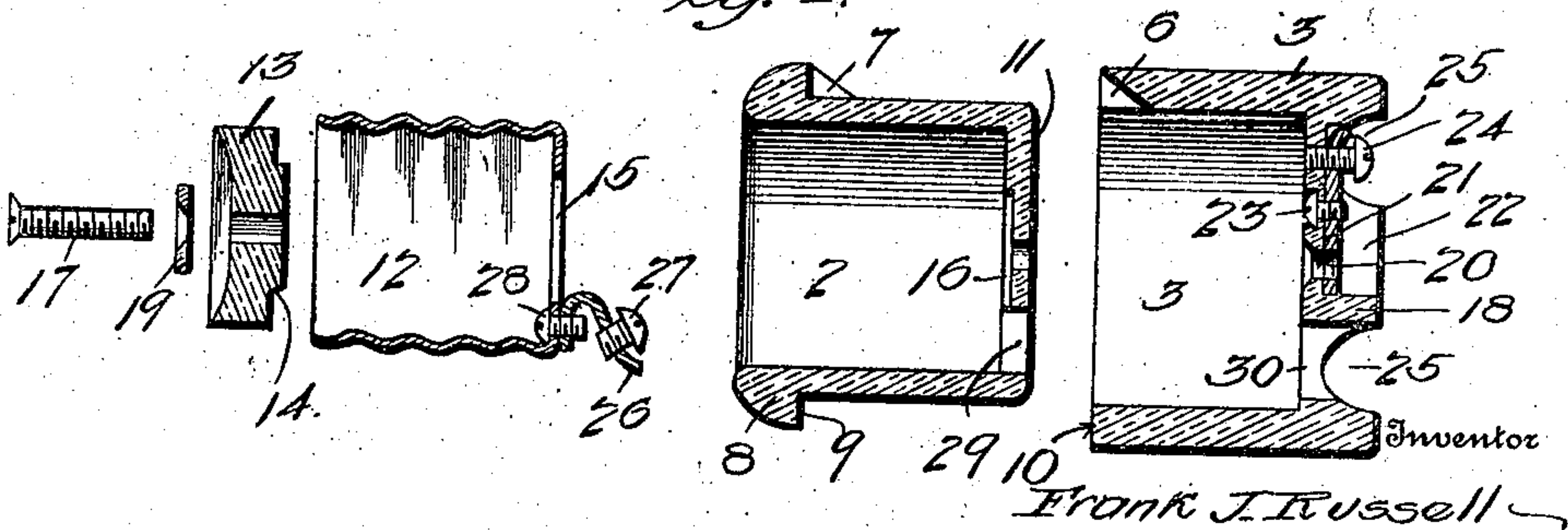


Fig. 4.



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ELECTRICAL SIGN-RECEPTACLE.

No. 881,344.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed April 5, 1907. Serial No. 366,555.

To all whom it may concern:

Be it known that I, FRANK J. RUSSELL, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Electrical Sign-Receptacles, of which the following is a specification.

This invention relates to an improved electrical receptacle designed to receive and connect with the standard forms of electrical connecting plugs such as the common incandescent lamp plugs and extension circuit plugs, and possessing special utility as a sign receptacle for carrying the lamps employed in forming an electric light sign.

To this end the invention contemplates an improved electrical receptacle which may be characterized as a two-piece sign receptacle embodying telescopically and adjustably related members which provide for clamping the receptacle body directly upon the sign board plate or other supporting element. In this connection the invention has in view a construction of receptacle which can be firmly secured to the supporting element without the employment of screw holes or auxiliary fastening means while at the same time providing thoroughly effectual weather proof features so as to protect the metallic parts from the action of the weather.

A further general object of the invention is to so construct an electrical receptacle that the same shall possess considerable strength so as to make the same better adapted to the strain of assembling than other forms of receptacles particularly adapted for sign use, especially those having extended fastening ears.

Also, the invention provides a receptacle of very compact construction and made-up of simple and durable parts which are so arranged as not to disturb or break the electrical connection by shaking loose as is sometimes the case with other types of receptacles.

With these and many other objects in view which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction combination and relation of parts herein-

after more fully described, illustrated and claimed.

The essential features of the invention involved in carrying out the objects above indicated are necessarily susceptible to a wide range of structural modification without departing from the scope of the invention, but certain preferred embodiments thereof are shown in the accompanying drawings in which—

Figure 1 is a front elevation, or front end view, of a two-piece sign receptacle constructed in accordance with the present invention. Fig. 2 is a rear elevation or end view of the receptacle. Fig. 3 is a central longitudinal sectional view of the receptacle. Fig. 4 is a sectional view of the receptacle showing the various parts thereof separated and illustrating their relation to each other. Fig. 5 is a side elevation of a modified form of the receptacle showing the complete housing of the line wire terminal connections between the two cup members. Fig. 6 is a longitudinal sectional view of the form of receptacle shown in Fig. 5. Fig. 7 is an elevation of another modification illustrating a variation in the relative sizes or proportions of the two cup members constituting the body portion of the receptacle.

Like references designate corresponding parts in the several figures of the drawings.

A distinctive feature of the invention resides in the construction of the receptacle body whereby the same provides for carrying the various parts for the electrical connection while at the same time the body itself acts as a clamp for securing the receptacle upon a sign board plate or other supporting element designated by the numeral 1 in the drawings. The said receptacle body consists essentially of two parts or members, namely, a pair of inner and outer cup members 2 and 3 made of porcelain, fiber or other insulating material such as is commonly employed in manufacturing fixtures of this character.

The inner and outer cup members 2 and 3 are adapted to adjustably and telescopically register one within the other, and to clamp respectively upon opposite sides of the supporting element 1 which is provided therein with a receiving hole or opening 4

through which the receptacle body is inserted, and exposed for the mounting of the electrical plug carried by the lamp. To provide for an effective, non-rotative clamping support of the receptacle body on the element 1, the latter is preferably provided at one side of its hole or opening 4, with a laterally deflected retaining projection 5 adapted to engage in a keeper notch 6 formed in one edge of the outer cup member 3 and held in such notch by a holding lug 7 projected from the inner side of an annular clamping collar 8 provided at the outer end of the inner cup member 2 and presenting at its inner side a binding shoulder 9 which impinges against one side of the supporting element in opposition to the binding shoulder 10 presented at one end of the outer contact member 3, as plainly shown in Figs. 3 and 4 of the drawings. This provides, when the two cup members are assembled and secured together, a self-sustaining clamp for the receptacle body upon the supporting element 1.

The inner cup member 2 of the receptacle body is preferably provided with an integral insulating bottom piece 11 upon the outer side of which is supported the shell terminal or side plug contact 12 which is housed wholly within the plug receiving opening of the cup member 2. Preferably, the terminal or side plug contact 12 consists of the conventional threaded metallic shell and may be secured in place in a thoroughly practical and electrical manner through the employment of an insulating button 13 arranged within the bottom of the contact or shell and provided at one side with a shoulder projection 14 adapted to project through a base opening 15 in the bottom of the shell 12 and snugly register in a keeper seat 16 formed in the outer side of the bottom piece 11 of the cup member 2. The said button 13 is held in the position described by means of the central plug contact and assembling screw 17 extending centrally through aligned screw holes in the button 13, the bottom piece 11 of the cup 2, and the integral bottom piece 18 of the cup 3. The head of the screw 17 engages with a contact washer 19 exposed within the plug receiving opening of the receptacle, and the outer threaded extremity of the said screw 17 engages a threaded opening 20 in a wire terminal plate 21 secured within a plate seat 22 channeled in the outer side of the cup bottom 18 and held in such seat by the securing screw 23. The said wire terminal plate 21 also carries a binding screw 24 exposed within the plane of one of the pair of line wire grooves 25 formed in and extending transversely across the outer side of the cup bottom 18 as may be plainly seen from Figs. 2, 3 and 4 of the drawings. The other wire terminal plate designated by the number 26, carries a binding screw 27 and

therefore constitutes what may be termed a binding post secured directly to and carried by the plug contact or shell 12, said binding post being secured to the latter by means of a screw or equivalent fastening 28. The binding post 26—27 is angularly arranged so as to be readily projected through aligned clearance openings 29 and 30 provided respectively in the cup bottoms 11 and 12 so that the binding screw 27 will be exposed in the other of said line wire grooves 25.

A modification of the invention is suggested in Figs. 5 and 6 of the drawings wherein the bottom piece 18 is illustrated as being entirely imperforate and the wire terminal plate and its parts arranged upon the inside of said bottom piece 18 instead of upon the outside thereof. In this way the wire terminal connections are entirely housed between the bottoms of the two cup members, and to provide for the passage of the line wires the shell or wall part of the cup 3 is provided in opposite sides with the line wire receiving slots 31.

A further modification is suggested in Fig. 7 wherein it is shown that the two cup members may be so sized or proportioned as to project from opposite sides of the supporting element to any desired distance, and various other structural modifications may obviously be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

I claim—

1. In combination with a supporting element having a receptacle receiving hole and a retaining projection, an electrical receptacle having adjustably connected cup members clamped respectively upon opposite sides of the supporting element, said members having respectively a cooperating notch and lug engaging with said retaining projection of the supporting element.

2. An electrical receptacle comprising a pair of telescoping cup members provided with closed insulating bottoms, and one of said members being further provided with line wire passages, a wire terminal plate secured to the bottom piece of the outer cup member and having a binding screw exposed to one of the line wire passages, a side plug contact arranged within the inner cup member and carrying a binding post projecting through the bottoms of both cup members and exposed to the other line wire passage, and a combined contact and assembling screw arranged to hold said side plug contact in position and adjustably engaging the wire terminal plate on the bottom piece of the outer cup member.

3. The combination with a supporting element, of an electrical receptacle comprising a pair of cup members nested one within the other and clamped respectively upon oppo-

site sides of the supporting element, one of
said cup members carrying both plug con-
tacts and one of said wire connections, means
whereby one contact serves to secure the
5 other plug contact in position, and the other
cup member carrying the other wire terminal
connection.

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

FRANK J. RUSSELL.

Witnesses:

THEO. STOLL,
HELEN M. McCUE.