

C. D. PLATT.
ELECTRICAL ROSETTE.
APPLICATION FILED NOV. 28, 1908.

923,887.

Patented June 8, 1909.

Fig. 1.

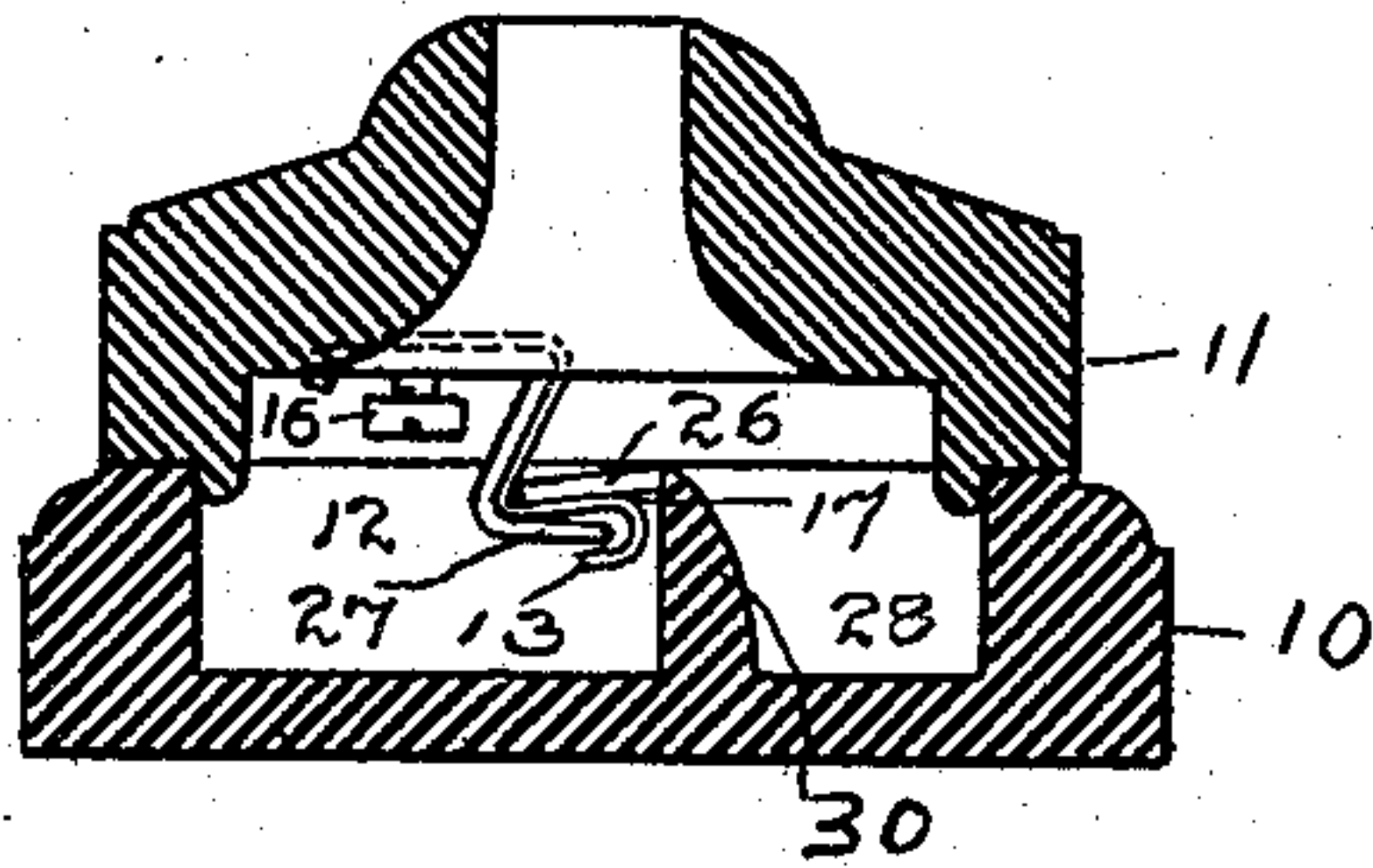


Fig. 2.

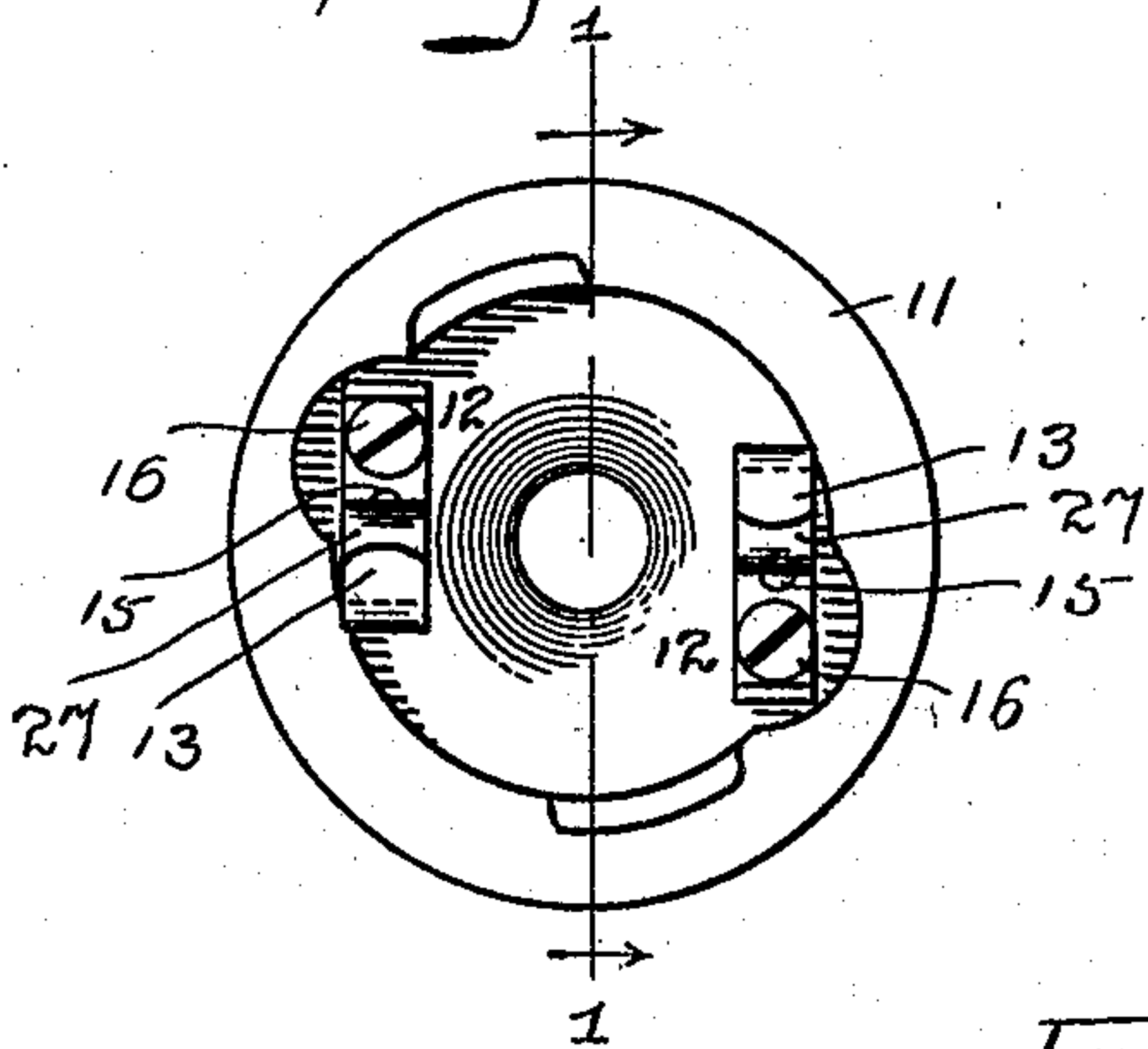


Fig. 3.

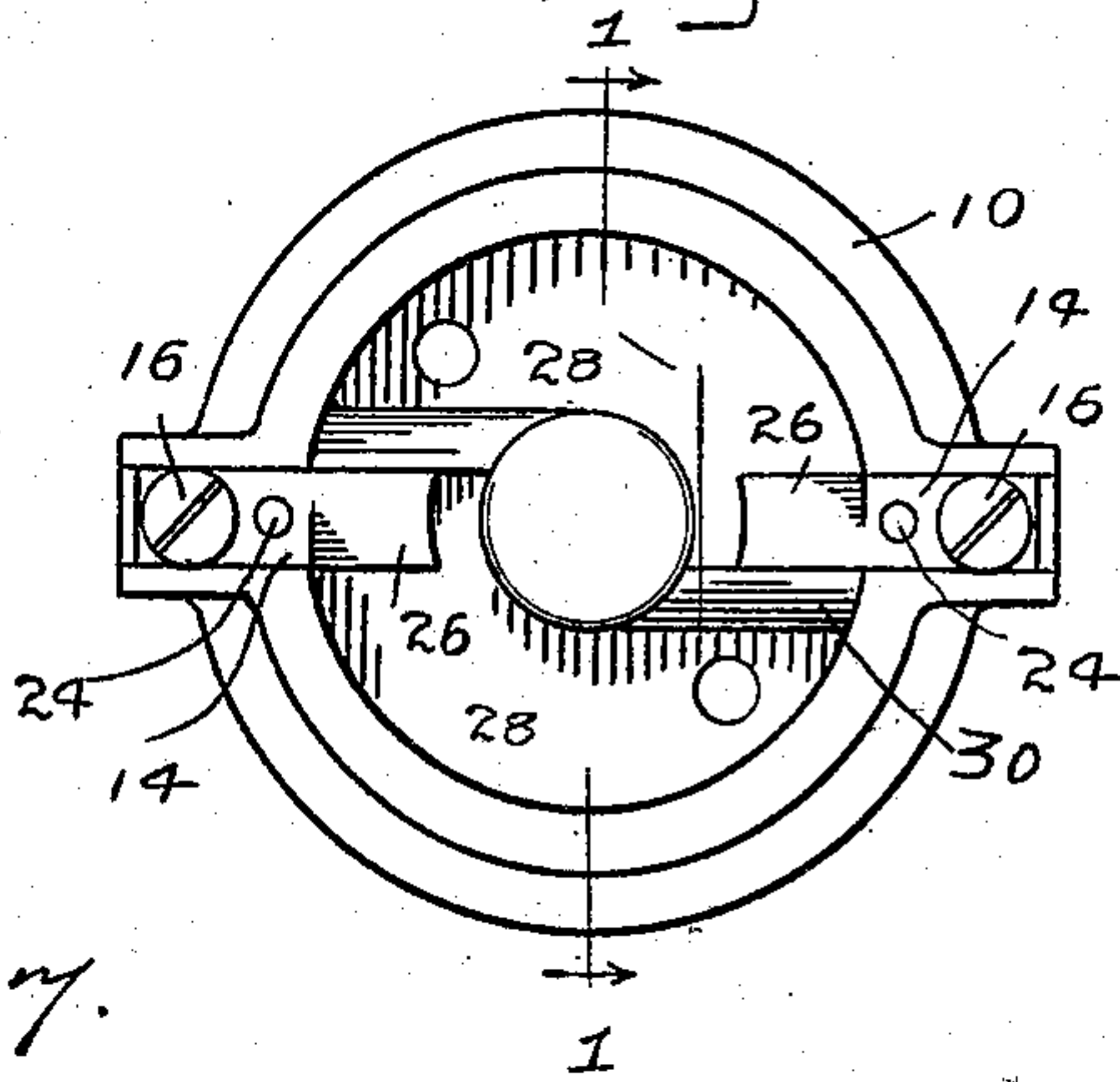


Fig. 7.

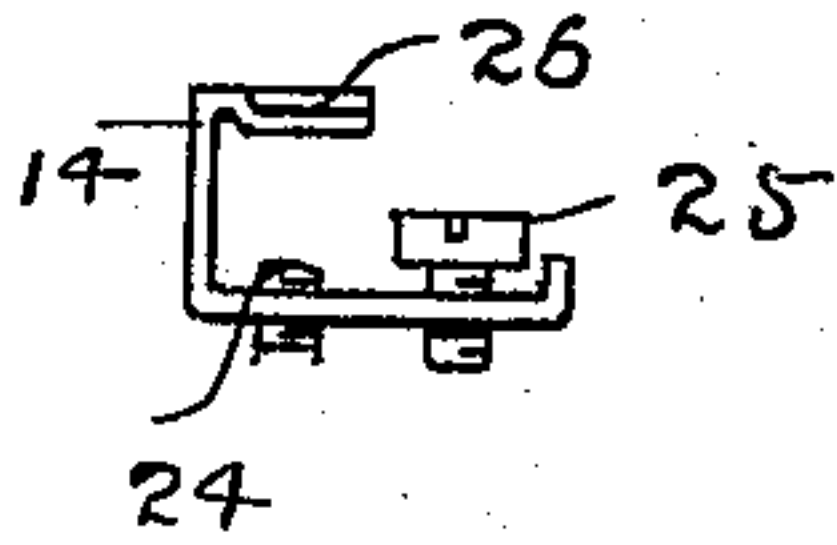


Fig. 4.

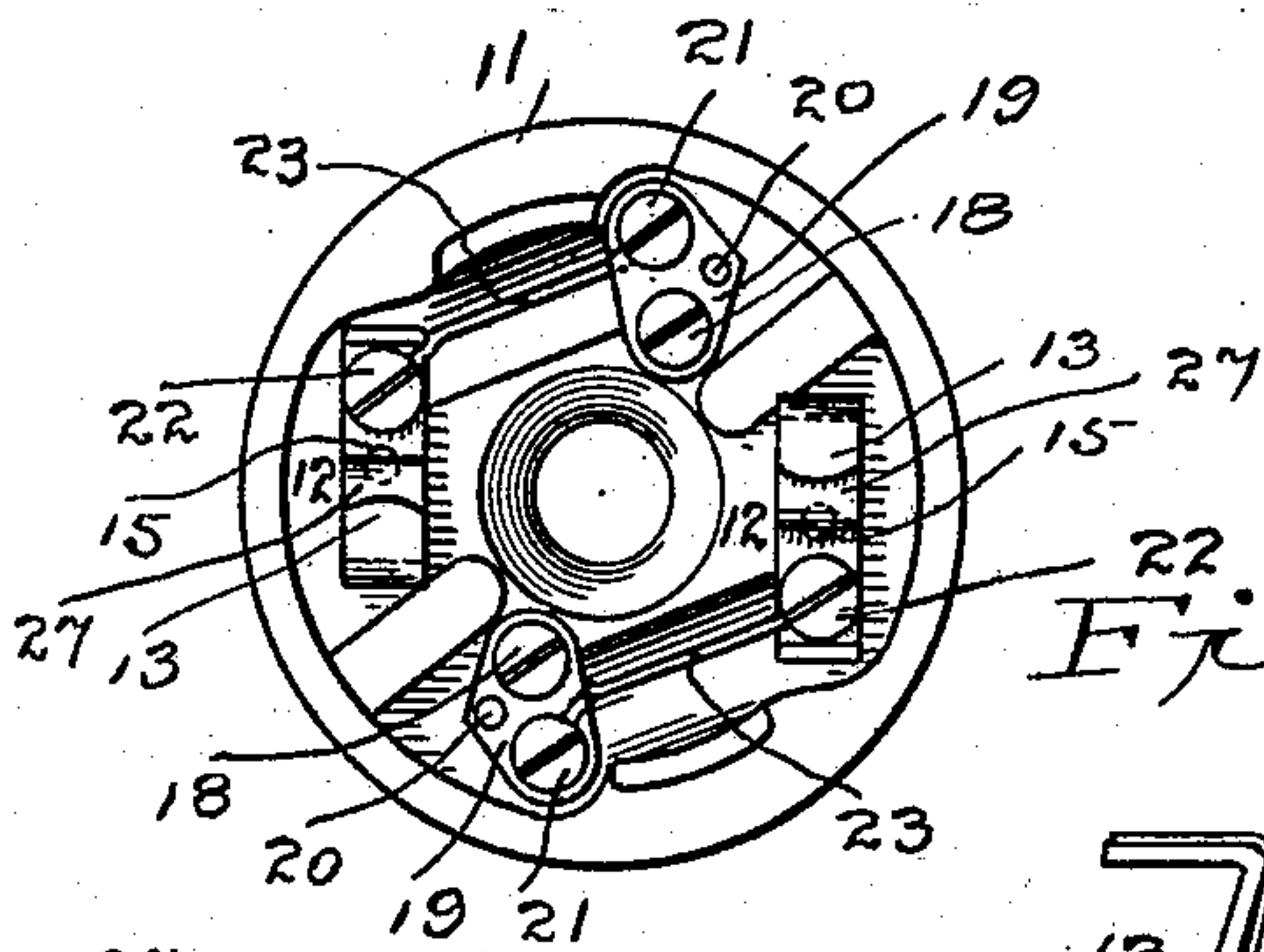


Fig. 5.

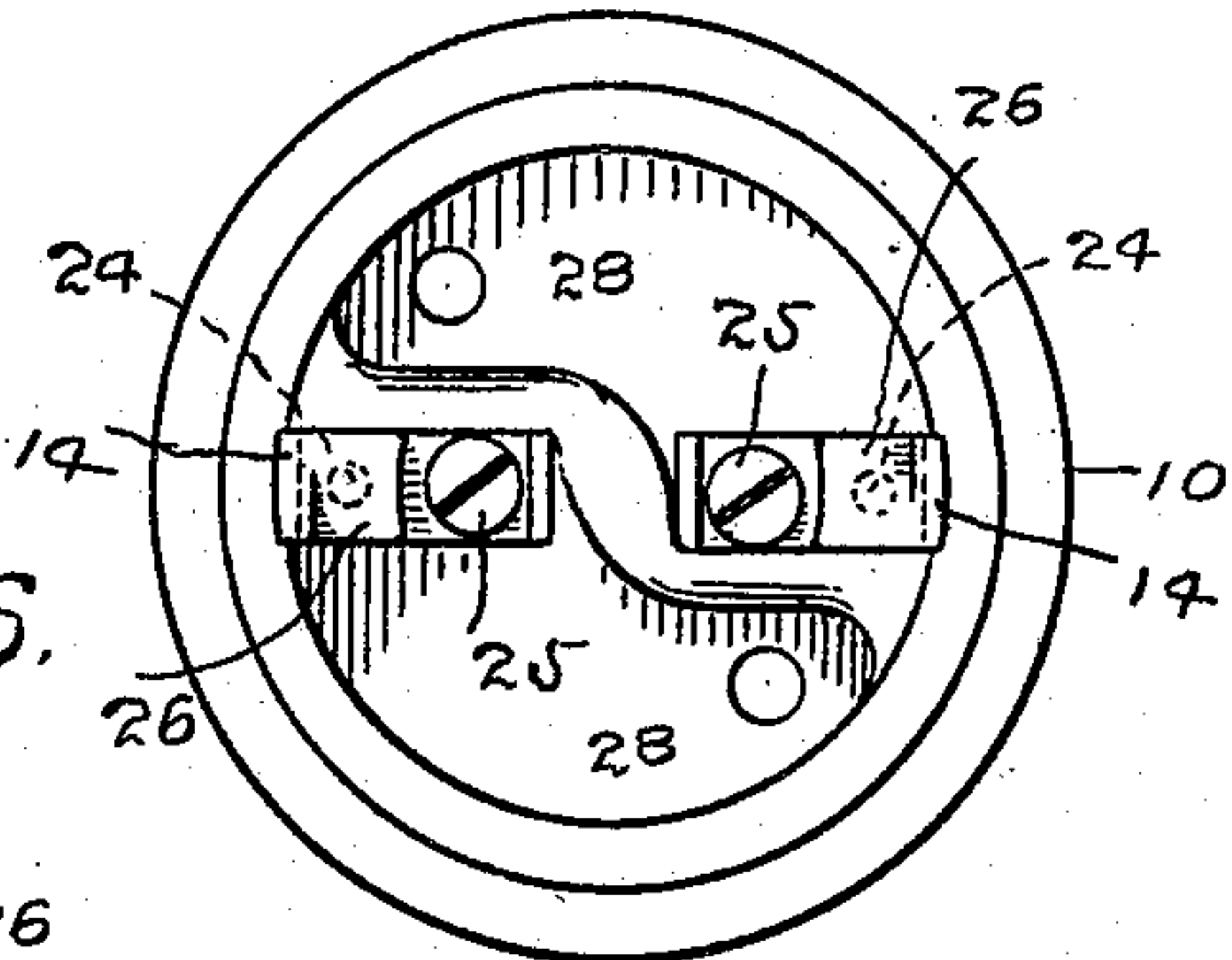
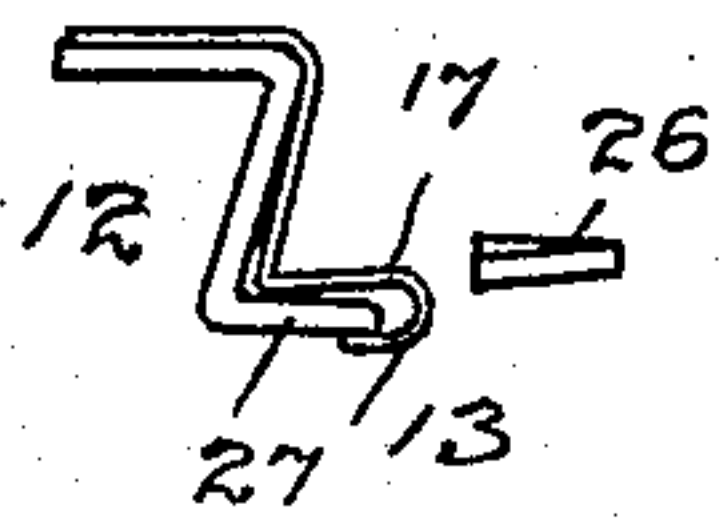


Fig. 6.



Witnesses:

H. A. Lamb.
S. W. Atherton.

Inventor
Clarence D. Platt
By Attorney
A. M. Wooster

UNITED STATES PATENT OFFICE.

CLARENCE D. PLATT, OF BRIDGEPORT, CONNECTICUT.

ELECTRICAL ROSETTE.

No. 923,887.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed November 28, 1908. Serial No. 464,966.

To all whom it may concern:

Be it known that I, CLARENCE D. PLATT, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Electrical Rosette, of which the following is a specification.

This invention relates to electrical rosettes and has for its object to provide a mode of attaching the cap to the base which shall provide for quick and sure attachment of the parts with ample electrical connection and without the use of tools, and which when the parts are once engaged will hold lamp and shade or other devices with perfect safety and without danger of the detachment of the cap through vibration without regard to whether the cap is or is not fully turned to place, it being a novel feature of the present invention that the attachment of the cap to the base is vibration-proof, as the effect of vibration is to place the respective terminals more completely in engagement.

With these and other objects in view I have devised the novel electrical rosette which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts:

Figure 1 is a section of my novel rosette, with the terminals fully engaged, on the line 1—1 in Figs. 2 and 3, looking in the direction of the arrows; Fig. 2 is an inverted plan view of a fuseless cap detached; Fig. 3 a plan view of the base detached; Fig. 4 an inverted plan view of a fuse cap detached; Fig. 5 a plan view of a slightly variant form of base detached; Fig. 6 a detail view illustrating the mode of engagement of the terminals; and Fig. 7 is an elevation of the form of base terminal shown in Fig. 5 detached.

10 denotes bases and 11 caps. The caps in Figs. 2 and 4 differ in that the former is fuseless and the latter is a fuse cap. The bases in Figs. 3 and 5 differ only in details of construction, more especially in the construction and mode of attachment of the terminals.

The cap terminals as a whole are indicated by 12, the locking springs by 13 and the base terminals as a whole by 14. Each base is provided with a recess or recesses 28. The essential feature of the cap terminals is the locking plates, indicated by 27, which extend into the recesses in the base and lie in approximately the horizontal plane. These

terminals are shown as made substantially Z-shape although the special form is immaterial, and the locking springs correspond approximately therewith.

In the form illustrated in Fig. 2 the cap terminals and the locking springs are attached to the caps by means of screws 15, the inner ends of which appear in the drawing. 16 denotes binding screws to which the current wires (not shown) are attached. The essential feature of the locking springs is that the free ends thereof incline away from the locking plate of the terminal and then curve loosely over the end of the locking plate forming a rounded projection indicated by 17.

In a fuse cap, as illustrated in Fig. 4, the current wires (not shown) engage binding screws 18 carried by plates 19 which are attached to the cap by screws 20, the inner ends only of which show. 21 denotes other binding screws in plate 19, and 22 binding screws in the terminals, said binding screws 21 and 22 being connected by a fuse 23.

In both forms of base illustrated, the base terminals 14 are secured to the bases by screws 24 the inner ends of which appear in the drawing.

25 denotes binding screws in the base terminals which may be placed externally as in Fig. 3 or internally as in Fig. 5. The essential feature of the base terminals is a locking incline 26 which lies obliquely to the horizontal plane and inclines toward the corresponding cap terminals as it approaches the locking position (see Fig. 6). A shoulder or rib 30 extends substantially diametrically across the base, and may or may not be enlarged at the center of the base as shown in Fig. 3. This shoulder divides the base recess into two compartments and prevents short-circuiting when fuses are blown and the interior of the rosette is filled with gas and molten metal. This shoulder also serves as an abutment for one side of the terminals and as a stop for the curled end of the spring in the cap.

The operation is as follows: The fully locked position of cap and base terminals is clearly shown in Fig. 1 and the position of a cap terminal and locking spring as they approach the locking position is shown in Fig. 6. In attaching the cap, the cap terminals are passed into the recesses in the base in proximity to the base terminals, as indicated in Fig. 6. The cap is then rotated relatively

to the base to place the terminals in engagement, as in Fig. 1. As soon as the locking projections of the locking springs come into engagement with the forward edges of the locking inclines, the locking springs will be pressed downward and will pass under the locking inclines. It is an important feature of the present invention that the cap is securely locked to the base just as soon as the locking springs have passed under the forward edges of the locking inclines, and that it is not necessary in order to insure a perfectly safe engagement of the parts that the cap terminals be turned to the extreme of the locking position as in Fig. 1, for the reason that just as soon as the forward ends of the locking springs have passed under and made engagement with the forward edges of the locking inclines the parts will be securely locked together until the cap is intentionally turned backward. The effect, if any, of vibration will be to cause the locking springs to pass farther forward down the locking inclines toward the fully locked position, as in Fig. 1, which will also improve the electrical connection of the terminals, as a greater portion of the locking springs will be in engagement with the locking inclines in which position they will be retained by the locking plate.

Briefly, the essential feature of novelty of the present invention is that there are no bumps or high points which must engage holes or recesses to effect a lock and which will not lock until they have been rotated to this exact position, but that the locking is effected through the engagement of locking springs lying at an angle to the horizontal plane with locking inclines lying at a corresponding angle, so that just as soon as the forward ends of the locking springs pass under the forward ends of the locking inclines, a perfect lock of the parts is effected.

Having thus described my invention I claim:

1. An electrical rosette comprising a base having terminals provided with locking inclines, a cap having terminals provided with locking plates and locking springs having

free ends which incline away from the locking plates and then curve loosely over the ends thereof forming rounded locking projections adapted to pass under the forward edges of the locking inclines and then to ride down the inclines.

2. An electrical rosette comprising a base having terminals provided with locking inclines and a cap having terminals provided with locking springs having free ends provided with locking projections which are adapted to pass under the forward edges of the locking inclines, the said inclines and springs being relatively formed and located to permit the cap and base to be assembled and separated solely by a rotative movement of the cap substantially as described, for the purpose specified.

3. An electrical rosette comprising a base having a recess and terminals in said recess provided with locking springs having free ends provided with locking projections which extend into the recess in the base and are adapted to pass under the forward edges of the locking inclines, the said inclines and springs being relatively formed and located to permit the cap and base to be assembled and separated solely by a rotative movement of the cap.

4. An electrical rosette comprising a base having a recess and terminals provided with locking inclines and a cap having terminals provided with locking plates lying in the horizontal plane and adapted to pass into the recess in the base, and locking springs corresponding approximately with the cap terminals and having locking projections which incline away from the locking plates and then curve loosely over the ends thereof, said locking springs being adapted to pass under the forward edges of the locking inclines and to be retained in engagement therewith by the locking plates.

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

CLARENCE D. PLATT.

Witnesses:

A. M. WOOSTER,
S. W. ATIERTON.