

J. L. BURTON.
ELECTRICAL CONNECTION ROSETTE.
APPLICATION FILED OCT. 17, 1908.

923,327.

Patented June 1, 1909.

Fig. 1.

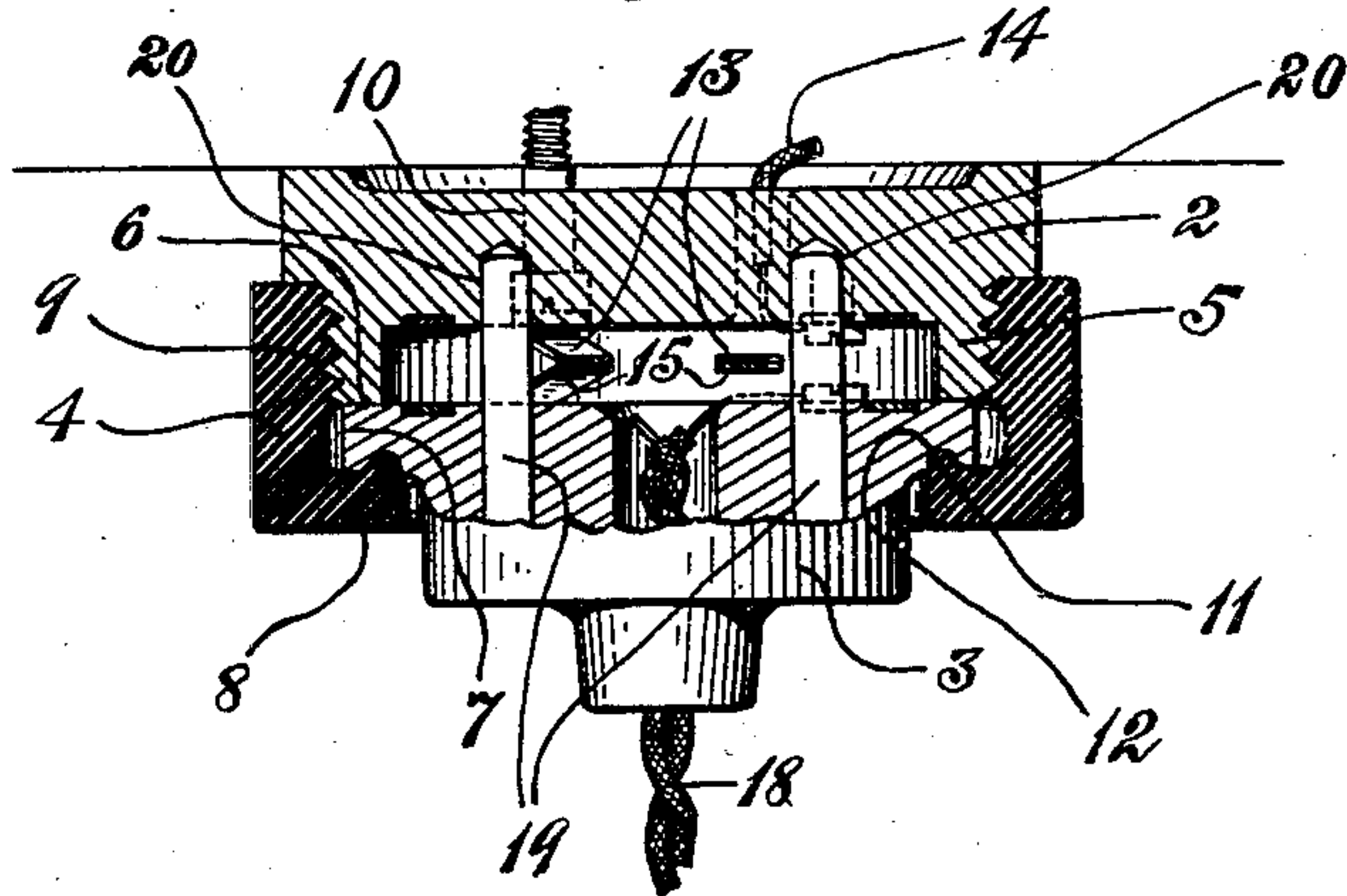


Fig. 3.

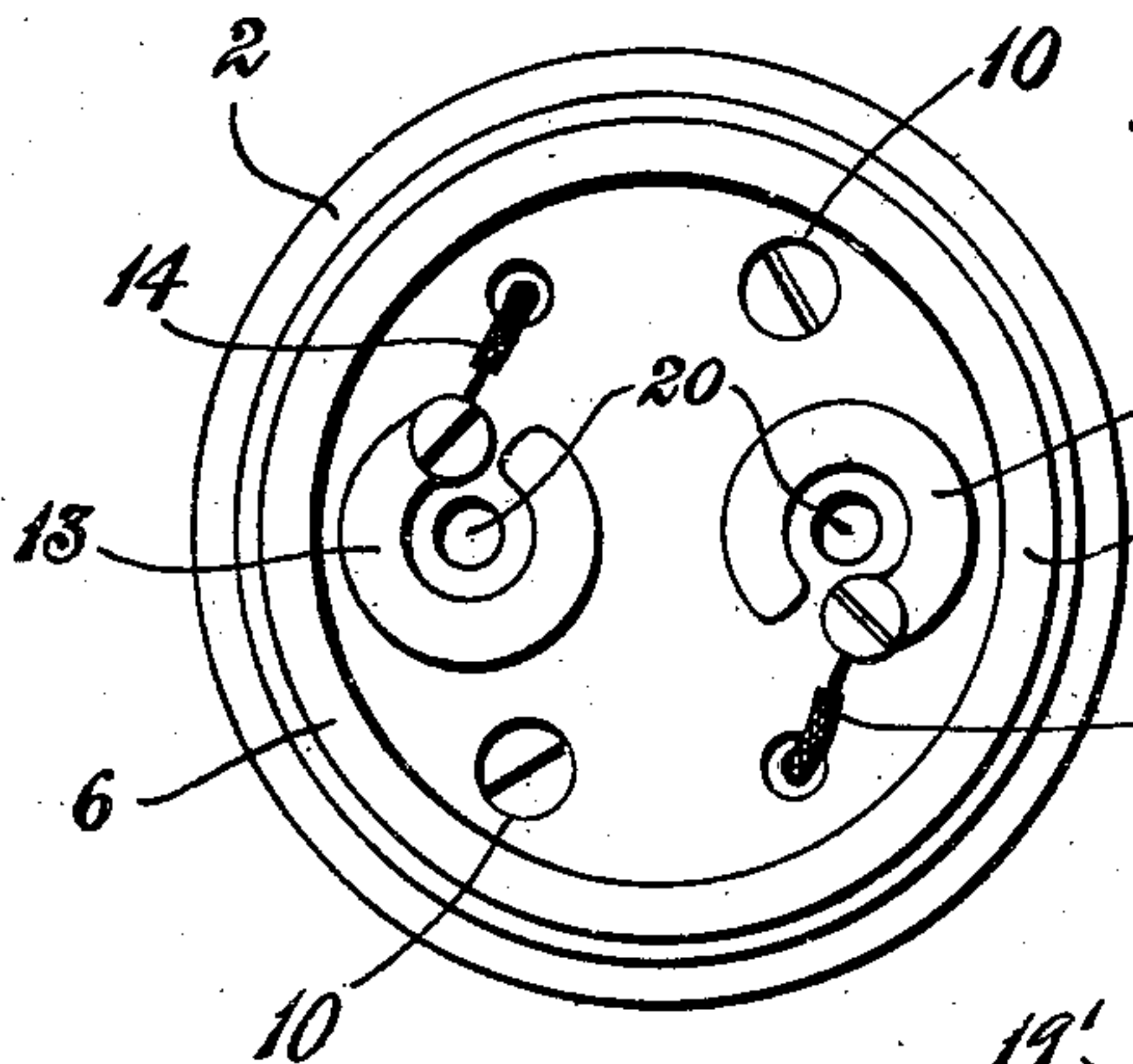


Fig. 4.

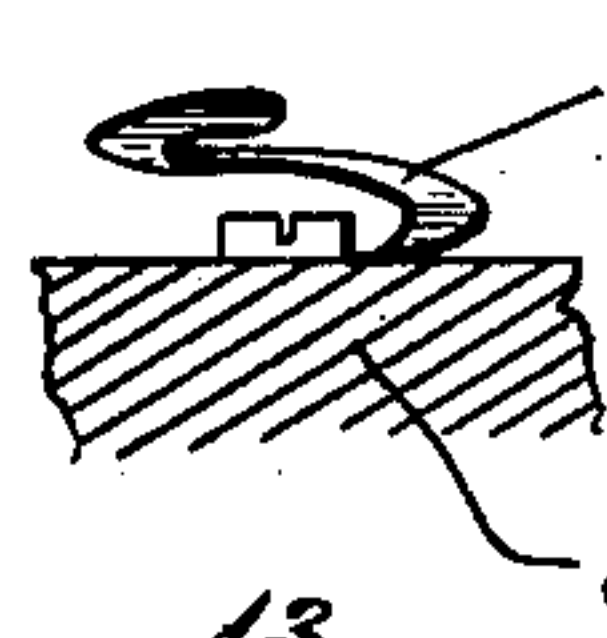


Fig. 2.

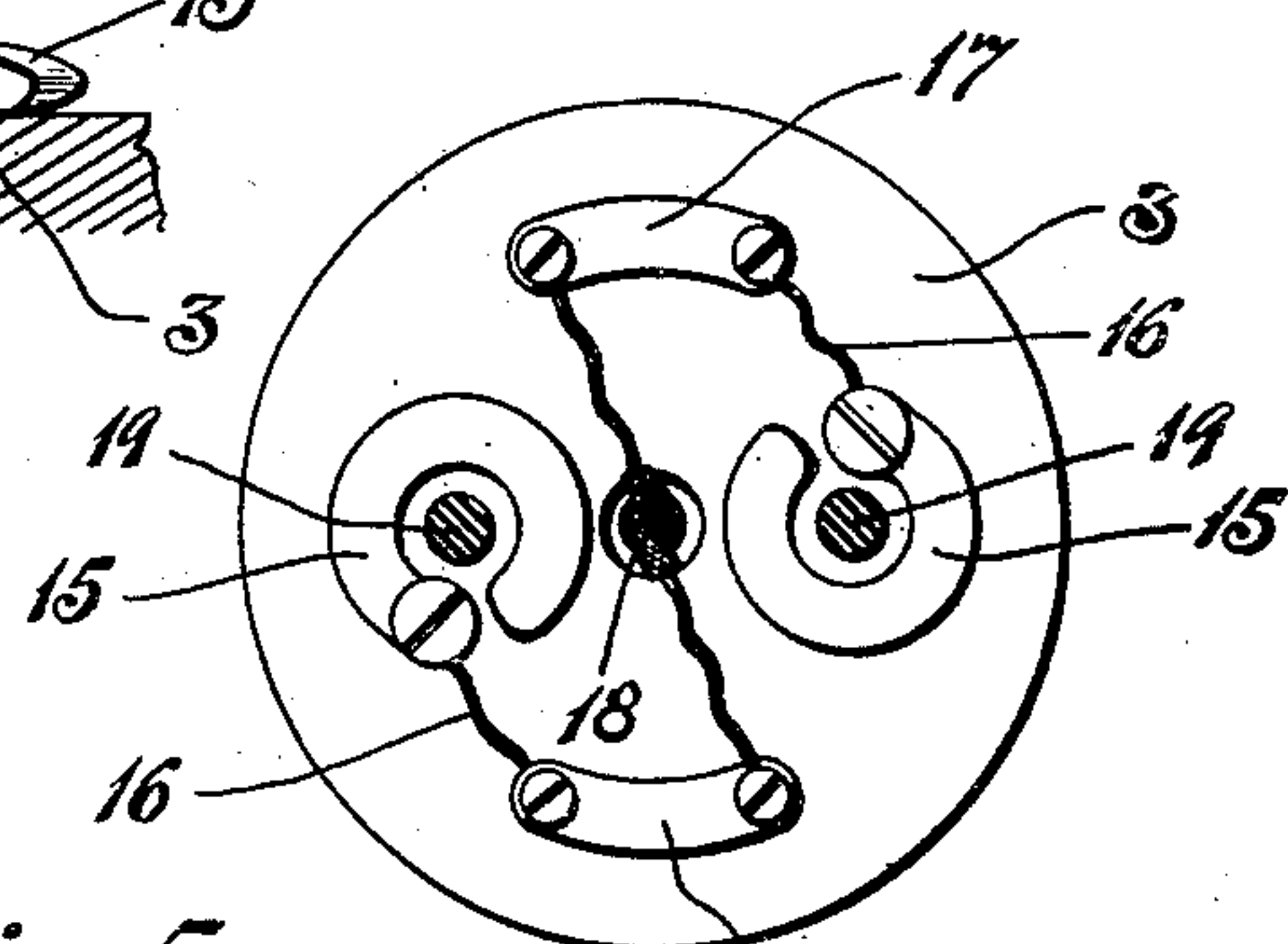


Fig. 5.

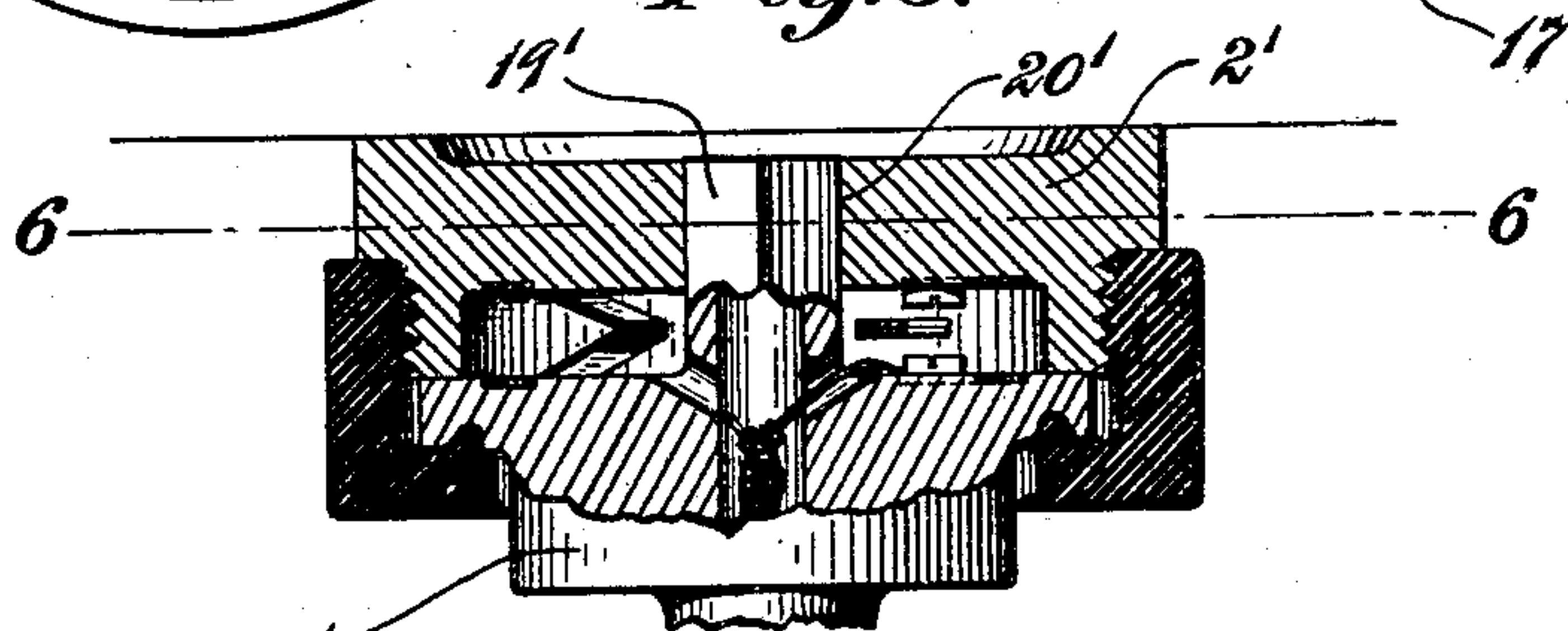
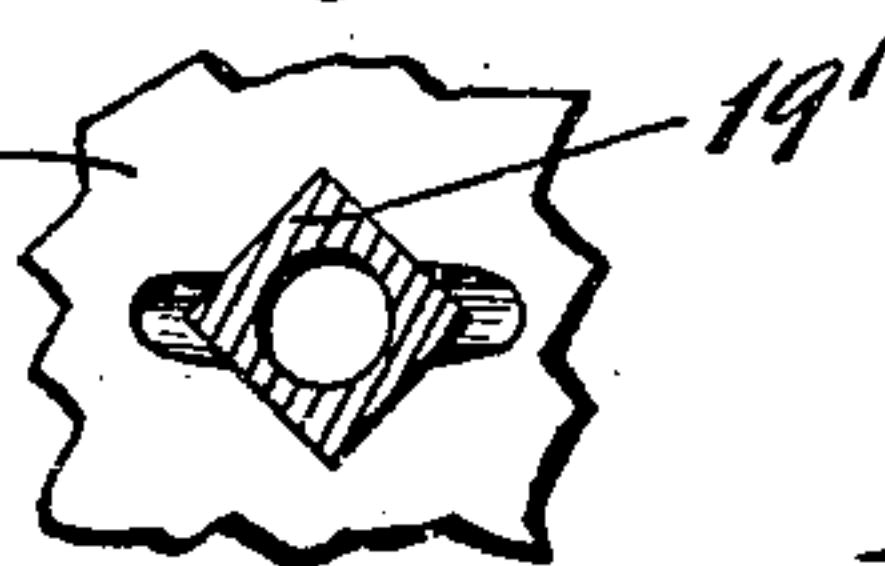


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

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ELECTRICAL-CONNECTION ROSETTE.

No. 923,327.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed October 17, 1908. Serial No. 458,189.

To all whom it may concern:

Be it known that I, JAMES LESLIE BURTON, a citizen of the United States, residing at Plainville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Electrical-Connection Rosettes, of which the following is a specification.

This invention relates to electrical connection rosettes the object of the invention being to provide a simple and effective device of this character which is strong in construction, by which perfect electrical connection can be maintained and by which the possibility of fires arising from burning out fuses is eliminated.

The device possesses other advantageous features which with the foregoing will be set forth at length in the following description wherein is outlined in full that form of embodiment of the invention which I have selected for illustration in the drawings accompanying and forming part of the present specification. The novelty of the invention will be included in the claims succeeding said description.

Referring to said drawings, Figure 1 is a cross sectional view of a rosette involving my invention, Fig. 2 is a top plan view of the lower member and Fig. 3 is a bottom plan view of the upper member of said rosette. Fig. 4 is a detail view showing a portion of said lower member. Fig. 5 is a cross sectional view of a modified form of the article, and, Fig. 6 is a horizontal sectional view of the same, the section being on the line 6—6 of said Fig. 5.

Like characters refer to like parts throughout the several figures of the drawings.

A connection rosette including my invention comprises an upper member, a lower member, and a coupling member and these three parts may be of any desirable shape or material. Preferably said upper and lower members are of porcelain or some equivalent non-conducting material as is the case with the common rosettes while the coupling member is usually made of vulcanized rubber or some analogous substance.

The upper member shown in the drawings is denoted by 2, the lower member by 3 and the coupling member by 4. I employ the terms "upper" and "lower" simply for convenience of description as it is evident that what has been designated the "upper"

member might be attached to a wall or even a floor instead of to a ceiling. Said upper member 2 is provided with a circumferentially-reduced, threaded portion 5 and by so reducing said part I provide an external, annular shoulder 6 thereon against which abuts or substantially solidly fits the lower member 3. Said lower member 3 is provided at its top with a circular flange as 7 which is adapted to rest on and be sustained by the flange 8 of the coupling member 4 said flange 8 being disposed interiorly of said coupling member along the lower edge thereon. The coupling member is internally threaded as at 9 to engage the external threads of the portion 5.

To mount the parts described they will first be separated if they can be connected after which the upper member 2 will be fastened to a ceiling (or wall) by means of screws or otherwise which may be passed through perforations as 10 in said member 2. The reduced portion of the lower member 3 will then be passed into the coupling member 4 until the flange 7 rests on the flange 8 after which the said coupling member 4, which as will be understood is made in the form of a ring or sleeve, will be applied to the upper member 2 and turned thereon until the top of the lower member 3 fits solidly against the lower face of said upper member 2 at which time the coupling member 4 will be solid against the upper enlarged portion of said member 2. In this condition the parts are held together tightly and they fit so securely together as to produce a very stable relation.

It is the custom to inclose in a rosette one or more pieces of fusible metal and as is well known these frequently burn out and when they do they scatter sparks and it is not uncommon that such sparks cause fire. Such sparks pass out the gap or opening between the two principal sections of the rosette which with those of the ordinary kind correspond to the upper and lower members 2 and 3 respectively. The coupling member 4 not only rigidly unites the upper and lower members 2 and 3 but also acts as an effective guard to prevent said sparks passing outside the rosette in that it extends across said gap and acts as a positive barrier to prevent such sparks escaping from the device. As a further precaution I may and preferably will interlock the lower

member 3 and the coupling member 4 and for this purpose may provide a tongue and groove connection between said two parts. The flange 8 is shown as provided with an annular bead or tongue 11 which snugly fits a groove as 12 on the upper enlarged portion of the said member 3. In view of the fact that the coupling member 4 stands across the gap between the members 2 and 3 together with the facts that there is an interlocking connection of continuous nature between the parts 3 and 4 and that the part 4 fits solidly against the part 2 there is no possibility of sparks escaping from the rosette. The principal feature in the construction, however, is the fact that the coupling member 4 crosses the gap to which allusion has been made. It will be observed that the engaging faces of said flange 8 and the upper enlarged portion of the member 3 are disposed at right angles to the axis of motion of the coupling member or sleeve 4 so that when the latter is turned there is no tendency to distort or bend either of said parts which would be the case were said engaging or bearing faces at an acute angle to said axis. In addition to the advantages following such a coupling member as 4 there is a still further point of utility. The lower member of a rosette has to support considerable weight relatively speaking and the pull of this weight tends to separate the contacts. In the present case this is not possible. The weight of an electric lamp or other part and the wires leading thereto, is transferred of course to the member 3 and in turn to the coupling member 4 and finally to the upper member 2 so that there is in effect solid stock supporting said lamp and its adjuncts and there is therefore no tendency to separate the parts 2 and 3 by reason of the pull exerted on the part 3. In view of this condition I can at all times insure a perfect connection between the pairs of contacts of the device.

The upper member 2 has attached suitably to the under side thereof a pair of diametrically-opposite contacts as 13 preferably of spiral form and to which the usual feed wires as 14 are connected and the free ends of these contacts when there is no pressure against them preferably extend below the lower edge of said member 2 so as to insure a proper contact with the lower contacts 15 when the parts of the rosette are assembled. The yieldable engagement between the contacts also provides for a proper connection between the parts of the rosette if there be any imperfections in said rosette which would not be the case were said pairs of contacts of unyieldable form. The lower spring contacts 15 are attached suitably to the upper side of the member 3 and from them lead fusible wires as 16 respectively to clamping strips as 17

from which latter extend the customary lead wires 18, said strips being suitably fastened to said member 3.

I provide means of a positive nature for preventing relative rotation of the members 2 and 3 and in this way center the same and assure the exact engagement between the two pairs of contacts. I may provide for this purpose two diametrically-opposite pins as 19 on the lower member 3 adapted to enter sockets or holes as 20 in the upper member 2. When the parts are to be connected as previously set forth the pins 19 will be inserted into the sockets 20 and the coupling member 4 will then be applied and turned home. While said coupling member is being thus turned to draw the part 3 against the part 2, said part 3 will not be rotated the result being that the contacts 15 will be properly presented to the cooperating contacts 13. The pins therefore serve as a convenient means for non-rotatively connecting and centering the said parts 2 and 3 as well as preventing turning of the part 3 to throw the contacts out of line, when the various members are in assembled condition. The pressure of the spring contacts 13 and 15 is also applied downwardly to the member 3 and in turn to the coupling 4 to an extent sufficient to prevent said coupling member 4 being accidentally turned off. It is not essential that I employ pins for obtaining the results set forth. In Figs. 5 and 6 I illustrate another means for accomplishing these functions.

I may mold to a lower member as 3' a sleeve as 19' preferably polygonal in cross section. Said sleeve or tube is shown as being square and it may be of metal or any other suitable material and is situated at the center of said lower member 3'. For the purpose of non-rotatively connecting and centering said part 3' with respect to the companion part 2' the latter may have a square hole as 20' at its center to receive said tube or sleeve 19'. Said part 19' is perforated for the passage of the usual lead wires. There are other ways that the results stated may be obtained. I might add in conclusion that my invention is not restricted to the construction hereinbefore described as various changes in details may be made within the scope of my claims.

What I claim is:

1. A rosette of the class described comprising an upper member, a lower member, cooperating contacts on said members, a sleeve threaded onto the upper member, for supporting said lower member and for also drawing the lower member toward the upper member, and means independent of said contacts for preventing rotation of the said lower member on the turning of said sleeve.
2. A rosette of the class described comprising an upper member, a lower member,

coöperating spring contacts on said members, a sleeve threaded onto said upper member, for supporting said lower member and for also drawing said lower member toward the upper member to bring said contacts into engagement, and means independent of the contacts for preventing the lower member from turning as said sleeve is turned.

3. A rosette of the class described comprising an upper member, a lower member, a sleeve threaded onto said upper member, for supporting said lower member and for also drawing said lower member toward said upper member, and pin means on one of the members, the other being directly apertured to receive said pin means to prevent turning motion of said lower member as the latter is drawn toward the companion member by the turning of said sleeve.

4. A rosette of the class described comprising an upper member, a lower member, a sleeve threaded onto said upper member, for supporting said lower member and for also drawing said lower member toward the upper member as said sleeve is turned, and a pair of pins associated with the members of the rosette for preventing rotation of said lower member on the turning of said sleeve.

5. A rosette of the class described comprising an upper member, a lower member, a coupling device operatively connecting said upper and lower members and having means for drawing the same together, and two pairs of yieldable contacts carried respectively by said upper and lower members one pair of yieldable contacts serving to en-

gage the other pair of yieldable contacts as said lower and upper members are brought together.

6. A rosette of the class described comprising an upper member externally threaded, a coupling sleeve in threaded engagement with the threaded portion of said upper member, a lower member supported by said sleeve the latter when turned serving to draw said lower member toward the upper member, and two pairs of spring contacts fastened to opposite faces respectively of said upper and lower members the spring contacts on the lower member being adapted to engage the spring contacts on the upper member.

7. A rosette of the class described comprising an upper member externally threaded a coupling sleeve threaded onto the threaded portion of the said upper member and having an internal annular flange, a lower member supported by said flange, the sleeve when turned serving to draw the lower member substantially into contact with said upper member and extending across the gap between said upper and lower members, and a tongue and groove, continuous interlocking connection between said flange and lower member.

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

JAMES LESLIE BURTON.

Witnesses:

F. E. ANDERSON,
HEATH SUTHERLAND.