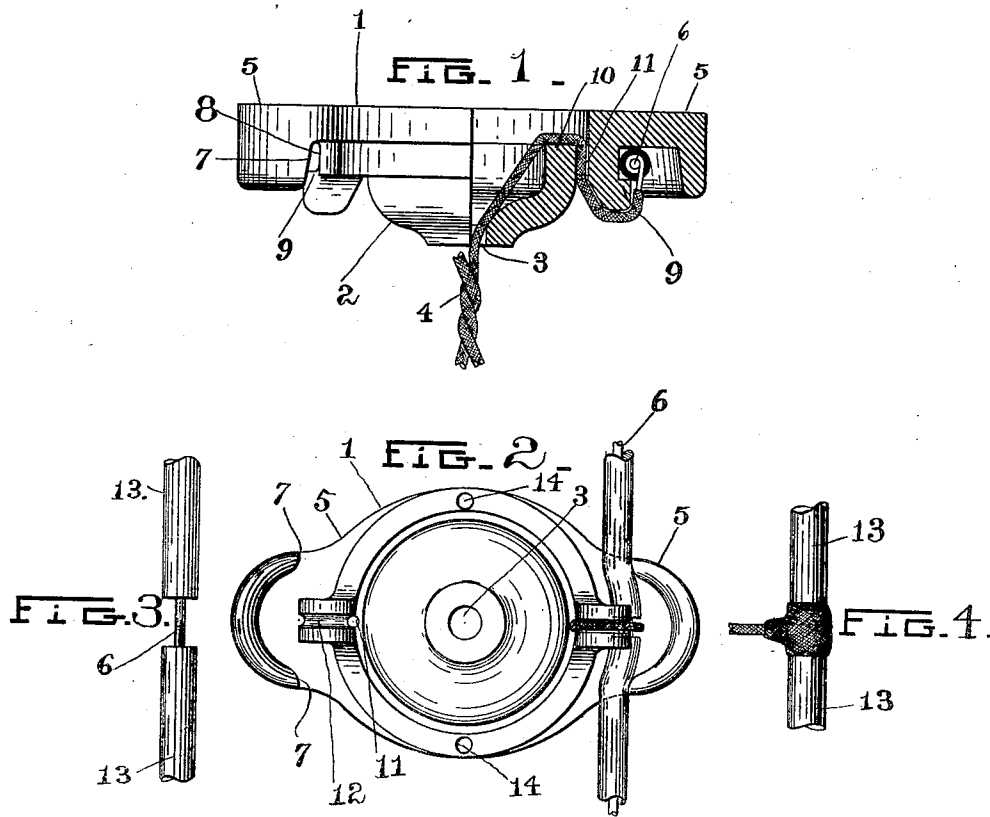


(No Model.)

C. N. HAMMOND.
ROSETTE FOR ELECTRIC LIGHTS.

No. 511,613.

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Witnesses:

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UNITED STATES PATENT OFFICE.

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ROSETTE FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 511,613, dated December 26, 1893.

Application filed June 30, 1893. Serial No. 479,263. (No model.)

To all whom it may concern:

Be it known that I, CHARLES N. HAMMOND, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Rosettes for Electric-Light Wires, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to rosettes, so called, which are insulators that are used in connection with suspended incandescent electric lights. These rosettes provide for the connection, with the main feeding wires which supply the electric current, of the flexible wires, called lamp cords, by which the electric lights are hung or suspended; and in addition, serve for the support of the said feed-wires and lamp cords. The said rosettes are employed, also, for other similar uses. They serve not only for purposes of insulation, and as supports, as aforesaid, but also as an ornamental covering to conceal the connection aforesaid.

Hitherto, so far as known to me, rosettes have been provided with screws and metallic pieces by means of which the mechanical and electrical connections between the feeding wires and the lamp cords have been secured. These parts, besides being objectionable in other respects, are liable to become detached or lost, and require the expenditure of considerable time on the part of the workmen who apply the rosettes, in making the connections and putting up the rosettes.

The object of my invention is to provide a rosette of simple character and construction, which may be conveniently applied and connected, which dispenses with the connecting screws and brass fittings commonly in use, and which will effectually separate the electric wires from adjacent wood work of the ceiling or other support to which the rosette is applied.

The invention consists in certain features of improved construction, and in a novel combination of parts, which first will be described with reference to the accompanying drawings and then be particularly pointed out and clearly defined in the claims at the close of this specification.

In the drawings, Figure 1 is a view one half in elevation, and one half in vertical section of a rosette embodying my present invention, it showing one feed wire with a strand of the lamp cord connected therewith. Fig. 2 is a view showing in inverted plan the parts which are shown in Fig. 1. Fig. 3 is a view of part of one of the feed wires showing the manner in which it is stripped of its insulating covering for a portion of its length in order to permit of having a strand of the lamp cord connected therewith. Fig. 4 is a view showing the appearance of the joint between the feed wire and the connected strand of the lamp cord when the insulating or electrical tape has been applied thereto.

The rosette 1 shown in Figs. 1 and 2 of the drawings, is formed of some suitable non-conducting material, and it has a boss 2 with a central hole 3 made therethrough for the passage of the lamp cord 4. The rosette has holes 14, 14 formed through the edges of the body thereof, for the passage of the screws or other fastening devices which secure it in place. At opposite sides of the boss 2 the rosette is formed with ears or flanges 5, 5 on which are provided binders for securing the feed wires 6 to the rosette at the required distance apart. These binders are on that side of the ears or flanges 5, 5 which is exposed, it being undermost when the rosette is applied in the position which is represented in Fig. 1, so that when engaged with the said binders the feed wires are separated and insulated by the interposed material of the ears or flanges, from or adjacent wood-work of the ceiling or other support to which the rosette is applied. The preferred form of binder comprises oppositely and alternately placed projections 7, 7 and 8, the projection 8 being opposite the two projections 7, 7 at a distance from the line of the latter less than the diameter of the feed wire with its covering, and at a point intermediate the two projections 7, 7. The projection 8 is provided with a lip 9 which prevents movement of the feed-wire off the end of the said projection. As is obvious, the feed-wire must be bent in order to permit it to be inserted to its place in the binder, and when straightened out by strain or otherwise, after having been thus bent and

inserted, it will pass in back of the lip 9, after which it cannot be removed until after having been bent to enable it to pass around the end of the lip 9. The ends of the strands 5 composing the lamp cord are mechanically applied or connected with the feed wires in the manner which is shown in Fig. 1 in the case of one of the said strands and feed wires, one of the said strands being in practice thus 10 connected with one feed wire and the other strand being thus connected with the other feed wire. Each strand extends upwardly within the boss 2, over a ledge 10 within the body of the rosette, then down through a hole 15 11 just outside the boss, and around the end of the projection 8, it resting in a groove 12 in the said end and having the stripped end of its conducting wire or wires applied directly to a stripped portion of the feed wire 6. 20 Fig. 1 shows the end of the conducting wire or wires of a strand stripped or bared of its insulating covering, and bent around the uncovered wire 6.

Fig. 3 shows the manner in which the feed 25 wire 6 has a portion of its insulating covering removed, in order to permit the end of the conducting wire or wires of a strand to be properly applied thereto.

The bared or stripped portions of the feed 30 wires and conducting wires are wound or covered with electrical or insulating tape in the manner which is represented in Fig. 4. This tape is omitted from Figs. 1 and 2 in order that the showing in the latter may be made clearer than it would be if the tape were represented therein.

The operations of connecting the bared or 35 stripped end of the conducting wire or wires of the strand with the bared or stripped portion of the feed wire, and of applying the electrical or insulating tape, are performed with the feed wire out of its binder. After they have been performed, the said feed wire 40 is bent and slipped into place in the binder, and the lamp cord is drawn upon to tighten the strand thereof. The end of the conducting wire or wires of the strand of the lamp cord may be soldered to the feed wire, in addition to being bent around the same, as some- 45 times is done in similar cases in the art.

The simple character and construction of my rosette are clearly apparent. It contains 50 no screws or metallic pieces for producing the mechanical and electrical connections between the feeding wires and the lamp cords; the form thereof which is illustrated in the 55 drawings is made entirely in one piece, and hence there are no separate or detachable parts. The said form thereof, in practice, will be molded of plastic material, and may 60 be vitrified by baking as in the case of articles made of porcelain. The feed wires and lamp cords are readily applied to the rosette and connected with each other. The por- 65 tions of the feed wires and of the strands of the lamp cords which are joined to each other, and which are bared or stripped to enable

the joint to be made, are located beneath the ears or flanges 5, 5, and hence are separated 70 and insulated by the material of the said ears or flanges from the material of the ceiling or other support to which the rosette is applied. In the case of rosettes heretofore in use the joints have been made in such positions and 75 manner as that adjacent wood-work has not been protected or shielded, and hence frequent fires have been the result.

It is, in general, considered to be necessary 80 for safety that the two feed wires which communicate with an electric light shall be located at least two and one-half inches apart at all points. I find that while existing forms of rosettes are so constructed as that the feed 85 wires applied thereto are themselves maintained apart at the distance stated, there are contained in such rosettes exposed metallic parts which are in electrical connection with the feed wires, and also are approached to 90 each other at their nearest points considerably under the specified distance. The effect is the same as if the feed wires themselves were brought as closely together as the said 95 connected metallic parts are. In my device this defect does not exist. Not only are the feed wires themselves maintained at the full distance apart, but, inasmuch as the connection of the lamp cord strands with the feed 100 wires is secured by direct attachment of the ends of the conducting wires of said strands to the feed wires, and inasmuch, also, as the insulating material forming the covering of the said strands is stripped therefrom only at the extreme outer ends of the strands, as 105 shown clearly in Fig. 1 of the drawings, it follows that at the rosettes there is no bridging in part of the space between the two feed wires.

Heretofore the connections of the ends of 110 the lamp cord strands within the rosette have been so slight and insecure that, for safety, it has been considered necessary, in practice, to tie a knot in the lamp cord above the hole 115 corresponding with the hole 3 in Figs. 1 and 2 of the drawings, in order to form an enlargement incapable of passing through the said hole under strain. In the case of my device, 120 the manner of applying the strands of the lamp cord to the rosette, and of connecting the ends of the strands to the feed wires, enables the lamp cord to be held effectually 125 without the said knot.

I claim as my invention—

1. A rosette having at opposite sides thereof ears or flanges provided with projections 130 serving as binders for the feed wires, and also having guides for the lamp cord strands adapted to enable the said strands to be mechanically applied directly to the feed wires at points protected by the said ears or flanges, substantially as described.

2. A rosette having at opposite sides thereof ears or flanges provided with feed wire 135 binders consisting of oppositely and alternately placed projections 7, 7 and 8, the last

mentioned of which has a retaining lip 9, and also having guides for the lamp cord strands whereby to permit the said strands to be joined to the feed wires at points protected by the said ears or flanges, substantially as described.

3. A rosette having at opposite sides thereof ears or flanges provided with projections serving as binders for the feed wires, and also having an intermediately located hole for the lamp cord, and formed with ledges 10 and holes 11 between said hole for the lamp cord and the binders, and enabling the lamp-cord strands to be mechanically applied directly to the feed-wires at points protected by the ears or flanges substantially as described.

4. A rosette having at opposite sides thereof ears or flanges 5 provided with feed wire binders consisting of oppositely and alternately placed projections 7, 7 and 8, the last mentioned of which is provided with a retaining lip 9, and also having an intermediately located hole 3 for the lamp cord, and formed between said hole and the binders with ledges 10, and also with holes 11, substantially as described.

5. A rosette having at opposite sides thereof ears or flanges 5, 5 provided with feed wire binders consisting of oppositely and alternately placed projections 7, 7 and 8, the last mentioned of which is provided with a lip 9 and groove 12, and also having an intermediately located hole 3 for the lamp cord, and formed between said hole and the binders with ledges 10, and also with holes 11, substantially as described.

6. The combination with the feed-wires, and a lamp-cord, of a rosette having at opposite sides thereof ears or flanges provided with projections serving as binders for the feed-wires, and also having guides for the lamp-cord strands, the lamp-cord strands being applied to the said guides and mechanically applied directly to the feed-wires at points protected by the said ears or flanges, substantially as described.

7. The combination with the feed-wires, and

a lamp-cord, of a rosette having at opposite sides thereof ears or flanges provided with feed-wire binders consisting of oppositely and alternately placed projections 7, 7 and 8 between which the feed-wires respectively are placed, the last mentioned projection having a retaining lip 9, the said rosette also having guides for the lamp-cord strands the lamp-cord strands being applied to the said guides and joined directly to the feed-wires at points protected by the said ears or flanges, substantially as described.

8. The combination with the feed-wires, and a lamp-cord, of a rosette having at opposite sides thereof ears or flanges provided with projections serving as binders for the feed-wires, and also having an intermediately located hole through which the lamp-cord is passed, and ledges 10 and holes 11 between said hole for the lamp-cord and the binders, the lamp-cord strands being applied to the said ledges and holes and mechanically applied directly to the feed-wires at points protected by the said ears or flanges, substantially as described.

9. The combination with the feed-wires and a lamp-cord, of a rosette having at opposite sides thereof ears or flanges 5 provided with feed-wire binders consisting of oppositely and alternately placed projections 7, 7 and 8, between which the feed-wires respectively are placed, the last mentioned projection having a retaining lip 9, the said rosette also having an intermediately located hole 3 through which the lamp-cord is passed, and ledges 10 and holes 11 between said hole 3 and the binders, the lamp-cord strands being applied to the said ledges and holes and joined directly to the feed-wires at points protected by the said ears or flanges, substantially as described.

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

CHARLES N. HAMMOND.

Witnesses:

WILLIAM B. RAND,
CHARLES F. RANDALL.