No. 804,114. PATENTED NOV. 7, 1905.

G. W. GOODRIDGE.

ELECTRICAL ROSETTE.

APPLICATION FILED NOV. 21, 1904.

Fig. 1.

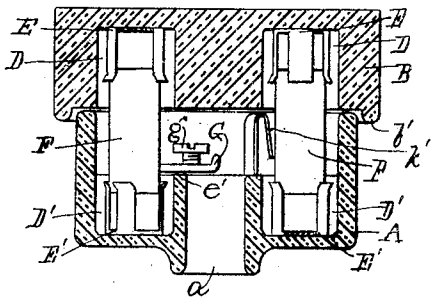


Fig. 2.

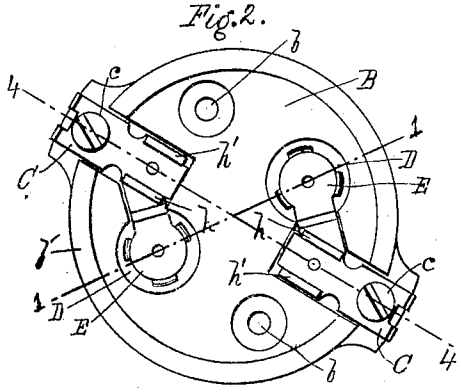


Fig. 4.

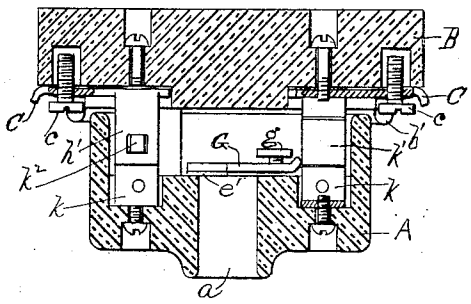


Fig. 3.

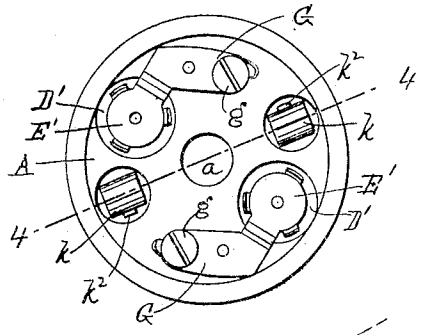


Fig. 5.

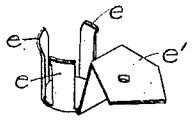
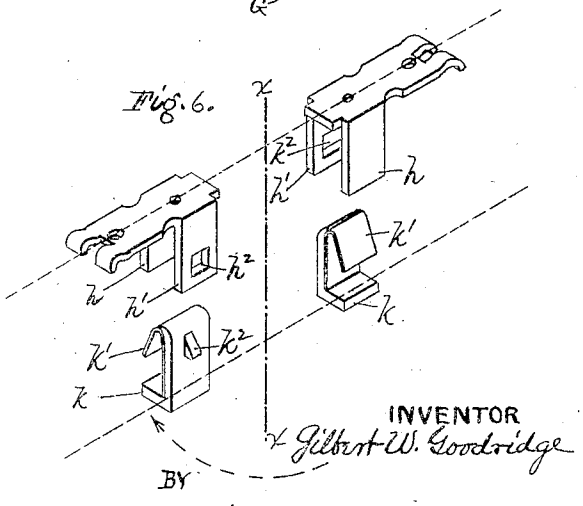


Fig. 6.



WITNESSES

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ELECTRICAL ROSETTE.

No. 804,114. Specification of Letters Patent. Patented Nov. 7, 1905.

Application filed November 21, 1904. Serial No. 233,676.

To all whom it may concern:

Be it known that I, GILBERT W. GOODRIDGE, a citizen of the United States of America, residing in the city of Bridgeport, in the county of Fairfield, State of Connecticut, have invented an Improved Electrical Rosette, of which the following is a full, clear, and exact specification.

The main object of my invention is to so construct an electrical rosette or like connection-block which is adapted for use with cartridge-fuses that the rosette will be not unduly large in size, will be convenient in application and use and readily examined, and not liable to come apart on the blowing out of the fuse or fuses.

In the accompanying drawings, Figure 1 is a vertical section of a rosette embodying my invention and containing the cartridge-fuses, but omitting the wire connections. Fig. 2 is a face view of the base with the cap and cartridge-fuses removed. Fig. 3 is an inside face view of the cap with the cartridge-fuses removed. Fig. 4 is a sectional view on the lines 4 4, Figs. 2 and 3. Fig. 5 is a perspective view of one of the clips for the cartridge-fuses, and Fig. 6 is a perspective view of a form of engaging catches preferred to be used to mechanically latch the cap to the base

In rosettes and the like connection devices employing fuse-cartridges it has heretofore been the custom to arrange the cartridges horizontally—that is, in a plane at right angles to the axis of the rosette—and to use them as the means for mechanically securing the cap to the base. That construction requires the rosettes to be made of objectionably large diameter and renders the cap liable to drop off when a fuse blows out. According to my invention I so construct the cap and base of my rosette that the cartridge-fuses stand vertically in the closed rosette, engaging opposite clips on cap and base, independent means being employed to mechanically connect the cap to the base.

The base or body B and detachable cap A may be made of porcelain or other suitable insulating material as usual, the base being provided with holes b b for the reception of the screws, by which the base may be secured to a ceiling, molding, or the like. The base is preferably provided with a rim b', within which fits the inner face of the cap A. In the form of rosette shown the base is provided with electrical connection-plates C C, secured in radial recesses in the base and extending out beyond the rim, where they are provided with binding-screws c for the connection of the bared portion of the main wires, as usual. I prefer to so construct the inner ends of these plates that they may serve as part of the means for mechanically connecting the cap to the base, as hereinafter described.

In the base I form two deep vertical recesses D D, preferably cylindrical and preferably also diametrically opposite each other, and in the bottom of each recess I provide spring-clips E E in electrical connection with the plates C C, respectively. The preferred form of these spring-clips is shown in Fig. 5, where it will be seen that each clip is provided with a number of spring-fingers e e, forming an approximately cylindrical socket, with a laterally-projecting piece e' to be bound down under the plate C or otherwise make electrical connection therewith. The upper ends of the fuse-cartridges F fit into these socket-clips E. Similarly, the cap A is provided with deep cylindrical recesses D′ containing socket-like clips E′ to receive the lower metallic ends of the cartridges F. The clips E′ are electrically connected to plates G within the cap, as by binding the laterally-projecting parts e' of the clips under the plates G by means of the screws which secure the plates G to the cap. Each plate G is provided with a binding-screw g for connection of the end of one of the drop wires, which are passed through the central hole a in the cap as usual.

The means for mechanically securing the cap to the base may be varied to suit requirements. In the drawings I have shown a construction which may be employed. On the inner end of each plate C on the base I form vertical jaws h h', the latter of which has a notch h^2 cut in it. On the cap I mount two corresponding-placed lugs k, each having on one face a spring k' and on the other face a beveled catch k^2, Fig. 6, adapted to enter and engage the notch h^2 in the corresponding jaw on the base. The notches h^2 are on diametrically opposite jaws, and the lugs k, with their springs and catches, stand reversed, as shown

in Fig. 6, so that upon pushing the cap up to the base with the lugs k in line with the jaws h, Fig. 6, the lugs will enter between the jaws, compressing the springs k', and as the inclines of the catches k^2 come into contact with the jaws the cap will be given a rotary movement on the central vertical axis x, Fig. 6, in the direction of the arrow until the catches k^2 pass into line with the notches h^2, whereupon the springs will press the catches into locking engagement with the notches h^2 and will hold them locked until a positive turning movement in the direction of the arrow, Fig. 6, is imparted by the operator to free the cap again.

In applying the cap to the base the cartridges F F are first placed in their clips in the cap, and the latter, thus carrying the cartridges, is then simply pushed up to the base, electrically engaging the upper ends of the cartridges with their clips in the base and mechanically locking the cap to the latter. Nevertheless, as will be seen, the mechanical locking means is independent of the cartridges and their clips, the mounting of the lugs h upon the plates C being merely a matter of convenience of manufacture.

I prefer to make the metal of the socket-clips E' in the cap slightly heavier than those in the base, so as to give stronger spring-clips in the cap to hold the cartridges a little more tightly than they are held by the clips in the base in order that when the cap A is removed the cartridges will come away with it and can be easily inspected.

I claim as my invention—

1. A rosette, comprising an insulating-base and insulating-cap, the latter having a central passage for the wires and on opposite sides of said passage coinciding vertical recesses in the cap and base with clips in the recesses in both cap and base to receive cartridge-fuses in a vertical position and means to secure the cap to the base.

2. A rosette, comprising an insulating-base and insulating-cap, the latter having a central passage for the wires, and both base and cap having vertical recesses, with clips in the recesses in both base and cap to receive cartridge-fuses in a vertical position and means independent of the cartridge-fuses to secure the cap to the base.

3. A rosette, having vertical recesses in the cap and base with spring-clips in the recesses to receive the cartridge-fuses in a vertical position, the clips in the cap being stronger than those in the base, and means to secure the cap to the base.

4. A rosette or the like, comprising a cap and base, each having a recess and spring-clips in the recesses to receive a cartridge-fuse, the clip in the cap being stronger than that in the base, and means to secure the cap to the base.

5. A rosette having vertical recesses in the cap and base with spring-socket clips therein having laterally-projecting parts and plates on cap and base for wire connections, to which plates said laterally-projecting parts of the socket-clips are connected, and means to secure the cap to the base.

6. A rosette, comprising a base and cap, one having notched jaws diametrically opposite to each other, while the other has lugs with beveled catches standing in reversed position and springs to force the catches into engagement with the notches of the jaws by a turning movement of the cap.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GILBERT W. GOODRIDGE.

Witnesses:

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H. G. WALES.