(No Model.)

E. W. RICE, Jr.

ELECTRIC CUT-OUT.

No. 463,770. Patented Nov. 24, 1891.

FIG. 1.

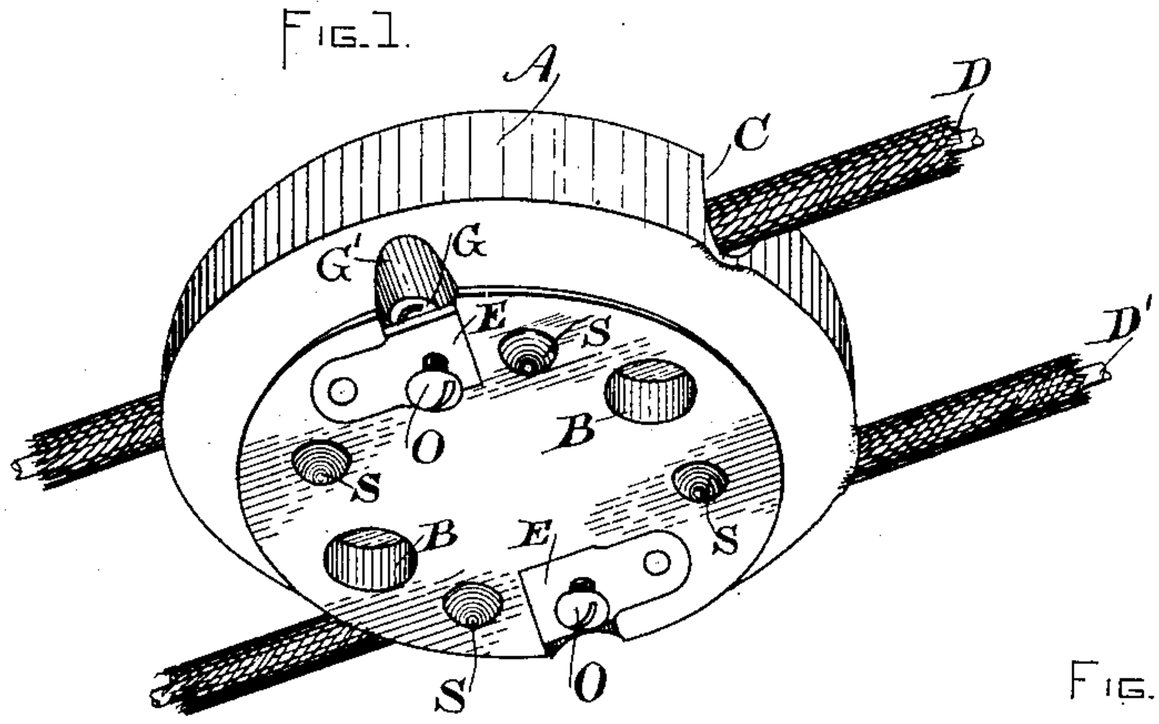


FIG. 2.

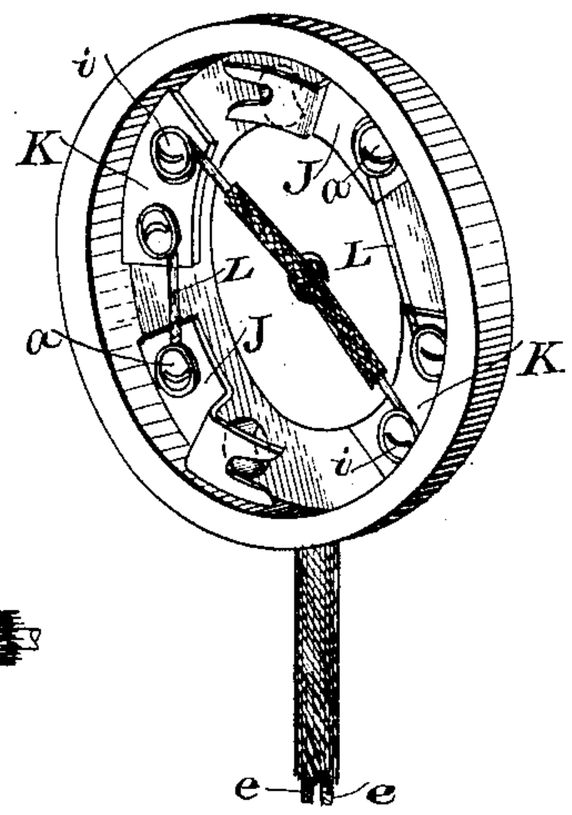


FIG. 3.

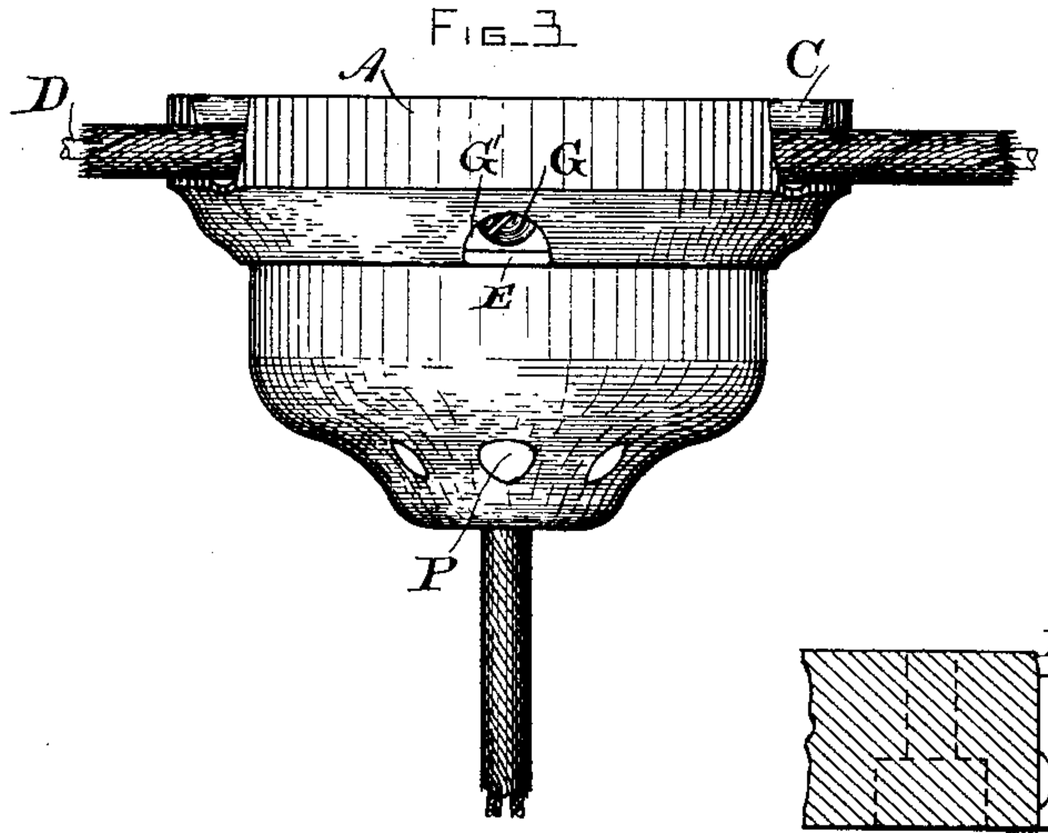
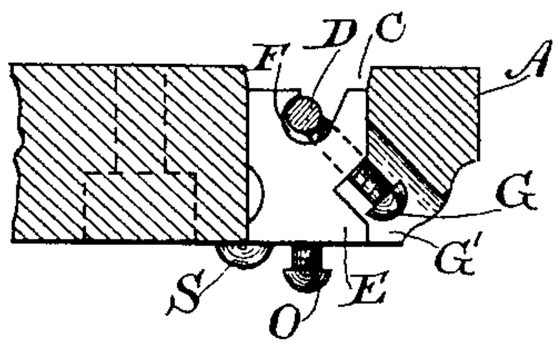


FIG. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

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ELECTRIC CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 463,770, dated November 24, 1891.

Application filed December 2, 1890. Serial No. 373,346. (No model.)

To all whom it may concern:

Be it known that I, EDWIN WILBUR RICE, Jr., a citizen of the United States, residing at Lynn, county of Essex, and State of Massachusetts, have invented a certain new and useful Improvement in Electric Cut-Outs, of which the following is a specification.

This invention relates to electric cut-outs often known as "rosettes," and used on incandescent-lamp circuits, consisting of a base having circuit-terminals secured thereto and a detachable cap containing fuses and contact-arms in circuit with the lamp or other translating device. Rosettes of this general character are already well known in the art, and my invention therefore deals only with certain improvements in specific features of construction hereinafter described.

These improvements are illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the base. Fig. 2 shows the under side of the cap. Fig. 3 is a side view of the cut-out with parts in place ready for use, and Fig. 4 is a detail view illustrating the means for clamping the circuit-wires to the base.

In the views, A represents the base of the cut-out, and is made of insulating material in the ordinary manner, porcelain being preferred. For the screws by which the base will be attached to its support—as, for instance, the wall or ceiling of a room—countersunk openings B B are provided. Its rear face is grooved at two points C to receive the circuit-wires D D′, and metal contacts E E′ are seated in openings in the base substantially flush with its front face and extending through into the grooves. The contacts are themselves notched at F, the notches being undercut, and the circuit-wire, bared of insulation at this point, is clamped in the notch by a set-screw G, which works in a slanting opening G′ in the base, so that the head of the screw can be reached from the front of the base at a point to one side of the cap. The cap is hollow, as seen in Fig. 2, and to its inner surface are attached contact-arms J J by screws *a a*, and also terminal plates K K by similar screws. The wires *e e*, leading to the lamps or other translating devices, are attached, respectively, to the plates K K at *i i*, while fuses L connect these plates with the contact-arms. Hence when the cap is in place, the arms engaging the contact-plates E, the lamp-circuit will be closed in a manner well understood. The contact-arms J lie wholly within and are protected by the cap, as seen in Fig. 2. Their upper ends are notched or grooved and engage screw-studs O, which are threaded into the contact-plates E. To allow tightening of the screws or the reverse, openings P are provided through the cap in line with the screws, through which a screw-driver may be inserted. Projecting lugs S are molded on the base adjacent to the contact-plates, which prevent accidental short-circuiting, which would otherwise frequently occur by reason of the contact of the studs O O either with contact-arm J and plate K or with the respective plates K, resulting either in a complete short-circuit between the main wires of the lamp or the cutting out of a fuse with consequent danger to the lamp. These projections S S serve as guides or obstructions to prevent such wrong connection or contact being made.

The construction described furnishes a cheap compact cut-out with all the contact-making parts entirely inclosed and protected by the cap. A good electrical connection is insured, and the cap may be readily removed for the insertion of new fuses and replaced in position. It may be observed that the perforations in the cap, besides permitting access to the screw-studs, also serve to ventilate the interior and permit the escape of gases when a fuse is blown, and their location at points in line with the contacts and therefore out of line with the fuses is advantageous as obviating the danger of melted metal dropping through the holes.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in an electric cut-out, of a base provided with contacts for the line-wires flush with its inner surface, with a perforated cap having contact-arms secured thereto, fuses connected to the contact-arms and extended over unperforated sections of the cap, and screw-studs projecting from the base-contacts, with which the contact-arms engage, and located at points substantially in line with the openings in the cap, as described.

2. An electric cut-out comprising a base grooved in its rear side to receive the line-wires, with slots from the grooves to the front and rim of the base, contacts seated in said slots and having at their rear ends undercut notches for receving the wires, screws tapped into the contacts and bearing backwardly and inwardly against the line-wires, contact-studs on said contacts, and a cap with terminals engaging with said studs.

3. The combination, with the cap having contact-arms and fuses attached thereto, of the base having contacts engaging with said arms, and insulating guiding projections on said base adjacent to the contacts thereon.

4. The combination, with the cap having contact-arms and fuses attached thereto, of the base having adjustable screw-contacts engaging with said arms, and insulating guiding projections on said base adjacent to the contacts thereon.

EDWIN WILBUR RICE, JR.

Witnesses:
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