

G. B. THOMAS.
ELECTRICAL ROSETTE CUT-OUT.

(Application filed Mar. 22, 1901.)

(No Model.)

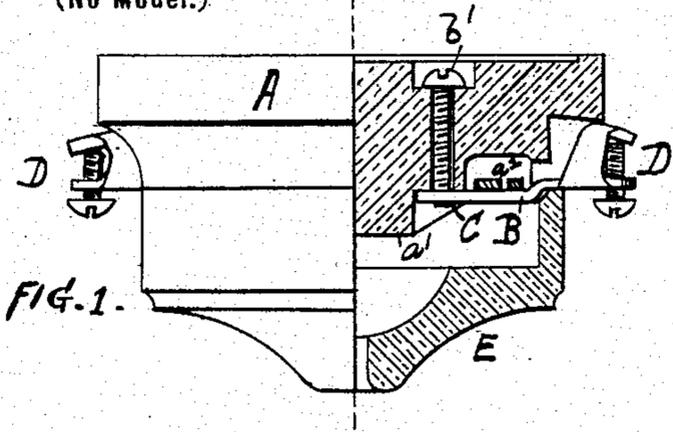


FIG. 2.

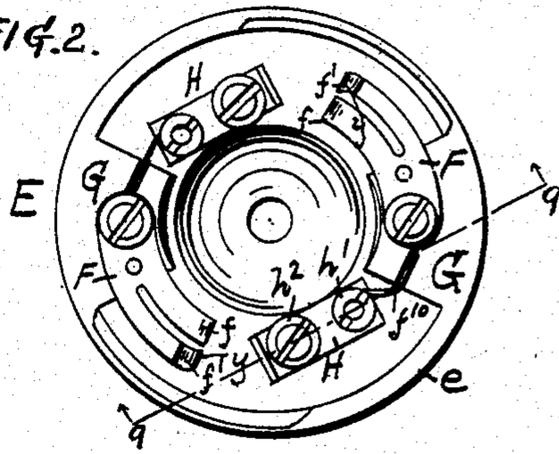


FIG. 4.

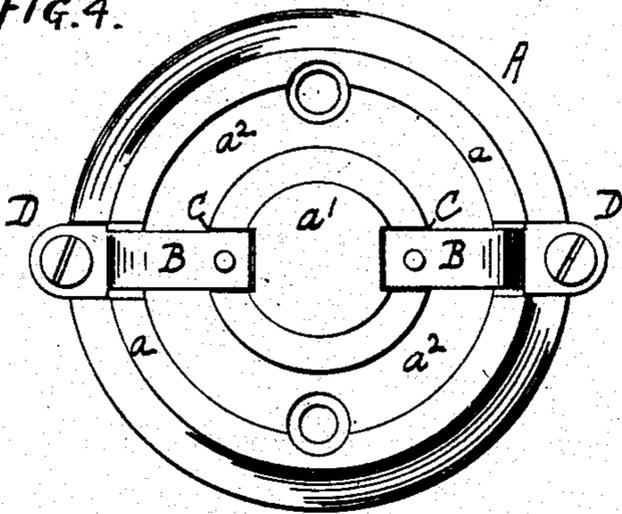


FIG. 3.

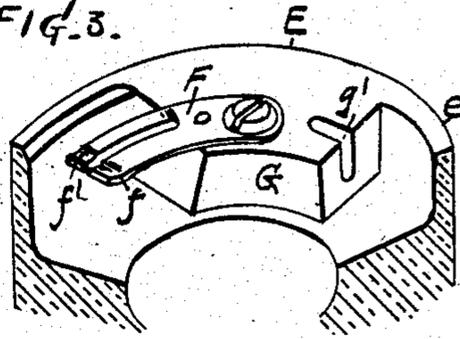


FIG. 5.

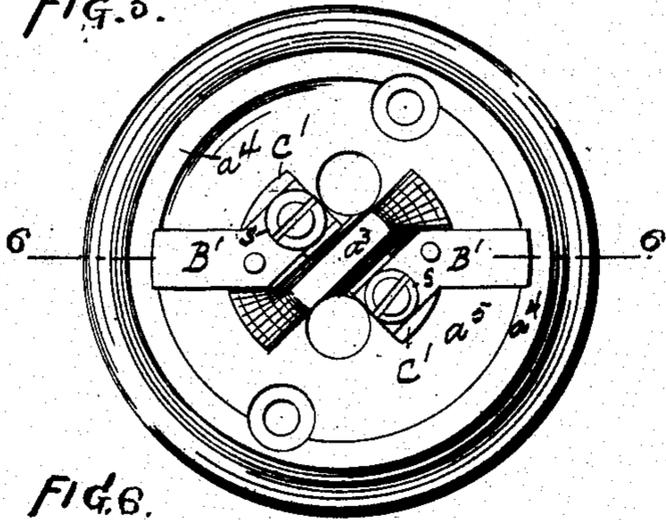


FIG. 7.

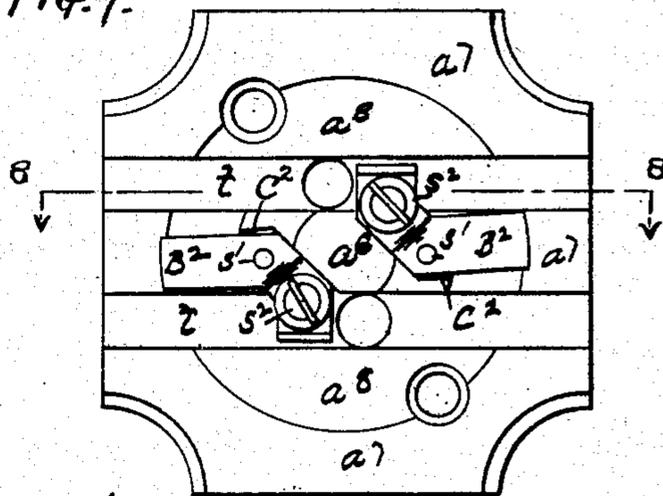


FIG. 8.

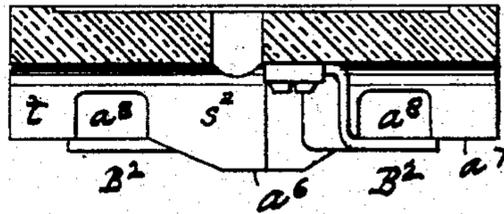


FIG. 6.

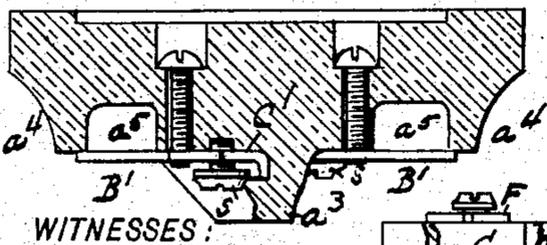
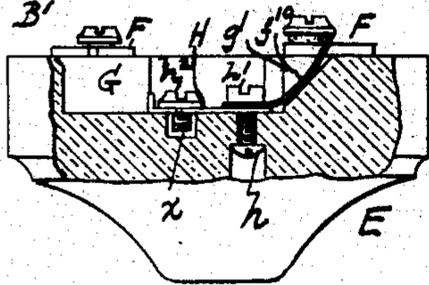


FIG. 9.



WITNESSES:

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GEORGE B. THOMAS
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HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE B. THOMAS, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MANUFACTURING COMPANY, OF SAME PLACE.

ELECTRICAL ROSETTE CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 677,479, dated July 2, 1901.

Application filed March 22, 1901. Serial No. 52,358. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. THOMAS, a citizen of the United States of America, residing in Hartford, in the county of Hartford, State of Connecticut, have invented an Improved Electrical Rosette Cut-Out, of which the following is a specification.

The bases and caps of rosette cut-outs are now commonly made of porcelain, and while porcelain is an excellent insulator and is mechanically strong for the purpose it has the drawback that as the securing means are generally constructed it is not always possible to get the cap to fit onto the base because of variations in the manufacture of the porcelain due to variations in the shrinkage of the molded parts in the vitrifying of the clay. To meet this difficulty and to insure that the inner face of the rim of the cap shall always fit properly against the face of the base, I provide the cap and base with interlocking contacts whose rear engaging faces are in the same plane with the joint between the cap and base, and for this purpose I mount the interlocking fingers on the base on a level with the rim of the base, while the fingers on the cap are mounted upon the face of a shoulder flush with the rim of the cap.

In the accompanying drawings, Figure 1 is a view, half in section, of a rosette cut-out made in accordance with my invention. Fig. 2 is an inner face of the cap. Fig. 3 is a perspective view of a part of the cap. Fig. 4 is a face view of the cleat form of the cut-out base, shown also in Fig. 1. Fig. 5 is a face view of the concealed form of cut-out base. Fig. 6 is a sectional view on the line 6 6, Fig. 5. Fig. 7 is a face view of the molding style of cut-out base. Fig. 8 is a sectional view on the line 8 8, Fig. 7; and Fig. 9 is a sectional view on the line 9 9, Fig. 2.

The same construction of cap can be used with the three styles of base—that is, the cleat, Figs. 1 and 4, the concealed, Figs. 5 and 6, and the molding, Figs. 7 and 8.

Referring to the cleat style of cut-out, Figs. 1 and 4, the base A has a central knob a' , an annular rim a , and an intermediate annular groove a^2 . The two diametrically opposite contact-fingers B B rest upon shoulders C,

recessed out of the knob a' , the face of this shoulder being on a level or flush with the face of the rim a of the base. The fingers B B are secured in place by screws b' , Fig. 1, passing through openings from the back of the base. The contact-fingers B B bridge across the groove a^2 and extend through notches in the rim a , and have at their outer ends any usual form of screw-clamp D for the conductor-wire. The clamp D, except as to its screw, may be formed in one with the finger B, the latter being bent, as shown in Fig. 1, to clear the rim of the cap, but the rear face of that part of the finger which bridges the groove a^2 and with which the interlocking finger of the cap is to engage is straight and in the same plane with the face of the shoulder C, Fig. 1, and the face of the rim a .

As will be seen on reference to Figs. 2 and 3, the cap has upon its inner face two curved fingers F F, adapted to engage and interlock with the fingers B B on the base. Each of these fingers F F is mounted upon an inwardly-projecting shoulder G, whose face is flush with the inner face of the rim e of the cap E, Figs. 3 and 9. I prefer to bend up the forwardly-projecting end of each finger F, as shown in Figs. 2 and 3, to facilitate its passing behind the corresponding finger B on the base. I further prefer to split this end into two parts $f f'$, one, f , relatively wide and inflexible and the other, f' , relatively narrow and slightly flexible. The rigid part f gives the desired strength, while the flexible piece f' may have its outer end bent inward at y , so as to form a spring-catch to hook over the finger B of the base when the cap has been fitted to and turned on the base to engage the fingers F with the fingers B.

In the hollow of the cap are secured electrical connecting-plates H H, to which the wires are connected, and between these plates H H and the fingers F F are fuses f^{10} , grooves g' being formed in the shoulders G for the reception and protection of the fuses, Figs. 2, 3, and 9. The plates H H are secured to the cap by screws h , Fig. 9, passing through openings in the cap and threaded into the plates, and projecting ends of these same

screws also serve to receive the screw-nuts h' , by which the ends of the fuses are secured. The screws h^2 , by which the tap-wire ends are secured to the plates H H, pass through the plates into openings x in the cap, Fig. 9, to prevent the plates H from turning with or on the screws h .

As I have said, this same construction of cap can be used on other styles of base. Thus in Figs. 5 and 6 I have shown the concealed form of rosette cut-out. This has a central knob a^3 , annular rim a^4 , and intermediate groove a^5 , and the contact-fingers B' B' are mounted upon shoulders C', recessed out of the central knob, with their rear faces in the same plane with the rim a^4 . The inner ends of the fingers B' are provided with binding-screws s for the attachment of the ends of the line-wires, while the outer ends of the fingers B simply rest against the face of the rim a^4 .

In the molding style of base shown in Figs. 7 and 8 there are grooves $t t$ for the conductors; but in other respects the base is substantially similar to the base Figs. 5 and 6. There is a central knob a^6 , a rim a^7 , and intermediate annular groove a^8 . The fingers B² B² are secured by screws s' to shoulders C² in the knob and project across the annular groove, with their outer ends resting upon the face of the rim a^7 . The faces of the shoulders C² are in the same plane with the face of the rim of the base. The inner ends of the fingers B², carrying the binding-screws s^2 for the line-wires, are for convenience bent down into the bottoms of their respective cross-grooves $t t$.

I claim as my invention—

1. A cut-out having a cap and base each having a rim and provided with interlocking contacts whose rear engaging faces are in the

same plane with the rim-joint between cap and base, substantially as described.

2. A cut-out having a base and an attachable cap, the latter having a rim and shoulders with contact-fingers mounted on the shoulders flush with the face of said rim, substantially as described.

3. A cut-out having a base and a cap and engaging fingers carried by the two parts, the base having a rim and having shoulders whose faces carry the base-fingers and are in the same plane with said rim, substantially as described.

4. A cut-out having a base and detachable cap, each provided with rims and with shoulders and fingers on the shoulders to interlock with the fingers on the other part, the shoulders on the cap being flush with the rim of the cap, while the shoulders on the base are flush with the rim of the base, substantially as described.

5. A cut-out having a base having grooves and contact-fingers bridging the grooves with a cap having contact-fingers to engage under the base-fingers, those on the cap being each split into two parts, one narrow and flexible and the other part wide and rigid, as and for the purpose set forth.

6. A cut-out having contact-fingers and connecting-plates and shoulders on which the plates are mounted, the shoulders being notched for the reception and protection of the fuse-wires, substantially as described.

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

GEORGE B. THOMAS.

Witnesses:

G. W. GOODRIDGE,
E. B. FORD.