No. 665,928. Patented Jan. 15, 1901.

C. G. PERKINS.

ELECTRICAL CUT-OUT.

(Application filed Jan. 17, 1900.)

(No Model.)

Fig. 1

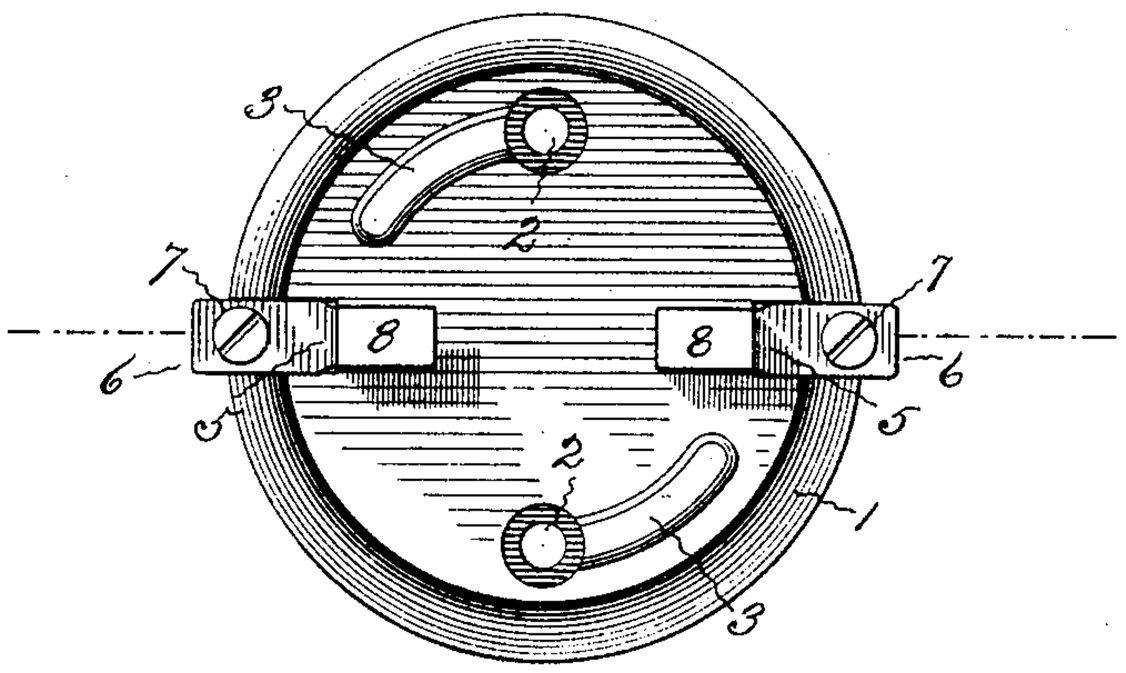


Fig. 2

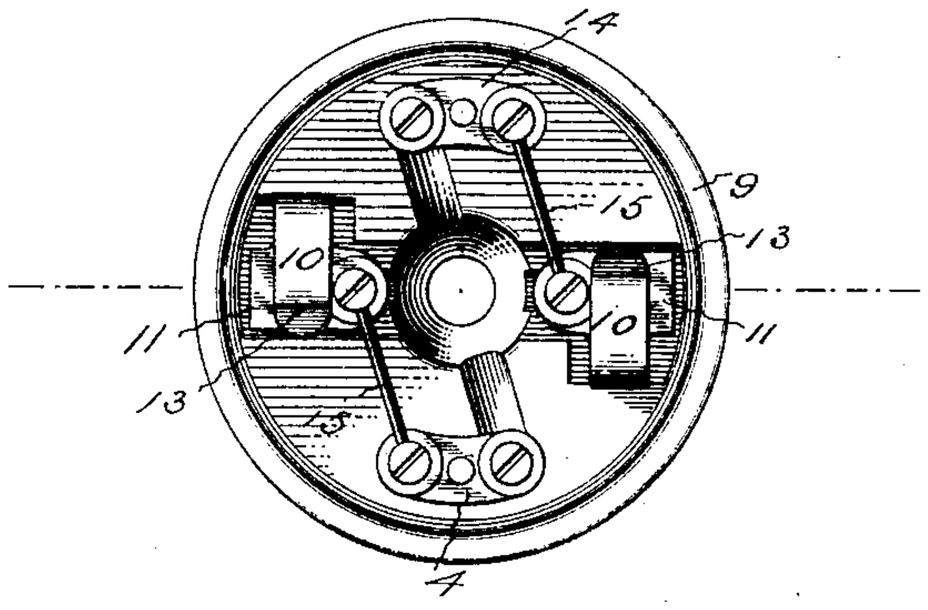


Fig. 5

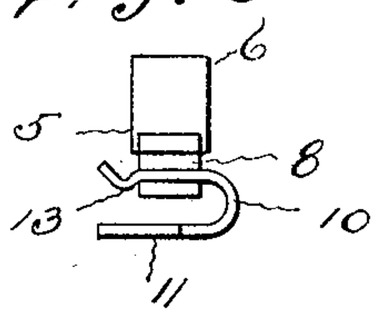


Fig. 3

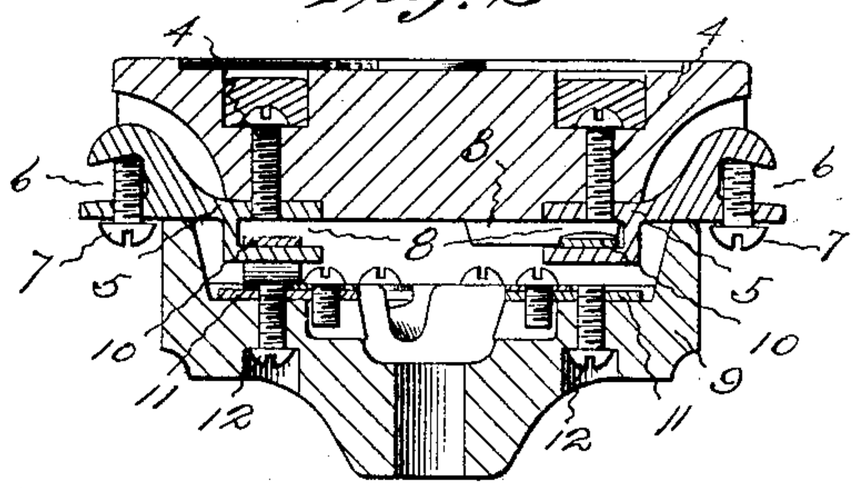
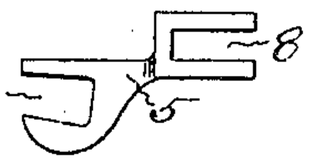


Fig. 4



Witnesses:

F. G. Holcomb.

C. E. Burland.

Inventor:

Charles G. Perkins,
by
Harry P. Williams.
Atty.

UNITED STATES PATENT OFFICE.

CHARLES G. PERKINS, OF HARTFORD, CONNECTICUT.

ELECTRICAL CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 665,928, dated January 15, 1901.

Application filed January 17, 1900. Serial No. 1,766. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. PERKINS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Electrical Cut-Outs, of which the following is a specification.

This invention relates to the class of rosette cut-outs which have the caps that contain the fuse-wires attached to the bases to which the line-wires are connected by conducting parts that are engaged by a rotary turn given to the cap.

The object of this invention is to produce a simple, durable, and effective cut-out having the conducting parts which are engaged for holding the base and cap together and which form a portion of the circuit through the cut-out shaped to easily adapt themselves to each other and make firm and close contact, so as to minimize resistance and prevent heating and securely lock the cap and base together.

The embodiment of the invention illustrated in the accompanying drawings has a base of insulating material, with a pair of outwardly-opening line-wire-attaching forks and inwardly-opening contact-forks, and a cap of insulating material, with a pair of fuse-wire-attaching plates and projecting spring-fingers that are arranged to be passed through the contact-forks by a rotary turn of the cap for securing the cap and base together.

Figure 1 of the views shows a plan of the insulating-base with the line-wire and contact forks. Fig. 2 is a view looking at the inside of the insulating-cap, showing the conducting parts. Fig. 3 is a diametrical section through the cap and base on the plane indicated by the dotted lines of Figs. 1 and 2. Fig. 4 is a detail side view of one of the line-wire and contact forks that are attached to the base, and Fig. 5 is a view illustrating the manner of engagement of one of the contact-forks and one of the spring-fingers.

The base 1, which in the drawings is shown as circular, is preferably formed of porcelain, although it may be formed of any other desirable insulating material. Perforations 2 are made through the base for the passage of the screws which are employed to secure the cut-out in position for use, and ribs 3 are provided for guiding the cap when turned to secure the base and cap together.

Attached to the base by screws 4 are conducting-pieces 5. The outer ends of these pieces are provided with outwardly-opening forks 6 for receiving the line-wires and binding-screws 7 for securing the line-wires in the forks. The inner ends of these conducting-pieces are provided with forks 8, that open toward the center of the base. The inner forks are so arranged that one arm of each lies a little beyond, but substantially parallel with, the plane of the inner face of the base, and the screws that pass through the base and fasten the forks in position turn into a threaded perforation in the other arm of each of the inner forks. The cap 9 is also preferably made of porcelain, and in the recess in the cap are spring-fingers 10. These spring-fingers project in opposite directions and are bent up from plates 11, that are secured in position by screws 12, that pass through perforations in the cap. The outer ends of the spring-fingers are bent so as to form shoulders 13. Plates 14 are fastened in the cap, and fuse-wires 15 connect the spring-finger plates 11 with these plates 14, to which are fastened the wires leading from the cut-out to the lamp or other piece of electrical apparatus.

The cap and the base are secured together by placing them face to face and then giving the cap a partial rotation, so as to cause the spring-fingers to pass through the contact-forks and by engagement with the inner faces of the outer arms of the forks hold the parts together. When the cap is completely turned, the shoulders 13 on the ends of the spring-fingers engage the farther edges of the outer arms of the forks, so that the parts cannot accidentally disengage, but will hold together until considerable force is applied in the opposite direction. The metallic pieces having the forks for the line-wires and the forks for the spring-fingers are simple to form and easy to secure in place. The spring-fingers are readily stamped and bent so that they will engage the forks and form a close strong contact which will hold the parts together securely and form a good electrical path through

the cut-out, and the conducting parts are so shaped that they will engage and disengage easily when turned in the proper manner.

I claim as my invention—

1. An electrical cut-out having an insulating-base, outwardly-opening line-wire-attaching forks each having an integral inwardly-opening contact-fork with arms of substantially equal length that extend practically parallel with the face of the base to which they are secured, an insulating-cap, conducting-plates secured to the cap, each having a spring-finger that extends substantially parallel with the face of the cap and passes between the arms of a contact-fork so that the inner surface of each spring-finger engages flatwise with the inner surface of the outer arm of a contact-fork for securing the cap to the base, said fingers having their ends bent to provide shoulders that engage the farther side edges of the outer arms of the forks and lock the fingers and outer arms of the forks together, branch-wire attachment-plates secured to the cap, and fuse-wires connecting the attachment-plates with the finger-plates, substantially as specified.

2. An electrical cut-out having an insulating-base, a contact secured to the base and having a loop open on one side and means of attachment of a line-wire, a cap for the base, a conducting-plate secured to the cap and adapted to pass between the branches of said loop so that the flat face of the contact-piece on the cap engages the flat inner surface of the outer branch of said loop whereby the cap is secured to the base, said contact-piece having its end bent to provide a shoulder that engages the farther side edge of the outer arm of the loop, a branch-wire attachment-plate secured to the cap, and a fuse-wire connecting the attachment-plate with the contact-plate.

CHARLES G. PERKINS.

Witnesses:
H. R. WILLIAMS,
C. E. BUCKLAND.