T. E. MURRAY.

ELECTRIC CUT-OUT.

APPLICATION FILED DEC. 26, 1913.

1,103,994. Patented July 21, 1914.

Fig. 1.

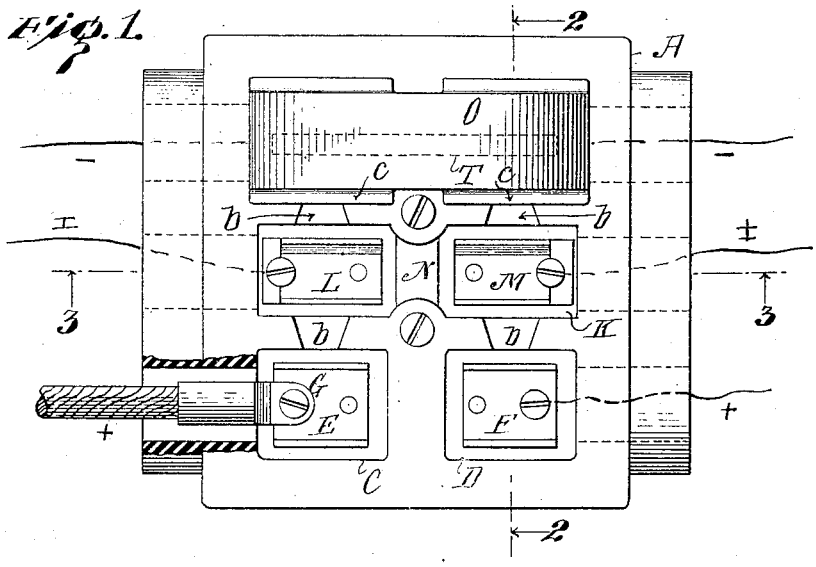


Fig. 2.

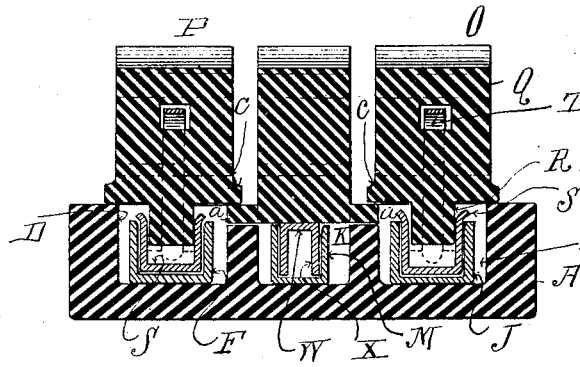


Fig. 4.

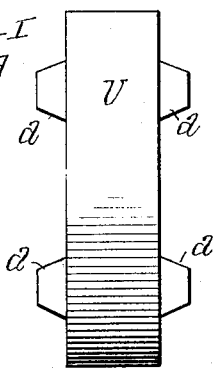
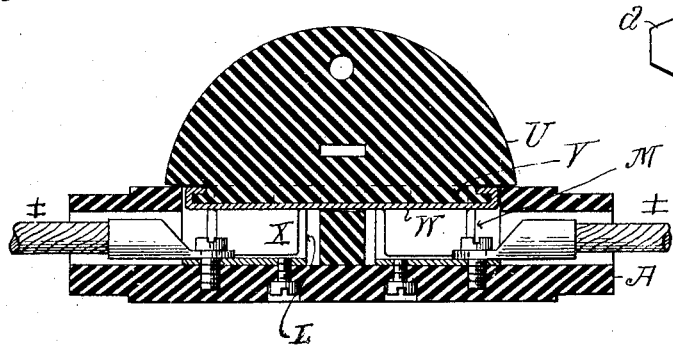


Fig. 3.



Witnesses:

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ELECTRIC CUT-OUT.

1,103,994. Specification of Letters Patent. Patented July 21, 1914.

Application filed December 26, 1913. Serial No. 808,776.

To all whom it may concern:

Be it known that I, THOMAS E. MURRAY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Electric Cut-Outs, of which the following is a specification.

The invention is an electric cut-out designed for three wire systems, and consists in the construction hereinafter set forth, whereby the plug for closing circuit between the terminals of the neutral lead is locked in position by the fuse plugs closing circuit respectively between the terminals of the positive and negative leads, so that said neutral plug cannot be removed from the base unless the fuse plugs are first taken out.

In the accompanying drawings—Figure 1 is a plan view of my cut-out, showing the neutral and positive plugs removed. Fig. 2 is a section on the line 2, 2 of Fig. 1. Fig. 3 is a section on the line 3, 3 of Fig. 1. Fig. 4 is a top view of the neutral fuse plug.

Similar letters of reference indicate like parts.

A is the base, preferably of insulating refractory material, such as porcelain, and having two sockets C, D, in each of which is a metal contact clip E, F. To the clips E, F are connected the terminals of the positive lead of a three-wire system, preferably in the manner shown at G, Fig. 1. Two similar sockets H, I (H not shown) are provided, with similar clips J, to which are connected the terminals of the negative lead of said system. Between the sockets E, F and H, I is a channel K, in which are contact clips L, M, to which are attached the terminals of the neutral lead, as shown in Fig. 3. Between the clips L, M is a movable barrier N of insulating material.

The fuse plugs O, P which connect the terminals of the positive and negative leads are of well known form. Each has a body portion Q of porcelain arched on its upper side and provided on its lower side with projections R, to each of which is secured a U-shaped contact plate S. The fuse strip T passes through a channel in the plug body and has its ends connected to said plates S. When the fuse plug O is inserted in the sockets H, I, the contact plates S coöperate with the clips J in said sockets, thus closing circuit through the fuse and between the terminals of the positive lead. When the fuse plug P is inserted in the sockets C, D, the contact plates S coöperate with the clips E, F in said sockets, thus closing circuit through the fuse and between the terminals of the negative lead.

The neutral plug U has an elongated projection V on its lower side, to which is secured a metal plate W having two downwardly turned wing portions X which coöperate with the clips L, M in channel K. When plug U is in place, as shown in Fig. 3, circuit is established through plate W between the terminals of the neutral lead.

In order to prevent the removal of the neutral plug U from the base before the fuse plugs O, P are removed, I form on each side of plug U lateral projections, *a*, Fig. 4, which are received in recesses *b* in the upper surface of said base. I also provide on each side of each fuse plug a lateral projection *c*. The neutral plug U being put in place, the projections *a* on said plug are received in and fill the recesses *b*. The fuse plugs O, P then being inserted, their projections *c* lap over the projections *b* of plug U, and thus prevent the removal of said plugs U until after plugs O, P have been taken out.

I claim:

1. An electric cut-out, comprising a base having sockets and circuit terminals of the positive and negative leads of a three-wire system therein, fuse plugs entering said sockets and coöperating with said terminals to close circuit in each lead, neutral terminals disposed in a channel in said base, a plug entering said channel, a bridge bar on said plug coöperating with said terminals to close circuit in said neutral lead, and means on said positive and negative fuse plugs for engaging said neutral plug after the same has been seated in said base and preventing the removal of said neutral plug until said positive and negative plugs shall first have been removed.

2. An electric cut-out, comprising a base having sockets and circuit terminals of the positive and negative leads of a three-wire system therein, fuse plugs entering said sockets and coöperating with said terminals to close circuit in each lead, neutral terminals disposed in a channel in said base, a plug entering said channel, a bridge bar on said plug coöperating with said termi-

nals to close circuit in said neutral lead, lateral projections on said plug adapted to enter recesses in the upper surface of said base, and lateral projections on said positive and negative fuse plugs extending over said neutral plug projections when said plugs are seated in said base.

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

THOMAS E. MURRAY.

Witnesses:
GERTRUDE T. PORTER,
MAY T. MCGARRY.