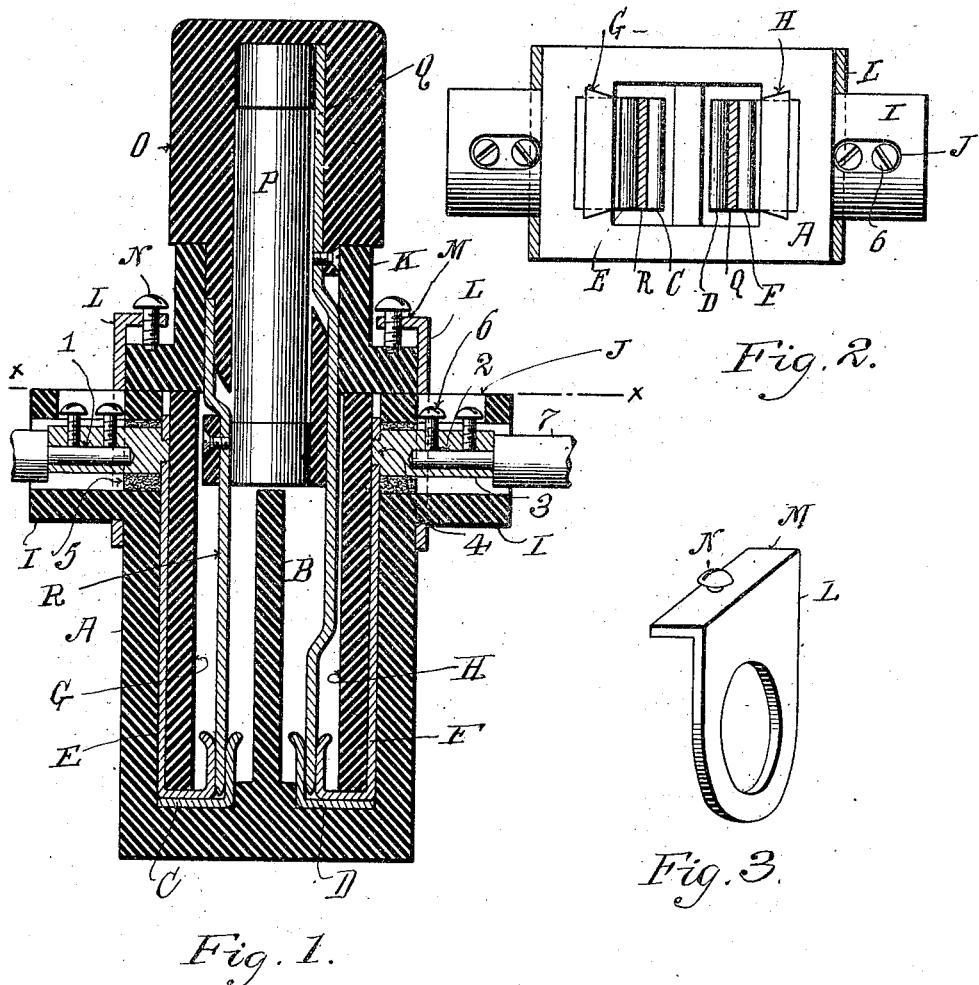


1,028,258.

T. E. MURRAY.
ELECTRIC CUT-OUT.
APPLICATION FILED DEC. 9, 1911.

Patented June 4, 1912.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS E. MURRAY, OF NEW YORK, N. Y.

ELECTRIC CUT-OUT.

1,028,258.

Specification of Letters Patent. Patented June 4, 1912.

Application filed December 9, 1911. Serial No. 664,704.

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 relates to electric cut-outs, and consists in the construction, more particularly hereinafter set forth, whereby the base in box form is divided into two compartments, in each of which is a circuit conductor having its terminal at the bottom of the compartment containing it.

Each conductor is disposed in a recess in the wall of the base, and is covered by a slideable plate of insulating material. A sleeve detachably secured upon the base prevents removal of said plates. A box-shaped cover, supported on the sleeve and preferably shouldered to enter the same, contains a bifurcated switch member—here comprising a fuse—the contact terminals of which protrude to enter said base compartments and coöperate with the circuit terminals therein.

In the accompanying drawings—Figure 1 is a vertical section of my cut-out. Fig. 2 is a horizontal section on the line α , α of Fig. 1. Fig. 3 shows one of the cover clamping plates in perspective.

Similar letters and numbers of reference indicate like parts.

The base A, preferably of porcelain or other refractory insulating material, is box-shaped, with an internal partition B. In the bottom and respectively on each side of the partition are metal strips C, D, said strips having upwardly projecting portions which coöperate to form clips with similarly bent portions of metal conducting strips E, F. The strips E, F are disposed in recesses made in opposite walls of said base. Said recesses are enlarged and dovetailed to receive dovetailed sliding pieces G, H, which cover strips E, F and rest upon the horizontal portions thereof. The strips E, F are secured to the circuit leads 1, 2 in the following manner: At one end of a cylindrical metal block 3 is formed a threaded projection 4, which is received in a correspondingly threaded opening in the strip E or F, the block 3 then entering an opening formed in the wall of the base.

Said opening is larger in diameter than said block. The clearance space between block and opening is filled with comminuted ductile metal, δ , such as metal floss, which is to be inserted by means of a tamping tool, 60 and thereby caused to cohere to the material of the block. When the block is of lead, lead floss is best used. In this way, a perfectly tight moisture-proof joint is produced between said block and the base wall. 65 The circuit lead 2 is inserted in an opening, preferably disposed eccentrically in the block 3, and held thereby by clamping screws 6 which pass through the upper and thicker portion of block 3. When the conductor is 70 sheathed, as shown at 7, the covering is cut off to expose preferably a sufficient length of the naked conductor to fill the opening in block 3, and the shoulder formed by the end of the covering is brought closely up to the outer extremity of said block. The base is provided with cylindrical projections I which inclose the block 3 and the end of the covered conductor, and have in their upper portions, openings J, through 75 which the screws 6 may be conveniently manipulated.

Upon the base A is disposed a sleeve K, flanged below to register with the top of said base. This sleeve is removably secured in place by means of the clamping rings L, which are passed over the projections I, so that their flanges M extend over the flanges on sleeve K. Set screws N, passing through flanges M and bearing on the sleeve flanges, then hold the sleeve closely down upon the base. When said sleeve is secured in place the sliding plates G, H cannot be removed from their recesses.

O is a box-shaped carrier, which here receives a cartridge fuse P. Said carrier is shouldered to fit over the end of sleeve K and extends down into the base A, so that the lower end of the fuse is in proximity to the top of partition B. One contact plate Q, disposed in said carrier, extends from the top thereof through an opening in one wall, and then protrudes below said carrier for a sufficient distance to become received between the strips D, F when said carrier is seated in the base. Another contact plate R is disposed in a recess on the lower portion of the carrier, passes through a wall and extends downwardly so as to be received in like manner between strips C, E. One fuse 110

terminal is in contact with plate Q, and the other with plate R.

The circuit proceeds from lead 1, to strips E, C, plate R, through the fuse P, to plate 5 Q, strips F, D, and to lead 2.

The fuse P and contact plates Q, R, here together form a bifurcated switch member. The compartments in base A may be filled with a liquid dielectric. When the carrier 10 is removed, the partition B, in addition to the dielectric, forms a barrier preventing leakage of current between the terminals at the bottom of said compartments.

I claim:

- 15 1. An electric cut-out, comprising a base in box form, circuit conductors longitudinally inclosed in walls of said base and having terminals at the bottom thereof, a cover for said base, and a bifurcated switch member disposed in said cover and having protruding contacts coöperating with said conductor terminals.
- 20 2. An electric cut-out, comprising a base in box form, circuit conductors disposed in walls of said base and having terminals at the bottom thereof, removable plates covering said conductors, a cover for said base, and a bifurcated switch member disposed in

said cover and having protruding contacts coöperating with said conductor terminals. 30

3. An electric cut-out, comprising a base in box form, circuit conductors disposed in recesses in walls of said base and having terminals at the bottom thereof, plates slideable in said recesses and covering said conductors, a cover for said base, and a bifurcated switch member disposed in said cover and having protruding contacts coöperating with said conductor terminals. 35

4. An electric cut-out, comprising a base in box form, circuit conductors disposed in walls of said base and having terminals at the bottom thereof, removable plates covering said conductors, a sleeve detachably supported on said box and above said covering 40 plates, a cover supported on said sleeve, and a bifurcated switch member disposed in said cover and having protruding contacts coöperating with said conductor terminals.

In testimony whereof I have affixed my 50 signature in presence of two witnesses.

THOMAS E. MURRAY.

Witnesses:

GERTRUDE T. PORTER,
MAY T. MURRAY.