T. E. MURRAY.

CUT-OUT SWITCH.

APPLICATION FILED DEC. 22, 1914.

1,158,535. Patented Nov. 2, 1915.

Fig. 1.

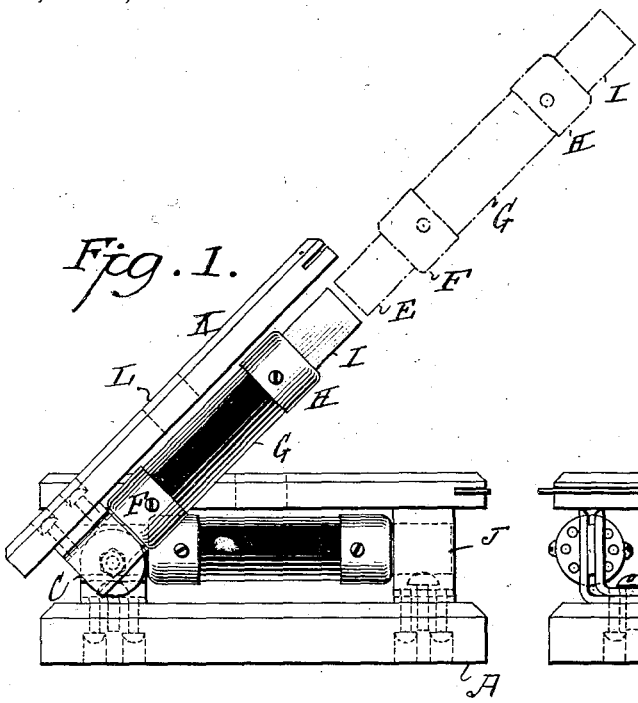


Fig. 3.

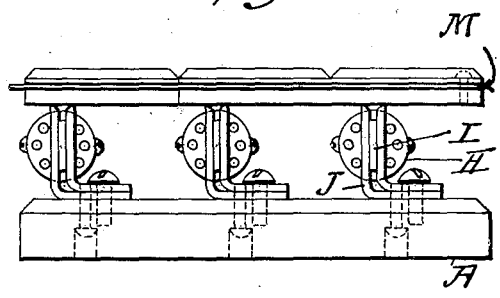
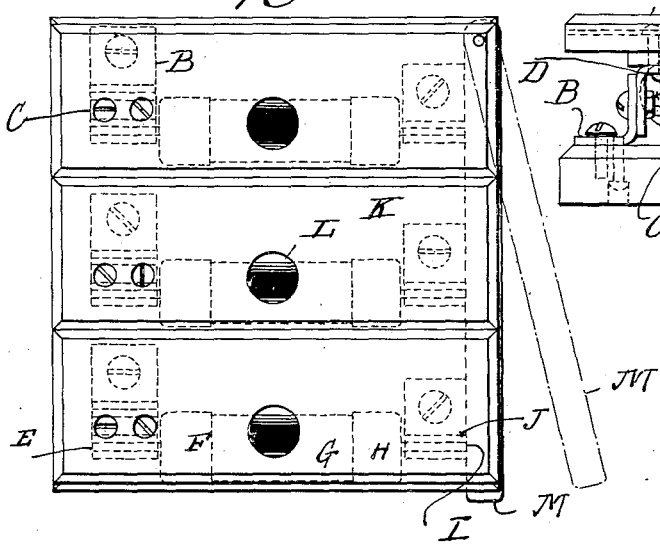


Fig. 2.



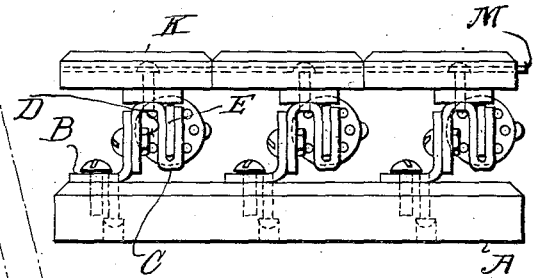


Fig. 4.

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CUT-OUT SWITCH.

1,158,535. Specification of Letters Patent. Patented Nov. 2, 1915.

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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 Cut-Out Switches, of which the following is a specification.

The invention is a cut-out switch, in which the movable member is a fuse case, preferably of the cartridge type, which is provided with end terminal contacts, one of which is detachably engaged in a support pivoted preferably to a bracket fixed upon a suitable base of insulating material. Upon said base is also a contact coöperating with the other fuse terminal contact when said switch is in circuit-closing position. A cover plate of insulating material which extends over the fuse case and base contact is secured upon the support independently of the fuse case. Where a plurality of said switches are used, I provide means for detachably connecting the independently secured cover plates so that any one switch or all of said switches may be operated at will.

In the accompanying drawings—Figure 1 is a side elevation of my cut-out switch. Fig. 2 is a top view. Fig. 3 is a similar elevation of the opposite end. Fig. 4 is an end elevation showing the switch closed.

Similar letters of reference indicate like parts.

My cut-out, as here shown, is arranged for a three-wire system, and therefore include three switches which are alike in construction, so that a description of one answers for all.

A is a base of insulating material. B is a metal bracket secured thereon. Pivoted to said bracket is a metal clip C, formed by bending a plate of sheet metal in S-form with its parts parallel. One loop of the S receives the nut D which secures the pivot pin in place. The other loop receives a contact plate E which projects from the end cap F of a cartridge fuse case G. A similar cap H on the opposite end of said case has a similar projection I which coöperates with a clip J secured upon the base A. Over the fuse case G is a cover plate K of insulating material secured to the clip C independently of the fuse case and turning with said clip on the pivot in bracket B. In said plate K is an opening L, through which the condition of the case—which will show whether the fuse has blown or not—may be observed.

The contact plate E on fuse cap F is to be made to fit tightly in its loop in clip C, so that it remains in position therein when plate K is raised to move projection I out of clip J in order to open the switch.

When a plurality of switches are disposed, as here shown, upon a common base, either one may be manipulated separately in order to open or close circuit. In order to permit all to be operated at once, I provide a metal bar M which is pivoted in an edge recess in the end cover plate of the series and extends through similar recesses in the edges of the other cover plates. When said bar is in place in all of said plate recesses, all three plates are connected and hence may be moved conjointly to open or close all the switches, and when said bar is moved out of the recesses of the plates other than that of the plate in which it is pivoted, as shown by dotted lines, Fig. 2, any one of said plates may be moved to open or close the switch with which it is associated.

It is to be observed that the fuse case is not carried by the cover plate, but that said plate is secured to the pivoted support independently of the fuse case, so that it can be removed without disturbing said fuse case, or the fuse case can be removed from the support without disturbing the cover.

I claim:

1. A cut-out switch, comprising a base, a bracket thereon, a support pivoted on said bracket, a cover rigidly secured at one end to said support, a switch member detachably secured at one end to said support and extending beneath and parallel to said cover, and a fixed contact on said base coöperating with said switch member.

2. A cut-out switch, comprising a base, a bracket thereon, a support pivoted on said bracket, a cover rigidly secured at one end to said support, a fuse case having plate terminals extending from its opposite ends and disposed below and parallel to said cover, means for detachably securing one of said terminals to said support, and a fixed contact on said base coöperating with the other fuse case terminal.

3. A cut-out switch, comprising a base, a plurality of brackets extending outwardly therefrom, a plurality of fuse cases, each having end terminal contacts, supports piv-

oted to said brackets and each adapted to receive one of said fuse case contacts, contact clips on said base respectively coöperating with the other fuse case contacts, a plurality of cover plates disposed in juxtaposition at their longitudinal edges each secured upon one support and extending over its associated fuse case and contact slip, and means for detachably connecting said plates together; the said cover plates when connected forming a single cover for all of said fuse cases.

4. A cut-out switch, comprising a base, a plurality of brackets thereon, a plurality of fuse cases, each having end terminal contacts, supports pivoted to said brackets and each adapted to receive one of said fuse case contacts, contact clips on said base respectively coöperating with the other fuse case contacts, cover plates each secured upon one support and extending over its associated fuse case and contact clip, and a bar pivoted at its end in a recess in the outer edge of one of said plates and movable into similar recesses in the remaining plates.

5. A cut-out switch, comprising a base, a bracket thereon, a fuse case having terminal contacts, an S-shaped support having one of its arms pivoted to said bracket, a fuse case having end terminal contacts, one of said contacts being adapted to fit between the remaining arm and the middle portion of said support, and a contact clip on said base cooperating with the other of said fuse case contacts.

6. A cut-out switch, comprising a base, a bracket thereon, a fuse case having terminal contacts, an S-shaped support having one of its arms pivoted to said bracket, a fuse case having end terminal contacts being adapted to fit between the remaining arm and the middle portion of said support, a cover plate secured upon said S-shaped support between said pivoted arm and said middle portion, and a contact clip on said base coöperating with the other of said fuse case contacts.

7. A cut-out switch, comprising a base, a plurality of brackets extending outwardly therefrom, a plurality of fuse cases, each having end terminal contacts, supports pivoted to said brackets and each adapted to receive one of said fuse case contacts, contact clips on said base respectively coöperating with the other fuse case contacts, a plurality of cover plates disposed in juxtaposition at their longitudinal edges, each secured upon one support and extending over its associated fuse case and contact clip, and means for detachably connecting said plates together; the said cover plates when connected forming a single cover for all of said fuse cases, and the said cover plates being respectively secured to the several supports independently of said fuse cases.

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

THOMAS E. MURRAY.

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