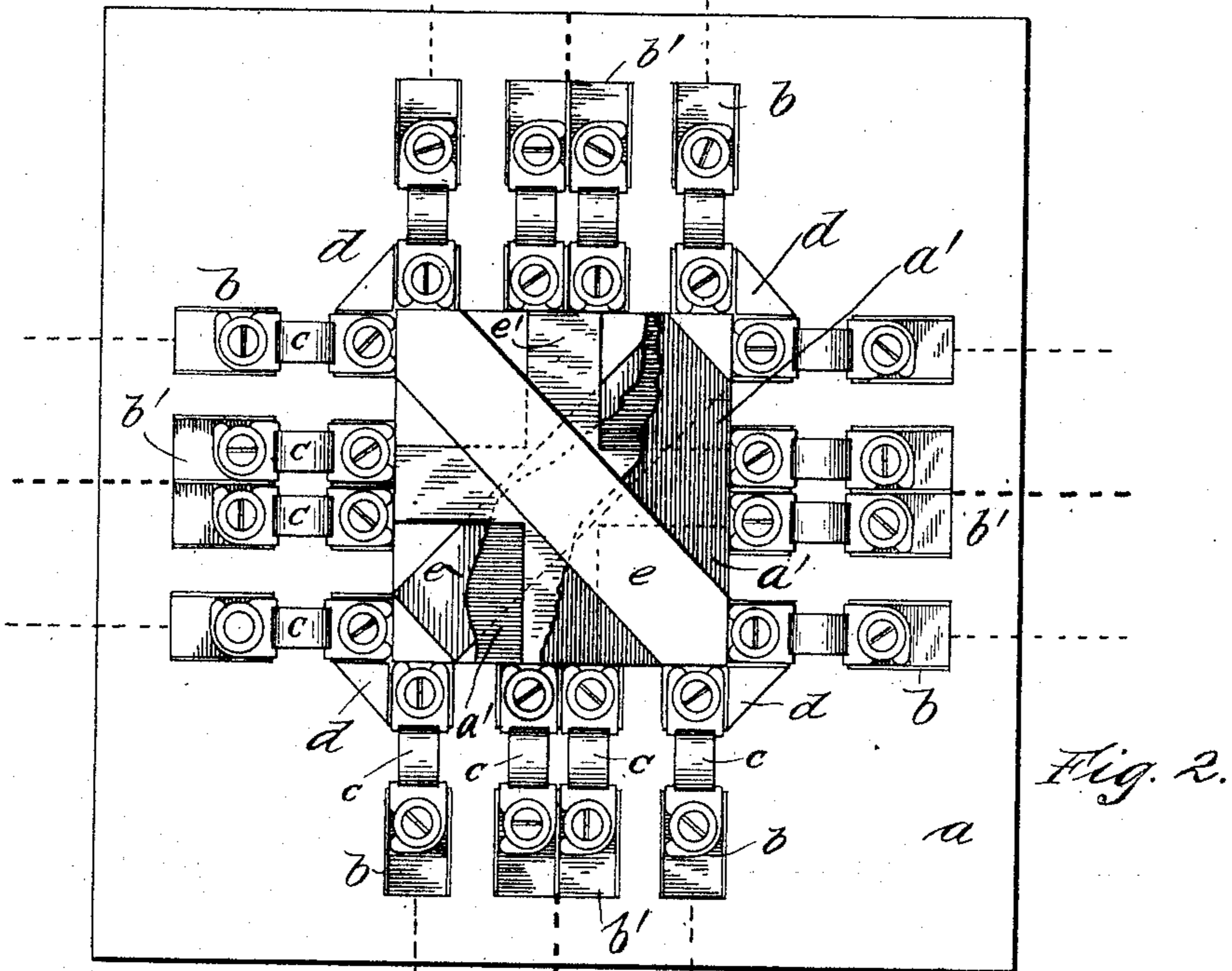
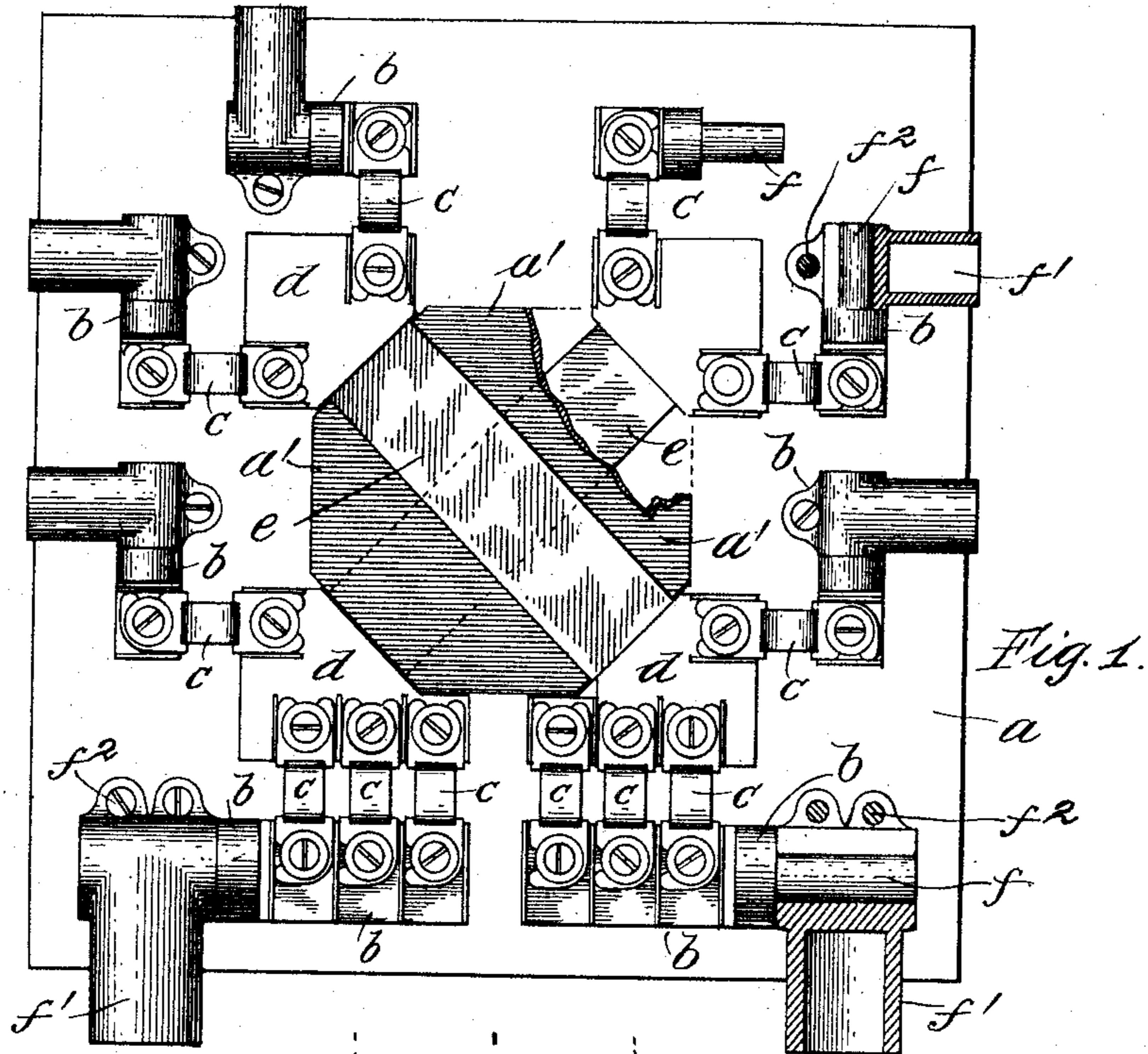


E. ELLICOTT.

CUT-OUT.

(Application filed Dec. 30, 1897.)

(No Model.)



Witnesses:

L. H. C. Sanner,

A. D. Lawrence

Inventor:

Edward Ellicott,

By Carter & Brown  
Attorneys.

# UNITED STATES PATENT OFFICE.

EDWARD ELLICOTT, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WESTERN  
ELECTRIC COMPANY, OF SAME PLACE.

## CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 620,111, dated February 28, 1899.

Application filed December 30, 1897. Serial No. 664,567. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD ELLICOTT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Cut-Outs, (Case No. 5,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to improvements in cut-outs, and has for its object the provision of means for more readily and efficiently securing the distribution of electric current at any point desired, while providing a compact structure effectually securing the insulation of conductors of opposite polarity.

In many types of cut-outs hitherto employed difficulty has been experienced in providing a compact structure affording sufficient insulation between the cross connecting-bars uniting the mains and branch connections, and, furthermore, it has been necessary to secure the desired connection by means of branch wires led off from the mains. Moreover, when conductors adapted to carry heavy currents are to be connected with the cut-outs trouble is frequently experienced in properly making said connections. The device herewith shown and described obviates these difficulties, my improvements consisting in interposing between the cross connecting strips or bars of the cut-out a thickness of slate or other insulating material which effectually insulates the conductors from one another, permitting them to be placed very close together.

Terminals are provided upon all sides of the cut-out from which the mains and branch conductors lead, the connections preferably being made by means of swivel-lugs, providing ample conducting-surfaces, whereby heavy wiring is more readily connected with the cut-out.

The construction briefly indicated above affords a compact and substantial device for taking off current at any point in the mains of a system of electrical distribution.

My improvements will be more readily understood by reference to the accompanying drawings, in which—

Figures 1 and 2 are plan views, partly broken away, of cut-outs embodying my invention, adapted for use, respectively, in two and three wire systems of distribution.

Upon the base *a*, of slate, marble, or other suitable insulating material, are mounted the main and branch terminal connections *b b*. Fuses *cc* unite said connections with contact-pieces *d d*, the alternate contact-pieces being in turn electrically connected by means of cross connecting-bars *e e*. In the cut-out shown in Fig. 2 an additional cross connecting-conductor *e'* unites the four terminals *b'*, adapted to be connected with the neutral wires of the system, the said terminals preferably being formed of double capacity, adapting said cut-out to be employed either with the three-wire or three-wire convertible systems. The said cross-connectors are arched or separated to receive strips of insulating material *a'*, preferably slate, the same being formed to fit closely in the central portion of the cut-out.

In Fig. 1 is shown my improved swivel-lug connection, which consists of a lug *f* of circular cross-section, whereon the terminal *f'* is adapted to be placed and secured in any desired position by means of a screw or screws *f<sup>2</sup>*, serving to clamp the split sleeve of said terminal firmly upon the lug. When this structure is employed, the conductor may be first inserted in the terminal and soldered thereto, said terminal being thereafter slipped into position and secured by means of the screw in any position of adjustment desired, which permits the cut-out to be more readily connected with heavy conductors than when the conductor is necessarily united to a terminal fixedly attached to the base of said cut-out. The parts of the swivel-lug are formed of sufficient size to afford ample conducting-surface between the lug and its encircling sleeve.

The fuse terminals or receptacles in the cut-out preferably are recessed or partitioned to prevent the fuses from being twisted when inserted beneath their binding-screws.

It is apparent that when the cut-out illustrated is employed branch circuits may be taken off from the mains at any desired point, the said mains being connected upon opposite

sides of the cut-out, while the branches extend from one or two of the remaining sides.

To insure perfect insulation, I have preferably employed slate insulators of one-fourth inch in thickness between the cross connecting-strips of opposite polarity.

The device as thus manufactured is simple and compact, adapting the same to be placed in narrow spaces between walls or in other desired positions.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, an electric line-terminal consisting of a rounded lug adapted to be secured to an insulating base-plate, a terminal portion provided with a receptacle for the connected conductor, and a sleeve rotatably fitting upon said lug and adapted to be secured in position thereon.

2. As a new article of manufacture, an electric line-terminal consisting of a rounded lug adapted to be secured in position upon an insulating base-plate, a removable terminal portion provided with a split sleeve adapted to fit upon the lug, said sleeve and lug having relatively large engaging surfaces, means for securing the same in position thereon, and a receptacle for the connected conductor associated with said sleeve.

3. The combination, in an electric cut-out, with an insulating-base *a*, of circuit-connecting parts *d* mounted thereon, connecting-

bars *e* uniting the parts *d* of like polarity, the said bars and connecting parts lying approximately in the same plane, and a stratum of insulating material *a'* disposed between the said bars and connecting parts, the same being constructed to receive and hold the insulating material in position, substantially as described.

4. In an electric cut-out, the combination with the base-plate, of main and branch circuit connections provided with swivel-lug terminals disposed upon said base-plate, flat conducting bars or strips uniting the connections or parts of like polarity, and a plate or strip of insulating material disposed between said bars which are recessed or separated to receive the same, substantially as described.

5. The combination in an electric cut-out, with a base *a* of insulating material, of contacts *d* disposed thereon, cross connecting-bars *e* uniting the contacts of like polarity, said bars being arched or recessed, and strata of insulating material *a'* as slate interposed between said contacts and the cross connecting-bars, substantially as described.

In witness whereof I hereunto subscribe my name this 2d day of December, A. D. 1897.

EDWARD ELLICOTT.

Witnesses:

GEORGE L. CRAGG,  
A. L. LAWRENCE.