H. C. WIRT.

ELECTRIC CONNECTING DEVICE.

APPLICATION FILED APR. 28, 1906.

976,532.

Patented Nov. 22, 1910.

Fig. 1.

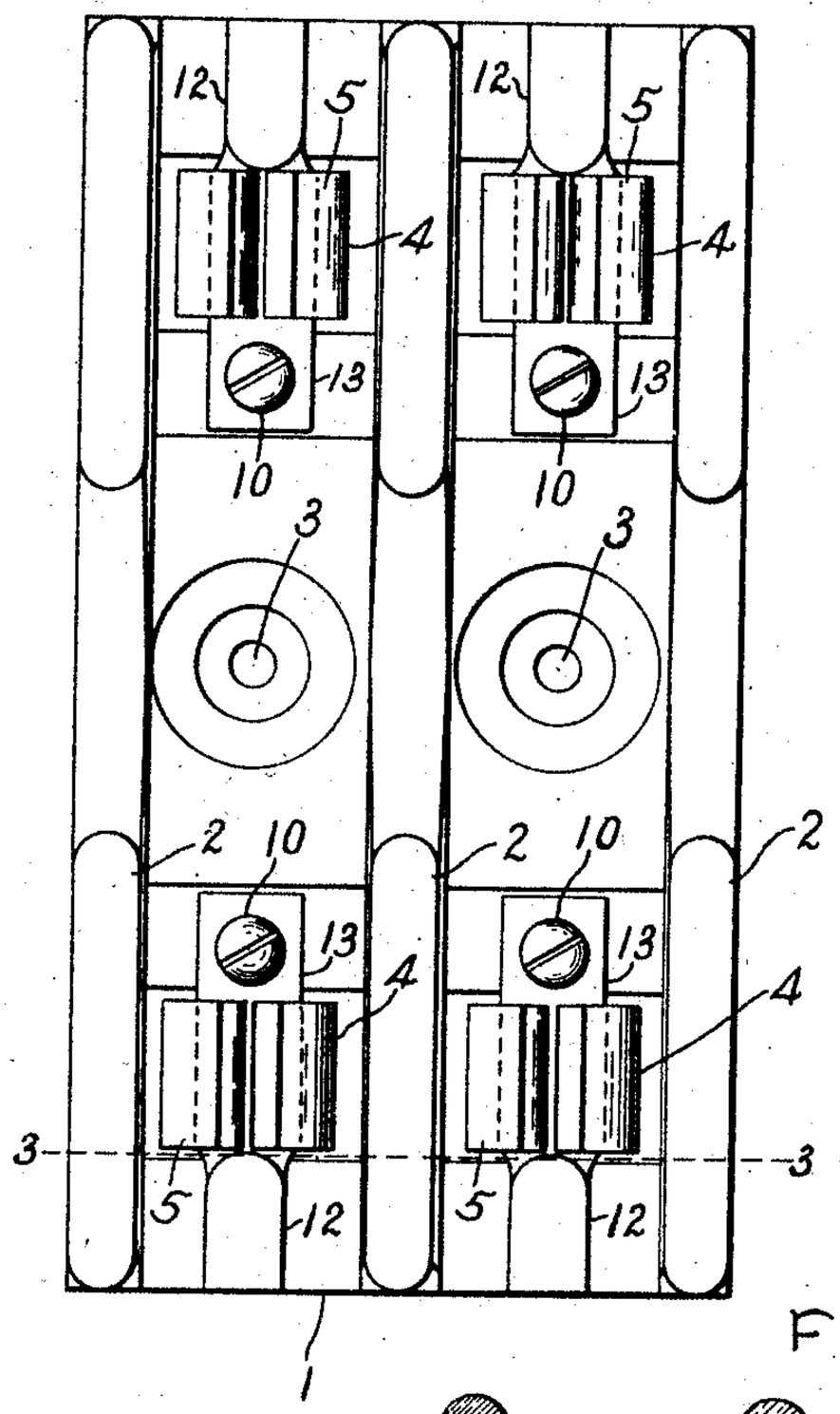


Fig. 2.

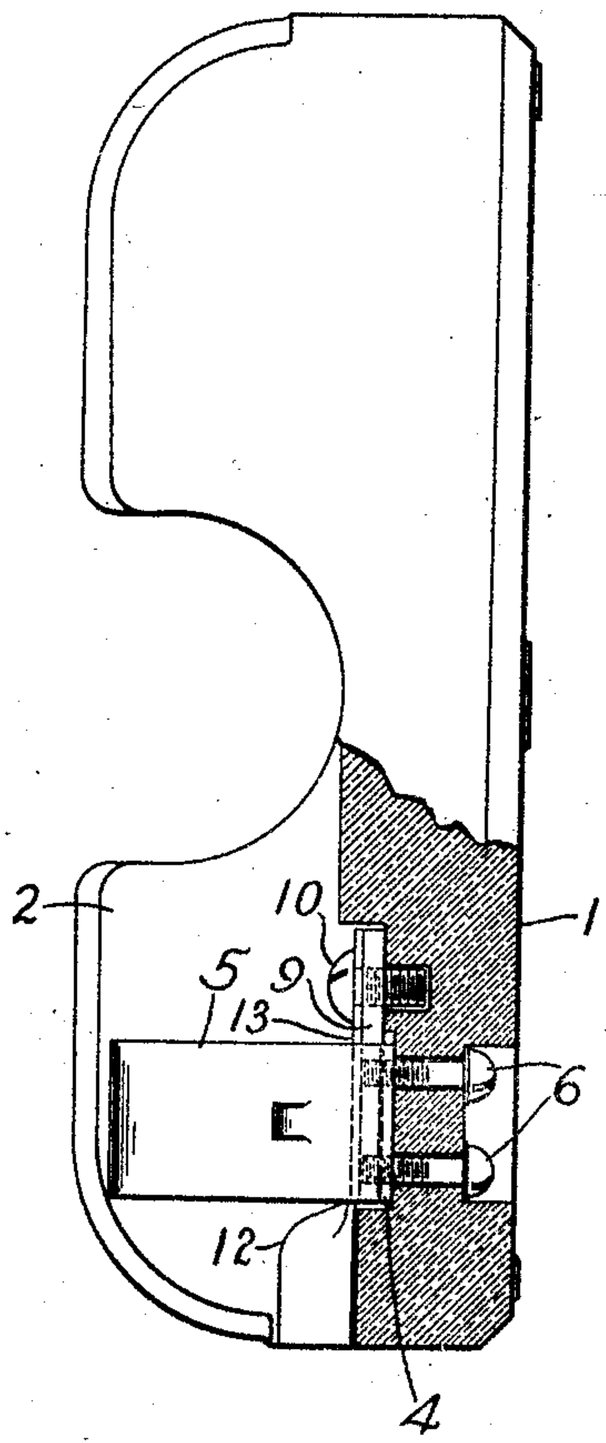
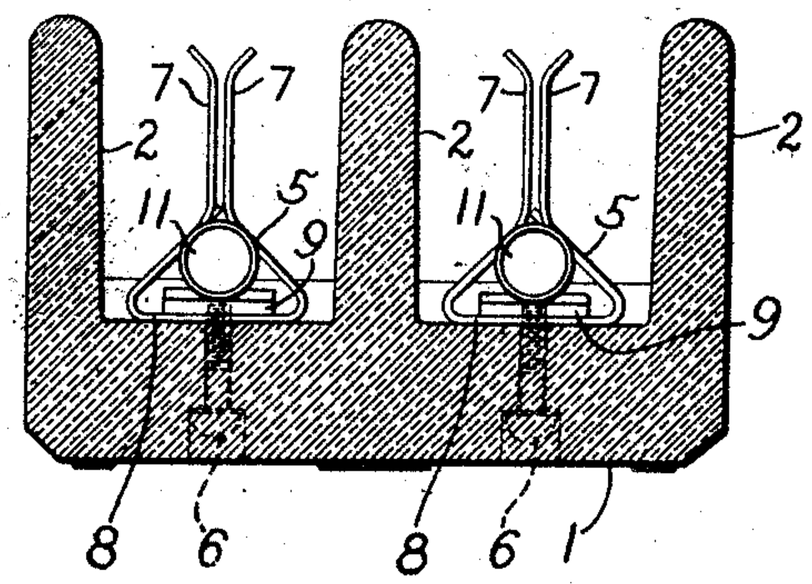


Fig. 3.



Witnesses.
Burchard V. Kelley
Helen Orford

Inventor.
Herbert C Wirt.
by Albert G. Davis
Atty.

UNITED STATES PATENT OFFICE.

HERBERT C. WIRT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

ELECTRIC CONNECTING DEVICE.

976,532. Specification of Letters Patent. **Patented Nov. 22, 1910.**

Application filed April 28, 1906. Serial No. 314,186.

To all whom it may concern:

Be it known that I, HERBERT C. WIRT, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Electric Connecting Devices, of which the following is a specification.

This invention relates to connecting devices for electric apparatus and more especially to connecting devices for joining the ends of conductor wires to the contacts of cut-out apparatus.

It is customary to provide the ends of conductors, and especially those composed of a plurality of strands, with solid metal terminals having recesses therein in which the wires are sweated or soldered so as to effect good electrical contact between conductor and terminal, and the terminals are detachably clamped to the metallic parts to which the electric current is conducted. In cut-out devices it has been the usual practice to connect the conductor terminals to the near sides of the contact clips and allow more or less of the conductor terminals to overhang the outer edges of the insulating bases of the cut-out devices. This arrangement is objectionable on account of the lack of protection of the wall or other support on which the insulating base is mounted from arcs which are liable to spring from the unprotected portions of the terminals. It has been proposed to lengthen the present forms of insulating bases so that they will underlie all exposed metallic parts connected thereto, but such enlarged bases are objectionable both on account of the greater cost and the greater space occupied thereby.

The object of the present invention is to provide a simple and easily applied connection which shall avoid the objections above mentioned.

In carrying out my invention I employ practically without change the forms and sizes of bases heretofore in use and mount the metallic contact members thereon in reverse positions to which they have been mounted, that is, with their binding posts or clamping means on the far sides or the sides opposite to those from which the conductors approach the contact, and I make the conductor terminals with long shanks so that they extend through the contact members sufficiently to be engaged by the clamping means, while their enlarged conductor-engaging portions are disposed in proximity to the near sides of the metallic contact members and thereby save the space between the contact members and the ends of the conductor ends heretofore taken up by the clamping means.

My invention as applied to a fuse block is shown in the accompanying drawing forming a part of this specification, in which—

Figure 1 is a top plan of a twin fuse block; Fig. 2 is a side elevation thereof with part in section; and Fig. 3 is a transverse section on line 3—3 of Fig. 1.

The fuse block shown consists of a base 1 of porcelain or other insulating material and three integral barriers 2 extending longitudinally thereof with trough-shaped spaces between them in which the cut-out members are normally disposed. Extending centrally through the base portion are two holes 3 for the reception of screws for securing the block to its support, and near each end of the base portion are formed transverse recesses 4 in which are secured spring contacts 5 by means of screws 6 extending through holes formed in the base. The contacts 5 are made of sheet metal with their opposite ends 7 bent up as shown to provide a wide foot section 8 and a V-shaped opening thereabove, and from the vertex of the opening they extend parallel to each other so that good contact surface is provided for engaging the sides of the blades of the fuse cut-outs when forced therebetween. Extending through each of the V-shaped openings in the clips is a flat metal bar 9 which rests upon the upper surface of the foot part of the clip and has tapped holes with which the screws 6 engage and thereby clamp the clip to the upper surface of the base. One end of the clamping bar 9 extends beyond the edge of the clip 5 toward the center of the block and has therein a tapped hole for the reception of a binding screw 10 by means of which the conductor terminal 11 is attached. The terminal 11 consists of a tubular wire receiving end portion 12 and a flat shank 13 integral therewith and of sufficient length to pass through the V-shaped opening in the contact clip into position to be engaged by the binding screw 10. The shank 13 is preferably offset from the axis of the tubular end portion so that the lower surface is in line with an element of the cylinder and thereby allows the termi-

nal to be connected to the cut-out block without interfering with the upper surface of the base 1.

I do not desire to restrict myself to the particular form or arrangement of parts herein shown and described, since it is apparent that they may be changed and modied without departing from my invention.

What I claim as new and desire to secure by Letters Patent of the United States, is:—

1. The combination of a metallic contact clip, of a terminal connector provided at one end with wire engaging means and extending at the other end into the space between the arms of the contact clip, and means for detachably securing said connector to said clip.

2. The combination with a metallic contact, of a binding device projecting from one side thereof, and a terminal connector provided at one end with wire-engaging means and at the other end with means for engaging the binding device and of a length to extend across said contact so that the wire-engaging portion and the binding means will be disposed upon opposite sides thereof.

3. The combination of a metallic contact having a broad foot portion and a transverse opening, a terminal connector having wire-engaging means at one end and an integral shank extending through said transverse opening, and means for detachably connecting said contact and said connector on the side of the contact opposite the said wire-engaging means.

4. The combination of an insulating base, a metallic contact comprising a broad foot portion and two end portions bent up therefrom, a bar clamped over said foot portion by screws extending through the base and having a binding screw in one end beyond the side of the contact, and a terminal connector having at one end wire-engaging means and a shank extending between the end portions of the contact and engaging said binding screw.

In witness whereof, I have hereunto set my hand this 27th day of April, 1906.

HERBERT C. WIRT.

Witnesses:

BENJAMIN B. HULL,

HELEN ORFORD.