(No Model.)

N. S. POSSONS.

FUSE BLOCK.

No. 435,102. Patented Aug. 26, 1890.

FIG. 1.

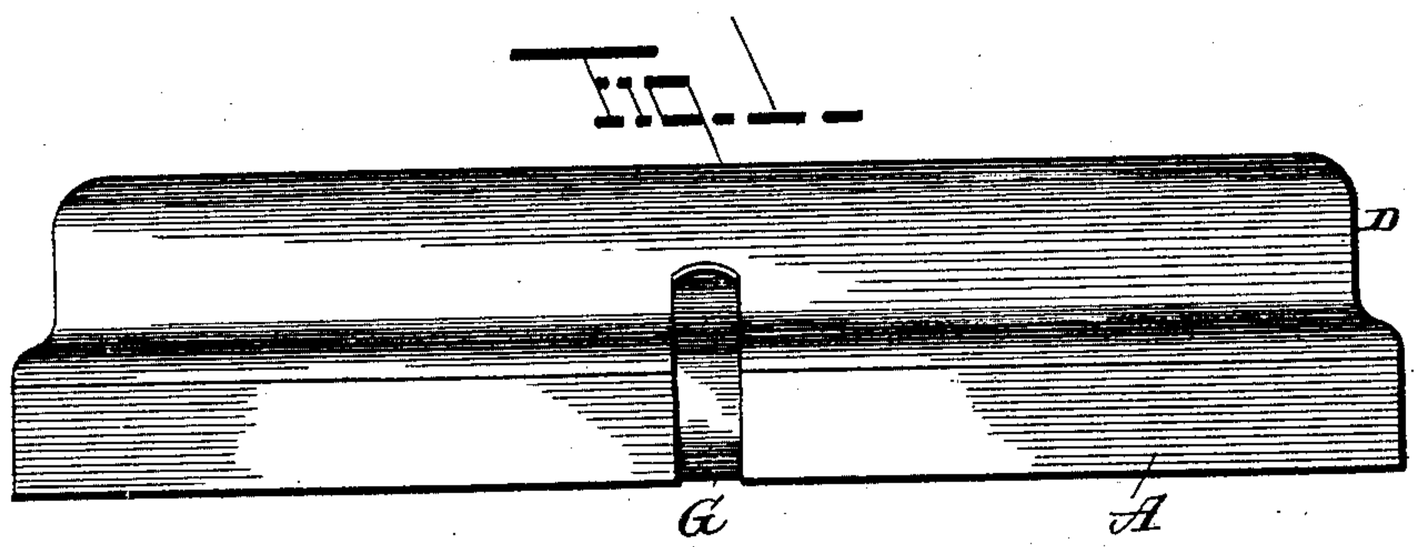


FIG. 2.

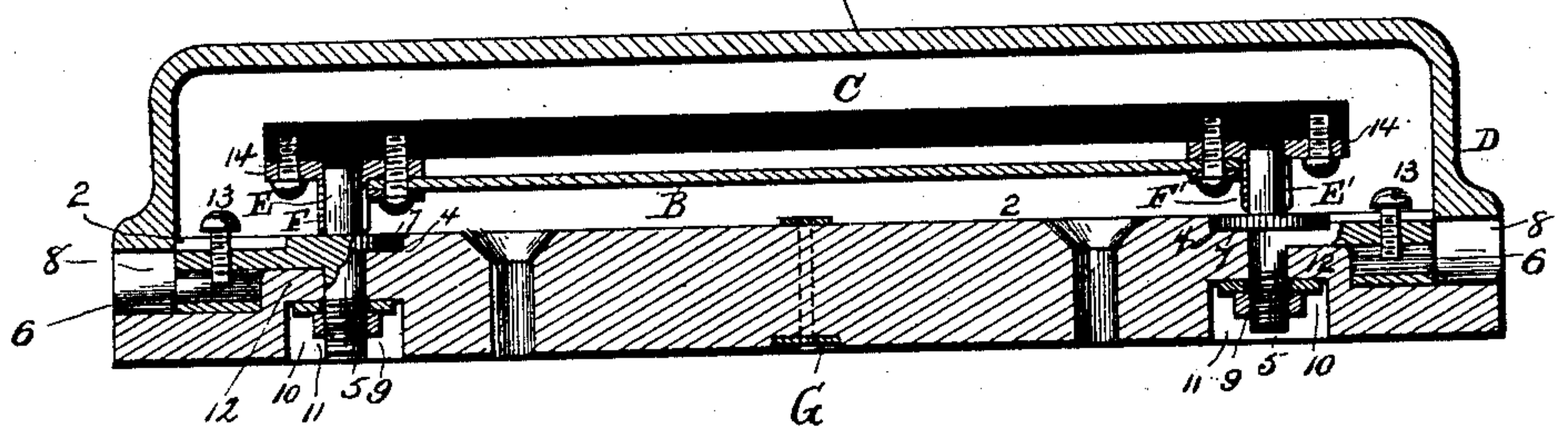


FIG. 3.

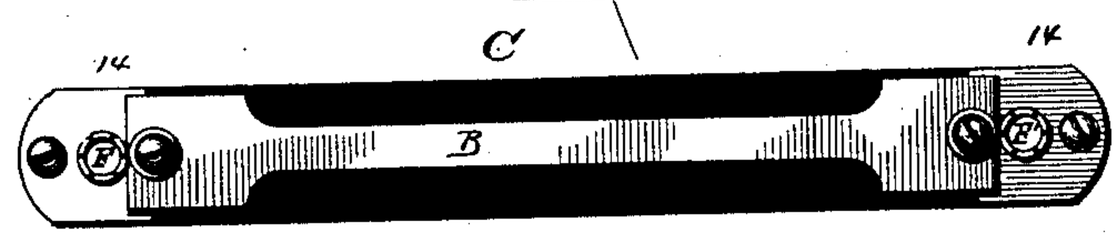
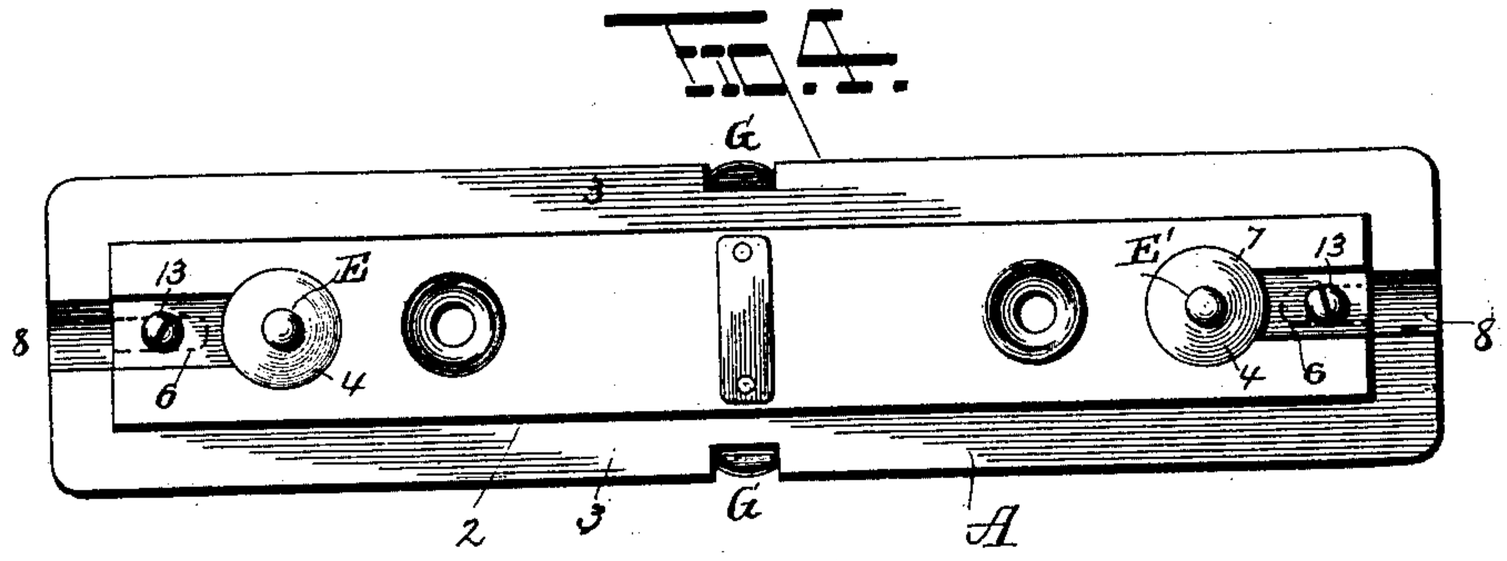


FIG. 4.



Witnesses:
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V. E. Hodges.

Inventor.
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By his Attorney
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UNITED STATES PATENT OFFICE.

NATHAN S. POSSONS, OF CLEVELAND, OHIO.

FUSE-BLOCK.

SPECIFICATION forming part of Letters Patent No. 435,102, dated August 26, 1890.

Application filed June 3, 1890. Serial No. 354,144. (No model.)

To all whom it may concern:

Be it known that I, NATHAN S. POSSONS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Thermal Cut-Outs or Safety-Strip Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates more particularly to what may be indicated generally as the mounting for the fusible conductor of an electrical cut-out, the fusible conductor itself being of any ordinary or suitable construction and material.

In the accompanying drawings, which form part of this specification, Figure 1 is an exterior side view of a thermal cut-out constructed in accordance with the invention. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a bottom view of the fusible conductor and its primary support, and Fig. 4 is a plan view of the base of the instrument with the fusible conductor removed.

The instrument comprises generally a base A, of wood or other suitable non-conducting material, a fusible conductor B, with its primary support C, and a cover D. The base A and the support C are provided at the ends with the corresponding parts of jacks or pin-and-socket contact-makers—namely, the pins E E′ on the base A, adapted to be put in electrical connection with outside wires or conductors, and the split sockets F F′ on the support C in electrical connection with the fusible conductor B. The support C is in the form of a bar of insulated material—such as hard rubber—of greater width than the fusible conductor and less width than the base A.

The cover D is made of wood or non-conducting material, and is of such size that it fits over the fusible conductor B, with its support C and split sockets F F′. It is detachably secured to the base A by means of the catches G G′. The inside parts of the instrument are thus protected in use by the cover, which can be easily removed to permit the same to be inspected without interfering at all with the circuit. When the cover is removed, the fusible conductor is still protected between the base A and the support C. If, however, it should be desired to remove or replace the fusible conductor, the support C furnishes a means of carrying the conducter without danger of making contact with the circuit which includes the fusible conductor so long as the two parts of the jacks E F and E′ F′ are in contact with each other. The said jacks permit the fusible conductor to be withdrawn from and replaced in the circuit with the greatest facility, while at the same time establishing efficient electrical connections. To assist in holding the cover D in place the base A has its center portion 2 raised above the outer margin 3, and this center portion fits the mouth of the cover, so that when the cover is confined by the catches G G′ the said raised portion entering the cover a short distance effectually prevents any motion until the catches are withdrawn.

In the arrangement shown of the jacks or pin-and-socket contact-makers at the ends of the fusible conductor it will be observed that the jack-pins E E′, or parts of the jacks on the base A, are each fastened thereto by means of a little plate 4, having a screw 5 projecting from its bottom, and are each provided with a socket 6 at the side of the plate for receiving the outside or line wire. This plate is preferably made circular, so as to fit in a shallow cavity 7, and which can be bored in the base A by an auger, and the socket 6 is arranged radially, fits in a groove 8 in the base, and effectually prevents the plate 4 from turning. The screw 5 projects through the bottom of the cavity 7, and is held by a nut 9 outside the washer 10 in a cavity 11, bored from the opposite side of the base. The plate 4 is also preferably made thin, being of considerably less thickness than the socket 6, whose inner end is preferably outside the edge of the plate 4, so that the cutting away of the base necessary for the reception of the said socket does not impair the partition 12 between the cavities 7 and 11. By this construction the distance from the top of the plate 4 to the outer end of the screw 5 need be but little more than the thickness of the socket 6, thus making the device or "connector," as it is called, very

neat and compact and requiring only a comparatively thin base. The connections at opposite ends of the base A have their sockets turned in opposite directions. A binding-screw 13 is tapped through the side of the socket 6. As shown, the sockets F F′ are fastened to the plates 14, which are secured to the support C by screws, one screw also serving to hold the end of the fusible conductor in place, the conductor itself being a narrow flat strip of fusible metal with enlargements at the ends of the strip.

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

1. An elongated cut-out or safety apparatus comprising a base provided with a raised rectangular central portion, a fusible conductor, an insulating-support of less width than said raised portion of the base and of greater width than the said conductor, which is secured on the under side thereof, jacks with separate parts on the base and fusible conductor, respectively, the parts on the base being within the area of the aforesaid raised portion, a cover which fits over the fusible conductor, its supports and jacks, and makes a close joint around the said raised portion of the base, and spring-catches secured to the base and engaging said cover, substantially as described.

2. The connector comprising the plate, the part of a separable contact—such as a jack-pin—the attaching-screw, and the radial socket at the side of said plate, substantially as described.

3. The connector comprising the circular plate, the part of a separable contact—such as a jack-pin—the attaching-screw, and the radial socket at the side of said plate, substantially as described.

4. The connector comprising the plate, the part of a separable contact—such as a jack-pin—the attaching-screw, and the socket at the side of said plate, with its inner end outside the edge of said plate, which latter is of less thickness than the socket, substantially as described.

5. The combination, with the fusible conductor and the parts of separable contacts, such as sockets, at the ends of said conductor, of a base provided with connectors comprising each, first, a plate fitting a cavity in the base; second, a part of a separable contact, such as a jack-pin, corresponding to the part on said fusible conductor; third, a screw projecting through the bottom of said cavity, and, fourth, a socket at the side of said plate fitting in a recess in said base, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

NATHAN S. POSSONS.

Witnesses:
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