

R. C. COLE.
FUSE BOX CLIP.

APPLICATION FILED MAY 16, 1911. RENEWED JAN. 4, 1912.

1,025,246.

Patented May 7, 1912.

Fig. 1.

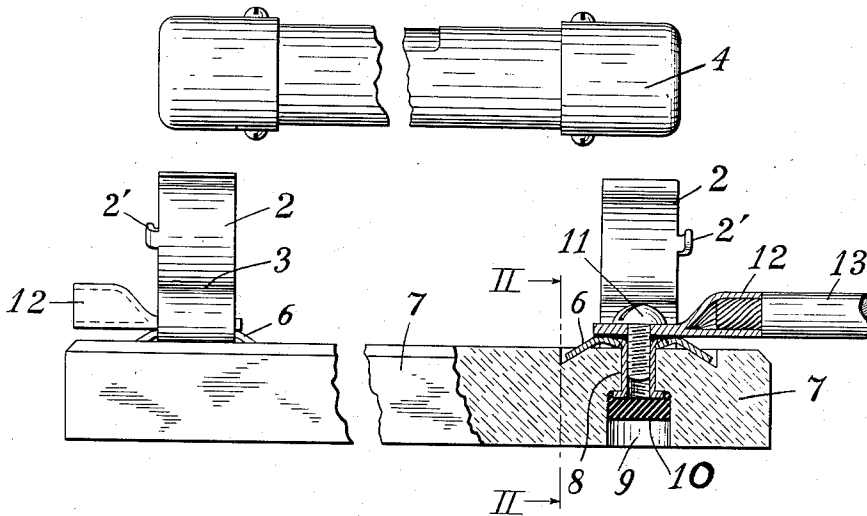


Fig. 2.

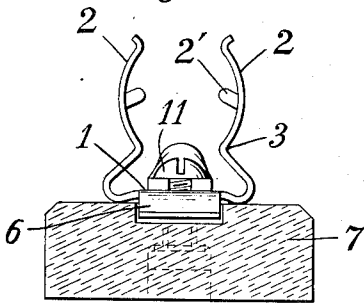
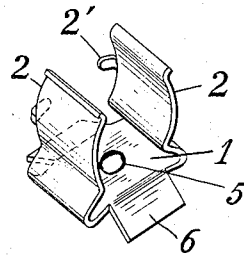


Fig. 3.



WITNESSES:

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FUSE-BLOCK CLIP.

1,025,246.

Specification of Letters Patent.

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Application filed May 16, 1911, Serial No. 627,518. Renewed January 4, 1912. Serial No. 669,437.

To all whom it may concern:

Be it known that I, ROBERT C. COLE, a citizen of the United States, residing at West Hartford, county of Hartford, and State of Connecticut, have invented the hereinafter-described new and useful Improvements in Fuse-Block Clips.

The invention relates to the structure of contact clips for fuses, and particularly to the construction and mode of attachment of clips adapted for receiving the ferrule terminals of inclosed or cartridge fuses.

The invention involves a construction of clip, and associated means for anchoring and securing the same to the insulating base-block and for securing the line terminal to the clip, the object being to reduce the number and facilitate the assembly of the parts and to provide a structure wherein the line terminal is directly attachable to the clip itself between the arms of the latter, and the clips are shaped to the base in such manner that the seating thereof produces automatically a proper alinement of the two clips, and thereafter holds them against tendency or possibility of disalignment. In its preferred form the clip is anchored to the base by means of a rivet which is tubular and internally threaded to receive the line terminal binding screw, thus obviating the necessity of special arrangements to this end and providing a fuse-block which is specially compact, and shorter than any heretofore produced, and wherein the electrical continuity between the fuse and the line is interrupted by only a single joint, which joint may have a desirably large contact area.

In the single sheet of drawings forming a part hereof, Figure 1 is a side elevation of a fuse-block embodying the invention, the several parts thereof being assembled, and one end of the block being shown in central longitudinal section. The figure also shows a standard form of cartridge fuse adapted to be inserted in the fuse block clips. Fig. 2 is a cross-section of fuse-block of Fig. 1 on the line II—II; and Fig. 3 is a perspective view of one of the clips detached.

The clips at both ends of the base-block are or may be of exactly the same structure and a description of one will therefore suffice for both. Each clip is formed of sheet metal struck up from a flat blank and having a flat central base plate marked 1, with

two relatively yielding arms 2 extending upwardly from the end portions of the base-plate. Each arm is curved inwardly as shown at 3 to form a stop shoulder for the entering fuse, and above the shoulder is formed to accommodate the general exterior contour of the ferrule 4 of the inclosed fuse. Such ferrules are commonly cylindrical in shape, and the two spring arms are therefore curved to approximately the arc of a circle of appropriate size. For other shapes of ferrules they may be formed accordingly, it being desirable only that a sufficient space be left between the two opposing arms to accommodate a screw-driver of ordinary size. Each arm is further provided with an inwardly projecting ear 2' serving to limit endwise movement of the fuse in the clip.

The base-plate of the clip is centrally perforated as shown at 5 in Fig. 3, and on each side of the perforation is provided with two wings or lugs 6 which are adapted to engage with corresponding notches or recesses formed in the upper surface of the insulating base-block 7. The lugs 6 are depressed below the plane of the base-plate 1 so that the latter may occupy a position slightly above the upper surface of the base-block while the lugs themselves are depressed below such plane into their recesses, in which position the fuse-clip at both ends will be maintained in alinement with or parallel to the longitudinal axis of the block, and each will be prevented against rotation thereon. As thus placed, the clip is permanently secured to the block by means of an eyelet 8 which is passed through the perforation 5 and through a corresponding perforation 9 in the base-block, and then upset over the margin of the perforation in the clip as indicated in Fig. 1. The lower head of the rivet is embedded and protected by a plug 10 of shellac, while its upper end is shaped in such manner as to provide a substantially flat surface on the base plate immediately surrounding the perforation therein. A clamping screw 11 is threaded into the interior of the tubular eyelet and serves as the means for attaching the terminal lug 12 of the line wire 13 directly to the clip. The mode of assembly will be plain from a consideration of the drawings, wherein it will be observed that ample contact area is provided for the line

terminal lug upon the clip, in a device having but a single screw to be manipulated, and the manner of the manipulation will be obvious from what has been said, while the
5 fuse block itself need be of but slightly greater length than the fuse.

Claims.

1. A fuse-block comprising an insulating base perforated near its extremities and provided with depressions in its upper surface
10 adjacent the perforations, in combination with fuse clips secured to the block by securing members passed through said perforations, and provided with lugs engaging
15 said depressions to maintain the alinement of the clips, and a clamping member threaded to said securing member whereby a line terminal may be clamped in electrical contact with the clip.

20 2. A fuse block comprising an insulating base block having recesses in its upper surface, fuse clips provided with depressed in-

tegral lugs occupying said recesses, an eyelet securing each lug to the base block and a line terminal clamp screw screwed into
25 the eyelet.

3. In a fuse block, a fuse clip formed of a base plate and two spring arms adapted to embrace the side or ferrule contact surfaces of an inclosed fuse, and provided with
30 a central perforation between said arms, in combination with one or more integral lugs formed on said clip to engage a base block, a securing member in the said perforation to secure the clip to the base-block and a line
35 terminal clamp screw screwed into said securing member.

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

ROBERT C. COLE.

Witnesses:

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DUNCAN C. HOOKER.