

D. C. HOOKER.
 TERMINAL CLIP FOR FUSE BLOCKS.
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1,122,754.

Patented Dec. 29, 1914.

Fig. 1.

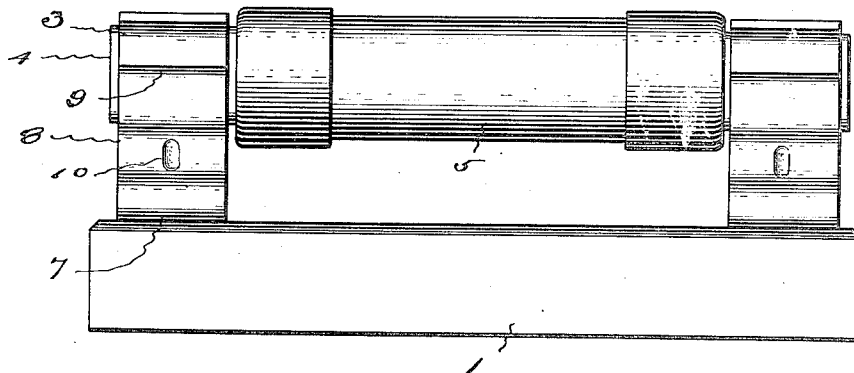
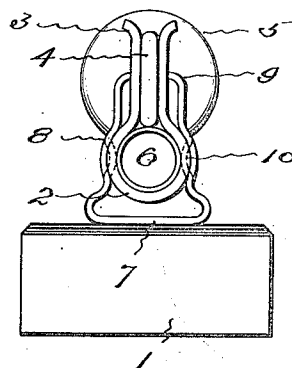


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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TERMINAL CLIP FOR FUSE-BLOCKS.

1,122,754.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DUNCAN C. HOOKER, a citizen of the United States, residing at Farmington, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Terminal Clips for Fuse-Blocks, of which the following is a specification.

This invention relates to those spring clips which are attached to fuse cut-out blocks for the connection of the ends of the circuit conductors and for receiving the terminals of inclosed electric safety fuses of the knife blade contact type.

The object of this invention is to provide a terminal clip of this nature, to which the end of the circuit conductors can be easily fastened, which has but few parts, all of which can be made by punch and die operations without other machining, consequently is simple and cheap to manufacture and assemble; which is compact, thereby permitting the use of a smaller block than is possible with prior clips of this type; and which has no mechanical joints between conducting parts, except, of course, that between the clip and a fuse terminal engaged therewith, thus eliminating the danger of overheating—the design being such that this engagement will, at all times, irrespective of the elasticity of the clip blades, be true and firm, thereby insuring maximum electrical conductivity, efficiency and durability.

Of the accompanying drawings, Figure 1 shows a side elevation of a fuse cut-out block provided with terminal clips which embody this invention, and a fuse held by such terminals. Fig. 2 shows an end elevation of the same.

The terminal shown consists of three pieces of metal only, not including the screws, rivets, eyelets or other means which may be employed to fasten the terminal to the insulating base 1. Of these three pieces, the clip is bent to shape, usually of copper, with a circular loop 2 at its inner or bent end, and a pair of blades 3 which project outwardly therefrom and are formed so as to receive and make close and flat contact with the blade terminals 4 of the fuse 5. In the clip loop is placed a ferrule or sleeve 6 which is desirably made of thin brass. This sleeve may, in practice, be soldered or welded in the clip loop, and it is designed to receive the end of the circuit conductor.

The base is desirably bent to shape from flat spring metal such as bronze or steel, preferably the latter. This base has a flat bottom 7 which is designed to be fastened to the insulating block. The sides 8 of the base are formed to receive the clip loop and the ends 9 are bent in so as to bear firmly against the outer surfaces of the clip blades and tend to force them toward each other.

The clip containing the sleeve is inserted or withdrawn axially from the opening between the spring arms of the base and the parts are desirably retained in correct relative position by forming one or more openings in the sides of the clip for receiving one or more indentations 10 formed in the sides of the spring arms of the base. The spring arms are so formed that their outer ends are normally closer together than when the clip is inserted so that a strong inward pressure is exerted against the clip blades for forcing them together. This pressure supplements the natural pressure of the contact blades and insures a true and firm contact at all times irrespective of the permanence of the temper or resilience of the clip arms.

The invention claimed is:

1. A fuse cut-out terminal consisting of a conducting spring clip formed with a loop at its inner end for the reception and attachment of a conductor terminal and a pair of spring blades projecting outwardly from said loop for the reception of a fuse terminal, and a metallic base formed with a pocket which fits and holds the clip loop and spring arms projecting outwardly from said pocket into engagement with the outer surfaces of the yielding portion of the clip blades so as to yieldingly force the blades toward each other.

2. A fuse cut-out terminal consisting of a clip which has a loop at its inner end and a pair of blades projecting outward therefrom for receiving a fuse terminal, a sleeve secured in said loop for receiving a conductor terminal, and a base which has an opening for receiving the clip loop and spring arms projecting outward therefrom into engagement with the outer surfaces of the clip blades so as to force the latter toward each other.

3. A fuse cut-out terminal consisting of a clip which has a loop at its inner end and a pair of blades projecting outward therefrom for receiving a fuse terminal, a sleeve

secured in said loop for receiving a conductor terminal, a base which has an opening for receiving the clip loop and spring arms projecting outward therefrom into engagement with the outer surfaces of the clip blades so as to force the latter toward each other, and means removably holding the clip and the base against relative longitudinal movement.

10 4. A fuse cut-out terminal consisting of a clip which has a loop at its inner end and a pair of blades projecting outward therefrom for receiving a fuse terminal, a sleeve secured in said loop for receiving a conductor terminal, a base which has an opening for receiving the clip loop and spring arms projecting outward therefrom into engagement with the outer surfaces of the clip blades so as to force the latter toward each other, and an indentation in the base projecting into an opening in the clip for removably holding the parts against relative longitudinal movement.

15 5. A fuse block having an insulating base, a metallic base-member attached to one face of the block near each end, each base-member having a pair of spring arms and a socket between the spring arms and the base, and a conducting clip-member held by each base-member, each clip-member having a wire terminal-loop that fits the socket in the base-member and a pair of spring blades that fit between and are forced toward each other by the spring arms of the base-member.

20 other, and an indentation in the base projecting into an opening in the clip for removably holding the parts against relative longitudinal movement.

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Witnesses:

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