

J. COLLINS.
FUSE BLOCK.

APPLICATION FILED APR. 18, 1908.

960,155.

Patented May 31, 1910.

FIG. 1 -

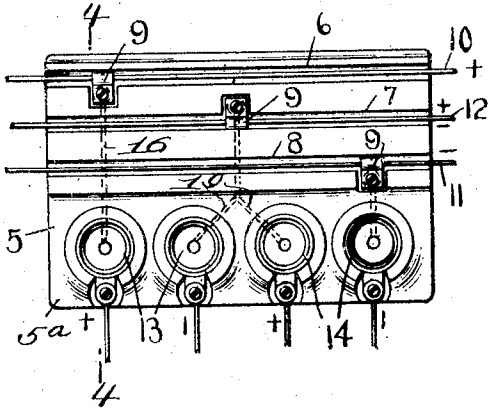


FIG. 2 -

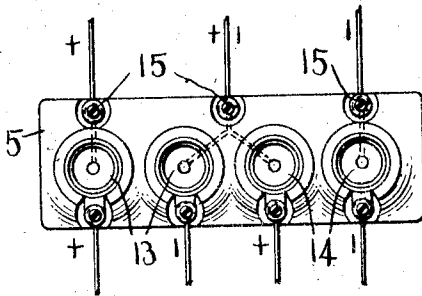


FIG. 3 -

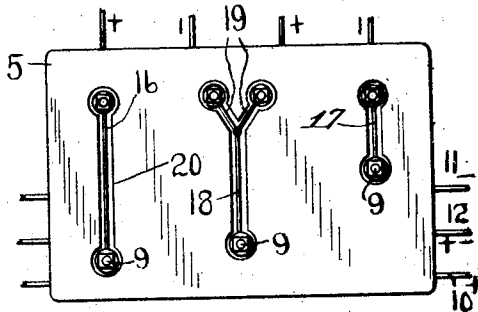
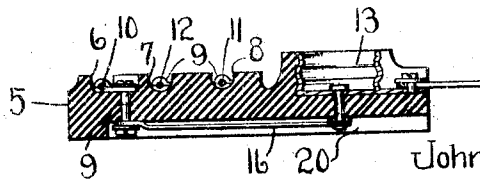


FIG. 4 -



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN COLLINS, OF WASHINGTON, DISTRICT OF COLUMBIA.

FUSE-BLOCK.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN COLLINS, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Fuse-Blocks; 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 to improvements in fuse blocks wherein two two-wire branches are led from a three-wire feeder.

In the art as ordinarily practiced, it is, in most cases, desirable, in systems of electrical illumination, to employ a three-wire feeder and two two-wire branches, as is well known. For this purpose, a construction of fuse block has always been employed in which three feed wires are passed through grooves in the central portions of the block and a pair of branch circuit terminals is arranged at each end of the block and on opposite sides of the feeders. It has been my experience that in wiring large buildings, especially where the fuse blocks are placed in a shaft which is common to the several floors, the particular construction of fuse block referred to, necessitates, in the aggregate, a considerable amount of additional construction work. This is due to the facts that the moldings in which the branch circuit wires are carried, frequently cross one another at certain points and at least one of the branch wire moldings crosses the molding in which the feed wires are carried at each floor of the building. These moldings at their points of intersection have to be fitted interlockingly by joints of special character, and for the purpose of safety, are provided with insulation sleeves. It therefore follows that a good percentage of the cost of wiring a large building, such as a hotel, office building or apartment house, is involved in the cost of joining the moldings at their points of intersection; in the use of the insulating sleeves and other incidental attachments; in the waste of the molding rendered necessary in the additional construction work referred to; and in the additional time rendered necessary by such additional construction work.

The present invention proposes a fuse block of the type referred to in the first paragraph of the specification but differing from the known construction in that the

four branch circuit terminals are located on one and the same side of the block and on such side only, and the three terminals by which the branch circuit terminals are connected to the three wire feeder are located at the opposite side of the block. This construction provides for both of the two-wire branch circuits being led from the same side of the block and it follows that with this leading-off arrangement of the branch circuits, crossing of the moldings which carry the feed wires and the branch circuit wires and the expensive additional construction work incident thereto, is not required.

Embodiments of fuse blocks in accordance with the present invention are illustrated in the accompanying drawings, wherein

Figure 1 is a plan view of a preferred form of fuse block; Fig. 2 is a plan view of a terminal fuse block; Fig. 3 is a bottom plan view of the block shown in Fig. 1 of the drawings; and Fig. 4 is a vertical sectional view on the line 4-4 of Fig. 1.

Similar characters of reference designate corresponding parts throughout the several views.

In the arrangement shown in Fig. 1, the block, designated generally by the numeral 5, is provided with the usual parallel grooves for receiving the wires of the feeder system. These grooves are designated by the numerals 6, 7 and 8, and the wires of the feeder system are designated by the numerals 10, 11 and 12, the wire 10 being led through the groove 6 and being a positive wire; the wire 11 being led through the groove 8 and being a negative wire; and the wire 12 being led through the groove 7 and being a neutral wire. The terminals of the positive, negative and neutral wires are designated by the numeral 9 and are located one in each groove in the usual manner.

At one side of the groove-receiving portion of the block 5, is an extended portion, as 5^a, which carries the branch circuit terminals. Four of these terminals are employed to connect the three-wire feeder with the two two-wire branches. The branch circuit terminals are arranged in line with one another, from end to end of the block, the pair of branch circuit terminals for one circuit being designated by the numeral 13, and the pair of branch circuit terminals for the other circuit being designated by the numeral 14, the terminals of each pair being

juxtaposed. As illustrated diagrammatically, the outer terminal 13 is tapped to the wire 10 by a connecting wire 16, which is led through the groove 20 in the underface of the block 5 (Figs. 3 and 4); the outer terminal 14 is tapped to the wire 11 by a wire 17 which is led through a similar groove in the underface of the block; and the inner terminals 13 and 14 are tapped to the wire 12, in any suitable manner, as for example, by a wire 18 which has two branches 19, that are joined to the respective terminals 13 and 14, the said wire 18 and branches 19 being for convenience led through a Y-shaped groove.

In the construction shown in Fig. 2 of the drawings, the block 5 is not provided with the feed wire grooves, as in the construction shown in Fig. 1, but has instead, terminal binding posts 15, to which the feed wires are connected. The principle of

the invention is the same in this example as in the construction shown in Fig. 1.

Having fully described my invention, I claim:

A three-wire fuse block having at least four branch circuit terminal connections at one and the same side thereof and at such side only, to provide for two two-wire branches being led from the same side of the block, in combination with three terminal connections at the opposite side of the block and whereby the branch circuit terminal connections may be connected to the positive, neutral and negative wires of a three-wire feeder.

In testimony whereof, I affix my signature, in presence of two witnesses.

JOHN COLLINS.

Witnesses:

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