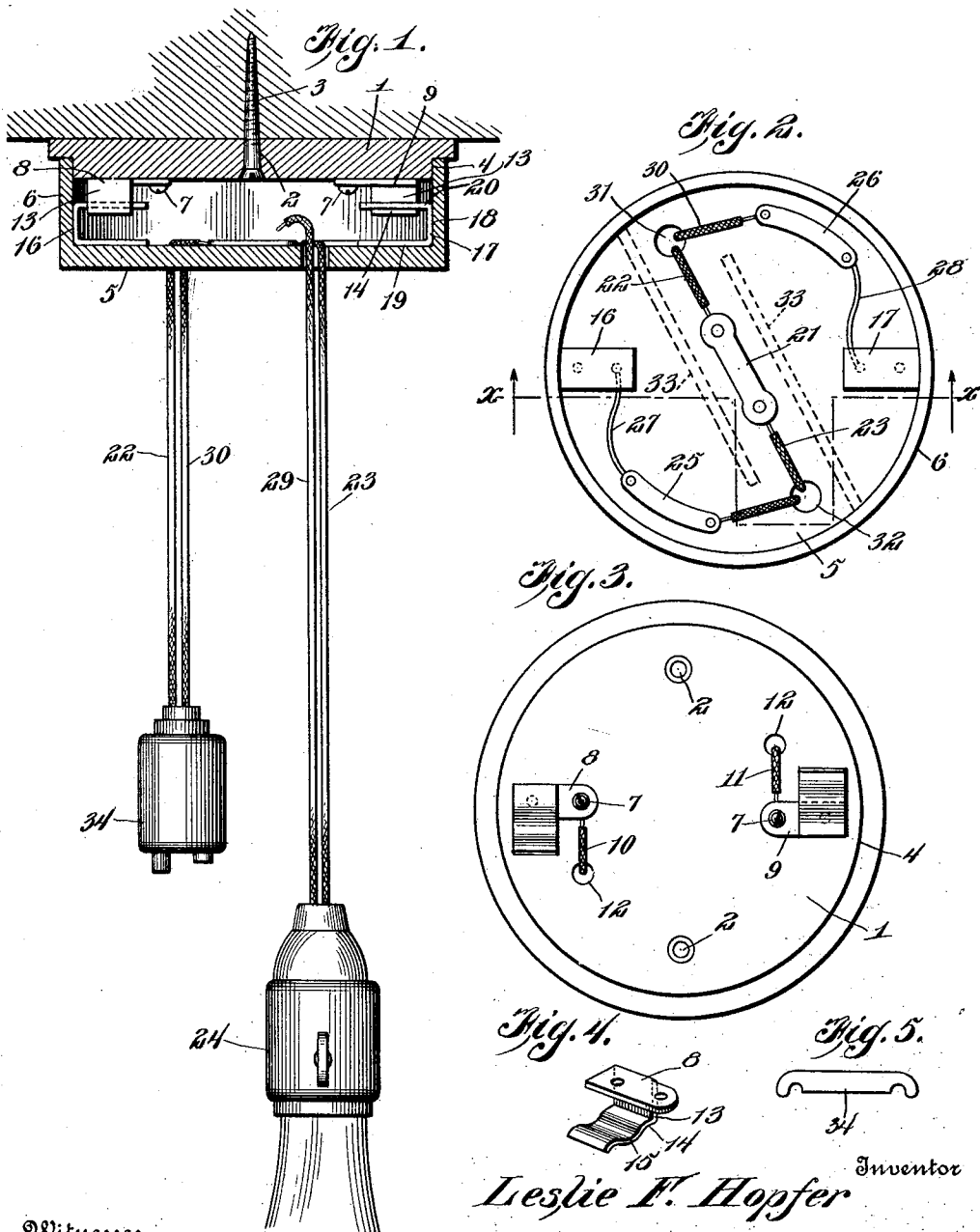


L. F. HOPPER.
 CEILING BLOCK CONNECTOR.
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1,056,679.

Patented Mar. 18, 1913.



Witnesses
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Fig. 4. Fig. 5.
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UNITED STATES PATENT OFFICE.

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CEILING-BLOCK CONNECTOR.

1,056,679.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed February 6, 1912. Serial No. 675,749.

To all whom it may concern:

Be it known that I, LESLIE F. HOPFER, a citizen of the United States, residing at Clearfield, in the county of Clearfield and State of Pennsylvania, have invented new and useful Improvements in Ceiling-Block Connectors, of which the following is a specification.

This invention relates to ceiling block connectors, the object of the invention being to provide a device of the class described, especially designed for use in connection with drop switches, the device embodying two openings, one for the switch wires and another for the lamp wires so that the same may be kept separated.

The device also embodies oppositely arranged fuse wires and these may be used either with or without baffle walls or partitions which, when a strong current is used, will avoid the liability of an arc forming between the terminals.

The device hereinafter particularly described may also be used for two lamps, by putting a lamp on each wire instead of using one set of wires for the lamp and the other set for the switch.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts, set forth in and falling within the scope of the appended claims.

In the accompanying drawing:—Figure 1 is a sectional view of the ceiling block connector, showing a lamp and drop switch connected thereto. Fig. 2 is a plan view of the detachable member of the block. Fig. 3 is an inverted plan view of the base member. Fig. 4 is a detail perspective view of one of the clamps. Fig. 5 is a detail plan view of a notched plate or strip to take the place of the fuse wires.

The connector block contemplated in this invention comprises essentially a base member 1 which may consist of porcelain wood or other insulating material, the same being provided with a central opening 2 adapting the same to be secured to a ceiling by a screw 3 or its equivalent. The base member is preferably rabbeted around its outer edge, as shown at 4.

The detachable member 5 of the block consists of a hollow cylindrical casing, the outer peripheral flange 6 of which is adapted to fit into the rabbet 4 in the base mem-

ber and to be secured in such position, as will hereinafter be particularly described.

Connected fixedly to the base member 1, preferably by means of bolts 7 having screw-like heads, as shown in Fig. 1, are two diametrically opposite terminals 8 and 9, to which the line wires 10 and 11 are connected, as best illustrated in Fig. 3, said wires passing outward through openings 12 in said base. Each of the terminals 8 and 9, is provided with a downwardly extending shank 13 at the end of which is a horizontally-projecting spring rib 14, forming a clamp for engagement with a corresponding or complementary clamping element on the detachable section 5 of the block. The lip or projecting portion 14 of the clamp is corrugated, as shown, for a purpose which will hereinafter appear.

Secured to the inner surface of the detachable section 5 are two other diametrically opposite clamping elements and terminals 16 and 17, each embodying a shank or body 18, a base 19 firmly secured to the bottom wall of the member 5 and an inwardly projecting lip or clamping portion 20 which, like the clamping portion 14 above referred to, is corrugated so as to interlock therewith, the corrugations of both portions 15 and 20 being substantially radial to the center of the block and the interlocking and unlocking of said elements being effected by a partial rotative movement of the detachable member 5 while applied in the correct relation to the base member 1.

Arranged centrally of and secured to the detachable member 5 is a connector plate 21 to one end of which is connected one of the drop switch wires 22 while to the other end of said connector plate is attached one of the wires 23 of a suitable lamp, shown at 24. At diametrically opposite places are located fuse plates 25 and 26, the same being connected by fuse wires 27 and 28 to the bases 19 of the clamps 16 and 17, as shown in Fig. 2. The other lamp wire 29 is connected to the fuse plate 25 while the remaining switch wire 30 is attached to the other fuse plate 26. It will also be observed that the detachable member 5 is provided with two diametrically opposite openings 31 and 32. Through the opening 31 pass the two wires 22 and 30 while through the other opening 32 pass the wires 23 and 29. In order to prevent any liability of an arc forming be-

tween the terminals, I sometimes provide the detachable member 5 with substantially parallel baffle partitions 33 arranged at opposite sides of the central connector plate 21, as indicated by dotted lines in Fig. 2. These baffle partitions also serve to keep the wires separate and distinct from each other.

In order to mount the ceiling block connection, the detachable member 5 is placed against the base member 1 in proper relation thereto and given a partial turn, thereby causing the clamps of one member to interlock by means of the corrugations with the clamps of the other member. To take down the ceiling block it is only necessary to reverse the operation just above described, thereby throwing the clamps out of interlocked engagement with each other. Instead of connecting up the lamp on a drop switch, as shown in Fig. 1, it will be understood that two lamps may be connected up by the ceiling block by mounting an additional lamp in the wires 22 and 30 to which the drop switch, indicated at 34, is connected.

In case a switch is used which does not employ the fuse wires 27 and 28, the connector plate or strip 34, shown in Fig. 4, may be substituted for such fuse wires, the same being terminally connected to the same parts shown bridged by the fuse wires in Fig. 2.

I claim:—

1. A ceiling block connector, embodying a base member, and a detachable member, and combined terminals and clamps on both members having the line wires and lamp wires connected therewith, said terminals and clamps having interlocking corrugations substantially radial to the center of the block adapted to be interlocked and unlocked by a partial rotative movement of the detachable member, a central connector plate, and fuse plates located at opposite sides of the connector plate.

2. A ceiling block connector embodying a base member, line terminals thereon, a detachable member, lamp and switch terminals thereon adapted to interlock with the terminals on the base member by a partial rotative movement of the detachable member, the latter having independent openings for the switch and lamp wires, a central connector plate, fuse plates located at opposite sides of the connector plate, and two baffle partitions arranged on opposite sides of the connector plate and interposed between the connector plate and the fuse plates.

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

LESLIE F. HOPFER.

Witnesses:

DAVID MULLIN,
ROBERT BUTLER.