

H. J. BLAKESLEE.
ELECTRICAL DISTRIBUTING BOARD.
APPLICATION FILED JUNE 5, 1907.

955,126.

Patented Apr. 19, 1910.

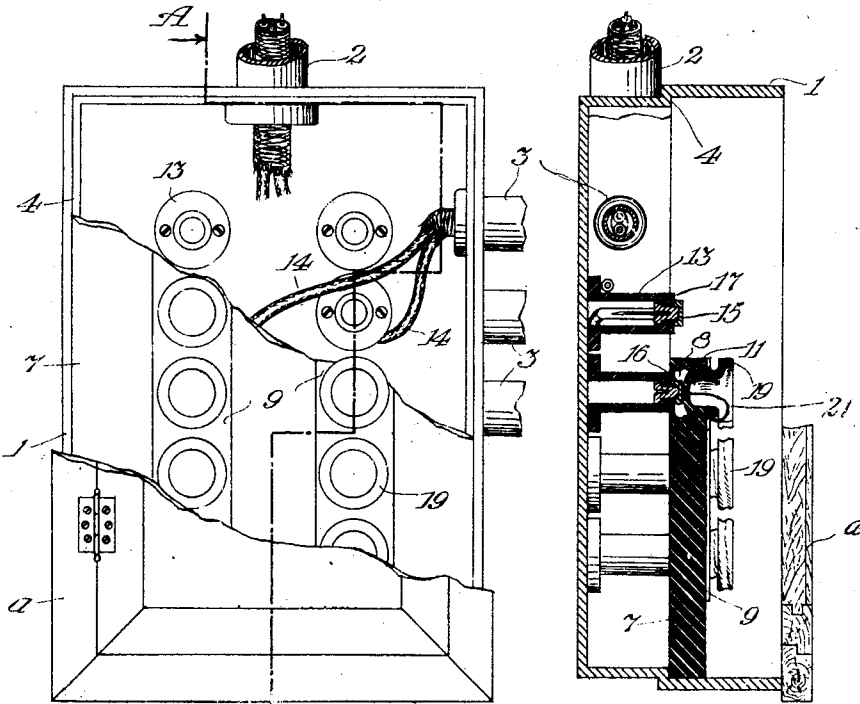


Fig. 1. A

Fig. 2.

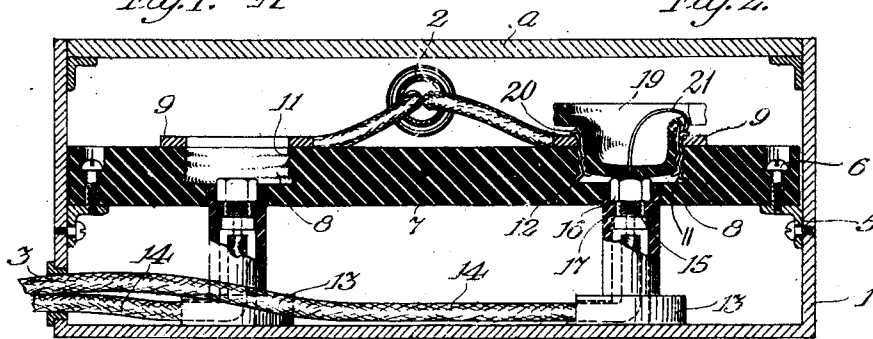


Fig. 3.

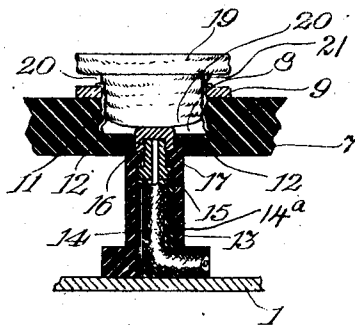


Fig. 4.

Witnesses:-
Harold L. Blwood
E. P. De Giorgi

Inventor
Henry J. Blakeslee
per:
Risley & Love
Attorneys

UNITED STATES PATENT OFFICE.

HENRY J. BLAKESLEE, OF UTICA, NEW YORK.

ELECTRICAL DISTRIBUTING-BOARD.

955,126.

Specification of Letters Patent.

Patented Apr. 19, 1910.

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To all whom it may concern:

Be it known that I, HENRY J. BLAKESLEE, a citizen of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Electrical Distributing-Boards, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to an improved distributing board for electric supply systems, and I declare the following is a full, clear, concise and exact description thereof sufficient to enable one skilled in the art to make and use the same, reference being had to the accompanying drawings in which like letters and numerals refer to like parts throughout.

The invention comprises several new and useful features, both in the matter of economy and efficiency, as will appear from the description and drawings which disclose but a single illustration of my invention.

In the drawings Figure 1 is a plan view of a distributing box, parts being broken away, and Fig. 2 is a sectional view of the same on line A—A of Fig. 1. Fig. 3 is a cross sectional view but with a slight modification, and Fig. 4 is a detail view of a portion.

Referring to the figures in detail, 1 represents the box as a whole which is to be provided with suitable supporting means and is apertured for conduit 2 and a plurality of conduits 3, 3 for branch wires. The sides of the box, or certain of them, as shown in Fig. 1, have interior shoulder 4 on which to support the distributing board or super-base by suitable attachments not necessary to describe or show.

In Fig. 3 is shown an alternative form of support for the board, consisting of small brackets 5 secured to the box-walls and pierced for screws 6 through the board. A cover, *a*, is shown in Fig. 3 to be mounted and secured by suitable means.

The distributing board or super-base is shown by 7 and consists of an insulating plate, as of slate or the like, and is pierced at a plurality of points, 8, 8, preferably arranged in pairs, to allow access for electrical contact means from one side of the board to contact points on the other side. On the board are fixed bus-bars 9, 9, (as by means

of a shell to be described) having holes arranged so that the holes of one bus-bar register with one of the holes of each pair of holes in the board and those of the other bus-bar register with the other hole of each such pair.

The hole in the board need not be of a uniform diameter through the board but may be substantially larger on the side of the bus-bar and for perhaps half the thickness of the board, the further portion of the bore being smaller, as clearly seen in the present showing of the device in the drawings, the different bores being shown as concentric.

The former portion of the bore has secured therein a conductive shell 11 interiorly threaded, for instance, to receive a plug. The shell may be secured in the aperture in the super-base or board in any suitable manner but I show it as being swaged in place, the inner end being forced in a flare into a slight recess 12 at the base of the larger bore. The other or outer end of the shell is shown (Fig. 4) as slightly overlapping the bus-bar to hold that in place. Other suitable means may be preferred to hold the bus-bar in place.

On the base of the box are mounted, by any suitable means, non-conductive studs 13, 13, centrally bored and having a lateral intercepting bore to receive wire 14, which is held in place at the end of the stud by being secured to a small conductive bolt 15 having nut 16, providing a contactor point, the bolt and the nut being held in place when properly adjusted, and also holding the wire, by the engagement of the head of the bolt and nut with shoulder 17 formed in the bore of the stud 13. Connection is made between the wire 14 and the nut 16 whereby the nut becomes and acts as a contact point. The space in the stud which is not taken up by the wire and its supports may be filled by a water-proof compound, 14^a, of suitable nature. The plug 19 is made generally of porcelain or the like and has around it a thimble 20 threaded to register with the shell 11 and be secured therein by any suitable means. In the plug is wire 21, which is the fuse referred to herein, and which connects at one end with the thimble 20 as seen in Fig. 4 and at the other end forms a terminal for contact at point 16 with the ter-

minal of wire 14. The current is thus established from the bus-bar through the shell and thimble to the fuse proper and thence to the contact point 16. It will be evident, however, that the interposition of the thimble 20 is not essential since the fuse 21 might be formed at the other end to contact directly with the shell 11, as seen at the right in Fig. 3, and, that the shell 11 might be omitted, if other means be preferred to hold the bus-bar in place, when the fuse 21 would contact directly with bus-bar 9.

One of the wires in conduit 2 is connected to one bus-bar and the other wire to the other bar. This may be done by any of the means familiar to those skilled in the art. The current coming in on one wire passes through the connected bus-bar. A plug being inserted in any hole in that bus-bar establishes connection between the bus-bar and the adjacent wire 14, by which the current passes through the branch and returns on the other wire 14 to the other bus-bar and to the other wire in conduit 2.

Various modifications can be made and I do not limit myself to the particulars shown and described as they are but an illustration of the invention in one form.

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

1. In a distributing board, a base of insulating material having apertures there-through, a bus-bar fixed upon one face of the base, a circuit terminal mounted independent of the base on the opposite side thereof, and a plug adapted to be held in the said aperture and adapted to make electrical connection through a fuse contained therein from said bus-bar to said terminal, substantially as described.

2. In a distributing board, a containing cabinet, insulated terminals for branch circuits fixed within said cabinet, a super-base removably mounted in said cabinet in such manner as with the box to inclose said branch circuit terminals, bus-bars fixed upon said super-base, said super-base and bus-bars having apertures and electrical conductive means adapted to be inserted into said apertures and establish electrical connection between the bus-bars and the terminals, substantially as described.

3. In a device of the character described, a base, a super-base removably mounted therewith and being insulated, bus-bars apertured and having shells secured to the walls thereof whereby to secure the bus-bars to the super-base, the latter being apertured therefor, and insulated studs mounted on the base and with a bore registering with the aperture in the bus-bar, substantially as described.

4. In a device of the character described, a base and a super-base, the latter being pro-

vided with bus-bars and the former with studs, the said studs, super-base and bus-bars having registering apertures for the insertion of electrical conductive members in contact, substantially as described.

5. In a device of the character described, a base of insulating material and a bus-bar fastened thereto by means of a metallic shell attached to the bus-bar, the base being recessed to receive the shell and the shell being swaged in said recess, a plug carrying a fuse-wire adapted to be inserted and held in the shell, said shell also serving as a medium for electric connection between the bus-bar and the fuse-wire, substantially as described.

6. In a device of the character described, a base, a super-base and a bus-bar thereon, both being apertured and the bus-bar being held to the super-base, a non-conductive stud on the base let into said aperture and having a current wire and a contactor therewith, and a plug adapted to be inserted in the aperture and make a circuit between the contactor and the bus-bar, substantially as set forth.

7. In a device of the character described, a base, a super-base and a bus-bar thereon, both being apertured, a conductive shell secured to the bus-bar and securing it to the super-base, a contactor on the opposite side of the super-base and a plug adapted to be inserted in the apertures and having means to make electrical connection between the bus-bar and the contactor, substantially as set forth.

8. In a device of the character described, a base, a super-base and a bus-bar thereon, both being apertured and the bus-bar being held to the super-base by a shell secured to the latter, a non-conductive stud on the base let into said aperture and having a current wire and a contactor therewith, and a plug having means to make electrical contact between the contactor and the bus-bar, substantially as set forth.

9. In a device of the character described, a base, an insulating super-base, bus-bars apertured and having shells secured to the walls thereof whereby to secure them to the super-base, the latter being apertured therefor, insulated studs mounted on the base with a bore registering with the bus-bar, and means whereby to establish electrical connection between the bus-bar and the stud, the latter comprising a contact point, substantially as described.

10. In a device of the character described, a base with a super-base, the latter being provided with bus-bars and the former with studs, the said studs, super-base and bus-bars having registering apertures for the insertion of electrical conductive members in contact, and said electrical conductive members, substantially as described.

11. In a device of the character described, the combination with an insulating super-base having a bus-bar secured thereon, the bus-bar and the super-base being apertured, of an independent contactor point, a plug carrying a wire one end whereof is adapted to contact with the bus-bar and the other end to contact with the contactor point upon

the insertion of the plug in the bus-bar, substantially as described.

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

HENRY J. BLAKESLEE.

Witnesses:

ELEANOR T. DE GIORGI,

HENRY M. LOVE.