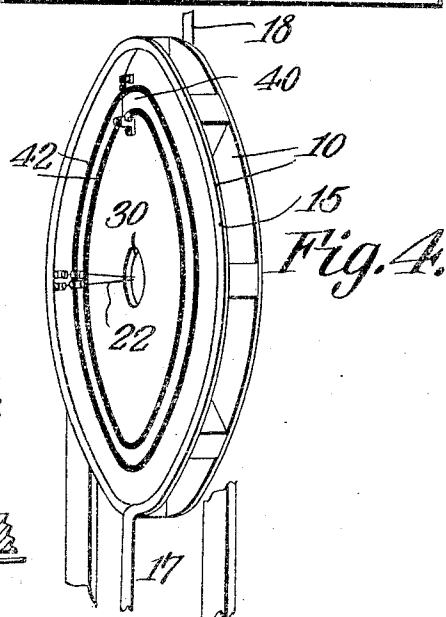
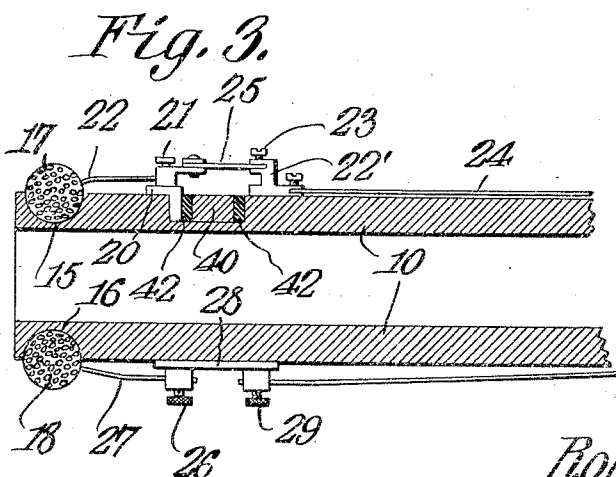
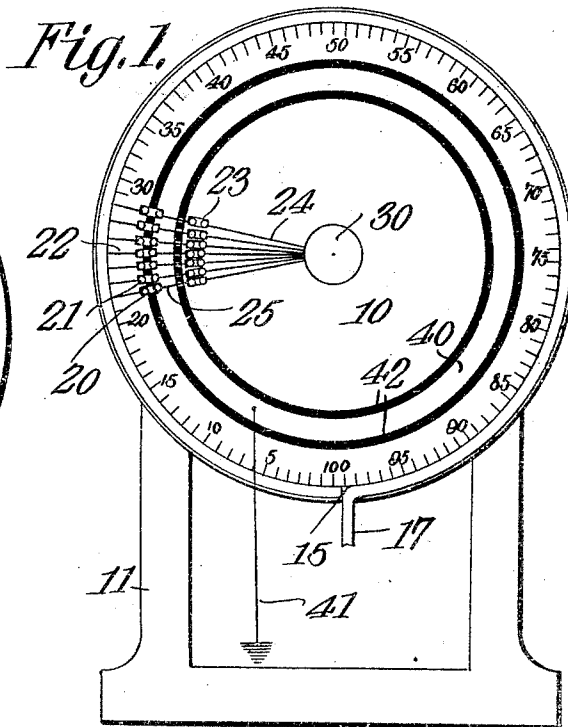
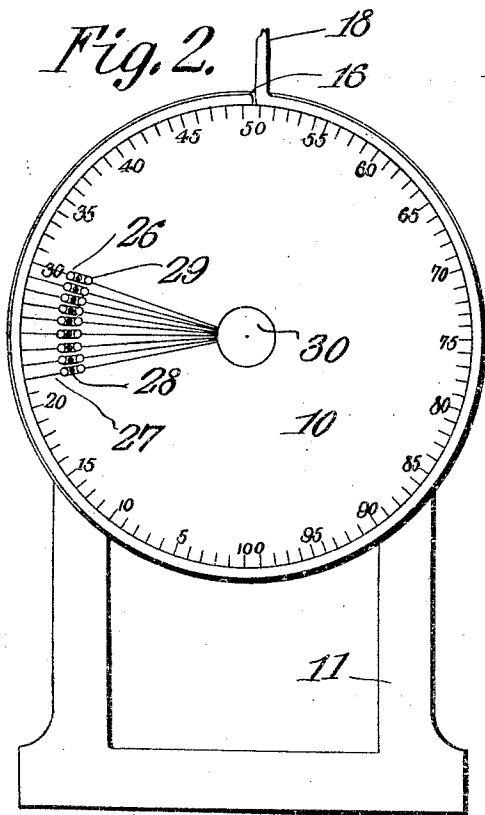


R. G. HARDGRAVE.
FUSED DISTRIBUTING BOARD AND CROSS CONNECTING RACK.
APPLICATION FILED MAY 3, 1909.

958,808.

Patented May 24, 1910.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT G. HARDGRAVE, OF TUCUMCARI, TERRITORY OF NEW MEXICO.

FUSED DISTRIBUTING-BOARD AND CROSS-CONNECTING RACK.

958,808.

Specification of Letters Patent.

Patented May 24, 1910.

Application filed May 3, 1909. Serial No. 493,612.

To all whom it may concern:

Be it known that I, ROBERT G. HARDGRAVE, a citizen of the United States, residing at Tucumcari, in the county of Quay and Territory of New Mexico, have invented a new and useful Fused Distributing-Board and Cross-Connecting Rack, of which the following is a specification.

This invention relates to distributing boards for telephone systems, and has for its principal object to provide a distributing board of novel construction wherein all of the jumper wires may be of precisely the same length, so that any wire may be detached from a street cable or switch board cable terminal and connected to any other terminal, it being unnecessary to cut jumpers of different length for different connections, so that considerable time and expense may be saved where connections are frequently altered.

A further object of the invention is to provide a distributing board of very simple construction in which a large number of connections may be made in small space, and in which all of such connections are freely accessible.

A still further object of the invention is to provide a distributing board having connections on one side for the street cable, and on the opposite side for the switch board cable, the jumper connections being arranged to extend through an opening formed at the center of the distributing board.

A still further object of the invention is to provide a distributing board in which a single grounded block or ring of carbon or like material is employed as a lightning arrester for all of the circuits.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is an elevation of one face of the distributing board showing the street cable connections. Fig. 2 is a view of the opposite face of the board showing the switch board cable

connections. Fig. 3 is a transverse sectional view of a portion of the board drawn to an enlarged scale. Fig. 4 is a perspective view of the board as seen from the side shown in Fig. 1.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The board comprises principally a circular block or slab 10 formed of marble, slate or other suitable material, and is supported on a bracket or stand 11. At the periphery of the plate are formed two annular grooves 15 and 16 arranged, respectively, on opposite sides of the slab or support and adapted to receive one the street cable 17, and the other the switch board cable 18, the two cables being fanned out in order to make the necessary connections.

Arranged around the outer face of the board or slab is a series of metallic blocks 20 carrying binding posts 21 to which the wires 22 of the street cable are connected, and in radial alinement with each of the binding posts 21 is a bracket 22' carrying a binding post 23 to which the end of the jumper wire 24 is connected. The binding post 21 and the bracket 22' are provided with connections for a fuse 25 which may be formed of any suitable material.

On the opposite side of the board or slab are arranged screws 26 to which the wires 27 of the switch board cable are connected, and one of these screws serves to secure a small plate 28 to the face of the board. This plate 28 carries a binding post 29 to which the opposite end of a jumper wire is connected, said jumper wire being arranged to extend through an opening 30 at the center of the board in order to connect the street cable wires on one side, with the switch board cable wires on the opposite side.

It will be seen that all of the jumper wires may be made of precisely the same length, and may be connected to any one of the binding posts 23 of the street cable connection or any one of the binding posts 28 of the switch board connection, so that it becomes an easy matter to change numbers or to connect any new lines by merely shifting one or both ends of the jumper wires in accordance with the street cable line to be connected to the switch board cable line, and it is unnecessary to cut separate jumper wires for each connection, as

must be done in distributing boards of the ordinary construction.

The face of the slab 10 is provided with an annular groove in which is arranged a ring 40 formed of carbon or other suitable material and connected by a wire 41 to ground. The opposite edges of the carbon ring are spaced from the walls of the groove by small strips 42 formed of mica or similar material, and it will be noted that the blocks 20 to which the terminals of the street cables are connected bear against the outer edges of these mica strips, so that in case of a static discharge the current will ground through the carbon ring, and will not be conducted through the jumper wires and switch board cable to the switch board proper. It is preferred to make the mica strips separate so that when one is destroyed by the passage of a current, another strip may be readily substituted therefor.

I claim:—

1. A distributing board having street cable connections on one side and switch board cable connections on the opposite side, the said sides being the front and rear of the board, and interchangeable jumper wires extending between said connections.

2. A distributing board having street cable connections on one side and switch-board cable connections on the opposite side said board having an approximately cen-

tral opening for the passage of the jumper wires.

3. A distributing board of disk-like form having street cable connections on one side, and switch board cable connections on the other side, the board being provided with a central opening for the passage of the jumper wires.

4. A distributing board of disk-like form having marginal supports at each side, one for the street cable and the other for the switch board cable, said board having an approximately central opening, and jumper wires extending through the opening to connect the street cable terminals with the switch board cable terminal.

5. A distributing board of disk-like form having a central opening and provided with an annular groove in one face, a carbon ring seated within the groove, insulating strips, street cable connections in the form of blocks resting against the insulating strips, binding posts for the jumper wires, and fuses arranged between the blocks and the binding posts.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ROBERT G. HARDGRAVE.

Witnesses:

MYRON B. KEATOR,
CATHERINE CHASE.