UNITED STATES PATENT OFFICE

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MASTER-CONTROLLED SYSTEM OF ELECTRIC-LIGHT WIRING.

1,170,924.


Application filed September 19, 1912. Serial No. 790,592.

To all whom it may concern:

Be it known that I, Irvir L. Matson, a citizen of the United States, and a resident of Marshfield, in the county of Plymouth and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Master-Controlled Systems of Electric-Light Wiring, of which the following is a full and exact description.

The object of this invention is the construction of means whereby some one light in each of any desired group of rooms can at any moment be turned on by a conveniently located master-switch, whereby anyone, under fear of intruders in the house, can instantly by the manipulation of a single switch, illuminate every room in the building.

Referring to the drawings forming part of this specification, Figure 1 is a diagram of the rooms of a dwelling showing variously arranged incandescent lights in the several rooms, and with one lamp in each room lighted. Fig. 2 is a diagram of the wiring by means of which one or more lights in each room are made controllable both by their individual key or switch and by a master-switch. Fig. 3 shows duplicate master-switches.

In Fig. 1 are represented four rooms, in one of which is located a master-switch S designed to control the current to each of the incandescent lamps 1 in the four rooms, while the lamps 2 are not so controlled. In room 3 is located a single pendent light controlled by a usual wall switch s; and in room 4 is located a chandelier composed of three lamps all controlled by a wall switch s; and in rooms 5 and 6 all the lights shown are of the wall type each having its usual individual key. This illustrates most of the well known arrangements of incandescent lamps, and is sufficient for disclosing the purposes of my invention.

Referring to Fig. 2, 10 and 11 are the feed wires taking their current from any suitable source. The current is fed from the positive wire 10 direct to the lamps 1 and 2, and returned through wires 12, switches 13 and wires 14 to the common return wire 11. For putting certain of said lights under the control of a single master-switch, each light 1 has its contact 15 connected by a wire 16 to a common wire 17 leading to one contact of the master-switch S, while the other contact of the master-switch is joined by a wire 18 to the return wire 11. Hence, whenever the master-switch is closed, every light 1, if not already incandescent, is immediately lighted, and remains in that condition until the master-switch is opened.

If more than one master-switch is desired, in order, for instance, to have one near the bed in two separate rooms, the two master-switches S and S' (Fig. 3) are made of the well known three-way type, one being connected with the wire 17, and the other with the wire 18, and the other points thereof being joined by the two wires 19. Thus disposed, either master-switch can light the lamps independently of the other.

In case some of the incandescent lamps have two controlling switches on separate floors, the wiring therefor is arranged as illustrated for the lamp 1* in Fig. 2. Here the three way switch 13* for one floor is similar to the other of the switches 13, all being of a well known form, but the wire 14*, instead of being connected with said three way switch, is extended to the four way switch 20 on the other floor, and the wire 15* is similarly extended to the four way switch. The contacts 15 and 21 of the three way switch are wired to the other contacts 55 of the four way switch by means of the leads 22, 23. With the switches and wiring thus disposed, the master-switch can turn on the current to the lamp 1* or master-switch S by no matter how the three way and four way switches may be left.

The lamps 1* and 2* illustrate an arrangement of a chandelier wherein one of the lights is controlled by the master-switch, and another is on a separate circuit, but both lights have a common switch independent of the master-switch. This common switch is a combined two-pole and three-point switch, mechanically united but electrically separated; the two-pole switch 25 being joined by a wire 26 to the lamp 2*, and its contact 27 being connected by a wire 28 to the return 11*.

The three point switch 30 is connected by a wire 31 to the lamp 1*; one contact 32 is connected by a wire 33 to the return 11*, and the other contact 34 is connected by a wire 35 to the wire 17. Hence, when the combined switches are in the position illustrated, and the current is thereby switched...
off from both lamps 1" and 2", the closing of the master-switch S completes the circuit to the lamp 1" and causes the same to be alone lighted.

What I claim is:

1. The combination of electric lamps located in groups, means including circuits for delivering current to said lamps, switches individual to each of said groups controlling the circuits of said lamps, a master-switch, and wiring connecting the latter with said current delivering means and with a part of the lamps in each group for delivering current thereto independently of said individual switches.

2. The combination of a group of electric lamps, means including circuits for delivering current thereto, a combined two-pole and three-point switch mechanically united to move simultaneously, the two-pole switch controlling the circuit to part of said lamps, the three-point switch controlling the remainder of the lamps, and a master-switch wired to said three-point switch.

In testimony that I claim the foregoing invention, I have hereunto set my hand this 17 day of September, 1913.

IRVING L. MATSON.

Witnesses:

A. B. UPHAM,

JOSEPH W. DOWNS.