

E. M. CARR.
ELECTRIC SWITCH.
APPLICATION FILED MAR. 14, 1908.

913,809.

Patented Mar. 2, 1909.

Fig. 1.

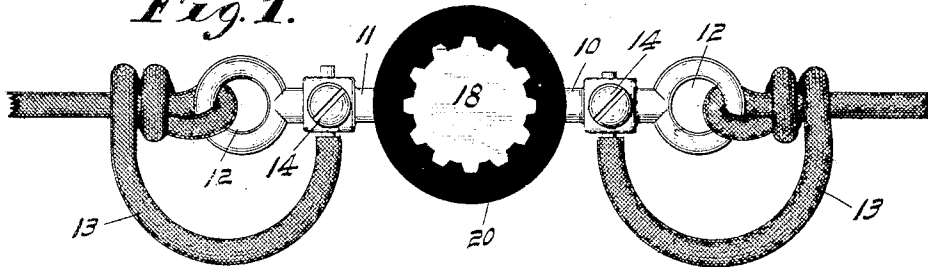


Fig. 2.

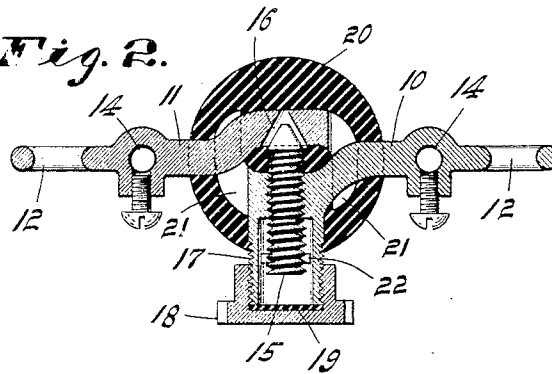


Fig. 3.

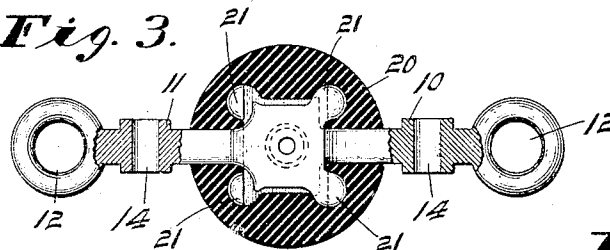


Fig. 4.

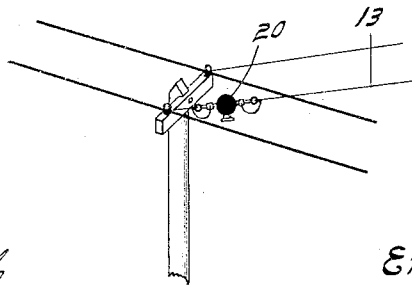
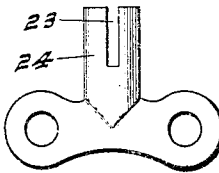


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

EMORY M. CARR, OF NEWCASTLE, INDIANA.

ELECTRIC SWITCH.

No. 913,809.

Specification of Letters Patent.

Patented March 2, 1909.

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To all whom it may concern:

Be it known that I, EMORY M. CARR, a citizen of the United States, residing at Newcastle, in the county of Henry and State of Indiana, have invented certain new and useful Improvements in Electric Switches, of which the following is a specification.

The object of my invention is to provide a device to be placed in a service circuit, preferably close to a pole or other support and suspended in the line of one of the electric conductors of an electric circuit supplying electricity to a consumer, so that the current may be turned off or on at any time without entering consumer's premises or disturbing or disconnecting any wires.

The accompanying drawings illustrate my invention.

Figure 1 is an under plan view of the switch and the proper connections for suspending it in the line; Fig. 2 is a section; Fig. 3 is a section at right angles to Fig. 2; Fig. 4 a perspective on a smaller scale showing the switch arranged in one side of the consumer's circuit leading from main feeders, and Fig. 5 is a detail of a key.

In the drawings 10 and 11 indicate a pair of metallic members each of which is preferably provided at its outer end with an eye 12 through which the conductor 13 may be passed. As the conductor 13 is preferably insulated I consider it advisable, in order to insure a better contact than would be possible by merely having the conductor at eye 12, to provide each of the members 10 and 11 with a binding post 14 to receive the end of the adjacent conductor 13.

Threaded transversely through the inner end of member 10 is a contact screw 15 having an inner end adapted to seat in a contact seat 16 formed in the inner end of member 11. In order to protect the outer end of the screw 15 member 10 is provided with a sleeve 17 within which screw 15 is mounted and this sleeve is threaded to receive a cover or cap 18 provided with a packing 19 to make the structure water tight.

The inner ends of members 10 and 11 are embedded in an insulating block 20 which holds them in fixed relation to, but insulated from, each other except as contact is made through screw 15. In order to insure against breakage I prefer to form members 10 and 11 at their inner ends so that they may be overlapped and I also provide each

of said members, at its inner end, with one or more transversely extending hooks or fingers 21 which lie within the block 20 and resist the pull of conductors 13.

In manufacture, screw 15 is moved into engagement with seat 16 and the parts are then embedded in a plastic which will harden to form block 20 the plastic being preferably molded into a round ball to give neatness of appearance. Of course the block 20 may be formed in any other desirable manner without departing from my invention.

In order to prevent tampering with screw 15 I prefer to so form it as to require a special key for its manipulation and of course any special form may be adopted. In the drawings I have shown screw 15 provided, at its outer end, inside sleeve 17, with a cross pin 22 adapted to be received in a slot 23 of a socket key 24.

In use the device is connected into one side of a circuit at any desired point, for instance at the pole supporting the main feeder wires at the point where the service circuit is taken off, and by turning screw 15 into or out of seat 16 the service circuit may be established or broken without entering the premises of the consumer. The members 10 and 11 being embedded in the block 20 at the point of possible contact, (i. e. screw 15 and seat 16) these parts are thoroughly protected from the weather and there is no danger of short circuiting with moisture.

I claim as my invention:—

1. A switch comprising a pair of conductors having adjacent portions embedded in an insulator, and a movable member carried by one of said conductors and adapted to be moved into and out of contact with the other conductor.

2. A switch comprising a pair of conductors having adjacent portions embedded in an insulator, and a movable member carried by one of said conductors and adapted to be moved into and out of contact with the other conductor within the insulator.

3. A switch comprising a pair of overlapping but electrically separated conductors, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator.

4. A switch comprising a pair of overlapping but electrically separated conductors

each having transversely extending fingers, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator.

5. A switch comprising a pair of overlapping but electrically separated conductors, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator and means for protecting the outer end of said screw.

6. A switch comprising a pair of overlapping but electrically separated conductors each having transversely extending fingers, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator and means for protecting the outer end of said screw.

7. A switch comprising a pair of conductors having adjacent portions embedded in an insulator, and a movable member carried by one of said conductors and adapted to be moved into and out of contact with the other conductor, and an eye and a binding post carried by each of said conductors at its outer end.

8. A switch comprising a pair of conductors having adjacent portions embedded in an insulator, and a movable member carried by one of said conductors and adapted to be moved into and out of contact with the other conductor within the insulator, and an eye and a binding post carried by each of said conductors at its outer end.

9. A switch comprising a pair of overlapping but electrically separated conductors, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of

said conductors and adapted to contact with the other within the embedding insulator, and an eye and a binding post carried by each of said conductors at its outer end.

10. A switch comprising a pair of overlapping but electrically separated conductors each having transversely extending fingers, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator, and an eye and a binding post carried by each of said conductors at its outer end.

11. A switch comprising a pair of overlapping but electrically separated conductors, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator and means for protecting the outer end of said screw, and an eye and a binding post carried by each of said conductors at its outer end.

12. A switch comprising a pair of overlapping but electrically separated conductors each having transversely extending fingers, an insulator connecting and embedding the overlapping portions of the conductors, a conductor screw threaded through one of said conductors and adapted to contact with the other within the embedding insulator and means for protecting the outer end of said screw, and an eye and a binding post carried by each of said conductors at its outer end.

In witness whereof, I, have hereunto set my hand and seal at Newcastle, Indiana, this ninth day of March, A. D. one thousand nine hundred and eight.

EMORY M. CARR. [L. s.]

Witnesses:

JAMES H. FISHER

ARTHUR T. WHITE.