C. R. MESTON & H. I. FINCH.

ELECTRIC SWITCH OPERATING ROD.

APPLICATION FILED JULY 6, 1910.

1,000,536. Patented Aug. 15, 1911.

Fig. 1.

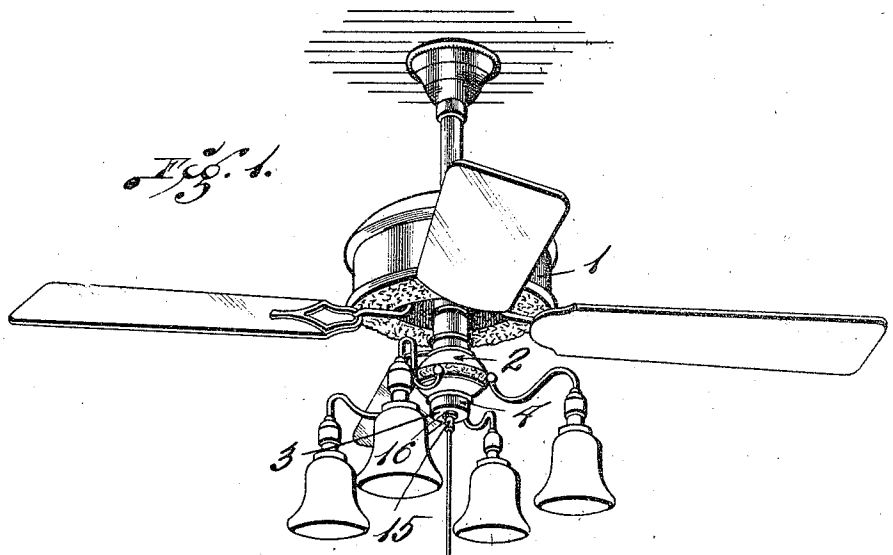


Fig. 3.

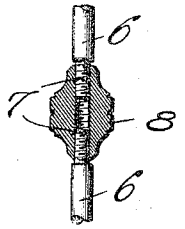


Fig. 2.

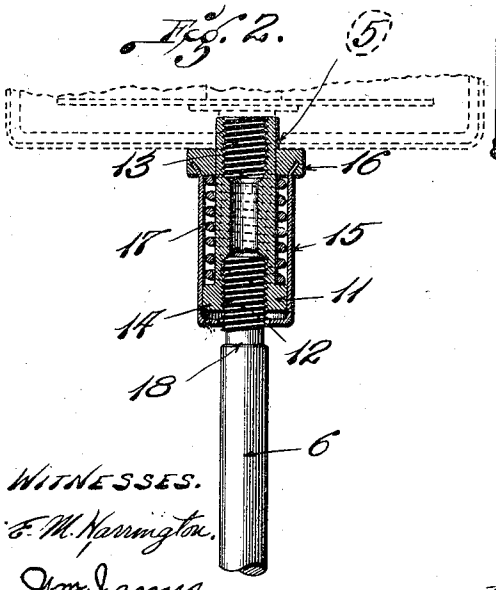
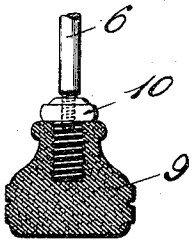


Fig. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES R. MESTON AND HERBERT I. FINCH, OF ST. LOUIS, MISSOURI, ASSIGNORS TO EMERSON ELECTRIC MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

ELECTRIC-SWITCH-OPERATING ROD.

1,000,536. Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed July 6, 1910. Serial No. 570,679.

To all whom it may concern:

Be it known that we, CHARLES R. MESTON and HERBERT I. FINCH, citizens of the United States, residing in St. Louis, Missouri, have invented a certain new and useful Improvement in Electric-Switch-Operating Rods, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a general view of our improved device as applied to a ceiling fan. Figs. 2, 3 and 4 are detail views.

This invention relates to a new and useful improvement in a rod to be used most especially in connection with a switch in an electric circuit.

The improvement has been shown and will be described in connection with a ceiling fan to which use it is especially adapted. It will be obvious, however, that it may be used in various other connections. In the type of fan which has been illustrated, and which is mounted on the ceiling of a room the switch connection for the purpose of controlling the current applied to the fan is usually at such a distance from the floor of the room that it is not easily accessible.

The object of our invention is to substitute for the ordinary snap button used in connection with the common type of switches, an extensible rod which may be easily reached from the floor.

With this object in view the invention consists in the construction, arrangement and combination of the several parts, all of which will be hereinafter described and afterward pointed out in the claims.

In the drawings 1 indicates generally the standard form of ceiling fan with the usual type of blades, and in this instance illustrated in combination with an electric chandelier 2.

3 denotes generally the switch for controlling the current applied to the fan, and which may be adjusted to regulate the speed of the fan, and to also cut off the current entirely.

4 is the usual sheet metal casing surrounding the switch 3, and having an opening 5 in the bottom through which the rod 6, for turning the switch, may be passed. This cover 4 is loosely applied to the switch, and is held in place by means of a device connected to the rod 6 to be described.

The rod 6 is formed in sections having screw ends 7, which are connected together by the ordinary type of screw sleeve 8. At one end of the rod is applied the knob or handle 9, preferably of insulated material, which has a stud portion 10 screwed therein, and is in turn screwed upon one of the threaded portions of the rod 6. At the other end of the rod 6 is screwed a sleeve portion 11 which is internally threaded at both ends 12 and 13, and has at the bottom edge thereof an enlarged portion 14.

Surrounding the sleeve portion 11 is a second sleeve 15, which is made of sheet metal, and has the end thereof bent around the enlarged portion 14 to form a stop so that the parts 11 and 15 are connected even when disconnected from the rod 6 and the switch. The other end of the sleeve 15 is bent and embedded in a sliding collar 16 slidably mounted on the main portion of the sleeve 11. The bent end of sleeve 15 is formed larger than the end of rod 6 to be independently slidable thereon.

Extending between the enlarged portion 14 and the collar 16 is an extensible spiral spring 17 which tends to hold the collar up. The end of the rod section 6 which is connected to the sleeve 11 is formed with a shoulder 18 of sufficient distance from the end of the sleeve 11 to allow play of the sleeve 15 which may be pulled down against the action of the spring 17 to seat itself against the shoulder 18.

The end 13 of the sleeve 11 is screwed on the ordinary screw plug of the electric switch connected with the fan 1, and the sliding collar 16 is by means of the spring 17 kept in contact with the switch cover 4, and holds the cover up in contact with the lower portion of the chandelier.

We are aware that minor changes may be made in the construction, arrangement and combination of the various parts of our improved device without in the least departing from the nature and principle of our invention, the scope of which is indicated by the accompanying claims.

We claim:

1. An electric switch operating rod having a sleeve screwed thereon at one end being

threaded at its opposite end to engage a switch spindle, a collar slidably mounted on the sleeve, and a spring surrounding the sleeve and engaged between a portion thereof and the collar.

2. The herein described electric switch operating rod, comprising a sectional rod, means for detachably connecting the various sections composing the rod, an insulated handle detachably connected to the lower end of the sectional rod, a sleeve screwed onto the upper end of the rod, and which sleeve is threaded to engage an electric switch spindle, a collar loosely mounted on the sleeve, and a spring surrounding the sleeve and bearing against a portion thereof, and against said collar.

3. In a device of the class described, the combination with a sectional rod, of a connection between said rod, and an electric switch spindle, which connection comprises, a sleeve threaded onto one end of the rod, which sleeve is threaded and adapted to receive a threaded switch spindle, a collar loosely mounted on said sleeve, and a spring surrounding the sleeve, and bearing against a portion thereof and against said collar.

In testimony whereof, we have hereunto affixed our signatures in the presence of two witnesses, this 1st day of July, 1910.

CHARLES R. MESTON.
HERBERT I. FINCH.

Witnesses:
M. P. SMITH,
ALMA GEBHART.