A. H. NERO.

ELECTRIC SWITCH.

APPLICATION FILED OCT. 7, 1911.

1,045,733. Patented Nov. 26, 1912.

Fig. 1.

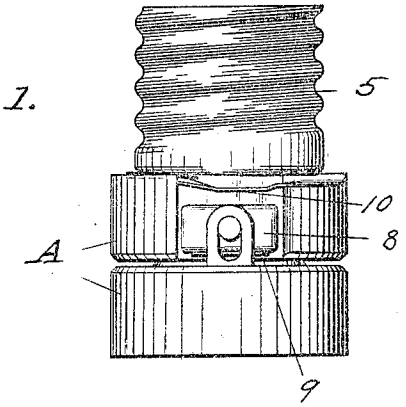


Fig. 2.

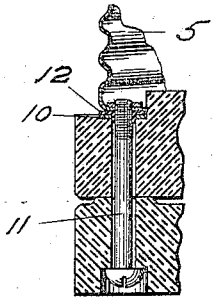


Fig. 3.

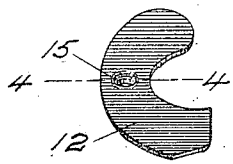
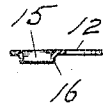
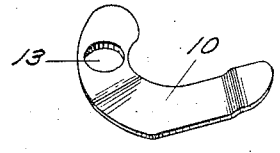
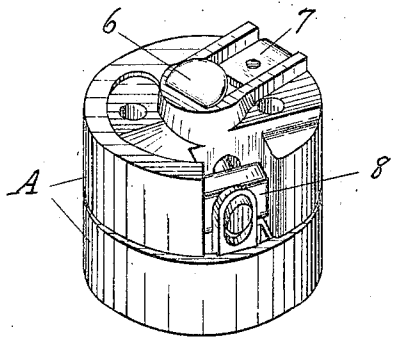


Fig. 4.







Witnesses:
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UNITED STATES PATENT OFFICE.

ARVID H. NERO, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE ARROW ELECTRIC COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT.

ELECTRIC SWITCH.

1,045,733. Specification of Letters Patent. Patented Nov. 26, 1912.

Application filed October 7, 1911. Serial No. 653,376.

To all whom it may concern:

Be it known that I, ARVID H. NERO, a citizen of the United States of America, and residing at New Britain, in the county of Hartford and State of Connecticut, have invented a certain new and Improved Electric Switch, of which the following is a specification.

My invention relates to electric switches and particularly to electric lamp sockets, the object of my invention being to provide an improved switch device embodying the novel features hereafter described and illustrated by way of example in the accompanying drawing in which,

Figure 1 is a side elevation of a lamp socket; Fig. 2 is a partial vertical section therethrough; Fig. 3 is a perspective of the socket body with certain portions detached; and Fig. 4 is a section on the line 4—4, Fig. 3 through the insulating strip.

Although readily embodied in various other constructions, I have for convenience, illustrated my invention in connection with a lamp socket of the type shown in Peterson 985,629. This socket comprises an insulating two button base A upon which are mounted the lamp receiving shell 5 and center contact 6. The latter is constantly in circuit through the line wire terminal plate 7, while the shell is in or out of circuit depending upon the position of the switch blocks 8, to which the current is led through the switch spring 9. In the "on" position the switch block is turned at right angles to the position shown and lifts the spring conductor 10 into engagement with the shell thus establishing the shell circuit.

In the patent above mentioned, the conductor 10 is electrically connected with the shell 5 both by actual contact and through the securing screw 11 which passes through both. In the present construction I insulate this spirng conductor 10 from the shell 5 by interposing a strip 12 of insulating material between their juxtaposed surfaces. To insure its insulation also from the securing screw 11, the perforation 13 of the conductor is made of considerable greater width than the diameter of the screw 11 so that the two do not come into contact. A simple way of insuring this separation of the conductor 10 from the screw 11 is illustrated, viz., by forcing the material of the insulating strip 12 down to form a collar 16 around the bolt hole 15. When the strip 12 is in position on the spring conductor 10, the collar 16 forms an insulating lining for the hole 13 therein and thus spaces and insulates the screw 11 therefrom. By this simple expedient it will be observed that I have obtained a spring conducting piece interposed between the switch block and the screw shell which in the "off" position is out of contact with and insulated from both. Thus when the switch is turned to the "off" position I secure two breaks substantially simultaneous and in series in the shell circuit, that is, between the shell and the spring conductor on the one hand, and between the latter and the switch block on the other hand. This so diminishes sparking that the switch may be used with safety although carrying substantially twice the usual current permitted by the underwriter's rules.

The advantage from the standpoint of safety is readily recognized as well as its adaptability to various switch constructions.

I claim as my invention:—

1. An electric lamp socket comprising a switch block constantly in the line of circuit, a lamp terminal in the switch circuit and an interposed conductor insulated from both switch block and lamp terminal in the "off position of the switch but engaged and displaced by said switch block into contact with said lamp terminal to close the switch.

2. An electric lamp socket comprising a switch block, a lamp terminal and an interposed switch member through which connection is established between said block and lamp terminal in the "on" position of the switch, said switch member being insulated from both lamp and switch block in the "off" position of the switch.

3. An electric lamp socket comprising a switch block, a lamp terminal and an interposed spring conductor through which the lamp circuit is completed in the "on" position of the switch, said conductor being insulated from both lamp and switch terminals in the "off" position of the switch.

4. An electric lamp socket comprising a switch block, a lamp shell terminal and a

spring conductor interposed between block and shell terminal and displaceable by said block into contact with said shell to complete the shell circuit, in combination with means to insulate said conductor from both block and shell in the "off" position of the switch.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

ARVID H. NERO.

Witnesses:

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HELEN M. SAUNDERS.