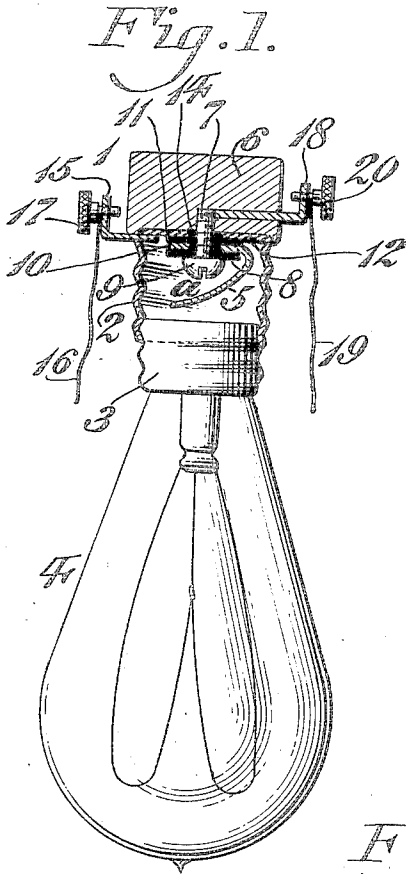
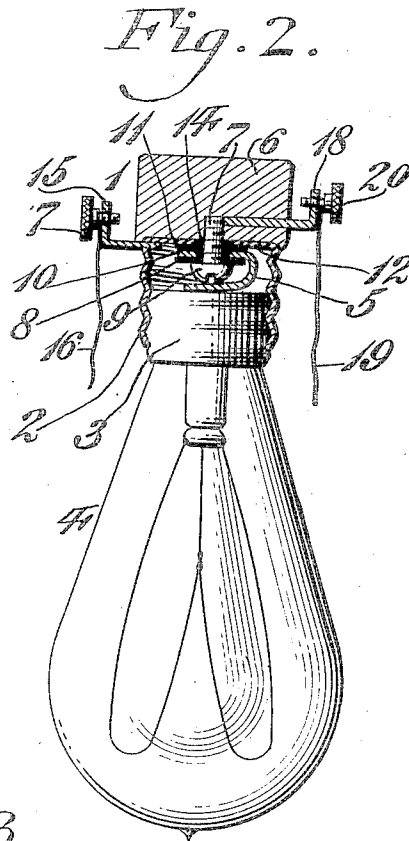
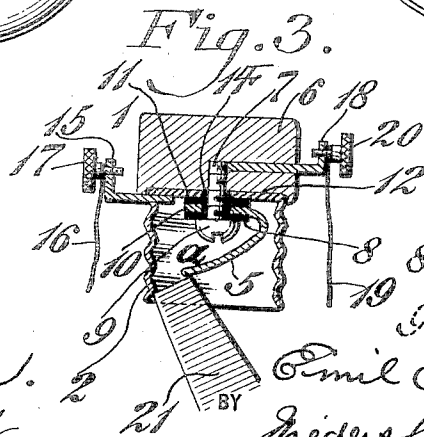
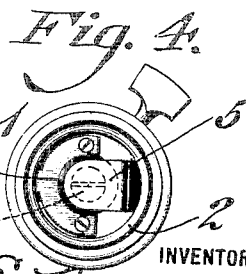


E. E. BROWN.
 NON-SHORT-CIRCUITING LAMP SOCKET.
 APPLICATION FILED OCT. 20, 1913.

1,099,635.

Patented June 9, 1914.



WITNESSES

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EMIL E. BROWN, OF PHILADELPHIA, PENNSYLVANIA.

NON-SHORT-CIRCUITING LAMP-SOCKET.

1,099,635.

Specification of Letters Patent.

Patented June 9, 1914.

Application filed October 20, 1913. Serial No. 796,138.

To all whom it may concern:

Be it known that I, EMIL E. BROWN, a citizen of the United States, residing in the city of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a new and useful Non-Short-Circuiting Lamp-Socket, of which the following is a specification.

My present invention consists of a novel construction of a lamp socket wherein novel means are provided for preventing the short-circuiting thereof.

In lamp sockets as heretofore constructed, numerous accidents have occurred in conjunction therewith owing to the workmen or other persons introducing into the socket a metallic tool for repair or adjustment, whereby the circuit is closed and a serious electric shock is received by the person holding the tool.

In accordance with my present invention, I have devised novel means to prevent the accidental closing of the circuit so that the liability of persons becoming injured is reduced to a minimum and the lamp socket is rendered fool-proof.

With the above in view my invention further consists of a novel construction and arrangement of a spring member which is insulated from one of the terminals and normally covers the same and which is adapted to be moved into contact with such terminal on the insertion of an incandescent bulb into the lamp socket.

It further consists of novel means for rendering the lamp socket non-short-circuiting and which may be employed in conjunction with any desired type of lamp socket.

It further consists of other novel features of construction, all as will be herein after fully set forth.

For the purpose of illustrating my invention, I have shown in the accompanying drawing one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 is a vertical section of a socket for an incandescent lamp embodying my

invention and a lamp partly inserted therein. Fig. 2 is a view of the parts seen in Fig. 1 with the lamp inserted in the socket to its full extent. Fig. 3 is a sectional view of the socket seen in Figs. 1 and 2 and with a portion of a screw-driver or other conductor of electricity applied thereto. Fig. 4 is a plan view of the socket seen in Fig. 1.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, 1 designates a socket for an incandescent lamp the main portion of which may be of any desired or conventional type, it being understood that my present invention is adapted to be employed in conjunction with any desired type of lamp socket and the lamp socket 1, in the present instance comprises a screw-threaded shell 2 adapted to receive the screw-threaded base 3 of the bulb 4 of an incandescent lamp,

5 designates a metallic spring secured to the insulating body 6 by a fastening device 7 such as for example a screw or its equivalent.

8 designates a washer of insulating material interposed between the head 9 of the fastening device 7 and the adjacent part 10 of the spring 5, so as to insulate said screw and spring from each other when a lamp is removed from the socket or is in the position with respect thereto, as seen in Fig. 1.

11 designates a washer interposed between the base 12 of the shell 2 and the adjacent portion 10 of the spring 5 so as to insulate said spring and base from each other. The shank of the fastening device 7 passes through a sleeve 14 of insulating material in order to insulate such fastening device from the base 12 of the shell 2 and also from the portion 10 of the spring 5. By such construction it will be apparent that the head 9 which forms one terminal of the electric circuit is completely insulated from one end of the spring 5.

15 designates a terminal projecting from the shell 2 and to this terminal one end of a circuit wire 16 is secured by means of a screw 17 in the usual manner.

18 designates a terminal in contact with the fastening device 7 and to said terminal 18 is adapted to be connected the other circuit wire 19 by means of a screw 20.

In the operation of my novel device it will be seen that when the parts are in the

position indicated in Fig. 1, the free end of the spring 5 is in such position that the circuit is open at *a* and cannot be closed until the free end of the spring 5 is moved into engagement with the terminal 9 such as occurs when the lamp is inserted into the socket to its fullest extent, as will be understood by reference to Fig. 2.

It will be apparent from the foregoing that a lamp socket of my novel type is rendered fool-proof since if a person should insert a metallic body 21, such as for example a screw driver, into the lamp socket, it would simply come into engagement with the shell 2 and the spring 5 and since the spring 5 is insulated from the terminal 9, the circuit would not be closed. If a lamp is inserted in the socket to its fullest extent the free end of the spring 5 will be moved inwardly into contact with the terminal 9 thereby closing the circuit, as is evident.

It is to be understood that my novel invention is designed to be employed in conjunction with any type of key or keyless lamp socket and my invention in its broad and generic scope consists in providing the socket with a normally insulated member which covers and protects the terminal and which does not contact with the terminal until a lamp is inserted in place.

It will now be apparent that I have devised a novel and useful construction of a non-short-circuiting lamp socket which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a lamp-socket, an outer socket-shell forming one terminal, a contact extending

into and insulated from said shell and forming the other terminal, and a movable conductor supported in said shell and insulated from the same and from the contact and adapted to form contact with one lamp-terminal and to be moved to said terminal contact by the insertion of the base of a lamp into the shell.

2. In a lamp-socket, an outer socket-shell forming one terminal, a contact forming the other terminal and extending into and insulated from said shell, and a resilient conductor supported in said shell and insulated from the same and from said contact to form contact with one lamp-terminal and to be moved to said terminal contact by the insertion of the base of a lamp into the shell.

3. In a lamp-socket, an outer socket-shell forming one terminal, a contact forming the other terminal and extending through and insulated from the bottom of said socket-shell, and a flat spring-conductor secured in said socket-shell to extend normally out of contact with said terminal-contact and insulated from the latter and from the shell and adapted to form contact with one lamp-terminal and to be moved into contact with said terminal contact by the insertion of the base of a lamp into the shell.

4. In a lamp-socket, an outer socket-shell forming one terminal, a contact-bolt in the base of the shell and insulated from the same and formed with a head and forming the other terminal, and a bent flat conductor spring having its shank clamped between the head of the bolt and the base of the shell and insulated from the same and having its free end normally out of contact with the head of the bolt, said spring being adapted to form contact with one lamp-terminal and to be moved into contact with the head of the terminal-bolt by the insertion of the base of a lamp into the shell.

EMIL E. BROWN.

Witnesses:

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