(No Model.)

S. BERGMANN.

LAMP SOCKET AND CIRCUIT CLOSER THEREFOR.

No. 484,580. Patented Oct. 18, 1892.

Fig. 1.

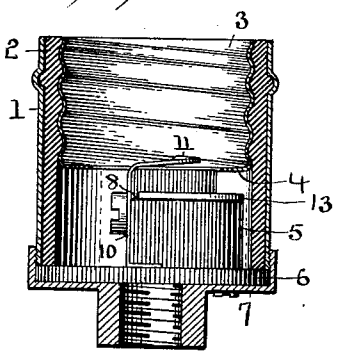


Fig. 2.

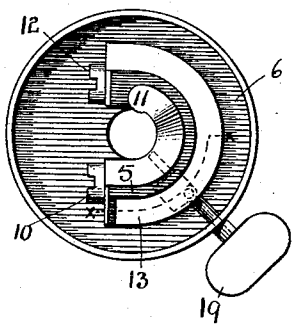


Fig. 3.

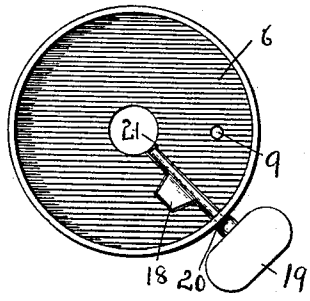


Fig. 4.

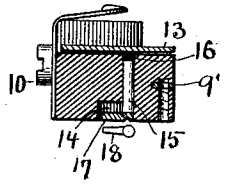
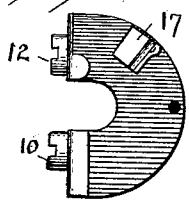


Fig. 5.



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UNITED STATES PATENT OFFICE.

SIGMUND BERGMANN, OF NEW YORK, N. Y.

LAMP-SOCKET AND CIRCUIT-CLOSER THEREFOR.

SPECIFICATION forming part of Letters Patent No. 484,580, dated October 18, 1892.

Application filed May 18, 1892. Serial No. 433,411. (No model.)

To all whom it may concern:

Be it known that I, SIGMUND BERGMANN, a citizen of the United States, residing at New York city, county and State of New York, have invented a certain new and useful Improvement in Lamp-Sockets and Circuit-Closers Therefor, of which the following is a specification.

The present invention relates to sockets adapted to receive incandescent lamps or other electrical devices and to connect the terminals thereof to a supply-circuit.

The main object of the invention is to provide improved means for making and breaking the circuit of the lamp or device in the socket; and the invention consists in improved devices designed to accomplish this end, as hereinafter set forth, and specified in the claims.

In the accompanying drawings, illustrating the invention, Figure 1 is a section of a socket embodying the improvement. Fig. 2 is a plan view of the cap forming the lower end of the socket and of the parts carried thereby. Fig. 3 is a plan view of said cap, the insulating-body and parts carried thereby being removed. Fig. 4 is a section through said body on line $x\,x$ of Fig. 2; and Fig. 5 is an end view of said body, looking from beneath.

The invention is shown applied to a socket of construction similar to that shown in Patent No. 443,746, dated December 30, 1890, and which consists of a shell 1, an insulating-lining 2, a screw-threaded socket contact or terminal 3, having at one end an internal flange 4, and an insulating-body 5 within the shell and supported on the insulating-washer 6 in the cap 7, said cap being adapted to screw onto or otherwise engage with the shell 1. The body 5 is preferably approximately semicircular, as shown in Fig. 2, and is stepped, as shown at 8 in Fig. 1. This body is secured in place by a screw passing through a hole 9 in the cap into the insulating-body and into a metal piece 9′, molded into the body for strengthening the hold of the screw. On the vertical side of the insulating-body is secured a supply-circuit terminal 10, to which a wire may be connected and which is extended over the upper end of the insulating-body to form the central socket contact or terminal 11. On the same face is secured a second supply-circuit terminal 12, which is extended to form or which is connected to a spring 13, resting on the ledge 8 of the insulating-body and under but normally out of contact with the flange 4 of the ring 3. Within the body is formed a cavity 14, in which is a plunger 15, preferably having an insulating-tip 16 and an enlarged head 17, which normally occupies the position shown in Fig. 4, the insulating-tip standing under the spring 13 and the enlarged head being directly over the cam or wiper 18 of the key 19, said key having a bearing at 20 in the wall of the cap and lying in a slot 21, formed by cutting away a portion of the insulating-washer 6, and being held in said slot by the body 5. In said head, preferably in line with the plunger, is formed a groove or depression, as indicated in the drawings, so that when the edge of the wiper reaches this point it will be arrested and held; but this depression is not sufficient to prevent turning the key to allow the plunger to move in the opposite direction when desired. The cavity 14 being angular and the head 17 fitting into the same, the latter will be held from turning, so that the groove therein will always be parallel with the edge of the wiper.

When the key 19 is turned in one direction, the wiper strikes the lower end of the plunger, raising spring 13 against the flange 4, closing the circuit, and when the key is turned in the reverse direction the circuit will be opened in an obvious manner. It will be evident that the precise mode of forming and supporting the socket-terminals and other parts of the socket is not material so long as the circuit-making spring normally stands near and is movable toward the socket-terminal in substantially the manner described.

In the patent above referred to a spring or contact device is shown on the insulating-body of the socket in much the same position as spring 13; but said spring or contact device, as shown in the patent, is always in contact with the screw-threaded sleeve-terminal of the socket when the socket is in condition to use. Hence there is no provision for making and breaking the circuit. Said construction I do not claim herein; but

What I claim is—

1. The combination, in a socket, of two socket-terminals suitably supported and insulated, one of said terminals being disconnected from the supply-circuit terminals, an insulating-body carrying a spring forming or connected to said circuit-terminal and in position to co-operate with one of the socket-terminals, a plunger movably held by the insulating-body, and a key for moving the plunger and through it the spring, substantially as described.

2. The combination, in a socket, of an insulating-body, on one end of which are two springs, one of which forms or is connected to the central contact or terminal of the socket, the other of which is a switch-spring, a second socket contact or terminal supported in proper relation to the first-mentioned terminal, and means for moving the switch-spring against said second terminal, substantially as described.

3. The combination of an insulating socket-body having a hole through it, a spring on an end of said body extending over the hole, a plunger in said hole having a head, and a key or wiper adapted when turned to strike said head and move it and through it the plunger and spring, and a contact device or terminal in co-operative relation with said spring, substantially as described.

4. The combination, in a socket, of an insulating-body, a central socket contact or terminal, an edge socket contact or terminal, a spring on said body movable toward and from one of said socket-terminals, a plunger in a hole passing through said insulating-body, over which the switch-spring extends, a head on said plunger, a wiper adapted to strike said head, and a stop for said wiper, substantially as described.

5. The combination, in a socket, of the contacts or terminals, an insulating-body, a switch-spring carried thereby and adapted to be moved toward or from one of said terminals, a hole in the insulating-body, a plunger in said hole over which the switch-spring extends, a head on the plunger movable in a cavity in the insulating-body of such form as to prevent said head turning therein, said head having a groove or depression in its upper face, and a wiper adapted to strike said head and to be arrested by said depression, substantially as described.

6. The combination, in a socket, of a sleeve-terminal suitably supported, an insulating-body adjacent to the inner end of said terminal, a curved spring secured to said body and extending along an end thereof under the end of the sleeve-terminal, and means for raising the free end of the curved spring against the sleeve-terminal, and a second socket-terminal, substantially as described.

7. The combination, in a socket, of the socket-terminals, a shell and body for supporting them, a cap adapted to engage said shell, an insulating-washer in said cap and having a portion cut away to receive a key, a key therein, and a circuit making and breaking device adapted to be operated thereby, substantially as described.

This specification signed and witnessed this 17th day of May, 1892.

SIGMUND BERGMANN.

Witnesses:
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