INVENTORS.

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INCANDESCENT-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 738,648, dated September 8, 1903.

Application filed June 12, 1903. Serial No. 161,190. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH L. YOST and OWEN E. KENNEY, citizens of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Incandescent-Lamp Sockets; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to certain new and useful improvements in incandescent-lamp sockets, and more particularly to that class in which the switch mechanism and contacts are located within a porcelain or other suitable insulating-body.

Our invention has for its object simplicity and economy of construction, strength and durability of the several parts, and facility in the assembling of the same.

With these ends in view our invention consists in the details of construction and arrangement hereinafter more particularly described and claimed.

In order that those skilled in the art to which our invention appertains may know how to make the same and fully appreciate its advantages, we will proceed to describe our improved socket, referring by numerals to the accompanying drawings, in which—

Figure 1 is a section taken on the line acac of Fig. 2. Fig. 2 is a section taken on the line y y of Fig. 1. Fig. 3 is a perspective view with the upper cap removed, and Fig. 4 is a detail perspective view of the switch-key and its bearings removed from the insulator block or barrel.

Similar reference-numerals indicate like parts in the several figures of the drawings.

1 represents a block or barrel, of porcelain or other suitable insulating material, formed with a diametric recess or chamber 2, within the outer end of which is located one of the circuit-wire posts 3. A peripheral recess or chamber 4 is formed to receive a second circuit-wire post 5, and the posts 3 and 5 are secured in position by suitable screws 6 passing through the bottom of the block or barrel 1 and threaded into the posts.

Within one side of the block or barrel 1 and at right angles to the recess or chamber 2 is formed a gateway or passage 7, with oppositely-disposed vertical shoulders 8, and at the lower extremity of this gateway or passage 7 is a short vertical wall 9. (See Fig. 1.) A vertical channel 10 is formed in the body of the block or barrel for the reception of the end of the spindle of the key 11.

Within the diametric chamber or recess 2 60 is located the conductor-plate 12 and the switch 13, such as shown and described in a concurrent application filed by us and bearing Serial No. 161,128.

The key 10 is mounted in bearings near the lower ends of two metallic plates 14, which are connected by a single clamping-screw 15 near the upper ends. The lower ends of the plates 14 are preferably curved to coincide with the similar shape of the lower extremity of the gateway or passage 7 and are of such width as to fit within the said gateway and against the vertical shoulders 8 and the short vertical wall 9, as clearly shown at Figs. 1 and 3, and to be clamped in position by the screw 15 in an obvious manner.

The key 11 has its spindle 16 passed through the holes or bearings near the lower ends of the plates 14, and the switch-operating cam or block 17 is then located upon the spindle, the extreme end of which is housed within the vertical recess 10 in the block or barrel 1, as best shown at Fig. 1, and when the plates 14 are clamped against the shoulders 8 and the wall 9 it will be readily understood that the key 11 and its cam or block 17 are rigidly held in proper operative relation with the switch 13.

A cap or closure 18, of insulating material, is secured to the upper ends of the circuit-wire posts 3 and 5 by screws 19 and conceals and protects the switch mechanism, as clearly shown.

From the construction shown and described it will be readily seen that the block or barrel 1 is simple and economic of construction and that the same is strong and durable and that as it contains all the recesses and chambers for the several metallic devices, conductors, &c., and as the closure or cap is a simple flat disk or cover no special adjust forment between the cap 18 and the block or barrel 1 is rendered necessary, as would be the case.
where the barrel is composed of two blocks each having corresponding recesses or chambers. It will also be understood that when it may be desired to use our improved socket as a keyless one it becomes necessary to only remove the cap 18, and upon loosening the screw 15 the key 10 and its accessories may be readily removed. When used as a key socket, the bearings of the key are, as will be obvious, metal bearings, and hence are more accurate and reliable than would be the case if such bearings were formed in the insulating material.

We of course do not wish to be confined to any exact design or proportions of the several parts of our improved socket, as they may be varied without departing from the spirit of our invention, which resides in the generic idea of providing seats and receptacles or chambers for the various metallic devices within a single block or body of insulating material and confining and concealing the same by a simple cap or closure and also in mounting the switch-operating key rotationally within metallic bearings independent of the insulator block or barrel and removable securing the same in proper position by clamping the said bearings against suitable shoulders formed upon the insulator block or barrel.

It will be understood that although we have not shown the same our improved socket is designed to be secured within the ordinary sheet-metal shell and base in the usual manner.

Having described the construction and advantages of our improved socket, what we claim as new, and desire to secure by Letters Patent, is—

1. In an incandescent-lamp socket, an insulator block or barrel provided with a diametric vertical recess or chamber adapted to receive switch mechanism and one of the circuit-wire-post plates and with a radial recess adapted to receive one end of the other circuit-wire-post plate; a non-recessed cap or cover composed of insulating material, and circuit-wire-post plates secured at their opposite ends to the insulator block or barrel and the cap or cover to hold the block or barrel and the cap or cover in close relation, substantially as set forth.

2. In an incandescent-lamp socket, a switch containing insulator block or barrel formed with suitable diametric and radial recesses or chambers adapted to receive the switch devices and the circuit-wire posts, and having a passage or opening transverse to the switch-containing recess or chamber formed with abutments or shoulders, in combination with a switch-key rotatively mounted in metallic bearing-plates clamped in position against the abutments or shoulders of the open passage-way, substantially as and for the purpose set forth.

3. In an incandescent-lamp socket such as described and having an insulator block or barrel with a switch-mechanism-containing recess or chamber and a vertical wall adjacent to the switch-containing recess or chamber, a switch-key rotatively mounted in metallic bearing-plates adjustably connected by a screw and adapted to be clamped in proper position upon the vertical wall of the insulator block or barrel, as set forth.

4. In an incandescent-lamp socket such as described, the switch-key mounted in parallel bearing-plates secured together by an adjusting-screw and adapted to be secured to the switch-containing insulator block or barrel or removed therefrom by the adjustment of the connecting-screw as hereinbefore set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOS. L. YOST.

OWEN E. KENNE.

Witnesses:

IDA RICKET,

CHAS. A. YOST.