(No Model.)

E. H. HEATH.

INCANDESCENT LAMP SOCKET.

No. 543,016. Patented July 23, 1895.

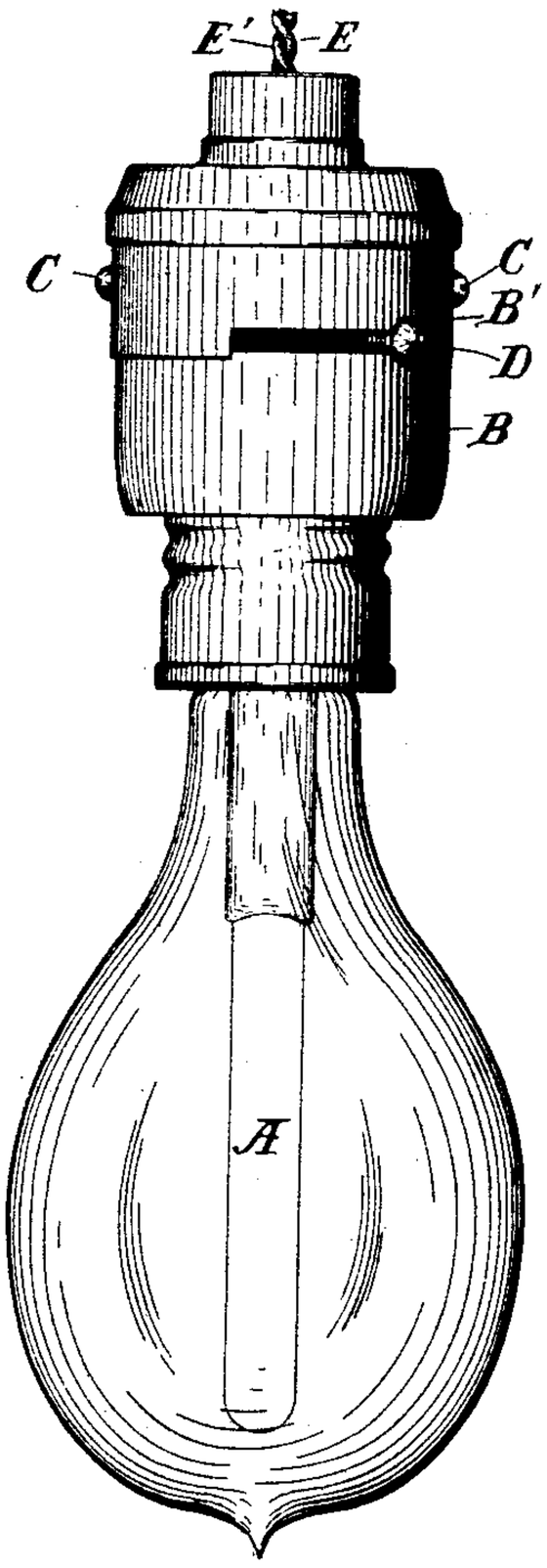

Fig. 1.

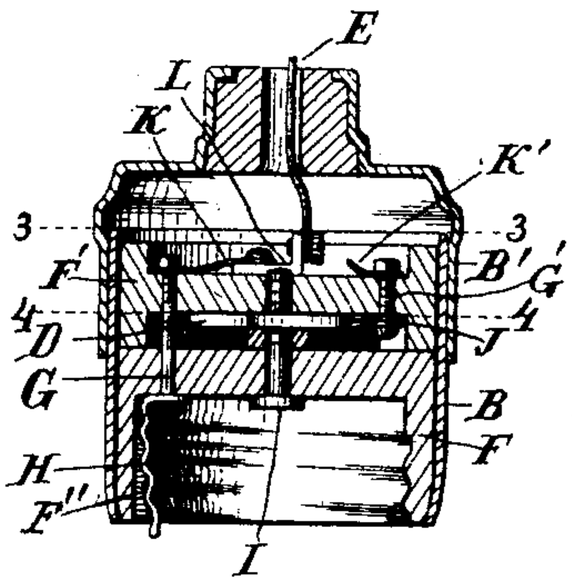

Fig. 2.

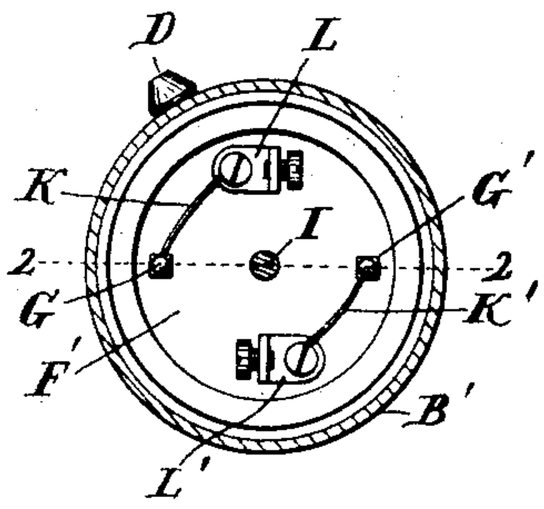

Fig. 3.

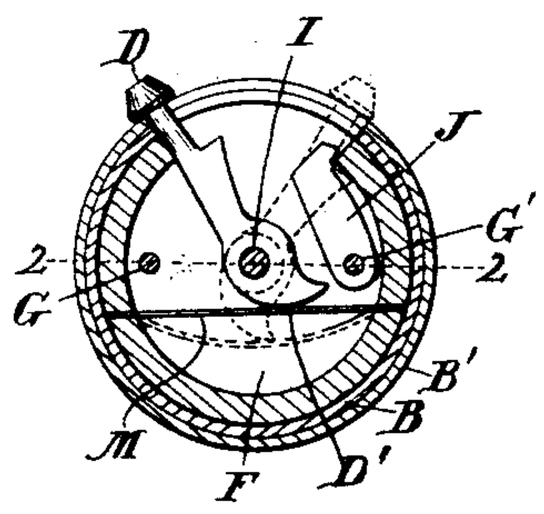

Fig. 4.

Witnesses

Lewis E. Flanders.

Lors Moulton.

Inventor

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UNITED STATES PATENT OFFICE.

EDGAR H. HEATH, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOHN H. BEAMER, OF SAME PLACE.

INCANDESCENT-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 543,016, dated July 23, 1895.

Application filed March 21, 1895. Serial No. 542,688. (No model.)

To all whom it may concern:

Be it known that I, EDGAR H. HEATH, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Incandescent-Lamp Sockets; and I 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.

My invention relates to improvements in an incandescent-lamp socket, and its object is to provide the same with certain new and useful features, hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a device embodying my invention; Fig. 2, a vertical section of the socket proper on the line 2 2 of Figs. 3 and 4. Fig. 3 is a transverse horizontal section on the line 3 3 of Fig. 2, and Fig. 4 the same on the line 4 4 of Fig. 2.

Like letters refer to like parts in all of the figures.

A represents an incandescent electric lamp of the usual construction; B B′, the outer jacket of the socket, having overlapping parts secured by screws C C′, which screws enter the diaphragm F′ and secure all the parts in place. Removal of said screws permits the separation of the parts B B′ and removal of the contents thereof.

F is a screw-threaded socket of non-conducting material adapted to receive the screw-threaded end of the lamp. In one side of said socket is a chamber F″, in which is a flexible strip of copper to engage the outer electrode of the lamp and secured in place by a bolt G, which bolt passes through the diaphragm F′ above the said socket.

D is a lever extending radially through a slot in the casings B B′, provided with a knife-edge D″ at one side to engage the spring-electrode J, and pivoted near its inner end upon a screw or stud I in the axis of the socket, said screw having a suitable head to engage the inner electrode of the lamp. Opposite the bolt G is a bolt G′ passing through the diaphragm F′, and having attached the divided spring-electrode J, between the parts of which electrode is thrust the lever D when the electric circuit is closed. Said lever D is provided at its inner end with a cam-face D′, which engages a spring M, by which spring said lever is held in engagement with the electrode J when the circuit is closed and held away from the same when the circuit is open. From the bolts G and G′ to binding-posts L L′ extend fusible wires K K′, which wires are adapted to melt and break the circuit whenever the lamp is endangered by excessive current. To these posts L L′ the conductors E E′ are attached to connect the lamp with the source of the electric current, the circuit for which current is through one of said conductors E, thence through the binding-post L, the fusible wires K, bolt G, and strip H to the outer electrode of the lamp; thence from the inner electrode of the lamp through the screw I, lever D, spring-electrode J, bolt G, fusible wire K′, and binding-post L′ to the other conductor E′.

The socket F is shown closed at the top; but that is immaterial, as it is quite as well to form the same of an extension of the flange of diaphragm F′ and integral therewith.

What I claim is—

1. In an incandescent lamp socket, a screw or stud in the axis of said socket, and adapted to engage the inner electrode of the lamp, a lever pivoted on said screw and extending outside said socket, a spring electrode engaging said lever when the circuit is closed, and electric circuits from the outer electrode of the lamp and from the said spring electrode to the main circuit, substantially as described.

2. In an incandescent lamp socket, a diaphragm in said socket a bolt passing through the same, having a flexible strip of conducting material attached to engage the outer electrode of the lamp, a central stud in said diaphragm, a lever pivoted on said stud, a bolt through said diaphragm, having a spring electrode attached to engage said lever, and conductors connecting said bolts with the main circuit, substantially as described.

3. In an incandescent lamp socket, a screw threaded socket having a chamber in its side, a diaphragm above said socket, bolts through said diaphragm near its opposite sides, and a central stud in said diaphragm, a lever pivoted on said stud spring electrodes on said bolts, one of which is in said chamber, and fusible wires extending from said bolts to binding posts on said diaphragm, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDGAR H. HEATH.

Witnesses:
LUTHER V. MOULTON,
LEWIS E. FLANDERS.