(No Model.)

# H. C. WIRT.

## LAMP SOCKET.

No. 559,474. Patented May 5, 1896.

FIG. 1.

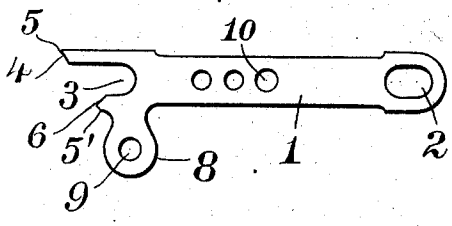



FIG. 2.

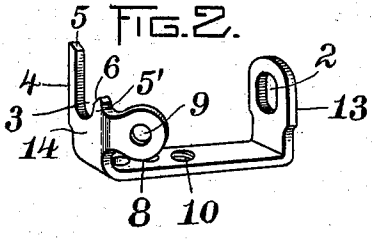



FIG. 3.

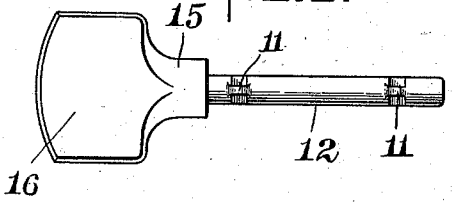



FIG. 4.

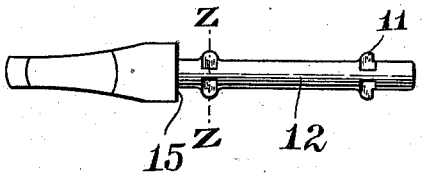



FIG. 5.

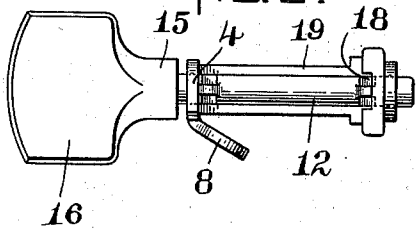



FIG. 6.

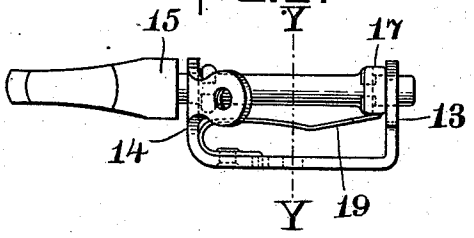



FIG. 7.

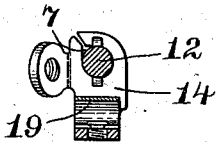



FIG. 8.

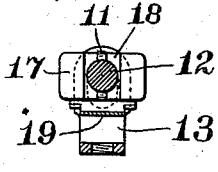
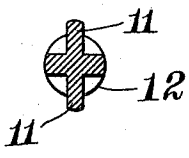



FIG. 9.




WITNESSES.

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# UNITED STATES PATENT OFFICE.

HERBERT C. WIRT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO THE GENERAL ELECTRIC COMPANY, OF NEW YORK.

## LAMP-SOCKET.

SPECIFICATION forming part of Letters Patent No. 559,474, dated May 5, 1896.

Application filed February 8, 1896. Serial No. 578,466. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT C. WIRT, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Incandescent-Lamp Sockets, (Case No. 357,) of which the following is a specification.

This invention relates to incandescent-lamp sockets, and has special reference to the construction of the key and its supporting-frame. Heretofore the bearings in the key-frame have been made solid and the key-shaft was retained in said frame by pins driven into holes drilled in the key-shaft and located within the bearings of the frame.

The object of this invention is to provide a key and supporting-frame which will be economical and by means of which the key may be readily secured in the frame.

In the accompanying drawings, Figure 1 is a view of a blank from which the key-frame is formed. Fig. 2 is a perspective view of the key-frame with bearings bent up and ready for the insertion of the key-shaft. Figs. 3 and 4 are side and edge views, respectively, of the key-shaft. Figs. 5 and 6 are plan and side views of the key and its frame complete. Fig. 7 is a vertical cross-section on the line X X of Fig. 6. Fig. 8 is a vertical cross-section on the line X X of Fig. 6, and Fig. 9 is a transverse cross-section on the line Z Z of Fig. 4.

The frame for the key-shaft is formed from a blank 1, as shown in Fig. 1, consisting of a strip of metal of the proper dimensions for the frame, and formed with an oval opening 2 at one end forming a bearing for the outer end of the key-shaft, and with a U-shaped recess 3 at the other end having on one side thereof an arm 4 and on the other side thereof a shorter arm 5′, of such a length relatively to each other that when the long arm 4 is bent around in the same plane with the blank, so that the beveled end 5 of the arm 4 is brought into contact with the beveled end 6 of the arm 5′, an opening 7 will be formed, constituting a bearing for the inner portion of the key-shaft.

8 indicates a projection on one side of the U-shaped portion 3, provided with a hole 9, which serves as a connection for the attachment of one of the terminals of the electric circuit.

10 indicates a hole in the base of the frame for attachment of the frame to the base of the socket. The second step in forming the frame for the key-shaft consists in bending up the ends of the blank 1 into the shape shown in Fig. 2, the long arm 4 being in a perpendicular position, leaving the inner bearing for the key-shaft open.

In the ordinary construction of frames for key-shafts the inner bearing of the frame is formed of one piece similar to the outer bearing 2, and the key-shaft is inserted in place by pushing it through the openings 2 and 7. The key-shaft is then held in place by means of small pins, which are pushed through holes in the key-shaft drilled in the latter. This construction is not only expensive, but requires much time and trouble in putting the key-shaft in place or removing it on account of having to insert the pins in the holes drilled in the key-shaft, and also by reason of drilling the holes in the key-shaft. These objections are obviated by my invention by dispensing with the necessity for drilling holes in the shaft and the providing of the transverse pins inserted through said holes, and in lieu thereof striking up suitable projections on the key-shaft, as shown more particularly in Figs. 3 and 4, of any suitable shape. As shown, lateral projections 11 are struck up on the key-shaft 12 adjacent to its ends. Then by reason of the construction of the frame having the bearing with the long arm 4 and the short arm 5′ the key-shaft 12 can be readily put in place in its bearings in the openings 2 and 7, the projections 11 being located within the upright arms 13 and 14 of the frame. The inner projections 11 are at such a distance from the inner end of the key-shaft 12 as to be located adjacent to the inner side of the arm 14 and to bring the shouldered portion 15 of the handle 16 of the key adjacent to the outer side of the arm 14. The projections 11 adjacent to the outer end of the key-shaft 12 are located at such a distance from the end of the latter as to leave room for the location of the contact-piece 17 between the projections 11 and the inner face

of the arm 13, the contact 17 being of the usual form, or that of an oblong block with a square recessed portion 18 on its inner face, in which the projections 11 are adapted to play loosely before coming into contact with the inner end of the recess 18, so as to afford a lost motion in the rotary motion of the contact-piece 17 when thrown into or out of contact with the shell of the lamp-socket or other contacting portion.

19 is a spring secured to the base of the key-frame, having its free outer end bearing against the contact-piece 17 and permitting the latter to ride over the end of the spring 19 as the key is turned. After the key-shaft is inserted in its bearings 2 and 7 it is held in place by simply bending over the long arm 4 until its beveled end 5 abuts against the beveled end 6 of the short arm 5'. It will thus be seen that by means of this construction the key-shaft may be readily inserted in place and removed from its frame by simply bending the long arm 4 into or out of position, and the expense of drilling holes in the key-shaft and the transverse pins inserted therein is avoided.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. As a new article of manufacture, a supporting-frame for the key-shaft of an incandescent-lamp socket, having the socket of one of its bearings adapted to be opened or closed, receive the key-shaft laterally, and secure the latter in place.

2. As a new article of manufacture, a supporting-frame for the key-shaft of an incandescent-lamp socket, having the socket of one of its bearings separable, so as to admit the key-shaft laterally, and adapted to be closed so as to retain the key-shaft in place.

3. As a new article of manufacture, a frame for the key-shaft of an incandescent-lamp socket, having the socket of one of its bearings formed by means of arms adapted to be closed together, and form a socket for the key-shaft.

4. As a new article of manufacture, a frame for the key-shaft of an incandescent-lamp socket, formed from a blank having its ends bent up to form the upright bearings for the key-shaft, one of said bearings having an oval socket, and the other a separable circular socket, adapted to be opened and closed to permit the key-shaft to be inserted laterally.

5. As a new article of manufacture, a key-shaft for an incandescent-lamp socket, formed with projections adjacent to its ends struck up from the key-shaft and serving to retain the key-shaft in its frame.

6. A key-shaft having projections struck up therefrom adjacent to its ends, an oblong, rectangular contact-piece with a rectangular recess on its inner face loosely engaging the projections on the key-shaft so as to have lost motion, and a spring bearing against the contact-piece, in combination with a key-frame having a socket-bearing at one end adapted to be opened and closed and permit of the lateral insertion of the key-shaft.

In witness whereof I have hereunto set my hand this 6th day of February, 1896.

HERBERT C. WIRT.

Witnesses:
B. B. HULL,
C. L. HAYNES.