

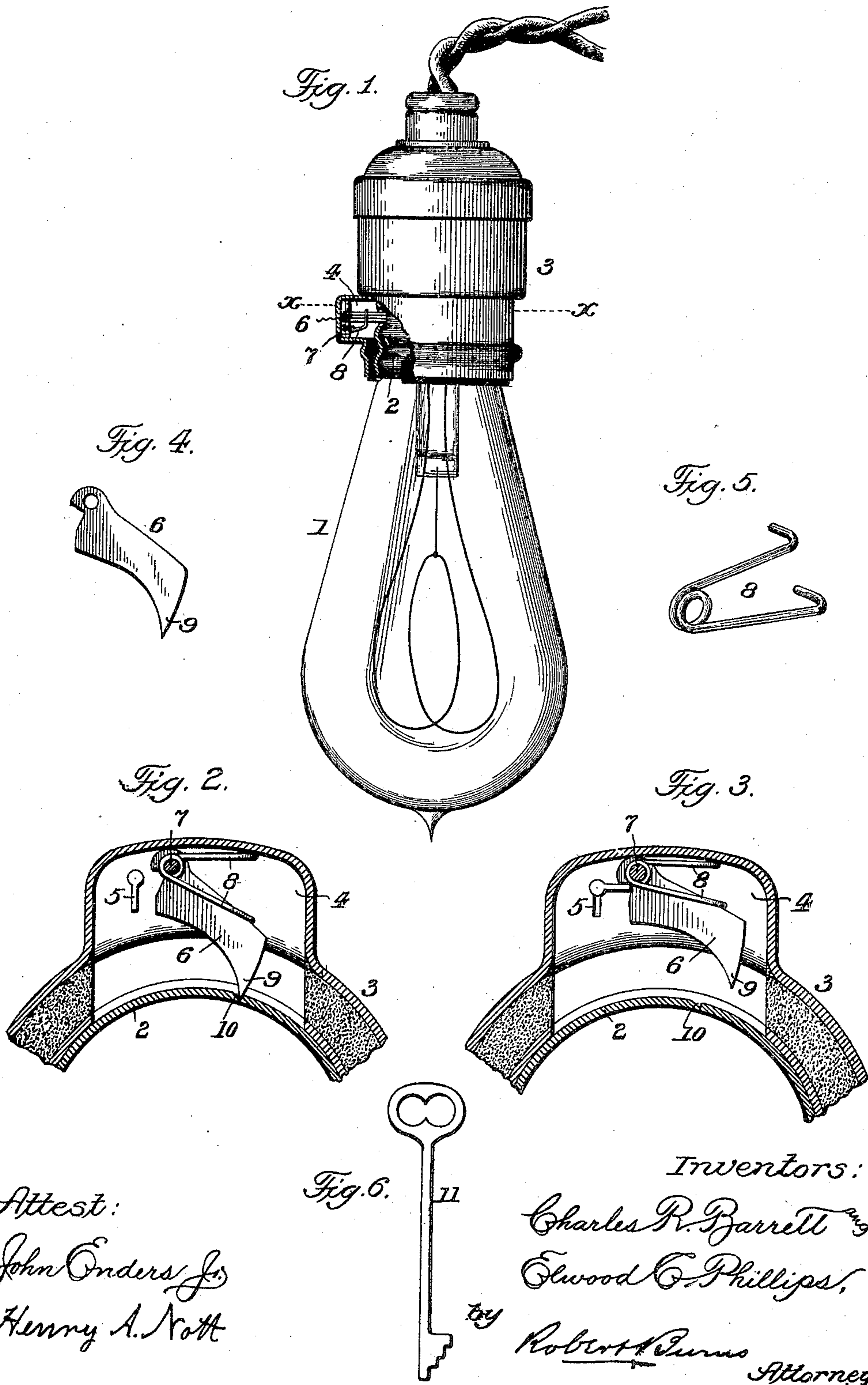
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Patented July 23, 1901.

C. R. BARRETT & E. C. PHILLIPS.  
LOCKING SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

(Application filed May 18, 1901.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## LOCKING-SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 679,206, dated July 23, 1901.

Application filed May 13, 1901. Serial No. 59,912. (No model.)

*To all whom it may concern:*

Be it known that we, CHARLES R. BARRETT and ELWOOD C. PHILLIPS, citizens of the United States, and residents of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locking-Sockets for Incandescent Electric Lamps, of which the following is a specification.

10 The present invention relates to that class of sockets for incandescent electric lamps, in which provision is made for locking the lamp in place against an unauthorized removal or theft of the same.

15 The object of the present improvement is to provide a simple and efficient construction of parts in which the locking of the lamp within the socket is securely effected without interfering with the proper screwing of the lamp into place to bring its filament into circuit, all as will hereinafter more fully appear and be more particularly pointed out in the claims. We attain such object by the arrangement of parts illustrated in the accompanying drawings, in which—

25 Figure 1 is a side elevation of an incandescent electric lamp and socket with parts in section, illustrating the present invention; Fig. 2, an enlarged fragmentary section at line *x x*, Fig. 1, illustrating the lock mechanism in a locked or engaged position; Fig. 3, a companion view with said parts in an unlocked position; Fig. 4, a detail plan view of one of the locking-detents detached; Fig. 5, a detail perspective view of the spring for holding the locking-detents in engagement with the recess therefor in the base of the lamp; Fig. 6, an elevation of the key for the locking mechanism of the present improvement.

40 Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents the usual incandescent lamp having an exteriorly-screw-threaded foot 2, by which attachment is had with the similarly-formed orifice in the socket 3, as usual in the present type of lamps and sockets.

50 The present invention involves a construction of parts as follows:

4 is a closed chamber located laterally at

one side of the lamp-socket 3 and opening into the interior of such socket, as shown. The casing forming said chamber 4 is provided with a keyhole 5 for the insertion of the key 55 by which the lock mechanism of the present invention is operated.

6 is a locking-detent pivoted upon a stationary pivot-pin 7 in the chamber 4, and 8 is a spring of any usual construction arranged 60 within said chamber and adapted to force the locking-detent 6 to its engagement with the lamp-foot 2. The locking-detent 6 will in the present invention have a tangential arrangement with relation to the circular inner 65 wall of the lamp-socket, as well as the circular wall of the lamp-foot, and will be provided with a pointed free end 9, which is adapted to engage in a recess or depression 10, formed in one of the spiral grooves in said lamp-foot, as shown, the arrangement being such that 70 the lamp-foot is free to screw into the lamp-socket to effect an operative connection of the lamp, the tangentially-arranged locking-detent 6 in such case riding in the spiral 75 groove of the lamp-foot. Upon the unscrewing of the lamp to effect a disengagement, and as the recess or depression 10 is brought around into line with the point 9 of the locking-detent 6, the said point will spring into 80 such recess to prevent a further unscrewing of the lamp.

With the present construction it will be observed that the lamp-foot can be unscrewed or turned into place to establish the electric 85 circuit through its filament and in so doing may carry the locking-recess 10 past the locking-detent 6 any required distance to establish the circuit without affecting the tendency of the parts to effect a lock before the 90 lamp can be unscrewed to a point of detachment. With such construction great nicety of adjustment of the parts is not required, and in consequence the cost of manufacture can be correspondingly reduced. 95

Another advantage of the present improved arrangement of parts is that the locking-detents 6 can be duplicated to any required extent and arranged side by side, as illustrated in Fig. 1, in the nature of lock-tumblers, so 100 as to require a particular formation of the wards in the bit of the key 11 to effect an

opening of the lock, and thus afford greater security against an unauthorized attempt to pick the lock.

In the particular construction shown the locking-detents 6 are to be formed of a non-conducting substance in order to prevent a short circuit when in engagement. They may, however, be formed of metal, if so desired, in which case they will have an insulated connection with their pivot-pin 7 and spring 8.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A locking-socket for electric lamps, having an internally-screw-threaded bore or opening adapted to receive the externally-screw-threaded foot of an incandescent electric lamp, a chamber arranged laterally at the side of the lamp-socket and provided with an entrance-keyhole and a tangentially-arranged spring-impelled detent pivoted in said chamber and adapted to engage in a recess in the screw-threaded periphery of the lamp-foot, substantially as set forth.

2. A locking-socket for electric lamps, having an internally-screw-threaded bore or opening adapted to receive the externally-

screw-threaded foot of an incandescent electric lamp, a chamber arranged laterally at the side of the lamp-socket and provided with an entrance-keyhole, a tangentially-arranged detent pivoted within said chamber and adapted to engage in a recess in the screw-threaded periphery of the lamp-foot, and a spring for forcing the detent to its engagement, substantially as set forth.

3. A locking-socket for electric lamps, having an internally-screw-threaded bore or opening adapted to receive the externally-screw-threaded foot of an incandescent electric lamp, a chamber arranged laterally at the side of the lamp-socket and provided with an entrance-keyhole, and a series of substantially counterpart detents or tumblers pivoted in said chambers in a direction tangential to the circular bore of the socket, and adapted to engage in a recess in the screw-threaded periphery of the lamp-foot, substantially as set forth.

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