

No. 748,337.

PATENTED DEC. 29, 1903.

C. BAKELEY.

SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

APPLICATION FILED JUNE 18, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 2.

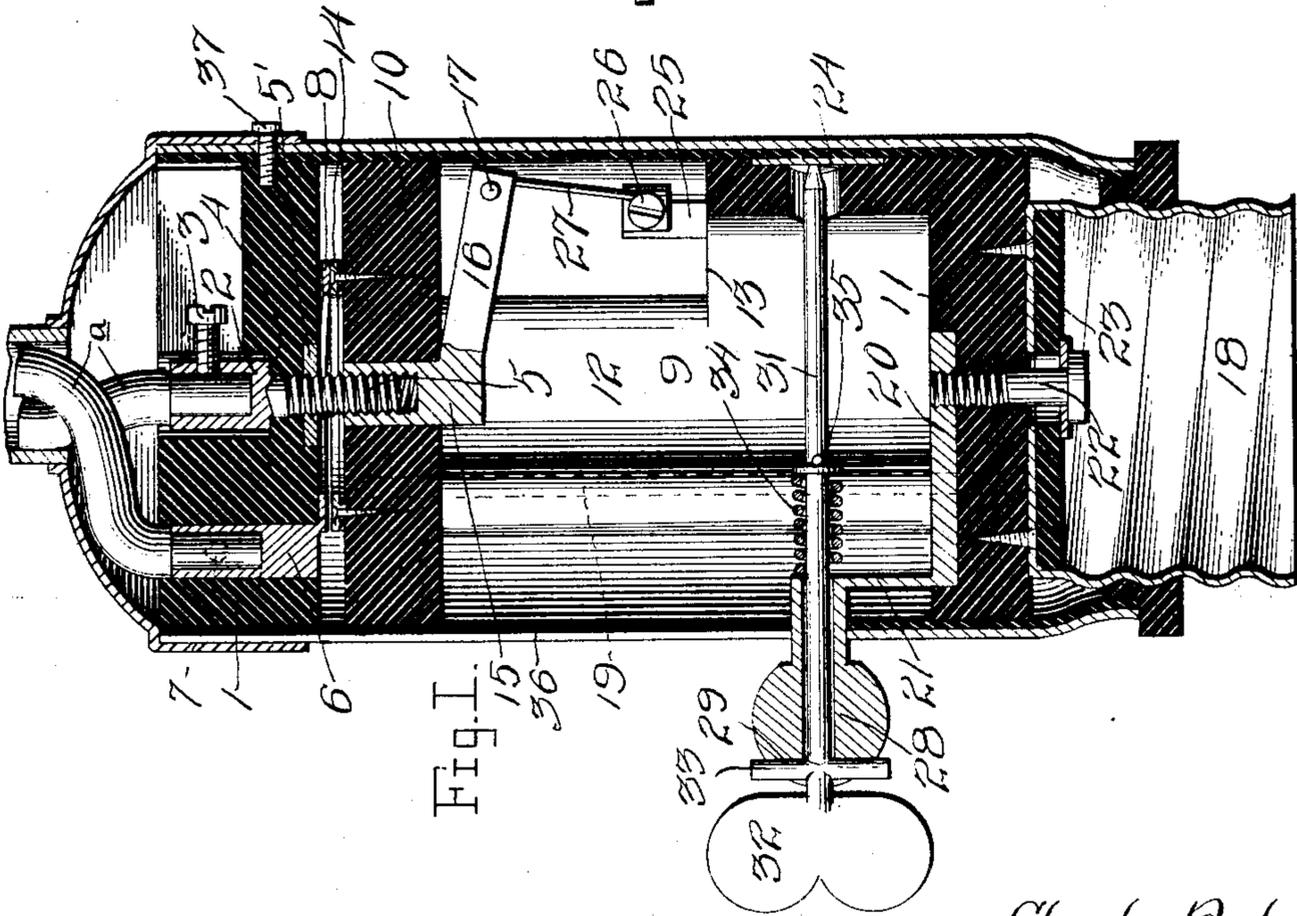
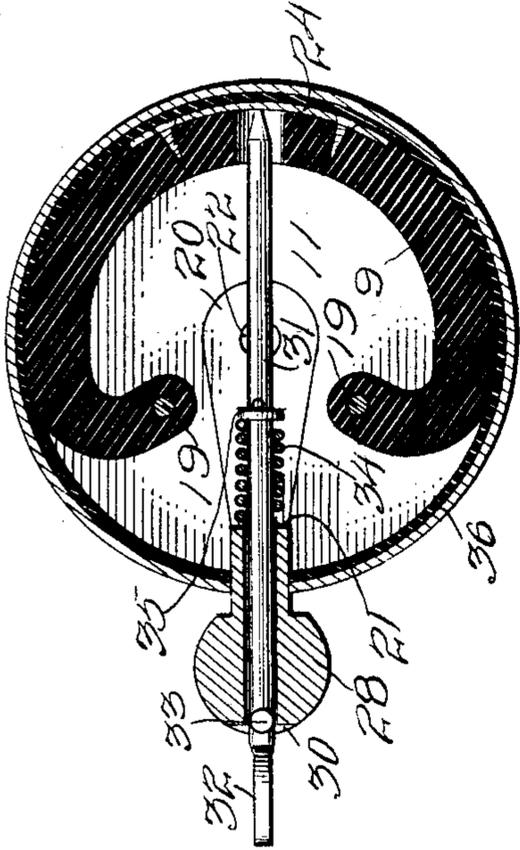


Fig. 1.

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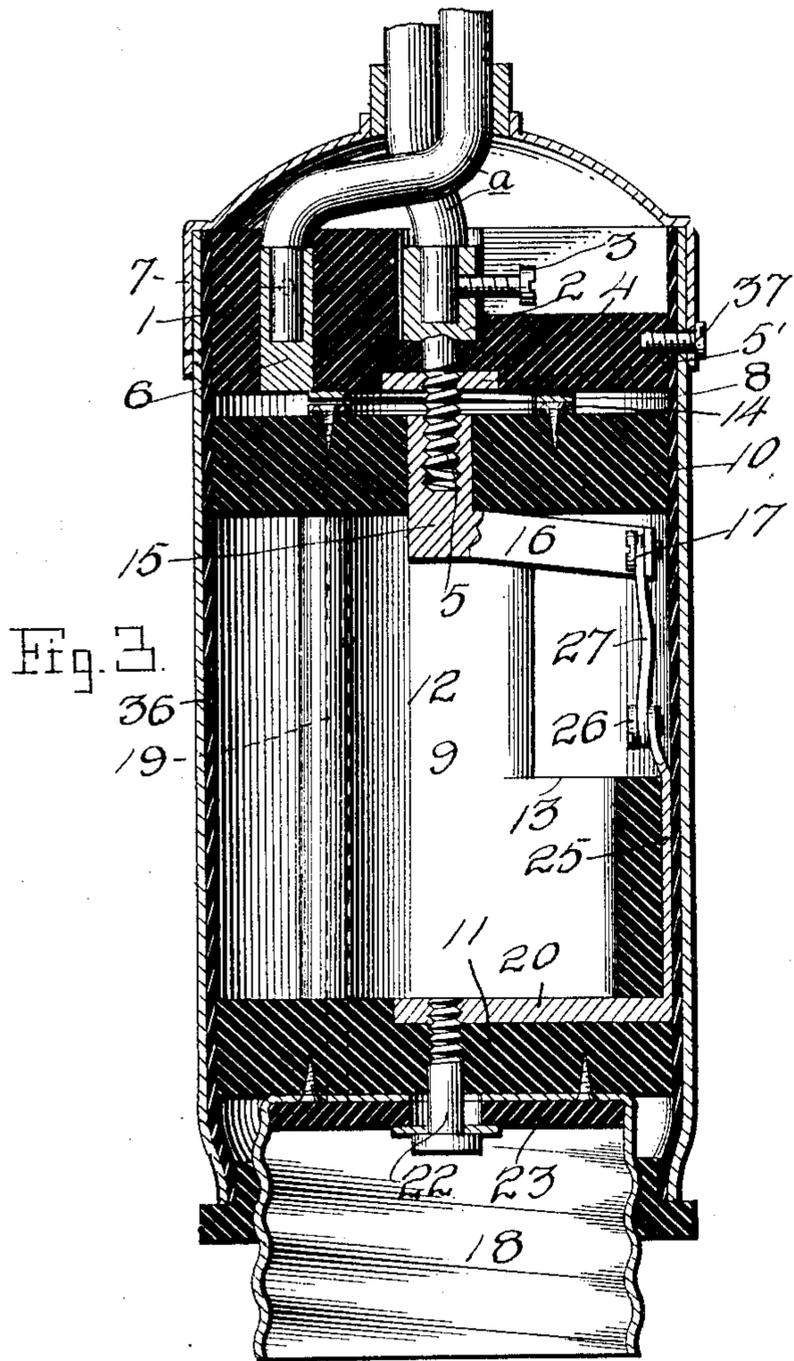
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# UNITED STATES PATENT OFFICE.

CHARLES BAKELEY, OF COVINGTON, KENTUCKY, ASSIGNOR OF ONE-HALF  
TO CHARLES AKERS, OF COVINGTON, KENTUCKY.

## SOCKET FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 748,337, dated December 29, 1903.

Application filed June 18, 1903. Serial No. 162,121. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES BAKELEY, a citizen of the United States, residing at Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Sockets for Incandescent Electric Lamps; and I do 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 sockets for incandescent electric lamps; and it consists in the peculiar construction and combination of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical sectional view of an incandescent-electric-lamp socket embodying my improvements. Fig. 2 is a similar view at right angles to Fig. 1. Fig. 3 is a vertical sectional view of a modified form of my improved incandescent-electric-lamp socket.

In the embodiment of my invention here shown I provide a base-piece 1, which is preferably circular in form, is made of non-conducting material, and is provided with a central opening in which is a conducting-sleeve 2, having a clamping-screw 3, a shoulder 4, and a threaded stem 5, which stem projects from the under side of the base-piece. On the threaded stem is secured a nut 5', which bears against the under side of the base-piece 1, is countersunk therein, and secures the sleeve 2 in place, as will be understood. A conducting-sleeve 6 also extends through the base-piece, near one side thereof, is provided with a clamping-screw 7, and its lower end, which extends to the under side of the base-piece, is electrically connected to a conducting spring-ring 8, which is disposed concentrically with reference to the stem of the conducting-sleeve 2. The line-wires *a* have their ends placed in the sleeves 2 6 and secured therein by the clamping-screws with which the said sleeves are provided. This base-piece 1 is in practice secured in a casing 36, hereinafter described, and is not thereafter disturbed.

The detachable portion 9 of the socket is preferably cylindrical in form and is provided

with heads 10 11 and a connecting-web 12, which web has an opening 13. This detachable section is made of non-conducting material. On the head 10 thereof is a conducting-ring 14, which contacts electrically with the conducting spring-ring 8 of the base-piece 1 and is disposed concentrically with reference to a nut 15, which is also a conductor and is here shown as of tubular form, secured in and extending through the center of the head 10 and having an arm 16 at its lower end, which arm is provided with a binding-screw 17. This conducting-nut 15 is engaged by the threaded stem of the conducting-sleeve 2 and forms electrical connection therewith.

The screw-collar 18, to which the lamp is connected in the usual manner and which forms one electrode, is secured to the under side of the head 11 by conducting-screws 19, which extend through openings in the sides of the web 12 of the detachable section 9 and are connected at their upper or inner ends to the conducting-ring 14.

A conducting-plate 20 is countersunk on the inner side of the head 11 and is provided with a standard 21. The said plate is secured in place by a conducting-screw 22, the head of which forms an electrode centrally disposed in the screw-sleeve 18 and insulated therefrom by a disk 23 of insulating material, which disk covers the heads of the screws 19, and hence prevents the said screws from casually working loose and disconnecting the conducting-ring 14. In the side of the web 12 opposite the standard 21 is a countersunk conducting-plate 24, which has an arm 25, provided with a binding-screw 26. A fuse-wire 27 is connected to the said arm by the said binding-screw and is also connected with the arm 16 of the conducting-nut 15 by the binding-screw 17. The standard 21 is provided with a bearing 28, at the outer end of which are cam-notches 29 and stop-notches 30, disposed at right angles with reference to each other. A cut-out stem 31, which is an electrical conductor, is journaled and movable longitudinally in the bearing 28, is provided at its outer end with a head or key 32, by which it may be readily turned, and is further provided with a transversely-disposed stud 33, which coacts with the notches 29 30

to move the said stem longitudinally in one direction when it is partly turned and to lock it against casual movement. The opposite end of the said conducting-stem coacts with the plate 24 to make or break the lamp-circuit. On the said stem is a coiled extensile spring 34, which is preferably also an electrical conductor and the opposite ends of which bear against the conducting-standard 21 and a pin or shoulder 35 on the stem 31. Hence electrical contact between the said stem and the said standard is insured and preserved under all conditions.

The detachable section 9, which is the working part of my improved socket, is incased in a cylindrical casing 36, which also incases the base-piece 1 and is secured thereto by means of set-screws 37. The head of the stem 31, which forms the movable part of the cut-out, projects through a slot in one side of the casing.

My improved incandescent-electric-lamp socket by the foregoing construction is provided with its own safety-fuse, which is concealed therein and which may be readily renewed when necessary.

It will be obvious that the detachable section 9 may be readily detached by unscrewing the same from the base 1 without disturbing or touching the line-wires. The socket can readily be removed from the circuit without disturbing any other portion of the circuit.

The socket-casing is lined on its inner side with insulating material to prevent possible cross-circuiting.

By simply substituting a base-piece and socket-casing of different size or shape the socket may be converted into a receptacle or wall-socket. The socket or receptacle, whichever the case may be, will then be adapted to all requirements where a socket or receptacle with a cut-out key is desired. By omitting the cut-out key 31 and the conducting-plate 24 and changing the construction of the conducting-plate 20, so that the arm 25 is directly connected thereto, the socket or receptacle may be converted into a keyless socket or receptacle, as shown in Fig. 3. The non-conducting portions of the detachable part of the socket will preferably be made in one piece and will be provided with hollow spaces for screws to pass through.

By substituting a stud-bolt for the screw

22 and also substituting a washer or ring for screw-shell 18 a lamp with Thomson-Houston base can be used in this socket.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An electric-lamp socket, having a non-conducting base provided with conductors having binders for the line-wires, one of said conductors having an annular contact-piece on the outer side of the base and the other a screw-stem projecting from the base, in combination with a detachable section having a conductor to contact with the contact-piece of the base-section, a conductor having a threaded socket to engage the conducting screw-stem, and a collar for the reception of the lamp, and a casing inclosing and connecting the base and detachable section and engaging the collar, substantially as described.

2. In an incandescent-electric-lamp socket, the combination of a base-piece having conductors provided with binders for the line-wires, a section detachably secured thereto and having conductors to contact with those thereof, a collar for the reception of the lamp, conducting-screws connecting the collar to one of the conductors of said section, a non-conducting disk in the head of the collar, covering the heads and preventing casual turning of the said screws, and a centrally-disposed conducting-screw extending through the said disk, binding the head of the collar between it and the detachable section, and connected electrically with one of the conductors of the detachable section, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES BAKELEY.

Witnesses:

BEN BIELKURHAUS,  
LOUIS TIMMERDING.