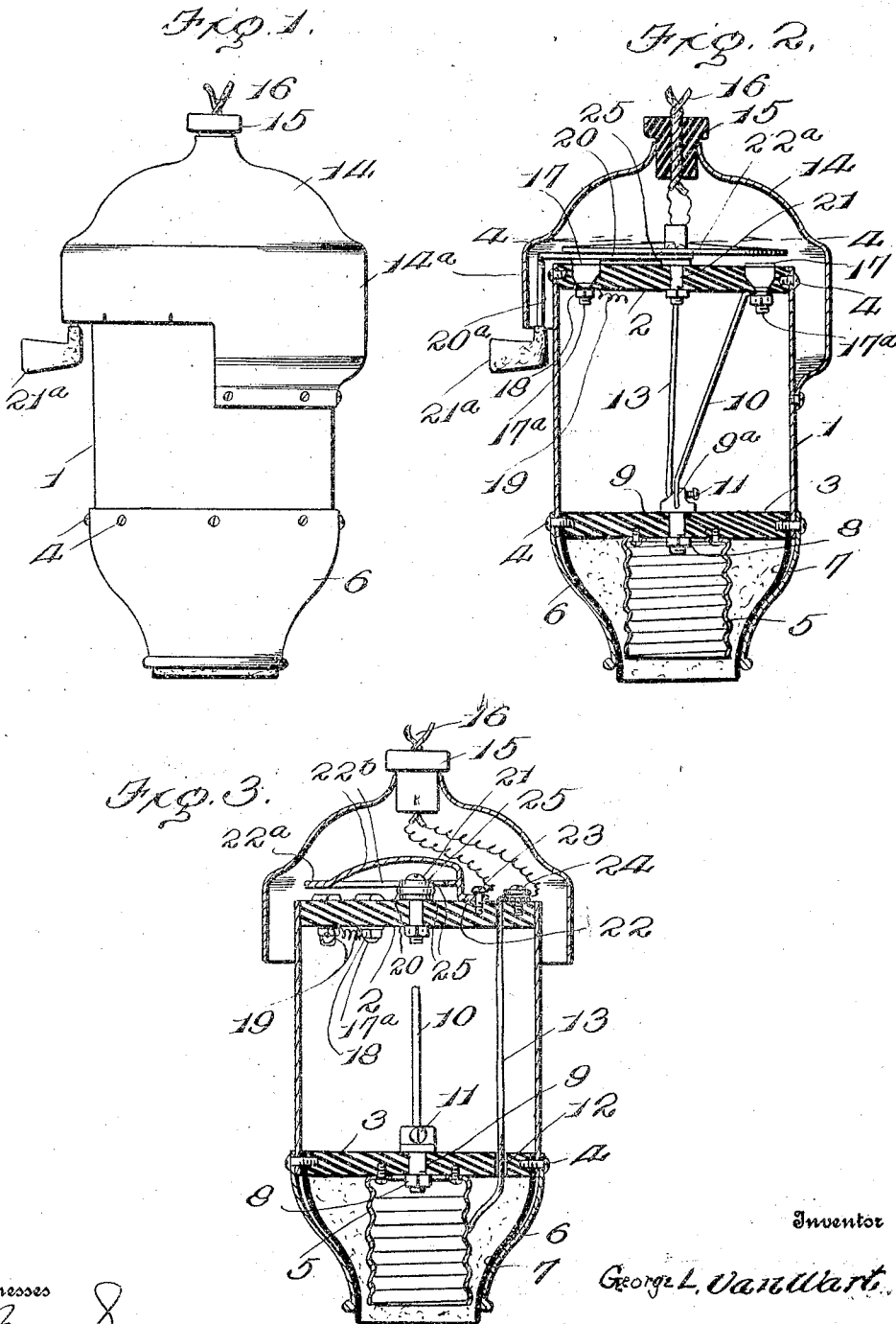


G. L. VAN WART.
ELECTRIC LAMP.
APPLICATION FILED AUG. 3, 1908.

936,747.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

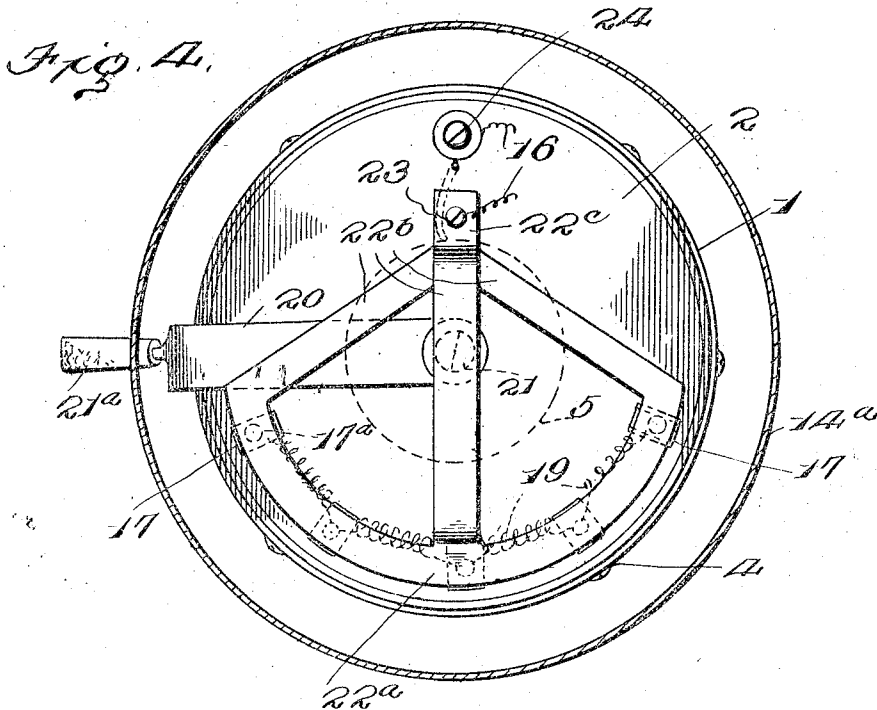


Fig. 5. Fig. 6.

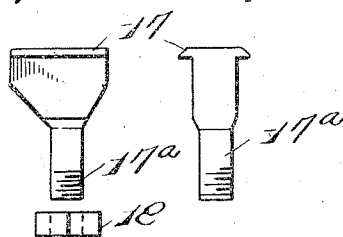
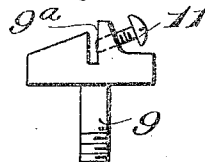


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE L. VAN WART, OF WATERTVILLE, CONNECTICUT.

ELECTRIC LAMP.

936,747.

Specification of Letters Patent.

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Application filed August 3, 1908. Serial No. 446,662.

To all whom it may concern:

Be it known that I, GEORGE L. VAN WART, citizen of the United States, residing at Waterville, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Electric Lamps, of which the following is a specification.

The present invention relates to improvements in electric lighting, and more particularly to a novel means whereby a current flowing through the individual lamps may be controlled and the lamps caused to burn with various degrees of brilliancy.

More specifically the invention resides in the provision of a base to which an incandescent lamp may be secured, a series of resistances being carried by the base and novel means being provided for cutting any selected number of these resistances into the circuit with the lamp.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of a lamp base constructed in accordance with the invention. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a similar view on a plane at right angles to that of Fig. 2. Fig. 4 is an enlarged horizontal sectional view on the line 4-4 of Fig. 2. Fig. 5 is a side elevation of one of the contact members. Fig. 6 is an end view of the same. Fig. 7 is a detail view of the bolt to which the contact member at the base of the socket is attached.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates the casing of the electric light base, the said casing being shown as having a substantially cylindrical formation and as closed at its opposite ends by means of the heads 2 and 3 which are held in position by the screws 4 and may be formed of any suitable insulating material such as porcelain. Secured to the outer face of the head 3 is a socket 5 which is internally threaded and is designed to engage an incandescent lamp in the usual manner. Surrounding the socket 5 and secured to the casing is a cap

6, a layer 7 of insulating material being disposed upon the inner face of the cap and the said insulating material fitting between the outer ends of the socket and the cap so that the socket is completely insulated from the metallic portions of the electric light base. The contact member 8 at the base of the socket 5 is in the nature of a nut which is threaded upon a bolt 9 passing through the head 3, the head of the bolt being slotted at 9^a to receive the flattened extremity of a wire 10, a set screw 11 being utilized for retaining the flattened end of the wire in position within the slot. An opening 12 is formed in the head 3 at one side of the socket 5 and extending through this opening is a wire 13 the extremity of which is secured to the socket 5 upon the exterior thereof.

Fitted over the opposite end of the casing is a cap 14 which is formed with a rim 14^a, the said rim being spaced from the casing and having the inner edge thereof extended inwardly and secured to the casing. The central portion of the cap is provided with a sleeve 15 through which the feed wires 16 pass, the said sleeve being formed of some insulating material such as hard rubber. A peripheral row of contacts 17 is provided upon the head 2 and these contacts are constituted in the present instance by the heads of bolts 17^a which extend through the head and are capped by the nuts 18. Resistance coils 19 are interposed between the various contacts 17, the extremities of the resistance coils being secured to the bolts 17^a by means of the nuts 18. One of the end contact members 17 of the series has the wire 10 secured thereto and the various contacts are designed to be frictionally engaged by a lever 20 which is pivotally mounted upon a bolt 21 passing centrally through the head 2, washers 25 being placed above and below the lever. The free end of the lever is extended laterally at 20^a so as to swing in the space between the casing 1 and the rim 14^a of the cap 14, and terminates in a finger-piece 21^a of some insulating material.

A spring plate is disposed immediately over the lever 20 for holding it in a yielding engagement with the various contact members and this spring plate as shown on the drawing is formed with an arc-shaped portion 22^a connected by the radial arms 22^b to a tang 22 which is secured to the head 2 by suitable fastening members such as the screws 23. This tang is offset from the plane

of the plate so that the plate is spaced from the head and the middle arm 22^b is deflected outwardly so as to extend over the head of the bolt 21 without coming into contact therewith. One of the feed wires 16 is connected to one of the screws 23 and is in electrical connection with the spring plate while the opposite feed wire is connected to a binding post 24 which also engages the extremity of the wire 13.

When the lever 20 is swung to one side so that it does not engage any of the contacts 17 the circuit will be broken and no current will flow through the lamp engaged by the socket 5. However, when the lever is moved into engagement with the opposite end contact of the series to that connected with the wire 10 all of the resistances 19 will be introduced into the circuit with the lamp and the current flowing through the lamp will be weak and will only produce a weak light. By moving the lever into engagement with the various contacts 17 any selected number of the resistances can be introduced into the circuit and the lamp caused to burn at any desired degree of brilliancy. Such a construction has the advantage of lengthening the life of the filament in the lamp as the current must be turned on gradually and the full force of the current is not caused to pass suddenly through the lamp. The invention has the further advantage of enabling the individual lights to be burned either at their full capacity or at a reduced candle power as desired.

Having thus described the invention, what is claimed as new is:

1. In an electric light socket, the combination of a base, a series of contacts upon the base, resistances interposed between the various contacts, a lever pivoted upon the base and designed to be swung into engagement with any selected one of the contacts to introduce the desired number of resistances into the circuit, and a spring plate disposed over the lever and holding the same in a yielding engagement with the contacts, the said spring plate comprising an arc shaped portion which is connected by radial arms to a tang, the tang being offset from the plane of the remaining portion of the plate and secured to the base.

2. In an electric light socket, the combination of a cylindrical casing, heads applied to opposite ends of the casing, a socket upon one of the heads, a cap applied to the opposite end of the casing and formed with a rim which is spaced from the casing, a series of contacts upon the head at the said opposite end of the casing, resistances interposed between the various contacts, and a lever pivotally mounted upon the head and adapted to be swung into engagement with any selected one of the contacts to introduce the desired number of resistances into the circuit, the end of the lever being extended laterally and operating freely between the cylindrical casing and the rim of the cap.

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

GEORGE L. VAN WART. [L. S.]

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