

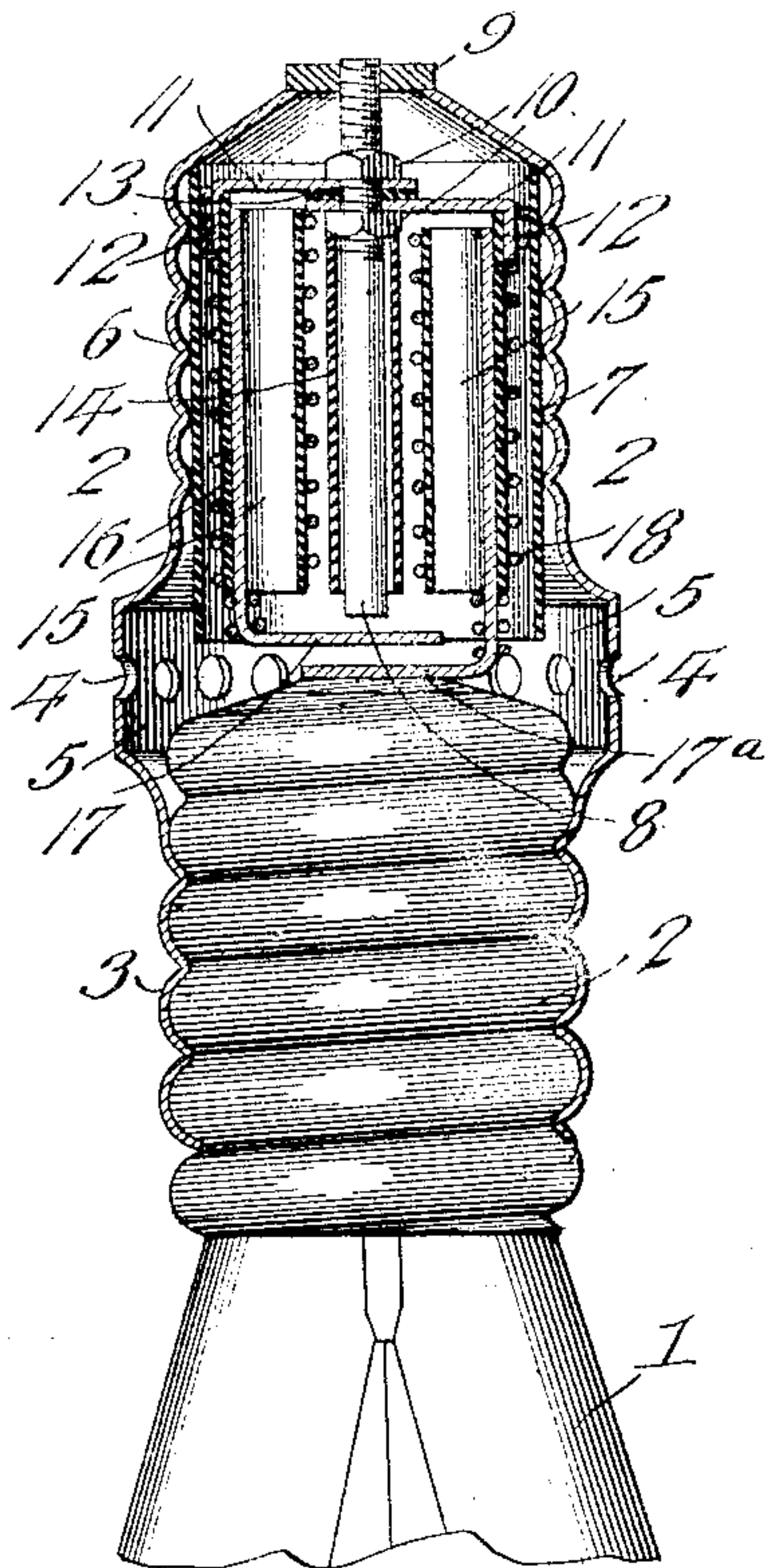
No. 859,821.

PATENTED JULY 9, 1907.

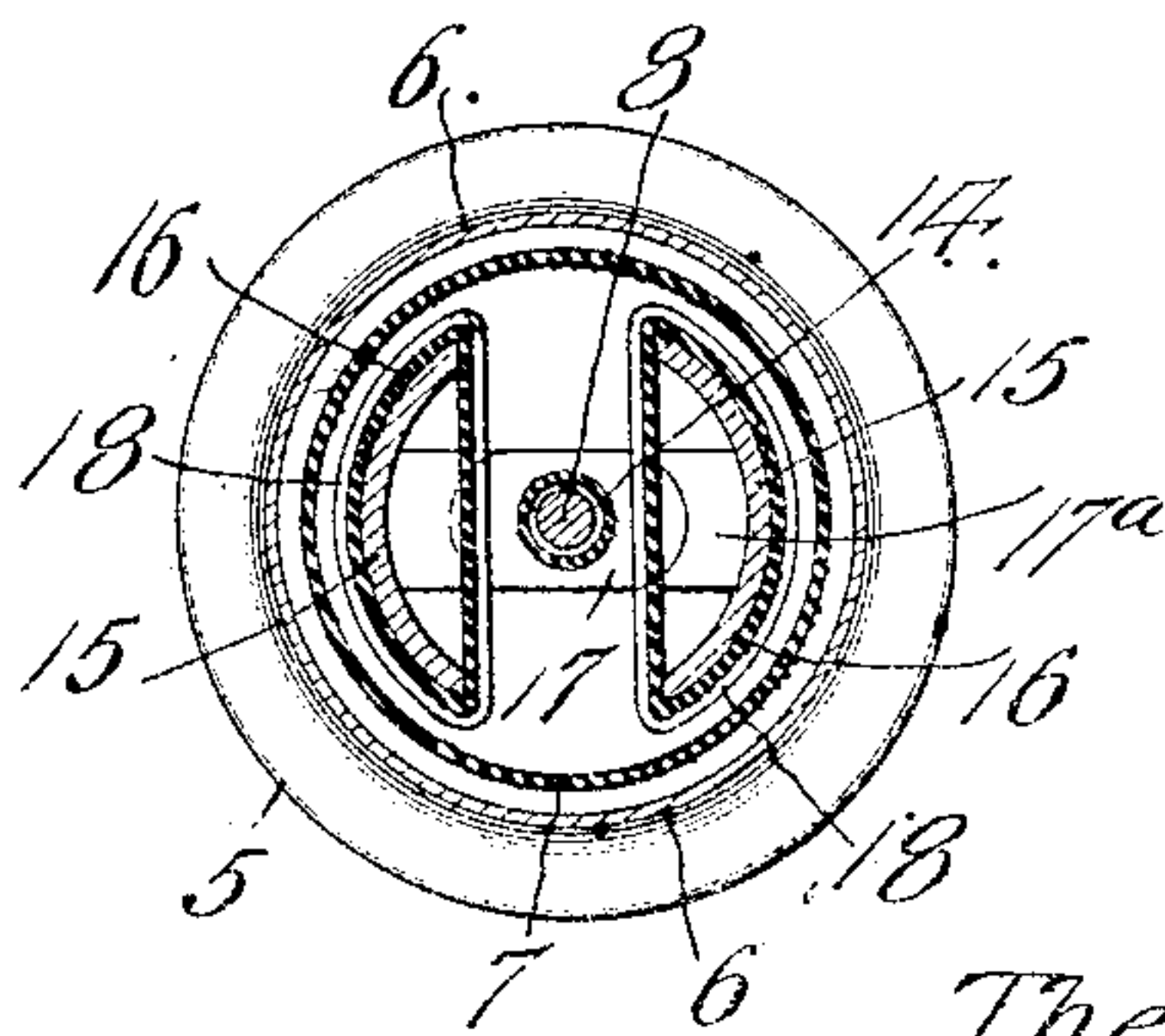
T. KOPP.  
CONTROLLER FOR INCANDESCENT ELECTRIC LIGHT BULBS.

APPLICATION FILED OCT. 13, 1906.

*Fig. 1.*



*Fig. 2.*



Witnesses

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By

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# UNITED STATES PATENT OFFICE.

THEODORE KOPP, OF PHILADELPHIA, PENNSYLVANIA.

## CONTROLLER FOR INCANDESCENT-ELECTRIC-LIGHT BULBS.

No. 859,821.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed October 13, 1906. Serial No. 338,816.

*To all whom it may concern:*

Be it known that I, THEODORE KOPP, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Controllers for Incandescent-Electric-Light Bulbs, of which the following is a specification.

This invention relates to controllers for incandescent electric light bulbs, and one of the principal objects of the same is to provide simple and reliable means for regulating the light to produce a dim glow, a light of greater intensity and to give the full power to the light by a simple adjustment of parts.

Another object of my invention is to provide means for adjusting the intensity of the light by adjustable steps from a dim to a brilliant light with an intermediate adjustment for giving a light of greater intensity than the glow or dim light and of less intensity than the full brilliancy of the lamp.

These and other objects may be attained by means of the construction and arrangement illustrated in the accompanying drawings, in which:

Figure 1 is a sectional view taken vertically through my controller and showing the same applied to an ordinary incandescent electric light bulb, the latter being shown partially broken away. Fig. 2 is a transverse section on the line 2-2, Fig. 1.

Referring to the accompanying drawing for a more particular description of my invention, the numeral 1 designates an incandescent electric light bulb, and 2 is the brass threaded attaching member of the same. Applied to the member 2 is my controller which consists of a shell or casing provided with a hollow threaded or corrugated socket portion 3 designed to be fitted to the member 2 of an ordinary electric light bulb. The shell or casing is provided with a series of perforations 4 to permit a free circulation of air into the upper portion of the controller, the casing being enlarged at this point to form an air chamber 5. The outer surface of the upper part of the casing or shell is spirally corrugated, as at 6, for attachment to a hanger or other support for the light bulb. Within the upper portion of the shell is an insulator tube 7 of mica or other insulating material. The short circuit pin 8 is supported in the upper end of the shell upon an insulator nut 9 and by means of the lock nuts 10 and secured between these lock nuts are two semi-circular plates or disks 11, each provided with a downwardly extending flange 12. A piece of insulating material 13 is disposed between the two plates 11. Surrounding the pin 8 is an insulator tube 14 preferably formed of mica. Contact pieces 15 of semi-circular formation are mounted within mica tubes 16 and the lower ends of the contact pieces are provided each with an inwardly extending contact arm 17, one disposed above the other

and said arms being normally separated by means of resistance coils 18 which surround the mica insulators 16, said resistance coils bearing at their lower ends against the spring contact arms 17, 17<sup>a</sup>, while the upper ends of the coils bear against the flanges 12 of the semi-circular portions 11.

When the spirally corrugated member 3 of the controller is inserted in a socket, and the short circuit pin 8 is connected up to the electrical conductors, the current will flow through said pin, through the resistance coil 18, and through the contact arm 17<sup>a</sup> to the lamp 1 to produce a very dim light owing to the resistance of coil 18. In order to decrease the intensity of the light, the threaded member 2 is turned into the member 3, and the contact arm 17<sup>a</sup> is forced against the arm 17, thus permitting the current to flow through the resistance coils 18 on opposite sides of the short circuit pin, thus decreasing the brilliancy of the light, owing to the resistance of the two coils 18. Should the full force of illuminating power be required the member 2 is turned still further and the short circuit pin is then brought into contact with the arm 17, and said arm is brought into contact with arm 17<sup>a</sup>; thus the current flows through the short circuit pin directly to the lamp and gives the full power thereto.

From the foregoing it will be obvious that the illuminating power may be increased or diminished by turning the bulb within its socket to produce either a dim glow, a light of greater intensity or a full power light, as desired.

My controller is of simple construction, can be quickly applied to any electric light bulb, without alteration in the structure of the same, and can be quickly operated for giving the required quality or intensity to the light.

Having thus described the invention, what I claim is:

1. An electric light controller provided with contact arms, and a short circuit pin, said contact arms and short circuit pin being normally held out of engagement, a resistance coil, and connections for making contact between said arms and between said arms and pin.

2. An electric light controller comprising a threaded shell designed to be attached to an electric light socket, a pair of contact-pieces within the shell, contact arms formed on said pieces, resistance coils surrounding said contact pieces, and a short circuit pin within the casing.

3. A controller for electric light comprising a threaded shell, contact arms normally held separated within said shell, resistance coils surrounding said contact arms, a short circuit pin supported normally out of contact with said contact arms, substantially as described.

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

THEODORE KOPP.

Witnesses:

CHARLES GRUBNER,  
JOHN MCKEE.