No. 711,243. Patented Oct. 14, 1902.

W. A. CHURCH.

INCANDESCENT LAMP SOCKET.

(Application filed Jan. 10, 1902.)

(No Model.)

Fig. 1.

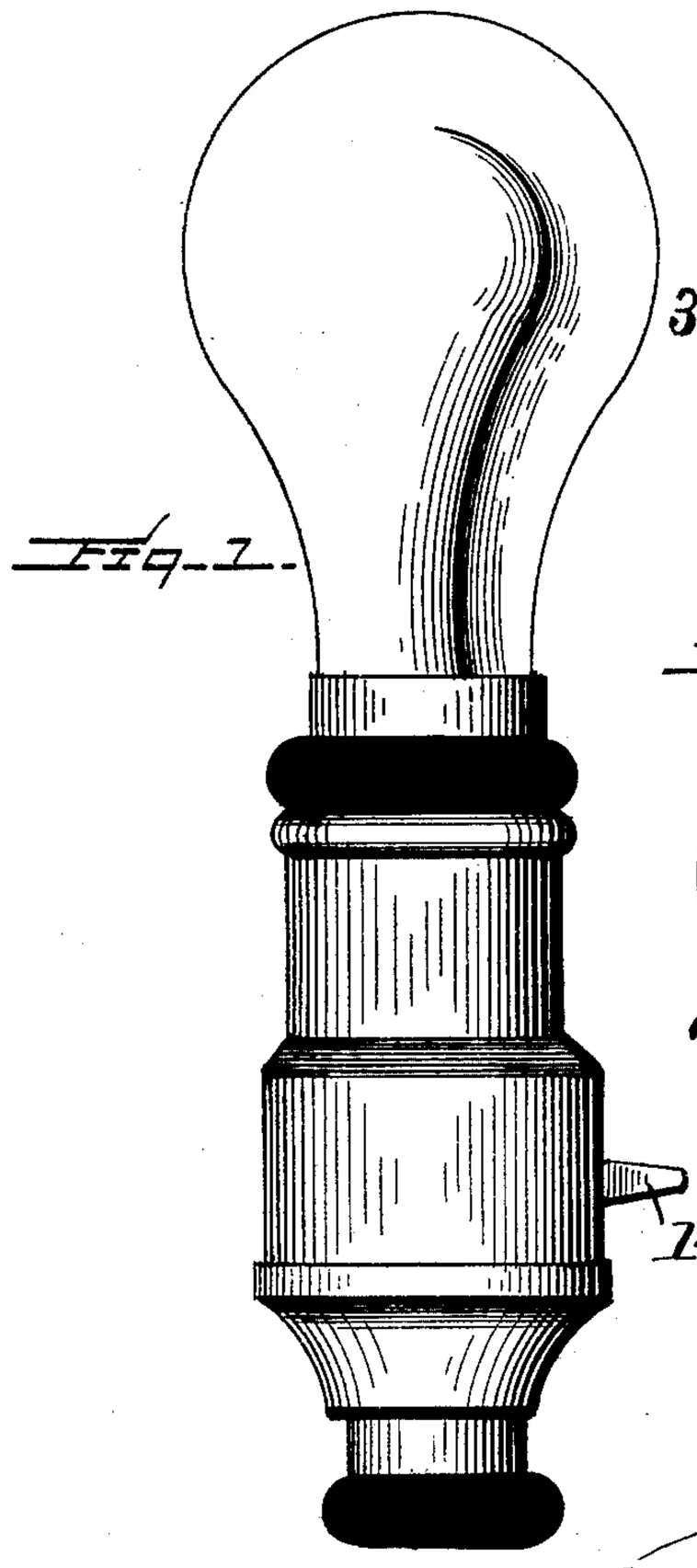


Fig. 2.

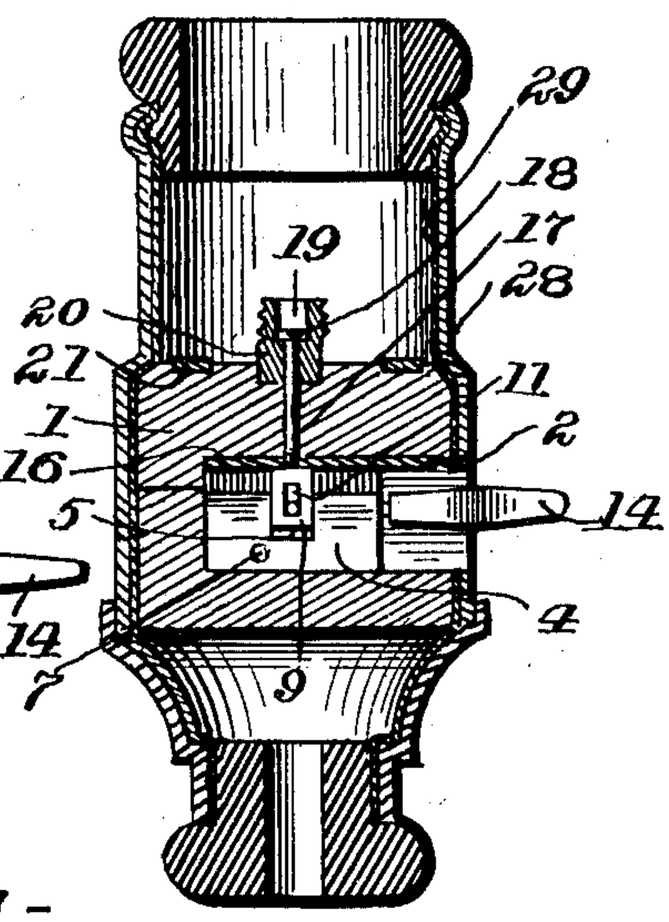


Fig. 4.

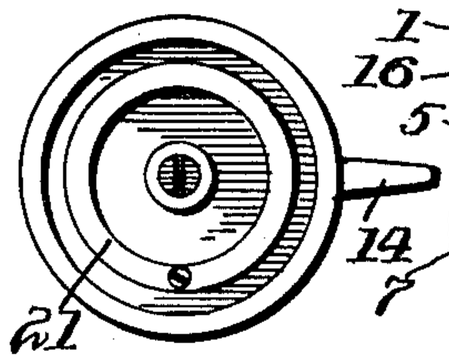


Fig. 5.

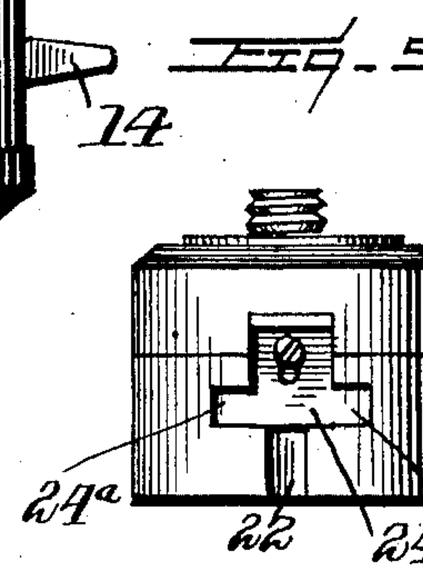


Fig. 3.

Fig. 6.

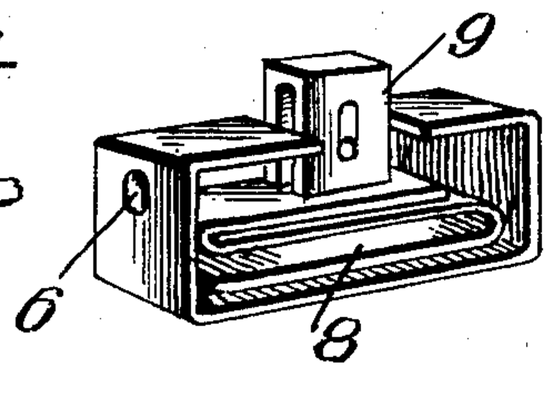


Fig. 7.

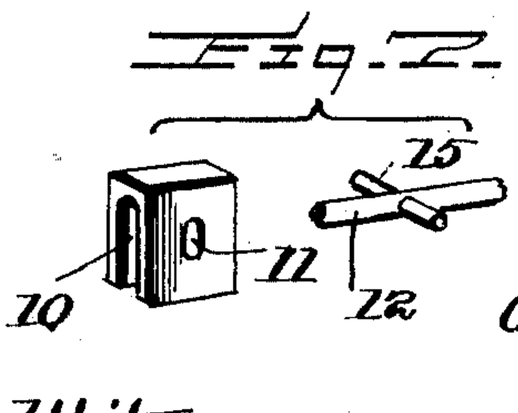


Fig. 8.

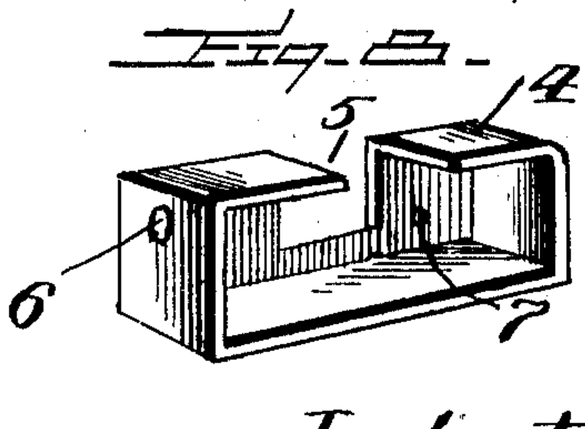
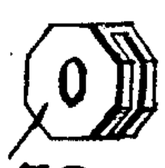


Fig. 9.



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UNITED STATES PATENT OFFICE.

WALTER A. CHURCH, OF BINGHAMTON, NEW YORK.

INCANDESCENT-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 711,243, dated October 14, 1902.

Application filed January 10, 1902. Serial No. 89,182. (No model.)

To all whom it may concern:

Be it known that I, WALTER A. CHURCH, a citizen of the United States of America, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Incandescent-Lamp Sockets, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in incandescent-lamp sockets, and has for its object to provide a socket containing but few parts, so that the same will not be liable to come out of order, and to construct a socket wherein the parts comprising the same may be securely held together.

Another object of the present invention is to construct the outer casing of suitable metal and to enamel the inner walls of the casing in order to form a coating of insulation for the metal casing.

My invention further aims to provide a lamp-socket of the above-described class that will be extremely simple in construction, strong, durable, and comparatively inexpensive to manufacture; furthermore, one that may be easily operated to make and break the current when desired.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a side elevation of my improved socket with a lamp in position therein. Fig. 2 is a vertical sectional view of the socket. Fig. 3 is a transverse vertical sectional view of the socket with the casing removed therefrom. Fig. 4 is a plan view with the casing removed. Fig. 5 is a side elevation of Fig. 3. Fig. 6 is a detail perspective view of the switch. Fig. 7 is a perspective view of the contact-block. Fig. 8 is a perspective view of the inner casing of the switch. Fig. 9 is a perspective view of the modified form of contact-block.

In the drawings the reference-numeral 1 indicates the body portion of the socket, which is composed of suitable insulating material, said socket being composed of two pieces, which are placed together and held in said position by the outer casing, also by means of a plate to be hereinafter described. The said socket has formed therein a central recess 2, in which is secured the casing 4, said casing being centrally cut away, as shown at 5, and has formed therein an opening 6 and a screw-threaded opening 7. A flat spring 8 is secured in the casing 4, and on the upper face of said spring is arranged a contact-block 9, having formed therein a central slot 10 and an elongated opening 11 extending therethrough transversely to the slot 10. A shaft 12 extends through the opening 6 of the casing and through the slot 10 of the contact-block. The outer end of the said shaft is provided with a switch-key 14 and the other end of the shaft is secured in the casing 4. This shaft 12 is further provided with transversely-extending pins 15, which pins are seated in elongated openings 11. A contact-plate 16 is arranged in the upper portion of the central recess 2, said contact-plate being secured by means of the screw-threaded rod 17, extending upwardly through the casing 1, the head 18 of said rod being seated in the recess 19 of the screw-threaded block 20.

The reference-numeral 21 represents a contact-ring arranged in the upper face of the casing 1, forming a contact with the lamp.

The reference-numeral 22 represents openings formed in the casing 1 to receive the wires, said wires being secured to binding-posts 23 of the plates 24 25, the plate 24 being connected to the pin 26, extending through the casing 1 and forming a contact with the under face of the ring 21, and the plate 25 has passing therethrough a pin 27, which is secured in the screw-threaded opening 7 of the casing 4, completing the circuit when the switch is operated. The plate 24 has formed on its lower end two lugs 24^a and 24^b, said lugs forming a lock to bind the two members of the socket together.

The reference-numeral 28 represents the

outer casing or shell having an inner enamel lining 29. This inner lining may also be a separate casing of insulated material, such as gutta-percha or the like, if desired.

The reference-numeral 30 represents an octagonal contact-block which is a modified form of the contact-block 9 and may be used in lieu thereof.

The reference-numeral 35 represents a lamp. When the lamp is placed in position in the socket, the circuit will be completed by means of the contact-ring and the screw-threaded rod 17, contact-plate 16, contact-block 9, spring 8 from the casing 4, from the pin 27 to the plate 25, from the binding-post 23, the plate 24 forming a circuit through the pin 26 and the contact-ring 21. As the switch-key is turned the contact-block 9 will be tilted and lie flat upon the flat spring 8, thereby disengaging the contact-plate 16, which will break the circuit, as will be readily understood from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. In an incandescent-lamp socket, comprising an insulated body portion composed of two parts, a casing having cut-away portions secured in said body portion, contact-plates secured in said body portion, one of said plates acting as a lock to hold the socket together, binding posts secured in said contact-plates, a contact-pin forming a connection between said casing and one of said contact-plates, a spring arranged in said casing, a shaft extending through said casing, a switch-key mounted on the end of said shaft, a contact-block secured to said shaft, a contact-ring arranged in the upper portion of said body portion, and a rod extending upwardly through said body portion forming a contact with the said contact-plate, substantially as described.

2. In an electric socket for incandescent lamps, said socket being composed of two parts, the combination of an outer casing having formed thereon an inner enameled face, a body portion having a recess formed therein, an inner casing having cut-away portions, a flat spring secured in said casing, contact-plates formed in the upper wall of said recess, a rod connecting said plate extending upwardly through said casing, contact-plates secured in the sides of said body portion, binding-posts secured in said contact-plates, electrical connections to said binding-posts, a contact-ring secured in the upper face of said body portion, electrical connection formed between said binding-posts and one of said contact-plates, an electrical connection formed between the other of said contact-plates and said casing, a contact-block having a slot formed therein and an elongated opening extending transversely therethrough, a shaft secured in said casing, transversely-extending pins carried by said shaft and engaging said contact-block, and means to operate said shaft, all parts being arranged and operating substantially as shown and described.

3. In an electric-lamp socket, comprising an insulated body portion, composed of two parts, and having a T-shaped slot formed on its surface, a casing having cut-away portions secured in said body portion, contact-plates, secured in said body portion, a T-shaped contact-plate within the T-shaped slot of the body portion, a contact-pin forming a connection between said casing and one of the said contact-plates, a spring in said casing, a shaft extending through the said casing, a switch-key secured on the end of said shaft, a contact-ring arranged in the upper portion of said body portion and a rod extending upwardly through said portion forming a contact with the said contact-plate.

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

WALTER A. CHURCH.

Witnesses:
CHARLES J. COOK,
W. E. ROBERTS.