

Apr. 10, 1923.

1,451,122

C. E. STAHL
ELECTRIC LAMP SOCKET
Filed Jan. 22, 1920

Fig. 1.

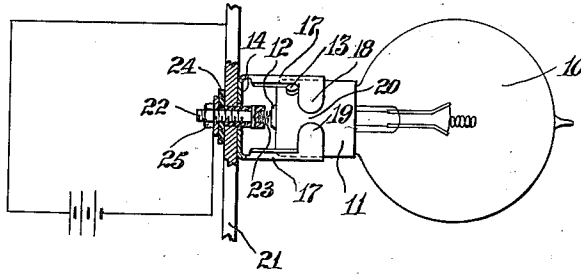


Fig. 2.

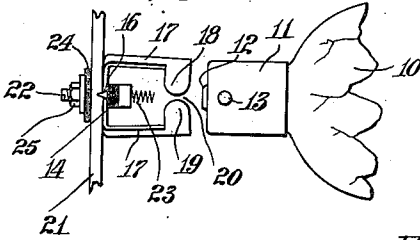


Fig. 3.

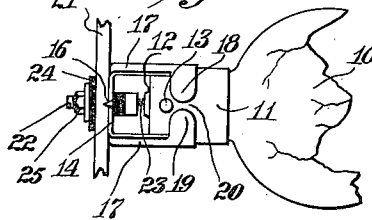


Fig. 4.

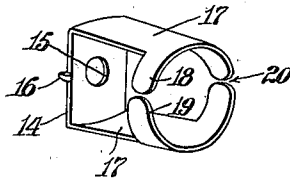


Fig. 5.

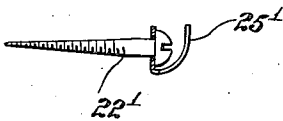
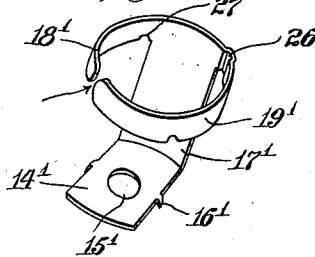


Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES E. STAHL, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE CONNECTICUT TELEPHONE & ELECTRIC CO., INC., OF MERIDEN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

ELECTRIC-LAMP SOCKET.

Application filed January 22, 1920. Serial No. 353,270.

To all whom it may concern:

Be it known that I, CHARLES E. STAHL, a citizen of the United States of America, residing at Meriden, Conn., have invented a new and useful Electric-Lamp Socket, of which the following is a specification.

My invention has for its main object the production of a simple, inexpensive device as a socket or holder for incandescent electric lamp bulbs. In its preferred form the socket is formed in one piece from sheet metal, for instance steel, and has a base, two spring arms and yielding jaws for receiving and holding the stem of a bulb.

Fig. 1 is a side view and partial section of a device embodying the improvements of my invention showing electric connections therewith.

Fig. 2 is a side view showing the parts with the bulb stem about to be inserted.

Fig. 3 is a similar view with the bulb stem partially inserted.

Fig. 4 is a perspective view of the socket by itself.

Fig. 5 is a detail view of a modified spring contact and screw.

Fig. 6 is a perspective view of a modified form of the socket.

The device is particularly intended for small bulbs such as 10 having cylindrical stems such as 11 with one or more end contacts such as 12 and lateral pins or projections such as 13.

The socket base 14 has a central perforation 15 for the attaching screw and may have one or more prongs such as 16 on opposite sides for assisting and holding the base from twisting. The side arms 17—17 extend abruptly from the base and are preferably somewhat arched in cross section to stiffen them and to cause them to conform to the cylindrical walls of the stem of the bulb. The outer ends of the arms are provided with jaws such as 18 and 19 adapted to embrace the stem of the bulb. Between the ends of the jaws 18 and 19 is an opening 20 which is contracted toward the center so as to afford a tapered entrance from both ends for the pins 13 of the bulb stem. The shape and proportions of the arms and jaws are such that when the parts are in the position shown in Fig. 3, the space 20 between the ends of the jaws 18 and 19 is narrower than the diameter of the pin 13. As a re-

sult, the stem of the bulb cannot accidentally slip out. It should be understood, however, that normally when the stem of the bulb is inserted it will be rotated into the position shown in Fig. 1, in which the friction of the parts is sufficient normally to hold the stem from accidental disengagement.

In the arrangement shown in Fig. 1, the support 21 affords electrical connection with the base of the socket and the screw 22 affords electrical connection through the spring 23 with the end terminal of the bulb. The screw 22 is shown insulated from the support 21 by means of a bushing 24. A nut 25 may be employed to tighten the screw 22. In the form shown in Fig. 5 the screw 22' and the spring 25' are of slightly different form.

In the form shown in Fig. 6 the base 14 has a single arm 17' and there are but two jaws 18' and 19' with a space 20' between their free ends for the passage of one of the pins on the bulb stem. In case the bulb is provided with two pins of course a passage must be provided opposite the passage 20' as for instance by means of a groove 26. If desired, recesses such as 27 for the pins may be provided in the rear edges of the jaws as a further insurance against accidental displacement.

I claim:

1. In a socket for a lamp stem having a pin thereon, a base, yielding arms on said base and extending at an angle thereto, curved spring jaws on said arms forming pin holding shoulders and having rounded ends, said jaws being adapted to substantially encircle a lamp stem, the adjacent rounded ends of the spring jaws being normally spaced apart a distance less than the diameter of the pin on a lamp stem whereby when a lamp stem is inserted in the socket the pin on the stem will spring the jaws apart to permit insertion of the stem and the jaws will thereafter spring back to a distance apart less than the thickness of the pin on the lamp stem to prevent accidental withdrawal of the stem from the socket.

2. In a socket for a lamp stem having a pin thereon, a base, curved jaws forming pin holding shoulders, means for supporting said jaws from said base, the end of at least one of said jaws being tapered to provide a tapered space between the adjacent ends of

said jaws, said jaws being formed to substantially encircle a lamp stem, the adjacent ends of said jaws being normally spaced apart a distance less than the thickness of the pin on a lamp stem whereby when a lamp stem is inserted in the socket the pin on the stem will enter the tapered space between the ends of the jaws and spring the latter apart to permit the insertion of the stem and the jaws will afterward spring back to a distance apart less than the thickness of the pin on the lamp stem to prevent the accidental withdrawal of the stem.

3. In a socket for a lamp stem having a pin thereon, a base, a jaw forming a pin holding shoulder, means for supporting said jaw from said base, a member supported

from said base and extending into proximity to the free end of said jaw, said jaw member being adapted to substantially encircle a lamp stem, the distance between the free end of said jaw and the adjacent member being less than the thickness of the pin on the lamp stem, whereby when a lamp stem is inserted in the socket the pin on the stem will enter the space between the jaw and the adjacent member and spring the jaw and member apart to permit the insertion of the stem and thereafter the parts will spring back to a distance apart less than the thickness of the pin on the lamp stem to prevent the accidental withdrawal of the stem.

CHARLES E. STAHL.