W. C. TREGONING.

ELECTRIC LAMP SOCKET AND SECURING MEANS THEREFOR.

APPLICATION FILED FEB. 12, 1908.

966,966. Patented Aug. 9, 1910.

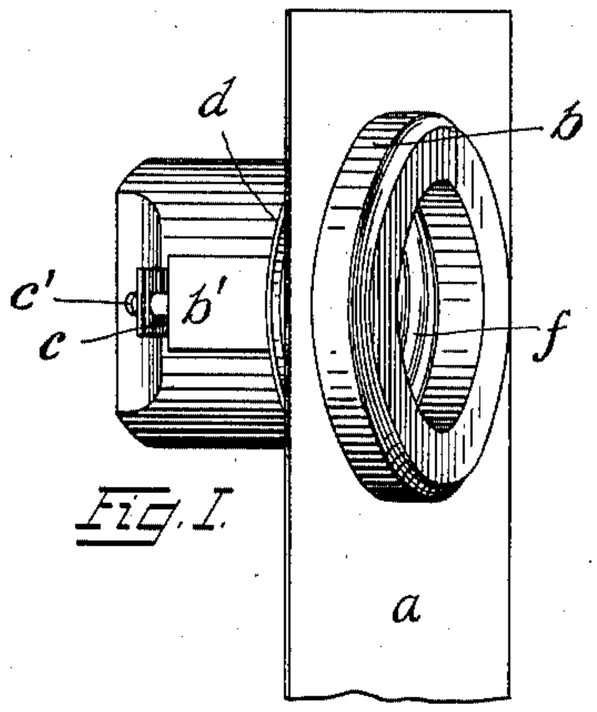

Fig. I.

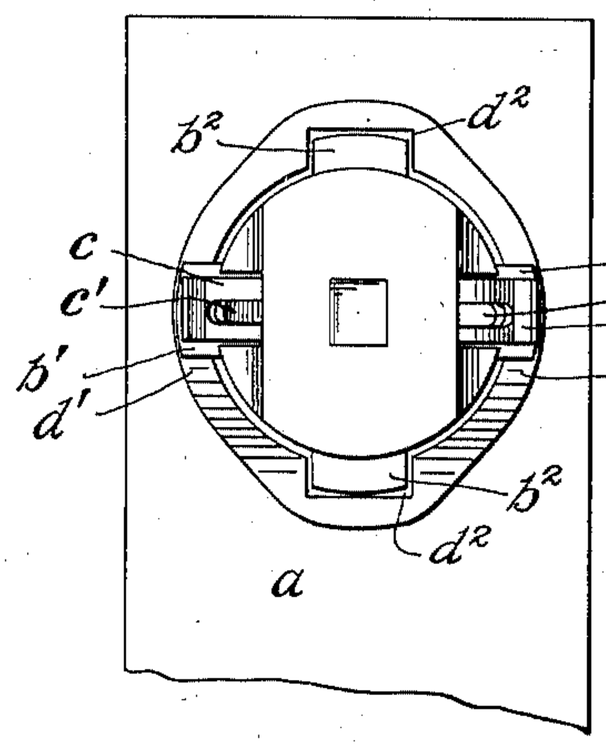

Fig. II.

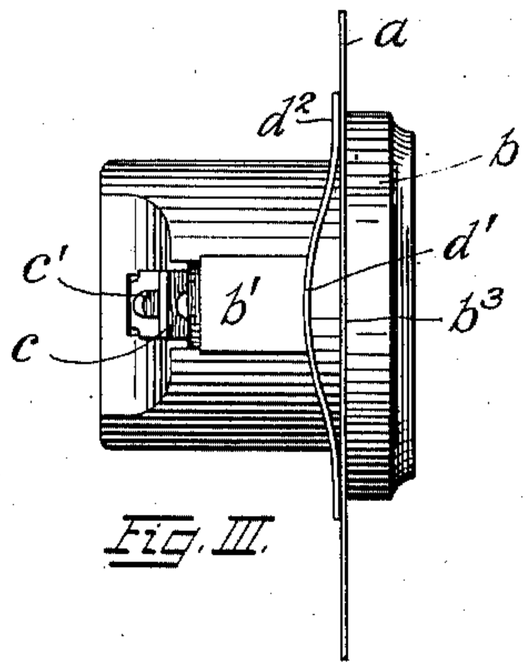

Fig. III.

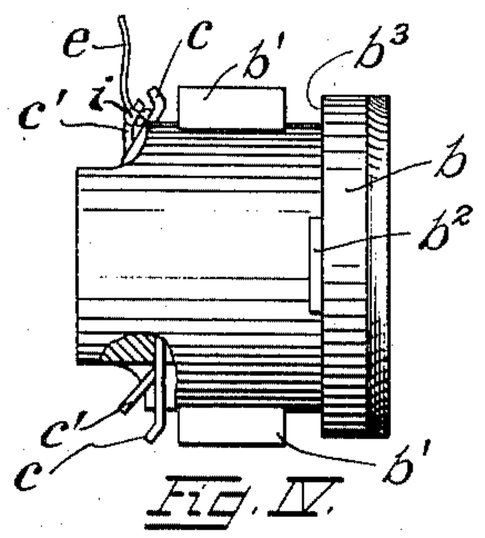

Fig. IV.

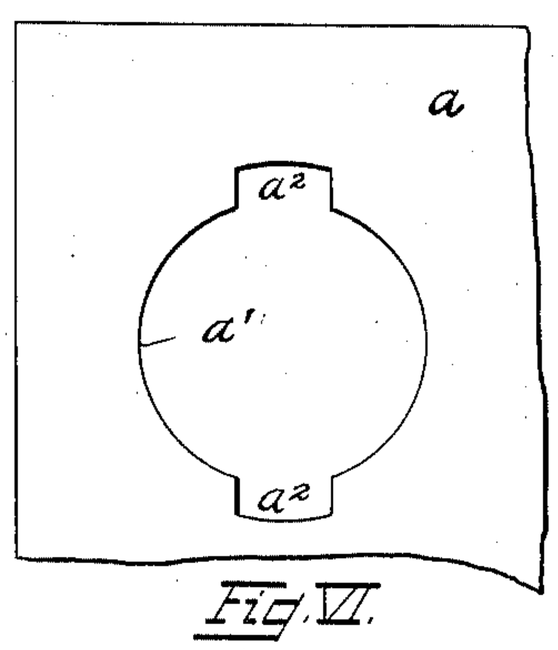

Fig. VI.

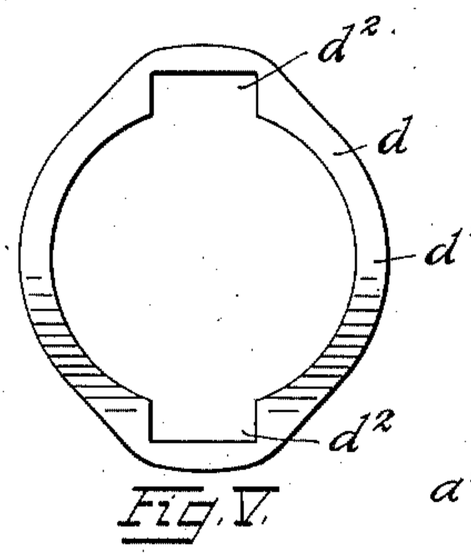

Fig. V.

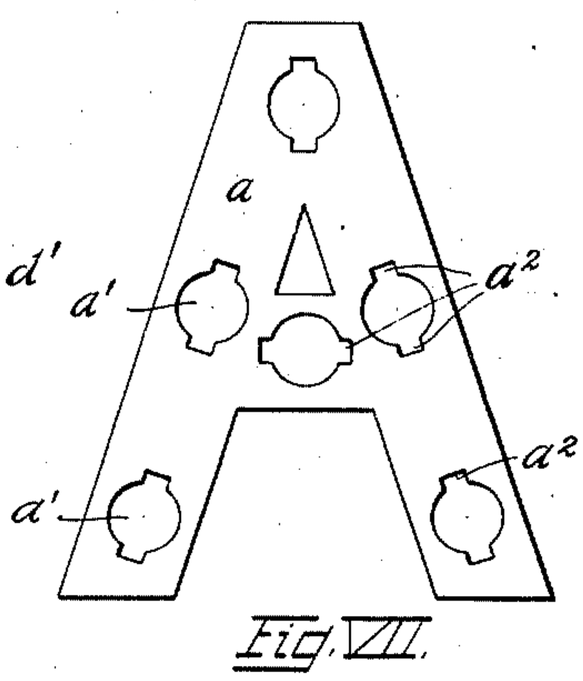

Fig. VII.

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By Albert G. Davis
his attorney.

UNITED STATES PATENT OFFICE.

WILLIAM C. TREGONING, OF CLEVELAND, OHIO, ASSIGNOR TO THE TREGONING ELECTRIC MANUFACTURING COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

ELECTRIC-LAMP SOCKET AND SECURING MEANS THEREFOR.

966,966. Specification of Letters Patent. Patented Aug. 9, 1910.

Application filed February 12, 1908. Serial No. 415,512.

To all whom it may concern:

Be it known that I, WILLIAM C. TREGONING, a citizen of the United States of America, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Electric-Lamp Sockets and Securing Means Therefor, of which the following is a specification.

My invention relates to improvements in electric lamp sockets and securing means therefor, and has for its object the provision of such means for removably mounting the socket, as shall be of the simplest and most efficient character.

More particularly, the improvements herein set forth are applicable to those lamp sockets which are designed for use upon electrically illuminated signs and exterior decorations; the requirements whereof being somewhat unusual. These signs commonly are formed of galvanized sheet metal letters, wherein apertures are cut for the sockets and various securing means for the porcelain bases thereof, have already been devised and employed in practice. In certain types of those with which I am acquainted, the porcelain base is engaged by a part stamped up from the galvanized sheet iron, adjacent to the opening through which the socket protrudes, but the member is not positively locked in place, and, moreover, the stamped up parts have no sufficient resiliency or springlike quality to maintain permanently, sufficient pressure upon the socket. In other types now commonly used, two or more screws are employed in association with each socket and appropriate securing means for attaching said socket to the sheet metal base.

In my improved construction, the undesirable screws are altogether dispensed with, and a separate springlike locking member is provided in association with a suitably formed porcelain base, whereby the socket is securely locked in place through the co-action of lugs formed upon said base. There is also provided the simplest form of electric terminal clip, whereby the connection is most readily secured to the external circuit. The details, however, can be more readily understood by making reference to the accompanying drawings, wherein:—

Figure I is a perspective view of one of said sockets and its mounting plate. Fig. II is a rear view of the socket and mounting plate, illustrating the locking mechanism. Fig. III is a side view thereof. Fig. IV is another side view showing the socket removed from its mounting plate. Fig. V is a plan view of the springlike ring. Fig. VI is a fragmentary plan view showing the opening in the mounting plate; and Fig. VII illustrates upon a small scale, the mounting plate formed as a letter **A** and adapted to receive six of the sockets.

Throughout the several figures of the drawings I have employed the same characters of reference to indicate similar parts.

In said drawings *a* designates a sheet metal strip which may form some portion of any suitable mounting plate or letter-face desired. At such intervals as may be required, circular openings *a'* are provided with which connect the recesses or diametrically positioned extensions a^2. These, as will be seen by making reference to the base *b*, Fig. IV, serve to accommodate either the similarly positioned lugs *b'* in inserting the socket, or the lugs b^2, for locking the same in place. It will be observed that the terminal members *cc'*, and the lugs *b'*, clear the opening so that the socket may be passed therethrough and given one quarter turn, in order to seat the locking lugs b^2 within the recesses a^2. The locking ring *d* is slipped over the terminals and lugs *b'*, and also given a one quarter turn, whereupon the socket is securely locked in place, as will be readily understood by referring to Fig. II, wherein the recesses d^2 register with the lugs b^2, while the upwardly curved portions *d'* bear directly upon the lugs *b'*. The wires, as *e*, may then be placed within the upwardly turned terminal or clip member *c*. With a pair of pliers, the tongue *c'* stamped from the center thereof, as best shown in Fig. III, is then bent down securely upon the wire, as shown in the upper part of Fig. IV, whereupon the connection may be made absolutely secure, if desired, by a small particle of solder *i*, although for temporary use the clip will grasp the wire with sufficient force. These terminal clips preferably are formed of sheet brass of moderately heavy gage and lacking any of the spring-like quality whereby the set given the clip members by the pliers is retained. The metallic screw shell *f* and any suitable sec-

ondary contact member are respectively connected to the clips in a manner well understood by those skilled in the art.

It will be seen that an unbroken circular face or rim b^3 engages the outer face of the mounting plate, and is held thereagainst by the spring, with sufficient force to prevent the access of snow or rain. The spring member being relatively small and light, may be formed of suitable spring-like metal, having a permanent arched set to secure the desired engagement of the parts. The insulation from the metallic mounting plate is of the highest character, since the interposed lugs b' prevent any possible electrical contact or grounding with the spring and associated mounting plate. The form of terminal clip avoids the use of screws, and is highly desirable either for a temporary or permanent connection, as explained, while the several features described serve to simplify and cheapen the type of lamp socket set forth above.

Having now explained the preferred form of my improvement, I claim as new and desire to secure by Letters Patent, the following:—

1. In apparatus of the class described, the combination with a mounting plate, having a circular opening and a connecting peripheral recess, of a socket-member formed of insulating material provided with a lug registering with said recess, and an additional lug disposed at an angle to the first, and a separate locking-ring formed of springlike sheet-metal independently rotatable with respect to the mounting plate and socket member, adapted to secure the parts removably together, substantially as set forth.

2. In apparatus of the class described, the combination with a mounting plate having a circular opening and diametrically positioned peripheral recesses, of a porcelain base-member provided with two sets of diametrically positioned lugs, substantially at right angles to each other; one set of said lugs registering with the recesses, and a springlike locking ring having a circular opening and diametrically positioned recesses, adapted to engage the lugs and retain the socket in position, substantially as set forth.

3. In apparatus of the class described, the combination with a mounting plate having a circular opening and diametrically positioned peripheral recesses, of an insulating lamp socket insertible therein and provided with diametrically positioned lugs in different planes adapted respectively to register with and pass through said peripheral recesses, and an independently adjustable annular locking-member formed of springlike sheet metal, interposed between the mounting plate and the lugs for removably securing the lamp socket in place, substantially as set forth.

4. In a mounting and securing means for lamp sockets, the combination with a mounting plate having a circular opening and a connecting recess, of an insulating lamp socket provided with a plurality of lugs angularly positioned in different planes with respect to each other and adapted respectively to pass through and to lie within said recess, and an independently adjustable locking member interposed between the mounting plate and the lug extending beyond said mounting plate, and adapted to removably mount the lamp socket therein, substantially as set forth.

5. A mounting for electric lamps, comprising a sheet metal mounting plate having one or more circular openings therein with diametrically positioned peripheral recesses, a porcelain socket-member, diametrically positioned lugs angularly disposed thereon and respectively adapted to register with the recesses, and an arched locking ring formed of springlike material having a circular central opening, and peripheral recesses adapted to engage the diametrically positioned lugs and the mounting plate and normally retain the socket in place, substantially as set forth.

6. In a mounting and securing means for lamp sockets, the combination with a mounting plate having a circular opening and a connecting recess, of a socket-member formed of insulating material provided with an extended lug adapted to pass through said recess in one position and thereafter be rotated beyond the recess, and an independently rotatable locking-ring formed of springlike sheet metal adapted to be positioned upon the socket-member and rotated for the purpose of temporarily locking the socket in place, substantially as set forth.

Signed at Cleveland, this 8th day of February, 1908, in the presence of two subscribing witnesses.

WILLIAM C. TREGONING.

Witnesses:

FRANK H. FORREST,

ALBERT LYNN LAWRENCE.