

H. CHRISTENSEN.
ELECTRIC LAMP SOCKET RETAINER.
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938,213.

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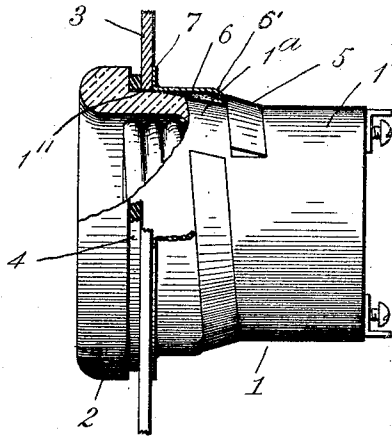


Fig. 1.

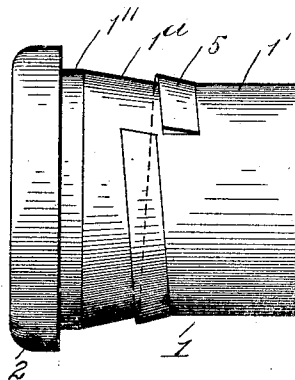


Fig. 2.

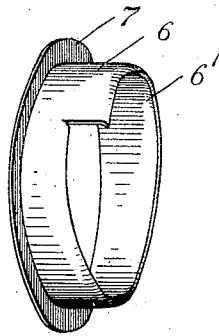


Fig. 3.

Witnesses

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ELECTRIC-LAMP-SOCKET RETAINER.

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To all whom it may concern:

Be it known that I, HJALMAR CHRISTENSEN, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Electric-Lamp-Socket Retainers, of which the following is a specification.

My invention has for its primary object the provision of an improved retainer, in the form of a ring, particularly adapted for holding electric lamp sockets in position on a sign board or other support.

A further object of my invention is to provide cooperating parts of improved construction and arrangement, arranged on the retaining ring and body to be held thereby, which permits of a ring of solid construction being slipped over one end of said body into proper position thereon.

With these and other objects in view, to be referred to as my description progresses, my invention resides in the features of construction, arrangements and combinations of parts, hereinafter described and succinctly pointed out in my appended claims.

Referring to the accompanying drawing, in which like numerals of reference designate like parts throughout: Figure 1 is a side view, partly in section of a lamp socket constructed and secured in position on a suitable support in accordance with my invention. Fig. 2 is a view in side elevation of the lamp socket removed, and Fig. 3 is a view in perspective of my retaining ring.

Referring to the drawing by numerals of reference, 1 designates a lamp socket or the like which is preferably enlarged at one end as by being provided with an external annular shoulder 2, to prevent the socket slipping through the opening in the sign board or other support 3, in which it is arranged, as clearly shown in Fig. 1. The other end portion of lamp socket 1, as indicated at 1', is substantially cylindrical in form and reduced in diameter.

Adjacent to shoulder 2, the diameter of socket 1 is slightly greater than at the end portion 1', and is substantially cylindrical in form, as indicated at 1'', to provide a bearing for a ring 4 of rubber or other suitable yielding material and afford a snug

engagement with the wall of the opening of the sign board or support 3.

The substantially cylindrical portions 1', 1'' are connected by an intermediate tapering portion 1^a, the same tapering from portion 1'' and being provided on its reduced end portion with a shoulder 5 which extends in a spiral path upwardly thereon for a single convolution. The outer side face of shoulder 5 is inclined, as shown, so that it will act as a guiding surface during the insertion of the socket through the opening in the sign board or support, as will be readily understood. The inner side face of shoulder 5 should be so formed as to provide a firm engaging surface for the spirally extending engaging portion 6' of my improved retaining ring 6. Ring 6 is provided at one end portion with an outwardly projecting flange 7 between which and the shoulder 2 of the lamp socket, the sign board or support 3 is engaged. To provide engaging portion 6', I first cut the outer end portion of ring 6 so that its edge will extend in a spiral path, then bend the same inwardly at a slight angle. The spacing of the ends of the engaging member 6' should be equal to the width of shoulder 5, so that shoulder 5 can be engaged therebetween when ring 6 is being rotated to bring its flange 7 into engagement with the sign board or support 3. When flange 7 is properly engaged with the sign board or support 3, ring 6 will lie entirely between said sign board or support 3 and the shoulder 5 of the lamp socket, as clearly shown in Fig. 1.

By providing lamp socket 1 with the inclined surface portion 1^a, I am enabled to form a spiral shoulder thereon which does not project without the bounds of that portion of the lamp socket which normally engages in the opening of the sign board or other support, indicated at 3. In conjunction with shoulder 5, a solid ring can obviously be employed, the same being slipped over the end portion 1' of the socket, as will be readily understood. Engaging portion 6', extending at an obtuse angle, as shown, will as the ring is tightened, bite into or bind tightly against the inner side face of shoulder 5 and thereby hold said ring against accidental backward turning.

My invention is not limited to use in con-

nection with lamp sockets alone, but may be used in connection with insulators of other forms or types, without departing from the spirit of my invention as defined in my annexed claims.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. In combination with a support formed with an opening, an insulator body projecting through the opening of said support, said insulator body being formed with an external spirally extending shoulder, and a retainer for said body arranged thereon and lying entirely between the spiral shoulder thereof and said support.

2. An insulator body formed with an external shoulder extending in a spiral path, and a ring arranged on said body and having at one end portion an inwardly extending engaging member arranged to engage the inner side face of the shoulder of said body.

3. An insulator body formed with an external shoulder extending in a spiral path for a single convolution, and a retainer arranged on said body and having one end

portion formed with an engaging part extending in a spiral path for engagement with the shoulder of said body throughout the length thereof.

4. An insulator body formed with an external shoulder extending in a spiral path for a single convolution, and a retainer arranged on said body and having its outer edge provided with an inwardly projecting portion extending in a spiral path for engagement with the inner side face of the shoulder of said body.

5. An insulator body tapering in an outward direction and formed with a shoulder extending upwardly on the tapering portion thereof in a spiral path, the outer side face of said shoulder being inclined downwardly in an outward direction, and a retainer having an engaging part for engagement with the shoulder of said body.

Signed at Seattle, Washington, this 19th day of March 1909.

HJALMAR CHRISTENSEN.

Witnesses:

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