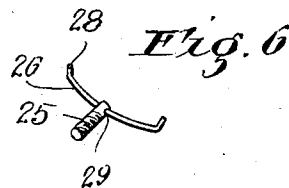
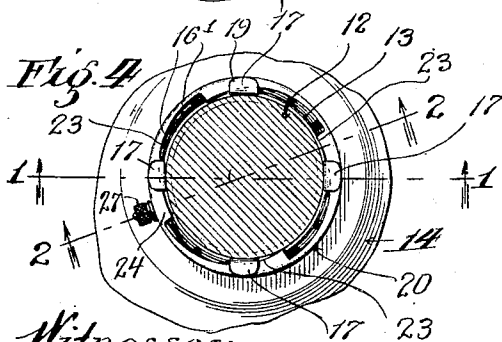
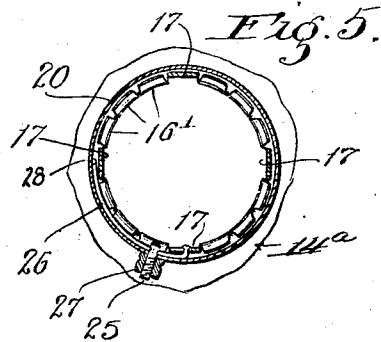
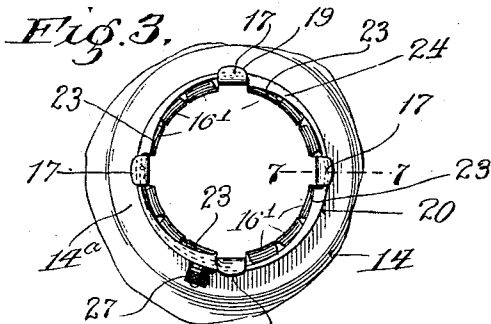
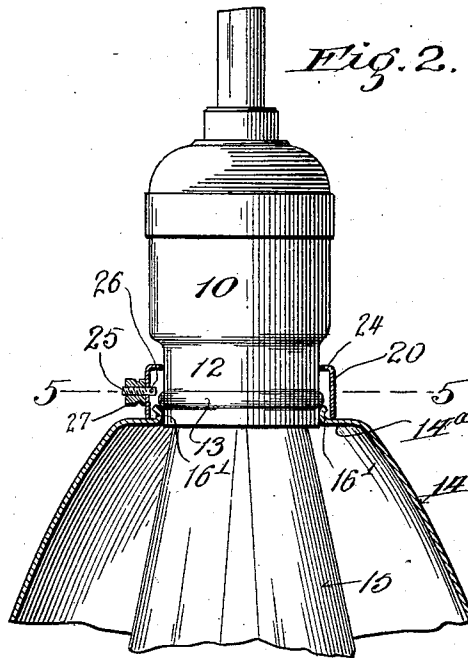
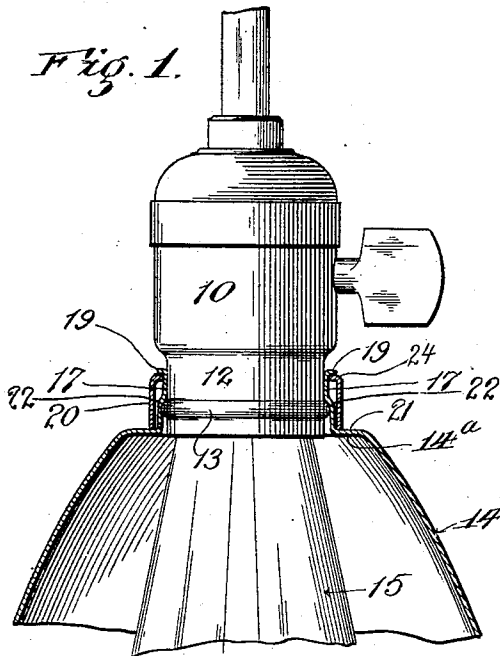


T. SMITH.
SHADE HOLDER.
APPLICATION FILED JAN. 2, 1909.

969,211.

Patented Sept. 6, 1910.

2 SHEETS—SHEET 1.



Witnesses:

George L. Otto
Fannie F. Richards

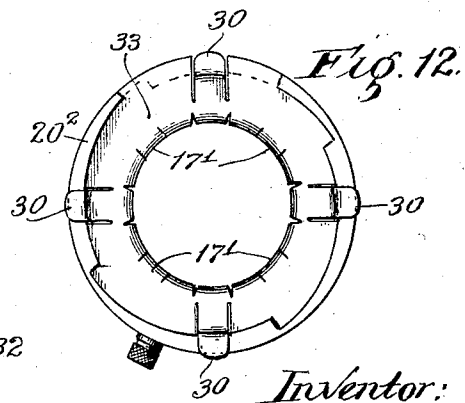
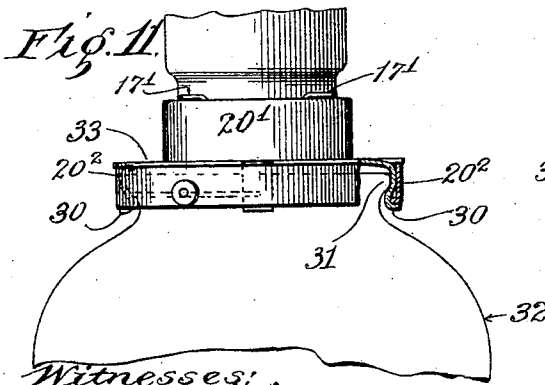
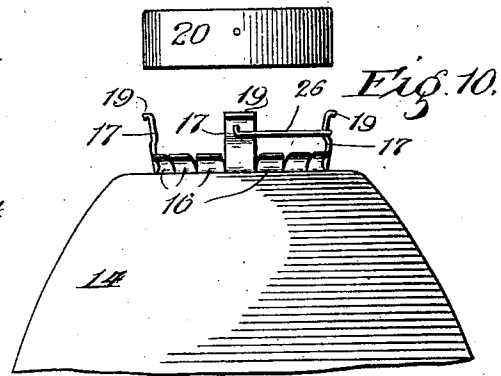
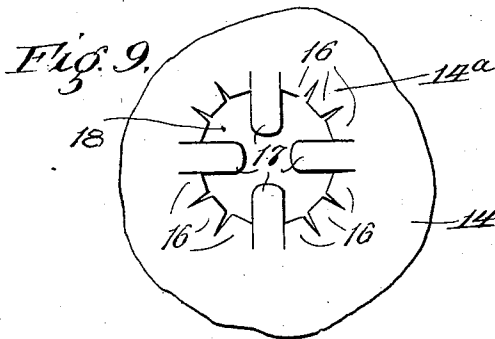
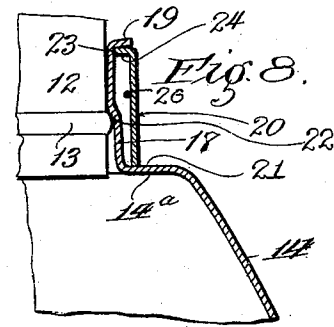
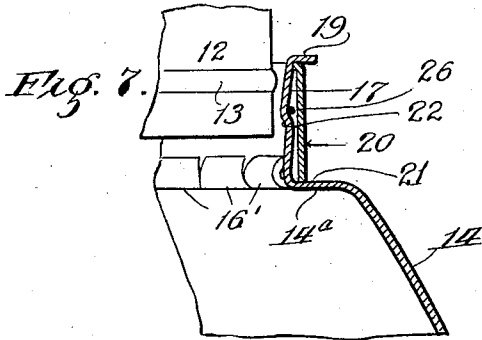
Inventor:
Theodore Smith
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2 SHEETS—SHEET 2.



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George C. Otto.
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his Atty.

UNITED STATES PATENT OFFICE.

THEODORE SMITH, OF CHICAGO, ILLINOIS.

SHADE-HOLDER.

969,211.

Specification of Letters Patent.

Patented Sept. 6, 1910.

Application filed January 2, 1909. Serial No. 470,465.

To all whom it may concern:

Be it known that I, THEODORE SMITH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Shade-Holders, of which the following is a specification.

This invention relates to certain new and useful improvements in shade holders, the object of the invention being to provide a simple and efficient device for clamping shades upon light fixtures.

Another object is to provide a shade holder with outwardly springing jaws adapted to embrace the light fixture, and with means for crowding the jaws upon the fixture.

It further relates to improved means for regulating the friction between the jaws and fixture, so that the shade may be secured immovably in place thereon, or it may be free to turn thereon if it is desired to change the position of the shade.

The invention is illustrated in the drawings furnished herewith, in which—

Figure 1 is a side view of an electric light socket and lamp, showing a shade secured on the socket, by means of my improved holder, the shade and holder being illustrated in section and the line of section being taken at 1—1 in Fig. 4, Fig. 2 is a similar view of the socket, lamp, shade and holder, the line of section, however, being taken on the line 2—2 in Fig. 4, Fig. 3 is a plan view of the holder and a fragment of the shade, Fig. 4 is a similar view showing the parts in a position upon a lamp socket, the latter being illustrated in cross section, Fig. 5 is a horizontal section taken on the line 5—5 of Fig. 2, Fig. 6 is a perspective view of a locking mechanism, Fig. 7 is an enlarged view, partly in side elevation and partly in vertical cross section of a fragment of a socket and one side of the shade and shade holder, the line of section being taken on the line 7—7 of Fig. 3, and illustrating the socket and shade as separated from each other, Fig. 8 is a view of the same parts after the shade has been secured in place, Fig. 9 is a plan view of a fragment of the shade blank before the various tongues and jaws are formed up into shape, Fig. 10 is a side view of a fragment of the shade and holder showing a certain clamping ring separated therefrom, Fig. 11 is a side view partly broken away of a modified form of the device and Fig. 12 is an under plan view

of said modified device with a fragment of the clamping ring broken away.

In the drawings 10, represents a light fixture here shown in the form of a lamp socket of an electric light fixture. The construction of the electric light socket is well known and requires no particular description so far as this specification is concerned. As is customary, however, the ordinary light socket contains a neck 12, which is provided with an external bead 13, which furnishes means for attaching the ordinary shade to the socket. The ordinary shade holder contains spring members adapted to be sprung upon the neck of the socket, but such spring members after a short time become worn or they lose their resiliency so that the shade is loosened from the lamp socket.

The shade is seen at 14, and is secured upon the lamp socket by means of my improved holder which will be presently described, and an electric light globe is represented at 15, which is secured in the lamp socket in the ordinary manner well known to those familiar with the art.

The holder may be constructed entirely independent of the shade and secured thereto as by riveting, soldering or otherwise fastening it thereto or one portion of the holder may be formed integral with the shade. In the preferred form of the invention one portion of the holder is made integral with the shade and as shown in Fig. 9 said portion comprises a base or shade-supporting ring 14^a, a number of tongues 16, and jaws 17, which are stamped up around a centrally located opening 18. The tongues 16, are bent upward and outward and as seen in Figs. 2 and 10, to form spring shoulders 16', adapted to engage with the lower edge of the bead 13, upon the lamp socket and thereby limit the upward movement of the holder upon the socket. It is evident that if the reduced portion or neck 12, of the lamp socket is a trifle larger than the opening formed between the shoulders 16', that the tongues 16, will spring inward slightly to accommodate the socket.

The jaws 17, are stamped up from the ring 14^a, and formed with outwardly projecting flanges 19, which overhang an adjusting or clamping ring 20, said ring being confined between the flanges 19, and the upper face 21, of the ring 14^a. The jaws 17, contain offset or shouldered portions 22, (see Figs. 7 and 8) which are arranged to

embrace and overhang the upper edge of the bead 13, on the lamp socket whenever the shade holder is slipped in place over the neck of the lamp socket and the jaws 17, crowded in toward the socket. The ring 14^a is preferably made of spring material and the spring tension of the jaws is in an outward direction. Thus when they are in their normal condition they diverge from each other to such an extent that they will not bind on any part of the socket while the holder is being slipped in place thereon. To clamp the holder upon the socket, means are provided upon the clamping ring 20, for swinging the jaws toward the lamp socket and causing them to impinge thereupon. As shown in Figs. 3 and 4, the ring 20, contains cams 23, preferably formed on the inner edges of a horizontal flange 24, and said cams are adapted to engage with the outer faces of the jaws 17, the arrangement of said cams being such that a partial rotation of the adjustment or clamping ring 20, will swing the jaws inward from their outermost position, bringing them against the neck of the lamp socket. The ring may be turned until the jaws are crowded tightly against the neck, thereby rigidly securing the holder in place upon the lamp socket.

I have provided means for locking the rings 20, 14^a, against relative movement and as shown the locking means comprises a threaded pin 25, which extends through the ring 20, a curved bar or rod 26, which is attached to the ring 14^a, and a nut 27, threaded upon the pin 25, and bearing upon the outer face of the ring 20. The bar or rod 26, is preferably secured at one end to one of the jaws 17, of the ring 14^a, and lies against the inner face of the ring 20, its free end being upturned as at 28, to prevent accidental disengagement from the threaded pin 25. The rod 26, extends through a hole 29, in the pin 25, and it is evident that when the nut 27, is turned upon the pin, the rod 26, will be drawn against the inner face of the ring 20, and the latter will be clamped between the rod and nut, thereby fixing the position of the ring 20, with respect to the stationary part of the holder. It is apparent, therefore, that any desired amount of friction can be had between the jaws and socket by turning the clamping ring to the proper point, and that when said desired friction is obtained, the nut 27, can be screwed up on the same, thereby holding the clamping ring in such fixed position with respect to the clamping jaws. The ring 20, can be turned sufficiently to make the holder practically immovable upon the socket or enough friction can be produced so that it may be readily turned upon the same. The nut 27, forms a convenient knob for turning the ring upon the jaws.

In the form shown in Figs. 11 and 12, the

holder is so modified that it may be clamped upon a lamp socket and upon a shade, the mechanism for clamping it upon the shade being substantially similar to that for clamping it upon the lamp socket. It is however desirable to make the shade jaws 30, quite short in order that they may properly engage with the ordinary flange 31, of the shade 32, and for this reason the metal of the ring 33, from which the jaws 30, are formed, is cut back from the outer edge so that the jaws in their entirety may bend freely whenever the ring 20², is properly turned to crowd them inward into engagement with the neck of the shade. In this form, the ring 33, forms the base or connection between the two sets of jaws 17', 30, while the overhanging edges of the jaws hold the rings 20', 20², against accidental removal.

I am aware that various alterations and modifications of this particular construction are possible without departing from the spirit of my invention and I do not therefore desire to limit myself except as may be necessary by the prior state of the art.

I claim as new and desire to secure by Letters Patent:

1. In a shade holder, the combination of a support having a circumferential shoulder for limiting the movement of the holder upon a lamp socket in one direction, and outwardly diverging, spring pressed jaws having flanges on their ends, and shoulders intermediate their ends for limiting the movement of the holder upon the socket in the opposite direction, and a clamping ring confined between the support and flanges and having jaw engaging cams adapted to crowd the jaws upon the socket by a partial rotation of the ring.

2. In a shade holder, the combination of a shade support having a shoulder forming an abutment against the lamp socket upon which the holder is to be attached and having outwardly springing jaws formed with outwardly extending flanges, and a clamping ring confined between the support and flanges and having an inwardly extending flange formed with cam shaped edges for engagement with said jaws.

3. In a shade holder, the combination of a shade supporting ring having outwardly springing jaws formed with shoulders adapted for engagement with the bead of an ordinary lamp socket, a clamping ring having means for crowding said jaws inwardly against the bead, and locking mechanism for preventing rotation of the clamping ring relative to the jaws.

4. In a shade holder, the combination of a shade supporting ring having clamping jaws which are provided with shoulders for engagement with the bead of an ordinary lamp socket, a ring having cams for engage-

ment with said jaws, and locking means for locking the ring against movement upon the jaws.

5 5. In a shade holder, the combination of
a shade support having spring jaws, a clamp-
ing ring having cams for engagement with
said jaws, a lock bar secured to one of said
jaws, a threaded pin having a sliding con-
10 nection with said lock bar and projecting
out through the ring, and a nut threaded
upon said pin and bearing on the outer face
of the ring.

6. In a shade holder, the combination of
a support having a circumferential shoulder
15 for limiting the movement of the holder
upon a lamp socket in one direction, and
outwardly diverging spring pressed jaws
having shoulders intermediate their ends for
limiting the movement of the holder upon
20 the socket in the opposite direction, the op-
posite jaws being spaced apart sufficiently
to permit the jaws to be slipped upon, or
removed from a lamp socket without con-
tacting therewith, and a clamping ring se-
25 cured upon the base against axial movement
and having jaw engaging cams adapted to
crowd the jaws upon the socket by a partial
rotation of the ring.

7. In a shade holder, the combination of
30 a shade support having a resilient shoulder

adapted to limit the movement of the holder
upon a lamp socket in one direction and out-
wardly diverging spring pressed clamping
jaws, the opposite jaws being spaced apart
sufficiently to permit the jaws to be slipped
35 upon, or removed from a lamp socket with-
out contacting therewith, and a clamping
ring secured upon the base against axial
movement and having jaw engaging cams
adapted to crowd the jaws against the lamp
40 socket by a partial rotation of said ring.

8. In a shade holder, the combination of
a support having a resilient shoulder form-
ing an abutment for a lamp socket and out-
wardly diverging clamping jaws having
45 shouldered portions intermediate their ends
for engagement with said lamp socket, the
opposite jaws being spaced apart sufficiently
to permit the jaws to be slipped upon, or
removed from a lamp socket without con-
50 tacting therewith, and a clamping ring se-
cured upon the base against axial movement
and surrounding said jaws and having jaw
engaging cams arranged to force said jaws
against the lamp socket by a partial rotation
55 of said ring.

THEODORE SMITH.

Witnesses:

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FANNIE F. RICHARDS.