April 23, 1929. O. C. F. WILCKE 1,710,281

GLOBE HOLDER FOR ILLUMINATING FIXTURES

Filed May 16, 1927 2 Sheets-Sheet 1

Fig. 1.

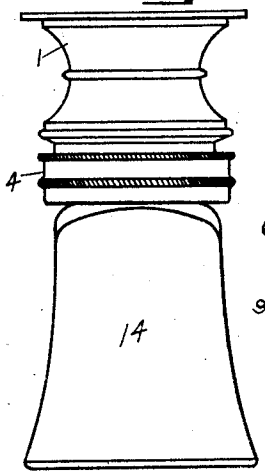


Fig. 3.

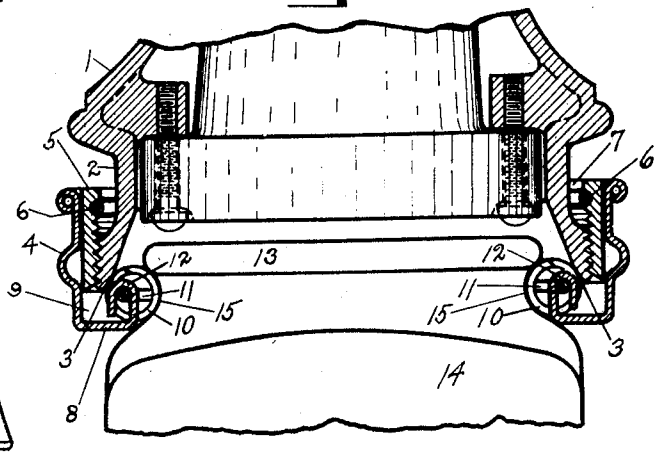
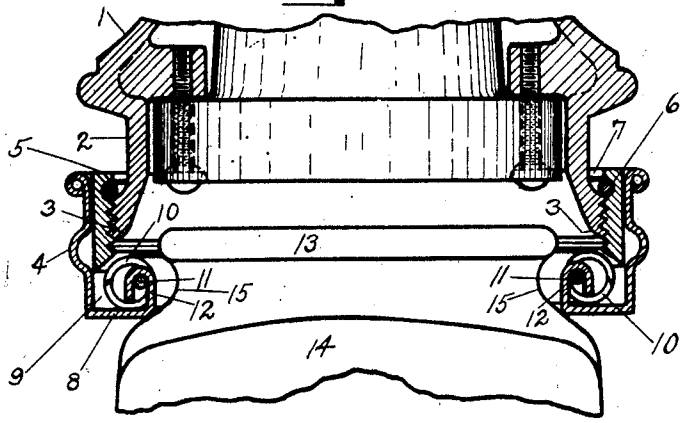


Fig. 2.



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Fig. 4.

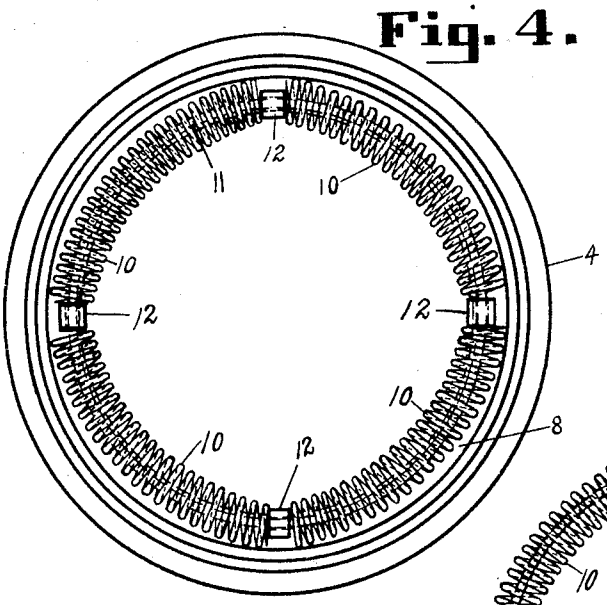


Fig. 6.

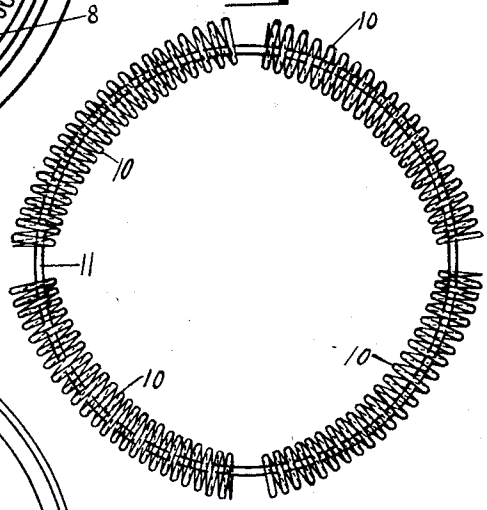
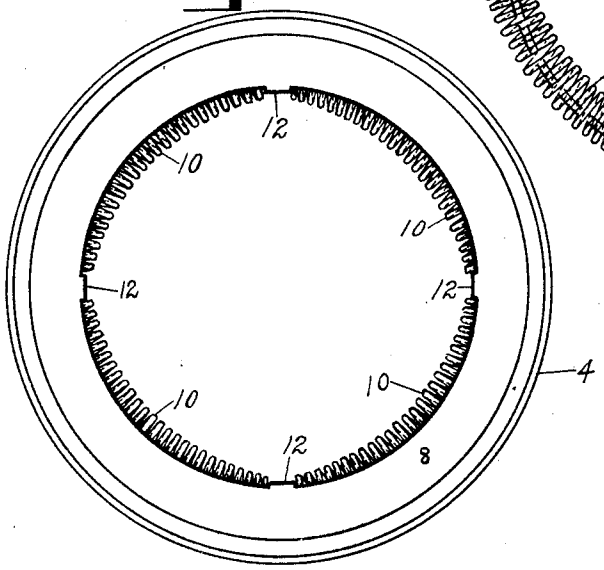


Fig. 5.



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UNITED STATES PATENT OFFICE.

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GLOBE HOLDER FOR ILLUMINATING FIXTURES.

Application filed May 16, 1927. Serial No. 191,648.

This invention relates to improvements in globe holders for illuminating fixtures.

The object of the invention is to provide a holder forming a part of the fixture with improvements whereby a shade may be inserted into the holder and held temporarily by a yielding gripper while the holder is being screwed or adjusted into final position to cause the gripper to permanently and firmly hold the shade.

This object is carried out by means of a gripping device, preferably made in sections which normally extends somewhat across and within the circular opening of the holder into which the shade is to be placed, so that the gripper will more readily take hold of the neck of the shade and secure the shade pending the final adjustment of the holder; and which same gripping device will then permanently secure the shade.

In the accompanying drawings,

Figure 1 is a side elevation of my improved shade holder with a conventional electric light shade held thereby;

Figure 2 is an enlarged view in vertical section showing the position of the parts when the yielding gripper is in normal position and extending slightly within and across the borders of the opening in the holder enough to temporarily hold the shade;

Figure 3 is a like view showing the parts in their final position after the holder has been screwed home and the yielding gripper has been forced into the groove or neck of the shade;

Figure 4 is a plan view of the holder and the yielding gripper, the latter in normal position when it extends well within the opening in the holder;

Figure 5 is an inverted plan view of the holder looking at the bottom thereof and showing the gripper extending somewhat within the opening of the holder;

Figure 6 is a detached view of the gripper showing its several sections and the ring on which the sections are strung.

Referring to the drawings, the numeral 1 indicates an electric light fixture of any conventional type. This fixture has a lower extension indicated at 2, and provided with a screw thread on its outside. The lower margin of this extension is beveled as seen at 3 for a purpose presently to appear.

The numeral 4 indicates the outer shell of the holder which is usually constructed of sheet metal spun up into any desired design. This shell has soldered or otherwise fitted within it a screw threaded annulus 5 having a groove 6 within which is sprung a wire ring to form a shoulder or stop to prevent the annulus from being entirely screwed off of the extension 2 of the fixture. This wire ring-like stop is inserted through the opening 7 within the shell of the holder 4 after the annulus has been screwed on the threaded extension 2 of the fixture.

Thus it will be seen that by rotating the holder 4, it will be adjusted up or down with reference to the fixture by reason of its threaded mounting on the extension 2 of the fixture.

The holder at its lower end is turned inward or formed with a ledge 8 constituting a space 9 within the holder and between the ledge and the lower ends of the annulus and extension 2. On this ledge is placed the yielding gripper, consisting in the present embodiment of a plurality, preferably four, of coil springs 10. These springs are strung on a wire ring 11 over which are bent hooks or clips 12 struck up from or formed with the ledge 8. See Figure 2. These clips secure the wire ring and thereby also secure the springs forming the gripper, yet permitting the springs to have freedom of movement radially as well as longitudinally. The natural tendency of the spring sections is to distend, in doing which their inner portions make a short cut across the opening within the ledge 8, and thus project themselves into the space within the inner margin of the ledge 8. This is clearly shown in Figures 4 and 5.

This extension of the spring gripper sections within the opening in the ledge enables them to make immediate contact with the shade when the latter is inserted in said opening, see Figure 2, where it will be seen that the bead 13 on the neck of the shade 14 has been snapped or pushed past the gripper sections and they have sprung back partly into the groove 15 beneath the bead and are ready to be forced finally further inward into pressing contact with the shade within the groove. See Figure 3.

In this latter figure, the parts are shown with the holder 4 screwed upward on the extension 2 of the fixture, so as to cause the bevel 3 on the fixture to force the spring

gripper inward and into the groove 15 of the neck of the globe. In this way the shade has become permanently and strongly attached to the holder where it will remain in any situation in which the fixture is used, such as on railway cars.

It will be seen from the foregoing that this invention provides for the easy and ready insertion of the shade into the holder and of the holding of the shade by the automatic snapping of the spring sections of the gripper far enough under the bead of the shade to maintain the shade safely in place pending the screwing of the holder upward on the fixture as above described. As the shade is perfectly safe from falling after it is snapped into the holder, the person making the attachment is free to remove his hand from the shade and to use the same hand for screwing up the holder. Again, when the shade is to be removed, the person can first screw downward the holder without fear of the shade dropping. Then he can take hold of the shade with the same hand he has just used in screwing down the holder and readily withdraw the shade.

It is further to be observed that the gripper herein set forth is adapted for use with different sized holders, so that the grippers can be manufactured and applied to various sizes of holders manufactured and utilized by different customers of the manufacturer of the gripper.

Thus the advantages and features of utility of this improved shade holder are manifest.

It will be understood that I desire to comprehend within my invention such modifications as may be necessary to adapt it to varying conditions and uses.

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

1. In a shade holder, the combination with a holder proper having its lower end formed into a ledge having clips, of a gripper composed of a plurality of helical spring sections adapted to rest on the ledge and to project themselves inward from the margins of the opening within the ledge, and a retaining device for the spring sections in the nature of a wire ring and clips adapted to engage and loosely hold the spring sections.

2. In a shade holder, the combination with a fixture having a threaded extension, a holder proper having an interior thread adapted to be screwed upon the extension and having also a ledge at its lower end with a large opening within the ledge for the insertion of a shade, and a spring gripper composed of a plurality of sections made each of a helical spring, the springs being adapted to normally position themselves within said opening, and means on the ledge engaging the spring to loosely retain them in position, the interior of the holder proper being adapted when screwed upward on the fixture to force the spring sections further into the opening and to seat them in the groove of the neck of the shade.

3. In a shade holder, the combination with a fixture and a holder proper screwed thereon, of a spring gripper made in sections and loosely mounted within the holder and adapted normally to extend somewhat within the opening in the bottom of the holder, whereby a shade may be inserted past and be temporarily held by the spring sections to hold the shade while the holder proper is being screwed up on the extension, an inner portion of the holder being adapted to then force the spring sections permanently into the neck of the shade, and means on the holder for positively holding the gripper in position in the holder.

4. In a shade holder, the combination with a holder having its lower end formed into a ledge, a grip member composed of a plurality of helical spring sections adapted to rest on the ledge and to project inwardly from the margin of the openings formed by the ledge, a wire member engaging the spring sections to hold them in place, and hook members struck up from the ledge member and adapted to engage and securely hold the wire member in place.

In testimony whereof, I affix my signature.

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