E. F. RUECKERT.

GLOBE HOLDER.

APPLICATION FILED SEPT. 28, 1912.

1,047,709 Patented Dec. 17, 1912.

Fig. 1.

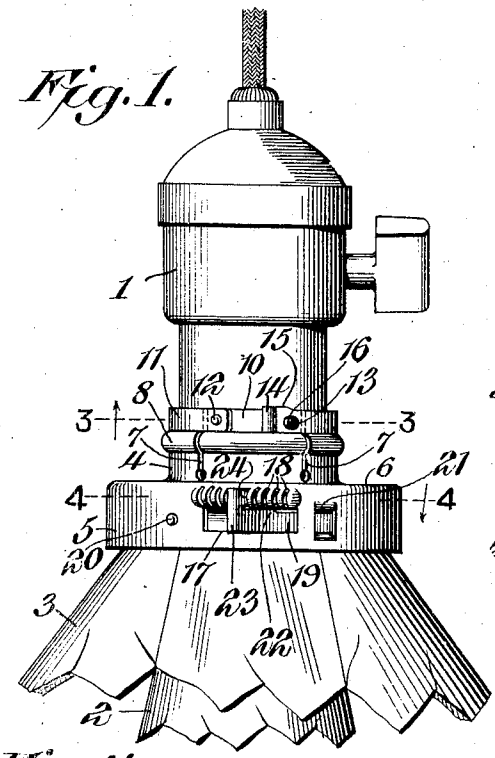


Fig. 2.

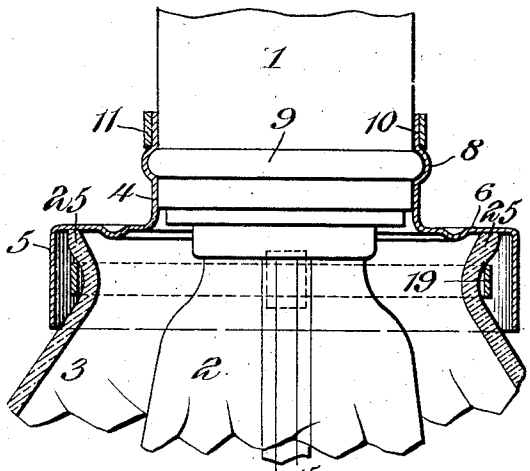


Fig. 3.

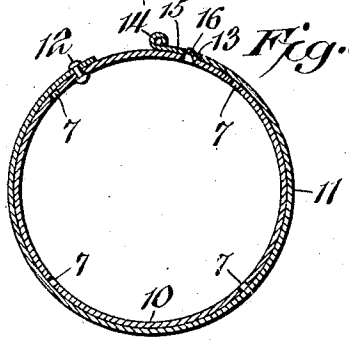


Fig. 4.

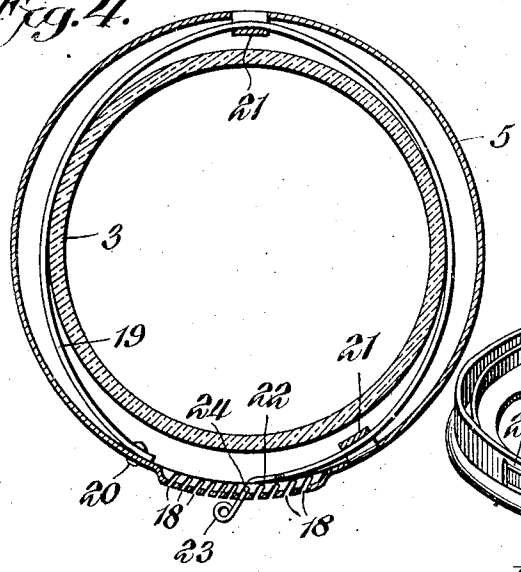
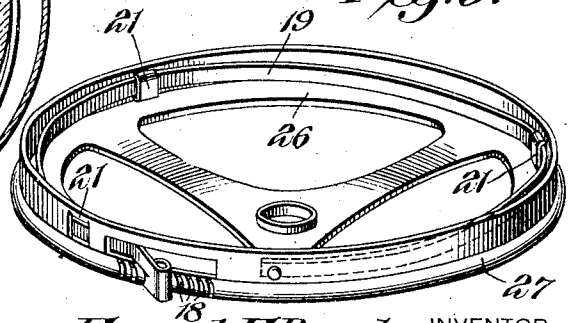


Fig. 5.



WITNESSES

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GLOBE-HOLDER.

1,047,709. Specification of Letters Patent. Patented Dec. 17, 1912.

Application filed September 28, 1912. Serial No. 722,991.

To all whom it may concern:

Be it known that I, ERNEST F. RUECKERT, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Globe-Holder, of which the following is a specification.

This invention has reference to improvements in globe holders for lighting fixtures or portable structures of like character, and its object is to provide a globe holder of simple construction especially adapted to hold a globe or shade for gas or electric or other light, in a manner which will prevent cracking of the shades or globes when the latter are heated, and which, moreover, so holds the globe as to be practically proof against accidental loosening of the globe.

The present invention comprises a device to be connected to a gas fixture or other lighting fixture, or an electric lamp socket, while the globe holding structure comprises a flexible band in position to embrace the corresponding edge of the globe with any desired force, and the band and the body of the globe holder have coacting means whereby the band is locked under any degree of tension in a manner to prevent accidental displacement even under conditions which tend to disconnect the locking end of the band from the coacting locking means on the body of the holder.

The invention will be best understood from a consideration of the following detailed description, taken in connection with the accompanying drawings forming a part of this specification, with the further understanding that while practical forms of the invention are illustrated in the drawings, it is susceptible of other practical forms, wherefore the invention is not confined to any exact conformity with the showing of the drawings but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention.

In the drawings:—Figure 1 is an elevation of a globe holder especially adapted to electric lamp sockets, and showing the globe holder applied to an electric lamp socket. Fig. 2 is a vertical cross section of the holder of Fig. 1 but drawn to a larger scale. Fig. 3 is a section on the line 3—3 of Fig. 1, but with the globe holder removed from the socket, and drawn to a larger scale than Fig. 1. Fig. 4 is a section on the line 4—4 of Fig. 1 also drawn to a larger scale and omitting the electric lamp and distant portions of the globe. Fig. 5 is a perspective view of a globe holder especially adapted to gas fixtures.

Referring to the drawings, there is shown in Fig. 1 an electric lamp socket 1 which may be taken as typical of any suitable electric lamp socket and needs no especial description. In Fig. 2 an electric lamp is indicated at 2 and a shade, such as is commonly employed in connection with electric lamps is indicated at 3, but this shade may be taken as typical of any suitable shade or globe.

In the structure shown in Figs. 1 to 4 the globe or shade holder comprises a collar portion 4 and a globe receiving body portion 5, which latter is connected to the collar portion by a radial flange 6, these parts being in general similar to certain types of globe holders for electric fixtures. The collar 4 is provided with a circular series of longitudinal slits 7 rendering this collar more or less expansible and contractible and at an appropriate point between the ends of the collar it is formed with a circumferential bead 8 on its exterior, forming a corresponding groove on its interior to receive the usual bead 9 of the socket 1. The bead 8 is traversed by the slits 7 and between this bead and the free end of the collar is a smooth cylindrical portion 10, which is also traversed by slits. To this smooth portion there is connected one end of a band 11 by a rivet 12 or otherwise, and this band is in the form of an incomplete ring of somewhat less circumferential extent than the smooth portion 10 of the collar. That end of the band 11 remote from the rivet 12 is formed with an eye or perforation 13 near the end and at the extreme end the band is returned on itself to form a bead 14 for manipulation, and in order to stiffen this end of the band and to provide an enlarged manipulating portion it may be expended in width, as indicated at 15. The smooth portion 10 of the collar is struck up to form a lip or tooth 16 adapted to extend through the perforation 13 when the band is brought about the smooth portion 10 with a force to contract this part of the collar to such an

extent that when the collar is applied to the base 1, and it yields sufficiently because of the slits 7 to spring over the bead 9, the band 11 will lock about the smooth portion 10 and will hold the collar against expansion, so that it cannot escape from the bead end of the socket 1.

The body portion 5 is provided with a circumferential elongated slot 17 along one edge of which, but not connected therewith, there is formed a circumferential series of short slots 18 extending in the same direction as the longitudinal axis of the holder, that is, the slots 18 are perpendicular in direction to the length of the slot 17. That portion of the body member traversed by the slots 18 is beaded out, as indicated, so that the portion of the body member provided with a series of slots 18 is outstanding with relation to the outer wall of the said body member.

Within the body member there is lodged a band 19 having one end secured to the body member by a rivet 20, or otherwise, adjacent to one end of the slot 17, and this band extends through guides 21 which may be formed by punching in the body member at closely adjacent points, so that the end portions of the guides remain integral with the body member, while the side portions are cut away therefrom. One of the guides 21 is closely adjacent to that end of the slot 17 remote from the rivet 20 and the band beyond the guide 21 is laterally expanded, as indicated at 22, and terminates in a still wider portion rolled into a bead 23, which bead is long enough to extend from the long edge of the slot 17 remote from the slots 18 substantially across the latter and where the bead is in coinciding relation to the slots 18 it is formed with a tongue 24 so located and of such size as to readily enter in any one of the slots 18 and is there held by engagement with the portions of the outstanding bead in which the slots are formed, which portions serve as outwardly extending teeth. The beaded end 23 of the band 19 is exterior to the body member 5 and is at such angular relation to the band 19 that it may be readily grasped by the fingers of an operator. The band 19 is so constructed that it normally tends to expand and to draw the beaded end 23 toward that end of the slot 17 adjacent the guide 21 and the tooth 24 is so related to the band that under its tendency it will enter and be maintained in any one of the slots 23 with which it may be brought into coincidence. By making the manipulating end of the band 19 of substantially the width of the slot 17 it is guided by the slot, while the relation of the tooth 23 at a somewhat acute angle to the length of the band contributes to the ready entering of the tooth into a slot in engagement with the walls of the slot 18. In action the walls of the series of slots 18 serve in the nature of a ratchet, but the tooth 23 cannot under conditions of use escape from this ratchet because the band is at this point of substantially the width of the slot 17 and the slots 18 are closed at the ends.

The globe or shade 3 has its small end outturned, as indicated at 25, after the usual practice, and the band 19 is of a width to readily enter the groove defined by the outturned portion of the globe. Such a band readily conforms to the shape of the globe but does not bind entirely about the small end of the globe. The band is held at the ends in and adjacent to the slot 17 and at an intermediate point in a guide 21 located approximately diametrically opposite from the slot 17. The result of this is that those portions of the band between the slot 17 and the guide 21 opposite it are drawn together and in engagement with the globe, so that the latter is supported on opposite sides against accidental displacement and in a manner to avoid cracking of the globe while the band is supported at substantially diametrically opposite sides of the body of the holder on a line substantially perpendicular to the line of support of the globe by the band. Prior to placing the globe in the holder the band is released from any engagement which it may have with the ratchet teeth defined by the slots 18 and after the globe is placed, which is easily accomplished because the band is then larger than the small end of the globe, the manipulating bead 23 is then grasped and drawn along the ratchet structure until the effective diameter of the band is lessened and the band firmly grasps the shade or globe, when the bead may be released to cause the tooth 24 to enter the slot 18, thus effectively locking the band against any accidental displacement by any force other than a purposely directed force, provided such force is not sufficient to destroy the structure.

In Fig. 5 the same arrangement for holding the globe is shown, except that the globe holding arrangement is applied to a supporting bracket of the type usually employed in gas fixtures. The supporting bracket or globe holder is indicated at 26 and needs no special description, except that the holder is usually formed with a peripheral bead 27, in which the slots 18 are produced. The globe holding band 19 may be in all respects like the band 19 in the form shown in the preceding figures, but in this instance there are provided three guides 21 instead of two, and these guides may be disposed substantially equi-distantly so that the globe is held at three points instead of two. This is advantageous since usually gas globes have their supporting ends of considerably greater diameter than globes employed in connection with electric lights.

What is claimed is:—

1. A globe holder having a globe receptacle provided at one side with a circumferentially extended slot, and a series of closed slots flanking the first-named slot and extending at substantially right angles to such first named slot, and a band within the receptacle having one end fast thereto adjacent the first-named slot and the other end extending through the first-named slot and exterior to the receptacle provided with a locking member adapted to the second-named slots.

2. A globe holder having a globe receptacle provided at one side with a circumferentially extended slot, and a series of closed slots in flanking relation to the first-named slot and each extending substantially at right angles to the first-named slot, and a band within the receptacle having one end fast thereto adjacent the first named slot, and the other end extending through the first named slot and exterior to the receptacle formed with a manipulating end provided with a tooth adapted to the first named slots.

3. A globe holder having a globe receptacle provided with a circumferentially expanded passage, and a band interior to the globe holder, said band being fast at one end to the receptacle adjacent to the passage and at the other end extending through the passage, said band being of a size when expanded to receive the supporting end of a globe, the receptacle being provided adjacent to the passage with a series of seats separate from the passage, and the band where projecting through the passage being provided with means adapted to any one of the seats for locking the band in holding relation to the supporting end of a globe when inserted in the holder.

4. A globe holder having a globe receptacle provided with an interior band fast at one end to the receptacle and at the other end extending through the receptacle adjacent to the fastened end, the band being of a size when expanded to receive the supporting end of a globe, said band and receptacle having coacting locking means, and the receptacle being provided with guiding members at points distant from the locking members and through which guiding members the band is passed, said guiding members consisting of in-struck portions of the receptacle.

5. A globe holder having a globe receptacle with its wall pierced by a circumferentially extended slot, an outwardly directed bead extending lengthwise of the slot adjacent thereto and provided with a series of closely adjacent slots closed at the ends and each disposed at substantially right angles to the length of the first-named slot, and a globe locking band arranged within the receptacle with one end fast thereto close to the first-named slot and the other end extending through the other end of the first named slot and there provided with manipulating means, and a tooth adapted to enter in one of the second-named slots.

6. A globe holder having a globe receptacle with its wall pierced by a circumferentially extended slot, an outwardly directed bead extending lengthwise of the slot adjacent thereto and provided with a series of closely adjacent slots closed at the ends and each disposed at substantially right angles to the length of the first-named slot, and a globe locking band arranged within the receptacle with one end fast thereto close to the first-named slot, and the other end extending through the other end of the first named slot and there provided with manipulating means, and a tooth adapted to enter in one of the second-named slots, said holder being provided with spaced in-struck portions constituting guides through which the band is passed.

7. A globe holder comprising a cylindrical body member and a collar connected thereto and projecting beyond one end of the cylindrical member in the direction of the axis of generation thereof, said collar being provided with open ended slits to render the collar elastic, and a band fast at one end to that end of the collar remote from the body member and disposed in encircling relation to the collar, the other end of the band being provided with a passage therethrough and the collar having a tooth formed thereon to engage in the passage in the band when the corresponding end of the collar is contracted, said collar being adapted to embrace the lamp receiving end of an electric light socket and the body of the holder being provided with means for locking a globe thereto.

8. A globe holder comprising a cylindrical body member and a collar connected thereto and projecting beyond one end of the cylindrical member in the direction of the axis of generation thereof, said collar being provided with open ended slits to render the collar elastic, and a band fast at one end to that end of the collar remote from the body member and disposed in encircling relation to the collar, the other end of the band being provided with a passage therethrough, and the collar having a tooth formed thereon to engage in the passage in the band when the corresponding end of the collar is contracted, said collar being shaped to embrace the lamp receiving end of an electric light socket and the body of the holder being provided with means for locking the globe thereto, said last named means comprising a band within the body member and fast at one end thereto, said body member having a circumferentially disposed slot

with a bordering series of slots extending at right angles to the first-named slot, and the band having its free end extending through the first-named slot in the body member and having a tooth adapted to enter in one of the series of slots bordering the first named slot.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ERNEST F. RUECKERT.

Witnesses:

ANNA L. MILLER,

RALPH L. SNOW.