

March 20, 1928.

1,663,264

D. N. THOMPSON

LAMP RETAINER FOR LAMP SOCKETS

Filed Sept. 13, 1922

Fig. 1.

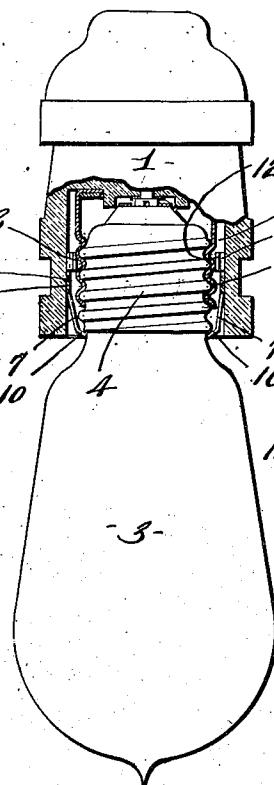


Fig. 2.

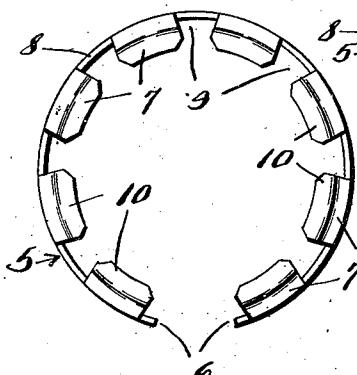


Fig. 3.

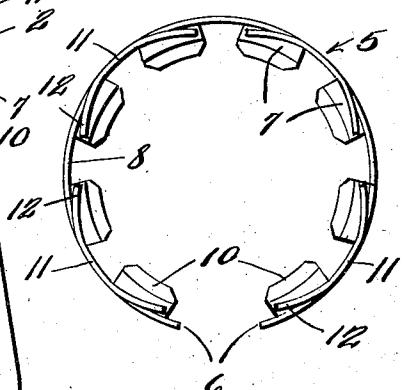
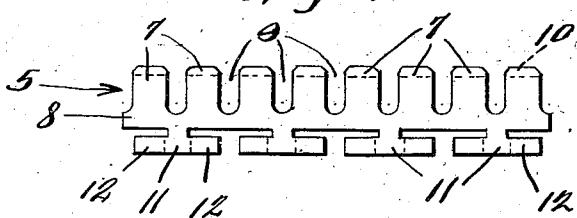


Fig. 4.



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UNITED STATES PATENT OFFICE.

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LAMP RETAINER FOR LAMP SOCKETS.

Application filed September 13, 1922. Serial No. 588,014.

This invention has for its object a lamp retainer for lamp sockets, which is particularly simple and economical in construction and highly efficient and durable in use to prevent loosening of the lamp by vibration and the like.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

10 In describing this invention, reference is had to the accompanying drawings, in which like characters designate corresponding parts in all the views.

15 Figure 1 is a vertical sectional view of this lamp retainer showing the same applied to a lamp socket and lamp, the socket being shown partly in section.

20 Figure 2 is an enlarged end elevation of the retainer looking upwardly.

25 Figure 3 is an enlarged end elevation looking downwardly.

Figure 4 is an expanded plan view of the retainer.

1 Designates the body of the lamp socket which may be of any suitable form, size, construction and material, it having the usual outer or screw threaded sleeve terminal 2, which is spaced apart from the walls of the body of the socket 1, providing the annular space 2^a around the shell 2.

30 3 is a lamp having the usual screw threaded plug or base 4.

35 This lamp retainer comprises a sleeve 5 insertable between the wall of the body of the lamp socket and the sleeve terminal 2, and provided with means for frictionally engaging the inner wall of the body 1 and the peripheral wall of the sleeve terminal 2, and also means for engaging the lamp or the lamp base.

40 The sleeve here illustrated is split at 6 and is expandable and contractile and is provided with means at its opposite, as its inner and outer ends, for engaging the inner wall of the body of the lamp socket and the peripheral wall of the sleeve terminal 2, and for engaging the lamp.

45 As here illustrated, the sleeve is provided with prongs 7 extending lengthwise thereof or in a direction parallel to the axis of the sleeve from an intermediate portion 8 of the sleeve, these prongs being spaced apart providing spaces 9 and being deflected inwardly and provided with inturned projections 10 at their outer or lower ends.

The sleeve is also provided with additional projections 11 at its inner end, the additional projections having angular or circumferentially extending arms 12 tensioned to engage at their ends the periphery of the sleeve terminal 2.

50 Preferably, the projections or prongs 11 are T-shaped in general form, the legs of the T formation being arranged in alinement with the spaces 9 between the prongs 7 and the arms of the T being bent inwardly to tension them to engage the periphery of the sleeve terminal 2.

55 In operation, the sleeve 5 is inserted in the lamp socket in the space 2^a and the ends of the arms of the T press against the sleeve terminal 2 while the intermediate part of the projections 11 or the parts at the ends of the legs of the T press against the inner wall of the body 1 of the lamp socket 75 and thus frictionally hold the sleeve 5 in position.

60 The inturned ends 10 of the prongs 7 normally project into an arc of less radius than the interior of the sleeve terminal 2.

65 When the lamp base is screwed into the sleeve terminal to its full extent, or far enough so that the central terminal of the lamp engages the central terminal of the socket, the inturned ends 10 either engage the threads of the lamp base, or in case the lamp screws in far enough, hook under the outer end of the outer terminal of the lamp base and thus hold the lamp base from shifting.

70 90 What I claim is:

1. A lamp retainer for lamp sockets comprising an expandable and contractile split sleeve formed with tongues extending in a direction parallel to the axis of the sleeve 95 and provided with projections at their ends for engaging the lamp base, substantially as and for the purpose described.

2. A lamp retainer for lamp sockets comprising an expandable and contractile split 100 sleeve having lengthwise prongs provided with inturned ends substantially as and for the purpose specified.

3. A lamp retainer for lamp sockets comprising an expandable and contractile sleeve 105 for entering the lamp socket, the sleeve being provided with means at its ends for engaging respectively the lamp socket and the lamp base, substantially as and for the purpose set forth.

4. A lamp retainer for lamp sockets comprising an expansible and contractile sleeve for entering the socket and formed with lengthwise prongs extending from the intermediate portion thereof toward one end and with other prongs extending from such intermediate portion toward the other end, the first-mentioned prongs being provided with means at their ends for engaging the threads of the lamp base, and the second-mentioned prongs being provided with means for engaging the lamp socket, substantially as and for the purpose described.

5. A lamp retainer for lamp sockets comprising an expansible and contractile sleeve provided with tongues extending lengthwise thereof, each tongue having a circumferentially extending arm having its end arranged to engage the periphery of the sleeve terminal of the lamp base, substantially as and for the purpose specified.

6. A lamp retainer for lamp sockets comprising an expansible and contractile split sleeve having T-shaped prongs at one end thereof, the ends of the arms of the T formation being arranged to engage the lamp socket, substantially as and for the purpose set forth.

7. A lamp retainer for lamp sockets comprising an expansible and contractile split sleeve having prongs extending lengthwise thereof from an intermediate portion and having their ends inturned and having additional prongs extending from such intermediate portion, said additional prongs being T-shaped in general form and the legs of the T formation being arranged in alignment with the spaces between the first-mentioned prongs, and the arms of the T-shaped prongs being tensioned to engage the lamp socket, substantially as and for the purpose described.

8. The combination of a lamp socket com-

prising a body and a sleeve terminal, spaced apart from the wall of the body providing an annular space around the sleeve terminal, a lamp retainer including an annular portion extending into such annular space having means at spaced apart points for engaging the sleeve terminal and for engaging the body and also having means at the outer end of the socket for engaging the lamp.

9. The combination with a lamp socket having a sleeve terminal spaced apart from the wall of the socket providing an annular space around the sleeve terminal, of a lamp retainer comprising a sleeve insertable in such space and provided with prongs at its inner end tensioned to engage the lamp socket and the sleeve terminal and with prongs at its outer end to engage the lamp, substantially as and for the purpose set forth.

10. The combination with a lamp socket comprising a body and a sleeve terminal in the body spaced apart from the wall of the body providing an annular space around the sleeve terminal, of a lamp retainer comprising an expansible and contractile split sleeve having spaced apart prongs extending lengthwise thereof from an intermediate portion toward the outer end of the socket to engage the lamp and also having additional prongs extending from such intermediate portion toward the inner end of the socket and formed with circumferentially extending spring arms for engaging the sleeve terminal and the inner wall of the body, substantially as and for the purpose described.

In testimony whereof, I have hereunto signed my name, at Syracuse, in the county of Onondaga and State of New York, this 15 day of August, 1922.

DON N. THOMPSON.