

G. E. FARRAR,
HOLDER FOR INCANDESCENT ELECTRIC LAMPS,
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1,237,187.

Patented Aug. 14, 1917.

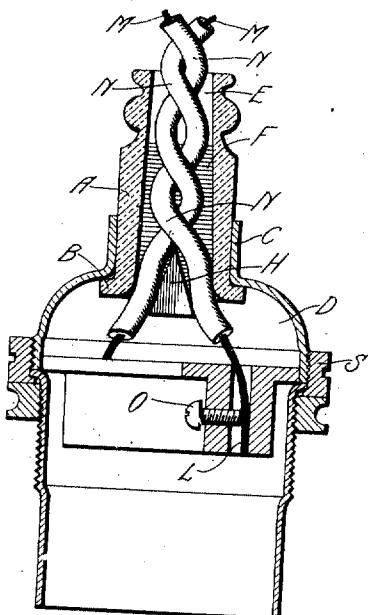


Fig. 1.

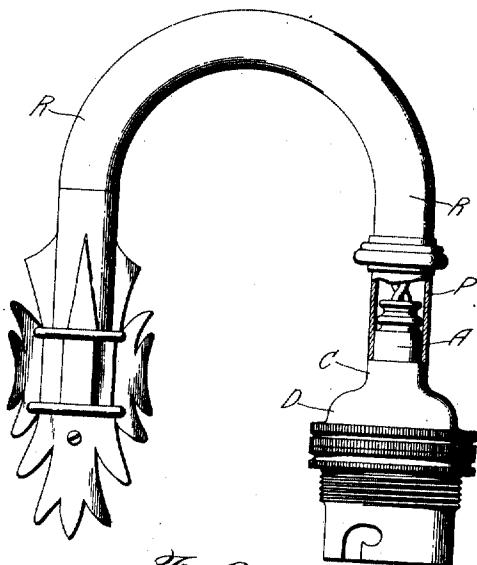


Fig. 2.

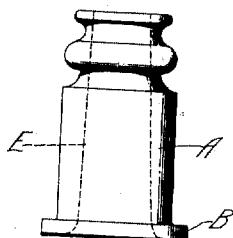


Fig. 3.

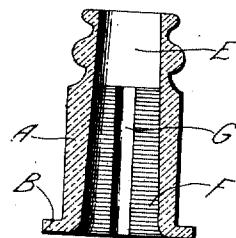


Fig. 4.

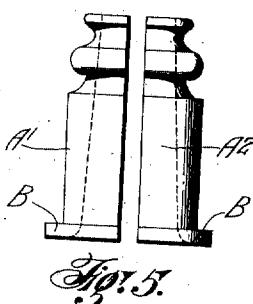


Fig. 5.



Fig. 6.

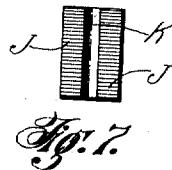


Fig. 7.

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HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

1,237,187.

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To all whom it may concern:

Be it known that I, GEORGE EDWARD FARRAR, a subject of the King of Great Britain and Ireland, and a resident of the city of 5 Perth, in the State of Western Australia, Commonwealth of Australia, (whose post-office address is 34 Colonial Mutual Chambers, St. George's Terrace, in the said city of Perth,) have invented certain new and use- 10 ful Improvements in Holders for Incandescent Electric Lamps, of which the following is a specification.

This invention relates to holders for incandescent electric lamps and has for its 15 object to provide simple means whereby an incandescent electric lamp holder may be attached to the flexible cords carrying the shrouded flexible wires, in an economical and effective manner.

20 By the invention it is not necessary to use a special fitting for use with a lamp holder suspended by a flexible cord and a separate fitting for use with a lamp holder suspended by a bracket, the fitting according to the in- 25 vention being applicable to both purposes.

In practice it is well established that the weight of the lamp and holder should not be carried by the contact ends of the flexible wires, which are secured to the usual terminals by set screws. To obviate this it has been usual in lamps suspended by flexible cords to externally thread the metal neck of the lamp holder to accommodate an internally threaded cap or ferrule, usually made 30 with a tapering top to clamp a wooden plug or a divided plug placed around the flexible cords, the plug being partially enveloped by the neck of the lamp holder. As the cap or ferrule is screwed onto the threaded neck it 35 engages the plug securely clamping it onto the flexible cords, thereby relieving any strain on the contact ends of the wires, the weight of the lamp and holder being supported by the flexible cords at that point 40 where the plug securely engages it.

In the type of lamp carried by a bracket it has been usual to internally thread the neck of the lamp holder which is then screwed onto an externally threaded extension of the bracket. The rigidity of such a 45 connection has at times led to the destruc-

tion of the incandescent electric lamp due to vibration or shock.

Referring to the drawings which form a part of this specification:—

55 Figure 1 is an enlarged sectional elevation of an incandescent electric lamp holder with the invention applied. A flexible cord by which the holder is suspended is shown.

Fig. 2 is a part sectional elevation of a 60 bracket supporting a lamp holder with the invention applied thereto.

Fig. 3 is an enlarged elevation of a plug used with the invention.

Fig. 4 is an enlarged section of same showing the central hole and the serrations or flutings therein, also longitudinal grooves that may be used if desired.

Fig. 5 is an enlarged elevation of a modified plug made in two sections. 70

Fig. 6 is an enlarged end elevation of a wedge used with the invention.

Fig. 7 is an enlarged side elevation of the wedge showing serrations or flutings therein, also longitudinal grooves that may be used 75 if desired.

The invention includes a plug A of non conducting material such as hardwood, vulcanite, fiber, porcelain, or the like, which may be of any suitable shape but is preferably of circular formation and adapted to fit snugly within the neck C of the lamp holder D. The plug is also provided with a step or shoulder B and a central hole or passageway indicated at E on the drawings. 80 The interior of the plug which surrounds the central hole indicated at E may, if desired, be provided with serrations or flutings F. It may also be provided, if desired, with longitudinal grooves G. 85

According to a modification the plug A 90 may be divided into two sections respectively marked A¹ and A², as illustrated in Fig. 5 of the drawings.

The invention also includes a wedge H 95 which may, if desired, be provided with flutings J and if necessary with longitudinal grooves K.

The invention is applied as follows:— The ends L of the flexible wires M shrouded 100 in the flexible cords N are stripped for electrical contact. The plug A is then inserted

into the top of the lamp holder D and passed through the neck C thereof, until the step B engages the top of the holder. The flexible cords N are then threaded through the central hole E of the plug and the stripped ends L of the wires M secured to terminals in the ordinary manner by set screws O or the like. The wedge H is then inserted between the two flexible cords and is forced into the bottom of the plug until the flexible cords are securely retained therein. The various parts of the holder are then connected by the usual union S in the ordinary manner. The holder is then ready for service. To disconnect the holder it is merely necessary to slacken the usual union S, remove the wedge, push the top of the holder upwardly along the flexible cords and slacken the set screws O in the customary manner.

When the invention is to be applied to a lamp holder supported by a bracket as illustrated in Fig. 2 it is attached in the manner already described except that the plug A is inserted within the usual tube P of the bracket R until the top of the neck C of the holder D engages the bottom of the tube P. The plug A in each case fits snugly within the neck C thereby preventing any lateral play.

The wedge H facilitates insulation between the ends of the respective flexible cords by keeping the said ends apart. By using the serrations or flutings F in the plug A and the serrations or flutings J on the wedge H the flexible cords N are more securely retained in position in the plug. The use of the longitudinal grooves G in the plug A and the longitudinal grooves K in the wedge H enables the holder to accommodate flexible cords of varying sizes or irregular diameter and also prevents the holder from rotating around the flexible cords N.

By making the plug A in two sections A¹ and A² as shown in Fig. 5 the plug may be passed into the neck C of the lamp holder D without removing the ends L of the flexible wires M from the terminals.

Having now described my invention what I claim as new and desire to secure by Letters Patent is:—

1. Improvements in holders for incandescent electric lamps, consisting in a plug adapted to engage the top of the holder and to accommodate flexible cords, in combination with a wedge inserted upwardly within the plug and frictionally supported between the flexible cords to hold the latter within the plug.
2. Improvements in holders for incandescent electric lamps, consisting in a plug having a step at its lower end, an internal central hole and an internal serrated surface, said plug being adapted to engage the

top of the holder and to accommodate flexible cords, in combination with a wedge situated between the flexible cords to retain the said flexible cords within said plug.

3. Improvements in holders for incandescent electric lamps, consisting in a plug having a step at its lower end and a central hole and internal longitudinal grooves therein, said plug being adapted to engage the top of the holder and to accommodate flexible cords, in combination with a wedge inserted upwardly within the plug and frictionally supported between the flexible cords to hold the latter within the plug.

4. Improvements in holders for incandescent electric lamps, consisting in a plug adapted to engage the top of the holder and to accommodate flexible cords, said plug having a step at its lower end to engage the top of the lamp holder and a central hole, internal longitudinal grooves and an internal serrated surface thereon, in combination with a wedge adapted to retain the flexible cords within the plug.

5. Improvements in holders for incandescent electric lamps, consisting in a plug formed in two sections and adapted to engage the top of the holder and to accommodate flexible cords, in combination with a wedge situated between the flexible cords to retain said flexible cords within the plug and support the weight of the lamp and holder.

6. Improvements in holders for incandescent electric lamps, consisting in a plug adapted to engage the top of the holder and to accommodate flexible cords, in combination with a wedge, situated between said flexible wires, said wedge having serrations on its sides.

7. Improvements in holders for incandescent electric lamps, consisting in a plug formed in two sections and adapted to engage the top of the holder and to accommodate flexible cords, said plug having a step at its lower end to engage the top of the lamp holder, a central hole and longitudinal internal grooves, an internal serrated surface, in combination with a wedge having serrated sides and adapted to retain the flexible cords within said plug.

8. Improvements in holders for incandescent electric lamps, consisting in a plug adapted to engage the top of the holder and to accommodate flexible cords, in combination with a wedge, said wedge having serrated sides and longitudinal grooves therein.

9. Improvements in holders for incandescent electric lamps, consisting in a plug adapted to engage the top of the holder and to accommodate flexible cords, said plug having an external step and internal serrations in combination with a wedge having serrated sides.

10. Improvements in holders for incan-

descent electric lamps, consisting in a plug adapted to engage the top of the holder and having a central hole to accommodate flexible cords, said plug having an external step, 5 internal serrations and internal longitudinal grooves, in combination with a wedge having serrated sides and longitudinal grooves

and arranged to be placed between the flexible wires to retain said wires within the plug and support the weight of the lamp 10 and holder.

In testimony whereof I affix my signature.

GEORGE EDWARD FARRAR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."