

R. DE S. H. ANDERSON.
ADJUSTABLE LIGHT HOLDER.
APPLICATION FILED JAN. 21, 1918.

1,283,446.

Patented Nov. 5, 1918.

Fig. 1.

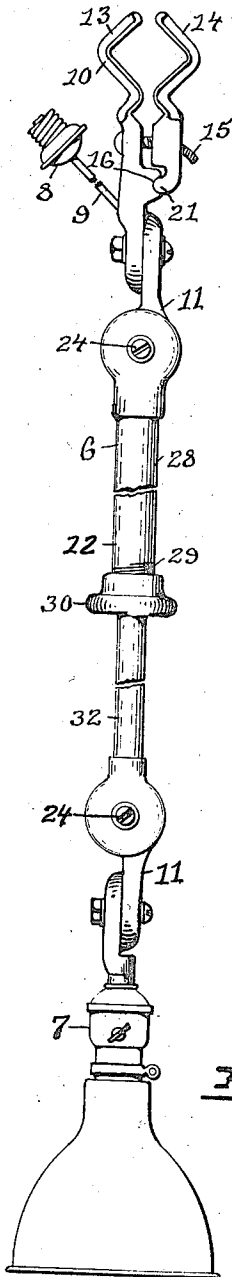


Fig. 2.

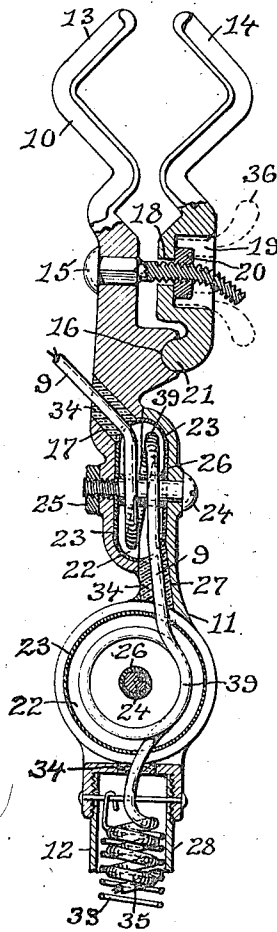


Fig. 3.

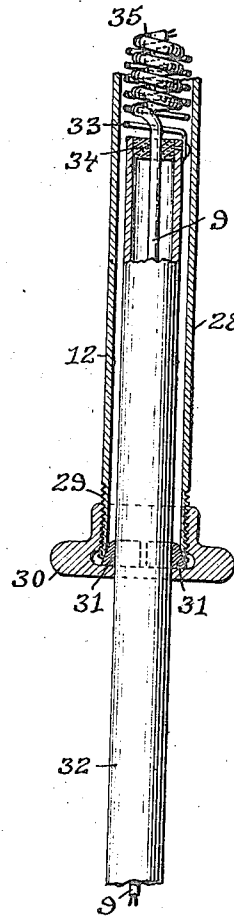


Fig. 4.

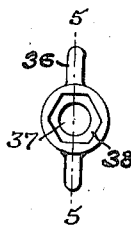
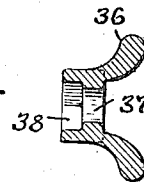


Fig. 5.



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ADJUSTABLE LIGHT-HOLDER.

1,283,446.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT DE SHIELDS HAMAN ANDERSON, a citizen of the United States, residing at Pawtuxet, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Adjustable Light-Holders, of which the following is a specification.

My invention has reference to an improvement in electrical appliances and more particularly to an improvement in adjustable light holders adapted to be detachably secured to relatively fixed objects, such as beds, chairs, etc.

The object of my invention is to improve the construction of adjustable light holders for incandescent electric lights, such as shown in my United States Patent No. 1,077,663, issued to me Nov. 4, 1913, whereby the holder may be adjustably secured to an article of furniture and locked in the required position, for use in hotels and the like.

Further objects of my invention are to improve the means of wiring the fixture or holder and to more positively insulate the wiring than has heretofore been done, in this form of adjustable light holders.

My invention consists in the peculiar and novel construction of an adjustable light holder for incandescent electric lights, said light holder having means for locking the holder to a relatively fixed object, such as a hotel bed, adjustable means for adjusting the light into any desired position, improved method of wiring whereby the wires are carried through the holder, telescopic means for lengthwise adjustment of the holder and details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a side view of my improved adjustable light holder showing intermediate portions broken away to more clearly illustrate my invention.

Fig. 2 is an enlarged longitudinal sectional view of a portion of the holder showing the locking means, one of the twin disk joints and the upper portion of the telescopic construction.

Fig. 3 is an enlarged longitudinal view showing the lower portion of the telescopic construction in section.

Fig. 4 is an end view of the locking key, and

Fig. 5 is a sectional view of the locking key taken on line 5, 5 of Fig. 4.

In the drawing, 6 indicates my improved adjustable light holder, 7 the usual incandescent electric light socket on the outer end of the holder, 8 the usual light plug and 9 60 insulated electric light wires, two wires in one insulation.

The holder 6 is constructed to have a clamping and locking member 10, two twin hollow disk joints 11, 11 and a telescopic section 12. The clamping and locking member 10 consists of two bent gripping jaws 13 and 14. The jaw 13 has a curved bolt 15 fixed in the jaw, a transverse groove 16, a wire opening 17 and is formed integral with one of the members of a disk joint 11. The jaw 14 has a bolt hole 18, through which the bolt 15 extends, a comparatively deep cavity 19, a nut 20 in screw-thread engagement with the curved bolt 15 and engaging with the bottom of the cavity 19, and a half round transverse rib shaped end 21 which engaging with the groove 16 in the jaw 13 forms a hinge joint for the jaws, as shown in Figs. 1 and 2. 80

The twin disk joints 11, 11 are formed at right angles to each other and in two parts. Each part of a disk joint 11 is constructed to form one half of a circular chamber 22, each half of which is lined with an insulating material 23, 23. The two parts or halves of the disk joints are frictionally secured together by a central screw 24 and nut 25 and the screw 24 is covered in the chamber 22 by a sleeve 26 of insulating material. A wire opening 27 connects the twin disk joint members, as shown in Fig. 2. 85 90

The telescopic section 12 consists of a tube 28 screwed at one end into a member of a disk joint 11 and screw-threaded at its outer end 29. A friction adjusting collar 30 screws over the end 29 and carries two tapered semi-circular friction plugs 31, 31 which frictionally engage with a tube 32 which telescopes through the collar 30 into the tube 28, as shown in Fig. 3. A coiled wire 33, or its equivalent, is secured at one end to the inner end of the tube 28 and at its other end to the inner end of the tube 32, as shown in Figs. 2 and 3, thereby eliminating friction between the electric wire coil and the tube 28. 100 105

The insulated electric light wires 9 are carried from the plug 8 through the wire opening 17, in which it is insulated by an insulating cementing material 34, into the chamber 22, then coiled around the screw 24 110

in the chamber 22 into a coil 39, then out through the wire opening 27, in which it is insulated by an insulating cementing material 34, into the next chamber 22. The wires
 5 are then coiled around the screw 24 into a coil 39 in this chamber and then carried out through a wire hole in the joint, in which it is insulated by an insulating cementing material 34 and into the end of the tube 28.
 10 The light wires 9 are then coiled up into a longitudinal coil 35 inside of the coiled wire 33 and then carried through the end of the tube 32, in the end of which it is insulated by insulating cementing material 34. The
 15 wires are now carried straight through the tube 32, through the outer disk joints 11, in which they are coiled and insulated as heretofore described, and then to the electric light socket 7 to which they are electrically
 20 connected in the usual way.

A key 36 having a hole 37 for the curved bolt 15 and an end recess 38 shaped to fit over the nut 20, is used, by turning the nut 20 on the curved bolt 15, to fasten the clamping member 10 and to lock the holder on the
 25 object to which the holder is to be secured. When the key is removed the holder is locked, as it requires the key to turn the nut. This is necessary in hotels and similar
 30 places. For private use a winged nut may be used in place of the nut 20.

In my improved adjustable light holder, the light wires are now carried through and concealed in the holder, the coiling of the
 35 light wires in the disk joints allows perfect freedom of movement of the joints without breaking or injuring the light wires. The forming of the light wires into a longitudinal coil 35 in the tube 28 allows perfect tele-
 40 scopic movement of the tube 32 in the tube 28 without injury to the light wires and the wire coil 33 prevents friction and wear on the coil of light wire against the inner surface of the tube 28, as the coiled wire 33
 45 expands and contracts with the coil 35 of light wire, also the light wires 9 are insulated in the disk joints from the holder by the insulating material 23, 23 lining the joints and the sleeve of insulating material
 50 on the joint screw and the holder as a whole may be as freely adjusted as the old form of holder having external wiring. By turning the friction adjusting member 30 to more or

less tighten the friction plugs 31, 31 on the tube 32 any friction desired on the tube 32, 55 may be obtained, to hold the light in the required position.

Having thus described my invention I claim as new:

1. An adjustable light holder having an outer and an inner tube telescopically connected, a wire coil or its equivalent operatively connected at one end to the outer tube and at its other end to the inner tube, electric light wires extending through the tubes
 60 and formed into a coil inside of the wire coil, an electric light socket on the outer end of the holder and means on the inner end of the holder for locking the holder to a relatively fixed object. 65 70

2. An adjustable light holder having tubes operatively connected by friction joints formed in two parts each part having a cavity, an electrical insulating material lining each cavity, a bolt extending centrally
 75 through the joint and adapted to frictionally secure the parts of the joint together, an electric insulating material covering said bolt in said cavities and electric light wires extending through the tubes and formed into
 80 coils around the bolt in the insulated cavities of the disk joints.

3. An adjustable light holder having tubes operatively connected by friction joints having insulated cavities therein and inlet and
 85 outlet wire openings in the joints, electric light wires extending through the tubes and the wire openings in the joints and formed into a coil in the joint cavities, said coil being adapted to expand and contract circumferentially in the joint cavities, and insulating
 90 cementing material closing the wire openings in the joints.

4. An adjustable light holder having tubes operatively connected by friction disk joints
 95 and telescopic connections, electric light wires extending through the tubes and formed into a longitudinal coil in the telescopic tube, means intermediate the coil of light wire and the tube for eliminating friction
 100 of the electric wire coil on the tube and an insulating cementing material closing the end of the outer tube.

In testimony whereof, I have signed my name to this specification.

ROBERT DE SHIELDS HAMAN ANDERSON.