C. W. TRULOCK.

LAMP LOCK GUARD.

APPLICATION FILED APR. 23, 1921.

1,414,906. Patented May 2, 1922.

Fig. 1.

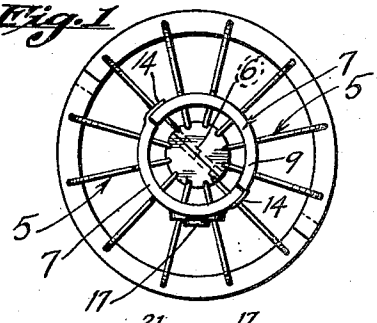


Fig. 2.

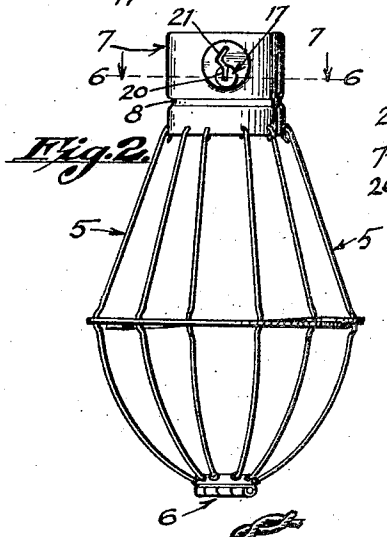


Fig. 5.

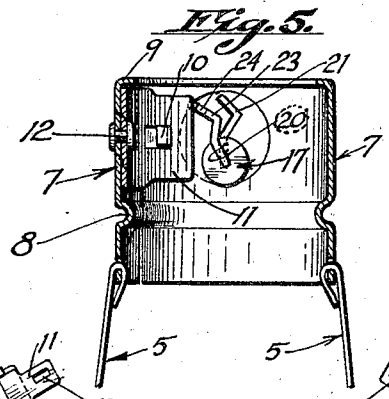


Fig. 3.

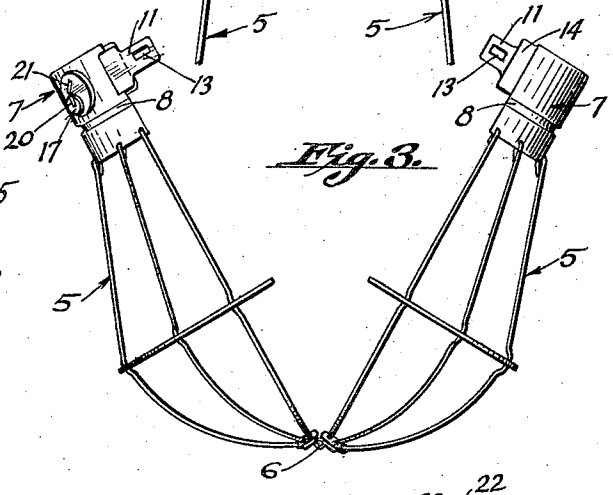


Fig. 4.

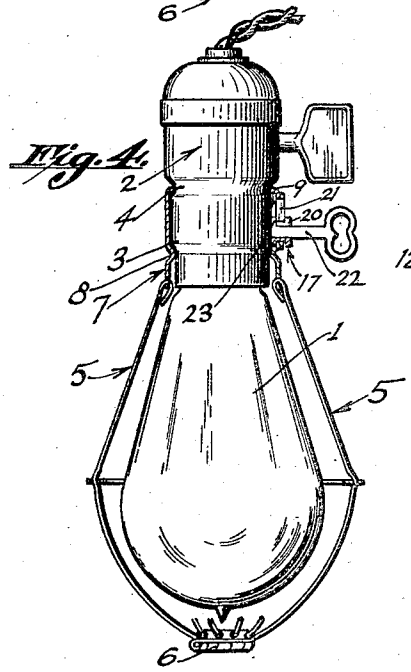


Fig. 6.

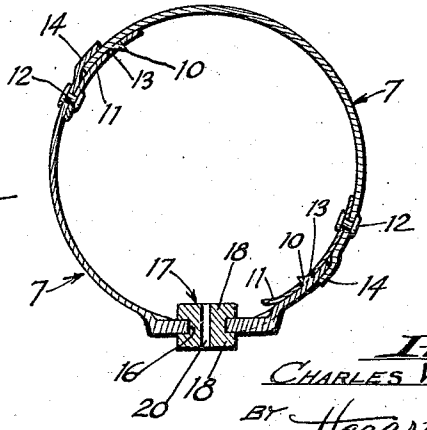
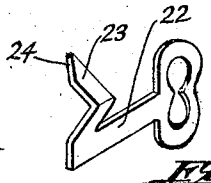


Fig. 7.



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LAMP-LOCK GUARD.

1,414,906. Specification of Letters Patent. Patented May 2, 1922.

Application filed April 23, 1921. Serial No. 464,004.

To all whom it may concern:

Be it known that I, CHARLES W. TRULOCK, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Lamp-Lock Guards, of which the following is a specification.

This invention is a device for locking usual electric lamps in their sockets and consists of a guard member received over the lamps so as to protect the same and lock around the socket of the lamp.

The invention will be readily understood from the following description of the accompanying drawings, in which—

Figure 1 is a plan view of a device constructed in accordance with the invention.

Fig. 2 is a side elevation of the same in locked position.

Fig. 3 is a similar view showing the device swung open so as to be received over the lamp.

Fig. 4 is a longitudinal section through a device constructed in accordance with the invention and showing the same in operative position upon a lamp socket.

Fig. 5 is a detail longitudinal section through the locking collar of the device.

Fig. 6 is a detail transverse section on the line 6—6 of Fig. 2, and

Fig. 7 is a perspective view of the key employed for unlocking the device.

The improved locking guard is employed in connection with a usual electric lamp 1 threaded into a usual lamp socket 2, which preferably includes an annular shoulder 3 and an annular groove 4.

The locking guard is a cage adapted to be received over the lamp and comprising two co-operating cage members 5 hinged together at one end, as shown at 6, and carrying half collars 7 at their opposite end so that when the cage is received over the lamp and the two cage members are swung toward one another and into position enclosing the lamp the two half collars will form an annulus received around the socket member 2.

The half collars 7 are preferably provided with an inwardly extending circumferential rib 8 adapted to be received beneath the shoulder 3 of the socket member and the ends of the half collars form an inwardly extending annular flange 9 adapted to engage in the annular groove 4 of the socket member. By this arrangement it will be seen that when the half collars are locked together that the guard member is held against removal from the lamp socket and as a consequence an adequate protector is formed for the lamp and it is impossible to remove the lamp from its socket.

The means employed for locking the half collars consist of lugs 10 projecting from the inner surfaces of the half collars at opposite ends of the same, and co-operating tongue members 11 secured to the inner surfaces of the half collars at the opposite ends of the same which are adjacent the lugs 10. The tongues may be secured to the half collars by rivets 12 and the projecting ends of the tongues overlie lugs 10 and are provided with openings 13 adapted to receive said lugs. It will thus be seen that when the half collars are swung toward one another that lugs 10 will automatically engage in openings 13 and thereby lock the half collars in closed position.

The joints at the meeting ends of the half collars may be protected by extending the ends of the half collars carrying tongues 11 so as to form laterally offset portions 14 adapted to be received over the ends of the half collars carrying lugs 10, and as clearly shown in Fig. 6. With the half collars thus automatically locked in closed position it is impossible to disengage the half collars until the following described unlocking mechanism is actuated:

This unlocking mechanism includes an opening 16 formed in one of the half collars adjacent the end thereof carrying the lug 10 so as to be alongside of the end of tongue 11 when the half collars are unlocked. A barrel 17 is rotatable in opening 16, the ends of the barrel being enlarged as shown at 18 so as to engage the respective surfaces of the half collar and thereby prevent axial displacement of the barrel while permitting of the ready rotation of the same. A radial slot 20 is formed in this barrel and a slot 21 is formed in the half collar so that when the barrel is rotated to the proper position slots 20 and 21 will aline to form a key opening. The slot 21 is preferably an angular slot so that the key opening formed by the alined slots will be of irregular shape and thereby necessitate the employment of a similarly shaped key for insertion in the key opening.

The key which may be employed in con-

nection with the key opening is shown in Fig. 7 as including the shank 22 and the operating end 23, which is bent so as to be readily received through the key opening. The end of the operating portion of the key forms a laterally extending tongue terminating in a wedge 24 and the parts are so arranged that when the operating end of the key is inserted in the key opening and the key is then rotated the wedge 24 will engage beneath the end of tongue 11, as clearly shown in Fig. 5. As a result, the tongue is pried from the end of the adjacent half collar so as to disengage lug 10 and recess 13, and the half collars may then be readily swung apart, it being understood that when the automatic connection at one end of the half collars is thus broken that the connection at the opposite end of the half collars will be readily disengaged.

The construction as thus described provides convenient means for locking a guard member around a lamp and onto the socket of the same, said locking means automatically engaging and being securely held against disengagement until a suitable key is inserted in the key opening and operated to disconnect the locking engagement of the guard member.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

1. The combination with a lamp and socket, of a guard comprising sections having half collars co-operating to form a collar received around the socket, said half collars having overlapping ends and lug and recess connections between the same, one of said half collars having a bearing opening, a barrel therein having a radial slot, the said half collar having a key slot extending beyond said barrel and adapted to aline with the radial slot, and a key having a laterally extending operating end, said slots being arranged to receive said key, the parts being arranged for engagement by said key end of one of said overlapping ends of the half collars in order to pry the same apart and thereby disconnect the lug and recess connection.

2. The combination with a lamp and socket, of a guard comprising sections having half collars co-operating to form a collar fitting the socket, said half collars having overlapping ends, lugs extending inwardly from opposite ends of the half collars, tongues secured to the opposite ends of the half collars from the lugs and having apertures to receive the lugs so that when the half collars are pressed together the tongues will snap over the lugs and lock the collars together, and means for unlocking one of the tongues.

3. The combination with a lamp and socket, of a guard comprising sections having half collars co-operating to form a collar fitting the socket, said half collars having overlapping ends, lugs extending inwardly from opposite ends of the half collars, tongues secured to the opposite ends of the half collars from the lugs and having apertures to receive the lugs so that when the half collars are pressed together the tongues will snap over the lugs and lock the collars together, and a key barrel mounted in one of the half collars and adapted to receive a key to engage one of the tongues to unlock the tongue from the lug.

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

C. W. TRULOCK.