A. S. LYHNE.

DEVICE FOR ATTACHING SHADE HOLDERS TO SOCKETS.

APPLICATION FILED JUNE 16, 1909.

967,534. Patented Aug. 16, 1910.

Fig. 1.

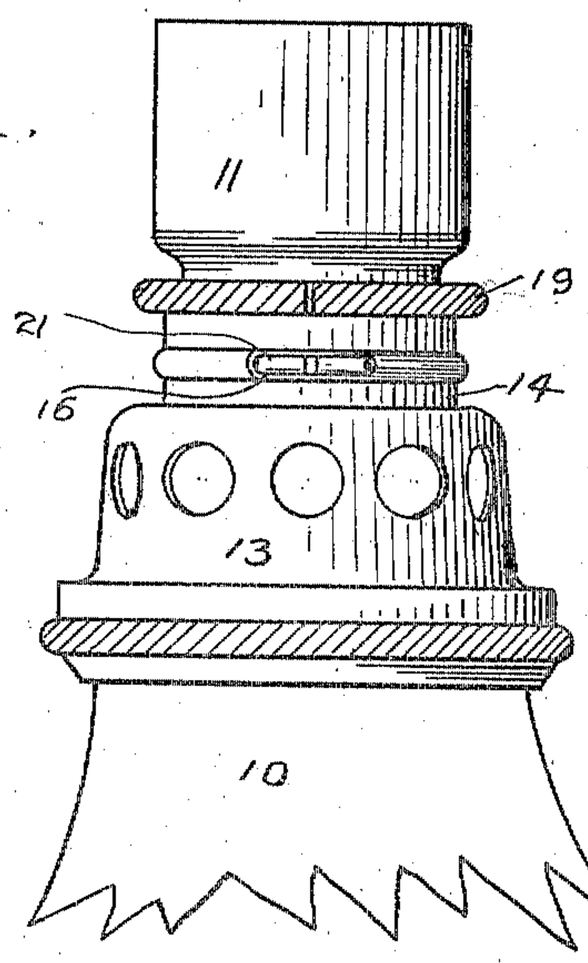


Fig. 2.

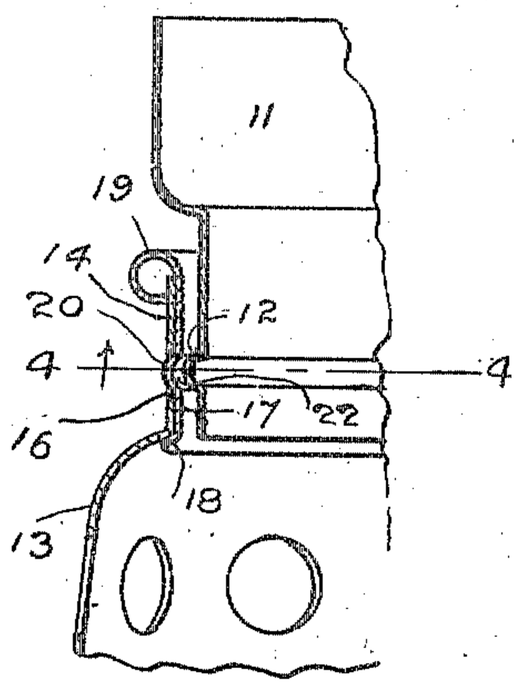


Fig. 4.

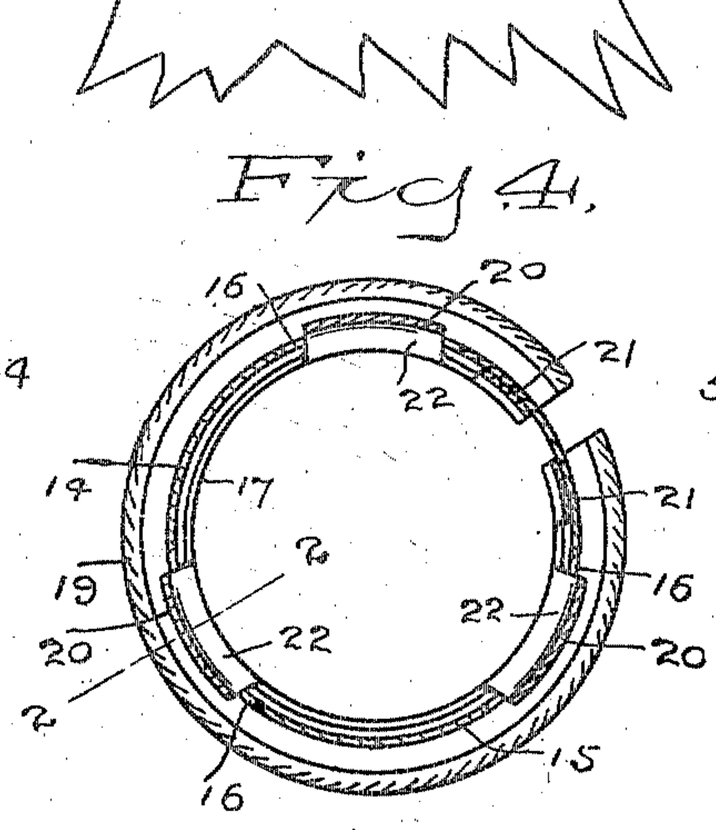


Fig. 3.

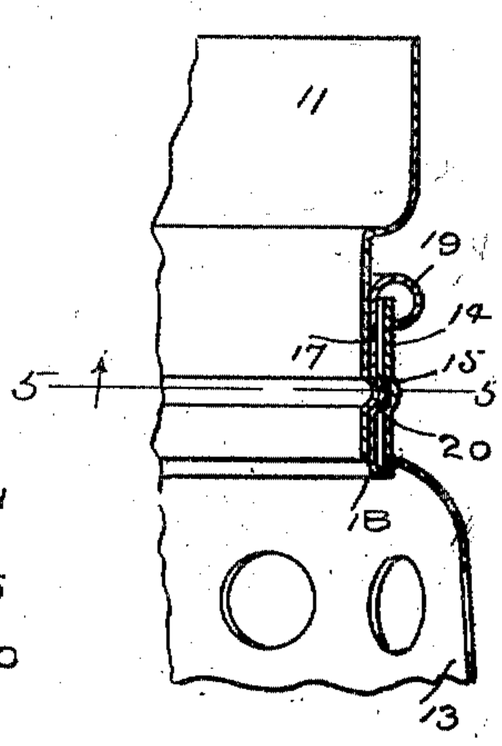
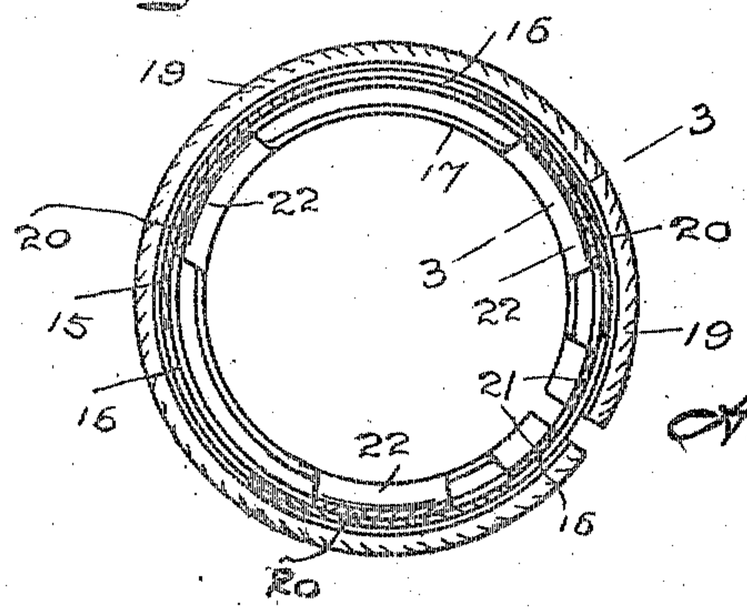


Fig. 5.



WITNESSES:

H. A. Lamb.

S. W. Atherton.

INVENTOR

Anker S. Lyhne

BY

A. M. Wooster

ATTORNEY

UNITED STATES PATENT OFFICE.

ANKER S. LYHNE, OF BRIDGEPORT, CONNECTICUT.

DEVICE FOR ATTACHING SHADE-HOLDERS TO SOCKETS.

967,534. Specification of Letters Patent. **Patented Aug. 16, 1910.**

Original application filed February 18, 1909, Serial No. 478,570. Divided and this application filed June 16, 1909. Serial No. 502,479.

To all whom it may concern:

Be it known that I, ANKER S. LYHNE, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Devices for Attaching Shade-Holders to Sockets, of which the following is a specification.

This application is a division of my former application Serial Number 478,570, filed February 18, 1909, and the present invention has for its object to provide simple, inexpensive and ornamental means for attaching shade holders to electric lamp sockets, which may be easily operated to attach a shade holder and shade to a socket or to detach it therefrom, which can be operated in either direction, shall be free from projecting parts and in which the gripping members shall be covered so that danger of injury to the hand of the operator shall be wholly avoided.

With these and other objects in view I have devised the novel shade holder attaching device of which the following description in connection with the accompanying drawing is a specification, reference characters being used to indicate the several parts.

Figure 1 is an elevation of the shade holder attaching device as in use, a shade holder carrying a socket being shown as attached to a socket shell; Fig. 2 a vertical section on an enlarged scale showing the locking device in the releasing position, the section line being indicated by 2—2 in Fig. 4; Fig. 3 a similar view showing the locking device in the locking position, the section line being indicated by 3—3 in Fig. 5; Fig. 4 a section on the line 4—4 in Fig. 2, looking in the direction of the arrow, the socket shell being omitted; and Fig. 5 is a section on the line 5—5 in Fig. 3, looking in the direction of the arrow, the socket shell being omitted.

10 denotes a shade, 11 a socket shell having near its lower end the usual external rib 12, and 13 the body or shade securing member of the shade holder which may be of any ordinary or preferred ornamental construction.

At the upper end of body 13 is a vertical flange 14 which is provided with an internal groove 15, and with a plurality of slots or openings 16, in the present instance three.

17 denotes an outwardly-acting spring locking sleeve which lies on the inner side of flange 14 and oscillates freely thereon. At the lower end of the sleeve is a flange 18 which is turned outward to engage the body and at the upper end is an outwardly-curved roll 19 knurled for convenience in operation. This roll engages the upper end of flange 14 and the roll and flange 18 retain the sleeve against detachment. The sleeve is provided with a plurality of outwardly-curved locking lugs or bosses 20 corresponding in number with slots or openings 16 in the flange and registering with groove 15 and the slots. The inner sides of these lugs or bosses comprise grooves 22. The locking sleeve is of course a divided sleeve and in order to retain the ends thereof firmly in place, I preferably provide at the ends outwardly-extending lugs or bosses 21 which engage groove 15 in flange 14 in the same manner as locking lugs 20.

The operation of engaging or disengaging a socket shell is as follows: When locking lugs 20 are in alinement with slots 16, the resiliency of the sleeve will force the lugs outward into the slots and will permit the sleeve to expand. In this position of the sleeve, it may be passed over the lower end of a socket shell, the rib 12 thereon slipping into alinement with the groove 15 in flange 14 and the grooves 22 in the inner faces of the locking lugs. Rotation of the locking sleeve in either direction will cause the forward ends of the locking lugs (either end may be the forward end depending on the direction of movement) to engage the inner wall of groove 15 in flange 14 and be forced inward thereby, the inner walls of grooves 22 in the locking lugs being forced into close engagement with rib 12 on the socket shell and locking the holder securely thereto. Further forward movement of the locking sleeve, or backward movement thereof, will again place the locking lugs in alinement with slots 16 in the flange into which the locking lugs will spring through the resiliency of the sleeve thereby relieving the grip of the locking lugs on rib 12 and releasing the holder from the socket shell so that it may be readily removed. It should be noted that when the locking lugs are in the releasing position, end lugs 21 remain in engagement with groove 15, thereby holding the ends of the sleeve securely in place. These end lugs, however, do not interfere

with attachment to or detachment from a socket shell when the locking lugs are in the releasing position. The locking sleeve serves an additional purpose in that it greatly strengthens the holder and makes it rigid at the point of attachment of the socket shell.

Having thus described my invention I claim:—

1. An attaching device of the character described comprising a flange having an internal circumferential groove and slots in the groove and a divided outwardly acting spring locking sleeve adapted to oscillate on the flange and having lugs which engage the groove in the locking position and spring into the slots in the unlocking position, and end lugs which engage the groove in the unlocking position to retain the ends of the sleeve against displacement.

2. An attaching device of the character described comprising a body with a flange having an internal groove and slots and a spring locking sleeve having lugs which engage the groove in the locking position and spring into the slots in the unlocking position, the inner sides of said lugs comprising grooves adapted to receive the rib on a socket shell, and means for operating said sleeve.

3. An attaching device of the character described, comprising a body with a flange having an internal groove and slots and a spring locking sleeve having lugs which engage the groove in the locking position and spring into the slots in the unlocking position, the inner sides of said lugs comprising grooves adapted to receive the rib on a socket shell, and end lugs which engage the groove in the unlocking position to retain the ends of the sleeve against displacement.

In testimony whereof I affix my signature in presence of two witnesses.

ANKER S. LYIINE.

Witnesses:
A. M. WOOSTER,
S. W. ATHERTON.