

C. J. KLEIN.
CASING FOR LAMP SOCKETS.
APPLICATION FILED DEC. 7, 1908.

1,007,359.

Patented Oct. 31, 1911.

Fig. 1.

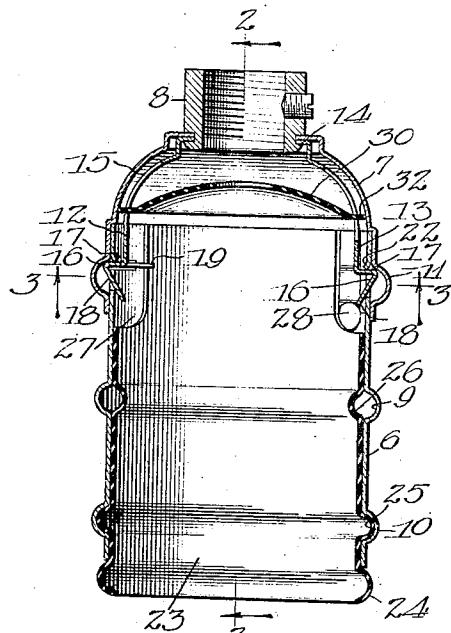


Fig. 2.

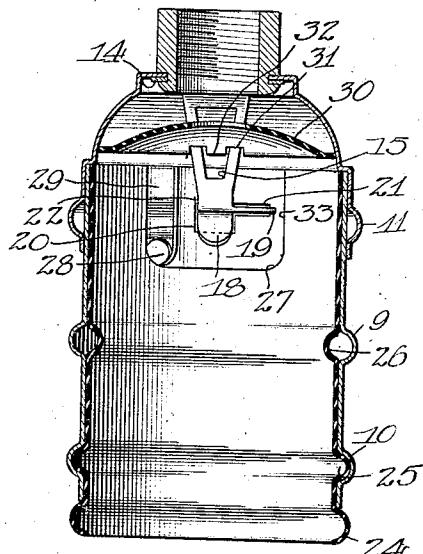


Fig. 3.

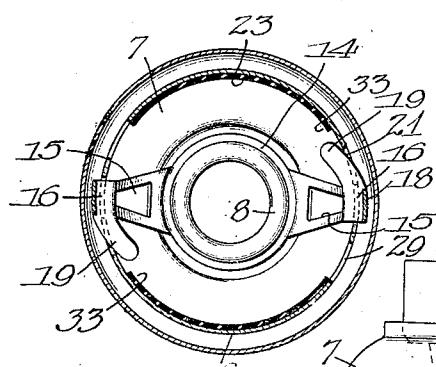


Fig. 4.

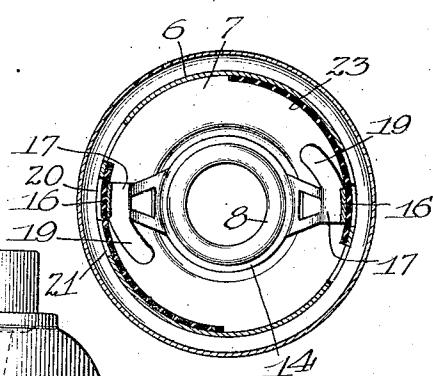
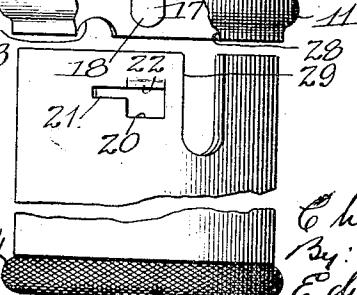


Fig. 5.



Witnesses:

Robert S. Weir
J. W. Fitzgerald

Inventor:
Charles J. Klein
By:
Edwin B. H. Tower, Jr.
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES J. KLEIN, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE CUTLER-HAMMER MFG. CO., OF MILWAUKEE, WISCONSIN, A CORPORATION OF WISCONSIN.

CASING FOR LAMP-SOCKETS.

1,007,359.

Specification of Letters Patent.

Patented Oct. 31, 1911.

Application filed December 7, 1908. Serial No. 466,320.

To all whom it may concern:

Be it known that I, CHARLES J. KLEIN, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and 5 State of Wisconsin, have invented new and useful Improvements in Casings for Lamp-Sockets, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to improvements in casings for lamp sockets. It applies more particularly to what are known as two-part casings.

15 It has for its object to provide improved means for fastening the two parts of the casing together.

It has for a further object to provide means which are operable from the forward end of the casing to release one of the parts from the other.

Other objects of my invention will hereinafter appear.

The drawing, forming a part of this specification, is merely intended to illustrate one embodiment of my invention, and therefore it should be construed merely in an illustrative sense and not in a limiting way. There are, of course, various different structures to which my invention may be applied and in which it may be embodied.

The views in the drawing are as follows:

Figure 1 is a vertical cross-sectional view of the casing; Fig. 2 is a similar view on the 35 line 2—2, Fig. 1; Fig. 3 is a cross-sectional view upon the line 3—3, Fig. 1, with the parts in their normal position; Fig. 4 is a similar view with the parts moved to release the shell from the cap; Fig. 5 is a 40 side elevation of the casing with the cap removed from the shell, and a part of the cap broken away to expose the pawl.

The casing is formed by a shell 6 and a cap 7, which fits over the rear end of the 45 shell and forms the back of the casing. The cap is of dome-like form and upon the back thereof carries an internally threaded nipple 8, the inner end of which protrudes through the cap and is suitably secured thereto. The cap and shell are preferably 50 formed of sheet metal. Upon the shell are formed two beads, 9 and 10, which encircle its periphery. These beads provide channels around the interior of the shell. The cap is

provided with a similar bead 11, near its forward end. Within the cap and upon the opposite sides thereof are arranged two spring catches or pawls, 12 and 13, which are preferably formed upon the ring 14, which bears against the back of the cap and is held in place by means of a bent-over portion of the nipple 8. Each of these pawls is preferably provided with a longitudinal slot 15, for a purpose which will hereinafter appear. The outer end of each pawl is provided with a lug 16, which has a transverse portion 17 and an inclined portion 18. Also extending from each lug is a tongue or shoe 19. These pawls serve to hold the shell to the cap and to prevent the shell and cap from turning relatively to each other. The inner end of the shell is provided with two recesses or apertures 20, arranged one on each side thereof, into which the lugs 16 of the pawls extend. The shell is also provided with slots 21, extending off from the holes 20 to receive the tongues 19. The inner wall 22 of the hole 20, which engages the lugs 16, is preferably bent inwardly to insure its firmly engaging the pawls. Within the shell 6, and fitting against the inner wall thereof, is an insulating sleeve 23, the outer end of which is provided with a bead 24, preferably having a knurled or roughened surface by means of which the sleeve may be turned. The sleeve 25 is provided with additional beads, 25 and 26. The bead 25 extends outwardly into the bead 10 upon the shell 6 and serves to hold the sleeve within the shell. In practice this bead only extends slightly into the channel 20 so that the sleeve may be removed from the shell if desired. The bead 26 projects inwardly and is provided for the purpose of holding the parts of the socket within the casing. The inner end of the sleeve is provided with two openings 27 in which are arranged the pawls 12 and 13. The inner edge of the cap is provided with two notches 28, disposed upon opposite sides thereof, and the shell is provided with two slots 29, similarly arranged, which are adapted to register with the notches 28. When the casing and cap are together these notches and slots form a hole through the casing through which pass parts of the switch mechanism. Within the cap is arranged an insulating plate 30 which engages the side walls of the cap and has notches 31 therein to receive the

pawls, a lug 32 being arranged between these notches, which enter the slots 15 in the pawls to hold the plate in position.

In order to release the shell from the cap, 5 the insulating sleeve is turned clock-wise within the shell. To turn the sleeve the operator takes hold of the knurled bead 24, on the outer end thereof, and twists the sleeve to the right. As the portions 33 of 10 the sleeve move forward they engage the tongues 19 and pass under the same and thence under the lugs 16, thereby retracting the pawls from the recesses 20 and thus releasing the shell from the cap. The shell 15 may then be withdrawn from the cap. Fig. 4 shows the position of the sleeve 23 after it has been turned to retract the pawls to release the shell. To reconnect the shell on the cap, the notches 28 and the slots 29 of 20 the cap and shell are brought into alinement and then the shell is pushed into the cap. If the sleeve 23 is in the position in Fig. 4, then it is turned counter clock-wise to allow the pawls to catch the shell. On the other 25 hand, if, previous to putting the shell into the cap, the insulating sleeve has been turned to its normal position the inner edge of the shell will engage the inclined portions 18 of the pawls, thereby forcing the pawls in- 30 wardly to permit the shell to pass into the cap, and when the shell is in position the lugs 16 of the pawls will register with the recesses 20 and pass into the same, thereby locking the shell to the cap.

35 The structure which I have provided enables the operator to release the shell from the cap without having access to the sides or inner end of the shell, as has been required in previous structures. This feature 40 is, of course, of great importance where the socket is located in a position where the sides or inner end of the shell are inaccessible.

I am, of course, aware that various modifications may be made in the structure which 45 I have illustrated herein, for the purpose of exemplifying a way in which the features of my invention may be embodied. It will, of course, be understood that other means may be devised which may be actuated from the 50 outer end of the casing to release the shell from the cap.

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

55 1. A casing comprising two parts and means for fastening said parts together, said means being movable independently of the casing and operable from the outer end thereof.

60 2. A casing comprising two parts, a catch movable independently of the casing for securing the parts thereof together and means operable from the outer end of said casing to release said catch.

65 3. A casing comprising two parts, means

for holding said parts together, and a sleeve within said casing adapted to operate said means to disconnect said parts.

4. A casing comprising two parts, means for fastening said parts together, and an 70 inner sleeve adapted to be turned to operate said means to release said parts.

5. A casing comprising two parts, a catch for fastening said parts together, and an 75 inner sleeve adapted to be operated to re-lease said catch.

6. A casing comprising two parts, a catch for fastening said parts together, and an 80 inner sleeve adapted to be rotated to release said catch.

7. A casing comprising two parts, a 85 spring pawl carried by one part and adapted to engage the other to fasten said parts together, and an inner sleeve arranged within the other part and adapted to be turned to disengage said pawl.

8. A casing comprising two parts, a 90 spring pawl carried by one part and adapted to engage the other to fasten said parts together, and a rotatable inner sleeve arranged within the other part, said sleeve having a portion adapted to be forced between said casing and said spring pawl to disengage the latter.

9. A tubular casing comprising two parts, 95 catches for fastening said parts together, and means operable from the outer end of said casing to release said catches.

10. A casing comprising two parts, catches for fastening said parts together, 100 and an inner sleeve adapted to be operated to release said catches.

11. A casing comprising two parts, spring 105 pawls carried by one part and adapted to engage the other to secure said parts together, and an inner sleeve arranged within the other part and adapted to be turned to disengage said pawls.

12. A casing comprising two parts, means for fastening said parts together and preventing one part from turning relatively to the other, and means being operable from the outer end of said casing to release said parts.

13. A casing comprising two parts, catches 115 for fastening said parts together and preventing one part from turning relatively to the other, and a sleeve in one part adapted to be turned to release said catches.

14. A casing for lamp sockets, comprising 120 a cap and a tubular shell, an insulating lining arranged within said shell and protruding from the outer end thereof to permit it to be grasped and turned.

15. A casing for lamp sockets comprising 125 a cap, a shell and an insulating sleeve rotatably mounted in said shell to serve as a controlling device, said sleeve and said shell having engaging parts to retain the former within the latter, and said sleeve having 130

means for facilitating the rotation thereof from the outer end of the casing.

16. A casing for lamp sockets comprising a cap and a cylindrical shell of substantially the same diameter throughout its entire length, an insulating sleeve within said shell, said shell and said sleeve having corresponding external beads formed thereon and cooperating to retain said sleeve within said shell, and said sleeve having formed thereon an internal bead adapted to form a retaining means for the mechanism to be inclosed in the casing.

17. A casing for lamp sockets, comprising a cap and a shell, means to secure the same together, an insulating sleeve arranged within said shell and rotatable to release said means and corresponding beads formed on said shell and sleeve to hold the same in assembled relation.

18. A casing for lamp sockets, comprising a cap and a tubular shell, spring pawls carried by said cap and adapted to engage said shell, and an insulating sleeve within said shell and protruding from the outer end thereof, said sleeve being rotatable to release said pawls from said shell.

19. A casing for lamp sockets, comprising a cap and a tubular shell, a spring pawl carried by said cap and having a lug adapted to fit into recess in said shell, said pawl being also provided with an inclined tongue adapted to be engaged by said shell to cause said spring pawl to automatically lock said cap and said shell together, and an insulating sleeve arranged within said shell and rotatable to operate said pawl to withdraw said lug from the recess in said shell.

20. A casing for lamp sockets, comprising a cap and a shell, spring pawls carried by said cap and having lugs adapted to fit into recesses in said shell, said pawls being also provided with inclined tongues adapted to be engaged by said shell to cause said pawls to automatically lock said shell to said cap, and an insulating sleeve within said shell and protruding from the outer end thereof, said sleeve being adapted to be turned to release said pawls from said shell.

21. A casing for lamp sockets, comprising a cap and a tubular shell, spring pawls carried by said cap and having lugs adapted to engage said shell to lock the same to said cap, an insulating sleeve within said shell and protruding from the outer end thereof, said sleeve being adapted to be turned to release said pawls from said shell, and corresponding beads formed upon said shell and said sleeve to hold the same in assembled relation.

22. A casing for lamp sockets, comprising a cap and a tubular shell, spring pawls carried by said cap and adapted to engage said tubular shell and lock the same to said cap, an insulating plate in said cap, lugs on said plate adapted to extend into slots in said spring pawls, and means operatable from the outer end of said shell to release said pawls from said shell.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

CHARLES J. KLEIN.

Witnesses:

FRANK H. HUBBARD,
SHEPLER W. FITZ GERALD.

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