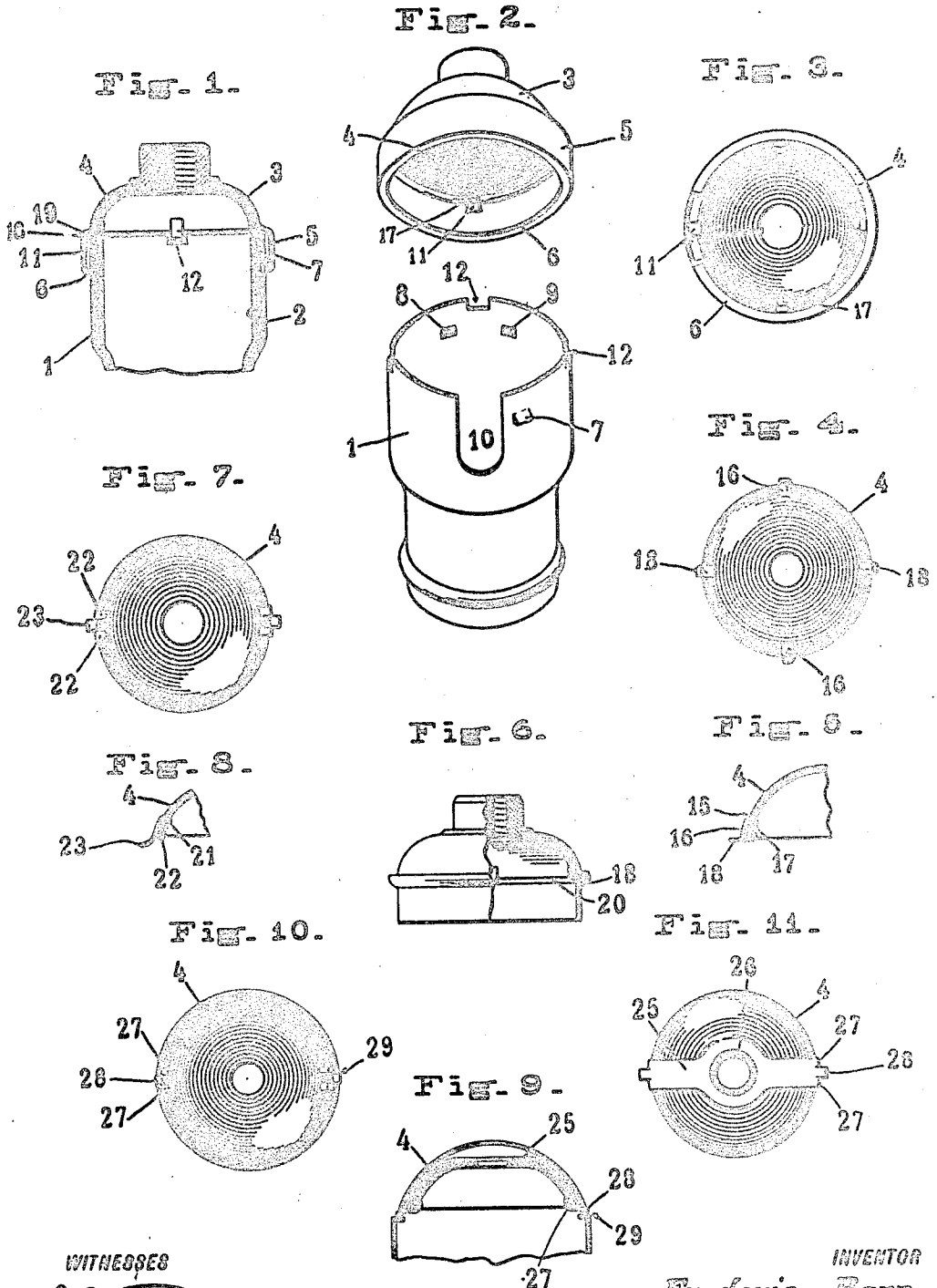


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 SOCKET FOR LAMPS, Co.
 APPLICATION FILED MAR. 23, 1912.

1,064,423.

Patented June 10, 1913.



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SOCKET FOR LAMPS, &c.

1,064,423.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed March 23, 1912. Serial No. 635,755.

To all whom it may concern:

Be it known that I, FREDERIC BARR, a citizen of the United States, and resident of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sockets for Lamps, &c., of which the following is a specification.

My invention relates particularly to improvements in means for fastening the insulating lining in the cap and means for securing or locking the cap and body of the shell together. Sockets of this character are used particularly for inclosing incandescent electric lamp switch bases and also what are commonly termed pendant switches. In constructions of this character in order to comply with the underwriters' requirements it is necessary to provide an insulating lining in the cap in such a manner as to prevent the circuit wiring from coming accidentally in contact with the cap. As these sockets are customarily made in two parts detachably secured together it is also necessary to fasten the cap lining in place so that it will not fall out in ordinary handling.

One object is to provide a simple and inexpensive means of securing the lining of the cap in place. Sometimes these cap linings are made of very flexible material such as thin paper which it is difficult to hold securely in place and the thin paper is likely to be torn in handling. A thick and rigid lining is preferable as it affords a more perfect means of insulation, for instance, porcelain or heavy fiber.

The special object of my invention is to afford means of securing such a heavy lining in place preferably so that it can be readily inserted or removed when necessary.

Another object is to provide means for securing the cap and body of the shell together to prevent relative rotation or relative longitudinal separation except when it is desired to separate them.

The invention contemplates providing the lining of the cap with two or more clips more or less yielding in nature and adapted to fit into corresponding holes or recesses in the cap. These clips may be formed in various ways and secured in various ways to the cap lining, some of the various forms of the invention are illustrated in the accom-

panying single sheet of drawings. To secure the two parts of the shell together as above indicated, the cap is provided with two or more interiorly projecting shoulders and the body is provided with corresponding notches for receiving the shoulders in the cap to prevent relative rotation. The cap is also provided with an interiorly directed flange at its lower edge to receive the upper edge of the body. The body is provided with outwardly and downwardly projecting catches adapted to engage the interior flange of the cap. The body is slotted at one point and one of the catches is located adjacent this slot where the body is particularly resilient. The other catches on the body are arranged opposite this catch so as to render the attachment and detachment of the parts more convenient.

Figure 1 is a vertical section of a socket embodying the improvements of my invention. Fig. 2, is a perspective view showing the cap and body of the socket separated. Fig. 3, is an interior view of the cap with part of the flange broken away. Fig. 4, is a view of the cap lining from the upper surface. Fig. 5, is a fragmentary sectional view showing one method of attaching a clip to the cap lining. Fig. 6, is an elevation and partial section of a modification of the cap. Fig. 7, is a view of a cap lining with another form of clip. Fig. 8, is a sectional view showing the method of attaching the clip of Fig. 7 to the lining. Fig. 9, is a sectional view showing another modification of the method of securing the lining in the cap. Fig. 10, is an interior view and partial section of the same. Fig. 11, is a top view of the cap lining of Figs. 8 and 9.

The body 1 of the shell may have a suitable lining 2 and the cap 3 has a lining 4.

The cap has a wall 5 with an interiorly directed flange 6 at the lower edge extending all the way around. The external diameter of the body 1 corresponds to the interior diameter of the flange 6 and the body is provided with a number of catches such as 7, 8 and 9 adapted to interlock with the upper surface of the flange 6 for preventing longitudinal separation of the parts. Preferably these catches are formed by cutting short slits in the metal and forcing a limited portion outwardly as shown so that

the parts may be readily telescoped in assembling them but will not separate in ordinary handling. The body of the shell is provided with a slot 10 which makes the upper edge of the body particularly resilient.

5 This slot can be the ordinary slot for accommodating a switch key or chain guide or simply a slit in case the shell is used for key-less sockets or pendant switches. The catch 7 is located adjacent the slot 10 and the catches such as 8 and 9 are located opposite thereto so that the parts can be more readily assembled or separated when desired.

10 The cap is provided with one or more shoulders such as 11 formed for instance, by indenting a portion of the cap. The upper edge of the body of the shell is provided with a number of notches such as 12 to correspond with the number of shoulders 11 in the cap, so that when the parts are interlocked the shoulder and notch construction will prevent relative rotation of the parts. In the form shown there are four shoulders in the cap and four notches in the body, the upper end of the slot 10 forming one of the notches. This disposition of the shoulders and notches is particularly useful in preserving the parts in their proper relative alignment and preventing the body of the shell from being tilted in the cap. It will be obvious, however, that a lesser or greater number of shoulders and notches for preventing relative rotation may be employed if desired.

20 The cap lining 4 is provided with two or more clips secured to its edge. A number of forms of clips are illustrated. In the form shown in Figs. 1, 2, 3, 4, 5, and 6 each clip consists of a strip of metal which passes through a hole 15 adjacent the edge of the lining. One end 16 is bent down on the outside of the lining. The inner part 17 is bent down inside the lining and the two pressed together so as to grip the lining. The end 18 of the clip is bent outward around the edge of the lining particularly as shown in Fig. 5. The cap is provided with a number of openings or recesses such as 19 adapted to receive the ends 18 of the clips. In the form shown in Figs. 1 and 2 these openings 19 are formed just above the shoulders 11. The clips formed in this way are more or less resilient or yielding so that they can be readily sprung into place in assembling the lining in the cap. Similarly the ends of the clips may be pried out of the recesses in the cap if it is necessary to remove the lining from the cap.

30 In the form shown in Fig. 6 the cap is provided with an interior groove 20 affording a recess for receiving the ends of the clips 18 so that the lining can be inserted in any position without its being necessary to locate the ends of the clips in small recesses as in the form shown in Fig. 1.

In the construction shown in Figs. 7 and 8 the clip has a prong 21 passing through the lining 4 and two prongs 22, 22 bent around the edge of the lining from the outside. The tip 23 of the clip is bent outwardly to engage in the recess or recesses in the cap as previously described. It will be obvious that this form of clip could be used with a cap such as shown in Fig. 1 or as shown in Fig. 6.

75 In the construction shown in Figs. 9, 10 and 11 the clips for securing the lining in the cap are formed from a single strip of metal 25 which extends around the outer surface of the lining and is provided with an opening 26 around the central opening in the lining. Portions 27 of the opposite ends of the strip 25 are bent around the edge of the lining 4 to hold the strip to the lining. Other portions 28, 28 of the strip 25 are bent outwardly to engage in the recess or recesses in the cap such for instance, as the hole 29. It will be obvious that the lining and clip of this construction might be used in a cap of the construction of Fig. 1 or that of Fig. 6.

In all of the constructions illustrated it will be noted that the resiliency of the clips rather than any flexibility of the lining permits the parts to be readily assembled. For this reason the cap lining can be made thick and of stiff fiber or porcelain if desired. While the clips may be bent so as to be retracted from the recess or recesses in the cap for removing the lining, it will be obvious that they could be soldered, brazed or otherwise suitably secured permanently in the cap if desired.

To assemble the parts of the shell, the body is inserted in the cap and rotated until the notches in the edge of the body are in alignment with the shoulders in the cap and then pushed in still farther until the body catches interlock with the interior cap flange. The parts are then interlocked longitudinally and rotatively. To separate the parts the body is compressed adjacent the catch 7 to disengage that catch. The body is then tilted slightly and withdrawn.

What I claim is:—

1. The combination of a socket cap having a plurality of interior recesses, an insulating lining fitting in said cap and a plurality of yielding metallic clips attached to said lining and projecting laterally therefrom and engaging in said recesses.

2. As an article of manufacture, an insulating socket cap lining and a plurality of yielding metallic clips secured to said lining, each clip having parts gripping the inner and outer surfaces of the lining respectively and each clip having a part projecting laterally for engagement in a recess in a socket cap.

3. As an article of manufacture, an insu-

lating socket cap lining and a plurality of yielding metallic clips secured to the periphery of said lining, each clip having three parts, one of said parts gripping the inner edge of said lining, the second part gripping the outer edge of said lining and a third part projecting laterally from the periphery of said lining for engaging in a cap recess.

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Witnesses:

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