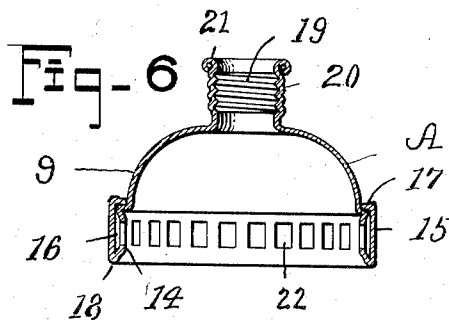
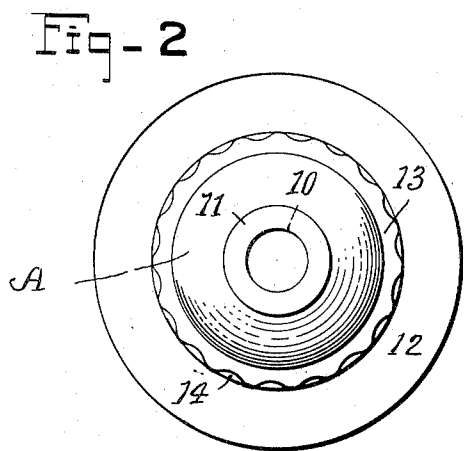
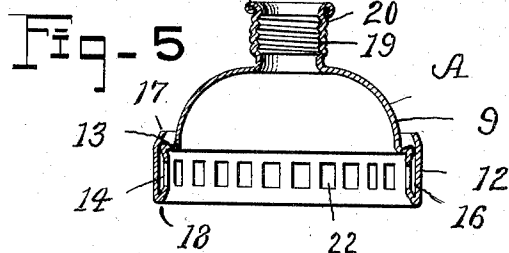
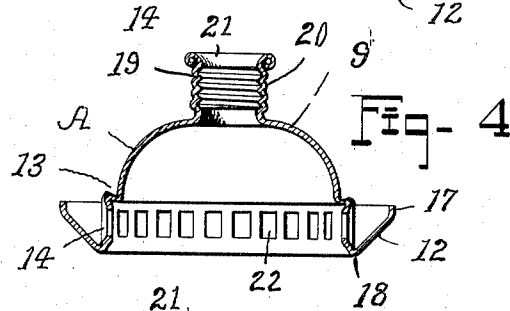
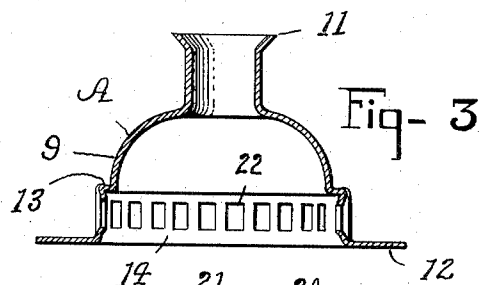
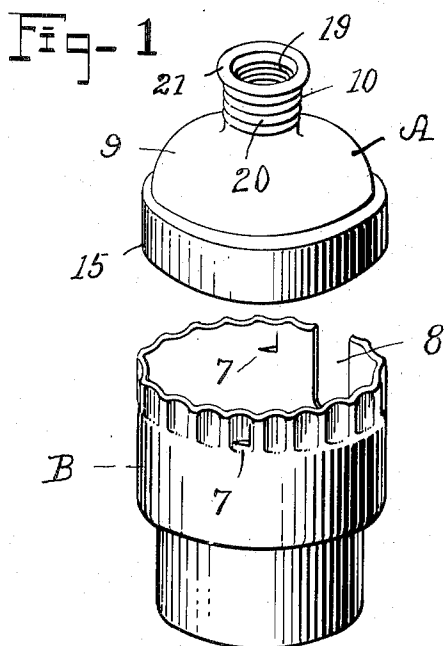


A. W. LIMONT.
ELECTRIC LAMP SOCKET CAP.
APPLICATION FILED MAR. 3, 1919.

1,325,875.

Patented Dec. 23, 1919.



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ELECTRIC-LAMP-SOCKET CAP.

1,325,875.

Specification of Letters Patent.

Patented Dec. 23, 1919.

Application filed March 3, 1919. Serial No. 280,275.

To all whom it may concern:

Be it known that I, ALEXANDER W. LIMONT, a citizen of the United States, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Electric-Lamp-Socket Caps, of which the following is a specification.

This invention relates to new and useful improvements in incandescent electric lamp sockets and more especially to the construction of the cap thereof.

The invention has particular reference to a style of cap having a number of engaging openings in its skirt portion, to receive corresponding latching elements of the shell, and which also includes an outer closing member for covering said openings as is more particularly shown in several prior patents, as for instance Patent #967,356.

The objects of the invention are to simplify, cheapen and generally improve the construction of caps of this general character and to design the same so that they can be made of a single piece of sheet metal, by a series of operations and which when so produced will have substantially the same appearance, and operate in the same manner as the cap shown in the patents referred to; to further design the cap so that it may be manufactured in an improved manner which will materially strengthen the cap, whereby the objectionable raw edges formed upon the lower rim of the flange, when employing an attached ring, will be eliminated.

A further feature of the invention is to form a closed bead around the top of the neck of the cap and to provide a rolled thread inside the neck whereby the cap may be screwed and fastened to a pipe or fitting thereby eliminating the use of an attached nipple such as has heretofore been commonly employed; also to form corrugations upon the outside of the neck in a manner to strengthen and stiffen the same.

With these and other objects in view the invention resides and consists in the construction and novel combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departure from the spirit or sac-

rificing any of the advantages of the invention.

Similar characters of reference denote like or corresponding parts throughout the several figures of the accompanying drawings forming a part of this specification, and upon which,

Figure 1 shows a perspective view of my improved cap together with a shell to which it may be attached.

Fig. 2 is a top plan view of the cap blank in process of manufacture and showing the general outline of the dome, skirt and neck portions of the cap.

Fig. 3 shows a central vertical cross section of the cap blank as shown in Fig. 2.

Fig. 4 is a central vertical cross section illustrating the shape the blank assumes after the next step in my process of manufacture is performed.

Fig. 5 shows a further section illustrating the result of the further operation, of disposing the flange farther up to form the skirt, and

Fig. 6 illustrates a central vertical cross section through the finished cap, the brim for covering the skirt portion being closed in and down to form the outer closed wall of the flange.

Referring in detail to the characters of reference marked upon the drawings, A indicates the cap as a whole and B the shell, each of which when formed in accordance with my present invention are made of a single piece of sheet metal. The construction of the shell, however, may be varied so far as the application of my improved form of cap is concerned; since the cap is equally well adapted to be used upon several well known commercial types of shells that are sleeved into the flange of the cap and having specially shaped upper engaging edges. The shell shown includes a corrugated upper edge and is provided with interlocking elements 7 arranged opposite to each other and one of which is arranged adjacent to the slot 8 which may accommodate the key for operating the switch.

A finished cap constructed in accordance with the invention is shown in Figs. 1 and 6 while the other intermediate figures illustrate the several operations employed in the manufacturing of the cap. I would first direct attention to Figs. 2 and 3 which show the sheet metal blank from which the cap is made, and wherein 9 represents the dome

portion of the cap, 10 the neck whose top edge portion 11 is first flared out as shown in Figs. 2 and 3. The lower edge portion is disposed out at a right angle to form a
 5 straight annular brim 12. An annular inclined shoulder 13 is formed at the base of the dome of the shell and the cylindrical skirt portion is provided with corrugations 14 and perforations 22 to receive the inter-
 10 locking element 7 of the shell B.

The brim 12 as shown in Figs. 2 and 3 is bent up to form an outer inclosing portion 15 of the flange, the wall of which is disposed vertically and spaced from the skirt
 15 portion in a manner to form a pocket 16 therebetween. With the provision of the pocket 16 between the skirt and the inclosing portion, the skirt is rendered resilient and sufficient space is provided for a slight
 20 expansive movement of the skirt in positioning the cap upon a shell. The edge portion 17 of this brim is finally turned in against the lower portion of the peripheral surface of the dome and into the annular
 25 inclined shoulder 13 in a way to hold the said edge portion in position. This formation of the metal is preferably done by several operations as indicated by the several drawings. The first operation is that of dis-
 30 posing the brim up at an angle of about 45 degrees as shown in Fig. 4 and with its edge portion 17 bent in slightly farther. The next operation as indicated in Fig. 5 serves to carry the stock up straight and parallel
 35 to the inner skirt leaving the deflected edge portion 17 disposed inward. The final operation of this portion of the blank is that of turning the edge 17 down upon the shoulder 13 in the manner previously suggested.
 40 If for any reason this edge of the brim should be left ragged or ununiform in width when disposed in its upward direction as shown in Fig. 5 it may be trimmed to a uniform width so as to fit snugly into the shoulder against the dome. This construction
 45 produces the completed flange of two thicknesses of metal formed integral one with the other, the outer member serving to inclose the skirt portion of the cap leaving a perfectly smooth finish upon all exposed parts
 50 and especially upon its lower edge or rim. The severe setting and abrupt bending of the stock around the lower edge of the cap as indicated by 18 serves to harden and
 55 stiffen the metal at that point and thereby materially strengthens the lower rim of the finished product.

The neck portion like the rest of the cap is formed of one and the same thickness of
 60 metal and is rolled as shown to form the internal thread 19 and the outer rib portion 20 and has its upper edge portion rolled to form a bead 21 as indicated. This bead as

well as the ribs formed upon the periphery serves to materially strengthen the neck of
 65 the cap while the internal threads serve the usual purpose of attaching the socket to a threaded pipe.

Having thus described my invention, what I claim and desire to secure by Letters Pat-
 70 ent, is:

1. An electric lamp socket cap, comprising a neck portion, a dome, a skirt having perforations therein, and an outer inclosing
 75 portion formed integral with the skirt and disposed upward from the lower part thereof to inclose the perforations and being slightly spaced from the skirt to permit expansion thereof.

2. An electric lamp socket cap, comprising 80 in part a dome, a perforated skirt, an annular shoulder above the corrugations and having an inclined top surface, an outer inclosing portion for covering the perforations, having an upper edge portion that is
 85 turned in upon the inclined top surface of the shoulder with the main body portion thereof spaced from the skirt to permit expansion of the skirt.

3. An electric lamp socket cap, comprising 90 in part a dome, an annular shoulder at the base of the dome, a skirt below the shoulder, an outer inclosing portion formed integral with the skirt and disposed upward to cover the same and having its upper portion
 95 disposed in upon the shoulder and against the dome with the main body portion thereof spaced from the skirt to permit expansion of the skirt.

4. An electric lamp socket cap, formed of 100 one piece of metal, comprising a neck formed of one thickness of metal and having a rolled thread upon its inside, a dome, an annular shoulder, a skirt, and an integral outer covering for the skirt whose upward
 105 disposed edge portion is turned in upon the shoulder with the main body portion thereof spaced from the skirt to permit expansion of the skirt.

5. An electric lamp socket cap formed of 110 one piece of metal, comprising a neck formed of one thickness of metal and having integral attaching means, a dome, and a flange for covering a socket shell, said flange being formed of spaced inner and outer
 115 thicknesses of metal bent back around its lower edge and having the upper edge of the outer covering disposed in and against the dome.

Signed at Bridgeport in the county of 120 Fairfield and State of Connecticut this 28th day of February, A. D., 1919.

ALEXANDER W. LIMONT.

Witnesses:

C. M. NEWMAN,
 LILLIAN M. ALLING.