

F. REUTTER.
 INCANDESCENT LAMP SOCKET.
 APPLICATION FILED APR. 10, 1913.

1,065,967.

Patented July 1, 1913.

Fig. 1.

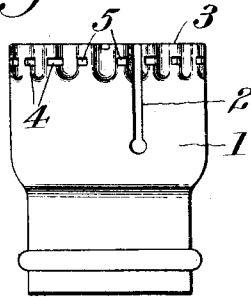


Fig. 5.

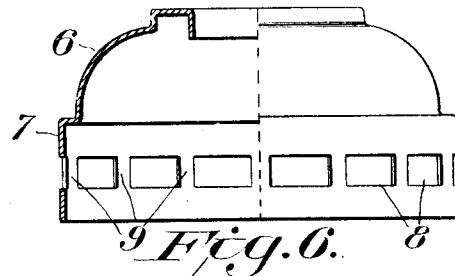


Fig. 2.

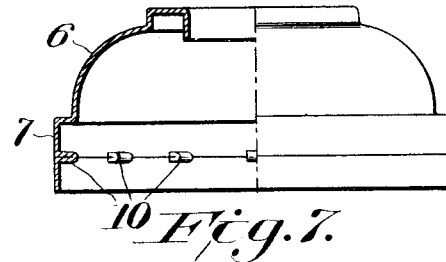
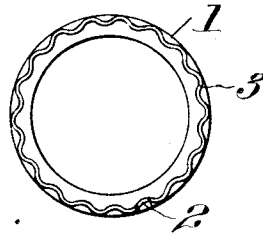


Fig. 3.

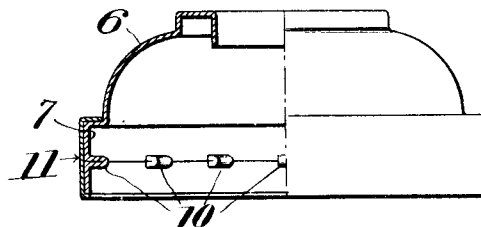
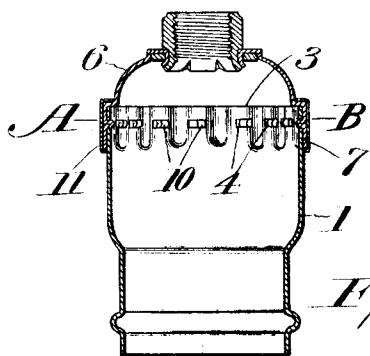


Fig. 6.

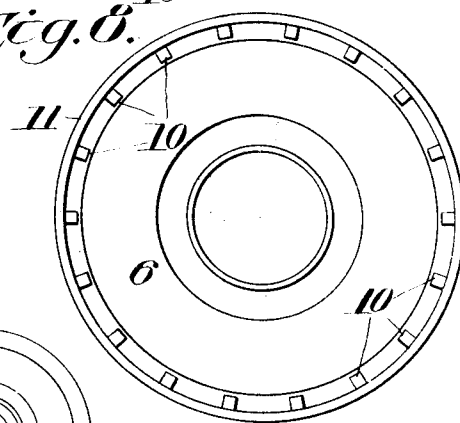
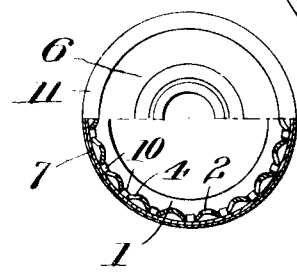


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK REUTTER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

INCANDESCENT-LAMP SOCKET.

1,065,967.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed April 10, 1913. Serial No. 760,309.

To all whom it may concern:

Be it known that I, FREDERICK REUTTER, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Incandescent-Lamp Sockets, of which the following is a full, clear, and exact description.

10 The object of this invention is to provide a simple and economical construction of detachable caps, for incandescent electric lamp sockets, of the type where the cap is provided with interior projections which are
15 adapted to engage slots in the shell of the socket and be held in engagement with the shell by the springiness of the shell, and capable of detachment therefrom by virtue of such springiness. Various constructions
20 have been devised for accomplishing this object, but all of them have been more or less expensive to manufacture.

The present invention is designed to furnish an economical and efficient construction
25 of socket cap of the general type referred to.

The invention consists in a cap for incandescent lamp sockets, having the interlocking projections formed integral therewith, by slotting the cap transversely in such way
30 as to leave intervening solid portions or strips of the metal of the cap, and then breaking down the metal of the cap in the direction of the height of the cap so as to fold the metal strips between the slots upon themselves and cause the thus folded parts
35 to project inwardly; this breaking down of the cap serving to substantially close the slots, so that the cap may be used with or without an exterior finishing ring, all as I
40 will proceed now to explain and finally claim.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated,
45 Figure 1 is an elevation of the socket; Fig. 2 is a top plan view thereof; Fig. 3 is a longitudinal section with the socket and cap assembled, and Fig. 4 is a top plan view and half horizontal section taken in the plane of line
50 A B, Fig. 3. Fig. 5 is a half section and elevation of the partly formed blank from which the cap is made; Fig. 6 is a similar view showing the projections formed; Fig. 7 is a view similar to Fig. 6 but with an exterior finishing ring applied, and Fig. 8 is
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an inverted plan view, all of these last four views being on a larger scale.

The socket 1, may have the longitudinal slit 2, for the reception of the key shaft, and its upper edge is crimped or corrugated as at 3, and these corrugations are provided with transverse slots 4 of greater length
60 than the projections on the cap. One or more of the slots next to the slit 2 may be provided with slots 5 of about the dimensions of the projections on the cap, so that
65 when the cap is applied to the shell and its projections are engaged in the slots 4 and 5, the slots 5 will prevent any rotary motion of the cap and so hold it in fixed relation
70 rotarily with respect to the shell, while all of the several slots 4 and 5 hold it in fixed relation in the direction of the length of the shell.

This present invention has to do with the formation of the projections in the cap 6. In the preferred procedure, the cap is produced in any usual or approved way, with an annular flange 7, and this flange is made with the slots 8 so as to leave intervening
80 strips 9 of the metal of the cap; and then the thus formed cap is placed in a suitable die of a character that will afford an outside support for the flange 7, and then pressure is applied to break down the flange; 85 and inasmuch as the strips 9 are prevented by the die from projecting outwardly, they are compelled to fold down upon themselves inwardly, as indicated in Fig. 6, thus leaving the inwardly extending projections 10, 90
hereinbefore referred to as the projections which engage the slots 4 and 5 of the shell. The breaking down of the slotted flange closes the slots, and the cap may then be subjected to any suitable finishing operation, 95 and be applied to the socket shell by pressing it down upon the corrugated end of that shell and then turning its projections into the slots 4 and 5, the resiliency of the shell being sufficient to yield to permit the projections to turn into the slots 4 and 5 and then recoil so as to lock the shell and cap together. To release the cap the shell is pressed in on that side of the slit 2 containing the slots 5, so as to release the projections from those slots and permit it to be
100 rotated so as to draw the other projections out of the slots 5 and into the grooves between the corrugations, when the cap may be withdrawn or separated from its shell. If 110

desired, the cap may be supplied with an exterior finishing band 11, of any approved construction.

By the construction described, a cap is furnished with integral projections, in a very economical and expeditious way, and of sufficient strength to fully sustain all strains to which it is exposed in use. It is unnecessary to use a supplemental ring having projections, as has heretofore been proposed; and while I prefer to form the projections integrally with the cap, such integrality is not indispensable, so long as these projections are formed by folding the metal upon itself by a breaking down of the metal as hereinbefore described, and the projections stand off from the cap horizontally, that is to say, transversely.

What I claim is:—

- 20 1. An incandescent lamp socket, having a cap provided with transversely-extending shell-engaging projections formed by folding upon themselves integral portions of the metal from which said projections extend.
- 25 2. An incandescent lamp socket cap, having inwardly extending transversely arranged projections formed of the metal of the cap folded upon itself.
- 30 3. An incandescent lamp socket cap, provided with a flange having alternating transverse slots and connecting strips, said strips folded upon themselves by breaking

down the flange and thereby converting said strips into transverse inwardly extending projections adapted for detachable engagement with an appropriately formed socket shell.

4. An incandescent lamp socket, having a shell provided with means for interlocking with a detachable cap, and a cap having transversely extending interior projections adapted to coöperate with the interlocking means on the shell, said projections formed of integral portions of the metal of the shell folded upon themselves.

5. An incandescent lamp socket, having a shell provided with a longitudinally corrugated end, divided by a longitudinal slit, said corrugated end having a series of transverse slots, and a cap provided with a series of inwardly extending projections formed by folding upon themselves integral portions of the metal from which said projections extend and adapted to engage the slots in the shell, one or more of the slots in the shell next to the slit adapted to snugly fit a projection on the cap so as to prevent relative rotation of the cap and shell.

In testimony whereof I have hereunto set my hand this 9th day of April A. D. 1913.

FREDERICK REUTER.

Witnesses:

PATRICK H. ROBINSON,
JOSEPH R. WOLFF.