W. F. ANKLAM.

LAMP SOCKET.

APPLICATION FILED AUG. 31, 1914.

1,209,655. Patented Dec. 26, 1916.

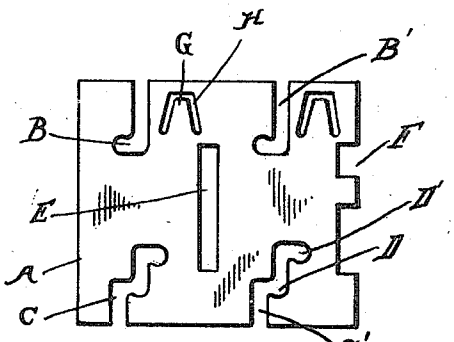


Fig. 1.

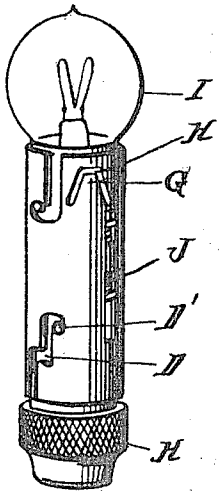


Fig. 2.

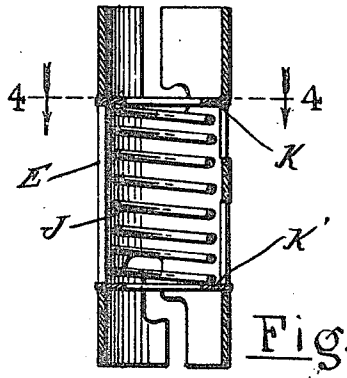


Fig. 3.

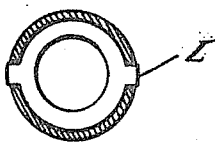


Fig. 4.

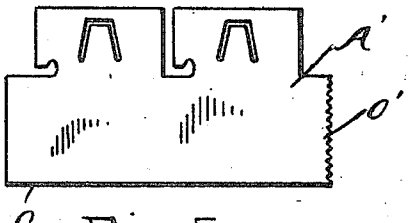


Fig. 5.

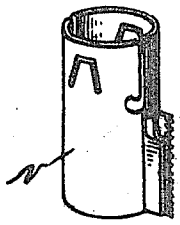


Fig. 6.

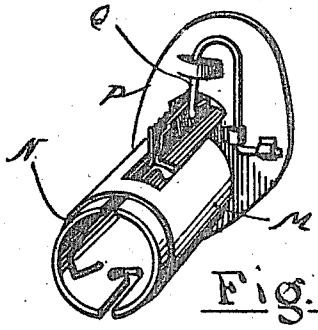


Fig. 7.

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WILLIAM F. ANKLAM, OF DETROIT, MICHIGAN, ASSIGNOR TO C. M. HALL LAMP COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

LAMP-SOCKET.

1,209,655. Specification of Letters Patent. Patented Dec. 26, 1916.

Application filed August 31, 1914. Serial No. 859,433.

To all whom it may concern:

Be it known that I, WILLIAM F. ANKLAM, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Lamp-Sockets, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to electric lamp sockets, and more particularly to a type designed for use in connection with vehicle lamps.

In the present state of the art it is usual to provide a bayonet joint locking connection between the lamp-bulb and the socket to hold the former from displacement by the vibrations of the car. The slots for this lock are usually arranged upon opposite sides of the socket and are formed by successive punching operations. With certain constructions the connector plug is arranged to engage the opposite end of the socket and is locked therein by similar bayonet joint connections, so that in the formation of the socket, several distinct punching operations are required to form all of the slots. In addition to the bayonet slots the sockets are frequently provided with spring tongues and guide slots, which are formed by further punching operations.

The primary object of the present invention is to simplify and cheapen the cost of manufacture, by forming all of the various slots and apertures in a flat blank which is subsequently bent to form the cylindrical socket.

It is a further object to obtain an improved construction, as hereinafter set forth.

In the drawings,—Figure 1 is a plan view of the flat blank having the slots and apertures formed therein; Fig. 2 is a perspective view of the completed socket, showing the lamp and the connector plug in locking engagement therewith; Fig. 3 is a longitudinal section showing the socket and locking spring, together with the movable abutments for the latter; Fig. 4 is a cross-section on the line 4—4 of Fig. 3; Fig. 5 is a plan view of the modified construction of blank; Fig. 6 is a perspective view of the socket formed thereof; and Fig. 7 is a perspective view showing the socket slidably engaged with its holding socket.

A is a flat blank of sheet metal, of suitable dimensions to form a cylinder of the required length and diameter for the lamp socket. This blank has punched therein a series of slots and apertures for forming a locking and clamping means.

As specifically shown, B and B′ are bayonet slots formed at one end of the blank and C C′ are also bayonet slots formed at the opposite end of the blank, and the latter are provided with two locking shoulders D D′ and are designed for locking the connector plug in positions respectively opening and closing the electric circuit.

E is a longitudinal slot in the central portion of the blank and F are recesses at one edge of the blank for forming a slot diametrically opposite the slot E when the blank is bent into cylindrical form.

G are spring tongues formed by U-shaped slots H punched in the blank and arranged intermediate the bayonet slots B B′.

With the construction as thus far described, the flat blank when bent into cylindrical form will be provided with bayonet slots at opposite ends of the socket and diametrically opposed to each other, also the diametrically opposed longitudinal slots E and F and the spring tongues G. Thus when the lamp such as I, is engaged with one end of the socket, it may be locked in the slots B B′, while the spring tongues G pressing inward will prevent any rattling. In the same manner the connector plug H may be inserted in the opposite end of the socket and may be engaged with either of the locking shoulders D D′, the latter holding the plug in position to close the electric circuit.

For holding both the lamp and the plug from accidental disengagement a spring J is arranged in the central portion of the socket. This spring abuts against plates K K′ at opposite ends thereof, which plates are provided with lugs L slidably engaging the slots E and F, the ends of said slots forming limiting stops.

To properly focus the lamp it is usual to provide means for longitudinally adjusting the same in relation to the reflector in the lamp body. Such a construction is shown in Figs. 6 and 7 and comprises an outer cylindrical socket M and an inner cylindrical socket N longitudinally adjustable therein and designed to hold the lamp and the plug. To secure these parts in different positions

of relative adjustment the inner socket N—which is formed from a blank A′ similar to the blank A—is provided with projecting portions O and O′ at its opposite edges, bent to form outwardly-extending flanges. The flange O′ is notched or serrated on its edge and is adapted to engage a flange P on the outer socket member M, as shown in Fig. 7. The notched flange O′ may be disengaged from the flange P by a slight rotation of the inner socket, but a spring Q normally holds these parts in engagement to prevent accidental displacement.

A socket of the construction above described may be manufactured for a small fraction of the cost of one formed from tubing, and as all of the slots are formed in a single operation they are relatively positioned with absolute accuracy. Thus in addition to the reduced cost of manufacture my improved socket is more exact in construction than those formed by the old method.

What I claim as my invention is:—

1. A lamp socket, comprising a sheet metal blank struck out to form a plurality of slots therein and bent into cylindrical form, the abutting edge of said blank being bent outward to form a locking flange.

2. A lamp socket, comprising a sheet metal blank struck out to form a plurality of slots at one end, and a notched projection at one side, said blank being bent into cylindrical form, and said projection being bent to form an outwardly-extending locking flange.

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

WILLIAM F. ANKLAM.

Witnesses:
HERBERT APFELBAUM,
C. E. ALLEN.