Jan. 17, 1928. 1,656,729

C. E. GODLEY

LAMP BULB HOLDER

Filed Jan. 25, 1926

Fig. 1

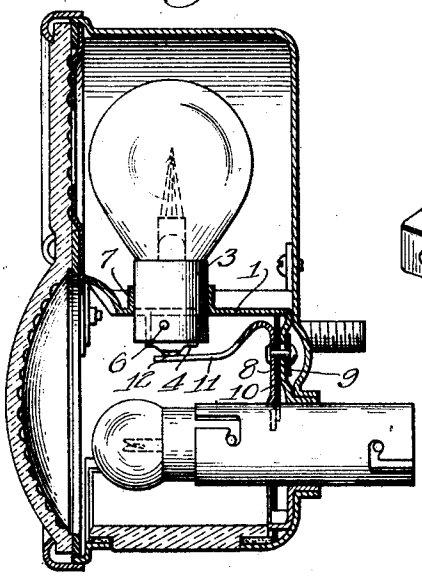


Fig. 2

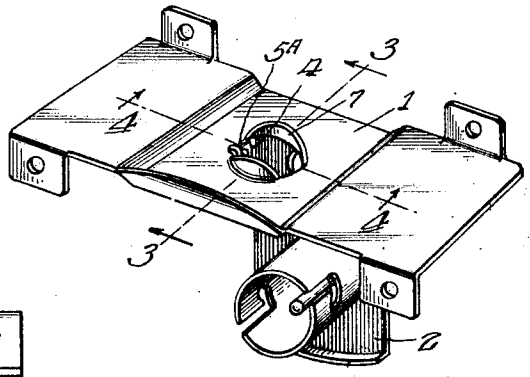


Fig. 3

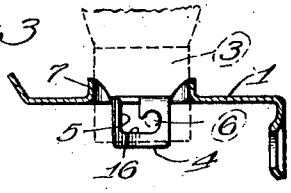


Fig. 5

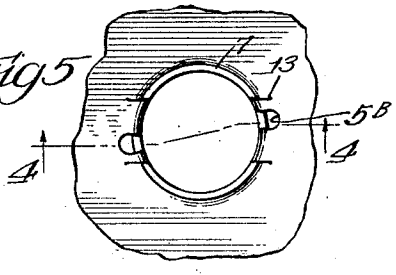


Fig. 4

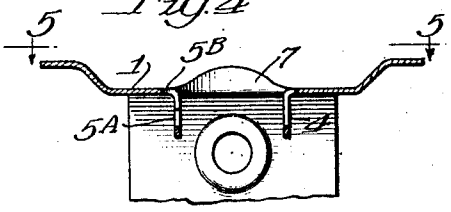


Fig. 6

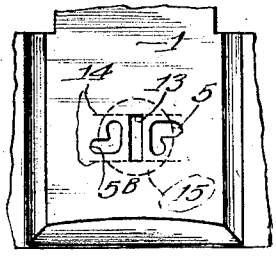
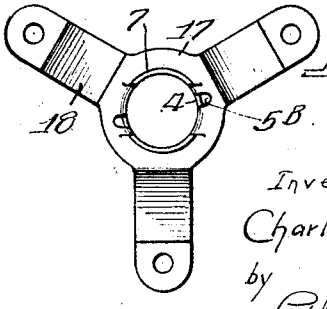


Fig. 7



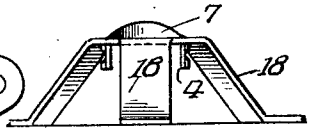


Fig. 8

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UNITED STATES PATENT OFFICE.

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LAMP-BULB HOLDER.

Application filed January 25, 1926. Serial No. 83,749.

My invention relates to a support for holding an incandescent lamp of the type having anchoring pins projecting laterally from opposite sides of its base, so as to support such a lamp bulb in operative relation to a separately mounted resilient base contact.

Generally speaking, my invention aims to provide an exceedingly simple and inexpensive bulb support which can readily be manufactured of sheet metal, which will effectively prevent the lamp bulb from rocking about its anchoring pins, and which will prevent the base of the lamp bulb from being unduly pressed toward the associated resilient base contact during the attaching of the bulb to the holder. Furthermore, my invention aims to provide a bulb support of this class which can readily be constructed as an integral part of a partition in a compartmental lamp and aims to provide blanks and methods for readily manufacturing such bulb supports out of ordinary grades of metal.

In United States Patent No. 1,602,220, issued October 5, 1926, on a combination tail lamp, I have shown a lamp casing divided into two compartments by a partition having a perforation through which the base of one lamp bulb extends so as to dispose the filament of the lamp bulb in one compartment while holding the base terminal of the lamp bulb in engagement with a resilient contact mounted in the other compartment. In lamp constructions of this general type, it has heretofore been customary to provide the partition with downwardly open forks for receiving the anchoring pins on the base of the lamp bulb. While such an arrangement enables the corresponding resilient contact to hold the bulb in operative position, the downward opening of the pin-receiving forks permits a careless user to press the bulb too far when inserting its base through the opening in the partition, thereby overstraining the resilient contact so that this will no longer hold the bulb firmly in its operative position.

In one of its important aspects, my invention provides a bulb holder arranged to obviate this difficulty by positively limiting the inserting movement of the base of the lamp bulb, while still permitting the holder to be constructed integral with the partition. My invention also provides a construction for this purpose which will also afford integral wings on the partition for preventing a rocking of the lamp bulb about the axis of its anchoring pins, and one which can be employed with equal facility as a portion of bulb-supporting members other than partitions. Furthermore, my invention aims to provide blanks from which such bulb holders can be formed without rupturing the metal, and aims to provide a novel method of manufacturing such holders.

Further and also more detailed objects will appear from the following specification and from the accompanying drawings, in which

Fig. 1 is a central, vertical and longitudinal section through a compartmental lamp of the type disclosed in my said Patent No. 1,602,220, showing my bulb holder as formed integral with a single partition which also has at its rear end a downward extension supporting the corresponding resilient contact.

Fig. 2 is a perspective view of the partition member of the same lamp and of the companion lamp socket carried by it.

Fig. 3 is an enlarged and fragmentary vertical section taken through the partition member of Fig. 2 along the line 3—3.

Fig. 4 is a similarly enlarged fragmentary vertical section taken at right angles to that of Fig. 3.

Fig. 5 is an enlarged plan view of the central portion of the partition.

Fig. 6 is a plan view of the central portion of the partition, showing the initially blanked perforations in the same, with parallel dotted lines showing the shearing cuts made by the dies during the subsequent forming of the upwardly directed wings and of the downwardly directed pin-anchoring ears, and with a dotted circle indicating the contour of the bulb-base receiving perforation in the finished holder.

Fig. 7 is a plan view of a tripod type of support embodying my invention, and Fig. 8 is a front elevation of the same.

In the drawings, Fig. 1 shows an automobile lamp in which the casing is divided into upper and lower compartments by a partitioning member which includes a generally horizontal partition 1 and a depending web 2. The partition 1 has a perforation through which the base 3 of an incandescent lamp bulb is partly inserted from the upper compartment, and has downwardly

directed wings 4 adjacent to diametrically opposite sides of the said perforation and each provided with a bayonet slot 5 for interlocking with one of the usual two laterally projecting pins 6 on the base of the lamp bulb. The partition also has a pair of integral and upwardly projecting webs 7 diametrically opposite each other and disposed with their vertical center lines spaced approximately 90 degrees about the axis of the perforation from the slot notches 5^A with which the pins 6 interlock when the lamp bulb is socketed in the thus arranged holder formation of the partition.

Secured to the depending web 2 of the partitioning member, but insulated from it by insulating members 8 and 9, is one arm 10 of a resilient contact member which has its other arm 11 extending across the axis of the said perforation below the partition so as to contact with the usual axial terminal 12 of the lamp bulb, the contact member being formed so that this contact arm 11 is continuously flexed upward by the resiliency of the contact member.

To provide such bulb-holding portions integral with a sheet metal partition, I first punch the partition to provide two substantially L-shaped apertures as shown in Fig. 6 and also to provide a spacer aperture 13 between the said L-shaped apertures. Then I simultaneously form the downwardly directed webs 4 from the metal parts at opposite sides of the spacer aperture, and form the upward wings 7 from metal portions respectively above and below the said spacer aperture. To accomplish this without tearing the metal, I provide dies which slit the metal along two dotted lines 14 flush with the upper and lower ends of the spacer aperture.

I also dispose the said L-shaped perforations in the original blanking so that the free ends of the shanks 5^B of these perforations extend beyond the periphery of the proposed base-receiving perforation 15.

By operating in this manner, I cause the formed holder portion of the partition to present two diametrically opposite and vertical slot portions, as shown in Fig. 5, each of which has its upper or entrance end extending into the adjacent horizontal partition part beyond the outside diameter of the lower web-forming holder portions, thereby permitting the ready insertion of a lamp bulb base carrying pins 6 which project from the base for a distance greater than the thickness of the metal from which my holder-carrying partition is formed. By extending the slits 13 beyond the resulting perforation 15, I permit the downwardly directed webs 4 to be connected to the horizontal partition portion 1 by junctures which are curved as shown in Fig. 4, thereby avoiding a rupturing of the metal and also facilitating the insertion of the lamp bulb base. I likewise permit the upwardly directed wings 7 to have curving junctures with the horizontal partition portions, and permit both the said webs and the said wings to be concaved toward each other in close approach to the diameter of a standard lamp bulb base, thereby enabling the upward wings 7 to be highly effective for preventing the lamp bulb from rocking about its locking pins.

When the base end of the lamp bulb is inserted through the partition from above, the bottoms 16 of the bayonet slots engage the lamp base pins 6 so as to limit the inserting movement. Hence the resilient contact member cannot be overstrained and bent out of proper operative shape by an undue downward pressure on the lamp bulb.

However, while I have heretofore described my invention as employed in connection with a partition member of a compartmental lamp, I do not wish to be limited to such an embodiment, as the same bulb holder arrangement might be employed in other connections and with other provisions than a depending web for supporting the same. For example, Figs. 7 and 8 show a bulb holder employing the same features, in which the metal portion 17 adjacent to the holder formations is supported by three legs 18 so as to constitute a tripod type of bulb support.

I claim as my invention:

1. For use with a lamp bulb having laterally projecting pins on its base, a holder formed of sheet material and having a perforation therein; the holder having two pairs of wings adjacent to the perforation, with the wings of each pair at diametrically opposite sides of the perforation and with the two pairs displaced about ninety degrees circumferentially of the perforation from each other; each wing of one pair having a bayonet slot including an entrance slot portion extending parallel to the axis of the perforation and terminating at a distance from the free end of that wing, and also including a transverse portion extending circumferentially of the said axis from the said terminating end of the entrance slot portion.

2. A lamp bulb holder as per claim 1, in which the perforation in the holder has a pair of radial extensions respectively alining with the entrance slot portions of the two bayonet slots for admitting the lamp bulb pins to the said entrance slot portions, the said perforation extensions extending radially of the said wings respectively beyond the outer faces of the wings.

3. A blank for making a lamp-bulb holder so as to provide two pairs of diametrically opposite wings extending respectively in opposite directions transverse of a portion of the holder and adjacent a perforation in the same; comprising a sheet metal blank

provided with two relatively reversed L-shaped perforations having parallel shanks disposed entirely within the contour of the proposed perforation and having their other shanks laterally offset from each other and extending in opposite directions parallel to each other beyond the said contour, the blank also having an elongated perforation disposed between the first named perforation shanks and extending substantially parallel to the latter and terminating within the said contour.

Signed at Detroit, Michigan, January 21, 1926.

CHARLES E. GODLEY.