June 11, 1940. C. M. BOLSER 2,204,525

SIGNAL LIGHT

Filed May 12, 1939

Fig. 1.

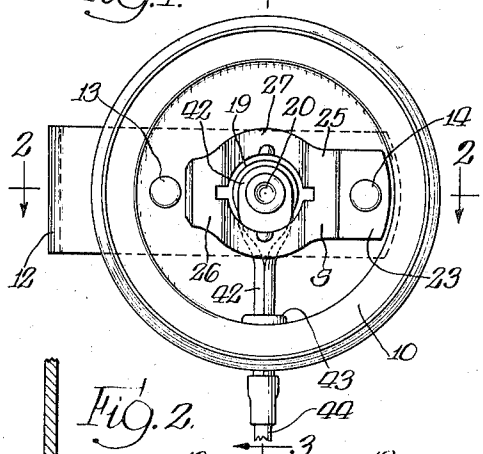


Fig. 3.

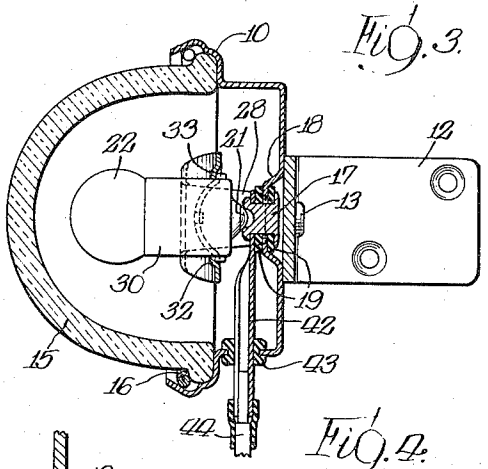


Fig. 2.

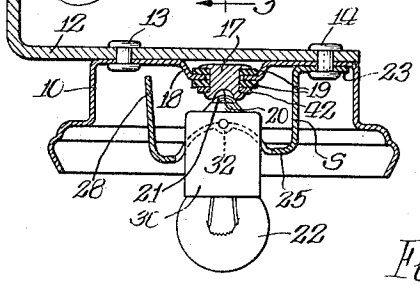


Fig. 4.

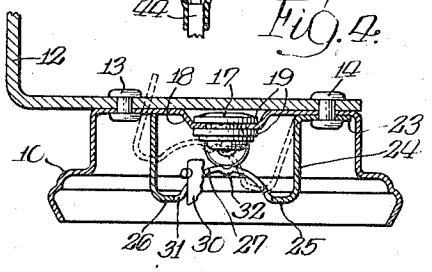


Fig. 6.

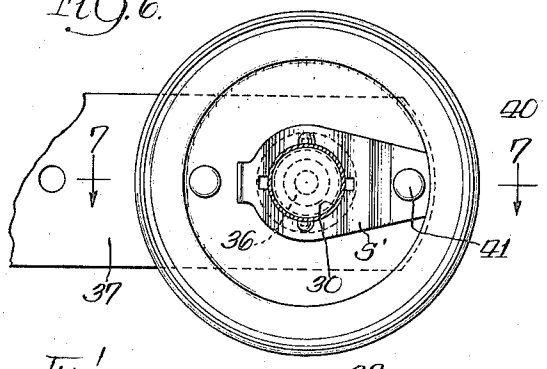


Fig. 5.

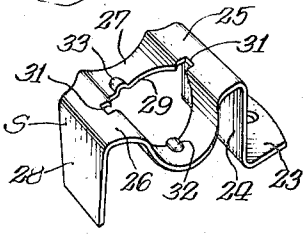
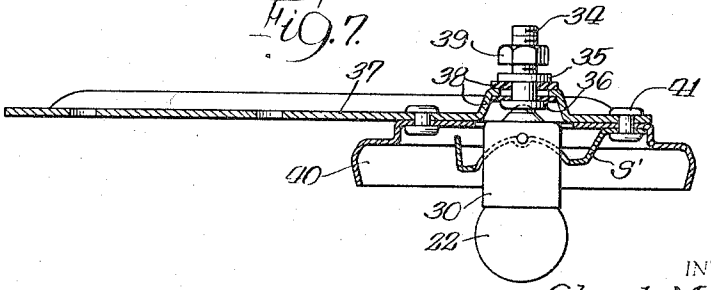


Fig. 7.



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Patented June 11, 1940

2,204,525

UNITED STATES PATENT OFFICE

2,204,525

SIGNAL LIGHT

Clark M. Bolser, Cedar Falls, Iowa

Application May 12, 1939, Serial No. 273,271

2 Claims. (Cl. 173—328)

An object of my present invention is to provide a signal light of simple, durable and inexpensive construction wherein such construction is adapted in general for vehicle or other lights using a bayonet type of light bulb therein.

Another object is to provide a socket structure for a light bulb which eliminates the usual sleeve necessary to receive the bulb base and substitutes therefor a relatively inexpensive stamping that serves both as a socket member to support the bulb and a means to tension the bulb so that its base contact remains in contact with a base contact of the housing or other support for the structure.

Another object is to provide a stamping which has an opening therethrough to receive the bulb base, the stamping adjacent the opening being so shaped as to provide a relatively elongated bore effect for the bulb base to minimize wobbling of the bulb base in the opening of the stamping, the shape of the stamping also serving to spring the stamping to a position where its tension will keep the bulb in proper contact at the base contacts of the bulb and support.

Still another object is to provide a structure in which the base contact of the support may be a stationary rivet or bolt, thus eliminating the usual spring-urged contact at this point and the stamping then serves both as a tensioning means and a support for the bulb.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawing, in which:

Figure 1 is a front elevation of a signal light embodying my invention, with the bulb and lens thereof omitted;

Figure 2 is a sectional view on the line 2—2 of Figure 1 showing the bulb in position;

Figure 3 is a sectional view on the line 3—3 of Figure 1 showing both the bulb and the lens in position;

Figure 4 is a sectional view similar to Figure 2, showing only a fragment of the bulb base to illustrate the operation as well as the normal position of a socket member of my structure;

Figure 5 is a perspective view of the socket member;

Figure 6 is a view similar to Figure 1 showing a modified structure, and

Figure 7 is a sectional view on the line 7—7 of Figure 6.

On the accompanying drawing, I have used the reference numeral 10 to indicate generally a housing and 12 a supporting bracket therefor. The housing and bracket may be secured together as by rivets 13 and 14.

A lens 15 is retained in the housing 10 so as to close the open side thereof. The usual split wire ring 16 may be provided for this purpose.

A base contact 17 is mounted in a recessed portion 18 of the housing 10. Suitable insulating washers 19 are provided to insulate the rivet 17 from the housing 18. The inner end of the rivet 17 is hollowed out or countersunk as at 20 to receive the base contact 21 of a bulb 22.

I provide a socket member S in the form of a sheet metal stamping having a foot portion 23, an upstanding flange 24, a pair of top flanges 25 and 26, having a curved part 27 between them, and a stop flange 28. The curved portion 27 is provided with an opening 29 adapted to receive the base 30 of the bulb 22. This opening has a pair of notches at 31 to receive the bayonet pins 32 of the bulb base 30. It is also provided with a pair of depressions 33 to finally receive the pins 32 when the parts are in the position shown in Figure 2.

The stamping S is anchored in the housing 10 as, for instance, by the rivet 14 passing through the anchorage foot 23. The stamping S, when in the position shown in Figure 4, is under tension when the stop flange 28 engages the housing 10. For instance, the original shape of the stamping may be as shown in dotted lines, so that when the foot 23 is riveted down the parts beyond the bend between the flanges 23 and 24 are under a desired predetermined tension.

Referring to Figure 4, it will be noted that the bulb base 30 has been inserted in the opening 29 and the bayonet pin 32 rotated until it strikes the curved part 27 of the stamping S. Further rotation will spring the stamping toward the position of Figure 2 and the position illustrated will be assumed when the bayonet pins 32 register with the depressions 33. The stamping S is now under the desired tension for keeping the bulb tightly against the base contact 17 and the centering and upright holding of the bulb 22 is aided by engagement of the base contact 21 in the depression 20 of the rivet 17.

Obviously, my structure eliminates all necessity for a spring at the contact 17 and the socket member S serves the double purpose of holding the bulb base and urging the bulb to engage the base contacts 17 and 21 together under spring tension.

In Figures 6 and 7, I show a modification in which, instead of a rivet 17, I provide a special bolt 34 having a flange 35 and a riveted head 36. The flange and head are insulated from a bracket 37 by washers 38 and a nut 39 serves as a means to connect an electric wire with the bolt 34. A casing 40 is secured to the bracket 37, and within this casing a stamping S' having substantially the same characteristics as the stamping S is secured as by a rivet 41. The only difference is that the stamping S' is of somewhat different proportions, so as to fit a casing 40 of less thickness than the casing 10.

For connecting an electric wire with the type of structure shown in Figures 1 to 4, I show a tubular terminal 42 having one end under the inner head of the rivet 17 and its other end passing through an insulation bushing 43 in the casing 10. A wire 44 is then soldered into the outer end of the terminal tube.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

1. Means for supporting a bulb and making electrical contact therewith comprising a support, a base contact rigidly mounted thereon and insulated therefrom and a stamping of resilient sheet metal, said stamping having an opening to receive the bulb base, said opening having opposite notches to receive bayonet pins of the bulb base and depressions adjacent the opening and circumferentially spaced from said notches to receive the bayonet pins upon rotation of the bulb base to move the bayonet pins from registry with the notches to registry with the depressions, said stamping having one side thereof secured to said support and being formed between said notches and across said opening with a semi-cylindrical curvature presenting its convex side toward said base contact and said depressions being positioned at the point on said convex side substantially nearest said support.

2. In a light bulb mount, a support, a base contact carried thereby and means for mounting a light bulb in position contacting with said base contact, said means comprising a sheet metal member, means for anchoring said member to said support, said member having an initially elliptical opening to receive a bulb base and its bayonet pins, said member being formed, between the portions of said opening to receive said bayonet pins, to a troughlike curvature to provide support for said bulb base throughout a substantial longitudinal extent thereof, the troughlike portion of said member, upon said bulb base being rotated after its bayonet pins have been inserted through said opening, effecting movement of said member away from said support and movement of the opening of said member axially of said bulb base, said stamping having means to receive said bayonet pins after said bulb base has been so rotated.

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