Jan. 29, 1929. 1,700,369

S. W. HYATT

STOP AND TAIL LIGHT

Filed Feb. 21, 1927

FIG. 1

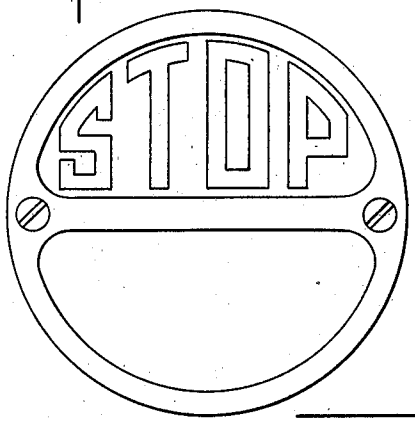


FIG. 2

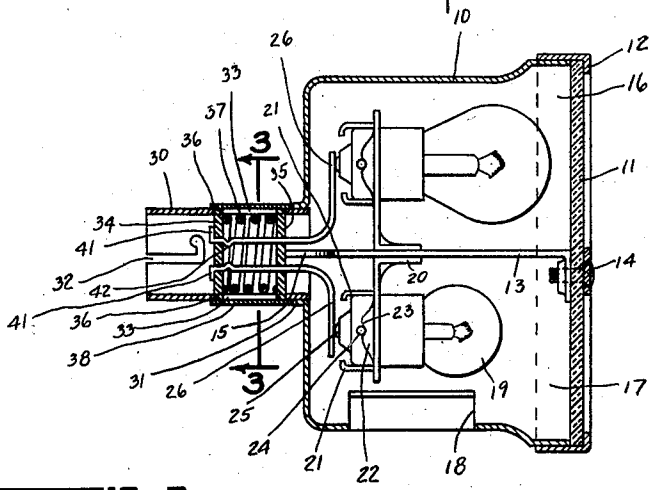
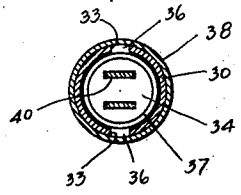


FIG. 3



INVENTOR.
SAMUEL W. HYATT.

BY Fackenthal & Fackenthal
Goldsmith & Galt
ATTORNEYS.

Patented Jan. 29, 1929. 1,700,369

UNITED STATES PATENT OFFICE.

SAMUEL W. HYATT, OF CONNERSVILLE, INDIANA, ASSIGNOR TO INDIANA LAMP CORPORATION, OF CONNERSVILLE, INDIANA, A CORPORATION.

STOP AND TAIL LIGHT.

Application filed February 21, 1927. Serial No. 169,992.

This invention relates to a combination tail and stop light construction, although certain features may be employed in an ordinary light construction.

The chief object of the invention is to provide a light construction which is simple in construction and serviceable in operation and yet be of but a relatively few parts.

The chief feature of the invention consists in the arrangement of the contacts, their mountings and the cooperation between the parts comprising the contact mounting.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

In the drawings Fig. 1 is an elevational view of a combination stop and tail light. Fig. 2 is a central longitudinal sectional view thereof. Fig. 3 is a transverse sectional view, taken on line 3—3 of Fig 2, and in the direction of the arrows.

In the drawings there is illustrated a combination stop and tail light, which embodies the invention. Herein same is shown including a casing or housing 10, closed by a single closure 11, retained thereon by a ring 12, said ring being suitably secured to or supported by said housing either directly or indirectly as herein illustrated. A partition 13 through the screw bolts 14 supports said ring in closed position. Partition 13 is suitably supported by the casing and at its rear end said partition is cut away as at 15. The partition forms two compartments in the casing 10, the upper compartment 16 and the lower compartment 17. The lower compartment comprises the usual tail light compartment and the housing is apertured as at 18 to direct the light rays from the bulb 19 therein downwardly on to the license plate. Partition 13 supports a pair of brackets 20 in said housing and each of said brackets is apertured and positioned adjacent to said aperture and formed from material removed to form the same is a pair of diametrically positioned stops 21 and a similar positioned pair of but alternately arranged retainers 22, having the recesses 23 therein to receive the pins 24 carried by the bulb 19. Thus undesired movement of the bulb is prevented by seating of the pin 24 in the recess 23, and inward movement of the bulb is prevented by engagement thereof with the angular ends of the stops 21.

The upper compartment 16 supports a similar light construction and each of the light bulbs has its central terminal 25 engage a contact 26, extending into the compartment containing the abovementioned. It will be understood that current is introduced through contact 26 to the central terminal 25 and after passing through the lamp is conducted by pin 24 to the ground return through supporting partition 13.

A sleeve 30 is suitably secured to and supported by the housing 10 coaxial with the circular flange 31 formed thereon and herein said sleeve is positioned within said flange and suitably secured thereto, as by sweating, spinning or the like. The sleeve 30 is provided with one or more bayonet slots 32 to receive the pins of a connecting plug of standard construction, said plug having two terminals therein, which herein, by reason of the stop and tail light construction employed, constitute separate circuits. The sleeve 30 includes oppositely and longitudinally positioned slots 33 and slidingly supported by said sleeve is a fibre or insulating washer 34 and a similar washer 35, each including a tongue 36, projecting radially therefrom for seating in the elongated slot or slots 33. Interposed between the pair of washers thus seated is a coil spring 37, which normally maintains said washers in spaced relation such that each is limited by engagement of the tongue or tongues 36 with the end or ends of the slots. A sleeve 38 is concentrically mounted upon sleeve 30 and is adapted to close elongated slots 33 and thus form a completely closed construction.

Each of the washers 34 and 35 are provided with a pair of slots 40, which are properly arranged in spaced relation, that is are so arranged that when both washers are positioned such that the projections 36 are seated in the slots 33, the openings or slots 40 will be in alignment in said washers. Other tongue and groove connections other than the projection and slot arrangement hereinbefore mentioned may be substituted. Each pair of registering openings 40 supports a contact 26. The outermost washer 34 has a relatively rigid connection with said contact 26 by the angular end 41 and the embossment 42 thereon being provided upon opposite sides of said washer. The other washer 35 slidably supports the contact 26 and, as shown, in Fig. 2, contact 26 beyond said washer 35 is turned angularly so that it has some inherent resiliency by reason of the aforesaid angularity.

Thus terminal contact connection between contact 26 and terminal 25 is assured.

One of the preferred methods of assembly is to mount in rigid relation both contacts 26 upon washer 34, then slide the washer in sleeve 30 angularly so that the tongues or projections 36 will pass into said sleeve until the foremost tongue or projection is seated in the recess 33, whereupon continued forward movement of the washer with a reverse tilting of the same will cause the seating of the opposite tongue in the adjacent recess. Spring 30 may then be positioned against washer 34 and then washer 35 may be similarly positioned as washer 36. If it is desirable, the contacts 26 may be supported by the second washer and then secured to the first washer by having the ends 41 turned angularly thereon. Following the mounting of the two washers in the separated or yielding relation the sleeve 38 is positioned to cover the slots 33 and projections 36. When the terminal plug or connecting plug is applied to the sleeve 30 and secured therein by pins locking in the bayonet slots or slot 32, the washer 34 will be projected towards the bulbs until the plug is seated, whereupon the washer will be returned into plug terminal engagement for completing the circuit from the plug to and through the contacts.

The resultant construction is a simple but rigid mounting for the contacts in the sense that sufficient resiliency is provided therein where resiliency is required for maintaining contact by reason of the detachable connections between the plug and the contacts and between the contacts and the bulbs.

While the invention has been illustrated as applied to a combination multiple bulb construction light same may be applied to a single bulb light, having multiple filaments or may be applied to a single filament multiple contact bulb light, without departing from the broader features of the invention.

The invention claimed is:

1. A terminal support comprising a sleeve, a pair of insulating members positioned therein, said sleeve and each insulating member having a complementary connection preventing rotative movement therebetween, the two sleeve connecting portions being identical and continuations of each other, yielding means interposed between said insulating members and normally maintaining the same in spaced relation, and an angular contact rigidly secured to one of said insulating members by having an angular exposed portion upon one face thereof for terminal contact and extending oppositely from the opposite face and by having an offset portion immediately adjacent thereto for clamping association with the supporting insulating member and extending through the other insulating member and projecting angularly beyond the same.

2. A device as defined by claim 1, characterized by said sleeve and insulating member having complementary connections preventing longitudinal movement of the insulating members beyond predetermined limits, and a projecting portion upon said sleeve extending beyond the insulating members and suitably fashioned for plug reception and anchorage, the angular exposed portion of the angular contact and the supporting insulating member being positionable adjacent said projecting sleeve portion for association with the plug.

3. A terminal support comprising a sleeve, a pair of insulating members positioned therein, said sleeve and each insulating member having a complementary connection preventing rotative movement therebetween and comprising a tongue on each insulating member and an elongated groove in the sleeve receiving said tongues, yielding means interposed between said insulating members and normally maintaining the same in spaced relation, an angular contact rigidly secured to one of said insulating members by having an angular exposed portion upon one face thereof for terminal contact and extending oppositely from the opposite face and by having an offset portion immediately adjacent thereto for clamping association with the supporting insulating member and extending through the other insulating member and projecting angularly beyond the same, and a concentric sleeve covering said tongue and groove connections.

4. A device as defined by claim 3 characterized by said elongated slot preventing longitudinal movement of the insulating members beyond predetermined limits and a projecting portion upon said first mentioned sleeve extending beyond the insulating members and suitably fashioned for plug reception and anchorage, the angular exposed portion of the angular contact and the supporting insulating member therefor being positionable adjacent said projecting sleeve portion for association with the plug.

In witness whereof, I have hereunto affixed my signature.

SAMUEL W. HYATT.