

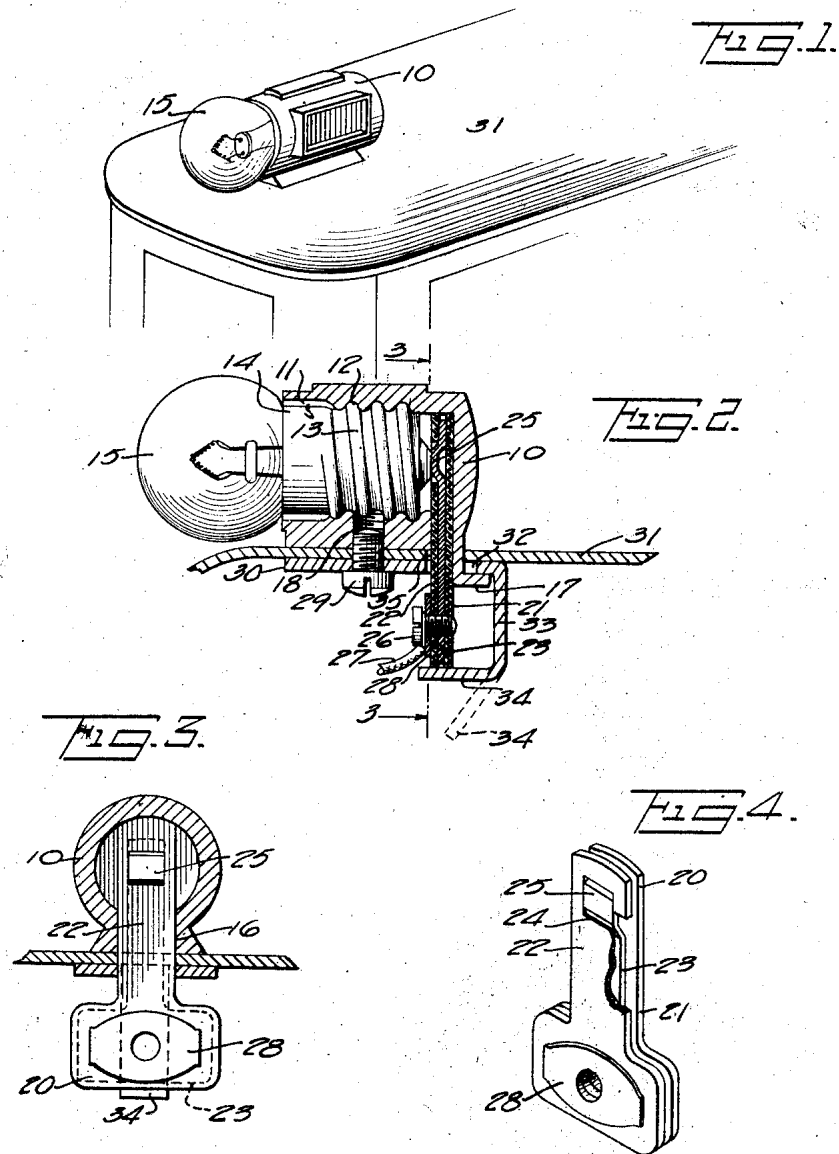
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HEADLIGHT FOR TOY LOCOMOTIVES

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# UNITED STATES PATENT OFFICE.

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## HEADLIGHT FOR TOY LOCOMOTIVES.

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The present invention relates to headlights for toy locomotives and is more particularly directed toward the provision of an improved device for carrying screw base miniature lamps such as are commonly employed in low voltage circuits having grounded returns.

The present invention contemplates the provision of an improved lamp support for electrical toys such as toy locomotives, although it is suitable for use in other than the toy art. Where the invention is made up in the form of a locomotive headlight, it employs a simple die casting having the threaded lamp socket formed in it, and having a passage-way for a removable insulated contact carrying member so that current may be conducted to the base of the lamp. The invention also contemplates the provision of a simple and expedient means of fastening this member in place after the body casting is fastened to the locomotive cover.

An object of the present invention is to provide an improved toy headlight body made out of a die casting having such a configuration as to provide a lamp socket, and fastening devices, and to associate with this die casting an easily constructed contact or terminal in such a manner that one may readily assemble the complete device in place and connect the wiring without exposing the same.

Other and further objects of the invention will appear as the description proceeds.

The accompanying drawings show, for purposes of illustrating the invention, one of the many possible embodiments in which it may take form, it being understood that the drawings are illustrative of the invention rather than limiting the same.

In these drawings:

Figure 1 is a perspective view of the toy locomotive showing the headlight mounted thereon;

Figure 2 is an enlarged longitudinal sectional view through the upper part of the locomotive showing the headlight mounted thereon;

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 2 looking in the direction of the arrow; and

Figure 4 is a perspective view of the contact carrying member.

Where the invention is to be embodied in

a toy locomotive headlight, the die casting 10 is made up to have an exterior surface simulating the locomotive headlight. As here shown, this die casting has a socket 11 threaded at 12 to cooperate with the threads 13 on a miniature lamp base 14. This socket is carried in a normally horizontal axis so that the light from the bulb 15 is directed in the desired direction. The casting 10 is also provided with a vertical passageway 16 which extends up from the bottom of the casting past the rear or base of the lamp socket. The casting is also provided with a rearwardly extending lug 17 and with a threaded hole 18 for the reception of a fastening screw.

A contact carrying member 20, shown more in detail in Figure 4, is made up from two pieces of sheet insulating material 21 and 22 of general T-shaped configuration. A conducting strip 23 is placed between the two insulating strips. This conducting strip is of substantially the same shape as the insulating strips but is preferably narrower so that the insulating strips extend beyond it along all edges. The upper end of one of the insulating strips is provided with a hole as indicated at 24 so that the upper end of the conducting strip is accessible as a contact as indicated at 25. This upper end may be bent outwardly as indicated in the drawings if desired. The lower end of the T-shaped contact carrying member is provided with a binding post in the form of a screw 26 which is threaded into the conducting strip 23 and which is attached to a wire 27 against a conducting plate 28 carried on the contact strip.

This contact carrying strip can be slid into position in the passage-way 16 from underneath as indicated in the drawings and it affords a convenient method of conducting the current to the base of the lamp socket and providing an insulating terminal for the lamp socket.

The headlight may be conveniently mounted in place in various manners, and, as here shown, a screw 29 passes through a thin metal plate 30 through the cover or roof of the toy car or other support and into the tapped hole 18 in the die casting. The plate 30 has an aperture 32 through which the rearwardly extending lug on the casting 10 may pass, as well as accommodate the contact carrying member. The aperture 32

is preferably so located so that the portion of the sheet metal member 30 is caught between the lug and the car roof 31. The sheet metal member 30 has a downwardly bent projection 33, the lower extremity of which may be bent inwardly as indicated at 34 so as to engage with the lower end of the T-shaped contact carrying strip to hold it into position.

Where these devices are used on toy locomotives, they may be readily assembled and fastened in place. The casting and sheet metal strip 30 are held in place by the screw 29. The wire 27 for the headlight may be fastened to the contact carrying strip which may be inserted into position by passing it through the hole 32 and a hole 35 in the car roof, and held in place by bending the bendable member 34 against its lower end. This securely fastens the parts in place, makes it unnecessary to carry any wires outside the locomotive body, and insures a good electrical contact for all parts.

It is obvious that the invention may be embodied in many forms and constructions within the scope of the claims, and I wish it to be understood that the particular form shown is but one of the many forms. Various modifications and changes being possible, I do not otherwise limit myself in any way with respect thereto.

I claim:

1. In combination, a toy locomotive cover, a headlight in the form of a casting having a normally horizontal socket for a lamp, a lug on the casting passing through an aperture in the locomotive cover, a screw for fastening the casting in place, a removable contact passing from the interior of the cover into the base of the socket to provide a central contact for the lamp, and means for holding the removable contact in place.

2. The combination with the sheet metal cover of a toy locomotive, of a headlight consisting of a unitary casting having provisions for mounting it on the cover, a socket, a lamp base, and a passage for the insertion of an insulated contact from the inside of the cover to the base of the socket, and an insulated contact carried in said passage.

3. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting fastened on the top of the cover, said casting having a socket for a miniature lamp base and having a rearwardly extending lug passing through an aperture in the cover and engaging underneath the cover, and a screw for fastening the casting on the cover.

4. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting carried on the top of the cover, said casting having a socket for a miniature lamp base, a vertical passage-way extending from the lower side of the casting to the

base of the socket, the cover having an aperture in line with the passage-way, and an insulated contact carrying member extending through the passage-way and aperture and having an exposed terminal for contacting with the lamp base.

5. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting carried on the top of the cover, said casting having a socket for a miniature lamp base, a vertical passage-way extending from the lower side of the casting to the base of the socket, the cover having an aperture in line with the passage-way, and an insulated contact carrying member extending through the passage-way and aperture and having an exposed terminal for contacting with the lamp base, the casting having a lug extending rearwardly from the passage-way and passing through the aperture in the cover and disposed underneath the cover.

6. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting carried on the top of the cover, said casting having a socket for a miniature lamp base, a vertical passage-way extending from the lower side of the casting to the base of the socket, the cover having an aperture in line with the passage-way, an insulated contact carrying member extending through the passage-way and aperture and having an exposed terminal for contacting with the lamp base, and a sheet metal member having a bendable portion engageable with the contact carrying member for keeping it in place.

7. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting carried on the top of the cover, said casting having a socket for a miniature lamp base, a vertical passage-way extending from the lower side of the casting to the base of the socket, the cover having an aperture in line with the passage-way, an insulated contact carrying member extending through the passage-way and aperture and having an exposed terminal for contacting with the lamp base, the casting having a lug extending rearwardly from the passage-way and passing through the aperture in the cover and disposed underneath the cover, and a sheet metal member supported between the lug and cover and having a bendable portion engageable with the contact carrying member for keeping it in place.

8. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting carried on the top of the cover, said casting having a socket for a miniature lamp base, a vertical passage-way extending from the lower side of the casting to the base of the socket, the cover having an aperture in line with the passage-way, a contact carrying member in the form of two inverted T-shaped pieces of sheet insulating material and an

interposed metal strip of smaller dimensions than the insulating pieces, said contact carrying member extending through the passage-way and aperture and having an exposed terminal for contacting with the lamp base, a binding post on the contact carrying member, and means for holding the contact carrying member in place.

9. In combination, a sheet metal cover for toy locomotives, a locomotive headlight casting carried on the top of the cover, said casting having a socket for a miniature lamp base, a vertical passage-way extending from the lower side of the casting to the base of the socket, the cover having an aperture in line with the passage-way, a contact carrying member in the form of two inverted T-shaped pieces of sheet insulating material

and an interposed metal strip of smaller dimensions than the insulating pieces, said contact carrying member extending through the passage-way and aperture and having an exposed terminal for contacting with the lamp base, a binding post on the contact carrying member, the casting having a lug extending rearwardly from the passage-way and passing through the aperture in the cover and disposed underneath the cover, and a sheet metal member supported between the lug and cover and having a bendable portion engageable with the contact carrying member for keeping it in place.

Signed at Irvington, in the county of Essex, and State of New Jersey, this 7th day of June, 1926.

LOUIS CARUSO.