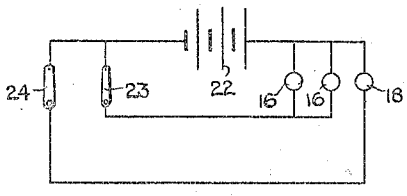
L. SCHEPMOES.

LIGHTING APPARATUS FOR RAILWAY CARS AND THE LIKE.

APPLICATION FILED NOV. 24, 1915.

1,198,065. Patented Sept. 12, 1916.

FIG. 2.



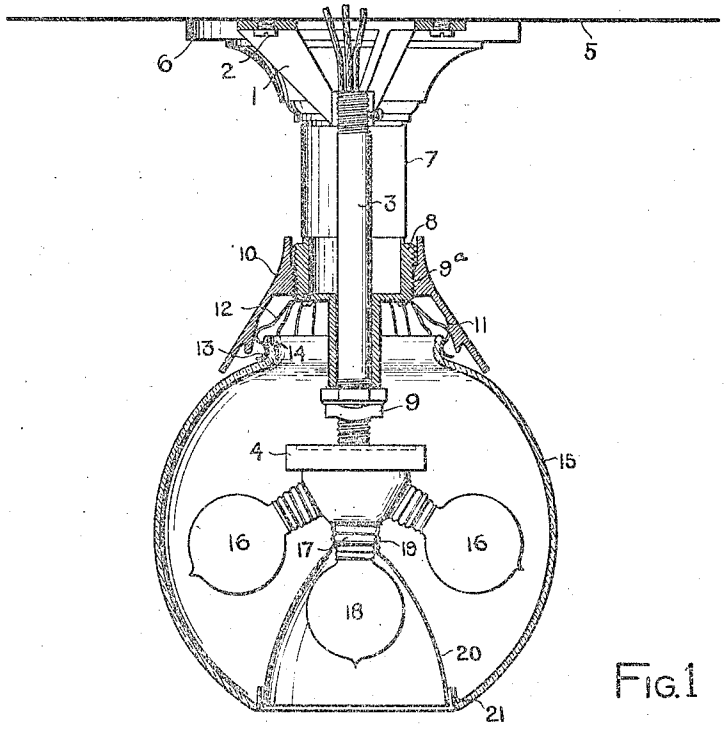


FIG. 1

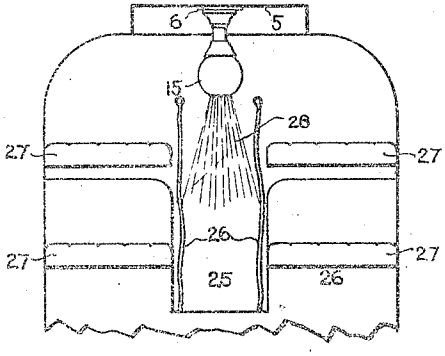


FIG. 3

INVENTOR

L. Schepmoes

BY

Emery, Booth, Janney & Varney

ATTORNEY

UNITED STATES PATENT OFFICE.

LINDSLEY SCHEPMOES, OF HASBROUCK HEIGHTS, NEW JERSEY, ASSIGNOR TO SAFETY CAR HEATING & LIGHTING COMPANY, A CORPORATION OF NEW JERSEY.

LIGHTING APPARATUS FOR RAILWAY CARS AND THE LIKE.

1,198,065. Specification of Letters Patent. Patented Sept. 12, 1916.

Application filed November 24, 1915. Serial No. 63,174.

To all whom it may concern:

Be it known that I, LINDSLEY SCHEPMOES, a citizen of the United States, and residing at Hasbrouck Heights, in the county of Bergen and State of New Jersey, have invented an Improvement in Lighting Apparatus for Railway-Cars and the like, of which the following is a specification.

This invention relates to lighting apparatus for railway cars and the like.

One of the objects thereof is to provide apparatus of the above type of simple and practical construction and efficient action in which the emission and direction of light are so controlled as to especially adapt it for use in sleeping cars.

A more specific object is to provide apparatus of the above type in which a sleeping car is effectively illuminated for ordinary use and yet the light so controlled as to improve sleeping conditions.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the structure hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawing in which is shown one of various possible embodiments of this invention. Figure 1 is a sectional elevation. Fig. 2 is a diagrammatic plan of electrical circuits. Fig. 3 is a diagrammatic section of a portion of a railway car.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Referring now to Fig. 1 of the drawing, there is shown at 1 a supporting casting or spider which may be bolted to the car roof as at 2. Threaded within and extending downwardly from the member 1 is a tube 3 on the lower end of which is secured, as by suitable threaded connection, the lamp cluster 4.

Fitted tightly to the car ceiling indicated at 5 is a canopy 6 which rests upon a sleeve 7, in turn supported by a fitting 8 held upon the tube 3 by the lock nuts 9. The outer surface of the fitting 8 has threaded thereon at 9^a a collar 10 provided with an inner tapering surface 11 adapted as the collar is screwed downwardly, to contact the springing arms 12 and jam their curved lower ends 13 into interlocking engagement with the lip 14 on the globe 15. The above features of construction do not in themselves form any part of the present invention and are accordingly not claimed herein.

Mounted within suitable sockets on the cluster 4 are electric bulbs 16 here shown as two in number but which may be of any desired number or candle power. In a socket 17 at the lower end of the cluster and having different electrical connections as hereinafter described, there is mounted a bulb 18. Screwed about the threaded member 19 of the socket 17 is a reflector 20 which is of such nature that it does not transmit light from the bulb 18 therethrough to any considerable extent and is preferably substantially opaque. This reflector is so formed as to throw the light from the bulb 18 in a downward direction with slight divergence of the rays. The lower end of reflector 20 fits closely within the upturned lip 21 at the lower edge of the globe 15, suitable packing being employed between these parts to prevent rattling, if desired. It is to be understood that the globe 15 is translucent and may be formed of an opal or frosted glass, and it is also to be understood that the term "globe" is used throughout in a broad sense to denote a translucent member mounted about a source of light whether in fixed relation thereto or removable therefrom.

The different lights are preferably supplied from a suitable source of current as the battery 22, and the circuit of the bulbs 16 is controlled as by the switch or cut-out 23, whereas the circuit of the bulb 18 is separately controlled by a switch 24, all as shown in Fig. 2 of the drawing.

As shown in Fig. 3 of the drawing, the apparatus set forth in Fig. 1 is preferably mounted centrally of the aisle 25 of a sleeping car, the curtains being indicated at 26 and the usual berths at 27. As indicated at 28, the light from the reflector 20 is thrown downwardly to illuminate the aisle, and substantially excludes from its path both the upper and lower berths of the car, although

a portion of the curtains including the section numbers is to some extent illuminated.

The parts within the globe 15 may be assembled or taken apart in the following manner. Assuming that the parts are as shown in Fig. 1 and it is desired to remove one of the bulbs 16, the bulb 18 is first unscrewed and thereupon the reflector 20 unscrewed and withdrawn. The bulbs 16 are then readily accessible through the lower opening in the globe 15 and if desired, the latter may be removed by first taking out the bulbs 16 and thereafter loosening the gripping members about the lip 14. The parts may be assembled in the reverse order.

The action of the above described apparatus is substantially as follows: In normal use, that is, when it is desired to illuminate the car, the switch 23 and if, desired the switch 24 also, are closed. The bulbs 16 then radiate light through the globe 15 and illuminate the entire car interior, the aisle being especially illuminated by the bulbs 18, it being understood, that a series of these fixtures are preferably installed centrally along the aisle of the car. When however certain of the berths are occupied, the switch 23 is opened and the illumination confined to the bulbs 18. The light from this series is thrown substantially down along the car aisle which is the only place where it is needed for those retiring later. The concentration of this light which, by the way, is not necessarily of great intensity, prevents any material illumination of the berths and leaves them in substantial darkness.

It will thus be seen that there is provided apparatus in which the several objects of this invention are achieved and in which the above and other advantages may be attained. The entire apparatus is of simple and inexpensive construction and is readily assembled and taken apart, and yet the illumination of the car is so controlled as well to meet all conditions of practical use.

As various possible embodiments of the above invention might be made and as various changes might be made in the apparatus above described, it is to be understood that all matter herein set forth is to be interpreted as illustrative and not in a limiting sense.

I claim as my invention:

1. In lighting apparatus for railway cars, in combination with the car berths and aisle therebetween, a source of light mounted above the car aisle, a shading reflector extending between said source and a major portion of said berths and formed and mounted to throw light downwardly from said source into said aisle substantially shading said berths, a source of light mounted above said car aisle between said berths adapted to throw light toward said berths, and means adapted to render inoperative said second source of light and retain said first source of light operative.

2. In lighting apparatus for railway cars, in combination with the berths and aisle therebetween, a supporting fixture mounted centrally of the car, a source of light upon said fixture, a reflector mounted to direct light downwardly from said source into said aisle substantially shading said berths, a second source of light on said fixture positioned to throw light toward said berths, and means adapted to render said second source of light inoperative and retain said first source of light in operative condition.

3. In lighting apparatus for railway cars, in combination, a support, a source of light upon said support, means adapted to direct light from said source downwardly and prevent lateral distribution therefrom, a second source of light, means mounting said second source of light upon said support and permitting the light to pass out therefrom in lateral direction, and means adapted to render inoperative said second source of light with said first source of light in operative condition.

4. In lighting apparatus for railway cars, in combination, a support, an electric light, a reflector positioned about said electric light to throw the light downwardly and prevent lateral distribution therefrom, a second electric light mounted upon said support outside said reflector and adapted to radiate light in lateral directions, and means adapted to break the circuit of said second light and retain the circuit of said first light unbroken.

5. In lighting apparatus for railway cars, in combination, a pair of sources of light, a substantially opaque reflector about one of said sources of light and positioned to throw the light downwardly therefrom in a restricted beam, the other of said sources of light being positioned outside said reflector, a translucent globe about said last source of light, and means adapted to render said second source of light inoperative with said first source of light operative.

6. In lighting apparatus for railway cars, in combination, a fixture mounted centrally of the aisle, a source of light upon said fixture, a substantially opaque reflector about said source of light adapted to throw the light therefrom downwardly in a restricted area, a second source of light mounted upon said fixture above said first source of light, and a translucent globe about said second source of light.

7. In lighting apparatus for railway cars, in combination, a fixture mounted centrally of the car, a source of light upon said fixture at the lower portion thereof, a substantially opaque reflector mounted about said source of light extending materially below the

same and shaped and positioned to concentrate substantially all of the light from said source within the car aisle and a source of light mounted upon said fixture and positioned to throw light laterally therefrom.

8. In lighting apparatus for railway cars, in combination, a supporting fixture, a translucent globe removably mounted on said fixture, a substantially opaque reflector extending within said globe, a source of light mounted upon said fixture within said reflector, and a source of light mounted within said globe outside said reflector.

9. In lighting apparatus for railway cars, in combination, a supporting fixture, a translucent globe removably mounted at its upper end upon said fixture, and provided with an opening at its lower end, and a substantially opaque reflector extending upwardly into said globe from said open lower end and removably fitting the edges of said opening.

10. In lighting apparatus for railway cars, a supporting fixture, a translucent globe removably mounted at its upper end upon said fixture and surrounding a portion of said fixture, said globe being provided with an opening at its lower end toward which said fixture extends, a reflector fitted within said opening and extending upwardly to and mounted upon said fixture, a source of light within said reflector, and a source of light within said globe outside of said reflector.

11. In lighting apparatus for railway cars, a supporting fixture, a translucent globe removably mounted at its upper end upon said fixture and surrounding a portion of said fixture, said globe being provided with an opening at its lower end toward which said fixture extends, a reflector fitted within said opening and extending upwardly to and mounted upon said fixture, a source of light within said reflector, and a source of light within said globe outside of said reflector, said opening in said globe being provided with a flange extending about said reflector.

12. In lighting apparatus for railway cars, a supporting fixture, a translucent globe removably mounted at its upper end upon said fixture and surrounding a portion of said fixture, said globe being provided with an opening at its lower end toward which said fixture extends, a reflector fitted within said opening and extending upwardly to and mounted upon said fixture, a source of light within said reflector, and a source of light within said globe outside of said reflector, said reflector being substantially opaque and extending downwardly below the source of light therein to concentrate the light therefrom within a restricted area.

13. In lighting apparatus for railway cars, in combination with the berths and the aisle therebetween, a supporting fixture mounted centrally of the car, a translucent globe removably mounted upon said fixture, a pair of sources of light mounted upon said fixture, one of which is within said globe, and a substantially opaque member about the other of said sources of light extending below the same and adapted to restrict radiation therefrom substantially to the car aisle.

14. In lighting apparatus for railway cars, in combination with the berths and aisle therebetween, a supporting fixture mounted centrally of the car, an electric light mounted upon said fixture, a translucent globe removably mounted at its upper end about said fixture and extending about said light whereby said light is adapted to radiate light laterally toward said berths, a substantially opaque member extending upwardly into said globe, and an electric light mounted within said member in position to have most of the direct rays toward said berths cut off by said member.

15. In lighting apparatus for railway cars, in combination with the berths and aisle therebetween, a supporting fixture mounted centrally of the car, an electric light mounted upon said fixture, a translucent globe removably mounted at its upper end about said fixture and extending about said light whereby said light is adapted to radiate light laterally toward said berths, a substantially opaque member extending upwardly into said globe, an electric light mounted within said member in position to have most of the direct rays toward said berths cut off by said member, and means adapted to break the circuit of said first electric light and maintain the circuit of said second electric light.

In testimony whereof, I have signed my name to this specification.

LINDSLEY SCHEPMOES.