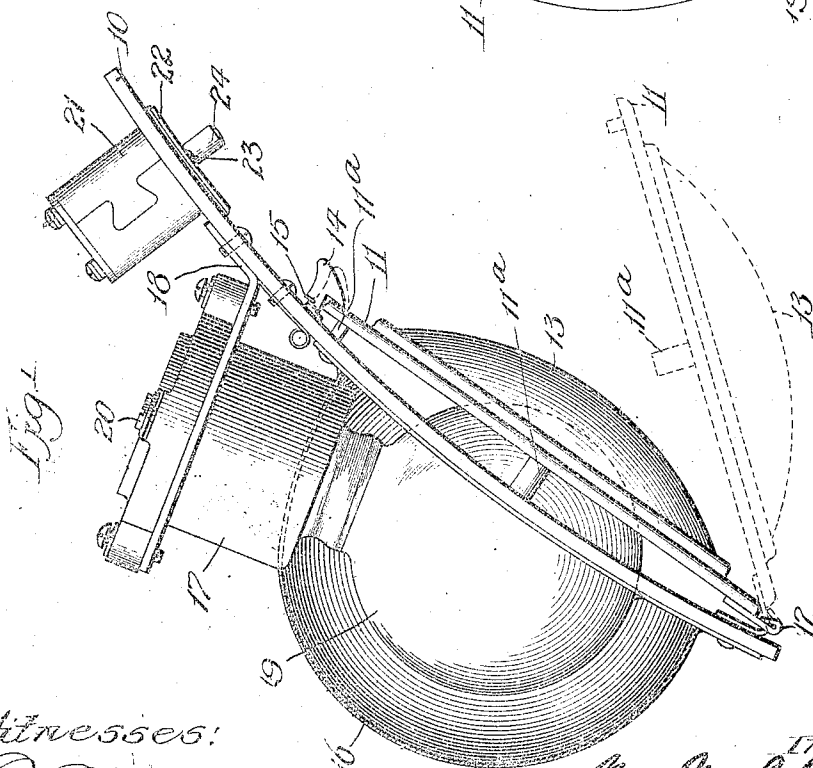
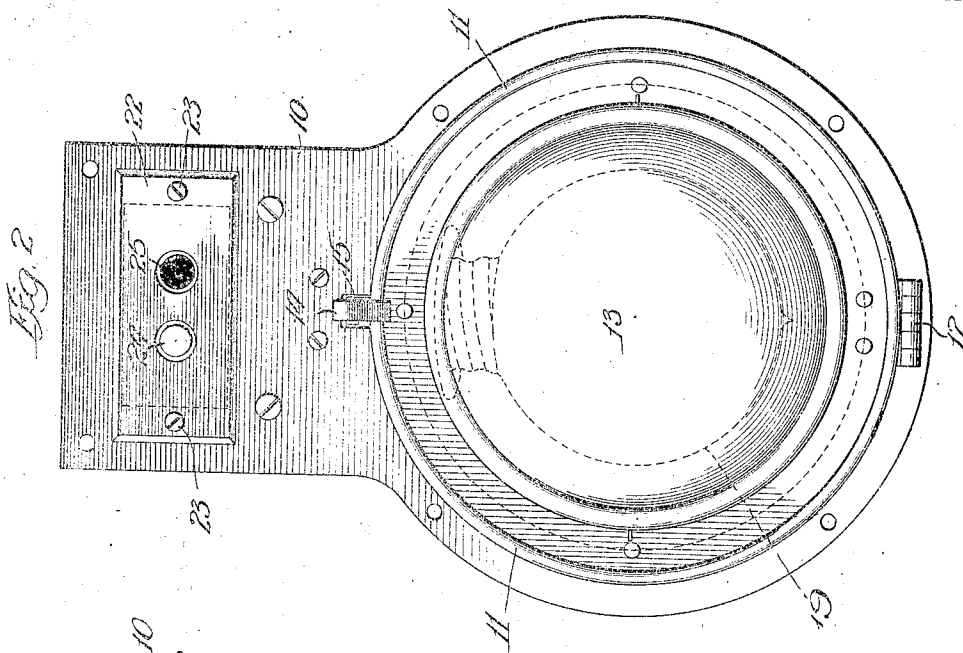


M. M. SCHNEIDER.
 BERTH LAMP.
 APPLICATION FILED NOV. 14, 1910.

994,203.

Patented June 6, 1911.

2 SHEETS-SHEET 1.



Witnesses:

Edw. G. Givins,
Henry M. Givins,

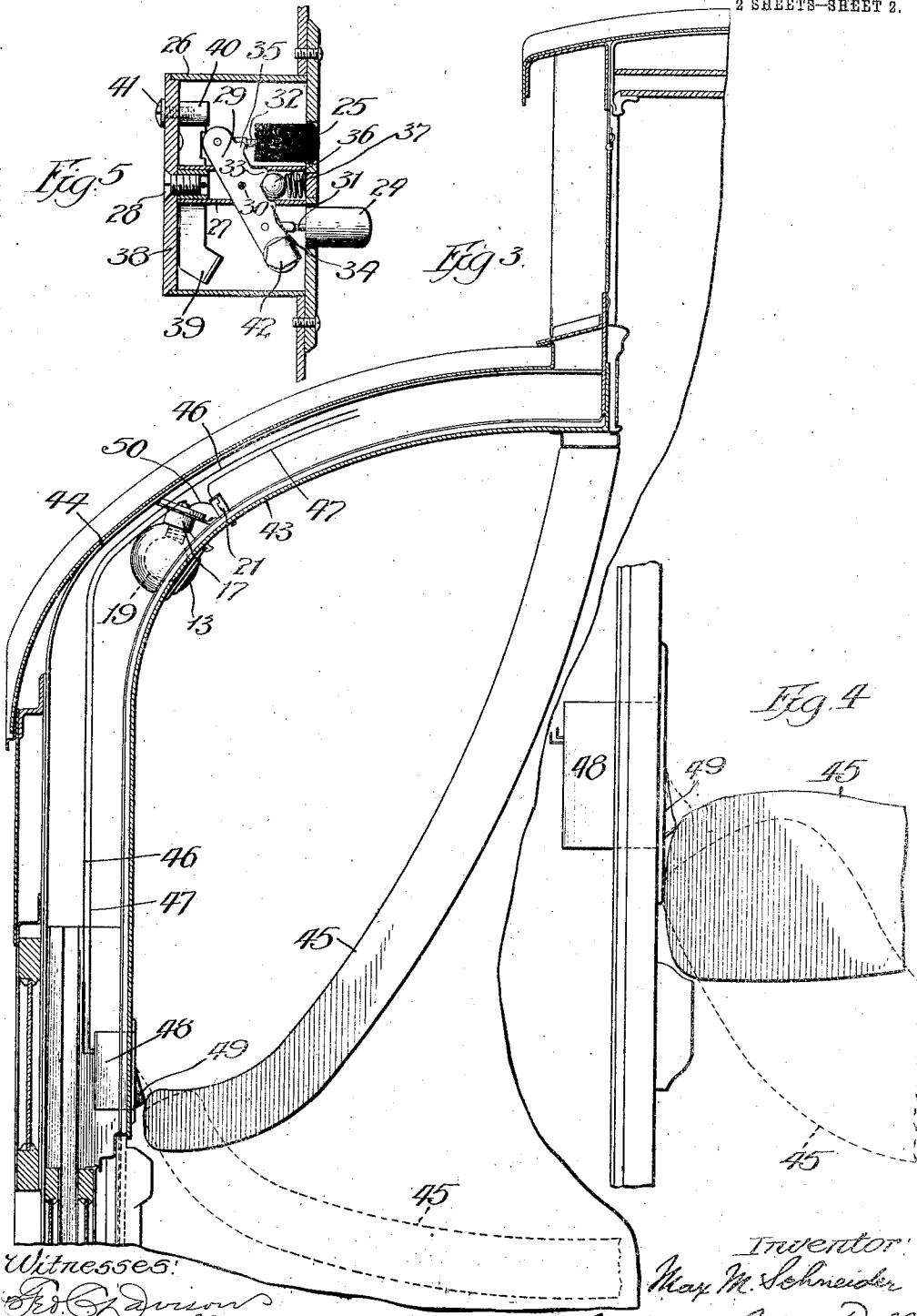
Inventor
Max M. Schneider
 By *Anthony J. Bell & Co.*
 Attys.

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Witnesses:
 Ed. C. Duvon
 Henry H. Shuply.

Inventor:
 Max M. Schneider
 By Smith, Bell & Fuller
 Attys.

UNITED STATES PATENT OFFICE.

MAX M. SCHNEIDER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE PULLMAN COMPANY,
OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

BERTH-LAMP.

994,203.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed November 14, 1910. Serial No. 592,169.

To all whom it may concern:

Be it known that I, MAX M. SCHNEIDER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Berth-Lamps, of which the following is a specification.

My invention relates to berth lamps, and refers particularly to a form of lamp in which an efficient ventilation to provide for heat radiation is used, and in connection with which improved switching mechanism is employed.

One of the objects of my invention is to provide a lamp which is primarily designed for use in connection with upper berths, and which is contained in the side wall of the car.

A suitable glass front is provided in order to allow the passage of light, and a reflector is preferably behind the lamp in order to increase the intensity of the light. It will be apparent that if the glass front and its metallic framework were to form a snug fit with the concave reflector which is used in connection with the lamp, there would be no opportunity for the radiation of the heat, and the lamp and its inclosing metallic parts would become heated to an undue extent. I therefore provide spacing lugs in connection with the metallic frame in the front of the lamp, these lugs serving to so position the front of the inclosing casing that ample circulation of air and ventilation are secured.

A further object of my invention is to provide simple means for closing the electric circuit in which the lamp is included without moving the lamp itself as is common in many berth lamps at present in use. This switching device consists of a pair of plugs similar to many of the devices well known in the art, the circuit being closed on depression of the white plug, and opened on depression of the black plug.

A still further object of my invention is the provision of automatic means by which the circuit in which the lamp is included is opened when the upper berth is raised into its unused position. This result I accomplish by providing a switch which is auto-

matically operated by means of the movable upper berth, this switch being connected in series with the circuit in which the lamp is included, the circuit being opened when the berth is raised, and closed when the berth is lowered.

These and other advantages of my invention will be more apparent by reference to the accompanying drawings which represent a preferred embodiment of my improvements and in which:

Figure 1 is a side elevation of the berth lamp showing the regulating switch in position, the concave reflector being indicated in section. Fig. 2 is a front elevation of the parts shown in Fig. 1. Fig. 3 is a fragmentary transverse vertical section through a car side showing the berth lamp in position, and the electrical circuit controlling the same. Fig. 4 is an enlarged fragmentary transverse vertical section through the car side showing the switch operated by the movable upper berth, and, Fig. 5 is a horizontal section through the switch associated with the berth lamp.

I will first describe the construction of the lamp itself, and will later describe the system of electrical connections which serve to operate the same.

The lamp comprises a front plate 10 to which the movable front 11 is fastened by means of the hinge 12. The front 11 contains a suitable glass 13 which may be retained in position in the front 11 in any suitable manner. When the front 11 is closed, it is held in position by means of the hook 14 which is actuated by the torsion spring 15. Attached to the rear of the front 11 are the spacing lugs 11^a which serve, as clearly shown in Fig. 1, to maintain an air space between the front plate 10 and the front 11 when the latter is in its closed position. This space is to allow for ventilation and the ready radiation of the heat from the lamp, as will be more fully understood hereafter. To the front plate 10 is riveted, or otherwise suitably fastened, the concave reflector 16. An opening in the upper part of this reflector is provided for the passage of the porcelain socket 17 which

is attached to the front plate 11 by means of the bracket 18. The bulb 19 is screwed into the socket 17 in the well known manner and the socket 17 is provided with the terminal screws 20 in the usual way. Also attached to the front plate 17 is the switch 21, the plate 22 of which is fastened to the front plate 10 by means of the screws 23, 23. The switch 21 is provided with the plugs 24 and 25. The plug 24 is preferably made white, and the plug 25 black.

The construction of the switch 21 is clearly shown in Fig. 5. The box 26 is held in position against the post 27 by means of the screw 28. The arm 29, pivotally attached to the post 27 at 30, is also pivotally attached near its ends to the metallic pins 31 and 32 rigidly mounted in the plugs 24 and 25 respectively. The arm 29 is provided, near its central portion, with an angular projection 33, and adjacent to this the two projections 34 and 35. Mounted within the post 27 is the ball 36 which is pressed against the arm 29 by the spring 37. It will be apparent that this ball is held either between the projections 33 and 34, or 33 and 35. When one of the plugs 24 or 25 is pressed inwardly, the ball 36, after the point of the projection 33 has passed its central line, serves to facilitate the movement of the arm 29 to its desired position and to firmly retain the arm in said position until the projecting plug is pressed inwardly. Mounted against the inner wall 38 of the box 26 are a pair of switch members 39, one of which is indicated in Fig. 5. Each of the switch members 39 is held in position by the post 40 and the screw 41, the latter also acting as a terminal screw. Each of the switch members 39 consists of a pair of thin spring blades which are normally held in contact with each other. On the end of the arm 29 is riveted a pair of U-shaped contact members 42, each of which is adapted to be inserted between the blades of each switch member 39 when the plug 24 is pressed inwardly. In this way, the two switch members 39 are brought into electrical connection.

I will now pass to a description of my improved system as a whole.

The front plate 10, of the lamp, is fastened to the inner wall 43 of the car, and the lamp, as a whole, is thereby located between the inner wall 43 and the outer wall 44. It will be evident that the front 11 and the switch plugs 24 and 25 occupy a readily accessible position inside of the inner wall 43. The upper berth 45 is of the well known construction, and may be moved from the position indicated in full lines in Figs. 3 and 4, to the position indicated in dotted lines when the berth is to be occupied. The electrical current is supplied through a pair of conductors 46 and 47. The conductor 46

passes directly to a switch 48 which has a movable spring-controlled member 49. When the upper berth 45 is moved to its lower position, an electrical connection is automatically formed between the conductors 46 and 47. The conductor 47 is connected with one of the screw terminals 41 of the switch 21. A short conductor 50 leads from the other screw terminal 41 of the switch 21 to one of the terminals 20 of the socket 17. The conductor 47 is continued from the second terminal of the same socket. It will thus be apparent that the lamp 19 is connected in series with the conductor 47 by the movement of the member 49. It is thus evident that when the upper berth 45 is raised into its inoperative position, and the movable member 49 of the switch 48 is thereby moved inwardly, the circuit in which the berth lamp is included will be broken and the lamp will be extinguished independently of whether the switch 21 is in its "on" or "off" position.

It will be apparent to those skilled in the art that many changes could be made in the detailed construction of the parts which I have mentioned without departing from the spirit of my invention.

What I claim is:

1. In an electric berth lamp for railway cars, the combination of a supporting front plate adapted for attachment to the car wall, a reflector fastened to the rear side of said plate, an incandescent lamp socket supported by said plate in position to hold a lamp bulb inside said reflector, a cover permitting passage of light therethrough hinged to said plate, means to hold said cover in closed relation to said plate, and means to prevent said cover from closing tightly on said plate whereby to afford ventilation for said lamp and reflector; substantially as described.

2. In an electric berth lamp for railway cars, the combination of a supporting front plate adapted for attachment to the car wall, a reflector fastened to the rear side of said plate, an incandescent lamp socket supported by said plate and positioned to hold a lamp bulb inside said reflector at an oblique angle to said plate, a cover permitting passage of light therethrough hinged to said plate, means to hold said cover in closed relation to said plate, and means to prevent said cover from closing tightly on said plate whereby to supply ventilation for said lamp and reflector, substantially as described.

3. In an electric berth lamp for railway cars, the combination of a curved supporting front plate adapted for attachment to the car wall, a concave reflector fastened to the rear side of said plate, an incandescent lamp socket supported by said plate and positioned to hold a lamp bulb inside said reflector at an oblique angle to said plate, a

cover permitting passage of light there-
through hinged to said plate, a spring catch
to hold said cover in closed relation to said
plate, and a series of projections with which
5 said cover coacts adapted to prevent the
cover from closing tightly on said front
plate, whereby to afford ventilation for said
lamp and reflector, substantially as de-
scribed.

MAX M. SCHNEIDER.

Witnesses:

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FRANK A. WARDE.