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ELECTRIC LANTERN.

APPLICATION FILED APR. 22, 1910.

998,849.

Patented July 25, 1911.

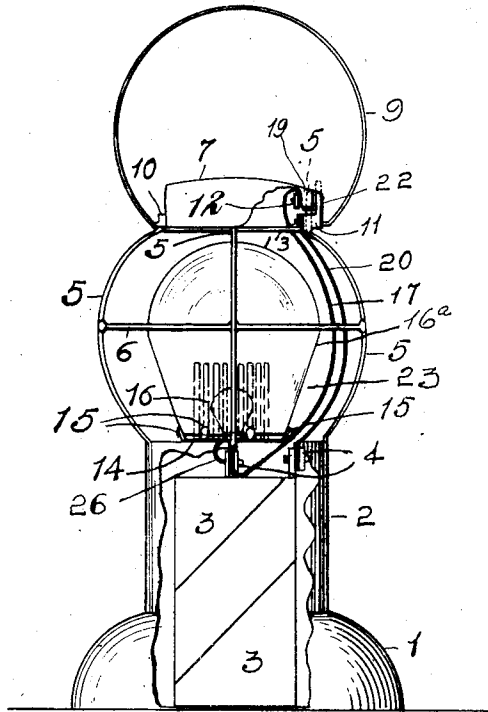


Fig. 1.

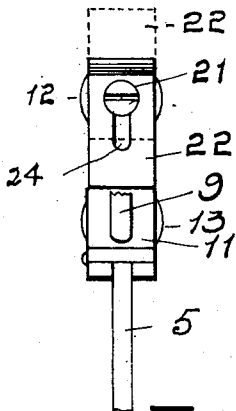


Fig. 4.

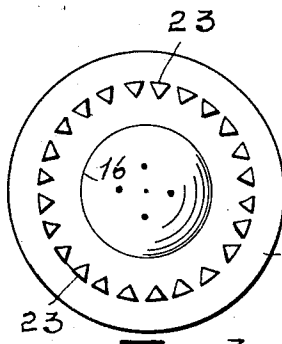


Fig. 3.

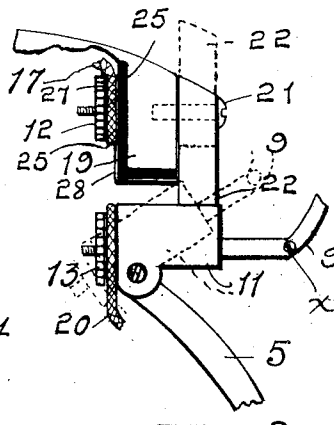


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS M. JENKS, DECEASED, (HARRIET B. JENKS, ADMINISTRATRIX,) AND ALFRED W. KNUTSON, OF GALESBURG, ILLINOIS; SAID KNUTSON ASSIGNOR TO SAID HARRIET B. JENKS.

ELECTRIC LANTERN.

998,849.

Specification of Letters Patent.

Patented July 25, 1911.

Application filed April 22, 1910. Serial No. 557,089.

To all whom it may concern:

Be it known that THOMAS M. JENKS, deceased, late a citizen of the United States, and a resident of Galesburg, in the county of Knox and State of Illinois, and ALFRED W. KNUTSON, a citizen of the United States, and a resident of Galesburg, in the county of Knox and State of Illinois, jointly invented a new and useful Electric Lantern, of which the following is a specification.

The invention relates to that general type of lanterns which are provided with a bail by which they are carried about and suspended, and to the particular type thereof known as railroad lanterns.

The object of the invention is to provide an electric lantern which is of the same general outline as is the ordinary type of railroad lantern.

It is another object to provide a lantern of the type described which is instantly lighted by the act of raising it.

A further object is to provide means for increasing the brilliancy of the light.

In the accompanying drawings, which illustrate a simple and preferred means embodying the improvements; Figure 1 is an elevation partly broken away; Fig. 2, a detail, a plan view; and Figs. 3 and 4, details.

Referring to the drawings by numerals, the same one indicating the same part in the different figures, 1 indicates a lantern base provided with a cup 2 adapted for the reception of any source of electric supply, shown here as a dry cell 3, the latter equipped with the usual wire-securing means 4.

Fixed to the cup 2 are the ordinary frame or guard wires 5, united near their mid-lengths by a brace wire 6, and at their upper portions fixed to and supporting a cap 7. The base, frame-wires and cap we shall hereinafter term the frame.

One end of a bail 9 is pivoted in a bearing 10 at the upper part of the frame and its other end is pivoted in a bearing in a contact point 11 fixed on the opposite side thereof. The bail may be jointed as shown at *x*, Fig. 2, if preferred. Another contact point 19 is supported by one of the frame wires 5 and is provided with wire-securing means 12, the point 11 being provided with similar wire-securing means 13.

A plate 14 is suitably secured on the top of the receptacle 2, and is provided with supporting means 15 by which a globe 15^a is

held in position. A filament (incandescent) lamp 16 supported on the plate 14 is connected to an insulated wire 17 leading from the cell 3, and said wire leads also to the contact 19. A wire 26 connects the cell 3 with the lamp. The contact point 11 is connected to the cell by an insulated wire 20. A pivot screw 21 is threaded into the point 19 and upon it is pivoted a metallic sliding plate 22 having a slot 24, which plate we shall for the purposes hereof term a secondary contact point. Insulation 25 is embedded in the contact-point 19, and a brush 28 is secured in place thereby and by an insulated washer 25, the latter being held in place by the nut 12 forming a part of the securing means. The ends of all wires are stripped of insulation in the ordinary manner.

To increase the brilliancy of the lamp, in order that it may be seen at a great distance, an annular series of prisms 23 are suitably mounted on the plate 14, surrounding the filament lamp 16.

In operation, the parts being in the relative positions shown by full lines in Fig. 2, upon the operator raising the lamp by the bail 9, it will raise the point 11 to the dot line position there shown and into contact with the point 19, it being understood that the secondary point has also been placed in the dot line position. In swinging the lamp as a signal, the centrifugal force will hold the points in contact and the lamp will be lighted as in lifting it by the bail. When it is desired to extinguish the lamp, it may be done by releasing the bail, whereupon the point 11 will fall by gravity and the circuit broken. Should it be desirable that the lamp be lighted when not suspended by the bail, this may be effected by sliding the secondary contact point into the position shown by full lines at Fig. 2 to complete the circuit.

The prisms will greatly accentuate the brilliancy and penetration of the light rays emanating from the lamp 16. It will be understood, however, that they might be replaced by other means for causing such increased luminance. It will be evident also that other means than those shown may be employed for effecting the contact and thus completing the circuit, and that other means than those shown may be substituted for keeping the circuit constant. We do not,

therefore, desire to be understood as limiting our claims to specific constructions, as all such changes and modifications may be made as fall within the scope of the invention.

5 We claim as our invention:

1. An electric lantern comprising in combination a skeleton frame, a source of electric supply supported thereby, a globe adapted to cast light in all directions, disposed within said frame, a swinging bail adapted for the passage of the user's arm, and to fall at the side of the frame when disengaged, a contact point supported thereby, a contact point on said frame, said points normally spaced apart, and connections between said supply source and contact points, said points being adapted to be brought into contact by the gravity of the lantern when it is suspended from the bail.

20 2. An electric lantern comprising a frame, a contact point supported thereby, a movable contact point, a swinging bail, one of its ends pivoted in the frame and its other end in the movable contact-point hereinafter recited for bringing said contact points into engagement when the lamp is lifted, a metallic plate pivoted to the first recited contact-point and adapted for engagement with the movable contact point, a source of electric supply connected with said points, a lamp connected therewith, and an annular series of prisms surrounding said lamp.

3. In an electric lantern of the railroad type, a base including a receptacle, a battery disposed therein, an apertured plate disposed above said receptacle, a lamp supported on said plate and adapted to cast light in all directions, a wire connecting it with said battery, a skeleton frame surmounting said base and disposed about said lamp, a stationary contact-point supported by said frame, a wire connecting it with the battery, a movable contact-point, a wire connecting it with the battery, and a swinging bail, one of its ends pivoted in said frame and its other end in the movable point, whereby a circuit is completed by the act of lifting said lantern by the bail, a circuit between said contact points and lamp.

50 4. An electric lantern of the railroad type comprising a base including a receptacle, a battery disposed therein, an apertured plate disposed above said receptacle, a lamp supported on said plate and adapted to cast light in all directions, a wire connecting it with said battery, a skeleton frame surmounting said base and disposed about said lamp, a stationary contact-point supported by said frame, a wire connecting it with said battery, a movable contact point, a wire connecting it with the battery, and a bail, one of its ends pivoted in the frame and its other end in the movable contact point, whereby a circuit may be completed between said contact-points and said lamp by the

gravity of the foregoing recited elements suspended from the bail.

5. An electric lantern of the railroad type comprising a base including a receptacle, a battery disposed therein, an apertured plate disposed above said receptacle, a lamp supported on said plate and adapted to cast light in all directions, a wire connecting it with said battery, a skeleton frame surmounting said base and disposed about said lamp, a stationary contact-point supported by said frame, a wire connecting it with said battery, a movable contact-point, a wire connecting it with the battery, a bail, one of its ends pivoted in the frame and its other end in the movable contact-point, whereby a circuit may be completed between said contact points and said lamp by the act of lifting the lantern by means of the bail, and means for bringing said contact points into engagement when the lantern is at rest and no weight suspended from the bail.

6. An electric lantern of the railroad type comprising a base including a receptacle, a battery disposed therein, an apertured plate disposed above said receptacle, a lamp supported on said plate and adapted to cast light in all directions, a wire connecting it with said battery, a skeleton frame surmounting said base and disposed about said lamp, a stationary contact-point supported by said frame, a wire connecting it with said battery, a movable contact-point, a wire connecting it with said battery, a bail, one of its ends pivoted in the frame and its other end in the movable contact point, whereby a circuit may be completed between said contact-points and said lamp by the act of lifting the lantern by means of the bail, and a pivoted plate for bringing said contact points into engagement when the lantern is at rest and no weight suspended from the bail.

7. An electric lantern of the railroad type comprising a base including a receptacle, a battery disposed therein, frame-wires fixed to and rising from said base, a lamp within said frame, a wire connecting it with said battery, a cap supported on said frame-wires, a contact-point on said cap, a contact-point pivoted to the frame, a swinging bail, one of its ends pivoted in a bearing in the frame and its other end in said pivoted contact-point whereby said points will be brought into contact by the act of raising the lantern by means of said bail, a wire connecting one of said contact-points and the battery, and a wire connecting the other of said contact-points and said lamp.

8. An electric lantern of the railroad type comprising a base including a receptacle, a battery disposed therein, a frame including frame-wires fixed to and rising from said base, a lamp within said frame, a wire connecting it with said battery, a cap supported

on said frame-wires, a contact-point on said cap, a contact-point pivoted to a frame-wire, a metallic plate pivoted to the first recited contact-point and adapted to be brought into
5 contact with the other, a swinging bail, one of its ends pivoted in a bearing in the frame and its other end in said pivoted contact-point, whereby said points will be brought into engagement by the act of raising the
10 lantern by means of said bail when the metallic plate is freed from engagement with the pivoted contact point, a wire connecting one of said points and the battery, and a wire

connecting the other of said points and the lamp.

In witness whereof we have hereunto af-¹⁵
fixed our signatures at Galesburg, Illinois
this 16th day of February, 1910.

HARRIET B. JENKS,
*Administratrix of the estate of Thomas M.
Jenks, deceased.*

ALFRED W. KNUTSON.

Witnesses:

WM. T. WISEMAN,
WEBB A. HERLOCKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."