

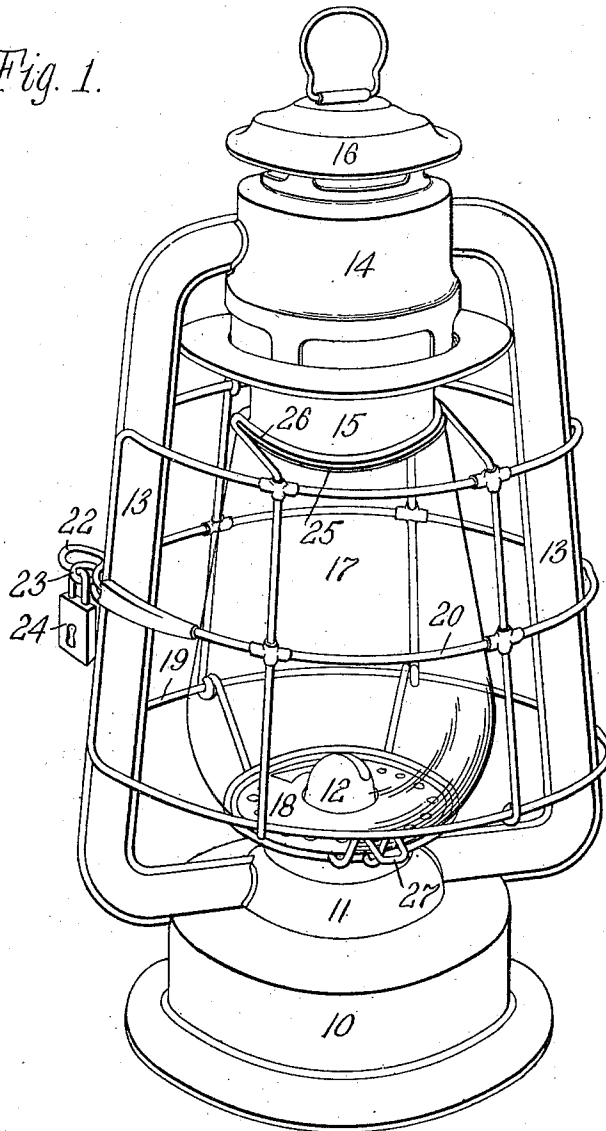
C. BERGENER.
LANTERN GUARD.
APPLICATION FILED OCT. 13, 1908.

974,629.

Patented Nov. 1, 1910.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses:

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Inventor:

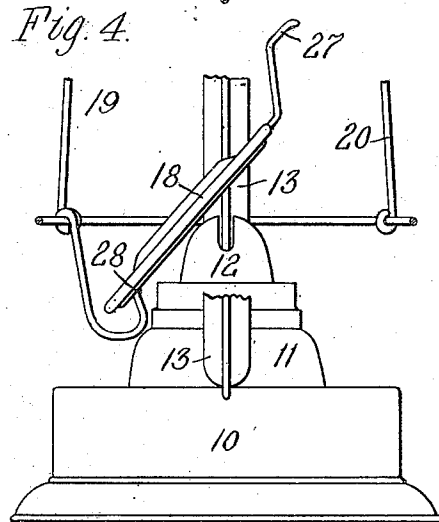
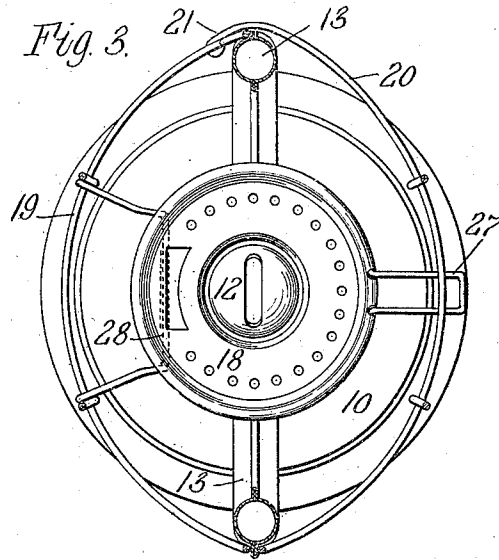
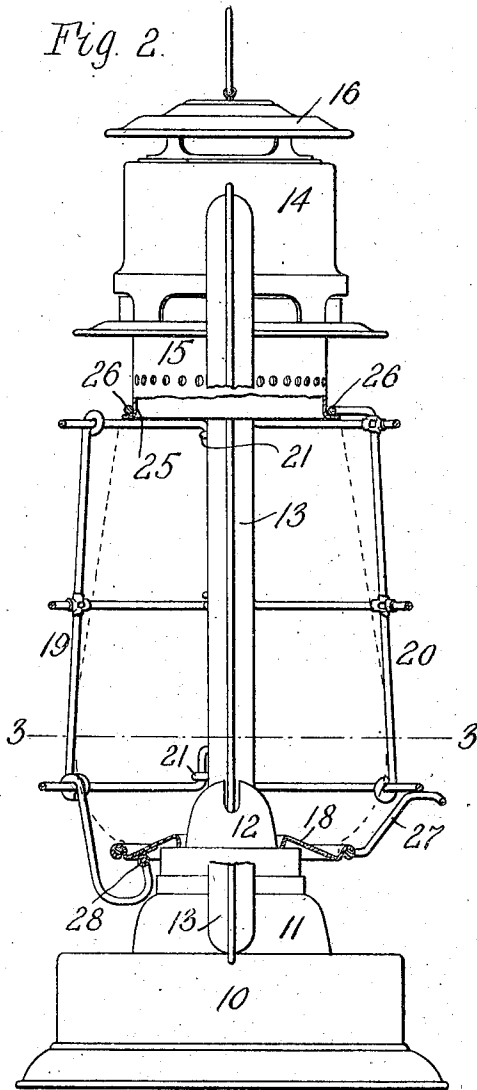
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3 SHEETS—SHEET 2.



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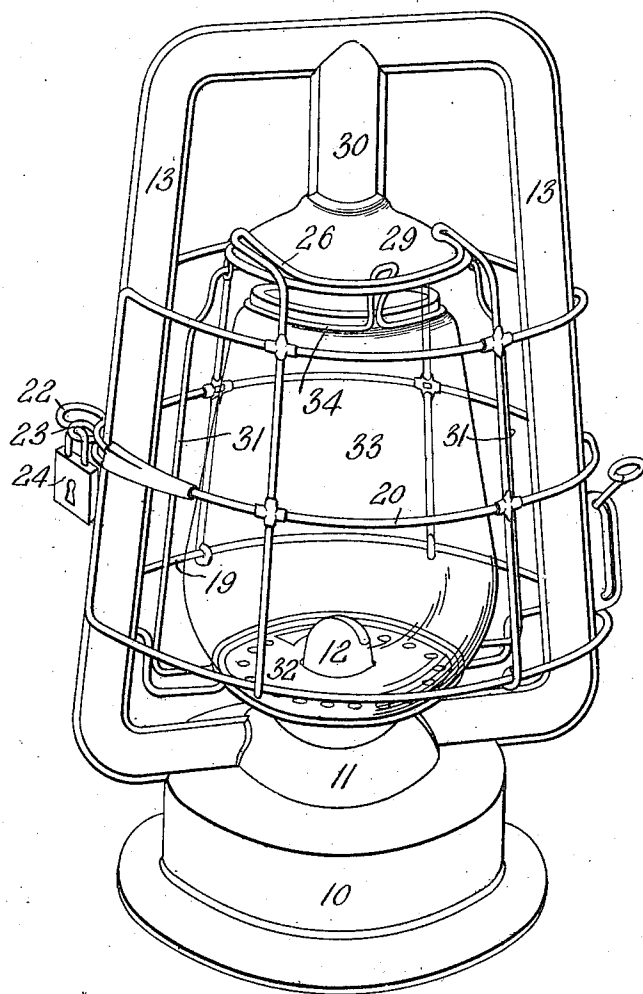
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3 SHEETS—SHEET 3.

Fig. 5.



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UNITED STATES PATENT OFFICE.

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LANTERN-GUARD.

974,629.

Specification of Letters Patent.

Patented Nov. 1, 1910.

Application filed October 13, 1908. Serial No. 457,575.

To all whom it may concern:

Be it known that I, CHARLES BERGENER, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Lantern-Guards, of which the following is a specification.

This invention relates to guards for that class of lanterns in which the globe is held in place in the lantern frame by a movable part arranged usually above the globe, as, for instance, in tubular lanterns of the cold-blast type, in which style of lanterns the globe is held upon the globe plate by a spring-pressed chimney arranged in the top portion of the lantern frame and bearing upon the top of the globe, or in tubular lanterns of the hot-blast type, in which style the globe is held upon the globe plate by an annular spring attached to the bell or canopy above the globe. When lanterns of this style are used by watchmen in mills and factories it is often desirable to prevent the watchmen from gaining access to the flame, as for lighting a pipe, since the possibility of such access increases the fire risk.

The object of this invention is to provide this class of lanterns with a guard of such construction that, when locked, it effectually prevents the globe from being raised for giving access to the flame.

In the accompanying drawings, consisting of three sheets: Figure 1 is a perspective view of a tubular lantern of the cold-blast type embodying this invention. Fig. 2 is a vertical sectional elevation of this lantern. Fig. 3 is a horizontal section through the guard in line 3—3, Fig. 2. Fig. 4 is a fragmentary vertical section, showing the globe plate swung up. Fig. 5 is a perspective view of a tubular lantern of the hot-blast type, embodying this invention.

Like reference characters refer to like parts in the several figures.

Referring to Figs. 1-4, which represent a lantern of the cold-blast type, 10 represents the oil pot, 11 the lower air chamber secured upon the same, 12 the burner, 13 the air tubes, 14 the upper air chamber, and 15 the spring-pressed chimney which is vertically movable in the upper air chamber and extends above and below the same, being provided at its upper end with the cap 16 and bearing with its lower end upon the globe plate 17, which is thereby held upon the plate 18

surrounding the burner. All of these parts may be of any well known construction and arrangement. The globe is protected by a guard which is made in two sections or halves, one section 19 being permanently secured to the tubes and the other section 20 being hinged to one of the tubes at 21 and connected with the other tube or section by a catch 22 and staple 23 to which a lock 24 can be applied. The metallic chimney 15 is provided with an external locking flange or shoulder 25, preferably arranged at the lower end of the chimney, and the movable guard section is provided at its upper end with an inwardly projecting locking stop or extension 26, which, in the normal position of the parts, represented in Figs. 1 and 2, stands over the locking flange or shoulder of the chimney and prevents the latter from being raised. This prevents the globe from being raised from the globe plate a sufficient distance to give access to the flame. The locking projection 26 of the movable guard section has preferably the form of a wire bow which is formed in one piece with two of the upright members of this guard section, as shown, and which extends partly around the chimney above the locking shoulder thereof. The globe plate 18 is preferably provided with an arm 27 which projects laterally and upwardly from the plate so that the movable guard section stands in the normal position of the parts over this arm. The plate 18 is hinged at 28, diametrically opposite the arm 27, to the fixed guard section, so that it can be swung up when access is desired to the burner. The movable guard section locks this globe plate in place by means of the locking arm 27 and prevents the same from becoming displaced and the burner from becoming detached if the globe should be broken. Upon releasing the movable guard section the globe can be removed and access can be had to the burner in the usual way.

Referring to Fig. 5, which represents a tubular lantern of the hot-blast type, the locking stop 26 of the movable guard section stands in the normal position of the parts above the bell or canopy 29 and prevents the same from being raised in the tubular lantern frame. In this style of tubular lanterns the bell or canopy is usually vertically movable on the central tube 30 and connected by side wires 31 with the globe

plate 32, these parts forming a globe-holding frame which is vertically movable in the tubular lantern frame and in which the globe 33 is removably held by the annular spring 34 attached to the bell. The movable guard section locks this globe-holding frame in its normal position in the tubular lantern frame and prevents the globe from being raised out of its normal position. The movable guard section also locks the globe plate in position irrespective of the presence or absence of the globe, because this plate is connected with the bell by the side wires and cannot move up or down independently of the bell, while in the cold-blast style of tubular lanterns the globe plate and the spring-pressed chimney are not connected and are movable independently of each other when the globe is not in place.

I claim as my invention:

1. The combination with a lantern frame and globe-holding means vertically movable therein, of a guard which is attached to said frame and which, when closed, forms a rigid inclosure for the globe and prevents the removal of the globe in a lateral direction, said guard having a movable portion which is opened for removing the globe and which, when closed, locks said globe-holding means against upward movement, substantially as set forth.

2. The combination with a lantern frame and globe-holding means vertically movable therein, of a guard having a portion which is pivoted to said frame to swing laterally toward and from the globe and which is provided with a locking device which engages the globe-holding means when the guard is closed and prevents said means from being raised, substantially as set forth.

3. The combination with a lantern frame and globe-holding means vertically movable therein, of a guard which is attached to said frame and which, when closed, forms a rigid inclosure for the globe and prevents the removal of the globe in a lateral direction, said guard having a movable portion which is pivoted to swing laterally toward and from the globe and which is provided with a locking device which engages the globe-holding means when the guard is closed and prevents said means from being raised, substantially as set forth.

4. The combination with a lantern frame having a vertically movable chimney by which the globe is held in position, of a movable guard which is attached to said frame and which, when closed, engages said chimney and prevents the latter from being raised, substantially as set forth.

5. The combination with a lantern frame having a vertically movable chimney by which the globe is held in position and

which is provided with a locking shoulder, of a movable guard attached to said frame and provided with a locking stop which engages said shoulder when the guard is closed, substantially as set forth.

6. The combination with a lantern frame having a vertically movable chimney by which the globe is held in position and which is provided with a locking shoulder, of a movable guard attached to said frame and provided with a locking bow which, when said guard is closed, stands above said shoulder and extends partly around said chimney, substantially as set forth.

7. The combination with a lantern frame and globe-holding means vertically movable therein and bearing upon the globe, of a guard which is attached to said frame and which, when closed, forms a rigid inclosure for the globe and prevents the removal thereof in a lateral direction, said guard having a movable portion which, when closed, bears upon said globe-holding means and prevents the same from being raised, substantially as set forth.

8. The combination with a lantern frame, a movable plate for supporting the globe and means for holding the globe on said plate, of a movable guard pivoted on said frame to swing laterally toward and from the globe and standing, when closed, above said plate and preventing upward movement of the same, substantially as set forth.

9. The combination with a lantern frame, a movable globe plate provided with a locking arm, and means for holding the globe on said plate, of a movable guard which is attached to said frame and which, when closed, stands over said arm and prevents movement of said plate out of its normal position, substantially as set forth.

10. The combination with a lantern frame, of a guard comprising a fixed section which is secured to said frame and a movable section, and a globe plate which is hinged to said fixed guard section and provided with a locking arm which extends underneath the movable guard section when the latter is closed, substantially as set forth.

11. The combination with a lantern frame provided with a movable globe plate and with a vertically movable chimney by which the globe is held upon said plate, of a movable guard which, when closed, engages said chimney and said plate and holds both against movement out of the normal position, substantially as set forth.

Witness my hand in the presence of two subscribing witnesses.

CHARLES BERGENER.

Witnesses:

EDWARD WILHELM,
GEO. W. HAM.