(No Model.) 2 Sheets—Sheet 1

A. W. PAULL.

LANTERN.

No. 433,363. Patented July 29, 1890.

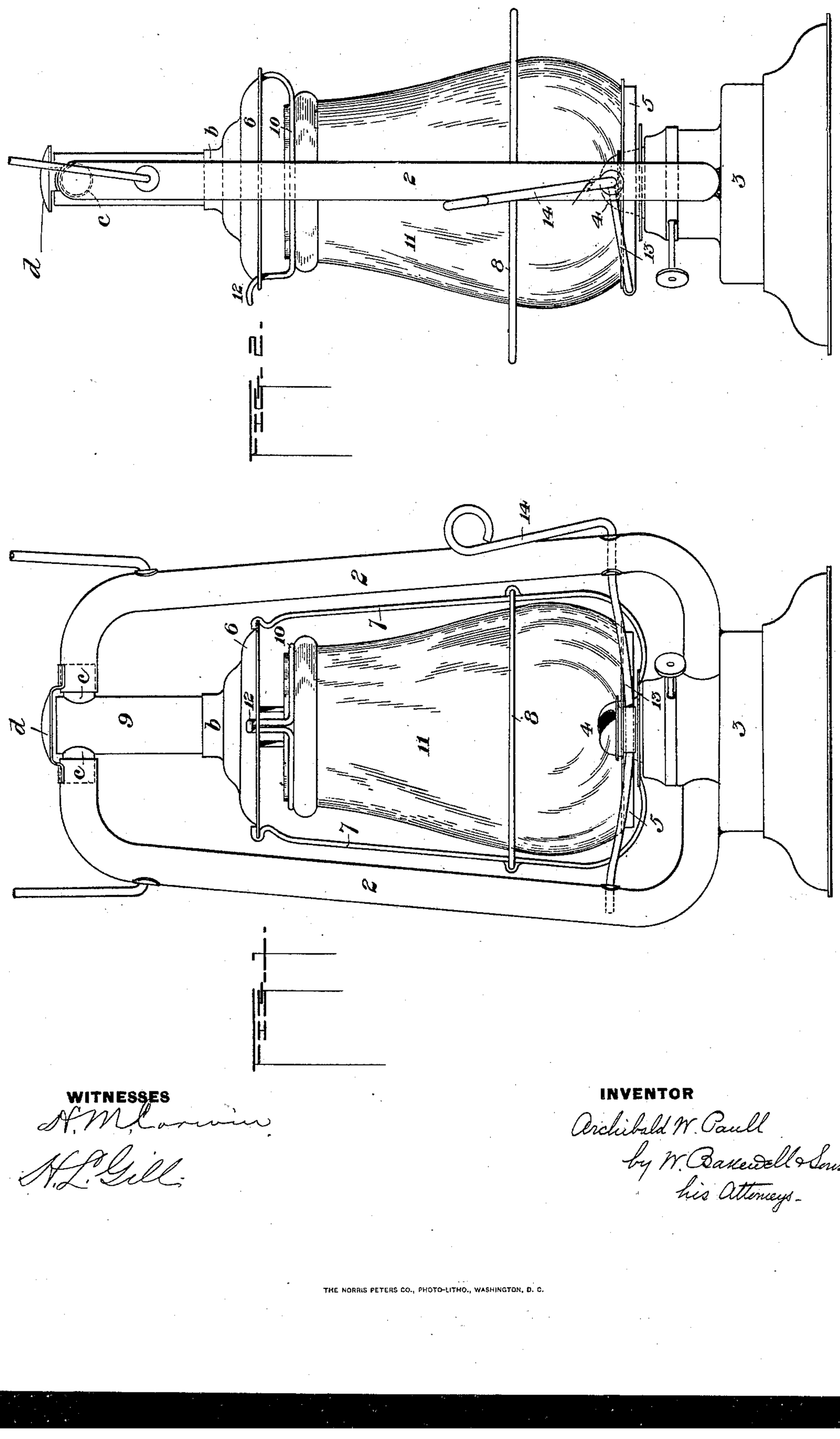

FIG. 1.

FIG. 2.

WITNESSES

A. M. Lawrence

H. L. Gill

INVENTOR

Archibald W. Paull

by W. Baxendell & Sons

his Attorneys.

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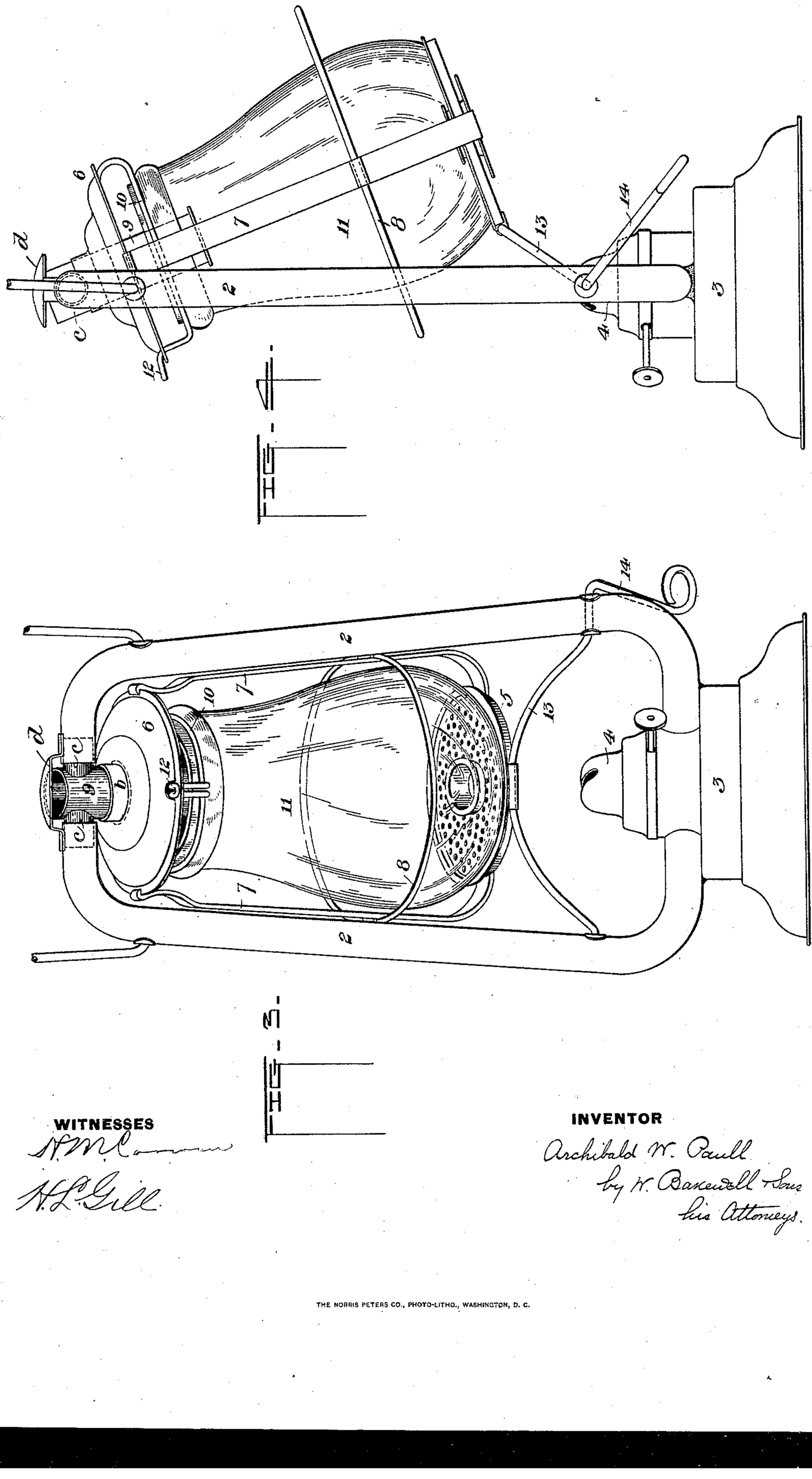

FIG. 1.

WITNESSES

N. W. Cameron

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INVENTOR

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UNITED STATES PATENT OFFICE.

ARCHIBALD W. PAULL, OF WHEELING, WEST VIRGINIA, ASSIGNOR TO THE NAIL CITY LANTERN COMPANY, OF SAME PLACE, AND THE BELLAIRE STAMPING COMPANY, OF BELLAIRE, OHIO.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 433,363, dated July 29, 1890.

Application filed January 18, 1890. Serial No. 337,319. (No model.)

To all whom it may concern:

Be it known that I, ARCHIBALD W. PAULL, of Wheeling, in the county of Ohio and State of West Virginia, have invented a new and useful Improvement in Lanterns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of my improved lantern. Fig. 2 is a side view of the same. Fig. 3 is a front view of the lantern, showing the globe in its raised position. Fig. 4 is a side view of the same.

Like symbols of reference indicate like parts in each.

My invention relates to an improvement in lanterns; and it consists in devices for shifting the globe so as to afford ready access to the burner, as is hereinafter more fully described.

In the drawings, 2 represents the air-tubes, and 3 the base or well. Fitting in the mouth of the oil-well is the burner 4, on which rests the perforated base-plate 5, which is connected with the upper or top plate 6 by the side rods or wire frame 7, which rods are connected by the circular cross wire or rod 8. Extending through an opening in the top plate 6 is the vertical tube 9, which is attached to and communicates with the upper portion of the side air-tubes 2. The plate 6 and the tube 9 are so arranged that the lantern-globe frame, of which the plate 6 forms part, may be raised and lowered, and when in a raised position may be swung laterally. I have shown in the drawings suitable devices for this purpose. The plate 6 is provided with a collar *b*, which fits around the tube 9, but is not soldered thereto, the consequence being that the plate and collar are adapted to be moved freely up and down on said tubes. The upper end of the tube 9 is provided with hollow laterally-projecting portions *c*, which fit within the ends of the side air-tubes 2, so as to afford communication between said tubes and the tube 9 and to permit the latter to swing laterally on the axis of the projecting portions *c*. The ends of the tubes 2 may be connected by a bridge-plate *d*, the effect of which is to brace and strengthen them. Attached to the plate 6 is a circular spring 10, which engages with the top of the globe 11, and is provided with a thumb-piece 12, by means of which the spring may be raised to permit of the passage of the top of the globe to a point directly under the spring after the lower portion of the globe has been seated on the plate 5. This spring serves to retain the globe 11 in its position between the two plates 5 and 6. Journaled in the air-tubes 2 near the base of the lantern is a rod 13, which is bent into the form of a segment of a circle, and is pivotally journaled to or connected with the perforated base-plate 5. Outside of one of the air-tubes the rod 13 is bent upward, forming a lever 14, the upper end of which lever is bent slightly inward, so as to engage the outer face of the air-tube and to form a spring-catch.

The purpose of the lever 14 and rod 13 is to elevate the lower plate 5, upper plate 6, and the globe, and then to carry the same to one side, so as to permit of free access to the burner.

The operation is as follows: When it is desired to raise the globe from the burner, the lever 14 is pressed away from the air-tube and down toward the base of the lantern, and, as the lever is an extension of the curved rod 13 and is bent at an angle thereto, the effect of this is, first, to raise the globe and upper and lower plates, the upper plate sliding on the air-tube, and then when the rod 13 has reached the limit of its upward motion to move the lower plate 5 and the globe laterally away from the burner the journaling of the portions *c* in the air-tubes 2 permitting the lateral swing of the globe-frame and of the tube 9. By reversing the movement of the lever 14 the globe and lower plate 5 are again brought down over the burner, while the upper portion of the lever, passing the air-tube and springing over the same, serves to retain the globe and plate in their lowered and normal position. By these means the globe is not only raised from the burner, but is at the same time thrown to one side out of the

way, as is clearly shown in Figs. 3 and 4. It will be noticed that during the swinging of the globe-frame back on the burner the rod acts as a link to secure the proper radial or swinging motion to bring the globe-supporting plate into its proper position, and that, so far as this function is concerned, the lever 14, by which the rod 13 may be operated, is unnecessary. Therefore, in the broad claim of this application I do not desire to exclude a construction in which such lever is omitted from the rod, the globe being moved and swung directly by hand.

My improved apparatus is susceptible of modification in divers ways without departing from the principles of the invention as herein claimed. Thus I believe myself to be the first to employ a globe movably connected with the body or frame of the lantern, a base, a rod pivoted at or near the base and connected with the lower portion of the globe and constructed to raise the globe and move it laterally away from the burner, and I desire to claim the same broadly, irrespective of the precise form of rod or of the precise arrangement of the pivotal connection of the globe to the lantern-frame, by which its lateral swinging motion is permitted.

In the device herein shown and described the globe-frame has a canopy sliding on a central air-tube, and this air-tube rocks on the side air-tubes. The rod which movably connects the globe-frame to the lower part of the lantern-frame may or may not have a lever, as stated, and when such lever is employed it interlocks with the side air-tubes to retain the globe-frame in position.

In the device shown and described in application Serial No. 268,280 the canopy both slides and rocks on the central air-tube, and the lever, irrespective of construction, is pivotally connected to the lantern-frame to raise and laterally move the globe-frame.

In the device shown and described in application Serial No. 337,688 the canopy slides, but does not rock, on a central air-tube, and the globe-frame is pivotally connected with the canopy to swing laterally from such canopy. The lever is connected to the upper portion of the globe-frame, and the lower portion of such frame swings free.

I claim—

1. As an improvement in lanterns, a globe pivotally connected with the body or frame of the lantern, a base, and a lever pivoted at or near the base and connected with the lower portion of the globe and adapted to raise the globe and move it laterally away from the burner, substantially as and for the purposes described.

2. In a tubular lantern, the combination, with a lantern-frame comprising air-tubes, of a globe-frame pivotally connected with the lantern-frame and having a globe-supporting plate, and a rod journaled in the lantern-tubes and connected with the lantern-frame and adapted to raise the globe and to swing it laterally away from the burner between the air-tubes, substantially as and for the purposes described.

3. In a tubular lantern, the combination, with a lantern-frame comprising air-tubes, of a globe-frame pivotally connected with the lantern-frame and having a globe-supporting plate, and a rod journaled in the lantern-tubes and connected with the lantern-frame and adapted to raise the globe and to swing it laterally away from the burner between the air-tubes, said rod having at its end an operating-handle, substantially as and for the purposes described.

4. In a tubular lantern, the combination, with a globe-supporting plate, of a rod connected with the plate and journaled in the tubes of the lantern and having at one of its ends an operating-lever constructed to swing over one of the tubes to form a lock therefor, substantially as and for the purposes described.

5. The combination, with the base and the side and central tubes forming the usual lantern-frame, of a globe frame or holder having its upper end at all times secured to said frame and its lower end hinged to the lantern-frame to swing laterally out of position whereby the globe may be shifted to expose the burner without freeing it at either end from the fixed parts of the lantern, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 10th day of January, A. D. 1890.

ARCHIBALD W. PAULL.

Witnesses:
W. B. CORWIN,
H. L. GILL.