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A. W. WALTER.
TUBULAR LANTERN.

APPLICATION FILED SEPT. 8, 1905.

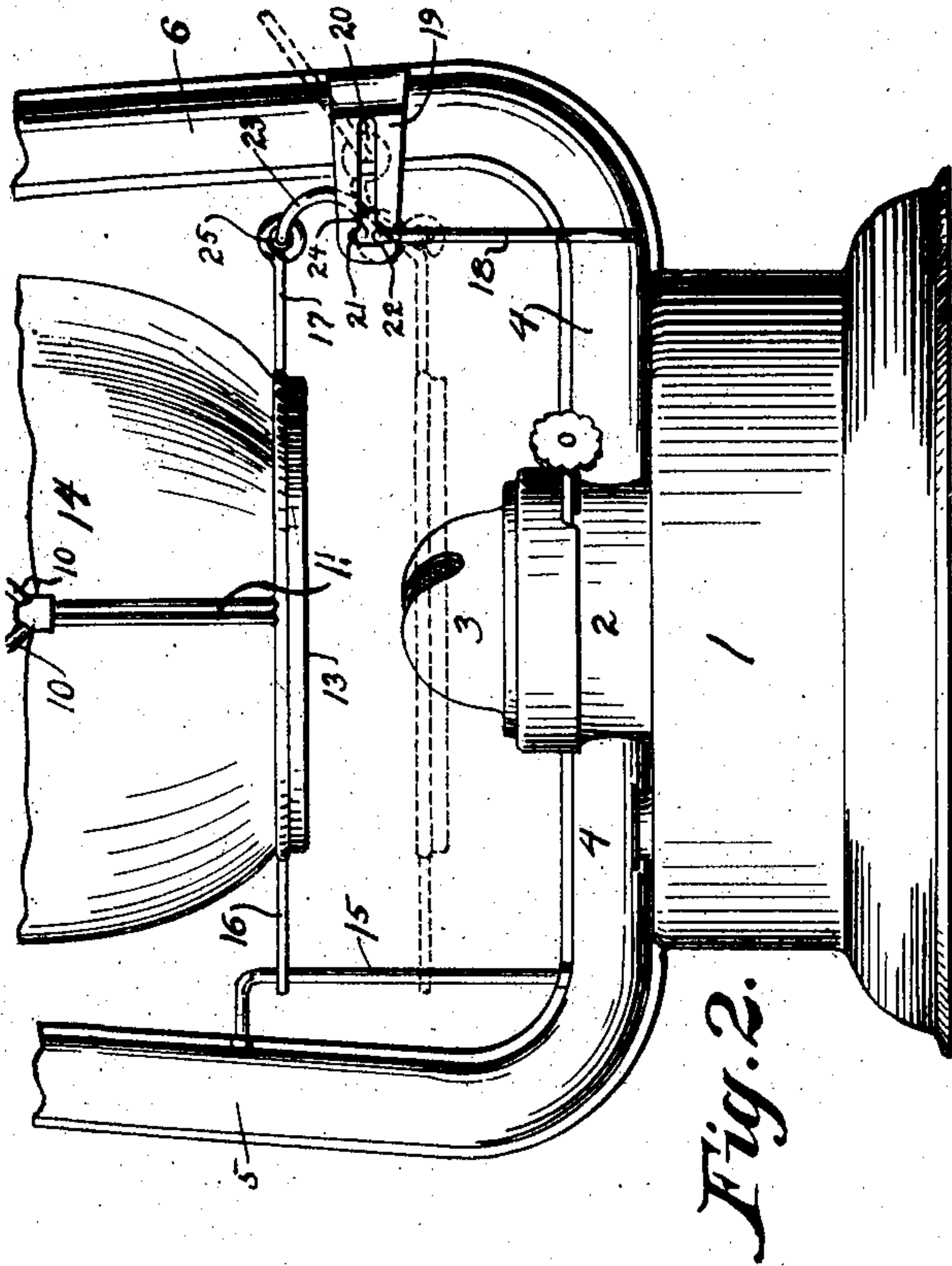


Fig. 2.

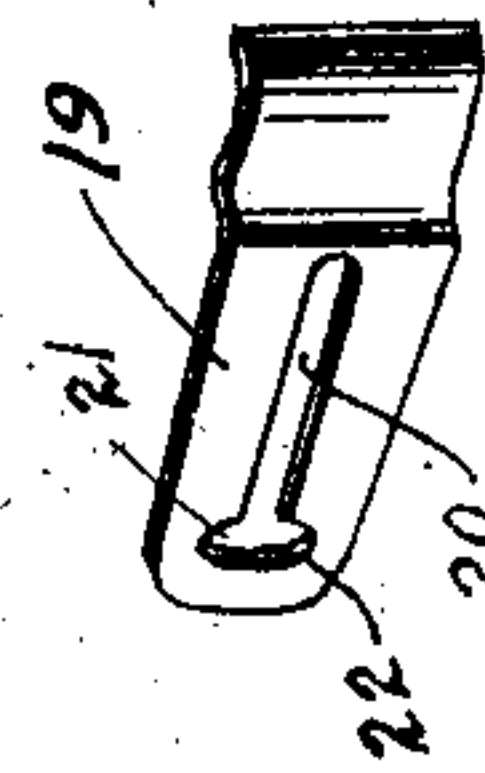


Fig. 4.

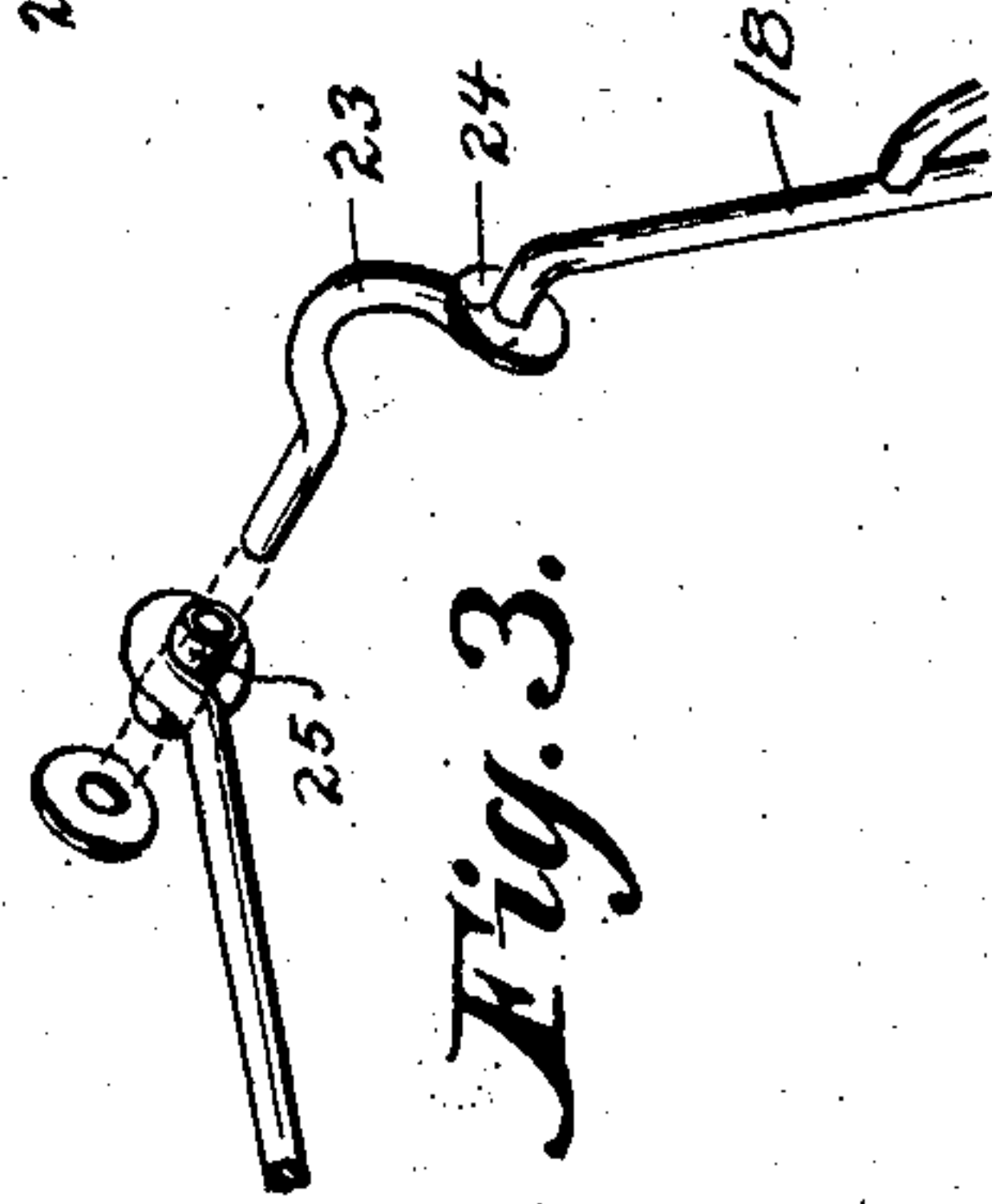


Fig. 3.

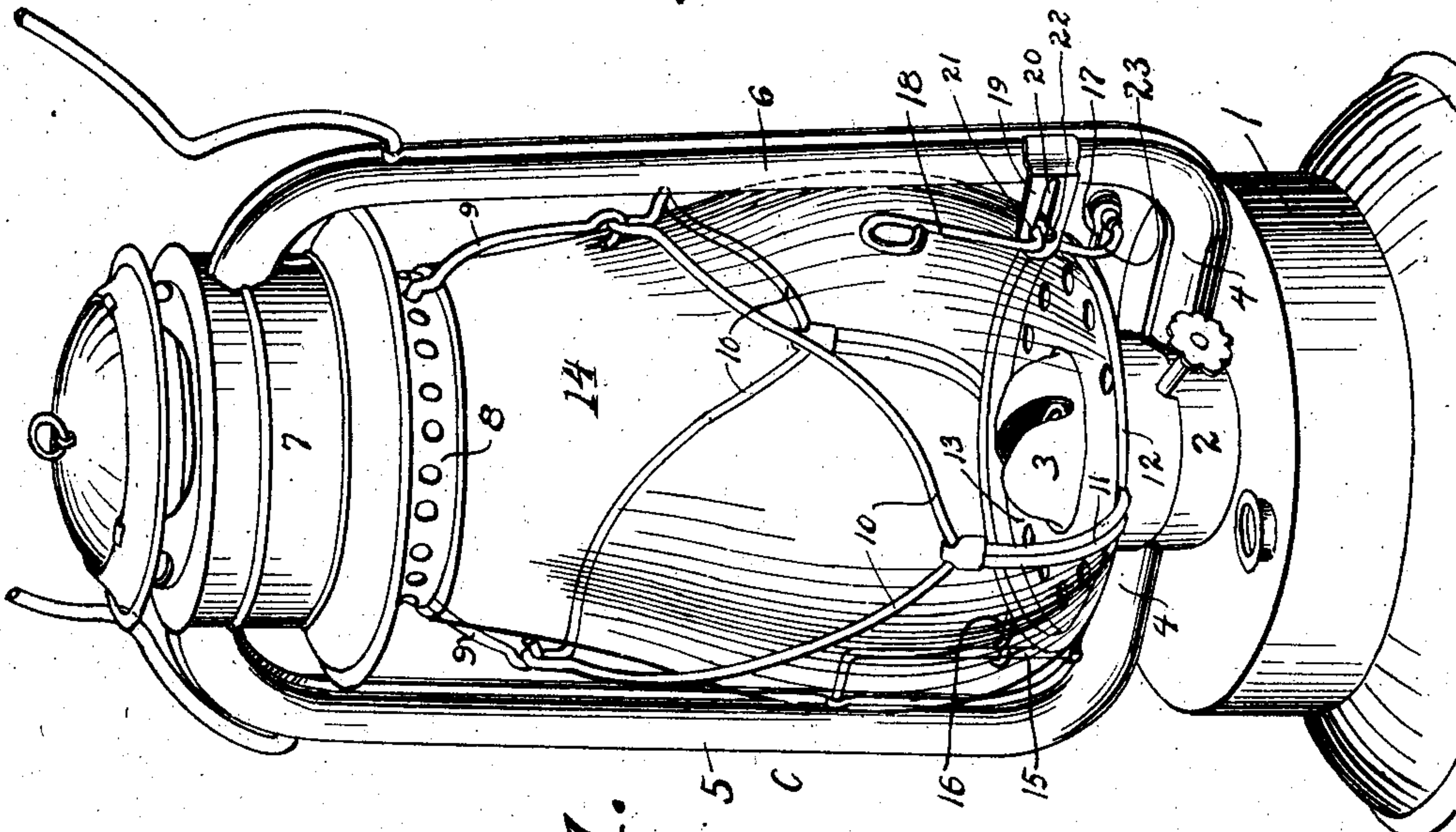


Fig. 1.

WITNESSES

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TUBULAR LANTERN.

No. 834,347.

Specification of Letters Patent.

Patented Oct. 30, 1906.

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To all whom it may concern:

Be it known that I, ANTON W. WALTER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Tubular Lanterns; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a perspective view of a tubular lantern, showing the combined globe-carrying frame, globe, and the frame and the globe-operating devices. Fig. 2 is a side elevation showing the lower portion of the lantern, illustrating the globe and its frame elevated, also showing in dotted lines the lower portion of the frame partially elevated. Fig. 3 is a view showing the globe and frame operating lever and a portion of the globe-frame lifting and lowering arm. Fig. 4 is a detached view of the lantern-locking plate.

The present invention has relations to tubular lanterns wherein mechanism is employed to elevate and lower the globe-frame and globe together with the different parts pertaining to and belonging to the relatively movable parts with reference to the main frame or body of the lantern proper.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the oil-reservoir of the lantern, upon which are mounted and attached in the usual manner the air-chamber 2 and the burner 3. To the air-chamber 2 and on either side thereof are attached horizontal air-tubes 4, which are continued to produce the vertical side tubes 5 and 6, which side tubes are extended upward and are attached to the ventilating-head 7 in the usual manner, and in which ventilating-head is located the top portion of the globe-frame 8, which portion is preferably formed of sheet metal, and to which are attached the wire members 9, and to which wire members 9 are attached wire members 10, and to which wire members 10 are attached the members 11, which members 11 carry the plate-holding ring 12, the plate 13 being located substantially as shown in the drawing, and of course is for the

purpose of properly closing the lower end of the globe 14.

The construction of the different parts carrying and holding the globe forms no particular part of the present invention, except as to the specific devices in connection therewith, by which the globe, its frame, and all the parts movable with the globe are elevated and lowered. To one of the vertical side tubes is attached the top or upper end of the guide-bar 15, and its bottom or lower end attached to one of the horizontal tubes 4. From the ring 12 extends the lateral arm 16, which arm is slidably connected to the rod 15. Diametrically opposite the arm 16 is located the arm 17, to which arm is pivotally attached the lever 18, which lever is formed of such a length that it will provide sufficient leverage to elevate the globe and the different parts movable therewith.

To the opposite vertical tube from that to which the rod 16 is attached is attached the inward-extending plate 19, which inward-extending plate is provided with the elongated slot 20, through which elongated slot the lever 18 is located, said lever being bent so that its opposite extending portions will be upon opposite sides of the plate 19, as illustrated in Figs. 1 and 2, by which arrangement the lever is held in proper relation with reference to the slot-plate 19. The extreme inner end of the elongated slot communicates with the recesses 21 and 22, which recesses are for the purpose of engaging that portion of the lever located in the slot 20.

In Fig. 1 the globe and its frame are shown in a lowered position, which is their normal one when the lantern is lighted and in use, and when said parts are in a lowered position the lever 18 is in an elevated or uplifted position and engaged with the upper recess 21.

When it is desired to elevate the globe-frame proper and the globe carried thereby, the lever 18 is moved outward, at which time it is disengaged from the notch 21 and is free to move in the slot 20 until it comes in contact with the outer closed end of said slot, and when engaged with the outer end of the slot the lever can be turned so as to bring it into the position illustrated in Fig. 2, which movement elevates the globe and its frame by reason of the changed position of the lever, and for the purpose of locking the globe-frame and globe in an elevated

position the notch or recess 22 is provided, which notch or recess receives the lever 18.

It will be understood that by pivotally attaching one end of the lever 18 to the arm 5 17 said arm must follow the movement of the pivoted end of the lever. For the purpose of locking the lever 18 when the globe and its frame is lowered, said lever is provided with the curved or bent portion 23, 10 which gives the lever proper a slight spring action, which spring action forces the portion of the lever opposite the recess 21 into said recess. When the globe-frame and globe is in an elevated position, the lever 18 15 will be held in the lower recess by gravity, the weight of the globe and its flange resting upon the now upper and pivoted end of the lever.

It will be understood that the recesses 21 20 and 22 should be so formed that when a pull is given to the lever it will be detached from whichever recess it may be engaged with; but the contact should be such that the lever will not become accidentally disengaged from 25 either of the recesses 21 or 22.

If desired, a collar 24 may be attached to the lever 18, which collar is adapted to come against the face of the plate 19. For the purpose of reducing the friction as between 30 the arm 17 and the lever 18 the sleeve 25 may be, and preferably is, provided, and said sleeve mounted upon the lever 18.

By providing the guide-rod 15 and connecting the arm 16 thereto in such a manner 35 that the arm can slide up and down on the guide-rod the movement of the different parts connected to the ring 12 or formed integral therewith must move parallel with said guide-rod, and hence the rocking and 40 sliding movement of the lever 18 will elevate

and lower the globe-frame notwithstanding the fact that the only fixed pivoted point of the lever is to or with the arm 17 and that said lever is not pivoted or fixedly attached to any part of the lantern-frame proper. 45

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a lantern-frame, a globe-plate guided therein, a stationary 50 slotted part fixed on said frame, and a lever pivoted to said globe-plate and having a horizontal portion movable along said slotted part as the fulcrum for raising and lowering said globe-plate. 55

2. The combination of a lantern-frame, a globe-plate guided therein, a stationary slotted part on said frame having the slot lying substantially radially to the center of the globe-plate, and a lever pivoted to said 60 globe-plate and having a horizontal portion movable along said slotted part as the fulcrum for raising and lowering said globe-plate.

3. The combination of a lantern-frame, a 65 globe-plate guided therein, a stationary slotted part fixed on said frame, and a lever having a horizontal part movable along said slotted part as a fulcrum and two arms, one being on one side of said slotted part and 70 pivoted to said globe-plate and the other being on the other side of said slotted part and having a thumb-plate.

In testimony that I claim the above I have hereunto subscribed my name in the presence 75 of two witnesses.

ANTON W. WALTER.

Witnesses:

FRANK A. SCHWERTNER,
J. SOHM.