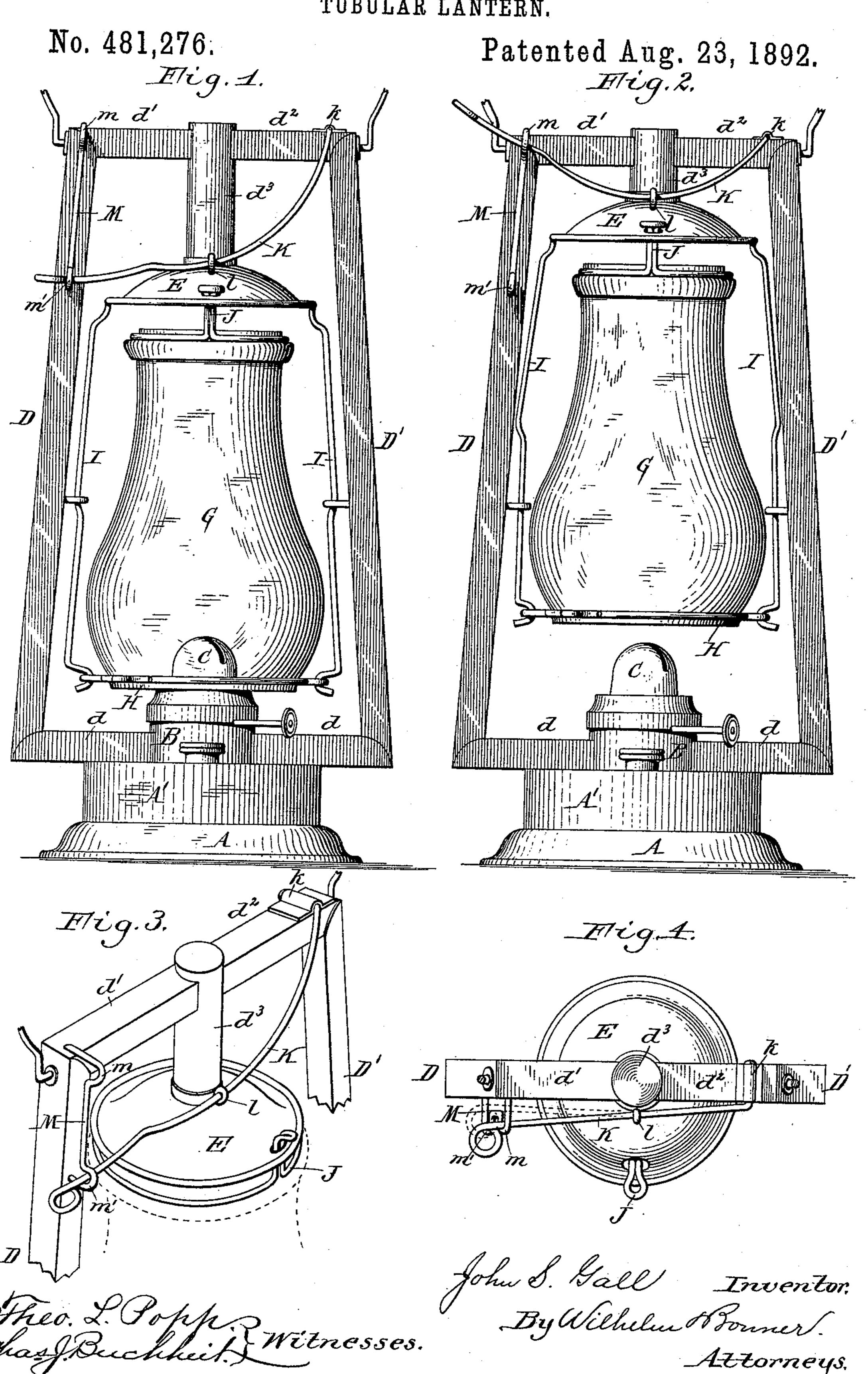
J. S. GALL. TUBULAR LANTERN.



## United States Patent Office.

JOHN S. GALL, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE STEAM GAUGE AND LANTERN COMPANY, OF SAME PLACE, AND THE R. E. DIETZ COMPANY, OF NEW YORK, N. Y.

## TUBULAR LANTERN.

SPECIFICATION forming part of Letters Patent No. 481,276, dated August 23, 1892.

Application filed October 8, 1888. Serial No. 287,541. (No model.)

To all whom it may concern:

Beitknown that I, JOHNS. GALL, of Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Tubular Lanterns, of which the fol-

lowing is a specification.

This invention relates to that class of tubular lanterns in which the globe is mounted in a vertically-movable frame, which can be raised from the burner when access is required to the latter for trimming the wick, lighting or extinguishing the lantern, or for other purposes, and which are provided with a lifting-lever pivoted to the lantern above the globe-frame, whereby the globe-frame can be raised and lowered—as, for instance, in the lantern of the patent to Glazier, No. 372,533, dated November 1, 1887.

The object of my invention is to simplify the construction of the mechanism by which the globe-frame is raised and lowered and held in position at either extreme of its move-

ment.

My invention consists of the improvements which will be hereinafter fully described, and

pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a lantern provided with my improvement, showing the globe-frame restart ing on the burner. Fig. 2 is a similar view showing the globe-frame elevated. Fig. 3 is a perspective view of the upper portion of the lantern. Fig. 4 is a top plan of the lantern.

Like letters of reference refer to like parts

35 in the several figures.

A represents the base of the lantern, containing the oil-pot A', air-chamber B, and burner C. D D'represent the side tubes; dd, the lower horizontal branches of these tubes; d'd', the upper horizontal branches thereof, and d' the central depending tube, connected with the upper branches d'd' of the side tubes. E represents the bell or saucer shaped plate, mounted loosely on the central tube d', so as to slide vertically on the same. G represents the globe, H the plate on which the globe rests, and I I the side wires connecting the plate H with the bell E. J represents the annular spring-catch, which is secured to the under side of the bell and which holds the

upper end of the globe. All of these parts may be of any suitable or well-known construction.

The base, the side tubes and their branches, and the depending central tube constitute the 55 rigid lantern-frame, and the bell, with its spring-catch, the plate on which the globe rests, and the side wires constitue the verti-

cally-movable globe-frame.

K represents the lifting-lever, which is piv- 60 oted to the rigid lantern-frame near one of the uppercorners thereof and which extends across the front side of the lantern-frame above the bell and terminates with its free end near the opposite side of the lantern-frame. As shown 65 in the drawings, the lifting-lever K is pivoted at k to the upper side of the upper branch tube  $d^2$ , near the outer end thereof, and passes through an eye l, secured to the upper side of the bell on the front side of the central tube 70  $d^3$ . The free end of the lifting-lever, which is provided with a thumb-piece, is arranged on the front side of the side tube D and behind a catch M, which is secured to the front side of said tube. This catch is preferably con-75 structed of wire and is provided at its upper and lower ends, respectively, with forwardlyprojecting bent portions, forming indentations or recesses m m', in which the liftinglever engages at either extreme of its move- 80 ment, and whereby it and the globe are locked in position. This lever is preferably made of spring-brass or other elastic material and so formed that in its normal position it will engage with its free end in one of these depres- 35 sions, as represented in Fig. 4. Upon pressing the free end of the lever back, as represented in dotted lines in Fig. 4, the lever is disengaged from the indentation and can then be raised and lowered on the catch. When 90 the lever reaches the indentation at the opposite end of the catch, it enters the same, and is thereby locked in position.

This lifting device is very simple in construction and locks the globe-frame securely 95 in either of its extreme positions when resting on the burner or when elevated to give ac-

cess to the burner.

I claim as my invention—

1. The combination, with the lantern-frame 100

provided with a depending central tube, of a vertically-movable globe-frame provided with a bell which slides on said central tube, an eye secured to said bell, and a lifting-lever pivoted to the lantern-frame near one side thereof and passing through the eye of the bell to the opposite side of the lantern-frame, substantially as set forth.

2. The combination, with the lantern-frame provided with a depending central tube and the vertically-movable globe-frame provided with a bell which slides on said tube, of a lifting-lever pivoted to the lantern-frame at one side thereof and extending across the lantern-

frame to the opposite side and connected between its fulcrum and its free end with the upper portion of the globe-frame and an upright catch secured to the lantern-frame adjacent to the free end of the lifting-lever and provided with an upper and a lower stop, with 20 either of which the lifting-lever can be engaged, substantially as set forth.

Witness my hand this 5th day of October,

1888.

JOHN S. GALL.

Witnesses:

P. L. SALMON, A. D. CLOSE.