

G. D. BURTON.  
Street-Lamp.

No. 214,021.

Patented April 8, 1879.

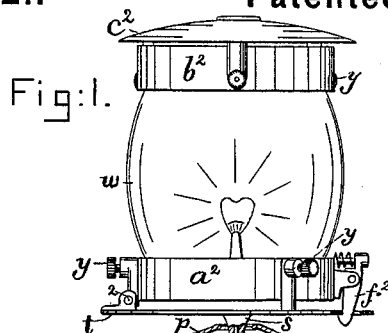
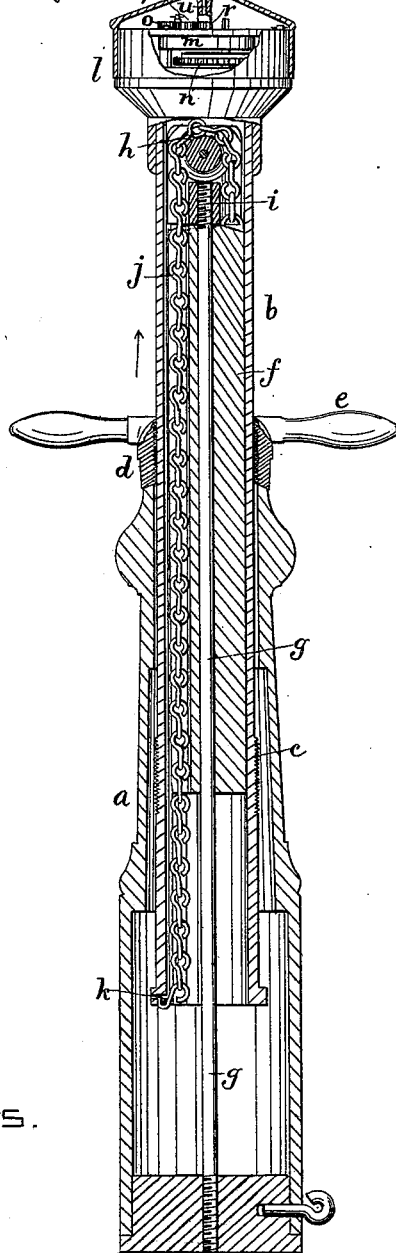
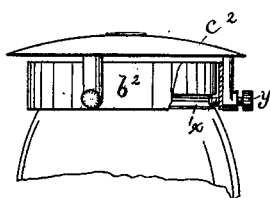


Fig: 2.



Witnesses.  
A. E. Whitney.  
L. W. Miller.

Inventor  
George D. Burton  
by Crosby & Morgan  
Attys

# UNITED STATES PATENT OFFICE.

GEORGE D. BURTON, OF NEW IPSWICH, NEW HAMPSHIRE.

## IMPROVEMENT IN STREET-LAMPS.

Specification forming part of Letters Patent No. **214,021**, dated April 8, 1879; application filed February 12, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE D. BURTON, of New Ipswich, county of Hillsborough, State of New Hampshire, have invented an Improvement in Street-Lamps, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to improvements in street or park lamps, whereby they may be lowered to be lighted, and then raised, and also to render the lamp available for advertising purposes.

In this invention the lamp-post is made telescopic, or one part is made to slide within the other, a suitable weight concealed within the post serving to elevate the upper portion thereof when released, the said upper portion being retained in the elevated position by a nut engaging with a threaded portion of the said upper portion.

At the uppermost part of the lamp-post I have added a clock mechanism or train of gear to rotate the lantern, preferably made as a globe, open at both ends, and held at both ends by means of set-screws within suitable collars.

Figure 1 represents one of my street-lamps completely lowered, the post being in section, and the case inclosing the train of gear being broken away; Fig. 2, a detail of the method of holding the globe.

The post is composed of the base part *a*, which will be set into the ground sufficiently far to maintain the post in proper vertical position, and of a top part, *b*, which is fitted within the hollow center of the base, so as to be raised and lowered therein. At or near the lower portion of the part *b* is a screw-threaded portion, *c*, (see Fig. 1,) which, when the portion *b* is elevated, is retained in elevated position by means of the nut *d*, supported at the upper end of the base, the internal screw-threads of the nut fitting the threaded portion *c*. (See Fig. 2.) This nut will, preferably, have handles, as at *e*; but instead of handles it may be made octagonal or of other proper shape to be readily engaged and rotated.

The counter-balance for the top *b* of the post and the lamp thereon is a tubular weight, *f*,

fitted to slide on a fixed rod, *g*, having at its top a sheave, *h*, supported by a nut, *i*, screwed upon the rod. A flexible connection, *j*, (shown as a chain,) connected at one end with the weight *f*, and extended over the sheave, passes through a groove made in the outer portion of the weight, and the other end of the chain is connected, as at *k*, with the lower end of part *b*.

Instead of this flexible connection shown as a chain, it is obvious I may employ a wire rope.

As the part *b* is lifted in the direction of the arrow near it, which may be done with little or no effort, according to the size of the weight, the weight descends within the hollow base.

At the upper portion of the top of the post I have placed a shell or case, within which I have arranged an ordinary train of gear common to clocks, and which need not, therefore, be herein specifically described, further than to say that the mainspring *m*, which acts to rotate the main pinion *n* by other pinions, (not shown) rotates the pinion *o*, which, in this instance, rotates an idle-wheel, *p*, which meshes with a pinion, *r*, at the foot of the stem *s*, which projects downward from the lamp-bottom *t*, the stem being hollow to fit over a pin or pipe, *u*, projected upward above the train of gear.

The lamp-globe *w*, which will be of glass and open at both ends, has an annular recess or collar, *x*, at each end, (see Fig. 2,) with which co-operate the ends of suitable set-screws *y*, the set-screws holding the globe securely, but so that a globe may be readily removed and replaced.

The set-screws at the lower end of the globe are held in a collar, *a*<sup>2</sup>, and those at the upper end of the globe in a collar, *b*<sup>2</sup>. The latter collar has above it an open space, and then the lantern-top *c*<sup>2</sup>; and the collar *a*<sup>2</sup> is pivoted at 2 to the base-plate *t* of the lantern, so that the same, with the globe, may be tipped over to clean the globe or to permit the lighting of a suitable lamp set upon the plate *l*; or it may be a gas-burner at the end of a pipe extended up through the center of the post. A suitable clutch, *f*<sup>2</sup>, pivoted upon an ear of the collar *a*<sup>2</sup>, confines it to the lantern-base *t*. This train of gearing, wound up and prop-

erly started, will rotate the lantern or the glass globe, so that a sign or letters painted thereon will be kept in constant motion, thereby attracting attention, and rendering the street-lamp an available and desirable advertising medium.

I am aware that lanterns and cages containing lamps have been supported so as to be lowered about a central post, to facilitate lighting the lamps, as in patents heretofore granted to myself and others, and the said lanterns or cages have been counterbalanced by weights.

The base *a* will be made of cast metal, while the upper part, *b*, may be made either of cast metal or of metal tubing.

I claim—

1. The base *a* and top part *b*, in combination with a counter-balance weight, *f*, a locking-nut, and a threaded portion, *c*, of the part *b*, substantially as described.

2. A casing, *l*, forming the tip of a lamp-

post, in combination with its inclosed train of gearing, the base-plate *t*, and a lantern adapted to be rotated by said gearing, substantially as and for the purpose described.

3. A lamp-globe and the collars *a*<sup>2</sup> *b*<sup>2</sup>, fitted to its ends, combined with the set-screws to hold the globe at each end, substantially as described.

4. The base *a*, its sliding interior portion *b*, and guide-rod *g*, combined with the weight and the sheave, and the flexible connection connected with the portion *b* and with the weight, to operate substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. D. BURTON.

Witnesses:

WILLIAM A. PRESTON,  
H. O. PRESTON.