J. IRWIN.

STREET-LAMP.

No. 188,142. Patented March 6, 1877.

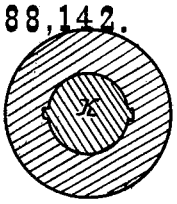

Fig. 3
Top View of Socket showing rod that attaches lid

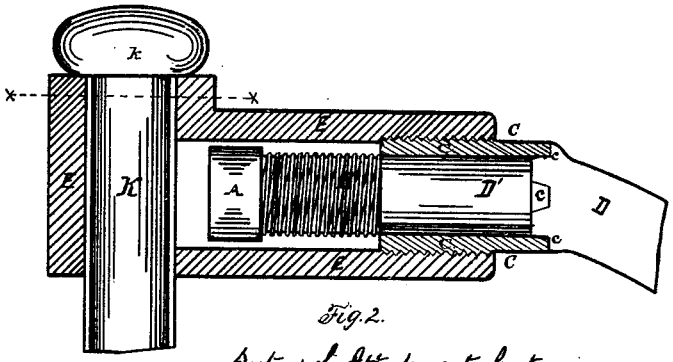

Fig. 2.
Section of Attachments for turning lid of lamp from Globe

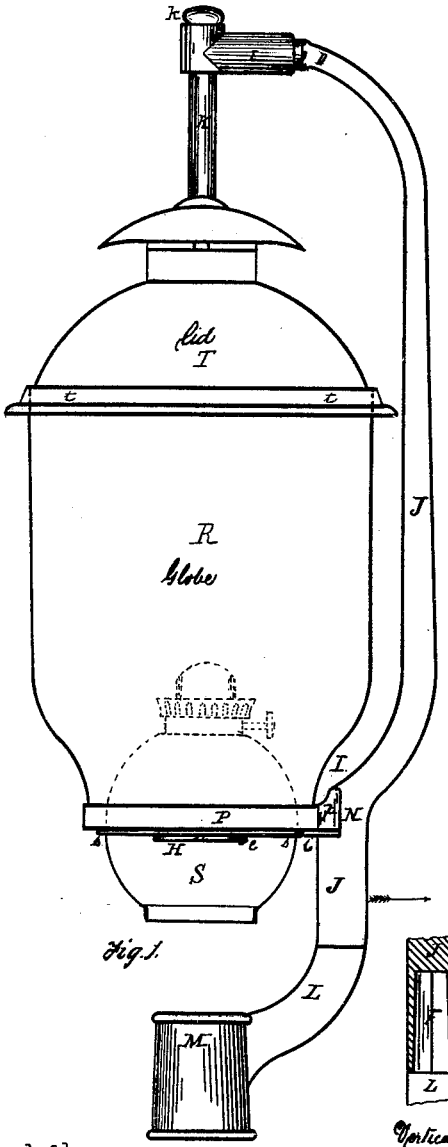

Fig. 1.

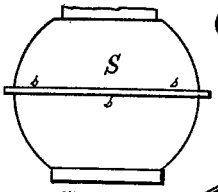

Fig. 9.

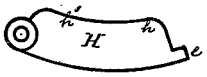

Fig. 8.

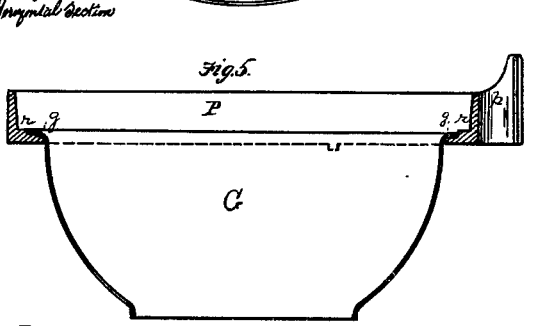

Fig. 4.
Top View of Globe Holder

Fig. 6.
Horizontal Section

Fig. 7.
Vertical Section

Fig. 5.

WITNESSES.
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UNITED STATES PATENT OFFICE.

JAMES IRWIN, OF ALLEGHENY, PENNSYLVANIA.

IMPROVEMENT IN STREET-LAMPS.

Specification forming part of Letters Patent No. **188,142**, dated March 6, 1877; application filed January 9, 1877.

To all whom it may concern:

Be it known that I, JAMES IRWIN, of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Street-Lamps; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view or elevation of my improved lamp. Fig. 2 is a partial sectional view of the devices by which the lid is raised and turned from the globe. Fig. 3 is a sectional view through the line *x x*, Fig. 2. Fig. 4 is an enlarged view of the globe-holder. Fig. 5 is a sectional view of the globe-holder and glass bottom globe. Figs. 6 and 7 show the manner in which the globe and lamp may be turned out of position. Fig. 8 is a view of one of the fasteners for securing the reservoir, and Fig. 9 is a side view of the reservoir.

Similar letters of reference indicate like parts wherever they occur.

My invention relates to improvements in street and similar lamps; and it consists, first, in mechanism by means of which the lamp-lid may be lifted and thrown clear of the lamp-globe; second, in so constructing the base-ring or globe-supporter that it shall be adapted to receive and sustain a supplemental or flame globe, or a lamp, or hydrocarbon-reservoir at pleasure; third, in connecting the globe-holder to the standard by means of the T-shaped lug, so that it can be removed at pleasure; fourth, in constructing the standard with a socket-joint, in order that the lamp may be reversed or turned from its position over the post; fifth, in devices for attaching the carbon-oil holder or reservoir to the globe-holder.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the drawing referred to, M represents the ferrule or socket, by means of which the lamp is attached to the post or other place. The ferrule M is provided with the arm L, having a square or irregular portion upon the shank F. The standard J has, at its lower end, a socket, which fits over the square portion of shank F, and holds the standard rigidly thereon. At the point N the standard J is provided with a T-shaped lug, I, and rest *i*, upon which the arms *p p* of the globe-holder P catch, and by means of which the globe-holder is attached to the standard. The globe-holder is provided with two flanges, in the upper one, *r*, of which the upper or principal globe R rests, and in the lower one, *g*, of which the lower or flame globe G is suspended, as shown in Fig. 5. The lower globe G serves to protect the flame more effectually from the drafts, and thus keep it more steady. The standard J is extended up above the lamp, and bent, as at D, to hold the lid T. The rod D′ is a continuation of the standard J, and is cylindrical, and of less diameter than the elbow portion D. The end of the rod D′ is threaded for the reception of the nut A. Working over the rod D′ is the sleeve C, provided with the four lugs *c*, which fit into corresponding recesses in the elbow D. The sleeve C is slipped over the rod D′, and the spiral spring held against it by the nut A. The sleeve C is provided on its outer surface with screw-thread, upon which the T-shaped socket E is screwed. Passing through and keyed in the socket E is the rod K, to which the lid of the lamp is attached by a nut, or in any suitable manner. The rod K is capable of vertical motion in the socket E, and is provided with the knob *k*, which prevents its escape therefrom.

When my improved lamp is to be used with oil, the lower globe is removed, and the carbon-oil holder S, or reservoir, provided with the flange *s*, is placed against the lower part of the globe-holder P, the fasteners H having been swung out from the globe-holder to allow the adjustment of the reservoir S. The fasteners H are then swung in, so that the lips *h* catch under the flange *s* and hold it against the globe-holder P, the lugs *e* being supported by hooks or projections in the lower part of the globe-holder, provided for that purpose.

The operation of my improved street-lamp is as follows: The globe-holder P is caught on the standard J at N, and the lower globe G suspended therein. The upper globe rests in the holder P, and the lid T rests upon the globe R, the flange *t* holding the globe R in place. When the globe is to be removed, the rod K is raised in the socket E, and the socket E and sleeve C drawn over until the spring is

sufficiently compressed to allow the lugs *c* to free themselves from the recesses in which they rest. The socket E is then given a quarter-turn, carrying with it the rod K and lid T, and the lugs *c* again spring back into the recesses above referred to, thus clearing the lid from the globe, and holding it in the position which it has assumed.

In case the lamp is to be used with oil, and the space between the ferrule M and the globe-holder is not sufficient to allow of the admission of the reservoir S, the standard J is lifted up until the socket frees the square on shank F, and is then reversed or turned thereon so as to carry the globe and its standard out of line with the post or other support. The carbon-holder S may then be inserted in the manner above described, and the standard again returned to the position before occupied.

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

1. In a lamp of the class specified, the combination, with the globe-lid, of the sliding rod and swivel-connection, substantially as and for the purpose specified.

2. In a lamp of the class specified, the combination of the spring locking devices with the lid and its swiveling connections, substantially as and for the purpose specified.

3. In combination with the main globe, the globe ring or support provided with a supplemental flange adapted to sustain a flame-globe or oil-reservoir, substantially as specified.

4. In a lamp of the class specified, the combination of the main globe, the globe ring or support, and the flame-globe, substantially as and for the purpose specified.

5. The combination of the standard provided with the T-shaped lug I and rest *i*, with the globe-holder having the T-slot formed by arms *p p*, substantially as and for the purpose specified.

6. In a lamp of the class specified, the jointed standard provided with the locking-socket, substantially as and for the purpose specified.

7. In a lamp of the class specified, which has a main globe and globe ring or support, catches secured to the globe-ring, substantially as and for the purpose specified.

In testimony whereof I, the said JAMES IRWIN, have hereunto set my hand.

JAMES IRWIN.

Witnesses:

F. W. RITTER, Jr.,

JAMES I. KAY.