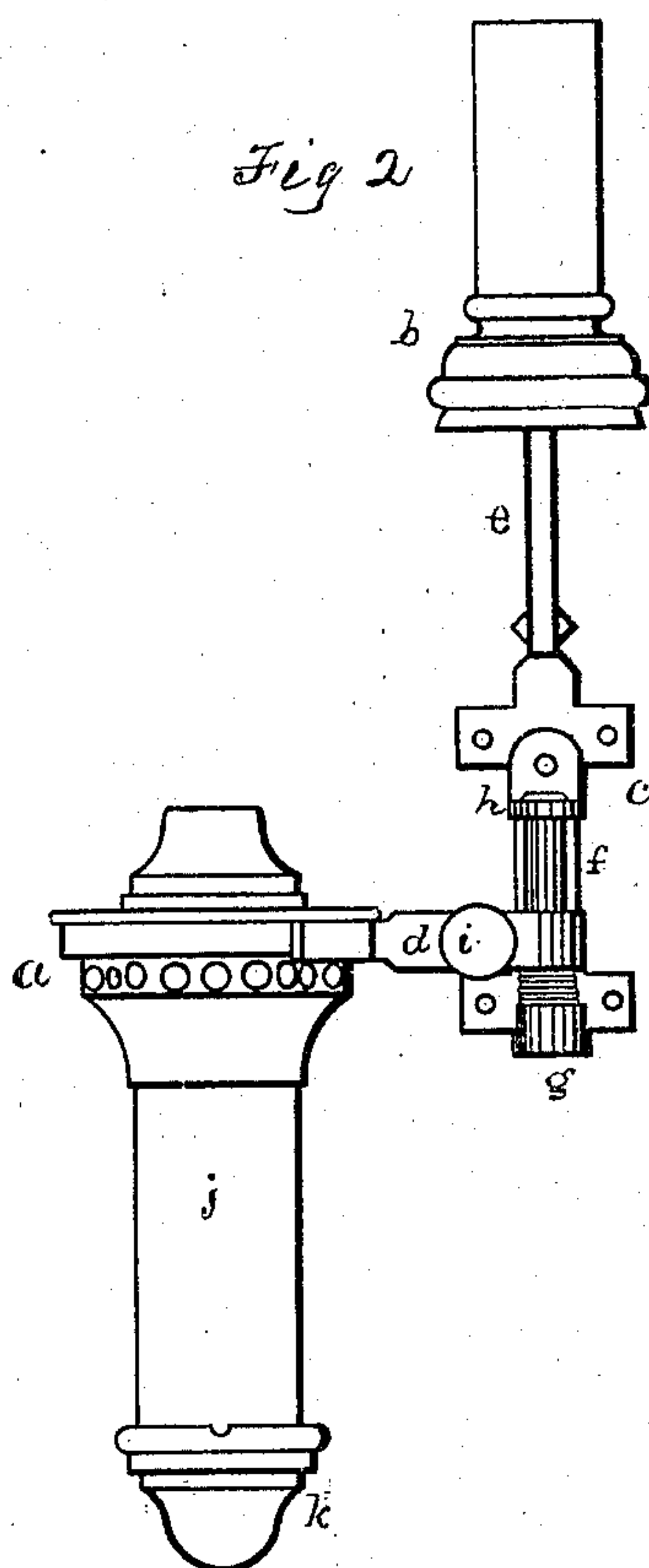
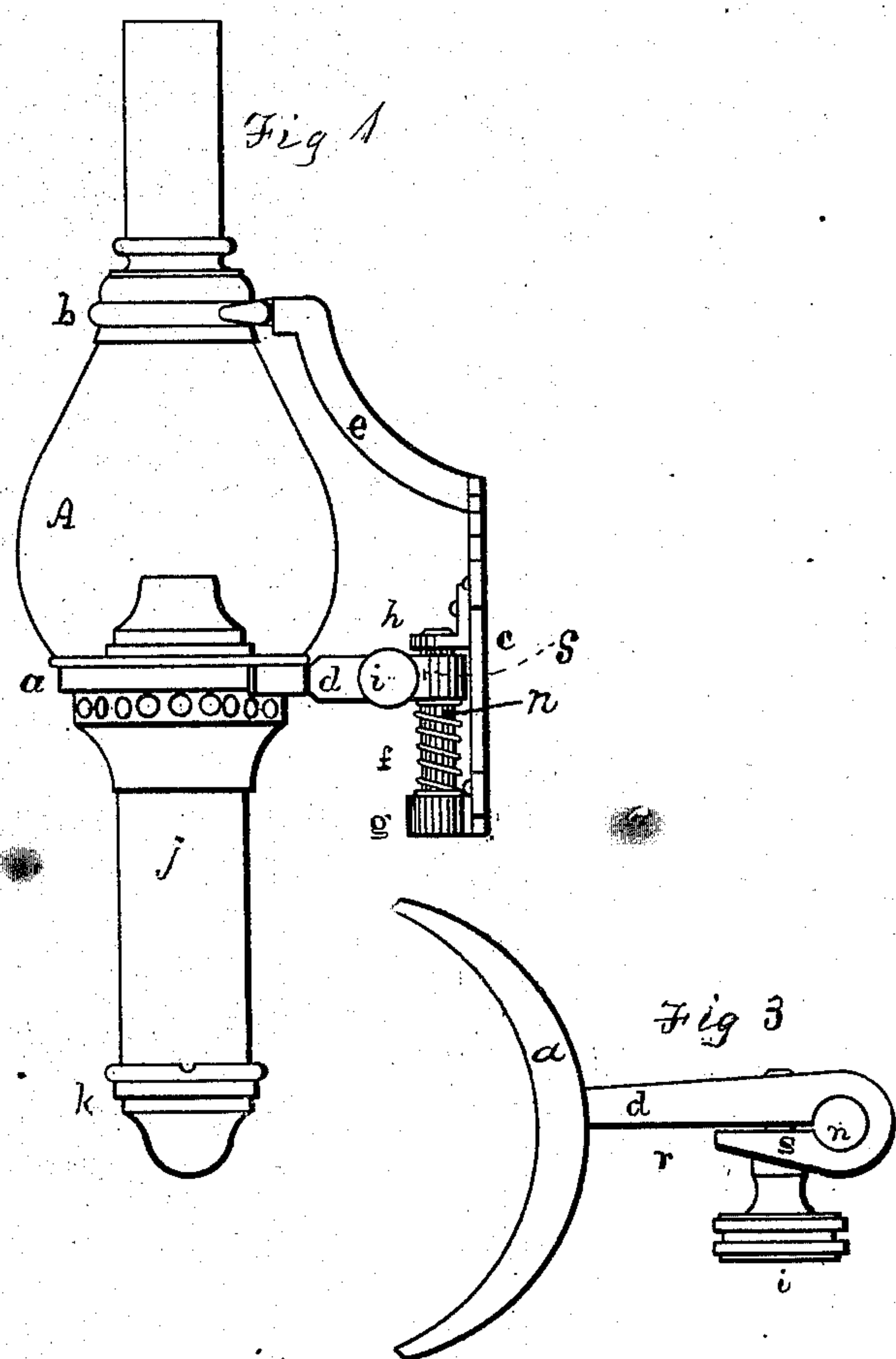


J. B. HOYT
Car-Lamp.

No. 159,324.

Patented Feb. 2, 1875.



Witnesses.
E. A. West.
W. B. Bond.

James B. Hoyt
Inventor

UNITED STATES PATENT OFFICE.

JAMES B. HOYT, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN CAR-LAMPS.

Specification forming part of Letters Patent No. 159,324, dated February 2, 1875; application filed July 27, 1874.

To all whom it may concern:

Be it known that I, JAMES B. HOYT, of the city of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Car-Lamps, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, a front elevation, showing the receiving-hoop turned around into the proper position for removing and replacing the globe; and Fig. 3, an enlarged detail.

My invention relates to so-called loose-globe car-lamps; and its nature consists in making the hoop which receives the globe, and connecting the same with the supporting-bracket, in such a manner that the hoop can be depressed and turned around for the purpose of removing the globe and replacing the same, and in permanently connecting the receiving-hoop with the candle-socket, thereby dispensing with a set of springs.

In the drawings, *A* represents the globe; *a*, the receiving-hoop; *b*, the cap, into which the upper end of the globe passes; *c*, a bracket to be attached to the side of a car. The hoop *a* is permanently connected to the part *d*, which is connected with the bracket *c* in such a manner that it, with the hoop, can be depressed and swung around to one side. This can conveniently be done by connecting with the bracket a pin, *f*, and providing the part *d* with a hole, *n*, to receive such pin. This pin *f*, as represented, is supported upon *g*, and its upper end may be supported, after the part *d* has been placed thereon, by means of a collar, *h*, secured to the bracket *c* by means of a screw.

A convenient way of making the part *d* is represented in Fig. 3, *n* being a hole drilled through a solid piece of metal, and *r* a slit sawed through the solid metal, so as to provide a spring, *s*.

i is a set-screw, by means of which the part *d* can be clamped upon the pin *f*. *e* may be regarded as a continuation of the bracket *c*, and it is permanently connected to the cap *b*. *j* is the candle-socket, which is permanently connected to the receiving-hoop *a*, instead of being loosely connected therewith by means of

springs, as has been usual. The candle-holder is connected with the part *k*, as usual, which part is secured to the candle-socket *j* in the ordinary manner.

As represented, there is a coil-spring around the pin *f*, which presses the part *d* up against the collar *h*, and aids in holding the receiving-hoop and globe in place. If this spring be made sufficiently strong, the set-screw *i* may be dispensed with, and the part *d* be provided simply with a hole to pass over the pin *f*, or the part *d*, when constructed as last mentioned, might be held in place by means of a set-screw, which should come in contact with the pin *f*.

The device can be made so as to be efficient without the use of the coil-spring. When the coil-spring is used the collar *h*, or an equivalent therefor, should be used to limit the upward movement of the part *d*; but if the coil-spring be not used, this part *h* is unnecessary, except to strengthen the pin.

The lamp is represented as adapted to be used with candles; but an oil-lamp might be used with my receiving-hoop, constructed as described.

In use, the globe can be inserted by first placing the parts in the position represented in Fig. 2; then the globe is to be placed in its receiving-hoop *a*, after which this hoop can be turned around to the position represented in Fig. 1, and elevated, the top of the globe entering the cap *b*. The parts are then to be secured in this position by means of a set-screw, or held there by the coil-spring, or in some other suitable manner.

The globe can be removed in a similar way by loosening the set-screw, pressing down the part *d*, and turning the receiving hoop, with the globe, away from the part *b*.

It is not necessary that the hoop be thrown around from under the cap *b*, since, if the hoop be pressed down, as described, so as to release the top of the globe from the cap, the globe can then be removed, in which case the pin *f* need not be round; but in use it will be found more convenient to have the parts constructed substantially as described.

I do not confine myself to any particular mode of making the bracket. It may be made in two parts, which is the old way.

What I claim as new is as follows:

1. In a loose-globe car-lamp, having an im-movable globe-cap, the combination of the candle-holder, having the hoop *a*, with a bracket, whereby the candle-holder has a downward, vertical, and a horizontal swinging movement, substantially as described.
2. In a loose-globe car-lamp, having an im-

movable globe-cap, the combination of the adjustable hoop *a*, socket *j*, arm *d*, set-screw *i*, and bracket, substantially as and for the purpose specified.

JAMES B. HOYT.

Witnesses:

E. A. WEST,
O. W. BOND.