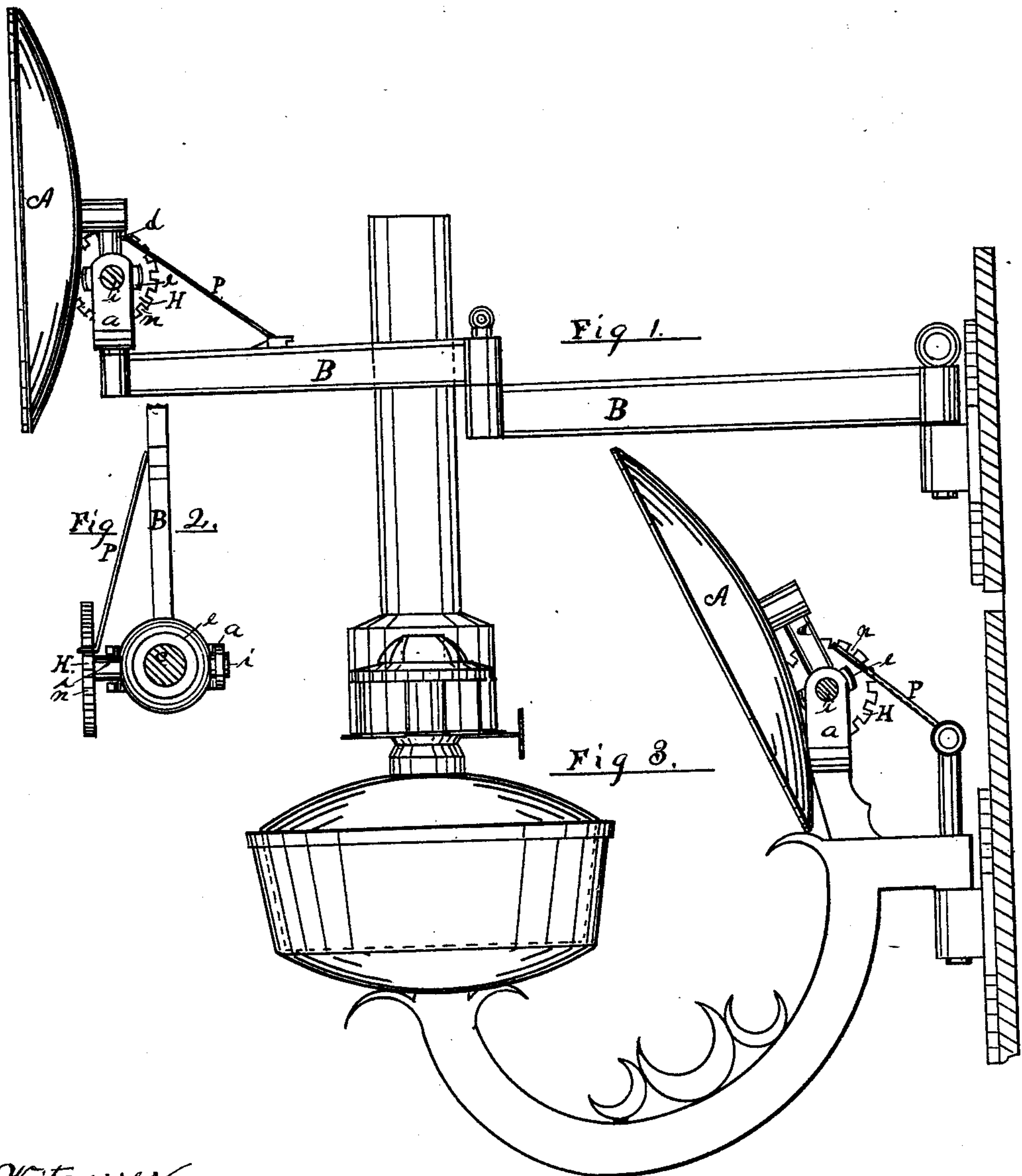


F. A. DUNNING.  
Holder for Lamp Reflectors.

No. 218,369.

Patented Aug. 12, 1879.



Witnesses

Thos H. Hutchins

Wm J. Hutchins

Inventor

Frank A. Dunning

# UNITED STATES PATENT OFFICE.

FRANK A. DUNNING, OF JOLIET, ILLINOIS.

## IMPROVEMENT IN HOLDERS FOR LAMP-REFLECTORS.

Specification forming part of Letters Patent No. **218,369**, dated August 12, 1879; application filed March 21, 1879.

*To all whom it may concern:*

Be it known that I, FRANK A. DUNNING, of the city of Joliet, Will county, and State of Illinois, have invented certain Improvements in a Holder for a Lamp-Reflector, the construction and operation of which I will proceed to explain, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1 and 3 are side elevations, and Fig. 2 is a plan view of the top.

The nature of my invention consists in the use of a universal joint to hold the reflector of a lamp, so constructed that the reflected light from a lamp may be cast in any desired direction.

In the drawings, A represents a reflector; *d*, a shaft, attached to the rear side of the reflector A, and passing through the eye *c* of the rocking shaft *e*.

*a* represents a forked standard, containing the journals *i* for the rocking shaft *e* to rest in.

H represents a ratchet-wheel, attached to the end of the rocking shaft *e*; and P, a spring-pawl, engaging with the ratchet-wheel, one end of which pawl is attached to the arm B, or to a portion of an ordinary lamp-bracket, and the other terminates in a hook, which rests in the notches *n* of the ratchet-wheel H.

Fig. 1 represents the universal joint, containing a lamp-reflector, attached to the end of an independent flexible arm, B, which may be attached to the side of or near any bracket-lamp, so that a lamp-reflector may be placed on any side of a lamp, and cast the reflected light of a lamp in any desired direction.

Fig. 2 represents the top of the universal joint, showing the manner in which the rocking shaft *e* is placed in the forked standard *a*, the manner in which the rocking shaft *e* is attached to the ratchet-wheel H, and the manner in which the wire or pawl P is placed in the notches *n* in the ratchet-wheel H.

Fig. 3 represents the universal joint, containing a lamp-reflector and attached to an ordinary lamp-bracket, and showing the manner in which the reflector A may be turned.

It will be observed that, by this construction, the pawl P may be raised, and the ratchet-wheel H turned in either direction, thus causing the rocking shaft *e* to turn with it, giving an angle to the reflector A, which is attached to the rocking shaft by means of the shaft *d*, which rests in the eye *c* of the rocking shaft *e*. The lamp-reflector A may be turned in the eye *c* sidewise in either direction.

This universal joint may be used on any lamp where it is practicable.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

The bracket B, provided with the ratchet H, pawl P, rocking shaft *e*, and forked standard *a*, to adjust the reflector A, in the manner and for the purpose set forth.

FRANK A. DUNNING.

Witnesses:

THOS. H. HUTCHINS,  
WM. J. HUTCHINS.