

(No Model.)

J. W. BRAGGER.  
BICYCLE LANTERN.

No. 547,201.

Patented Oct. 1, 1895.

Fig. 1.

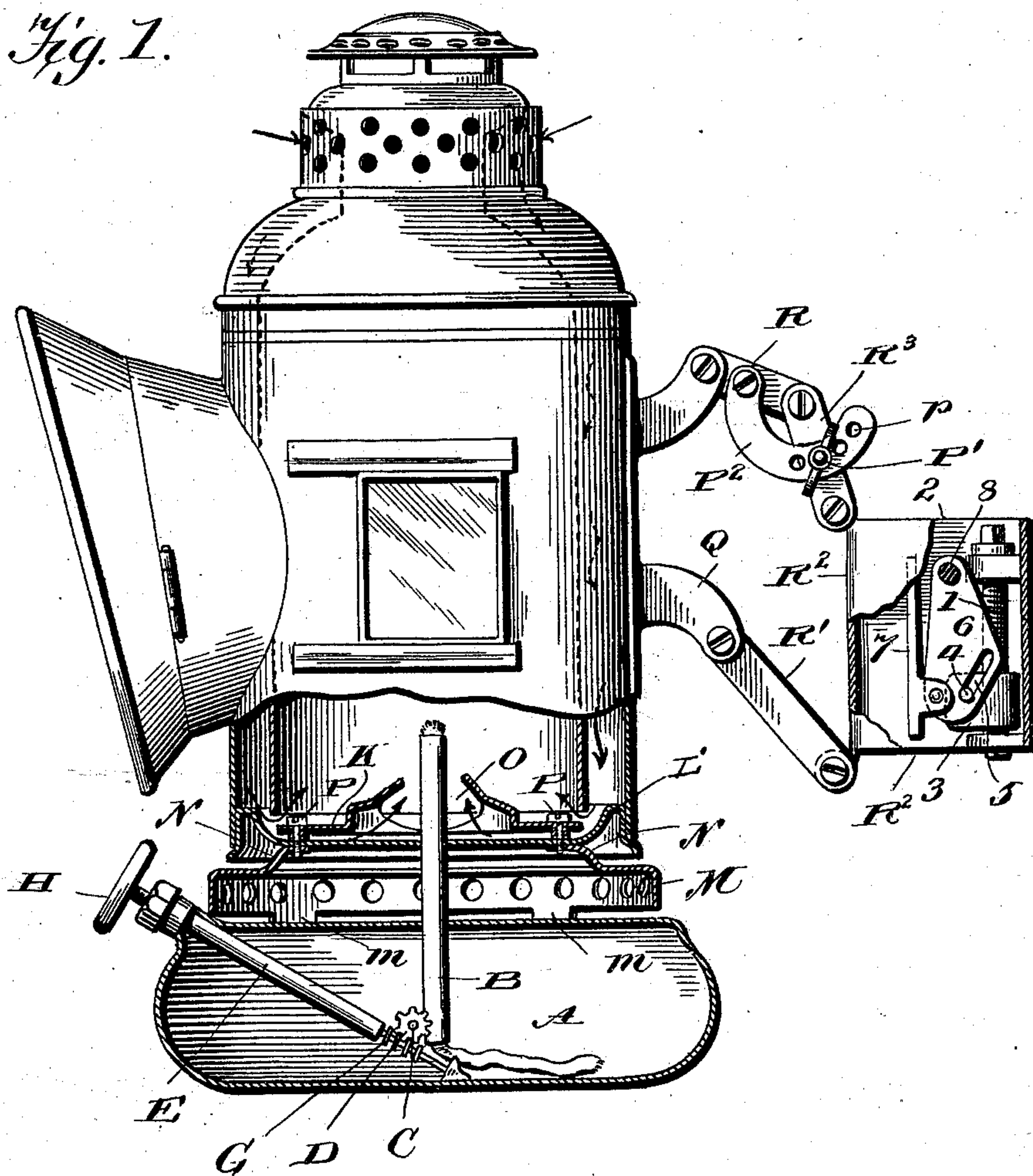
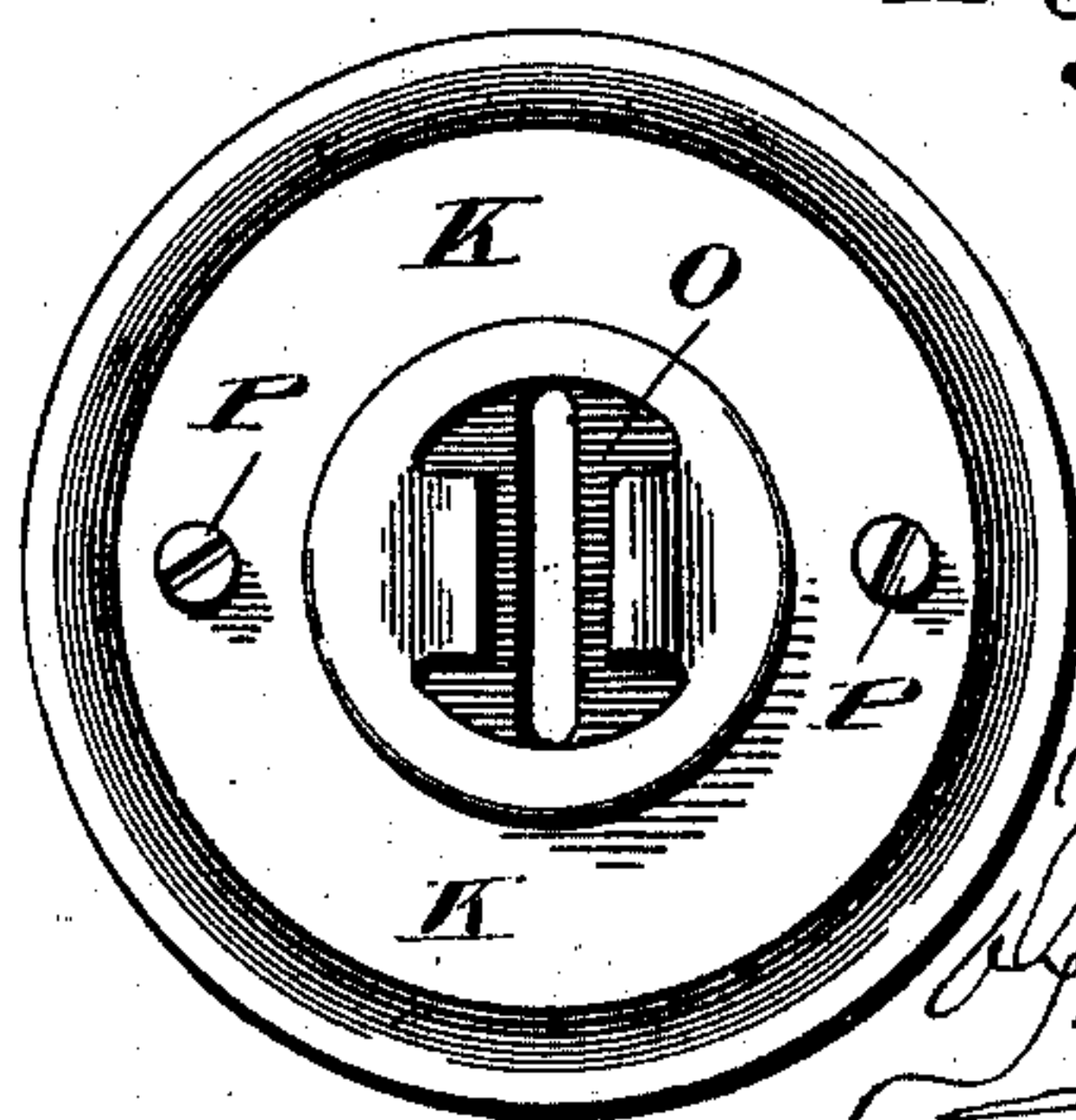


Fig. 2.



Witnesses:  
L. C. Hills.  
A. R. Hough.

Inventor:  
John W. Bragger,  
by Franklin D. Hough  
Attg.



# UNITED STATES PATENT OFFICE.

JOHN W. BRAGGER, OF WATERTOWN, NEW YORK, ASSIGNOR TO THE  
HITCHCOCK LAMP COMPANY, OF SAME PLACE.

## BICYCLE-LANTERN.

SPECIFICATION forming part of Letters Patent No. 547,201, dated October 1, 1895.

Application filed June 20, 1895. Serial No. 553,444. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. BRAGGER, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Bicycle-Lanterns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in lanterns, and especially to the class of bicycle-lanterns; and the object of the invention is to produce a construction of lamp which will not be easily extinguished under a sudden jar and one which will take its draft from about the top of the casing of the lantern and by the provision of a plate for the burner having a wide aperture, whereby the flame may not be so sensitive to a change or check in the draft which it is subject to while in use. In burners having a narrow slot, and especially when using kerosene-oil, the rush of air through the slot when subjected to a sudden jar would be likely to extinguish the light.

A still further object of the invention relates to a new and improved means of adjusting the bracket-arms of the lantern, whereby the angle at which it is desired to hold the lantern may be varied, and then the provision of suitable means for locking the lamp to the bicycle.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described, and then specifically defined in the appended claims.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters and figures of reference indicate like parts, in which—

Figure 1 is a side elevation of my improved lantern with parts broken away and parts being in section to better illustrate its construction. Fig. 2 is a plan view of the plate K.

Reference now being had to the details of the drawings by letters and figures, A designates the oil-tank, having mounted therein the wick-holder B.

C is a pinion-shaft having a series of spur-wheels for engagement with the wick and a pinion-wheel D.

E is a turning-post journaled obliquely in the oil-tank, and at the lower end of said post is a worm G, adapted to mesh with and turn the cogs of the said pinion-wheel. The upper end of said post is provided with the turning-wheel H, and a suitable packing is provided for the post where it passes through the wall of the oil-tank, so as to guard against any oil leaking through.

Upon the top of the tank A is secured the perforated ring M by means of the lugs *m*, formed on its lower edges. This ring is raised above the tank, so as to allow a free circulation of air across the top of the tank and thus keep it always cool. The top of the ring M is turned inward a suitable distance, and from the inner edge of this turned-in horizontal portion rises upward at a suitable angle the integral lugs N, which form a support for the shell or outer frame-supporting plate L, which in turn forms a support for the plate K and the outer frame of the lamp. The outer portion of this shell is curved upward beyond the plate K, and then the outer edge is turned downwardly and outwardly, so as to fit inside of the lower edge of the outer frame of the lamp. The plate K is provided with a suitable opening at its center for the wick-tube to extend through, and is separated from the shell L' by means of washers, which are applied to the screws which secure the plate K, the shell L', and the ring M together. These parts are separated and so arranged that the air which is taken in through the small openings at the top of the outer frame passes down inside of the outer frame, under and over the plate K to the point of combustion.



Two concentric frames or shells are secured together and used in making the lantern-body, and the space between the two serves as an air-channel and to heat the inflowing air, as indicated by arrows.

The brackets Q, integral with the casing of the lantern, have pivotal connection with the links R and R', the link R being pivoted to a link R<sup>3</sup>, which is pivoted to the clamping-member R<sup>2</sup>, to the lower end of which the link R' is pivoted.

P is a curved segment having a series of perforations p, and is pivoted at one end to the link R and adjusted at different points by means of the thumb-screw P' to the link R<sup>3</sup>, whereby the angle at which it is desired to hold the lantern may be adjusted.

The locking mechanism by which the lantern may be held to a lantern-holder of the bicycle consists of the post 1, having a square top and screw-threaded nearly its length and suitably mounted within the boxing 2. This screw-threaded post works through a screw-threaded plate 3, which carries a lug 4. This lug 4 works in a slot 5 of the plate 6, the slot being disposed obliquely, and to the lower end of said plate 6 is pivoted the plate 7, which is provided to contact against and clamp the lantern-holder secured to a portion of the frame of the bicycle. The upper end of the plate 6 is pivoted to a pin 8, held to the walls of the boxing 2, which holds the upper end of

the plate 6 stationary, while its lower end is designed to force the plate 7 outward.

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

1. In combination with a bicycle lantern, having the brackets Q, Q, the links R and R', R<sup>3</sup> and clamp R<sup>2</sup>, of the curved segment P having a series of apertures, and the thumb screw P' adapted to engage with registering apertures of the said segment and link R<sup>3</sup>, whereby the lantern may be held at different angles, substantially as shown and described.

2. The oil tank, the perforated ring mounted thereon and provided with the upwardly inclined lugs N, and the supporting plate L', placed upon the lugs, and having its outer edge-shaped so as to form a support for the outer frame or shell; combined with the plate K provided with a central opening through which the wick tube passes, and which plate K is raised above the plate L' so as to allow a free circulation of air; and the two concentric frames, or shells, provided with air openings at their tops, and down between which the air passes, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. BRAGGER.

Witnesses:

C. H. WATTS,

GEORGE A. LAWYER.