

(No Model.)

D. W. CORBET.  
LANTERN.

No. 565,156.

Patented Aug. 4, 1896.

Fig. 1.

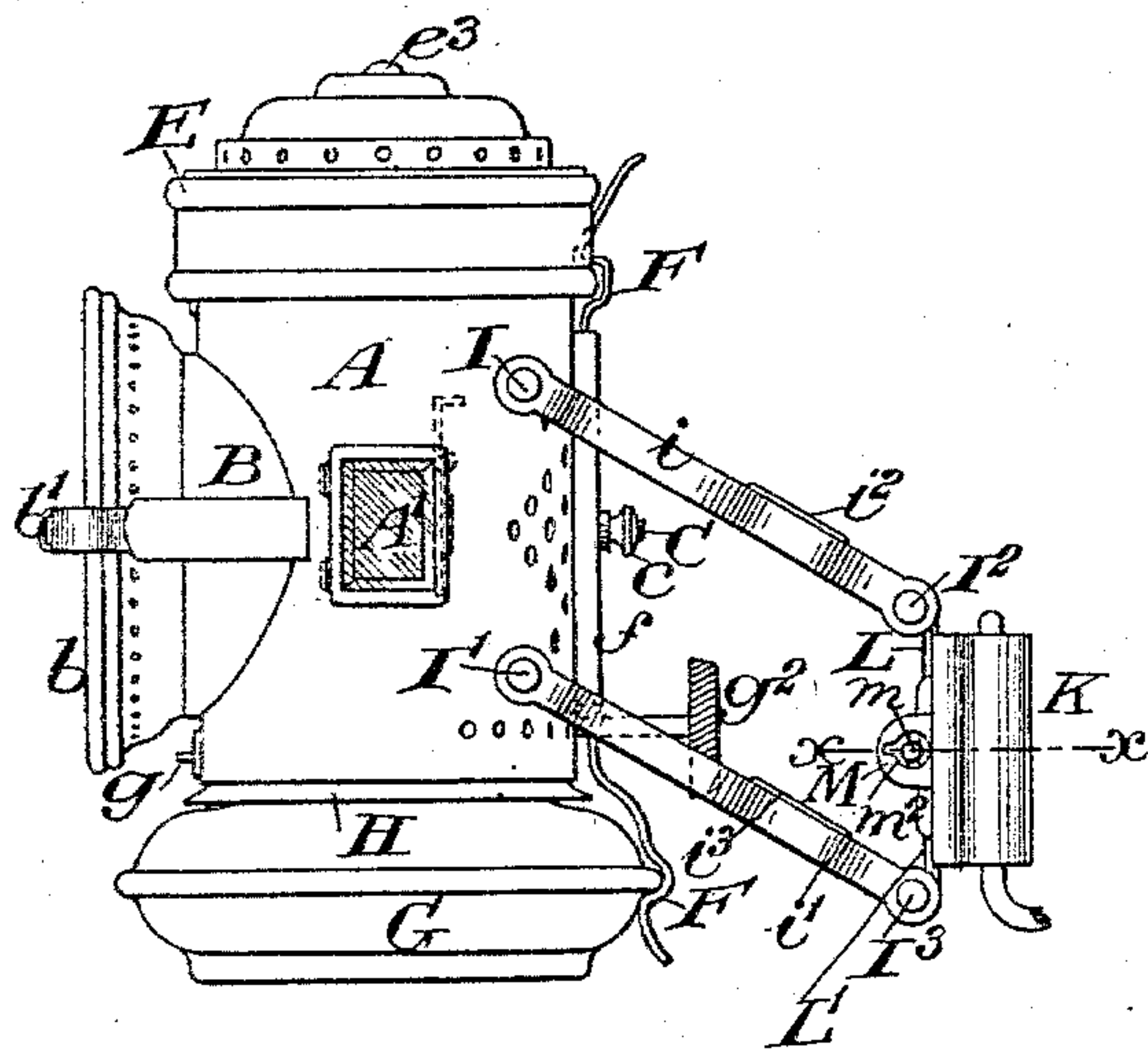


Fig. 2.

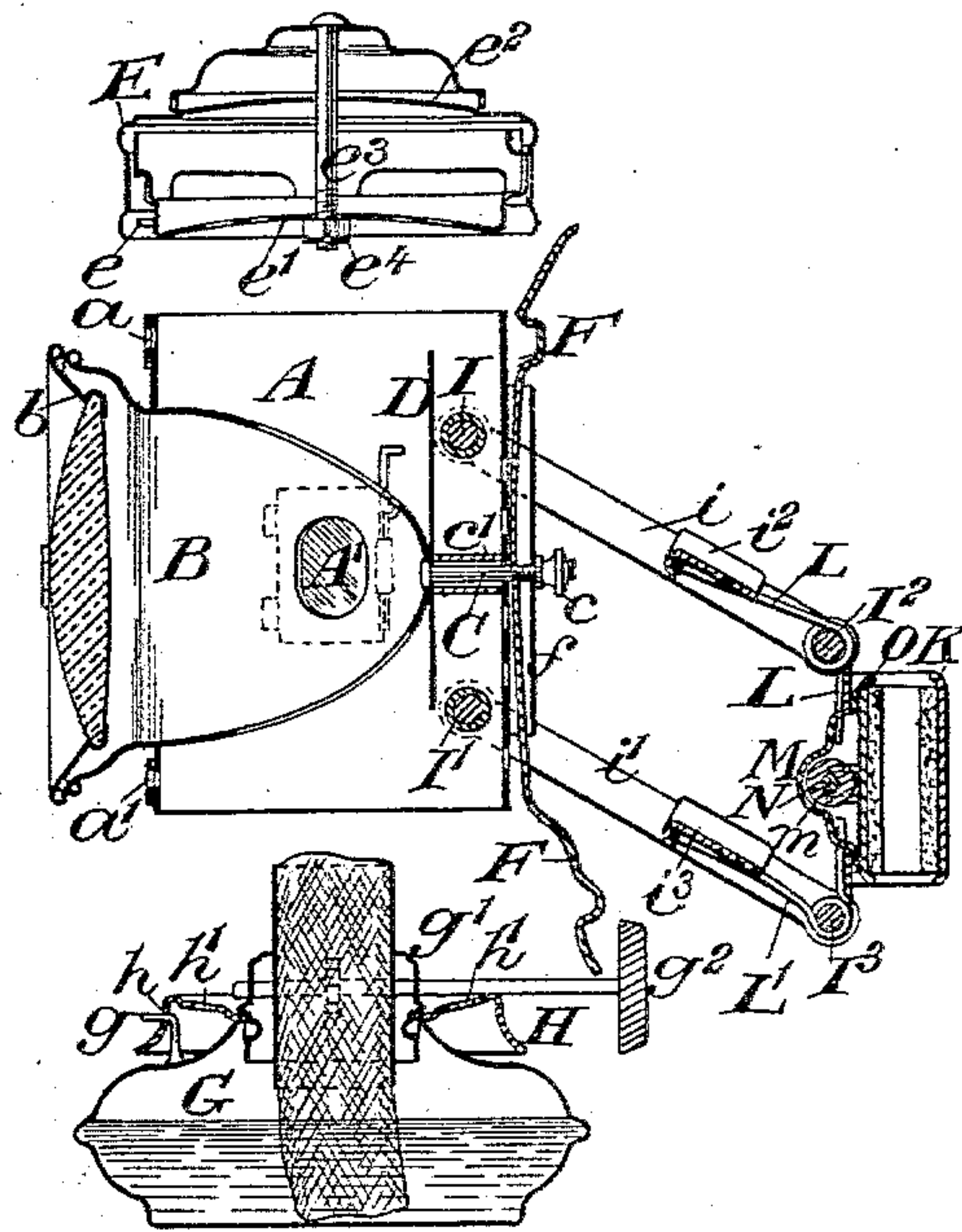


Fig. 3.

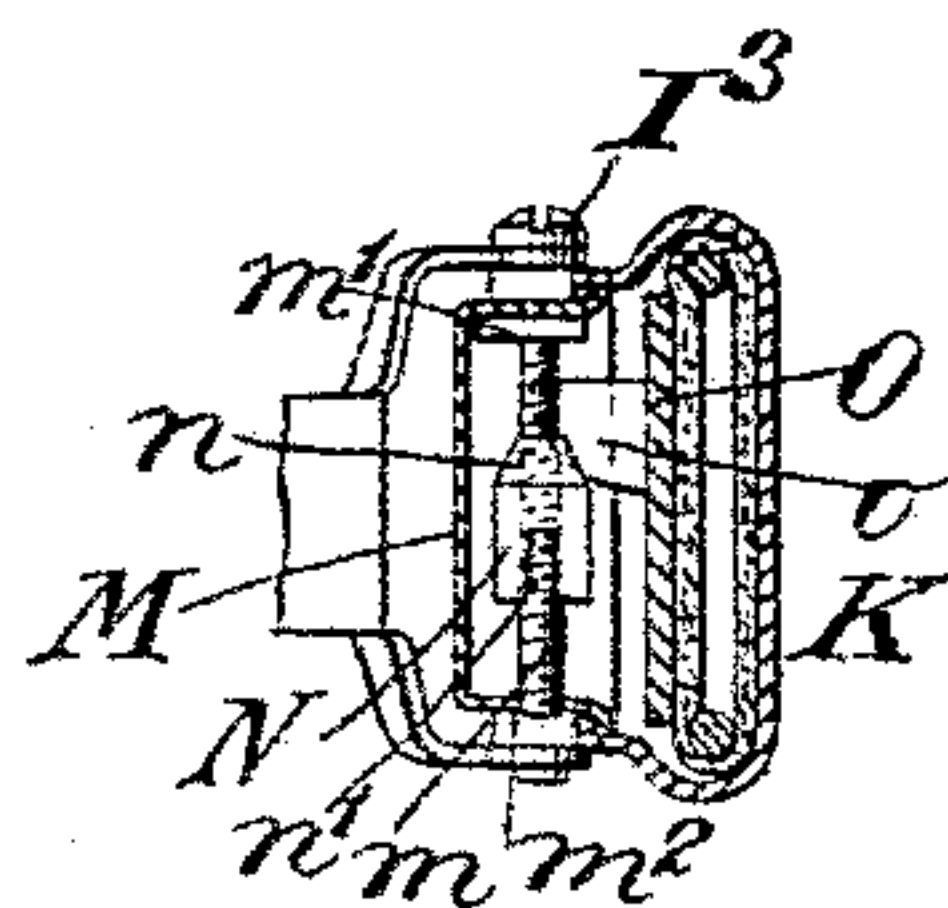
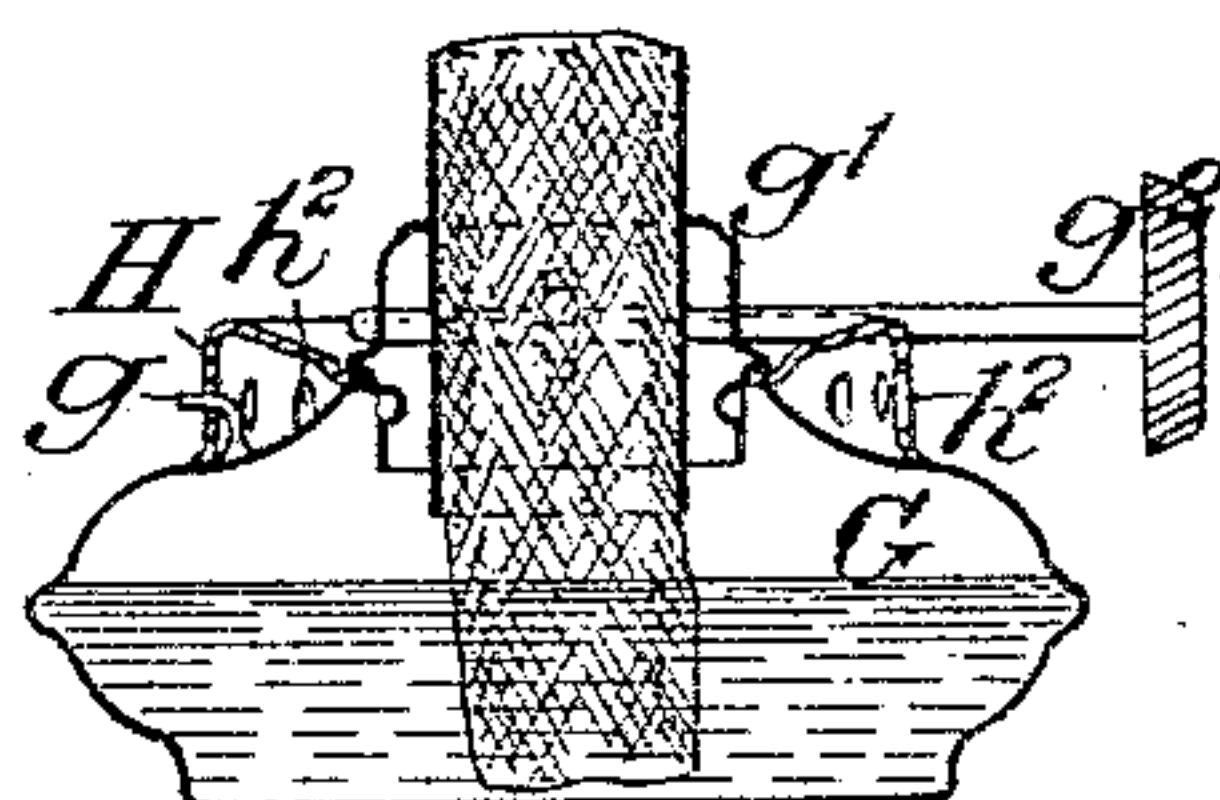


Fig. 4.



Witnesses:-

George Barry.

V. B. Seward.

Inventor:-  
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by attorneys

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# UNITED STATES PATENT OFFICE.

DENYS W. CORBET, OF BROOKLYN, NEW YORK.

## LANTERN.

SPECIFICATION forming part of Letters Patent No. 565,156, dated August 4, 1896.

Application filed June 25, 1895. Serial No. 553,978. (No model.)

*To all whom it may concern:*

Be it known that I, DENYS W. CORBET, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Lanterns, of which the following is a specification.

My invention is an improvement in lanterns, and more particularly to that class known as "bicycle-lanterns," the object being to provide a lantern which will be very strong in construction, in which a good draft may be furnished to the flame without danger of extinguishing the same, and one which may be securely locked to the lantern-support.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents the lantern in side elevation with the parts assembled as in use. Fig. 2 is a vertical central section through the lantern from front to rear, the top and fount being shown removed from the body portion or casing. Fig. 3 is a horizontal section through the socket-piece on the line  $xx$  of Fig. 1; and Fig. 4 is a sectional view through the fount, showing a modified form of draft-plate secured thereto.

The lantern-casing or body portion is denoted by A, and it has secured therein a suitable parabolic reflector B, which is extended without the casing at its front to form a suitable lens-holder  $b$ . This lens-holder is hinged to the parabolic reflector at one side and is locked at its opposite side by means of a suitable catch  $b'$ , secured to the reflector B exterior to the casing A. The casing A is provided with suitable removable side lights  $A'$ .

The parabolic reflector B is removably secured to the casing A by a suitable screw C, which extends from the rear portion of the reflector B through the back of the casing A. The screw C is provided with a suitable thumb-nut  $c$  on its end exterior to the casing A, so that when the thumb-nut  $c$  is unscrewed the reflector B may be removed from the casing.

The reflector B is spaced from the rear of the casing A by means of a suitable sleeve  $c'$ , which extends from the rear end of the reflector B to the casing A.

A suitable wind-guard D may be secured

at the back of the reflector B by means of the screw C.

The top or cover of the lantern E is made removable from the casing A, and is provided at its front end with a suitable lug or projection  $e$ , which is adapted to enter a socket or slot  $a$  in the casing A. The rear portion of the cover E is provided with a recessed or cut-away part, which is adapted to engage the upper nose of a locking-catch F when the cover is inserted into its position upon the casing. The sides of the cover E project down below the top of the casing A and are spaced therefrom to form suitable air-exits. The cover E is provided with a plurality of smoke and heat guards. (In the present instance two are shown.) These heat-guards are denoted by  $e'$   $e^2$ , and are secured in position by means of a suitable bolt  $e^3$ , which extends from the top of the cover downwardly therethrough and is provided at its lower end with a suitable nut  $e^4$ .

The fount is removably secured to the bottom of the casing A. It is provided at its front end with a projection or lug  $g$ , which is adapted to enter an opening  $a'$  in the casing A. The lower nose of the locking-catch F is adapted to engage the fount at its rear portion for locking it in position on the casing. This locking-catch F is preferably housed within a suitable box  $f$  and is secured to the casing A by the screw C, which holds the reflector B in position.

Upon the fount G, I locate a suitable removable draft-plate H. The draft-plate is removably secured to the top of the fount in the following manner: The top of the draft-plate rests upon the fount around its wick-opening and is secured in position by the wick-holder when the wick-holder is inserted into the fount. I have shown the draft-plate as still further secured against rattling or turning upon the fount by its engagement with the lug  $g$ , which passes through an opening  $h$  on one side of the draft-plate and the impinging of the stem of the wick-raiser  $g^2$  upon the top of the draft-plate at its opposite side. In my preferred form the bottom of the draft-plate is spaced from the top of the fount for the admission of air between the draft-plate and the fount. The top of the draft-plate is provided with suitable perforations  $h'$ , which



may be of the required number to suit wicks and founts of varying sizes, so as to furnish the required draft to the flame.

In the draft-plate shown in Fig. 4 the bottom of the plate extends downwardly and rests upon the top of the fount G, and the plate is provided with suitable openings  $h^2$  along its side walls for the admission of air therethrough.

The casing A has two tubular bearings extending transversely through its body portion at its rear, and through these two tubular bearings pass upper and lower pintles I I'. From the outer ends of these pintles I I' extend pintle-arms  $i$   $i'$ , which are pivoted at their rear ends to suitable pintles I<sup>2</sup> I<sup>3</sup>, which extend through tubular bearings on the socket-piece K.

The lantern is yieldingly held between the limits of its upward and downward swinging movement by suitable means—in the present instance by springs L L'—the spring L tending to return the lantern from the limit of its downward movement and the spring L' tending to return the lantern from the limit of its upward movement, thereby cushioning the movement of the lantern in both directions. The spring L is preferably coiled one or more times around the pintle I<sup>2</sup> and one of its ends engages a suitable cross-plate  $i^2$  on the upper arms  $i$  and its other end engages the socket-piece K. The spring L' in a similar manner is coiled around the pintle I<sup>3</sup> and one of its ends engages a suitable cross-plate  $i^3$  upon the arms  $i'$  and its other end engages the said socket-piece K.

The socket-piece K is locked to the lantern-bracket in the following manner: At the front of the socket-piece I secure a suitable lock-casing M, which extends transversely to the socket-piece. Within this lock-casing I secure a suitable screw  $m$ , which screw I hold against turning within the lock-casing, in the present instance by means of a squared head  $m'$ . Upon this screw I mount a suitable wedge-nut N, which is beveled at its front, as shown at  $n$ , and is recessed at its rear, as shown at  $n'$ , for the reception of a suitable key when inserted through the keyhole  $m^2$  at the end of the lock-casing M. Within the socket-piece I insert a suitable clamping-plate O, which is provided with wedge-shaped ears  $o$ , which surround the screw  $m$ , in advance of the traveling nut N, which ears are inclined from the side which engages the beveled portions  $n$  of the traveling nut N. By reason of this engagement of the ears with

the traveling nut, as the nut is advanced, the clamping-plate O is forced toward the opposite wall of the socket-piece K, thereby locking the said socket-piece to the lantern-bracket.

The lantern as thus constructed can be readily taken apart for cleaning purposes and yet when the parts are assembled they are securely held in position against rattling or displacement and the tendency of the lamp to blow out is reduced to a minimum.

It will further be seen that a single screw secures the reflector B, wind-guard D, catch F, and its box  $f$  to the casing A, thereby materially reducing the number of parts.

The draft-plate as thus constructed keeps the top of the fount cool when the lantern is lighted, which will effectually prevent the sweating of the oil, thereby preventing the lamp from smoking. The amount of draft may be easily regulated by increasing or diminishing the number of draft-holes in the top of the draft-plate, as may be required.

When the lug  $g$  on the fount is inserted in the opening in the front of the casing A and the catch F is caused to engage the fount, it will be seen that the draft-plate is still further secured against displacement between the casing and fount.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. The combination with the body of the lantern and the fount, of a removable draft-plate spaced from the top of the fount, a wick-holder engaging the fount and draft-plate for removably securing the draft-plate to the fount and means for removably securing the fount to the body of the lantern, substantially as set forth.

2. The combination with the body of the lantern, the fount, the wick-holder, the removable top and the reflector, of a catch for holding the top and the fount to the body portion, a wind-guard spaced from the body of the lantern and a single screw-bolt for holding the catch, the reflector and the wind-guard in assembled adjustment, substantially as set forth.

DENYS W. CORBET.

Witnesses:

FREDK. HAYNES,

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