No Model.)

2 Sheets—Sheet 1.

D. W. CORBET.

LANTERN.

No. 554,863. Patented Feb. 18, 1896.

Fig. 1.

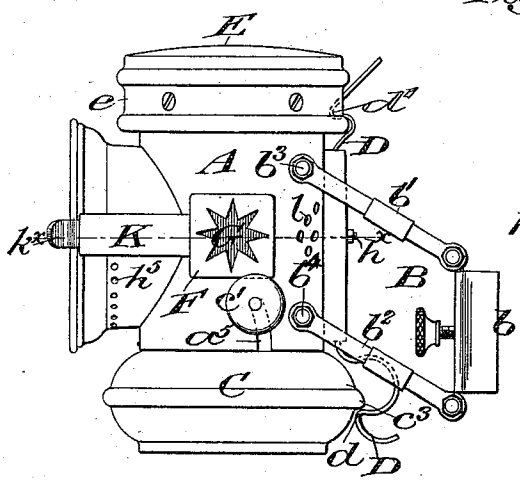


Fig. 2.

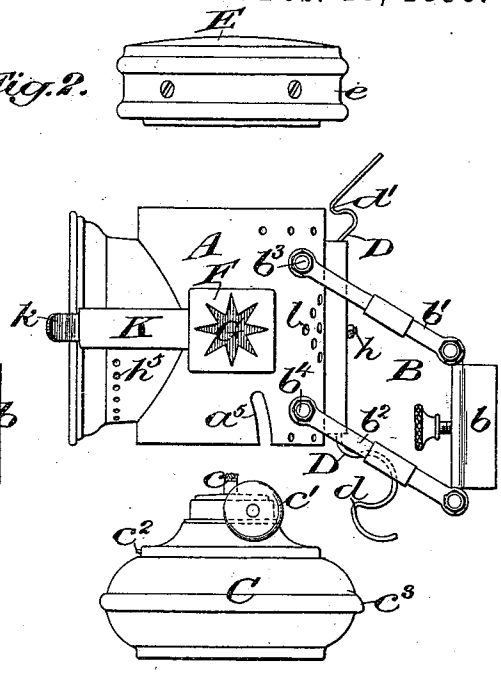


Fig. 3.

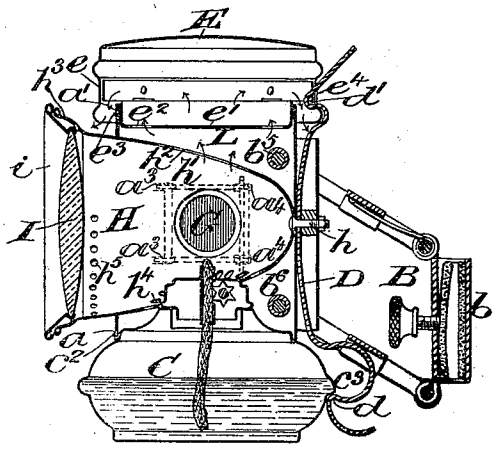
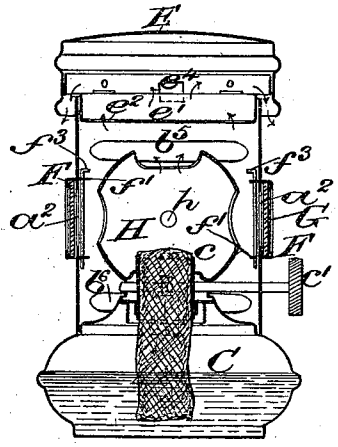


Fig. 4.



Witnesses:-
George Barry.
R. Seward

Inventor-
Denys W. Corbet
by attorneys
Brown & Seward

(No Model.) 2 Sheets—Sheet 2.

D. W. CORBET.

LANTERN.

No. 554,863. Patented Feb. 18, 1896.

Fig. 5.

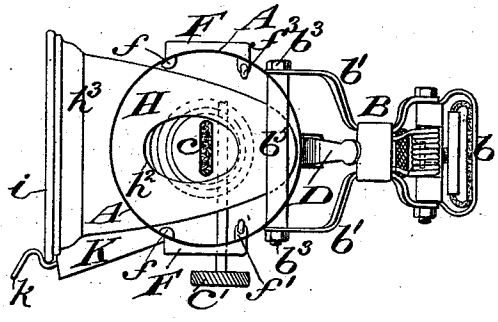


Fig. 6.

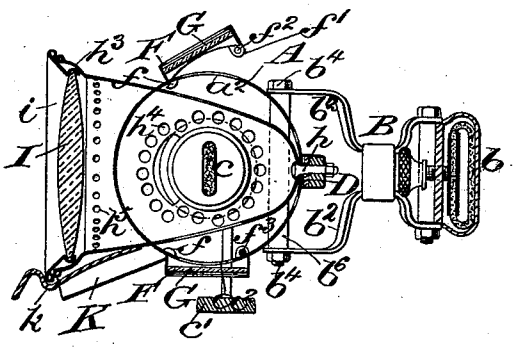


Fig. 7.

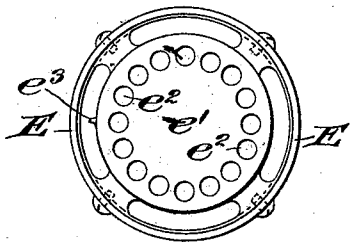
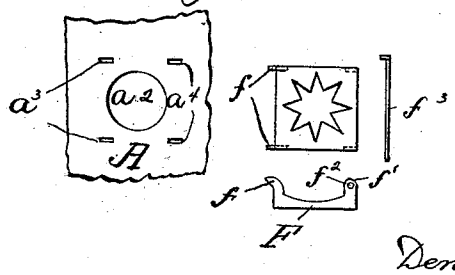


Fig. 8.



Witnesses:-
George Barry,
R. B. Lovell.

Inventor:-
Denys W. Corbet.
by attorneys
Brown Seward

UNITED STATES PATENT OFFICE.

DENYS W. CORBET, OF BROOKLYN, NEW YORK.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 554,863, dated February 18, 1896.

Application filed November 21, 1894. Serial No. 529,472. (No model.)

To all whom it may concern:

Be it known that I, DENYS W. CORBET, a resident 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 relates more particularly to that class known as "bicycle-lanterns," the object being to provide one which will be very strong in construction, give a powerful light, and in which the parts cannot become overheated, so as to endanger the melting of the different parts.

A further object is to provide a lantern of the above class which will have very few parts, which cannot be unintentionally blown out, and which will have a good draft.

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 similar view showing the top and the lamp portion removed. Fig. 3 is a vertical central section through the lantern from front to rear. Fig. 4 is a vertical central section from side to side. Fig. 5 is a plan view of the lantern with the top removed. Fig. 6 is a transverse section through the line $x\,x$ of Fig. 1. Fig. 7 is an inverted plan of the top of the lantern; and Fig. 8 shows in detail the side-light opening in the casing, the side-light holder and the manner of attaching the holder to the casing.

A designates the lantern-casing.

B designates the casing-support, which consists in the present instance of a suitable socket-piece b, which is adapted to embrace the lantern-bracket upon a bicycle, and upper and lower pivotal arms b' b^2.

The casing A is secured to the support B in the following manner: Pintles b^3 b^4 extend through the body of the casing A and are secured to the upper ends of the arms b' b^2, preferably by means of nuts. To make the connection between the arms and the casing stronger I provide tubular bearings b^5 b^6, which extend transversely through the casing A and surround the pintles b^3 b^4. These tubular bearings are preferably secured against lateral displacement to the casing A. If desired, I may do away with the tubular bearings and depend upon the pintles b^3 b^4, and form bearings or stops for the pintles by simply stamping or embossing the casing itself.

C designates the oil-reservoir, and it is provided with a suitable wick-holder c having a wick-raiser c'. This oil-reservoir is secured removably to the lower open end of the casing A in the following manner: The reservoir C is provided with a lug c^2, which enters a suitable opening a in the casing A, and the opposite side of the reservoir is provided with a lug or bead c^3, which is adapted to be engaged by the nose d of the spring-catch D, which is secured to the casing A. The casing A is provided with a slot a^5, which is adapted to receive the stem of the wick-raiser.

E designates the cover of the lantern, the sides e of which are adapted to overlap and are spaced from the top of the casing A when the cover is placed thereon, thereby forming an air-outlet.

e' is a smoke or heat shield and is secured to the cover E and spaced from the top thereof to form an air chamber or space. This shield is provided with a number of holes or openings e^2 therethrough for allowing the passage of the heated air. There are preferably no openings directly above the flame, as it is desired that this portion of the shield should prevent the heat of the flame from discoloring the top of the cover E. This shield, when the cover is in position, extends a short distance below the top of the casing, and it is provided at one end with a lug e^3, which engages a suitable opening a' in the casing A. On the opposite side of the cover from the lug e^3 I provide an opening e^4 for the reception of a nose d' upon the spring-catch D hereinbefore referred to.

It will be seen that when the oil-reservoir and cover are inserted in position within the casing they are firmly held against unintentional displacement by means of oppositely-extended ends of the spring-catch D. It is understood that this spring-catch may be made in two pieces, one extending upwardly and the other downwardly, and both of them secured to the casing A, if so desired.

The side lights of the lantern are formed in the following manner: An opening a^2 is formed upon each side of the casing A and a

side-light holder F is removably secured around the said opening in the following manner: The casing A is provided upon one side of the opening a^2 with upper and lower slots a^3 for the reception of the hinge-hooks f upon the side-light holder F, so that the holder may be swung toward and away from the casing A, because of the engagement of the hinge-hooks f with the slots a^3 in the casing. The casing A is further provided with upper and lower slots a^4 upon the opposite side of the opening a^2 and they are adapted to receive upper and lower ears f' upon the side-light holder F. These ears f' are provided with holes f^2 for the reception therethrough of a locking-pin f^3.

The side light is denoted by G, and it will be seen that it may be readily removed from the holder F and a side light of another color may be placed within the holder, if so desired; also the side light G may be removed, if it is desired to wash the same.

H designates the parabolic reflector, and it is secured at its rear end within the casing by means of a fastening device h, which fastening device is preferably the same one that secures the spring-catch D to the casing. The reflecting-surface of the parabolic reflector H may be either corrugated or plane, as desired. This parabolic reflector partially surrounds the exposed portion of the wick of the lantern and extends without the casing A to form a lens-holder h^3. This parabolic reflector is provided with suitable openings on its opposite sides corresponding with the side-light openings h' in the casing, said openings being in line with the light, so that the light itself may be seen therethrough. It is further provided with a smoke and heat outlet h^2 at its top directly above the wick.

I designates the lens which is secured in a suitable frame i, which in turn is hinged at one side to the lens-holder h^3 and at its other side is held closed by means of a suitable spring-catch k within a suitable casing K along the outer side of the reflector H.

By securing the parabolic reflector within the casing A in the above manner an air-space L is formed between the reflector and the casing, thereby preventing the casing from becoming overheated and discolored. Air is admitted from the outside to the air-space L by means of a number of openings l situated at different points in the casing A. These openings l are preferably located along the back of the casing A.

Air is fed to the flame from the air-space L by means of suitable openings h^4 in the base of the parabolic reflector H. These openings preferably extend entirely around the wick-holder.

A supplemental or auxiliary draft of air is fed to the flame by means of openings h^5 located partially around the circumference of the reflector upon its exposed portion without the casing A.

By the above construction I am enabled to make a lantern which will give a powerful light and in which the casing and cover are prevented from being overheated. By passing the pintle, which connects the lantern-holder to the lantern, transversely through the body portion of the lantern-casing I am enabled to get a very strong connection between the two and one which cannot be melted off or torn off.

It is obvious that slight changes might be resorted to in the construction and operation 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. A lantern, comprising a casing, a reflector within the casing, a removable cover, a removable reservoir, a spring extended into two locking-catches for removably securing the cover and reservoir to the casing, and a single fastening device for rigidly securing the reflector and spring to the casing, substantially as set forth.

2. In combination, a casing having a side-light opening therein, a side-light holder having hinge-hooks adapted to enter slots in the casing at one side of the side-light opening and perforated ears adapted to enter slots in the casing on the opposite side of the said opening, and a locking-pin engaging said ears for removably securing the side-light holder to the casing, substantially as set forth.

3. A lantern, comprising a casing, an oil-reservoir, a cover and a spring secured to the casing and extended into two locking-catches for removably securing the oil-reservoir and the cover to the casing, substantially as set forth.

DENYS W. CORBET.

Witnesses:
I. I. GILES,
EDW. F. SONNTAG.