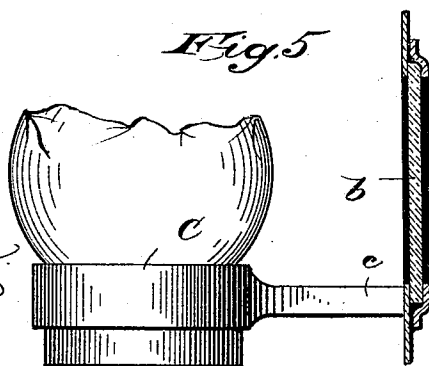
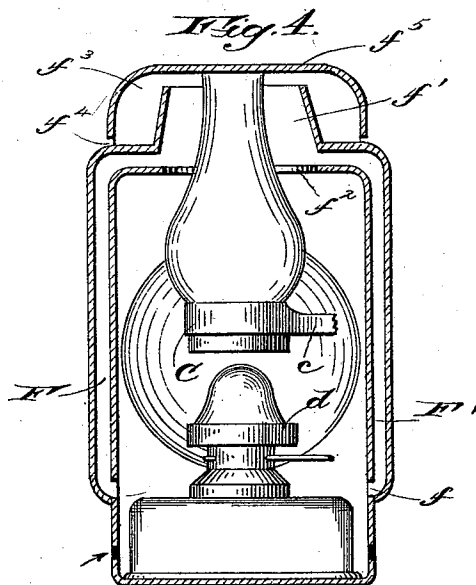
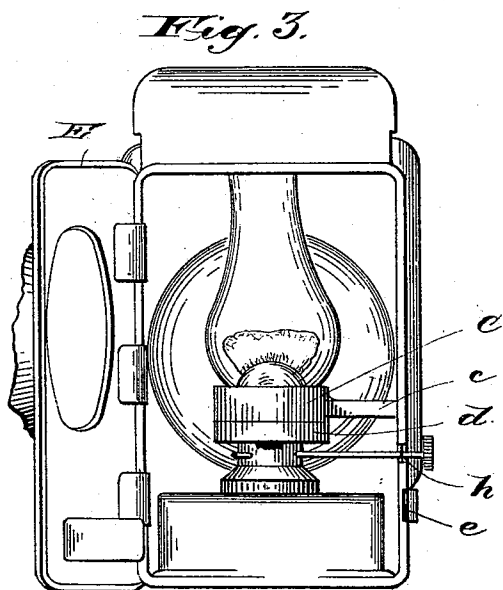
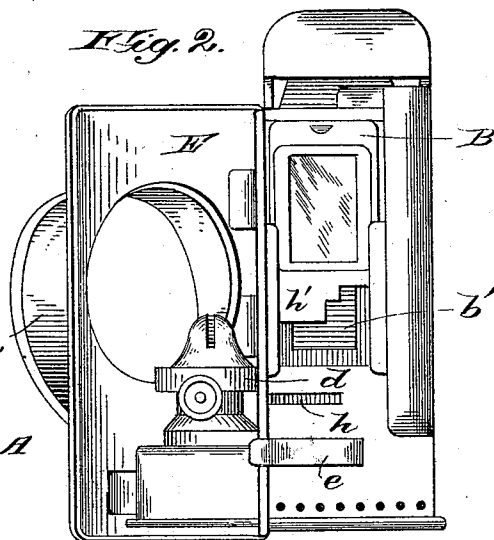
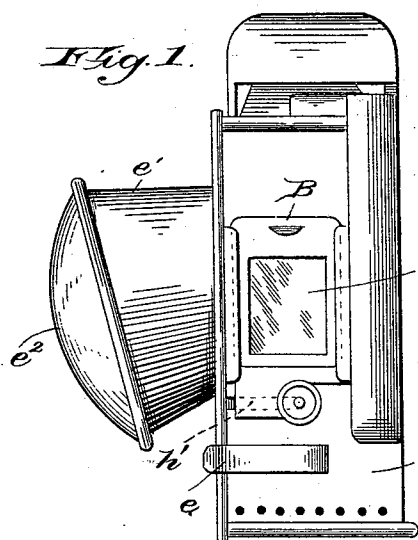


(No Model.)

F. C. WESTON.
BICYCLE LANTERN.

No. 511,981.

Patented Jan. 2, 1894.



Witnesses

W. J. Sweeney
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Inventor

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UNITED STATES PATENT OFFICE

FRANK C. WESTON, OF BANGOR, MAINE.

BICYCLE-LANTERN.

SPECIFICATION forming part of Letters Patent No. 511,981, dated January 2, 1894.

Application filed February 13, 1892. Serial No. 421,483. (No model.)

To all whom it may concern:

Be it known that I, FRANK C. WESTON, a citizen of the United States, residing at Bangor, in the county of Penobscot and State of Maine, have invented a new and useful Improvement in Bicycle-Lanterns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to a bicycle lantern, having the chimney supported by a slide upon the side of a lantern frame, which preferably also carries a side light, and by the raising of which the chimney is lifted from the burner and an opening created through which the lamp may be lighted and trimmed without opening the door, the chimney also being supported in all positions by the said slide.

Referring to the drawings: Figure 1 is a view in side elevation of the lantern without the attaching connection. Fig. 2 is a view in side elevation thereof, the door of the lantern being open, the lamp being partially drawn out and the side slide carrying the chimney being lifted. Fig. 3 is a view in front elevation of the lantern, the door being open. Fig. 4 is a view in vertical section, to show the position of the air chambers or channels. Fig. 5 is a view in detail, enlarged, representing especially the chimney support and connection with the side slide.

The casing or frame A is preferably rectangular in shape. It has on one side a slide B, which is vertically movable in suitable ways thereon, and which preferably carries the side light *b*. To the inner side of this slide there is attached the chimney holder C by means of a horizontal arm *c*. The chimney holder is circular in shape and is of a size to receive the lower circular section *d* of the chimney, the enlargement of the chimney above said section resting upon the upper edge of the holder. The slide, when closed, locates the chimney in proper relation to the burner, and when raised provides the opening *b'* through which the lamp may be reached, lighted and trimmed; it being understood, of course, that the lifting of the slide also lifts the chimney from the burner so that the wick is exposed.

The front of the lantern frame forms the

door E, and it is hinged at one side to the frame and is held at the other side in a closed position by the latch *e*. It has, extending outward or forward, a case or shell *e'*, which preferably is enlarged gradually, or flaring from its inner end outwardly, and which is also in the main directed downward. Its end is somewhat inclined and is closed by the meniscus lens *e''* (see Fig. 1), the lens being held inclined to a vertical line and so as to converge the rays of the light upon the ground in front of the machine.

Upon each side of the frame, near the back, there is an air passage or channel F (see Fig. 4). These channels or passages connect at their lower ends with the lamp chamber *f* and at their upper ends with a conical chamber *f'*, surrounding the upper part of the chimney and connected with the lamp chamber *f* by the hole *f''*, through which the chimney extends, and with the chamber *f'''*, which surrounds the conical top and extends from the chimney, connected with the outer air at *f''''* (see Fig. 4), the chamber *f'''* being formed by the hood *f''''* attached to the lantern frame.

There is in the side frame carrying the vertical slide a narrow aperture or recess *h*, extending from the front edge, which receives the spindle of the wick-raising device. This aperture is quite long and it is mainly covered, when the slide B is closed, by a downwardly extending section *h'* of the slide. (See Fig. 1.)

A bicycle lantern having the features I have specified is very useful and desirable, because I am enabled, by providing a suitable draft for properly supporting combustion, to employ a chimney, and because, also, the chimney is supported in a manner which largely neutralizes the disadvantages coming from sudden shocks and blows.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a bicycle lantern, the combination with the lantern casing having a hinged front and a side aperture, of a lamp in said casing, a vertically movable slide covering said side aperture, and a chimney for said lamp supported from said slide and vertically movable therewith, substantially as described.

2. In a bicycle lantern, the combination

with a lantern casing provided with a side aperture, and an aperture for the passage of the wick controlling spindle of the burner, of a vertically movable slide adapted to close
5 both of said apertures, a lamp in said casing, and a chimney for said lamp supported from said slide and vertically movable therewith.

3. In a bicycle lantern, the combination with the lantern casing provided with a hinged
10 front and a side aperture, of a lamp in said casing, a vertically movable slide covering

said aperture, a rigid supporting arm extending from said slide to a central point within the said lantern casing and a chimney mounted on said supporting arm and vertically movable with said arm and slide to cover and uncover the burner, substantially as described. 15

FRANK C. WESTON.

In presence of—

W. A. NELSON,

F. H. C. REYNOLDS.