

(No Model.)

J. H. WILKINS.
BICYCLE LANTERN.

No. 307,511.

Patented Nov. 4, 1884.

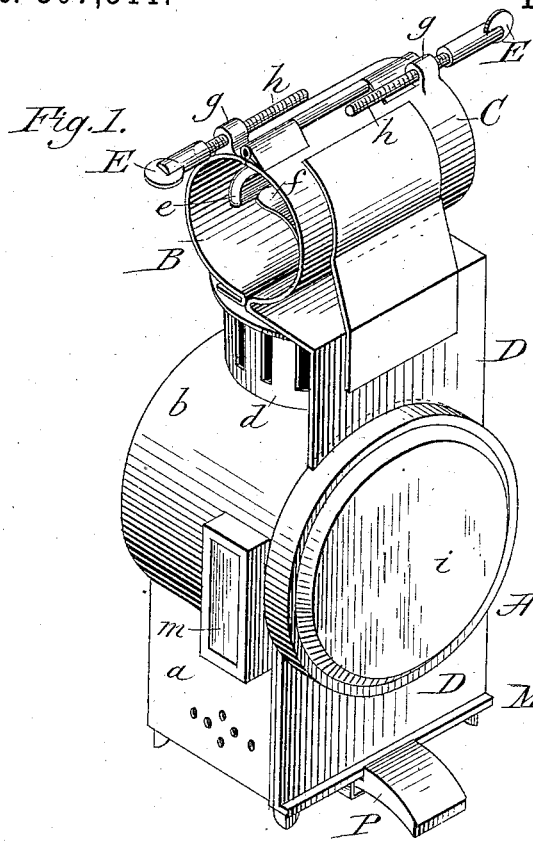


Fig. 3.

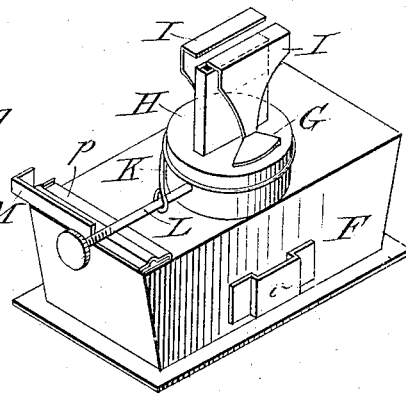


Fig. 2.



Fig. 4.

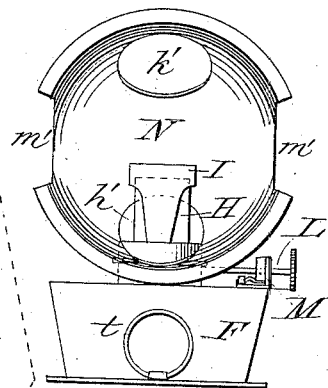
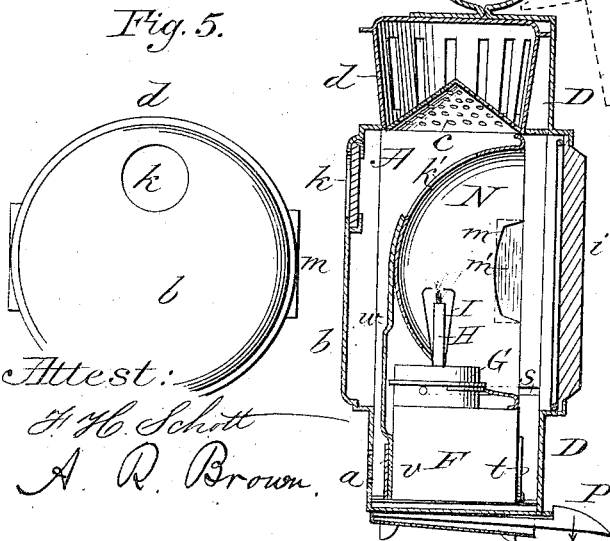


Fig. 5.



Attest:

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UNITED STATES PATENT OFFICE.

JOHN H. WILKINS, OF NEWARK, NEW JERSEY, ASSIGNOR TO HIMSELF
AND CHAS. W. A. ROMER, OF SAME PLACE.

BICYCLE-LANTERN.

SPECIFICATION forming part of Letters Patent No. 307,511, dated November 4, 1884.

Application filed August 31, 1883. Renewed August 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WILKINS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, 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 lanterns for bicycles or velocipedes; and it consists in the construction and arrangement of parts, as hereinafter more fully described and claimed.

In the annexed drawings, illustrating the invention, Figure 1 is a perspective view of my improved lantern. Fig. 2 is a vertical section of the same. Fig. 3 is an enlarged perspective view of the lamp removed from its case. Fig. 4 is a front view of the lamp and reflector. Fig. 5 is a rear view of the body of the lantern.

Like letters of reference designate like parts in the several views.

The lantern-casing A consists of a lower rectangular or nearly rectangular portion, *a*, having perforated sides, and surmounted by a rounded body, *b*, carrying a perforated dome, *c*, that is surrounded by a slotted cap, *d*.

To the top of the cap *d* is secured the fixed jaw B of a clip or clamp for attaching the lantern to the axle or hub of the bicycle, the movable jaw C, that is hinged to the fixed jaw, being continued down to form the hinged front or door D of the lantern.

The fixed jaw B of the clamping device carries a bearing-plate, *e*, that conforms to the outline of the hub or axle on which it rests, the lantern being secured thereto by a spring-plate, *f*, that is carried by the movable jaw C, and which plate is adapted to spring beneath the hub or axle when the lantern-door D is closed after the lantern has been placed in position.

On the outer faces of the clamping-jaws B C are loops *g g*, that form bearings for the re-

ception of the screw-threaded shanks *h h* of the adjustable buffers B E, which serve to hold the lantern from lateral displacement on the hub or axle.

That portion of the lid D that covers the front of the rounded or cylindrical portion *b* of the lantern-casing is provided with a glass face, *i*, a smaller opening covered by a glass, *k*, being formed in the upper back part of the body *b*, and an elongated opening closed by glass *m* being formed in each side near the front. These glasses may be of any suitable color, the back light and one side light being usually red, and the other side light being green, while the front glass, *i*, is preferably uncolored.

The lamp F is formed to fit within the lower portion or base, *a*, of the lantern-casing, and is provided with sloping ends that afford space for the passage of air to the burner G.

To the top of the burner, on each side of the wick-tube H, is secured a deflector, I, consisting of a metallic plate, the upper end of which is bent inward toward the wick. These deflectors I I serve to steady the flame, under the jolts of the bicycle, by distributing air to the wick uniformly. A spring-detainer, K, is secured to the side of the burner, and has one end coiled or turned around the spindle L of the wick-raising device, so that the position of the wick will not be altered by the jolting movements of the bicycle. The wick is thus made to burn with a steady flame, that is not liable to be extinguished by the movements of the vehicle.

At one end of the lamp F is a guide, *p*, for holding a detachable plate, M, that covers the slot *s* in the side of the lantern-casing, through which the spindle L passes when the lamp F is being placed in position or removed. It will be seen that by detaching this plate M the burner G and spindle L may be turned freely for the purpose of removing or replacing the burner, and when the lamp is in its place within the lantern-casing the plate M not only covers the slot *s*, but also bears against the spindle L sufficiently to assist in preventing any liability of the burner to turn in its seat.

At the front of the lamp-body is a hinged

loop or ring, *t*, for handling the lamp, and at its back is a loop, *v*, for receiving the shank or standard *w* of the reflector N. The reflector N is formed with parabolic curves, and is provided with an opening, *h'*, in its lower part 5 for the passage of the wick-tube H, an opening, *h*, in its upper portion that corresponds with the rear light or glass, *k*, and on each side with an opening, *m'*, corresponding with the 10 side glasses, *m m*. It will be seen that this construction provides a rear light without perforating the center of the reflector, and thereby destroying its focus or impairing its power of throwing a strong light forward in the path of 15 the bicycle.

When the lantern is to be attached to the hub or axle or other part of a bicycle, the door D is opened sufficiently to enable the jaws B C to surround the attaching part with the bearing *e* above the same, so that when the door D 20 and movable jaw C are closed the friction-plate *f* will spring beneath said attaching part,

the door D being firmly locked by a spring-catch, P, that is arranged at the bottom of the lantern.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 25

1. The combination, with the lantern-casing A, having slot *s*, and the lamp F, having 30 guide *p*, of the detachable plate M, substantially as shown and described.

2. The combination of the lantern-casing A, having slot *s*, the lamp F, having guide *p*, the burner G, wick-raising spindle L, and detach- 35 able plate M, substantially as shown and described.

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

JOHN H. WILKINS.

Witnesses:

ABRAHAM MANNERS,
JULIUS C. FORCE.