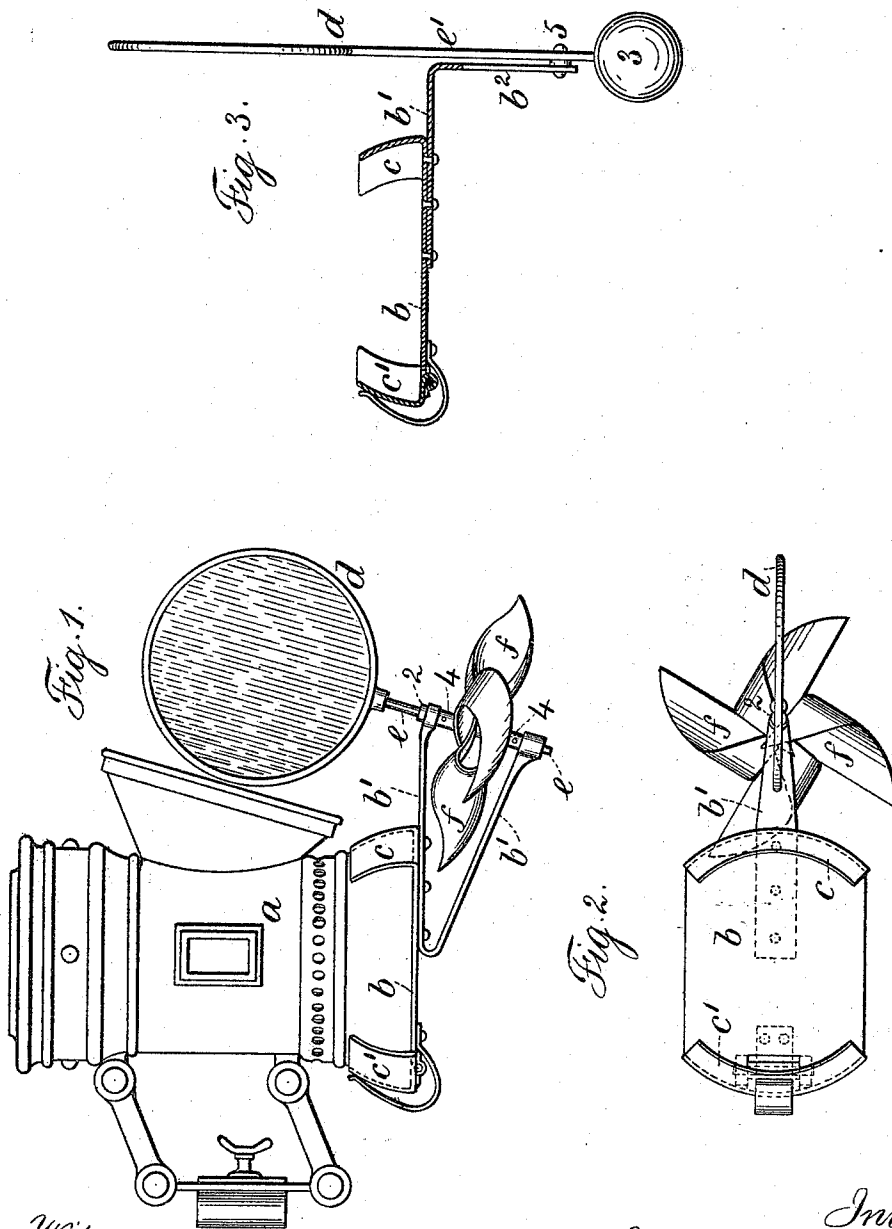


(No Model.)

L. A. BERNHEIMER.
BICYCLE LAMP ATTACHMENT.

No. 582,167.

Patented May 11, 1897.



Witnesses:
J. Staib
Charles Smith

Inventor:
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UNITED STATES PATENT OFFICE.

LEOPOLD A. BERNHEIMER, OF NEW YORK, N. Y.

BICYCLE-LAMP ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 582,167, dated May 11, 1897.

Application filed June 6, 1895. Serial No. 551,836. (No model.)

To all whom it may concern:

Be it known that I, LEOPOLD A. BERNHEIMER, a citizen of the United States, residing at New York, in the county and State of New York, have invented a new and useful Improvement in Bicycle-Lamp Attachments, of which the following is a specification.

This invention is especially intended as an attachment for bicycle-lamps, whereby the light from such lamps will be caused to flash or change color periodically and with sufficient rapidity to attract attention and indicate that the cycle is moving, the mechanism that produces the flash of the light being automatic.

In carrying out this invention an interceptor is employed in front of and outside of the lamp, and a motion is given to the interceptor automatically to move the same, so that the light shines unobstructedly, and then such interceptor is brought into action and either obscures the light or changes its color.

In the drawings, Figure 1 is a side view illustrating a cycle-lamp with the improved attachment thereon. Fig. 2 is a plan view of the attachment separated from the lamp, and Fig. 3 is a side view of a modification of the moving device for the interceptor.

The cycle-lamp *a* is of any desired character, and the plate *b* is provided with a front clip *c* and a back clip *c'*, there being a spring for allowing the back clip to yield as the lamp is inserted between the clips. Any desired mechanism may be made use of for attaching the plate *b* to the lantern. The brackets *b'*, extending out from the plate *b*, receive through them the vertical, or nearly vertical, arbor *e*, and a rotator *f* is fixed upon the arbor *e*, such rotator being a wind-wheel of any desired character, that which is represented being similar to the toy known as a "pin-wheel," but made of light thin sheet metal, so as to be acted upon by the wind for rotating the arbor *e* when the cycle is in motion, and this air-wheel may be provided with a hub 4, and the collar at 2 aids in keeping the arbor in position.

The interrupter *d* is mounted upon the arbor *e*, and the same is preferably in the form of a circular frame having within it a piece of colored material, such as celluloid, gelatin,

or mica, and red is preferred as generally understood to indicate danger.

When the cycle is in motion, the air acting upon the wheel *f* causes the interrupter *d* to revolve with greater or less rapidity, and when such interrupter is edgewise to the light shining from the lamp such interrupter is substantially invisible; but when the interrupter is in front of and parallel, or nearly so, to the lens of the lamp the color of the light is either changed or more or less interrupted, and the speed of rotation of the interrupter will be in proportion to the speed of movement of the cycle.

The device represented in Fig. 3 consists of a plate with clips to engage the base of the cycle-lamp similar to those shown in Figs. 1 and 2, but with a pendent arm *b²*, having a pivot at 5 by which the rod or arbor *e'* of the interrupter *d* is supported, and the counterweight 3 normally holds the interrupter in front of the cycle-lamp, and the parts can receive a pendulous movement from the vibration of the cycle when the same is in motion or the interrupter may be swung by hand or otherwise to cover or uncover the front of the lamp.

Transparent material of a light blue, red, or similar color, by which the color of the light will be changed, will interfere but little with the illumination of the roadway by the cycle-lamp, and hence the utility of the light will not be interfered with, and a signal is given that attracts attention by the movement of the interrupter, whether that movement is automatic or by hand, and the present device is adapted to be fastened upon the base of a cycle or other lamp without necessitating any change in the lamp itself.

I claim as my invention—

1. The combination with a lamp, of a movable interrupter and a frame for removably connecting the interrupter to the base of the lamp, substantially as set forth.

2. The combination with a movable interrupter, of a detachable frame adapted to connect with the base of a lamp and form a support, and a substantially vertical arbor for supporting the interrupter upon the frame, substantially as set forth.

3. The combination with a movable inter-

rupter, of a detachable frame adapted to connect with the base of a lamp and form a support, a substantially vertical arbor for supporting the interrupter upon the frame, and
5 a wind-wheel upon the arbor for rotating the interrupter, substantially as set forth.

4. The combination with a cycle-lamp, of a detachable frame, a ring and transparent colored material within the ring, and means
10 for giving motion to the ring in front of the lamp to bring the colored transparent mate-

rial into position for the light to shine through the same or to move such ring and transparent material so as not to interrupt the light passing out from the lamp, substantially as
15 set forth.

Signed by me this 31st day of May, A. D. 1895.

LEOPOLD A. BERNHEIMER.

Witnesses:

A. P. THORPE,

GEO. T. PINCKNEY.