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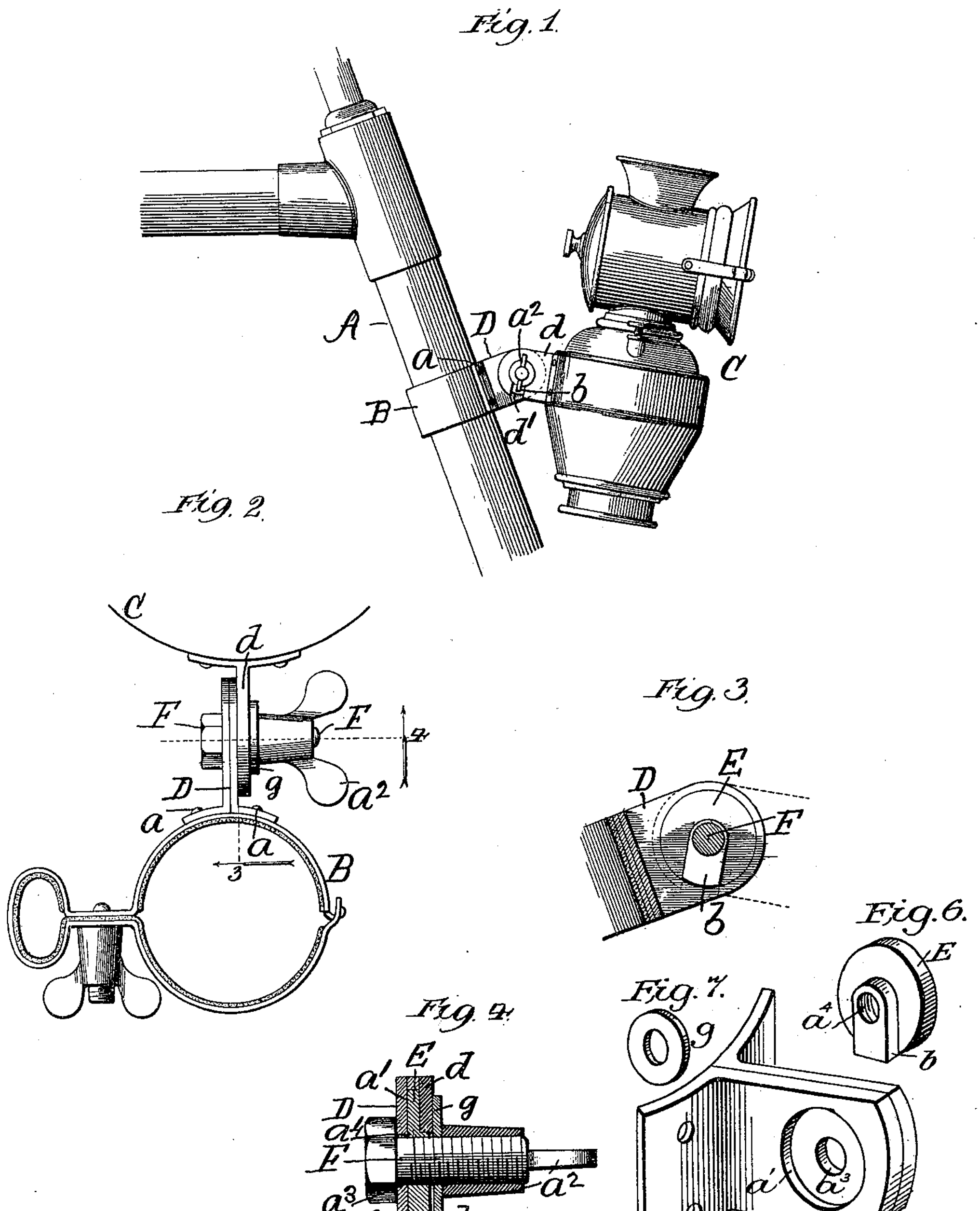
F. W. HEDGELAND.

BICYCLE LAMP SUPPORT.

(Application filed July 31, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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BICYCLE-LAMP SUPPORT.

SPECIFICATION forming part of Letters Patent No. 642,906, dated February 6, 1900.

Application filed July 31, 1899. Serial No. 725,647. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. HEDGELAND, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamp-Bracket Attachments; and I do hereby 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.

This invention relates to an attachment for the support and adjustment of lamps on bicycles, and has for its object to provide a device of this character that will permit of the lamp being taken off and replaced without changing the angle of inclination or reflection.

Under the ordinary arrangement each time that a bicycle-lamp is replaced after having been removed for cleaning or other purposes it must be readjusted to the required angle in reflecting the light in the proper direction, which requires both time and patience and is often the cause of a good deal of annoyance.

The present invention provides a simple and convenient device that may be set to support the lamp at the proper angles and then locked in place. The lamp may then be removed and replaced as many times as necessary, but will always remain at the same angle without requiring any attention to the adjustment.

In the accompanying drawings, Figure 1 is a broken-away elevation of the front frame-tube, showing a lamp in position. Fig. 2 is a plan of the attachment and connecting parts. Fig. 3 is a broken-away section on line 3, Fig. 2, looking in the direction indicated by the arrow. Fig. 4 is a section on line 4, Fig. 2. Fig. 5 is a detached view in perspective of the supporting-lug, showing recess for the reception of the revoluble disk. Fig. 6 is a view in perspective of the revoluble disk. Fig. 7 is a view in perspective of a washer, showing the aperture therethrough not threaded.

A may represent the front frame-tube of a bicycle, B the usual lamp-bracket-holding ring, and C a lamp. A lug D is secured to the lamp-bracket ring, as at a. This lug is provided with an annular recess a', in which is loosely seated a revoluble disk E, as shown in Figs. 3 and 4. A locking and clamping bolt F is inserted through the lug D and the disk E from one side and projects far enough from the opposite side to receive the threaded wing-nut a^2. The aperture a^3 in the lug is not threaded, but the aperture a^4 in disk E is threaded, so that the locking-bolt has a threaded engagement with the disk, but not with the lug, as is necessary in the operation of the device.

The disk E is provided on its outer side with an integral raised guide-plate b, which is formed by thickening the disk at that point, as shown in Figs. 3 and 4.

The supporting-arm d of the lamp is provided with a slot d', starting in from the edge at one side, as shown in Figs. 1 and 4. When the lamp is attached, the slot in the supporting-arm straddles the locking-bolt and engages the respective sides of the guide-plate b and holds the lamp firmly in place and at an angle in accordance with the relative position to the stationary parts of the plate on the disk E. All the parts are shown in their locked and clamped position in Fig. 4. The lamp is clamped in place by the wing-nut a^2, a washer g being inserted between the same and the slotted arm of the lamp.

By slacking back on the bolt F from the locking position illustrated in Fig. 4 the disk may be turned so as to bring the plate into any desired position with reference to the angle at which the lamp is to be supported. Then tighten up the bolt, which has the effect of locking the disk in the position to which it has been adjusted. This feature of getting the angle at which the lamp is to be carried is independent from the means employed to removably clamp the lamp in place. The lamp is taken off by turning back on the wing-nut, which relaxes the clamping pressure on the slotted arm. This is done without disturbing the position of the disk E or its locking-bolt; so that when the lamp is replaced it will be held at the same angle, thus obviating the labor and annoyance attending the adjusting of the lamp to the desired angle each time it is taken off. This construction and arrangement forms a combination device, both features of which, that of locking the angle-adjusting mechanism and the means for removably clamping the lamp in place, being united in the same structure, yet having an

independent action from each other, both operations being controlled by one and the same bolt.

This device may be used on different kinds of vehicles other than bicycles and also for stationary lamps.

The device as illustrated is in position for supporting the lamp on the right-hand side. It may be converted into a left-hand attachment by turning the bracket-ring upside down from the position shown and then turning the revoluble disk E to bring the guide-plate thereon into position to receive the slotted end of the lamp-arm in supporting the lamp at the desired angle of inclination.

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

1. In a lamp-bracket, the combination with a lamp, of an angle-adjusting means, and a bolt or clamping device for effecting such adjustment, said bolt also mounting the lamp in position and permitting of its being removed and replaced without disturbing the angle at which it is supported, substantially as described.

2. In a lamp-bracket, the combination with a supporting-lug, of angle-adjusting means embraced therein, said lug forming the lamp-support and permitting of the removal of the lamp therefrom without disturbing the angle adjustment, substantially as described.

3. In a lamp-bracket, the combination with a bracket-ring, provided with a lug, of a revoluble disk, provided with a guide-plate and loosely recessed in said lug, and a locking-bolt, inserted through the lug and having a threaded engagement with said disk, whereby the latter may be turned to bring the guide-plate into position to support an object at any desired angle and then locked in place, substantially as described.

4. In a lamp-bracket, the combination with a bracket-ring provided with a lug, of a revoluble disk, provided with a guide-plate and loosely recessed in said lug, a locking-bolt, the lamp-arm, provided with a slot and adapted to straddle said bolt and guide-lug in supporting the lamp at the desired angle, and a nut for clamping said lamp-arm, substantially as described.

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

FREDERICK W. HEDGELAND.

Witnesses:
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