

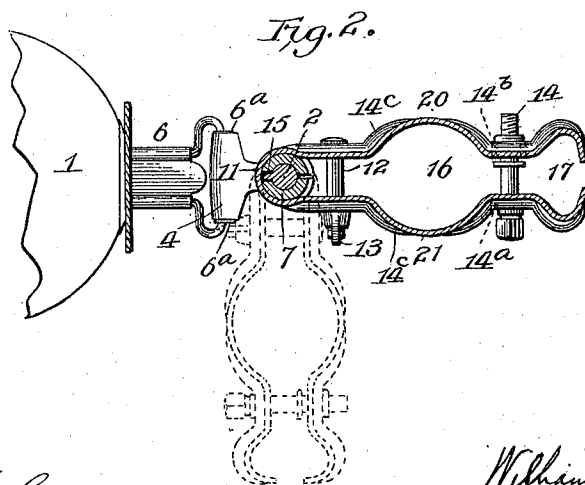
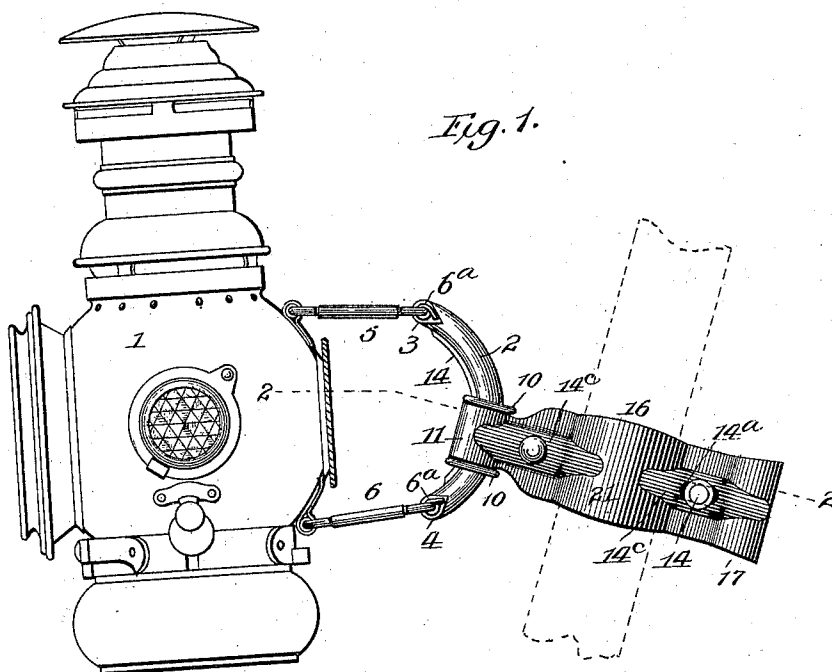
(No Model.)

2 Sheets—Sheet 1.

W. S. HAMM & W. H. TUFFORD.
BICYCLE LAMP SUPPORT.

No. 585,518.

Patented June 29, 1897.



WITNESSES:

Harry S. Rohrer
Marion B. Cole

INVENTORS:

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(No Model.)

2 Sheets—Sheet 2.

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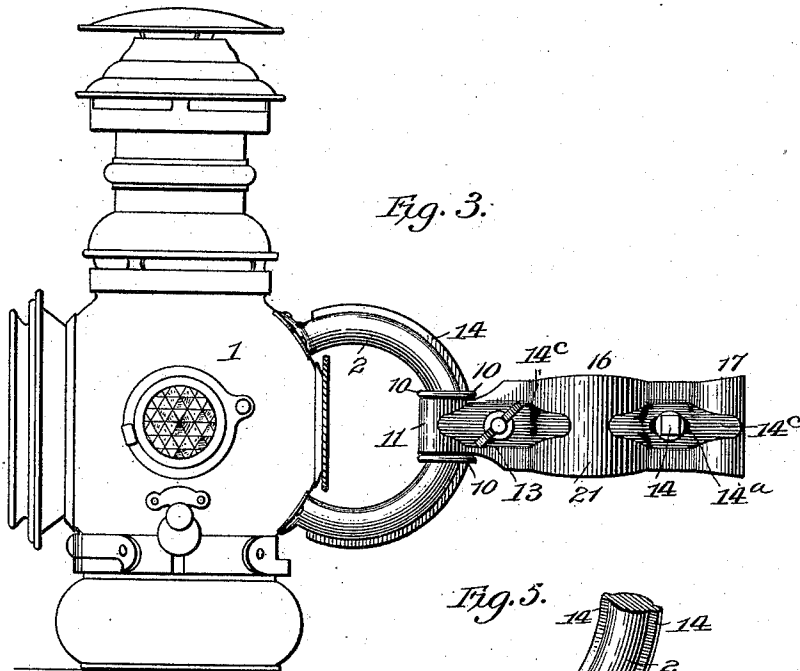


Fig. 3.

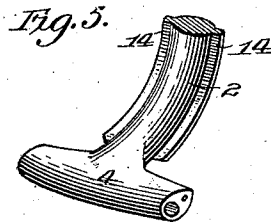


Fig. 5.

Fig. 4.

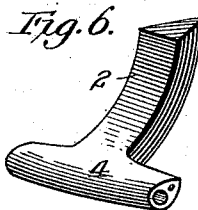
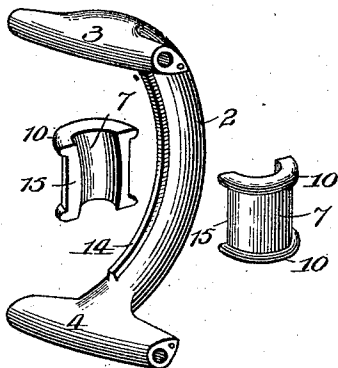


Fig. 6.

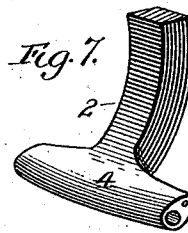


Fig. 7.

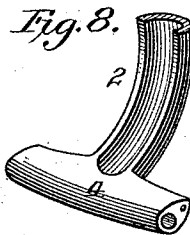


Fig. 8.

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UNITED STATES PATENT OFFICE.

WILLIAM S. HAMM AND WILLIAM H. TUFFORD, OF CHICAGO, ILLINOIS,
ASSIGNORS TO THE ADAMS & WESTLAKE COMPANY, OF ILLINOIS.

BICYCLE-LAMP SUPPORT.

SPECIFICATION forming part of Letters Patent No. 585,518, dated June 29, 1897.

Application filed March 6, 1897. Serial No. 626,224. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM S. HAMM and WILLIAM H. TUFFORD, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bicycle-Lamp Supports, of which the following is a specification, reference being had to the accompanying drawings and to the numerals of reference marked thereon.

Our invention has reference to a lamp or lantern, more particularly such as is used on a bicycle or similar vehicle and is provided with means for temporarily securing it to some convenient part thereof.

The object of our invention is to provide a neat, simple, and ready means for supporting a lamp, whether attached to the head, fork, or other part of the bicycle-frame, and adjusting it to any angle whether horizontal or vertical. This result we accomplish by the use of a curved or segmental bar attached either by a spring-support or rigidly to the body of the lamp, a divided sleeve surrounding the segmental bar and within which the latter is made to slide longitudinally, and a clamp embracing the sleeve and adapted by means of a screw to tighten the sleeve around the segmental bar for the purpose of holding the lamp in place after it has been adjusted. The clamp, besides holding the lamp in its proper position, is also used for securing the lamp to the vehicle.

Referring to the drawings, Figure 1 is a side elevation of a bicycle-lamp having our improvement attached thereto. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is an elevation showing a modified form of our device. Fig. 4 is a perspective view of a detail, and Figs. 5 to 8 illustrate further modifications.

Similar numerals of reference indicate similar parts in the respective figures.

1 is a bicycle-lamp of any desired form or construction, at the back of which is the curved or segmental bar 2, provided at its ends with T-heads 3 4, as seen in Figs. 1 and 2. Pivoted to the T-heads of the segmental bar 2 are links 5 6, the opposite ends of the links being hinged to the lamp. Any known spring arrangement may be used to take up

vibration or jar, but we prefer the one illustrated in Figs. 1 and 2. In this example each T-head is longitudinally perforated for a pivot of one of the links, which pivot is surrounded within the perforation by two springs 6^a, one end of each spring being secured to the pivot, while the other is attached to the T-head. The sockets on the lamp, to which the links are pivoted, are preferably lined with rubber to absorb vibration and prevent metallic contact.

A cylindrical sleeve 7 surrounds the segmental bar 2, the latter being adapted to slide longitudinally therein. The sleeve is divided lengthwise into two parts, each part having a curved slot shaped to fit the segmental bar 2. The sleeve 7 is retained in position on the bar 2 by a clamp 11, which partly embraces the sleeve and which by means of a screw 12 and thumb-nut 13 binds the clamp to the sleeve and the sleeve to the segmental bar. A projecting bead or flange 10 is formed on each end of the sleeve, as shown, to retain the clamp in position thereon. A rib or feather 14, formed upon the concave or inner side of the bar 2, enters a space 15, existing between the two parts of the sleeve 7, and serves to prevent rotary movement of the sleeve upon the bar.

The clamp 11, which consists of a plate of spring metal, is bent approximately into U form, the loop or bend embracing the sleeve 7 between the flanges 10, as above stated, while the two arms 20 21 of the clamp extend backward from the loop in substantially parallel lines. The two arms 20 21 are curved outwardly to form a cylindrical opening, as will be seen at 16, to fit them to clasp the head-post or some other cylindrical portion of the bicycle-frame, while the ends of the said arms are hook-shaped, as at 17, to adapt them to clasp the fork.

A screw 14 passes through an elongated opening 14^a in one arm of the clamp 11 to a nut socketed in a slot 14^b, formed in the other arm, the slot being between the curved portion 16 and the hook-shaped end 17. The screw 14 has a squared head to take a wrench and serves to tighten the clamp on the vehicle however attached thereto. By socketing the nut in the slot 14^b and also providing an elon-

gated opening through which the headed end of the screw 14 passes binding is prevented. The same provision is made with respect to the screw 12, having the thumb-nut 13. The clamp or bracket is stiffened by convex surfaces 14^c, formed therein in the process of stamping it out.

Fig. 3 shows the lamp having the segmental bar 2 rigidly fastened thereto, the means of attachment and adjustment being as in Figs. 1 and 2. In this case the spring or elasticity is supposed to be found in the pneumatic tires with which the wheels of the vehicle are furnished.

Assuming that the lamp is secured in place on a bicycle, to adjust it the thumb-nut 13 must be turned back to loosen the sleeve 7 on the segmental bar 2. Now by sliding the segmental bar through the sleeve any required degree of adjustment in a vertical arc may be obtained, whereby the light from the lamp shall be thrown on the ground a greater or lesser distance in advance of the rider. Horizontal adjustment is regulated by swinging the lamp to the right or left, the sleeve 7 turning in the bend of the clamp 11. When the desired position of the lamp has been attained, by tightening the thumb-nut 13 the lamp will be fixed in that position. When the lamp is attached to the head of a bicycle, the clamp will stand in the longitudinal center line of the vehicle, as indicated in full lines in Fig. 2; but when it is attached to the fork it will be turned at a right angle to such line, as shown in dotted lines in the same figure.

The rib or feather 14 may project from the inner curve of the segmental bar, as in Fig. 7, or the outer curve, as in Fig. 3, or from either or both sides, as represented in Fig. 5. The rib 14 may be dispensed with and the segmental bar shaped as in the sectional views, Figs. 6, 7, and 8. Fig. 6 represents a triangular and Fig. 7 a square bar, while in Fig. 8 a bar is shown formed of shaped sheet metal, in this instance U-shaped.

While the sleeve 7 is preferably formed in two parts, it may be a split ring, and other

departures from the exact construction of certain parts as herein described may obviously be made without departing from our invention and will suggest themselves to the skilled mechanic.

Having thus described our invention, we claim—

1. The combination of a lamp-body, a segmental bar attached thereto, a divided compressible sleeve having a longitudinally-curved bearing therein through which the said segmental bar passes, and means for clamping the parts of the sleeve to the segmental bar, substantially as set forth.

2. The combination of a lamp-body, a segmental bar attached thereto, a two-part sleeve surrounding the said bar and through which it slides, the sleeve having a longitudinally-curved internal bearing and a straight external cylindrical bearing and a clamp embracing the sleeve and adapted to secure it to the bar, substantially as set forth.

3. The combination of a segmental bar attached to a lamp-body, a rib projecting therefrom, a two-part sleeve having a longitudinally-curved internal bearing surrounding the said ribbed bar, and a clamp embracing the two-part sleeve, and adapted, when tightened, to clamp both the body and rib of said segmental bar, substantially as set forth.

4. The combination, with a lamp, of a supporting segmental bar, a divided sleeve thereon, having a longitudinally-curved internal bearing, and a straight cylindrical external bearing and a clamp shaped so as to embrace and clamp the sleeve, thus securing the lamp after adjustment, and to admit of the attachment of the lamp to any part of a bicycle, substantially as set forth.

In testimony whereof we have hereunto set our hands and affixed our seals, at the said city of Chicago, this 19th day of February, 1897.

WILLIAM S. HAMM. [L. S.]

WILLIAM H. TUFFORD. [L. S.]

Witnesses:

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G. L. WALTERS.