No. 621,823. Patented Mar. 28, 1899.

J. KIRSCHBAUM.

SPRING CARRIER FOR LAMPS.

(No Model.) (Application filed May 18, 1898.)

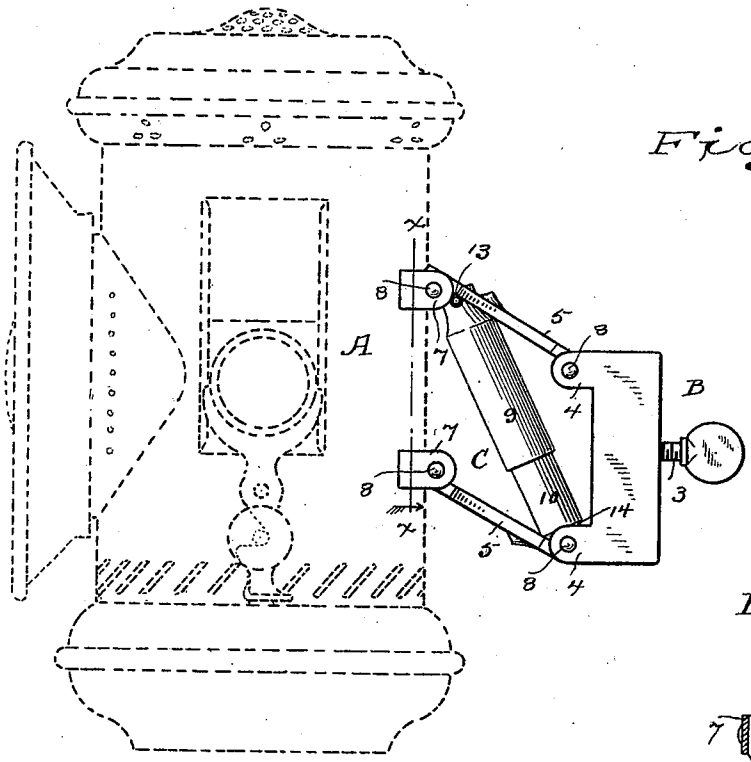


Fig. 1.

Fig. 3.

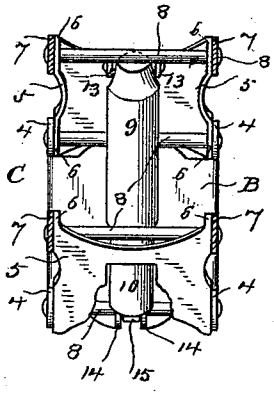
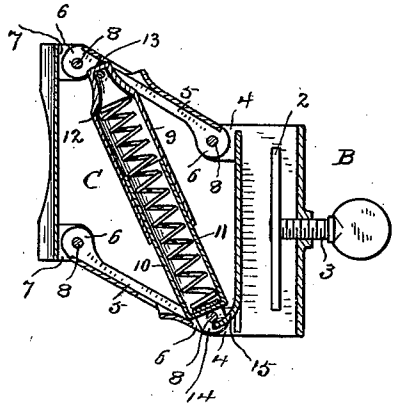


Fig. 2.



WITNESSES

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SPRING-CARRIER FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 621,823, dated March 28, 1899.

Application filed May 18, 1898. Serial No. 681,033. (No model.)

To all whom it may concern:

Be it known that I, JOHN KIRSCHBAUM, a citizen of the United States, residing at Waterbury, county of New Haven, State of Connecticut, have invented a new and useful Spring-Carrier for Lamps, of which the following is a specification.

My invention has for its object to provide a spring-carrier for lamps, more especially bicycle and carriage lamps, which shall be simple and inexpensive to produce, will permit ample but steady movement of the lamp and without sudden jerks, the weight of the lamp being carried at all times by a compression-spring, and which shall be so constructed as to render breakage practically impossible.

With these ends in view I have devised the simple and novel spring-carrier for lamps which I will now describe, referring by numbers to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view showing a bicycle-lamp in outline and my novel spring-carrier in side elevation; Fig. 2, a longitudinal section of the carrier, illustrating its construction; and Fig. 3 is a section on the line *x x* in Fig. 1, the lower arm being slightly broken away to show the lugs.

A denotes a lamp the back of which is provided with lugs or eyes 7 for the attachment of the arms of the carrier, and C denotes my novel spring-carrier as a whole. The carrier is provided with an attaching-clamp B, which may be made of any suitable construction to adapt it to engage a bicycle-lamp bracket or the dashboard or other portion of a carriage, the special construction of the clamp not being of the essence of my invention. In the present instance I have shown the clamp as comprising the ordinary sheet-metal socket of a bicycle-lamp clamp, within which is a movable plate 2, carried by a set-screw 3, said plate being adapted to engage the lamp-bracket (not shown) to lock the carrier and lamp in position on a bicycle. The clamp is provided on its inner side with lugs 4, to which the arms 5 of the carrier are pivoted, the other ends of said arms being pivoted to lugs 7 on the lamp. The special construction of arms 5 is not of the essence of my invention. They are ordinarily made of sheet metal and are provided with inwardly-turned lugs 6, which are pivoted to lugs 4 and 7. In the present instance I have shown the arms as pivoted both to the clamp and to the lamp by means of pins 8, which extend the entire width of the arms and pass through the respective pairs of lugs each side of the arms, as clearly shown in Fig. 3.

9 and 10 denote shells or tubes, each of which is open at one end and the bases of which are pivoted, respectively, to the inner end of the upper arm—that is, the end next to the lamp—and to the outer end of the lower arm—that is, the end next to the clamp. The open ends of these shells slide one within the other and inclose a coil-spring 11, the ends of which bear against the bases of the shells. The special mode in which the ends of the spring have their bearing in the shells or in which the bases of the shells are pivoted to the arms is not of the essence of my invention. In the present instance I have shown the base of upper shell 9 as reduced in diameter, so as to form a shoulder 12, against which the upper end of the spring rests, the reduced upper end of said shell lying between lugs 13 on the inner side of the upper arm and being pivoted to said lugs, and have shown shell 10 as closed at its lower end and the lower end of the spring as resting against the end of the shell. I have also shown the lower end of shell 10 as provided with lugs 14, through which the pin 8 passes which connects the outer end of the lower arm to the attaching-clamp, said shell being retained at a central position by means of a lug 15, which extends from the inner side of the clamp and lies between lugs 14, as clearly shown in Fig. 2.

It will be noticed that in my present carrier the weight of the lamp acts directly on the spring to compress it, there being no strain whatever on the spring other than compressive strain, so that all leverage on the coils, and the consequent danger of breakage, is done away with.

Having thus described my invention, I claim—

1. A carrier for bicycle-lamps comprising an attaching-clamp, upper and lower arms pivoted to said clamp and adapted to be pivotally connected to a lamp, shells sliding one

within the other and attached respectively to the end of the upper arm which is connected to the lamp and to the end of the lower arm which is connected to the clamp, and a coil-spring lying within said shells and bearing against the attached ends thereof.

2. The combination with a bicycle-lamp, an attaching-clamp and upper and lower arms pivoted to said lamp and said clamp, of shells adapted to slide one within the other, the base of one shell being pivoted at the end of the upper arm which is attached to the lamp, and the base of the other shell being pivoted at the end of the lower arm which is attached to the clamp, and a coil-spring lying within said shells by which the lamp is yieldingly supported.

3. The combination with a bicycle-lamp and an attaching-clamp having a lug 15, of upper and lower arms pivoted to said lamp and said clamp, said upper arm having at its upper end lugs 13, shells adapted to slide one within the other, the base of the upper shell being pivoted to lugs 13 and the base of the lower shell being provided with lugs 14 which lie on opposite sides of lug 15 and are pivoted at the end of the lower arm which is attached to the clamp.

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

JOHN KIRSCHBAUM.

Witnesses:

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