

(No Model.)

A. HERING.
VEHICLE LANTERN SUPPORT.

No. 443,207.

Patented Dec. 23, 1890.

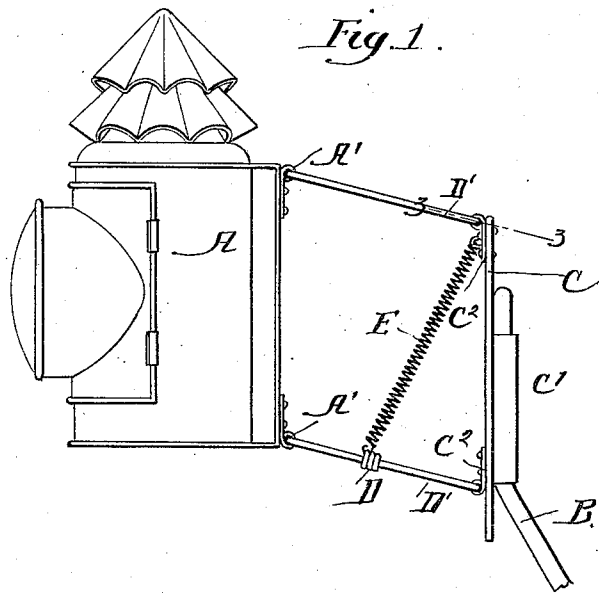


Fig. 2.

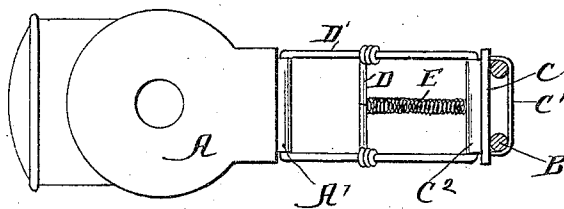
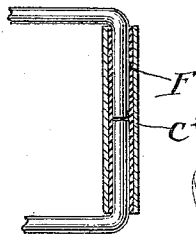


Fig. 3.

Witnesses:

Jean Elliott.
Julius H. H. H.



Inventor:

Albert Hering

By *Robert W. Burton*
his Attorneys.

UNITED STATES PATENT OFFICE.

ALBERT HERING, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE GORMULLY & JEFFERY MANUFACTURING COMPANY, OF SAME PLACE.

VEHICLE-LANTERN SUPPORT.

SPECIFICATION forming part of Letters Patent No. 443,207, dated December 23, 1890.

Application filed May 3, 1890. Serial No. 350,426. (No model.)

To all whom it may concern:

Be it known that I, ALBERT HERING, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Vehicle-Lantern Supports, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part thereof.

10 This invention relates to supports for lanterns for vehicles, being particularly adapted to meet the necessities arising in the use of such lanterns upon velocipedes and other vehicles, whereon the lantern is subjected to considerable jarring, and it is the purpose of this device to reduce the jarring of the lantern to the lowest possible limit.

15 In the drawings, Figure 1 is a side elevation of the lantern and its support and the post upon the vehicle on which it is supported. Fig. 2 is a plan of the same. Fig. 3 is a section at the line 3 3 on Fig. 1.

A is the lantern, which in itself presents no peculiarities except those which relate to the pivotal connections thereto of the supporting-links in respect to the bushings therein, which are of the same sort as those shown in Fig. 3, and will be described in that connection.

30 B represents a portion of the bracket upon which the lantern is adapted to be placed and supported. As illustrated and as commonly employed it is made of heavy wire folded, forming a loop adapted to enter the socket C', provided for it upon the back side of the lantern-supporting bar C.

40 D' D' are two precisely similar links, made of heavy wire or rod adapted to the size of the lantern, folded in the form of a rectangle, the ends of the wire coming together at the middle of one of the ends of such rectangle, the opposite end being journaled in the bearing A', formed on the back side of the lantern. The side composed of the ends of the wire, which meet, as described, is journaled in a similar bearing C', formed on the bar C. This description will apply equally to both of the links, one being secured at the top and the other at the bottom of the rear side of the lantern and at the forward side of the lan-

tern-supporting bar C, said links being, as will be understood, one directly over the other.

E is an extensible coiled spring, the upper end of which is secured in any way to the bar C near the upper end of said bar. The lower end of the spring is connected to the cross-bar D, which extends between the side bars of the lower link. This cross-bar is designed to be adapted to slide along said side bars and to be comparatively fixed in position wherever located, and it may in individual instances be soldered fast at some preferred location, and to adapt it to be used in this manner it is most conveniently made of wire or rod, having an eye formed at each end by being wound in a spiral coil of three or four turns of such diameter as to fit very closely onto the wire or rod of which the link is composed, the distance between its said eyes being equal to the distance between the side bars of the link. When thus made, it will be put onto the link before the ends which form the pivot of the link to the bar C are bent together.

75 The tension of the spring E is designed to be sufficient to uphold the lantern, preferably keeping it in such position that the links slope somewhat upward from the bar C to the lantern, so that as the lantern oscillates the links may pass from a short distance above to a short distance below horizontal lines from their pivots on the bar C, so that the distance of the lantern from the bar may be changed as little as possible on account of that oscillation. The bar D, it will be understood, will be adjusted by sliding it back and forward on the link to adjust the tension of the spring, as desired. This adjustment, it will be understood, is one which may be made in the use of the lantern from time to time as the spring becomes stretched and requires such adjustment in order to make it hold the lantern at the proper point; but the construction shown has an additional purpose in the process of manufacture—viz., that the position of the bar may be adjusted according to the weight of the lantern and its contents and according to the style and proportions of the spring employed with it. Thus, if it is desired to use a spring of slight extensibility 100

and strong tension, the bar D will be set very near to the pivot of the link to the upright bar C, because in that position a given motion of the lantern will tend to stretch the spring less than if the bar D is placed farther forward on the link, and in view of the fact that inequalities of tempering will give to springs even of the same proportions different tension and extensibility the possibility of adjusting the bar D to such point in each instance as will be adapted to the tension and extensibility of the particular spring enables the manufacturer to adjust all lanterns to precisely the same position, notwithstanding variations in the springs, and when this device is made use of for this purpose the bar D may after being thus adjusted be soldered fast onto the link.

In order to avoid all squeaking at the four bearings of the links on the lantern and on the support, I provide an elastic or, at least, a yielding bushing F in said bearings. This bushing may be made of felt or rubber or any like material; but a material capable of absorbing oil slightly and not being injuriously affected by it is to be preferred, for which reason I usually use felt or cloth.

I claim—

1. In combination with the lantern and the lantern-supporting bar, two substantially-parallel links, located one above the other, each link being integrally formed of folded wire or rod and having the portions of such wire or rod which constitute the length of the link from the lantern to the supporting-bar connected at their opposite ends by parallel por-

tions of such integral wire or rod, said parallel portions constituting the bearings of the link on the lantern and on the lantern-supporting bar, respectively, substantially as set forth.

2. In combination, substantially as set forth, the lantern and the lantern-supporting bar, the links, located one above another, which connect them, the bar D, joined to the side bars of one of the links, and the spring E, connected at its upper end to the bar C above such link and at its lower end to said cross-bar D.

3. In combination, substantially as set forth, the lantern and the lantern-supporting bar, the links, located one above the other, which connect them, the bar D, joined to the side bars of one of the links and adapted to slide on said side bars, and the spring E, connected at its upper end to the bar C and at its lower end to said cross-bar D.

4. In combination, substantially as set forth, the lantern and the lantern-supporting bar C, the links, located one above the other, which connect them, the cross-bar D, formed of wire coiled at its ends to form eyes, which slide on the side bars of one of the links, and a spring E, connecting said cross-bar to the lantern-supporting bar C, substantially as set forth.

In testimony whereof I have hereunto set my hand, in the presence of two witnesses, at Chicago, Illinois, this 29th day of April, 1890.

ALBERT HIERING.

Witnesses:

CHAS. S. BURTON,
JEAN ELLIOTT.