

(No Model.)

S. L. REEFY.
BRACKET FOR VEHICLE LAMPS.

No. 529,751.

Patented Nov. 27, 1894.

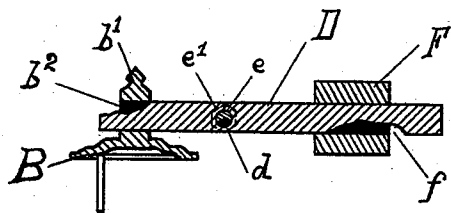


Fig. 2.

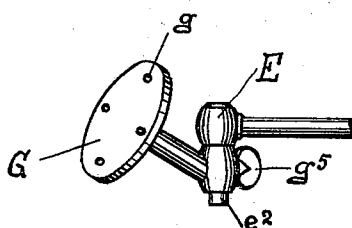


Fig. 3.

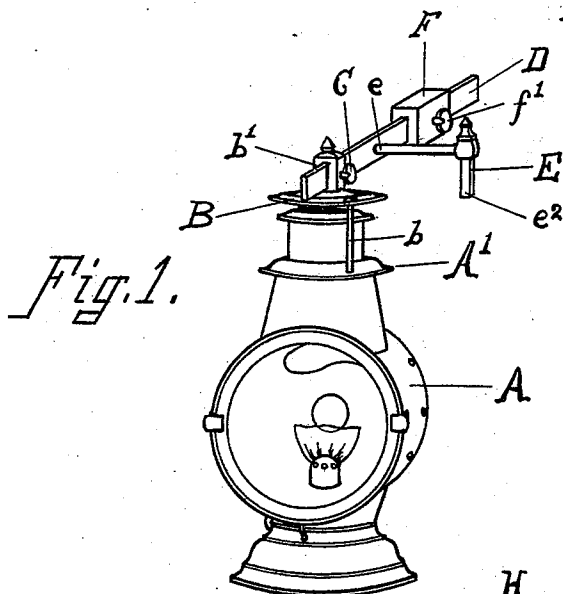


Fig. 1.

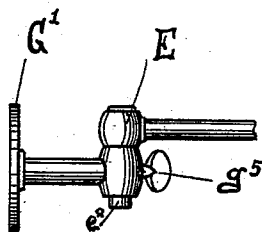


Fig. 4.

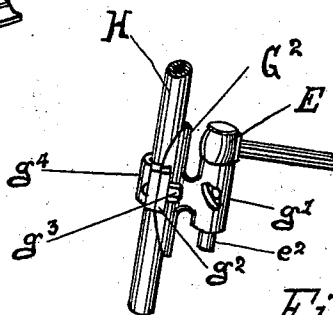


Fig. 5.

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UNITED STATES PATENT OFFICE.

SOLOMON L. REEFY, OF EDINBURG, ILLINOIS.

BRACKET FOR VEHICLE-LAMPS.

SPECIFICATION forming part of Letters Patent No. 529,751, dated November 27, 1894.

Application filed February 17, 1894. Serial No. 500,528. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON L. REEFY, a citizen of the United States, residing at Edinburg, in the county of Christian and State of Illinois, have invented certain new and useful Improvements in Brackets for Vehicle-Lamps, of which the following is such a full, clear, and exact description as will enable those skilled in the art to which it pertains to make and use my said invention.

The purpose of my invention is to provide means whereby a lamp of any suitable and convenient form may be connected with and supported in any desired position on the vehicle in such manner that the lamp may oscillate freely in order to adapt itself to sudden shocks and changes of position to which such lamps are subject.

Heretofore the common practice has been to affix vehicle lamps rigidly to the vehicle and it is a common experience of the users of lamps so attached to have the light extinguished just at the time when it is most needed, for it is the roughest jolting in the worst places in the road that most frequently causes the extinguishment of the light. For this reason lamps rigidly affixed to the vehicle are very objectionable. My invention is primarily intended to obviate this objection.

With this end in view my invention consists of certain novel features of construction and combinations of mechanism, shown in the annexed drawings and hereinafter fully described and specifically claimed.

In the drawings to which reference is hereby made Figure 1 is a perspective view of the complete bracket, and the means for connecting the lamp with the bracket. Fig. 2 is a vertical longitudinal section through the vibrating arm and connected parts. Fig. 3 is an enlarged detached view of the socket plate used in connecting the bracket with an inclined side or end of the vehicle body. Fig. 4 is an enlarged detached view of the socket plate used in connecting the bracket with a flat side or end of the vehicle body. Fig. 5 is an enlarged detached view of the socket plate used in connecting the bracket with the bow of the vehicle top.

Similar letters indicate like parts in all of the views.

The lamp A may be of any suitable form.

I prefer however to use a tubular lamp such as is shown in Fig. 1. To connect the bracket with the lamp I use the cap B, which is secured to the flange top A' of the lamp by bolts b. The cap B has an integral block b' which is pierced by a horizontal transverse hole b² adapted to receive the vibrating arm D. A thumb screw C serves to clamp the arm D in the hole b².

The arm D is pierced by a transverse hole d adapted to receive a pivot on which the arm turns. The weight F has a longitudinal hole f, through which the arm D passes, and a thumb screw f' serves to clamp the weight in any desired position on the arm D. The lamp being suspended from the arm on one side of the pivotal support and the weight being on the other side of said pivotal support, the weight serves to counterbalance the lamp, so that when the lamp is at rest it will always be suspended in a vertical position, and however much the lamp may be swung out from a vertical position by the jolting of the vehicle, the vibrating arm will turn on the pivot to restore the lamp to a vertical position. It will be observed also that the movement of the lamp is an easy oscillating movement which obviates the liability to extinguish the light which would exist if the lamp were rigidly secured to the vehicle, and subject to the sudden jerky motion of the vehicle.

Instead of making the counterpoise F movable on the arm D, it may be rigidly secured to or integral with the arm D; and instead of moving the weight to counterbalance the lamp, the block b' to which the lamp is secured may be adjusted on the arm so as to counterbalance the weight.

It is of the essence of my invention to provide means for pivotally supporting the lamp so that it may oscillate freely and be self-adjusting so as to readily adapt itself to the constantly varying movements of the vehicle and it is immaterial whether this result is attained by moving the counterpoise to counterbalance a fixed lamp, or by moving the lamp to counterbalance a fixed counterpoise, or by making both the lamp and the counterpoise adjustable on the bar as I herein set forth.

The angle arm E has at the outer end of its horizontal member a pivot e which supports

the arm D and on which the arm turns. A nut e' retains the arm D in position on the pivot e . The end e^2 of the vertical member of the angle arm may be either round or square and is adapted to fit into socket plates having round or square sockets as the case may be, by means of which the bracket is connected with the vehicle. The socket plates have thumb screws g^5 by means of which the end e^2 of the arm E may be clamped in the socket.

The form of the socket plates G and G' for the inclined side or end of the vehicle body, and for the flat sides or ends of the vehicle body are clearly shown in Figs. 3 and 4, respectively. The socket plates have a base provided with holes g to receive screws by which the socket plates are secured to the vehicle body.

The socket plate shown in Fig. 5 is designed to connect the bracket with one of the bows H, of the vehicle top, and in that view I have shown the socket plate in position on the bow. The socket plate consists of an elongated oval body G^2 having an integral socket g' parallel to said body, also having projecting flanges g^2 having holes adapted to receive bolts g^3 which connect the segmental strap g^4 with the body G^2 .

By reason of the lamp being pivotally supported on the vibrating arm it is not necessary to detach the lamp from the bracket when the bracket is connected with the bow of the vehicle top in order to lower the vehicle top, for it is obvious that when the top is lowered the arm D will turn on its pivot so that the lamp will always retain its vertical position irrespective of the position of the vehicle top.

In attaching the lamp to the vehicle a suitable socket plate is secured in any desired position on the vehicle body or on the bow of the vehicle top and the end e^2 of the arm E is then inserted in the socket. To detach the lamp the arm E is simply removed from the socket leaving the socket plate in position for future use.

I am aware that spring counterpoises and sliding counterpoises are not in themselves new but have long been commonly used with a great variety of mechanical devices. I am also aware that a spring counterpoise has heretofore been used on vehicle lamps, but such use of a spring counterpoise is objectionable because the vibration of the spring caused by the jolting of the vehicle imparts a sudden and jerky motion to the lamp, also because lamps of that description are not readily attachable to a bow of the vehicle top for the reason that the tension of the spring which is connected with the pivotal arm on which the lamp is supported is increased to such an extent by the rotation of the arm as to more than counterbalance the weight of the lamp thereby causing the lamp to assume a nearly horizontal position when the top is folded back. These objections are totally obviated by the use of my pivotal supported

arm and the sliding counterpoise on said arm. I am also aware that a sliding counterpoise has been used to counterbalance a boom from which an electric street lamp is suspended, for the purpose of the more convenient care of the lamp, but I am not aware that a gravitating counterpoise on a pivotally supported arm has heretofore been used to counterbalance a vehicle lamp so that the lamp may oscillate freely and automatically and smoothly adapt itself to the jolts and sudden movements of the vehicle, or adapt itself to the changed position of the top when the top is folded back as already described.

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

1. In a bracket for vehicle lamps, the combination of the angle arm attachable to the vehicle, the vibrating arm pivotally supported on the angle arm, the block adjustable on the vibrating arm and adapted to be connected with the lamp, and the gravitating counterpoise on the vibrating arm adapted to counterbalance the weight of the lamp, as set forth.

2. In a bracket for vehicle lamps the combination of the socket plate attachable to the vehicle the angle arm adapted to fit in the socket plate and adapted to support the vibrating arm, the vibrating arm pivotally supported on the angle arm, the cap adapted to be connected with the lamp and having a block adapted to be longitudinally adjusted on the vibrating arm, and the counterpoise adjustable on the vibrating arm, and adapted to counterbalance the weight of the lamp, as set forth.

3. In a bracket for vehicle lamps the socket plate having an elongated oval body with an integral socket, and a segmental strap detachably connected with said body; in combination with an angle arm having a vertical member adapted to fit in said socket, a vibrating arm pivotally supported on the angle arm, the cap attachable to the lamp and adjustably connected with the vibrating arm and the adjustable counterpoise adapted to counterbalance the lamp, as set forth.

4. In a bracket for vehicle lamps a cap having a perforated block adapted to receive a supporting arm and provided with bolts adapted to connect said cap with a lamp; in combination with an angle bar attachable to a vehicle, a vibrating arm pivotally supported on said angle arm and fitting in said block and a counterpoise adjustable on said vibrating arm, as set forth and for the purpose stated.

5. In a bracket for vehicle lamps, a socket plate attachable to the inclined side or end of a vehicle body, consisting of a base having holes adapted to receive bolts or screws, also having a socket in an inclined position relative to said base and having a set screw adapted to clamp the angle arm in said socket; in combination with an angle arm, a vibrating arm pivotally supported on said angle arm, a cap attachable to a lamp and adjust-

able on said vibrating arm and a counterpoise adjustable on said vibrating arm, as set forth.

6. In a bracket for vehicle lamps, the combination of a socket plate, an angle arm adapted to fit in said socket plate, a vibrating arm pivotally supported on said angle arm, a counterpoise adapted to slide on the vibrating arm, the set screw on the counterpoise, the cap attachable to the lamp and a block on the

cap adapted to slide on the vibrating arm, and the set screw on the block, as set forth and for the purpose stated.

In witness whereof I have hereunto subscribed, at Edinburg, Illinois, this 14th day of February, 1894.

SOLOMON L. REEFY.

Witnesses:

H. G. HALE WALKER,
GEO. A. WALKER.