I. S. HERSHBERGER.

HEADLIGHT FOR STREET CARS, AUTOMOBILES, AND OTHER VEHICLES.

APPLICATION FILED JUNE 5, 1912.

1,040,674.

Patented Oct. 8, 1912

2 SHEETS—SHEET 1.

Fig. 1.

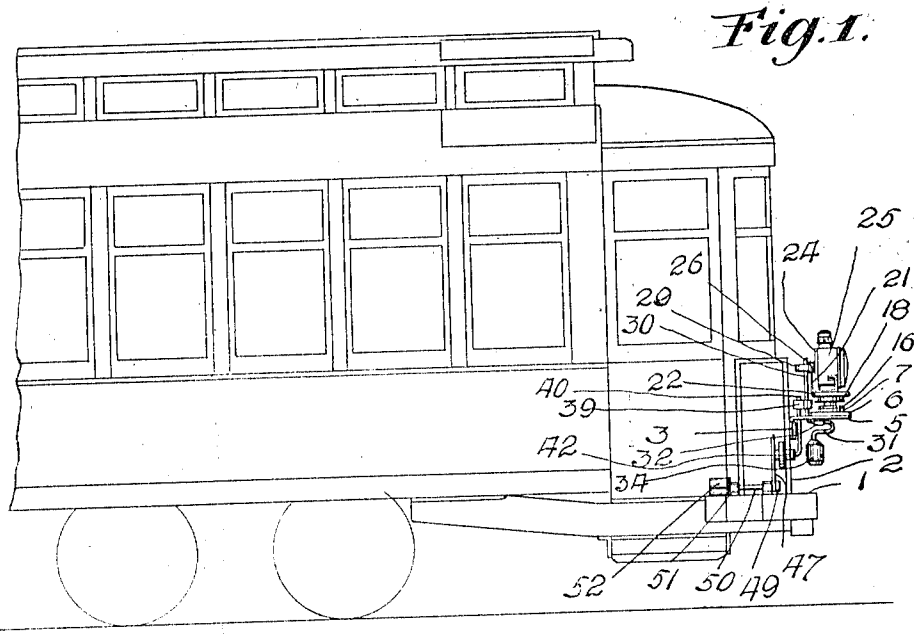


Fig. 3.

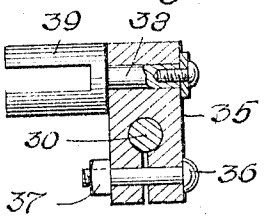


Fig. 2.

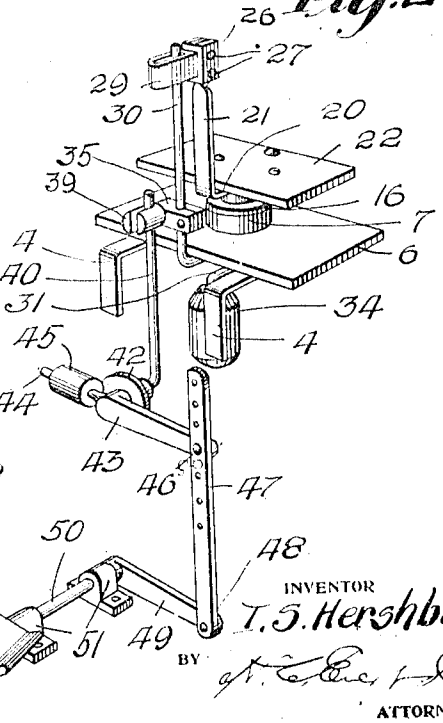
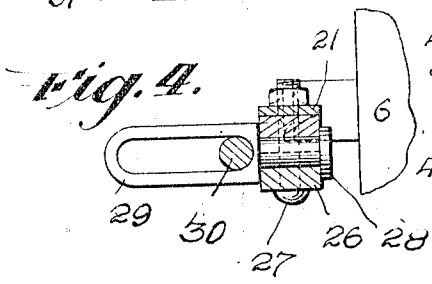


Fig. 4.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 5.

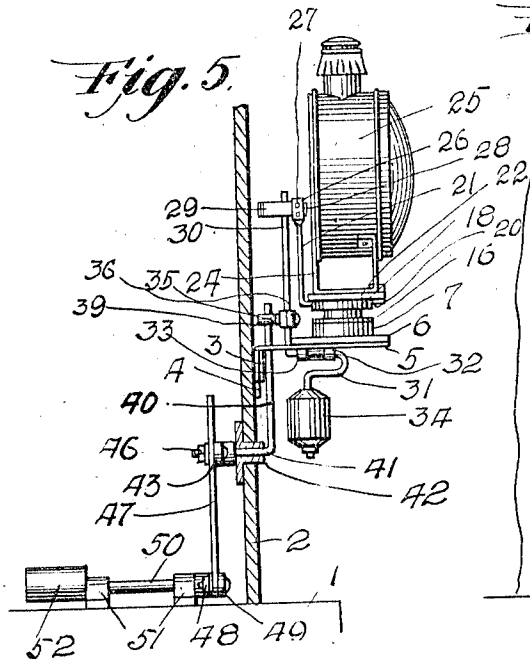


Fig. 6.

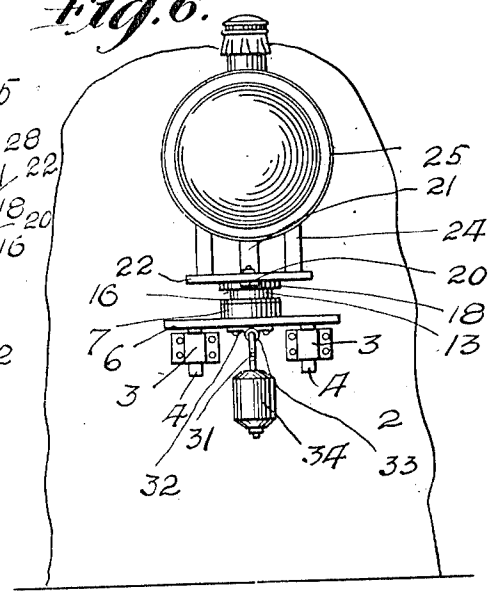


Fig. 7.

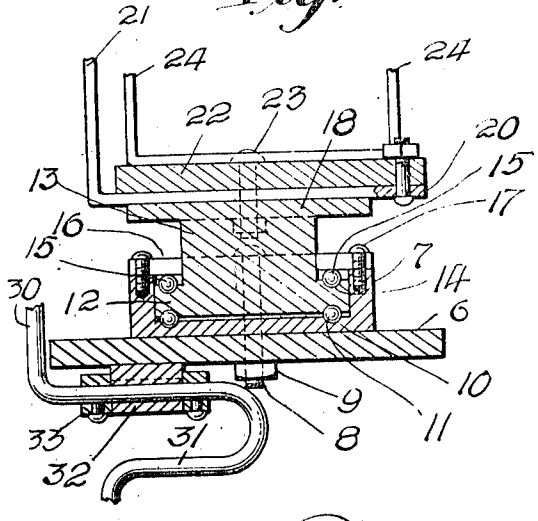
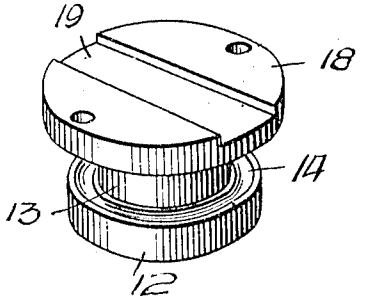


Fig. 8.



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UNITED STATES PATENT OFFICE.

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HEADLIGHT FOR STREET-CARS, AUTOMOBILES, AND OTHER VEHICLES.

1,040,674. Specification of Letters Patent. Patented Oct. 8, 1912.

Application filed June 5, 1912. Serial No. 701,919.

To all whom it may concern:

Be it known that I, IRWIN S. HERSHBERGER, a citizen of the United States of America, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Headlights for Street-Cars, Automobiles, and other Vehicles, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to head lights for street cars, automobiles and other vehicles, and the primary object of my invention is to provide a dirigible head light or lamp that will cast rays of light in the path of the car or vehicle, whereby the operator of the car or vehicle can observe the path or road over which the car or vehicle is about to travel.

Another object of this invention is to provide a foot actuated mechanism for swinging a head light, lamp or lantern in a direction that will cast rays of light in the direction in which the car or vehicle is steered, thereby preventing the rays of light being cast at a tangent when passing around a curve section of track or a road.

A further object of this invention is to provide a head light shifting mechanism that operates upon the principle of a pendulum, the head light being normally supported straight ahead and after each actuation restored to its normal position.

A still further object of this invention is to accomplish the above results by a mechanical construction that is easy to install, inexpensive to manufacture, durable, and highly efficient as a lamp or lantern shifting mechanism.

With the above and other objects in view, the invention resides in a novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

Figure 1 is a side elevation of the lamp shifting mechanism as applied to a portion of a street car. Fig. 2 is a perspective view of the mechanism. Fig. 3 is a horizontal sectional view of a coupling member. Fig. 4 is a horizontal sectional view of a yoke holder. Fig. 5 is an enlarged side elevation of the lamp shifting mechanism. Fig. 6 is a front elevation of the same. Fig. 7 is an enlarged vertical sectional view of a portion of a mechanism, and Fig. 8 is an enlarged perspective view of a rotatable head.

Further describing my invention with reference to the drawing wherein like numerals denote corresponding parts throughout: 1 denotes the platform of a car as having a dash board 2.

3 denotes straps carried by the dash board 2 and detachably mounted in these straps are the rear ends 4 of brackets 5 that support a horizontal platform 6.

7 denotes a cup shaped base secured to the platform 6 by bolts 8 and 9. In the bottom of the base 7 is an annular race 10 for anti-frictional balls 11 and revolubly mounted upon said balls is a circular head 12, the bottom of which has a race to receive the anti-frictional balls 11. The head 12 has a neck 13 and a ball race 14 surrounding the neck 13. The ball race 14 receives anti-frictional balls 15 and engaging these balls is a sectional cover 16 that is secured to the base 7 by screws 17 or other fastening means. The cover 16 is made in sections whereby the head 12 can be easily placed in the base 7. The neck 13 has the circular base 18 provided with a seat 19 for the lower end 20 of an upright 21, the lower end 20 being secured to a lamp base 22 that is bolted, as at 23 to the holder 18. Suitably secured to the base 22 are frames 24 supporting a head light, lamp or lantern 25.

26 denotes a yoke holder that is bolted or otherwise secured, as at 27 to the upper twisted end of the upright 21. The holder 26 supports a stem or shank 28 of a yoke 29.

30 denotes a pendulum rod that extends into the yoke 29. The rod 30 has a goose neck 31 that is loosely mounted in a bearing 32 provided therefor upon the underneath side of the platform 6. The goose neck has collars 33 that engage the ends of the bearing 32 and prevent longitudinal movement of the goose neck in said bearing. The goose neck 31 terminates in a weight or pendulum 34 and this weight retains the rod 30 normally upright or vertical.

35 denotes a coupling member in the form of a split clamp that is mounted upon the pendulum rod 30 by a bolt 36 and a nut 37. Mounted in the coupling member 35 is a shank 38 provided with a fork 39.

40 denotes a vertical actuating rod that extends into the fork 39. The actuating rod 40 is carried by an end of a rock shaft 41, journaled in a bushing 42 mounted in the

dash board 2. The inner end of the shaft 41 has a crank 43 and a weight rod 44 upon which is mounted a counter balance weight 45. The crank 43 is adjustably connected, as at 46 to a connecting bar 47 that is pivotally connected, as at 48 to the crank 49 of a rock shaft 50. The rock shaft 50 is journaled in bearings 51 mounted upon the platform 1. The inner end of the rock shaft 50 is provided with a treadle or foot piece 52 to facilitate rocking the shaft 50 by the toe of the foot.

In operation, a pressure of the foot upon one side of the treadle 52 rocks the shaft 50 and lowers the connecting bar 47, thereby rocking the shaft 41, swinging the pendulum rod 30 and turning the head light, lamp or lantern 25 upon the base 7. When the right hand side of the treadle 52 is depressed, the head light is turned to the left and when the left hand side of the treadle is depressed, the head light is turned to the right.

A street car equipment comprises the straps 3 and the elements 40 to 52 inclusive. The platform 6 at one end of the car can be removed and placed at the opposite end of the car when it is desired to change about the head light.

It is thought that the operation and utility of the lamp shifting mechanism will be apparent without further description, and while in the drawings there is illustrated a preferred embodiment of the invention, it is to be understood that the structural elements are susceptible to such changes, as in the size, shape and manner of assemblage, as fall within the scope of the appended claims.

What I claim is:—

1. A lamp shifting mechanism comprising a platform, a base carried thereby, a head revolubly mounted in said base, a holder carried by said head and adapted to support a lamp, an upright carried by said holder, a yoke carried by said upright, a pendulum rod extending into said yoke and under said platform, a bearing carried by said platform and supporting said pendulum rod, a coupling member carried by said rod, an actuating rod loosely arranged in said coupling member, and means including rock shafts, cranks and a treadle for actuating said rod.

2. A lamp shifting mechanism comprising a platform, a head revolubly supported by said platform, a holder carried by said head and adapted to support a lamp, an upright carried by said holder, a yoke connected to the upper end of said upright, a pendulum rod movably supported by the underneath side of said platform and provided with a pendulum, an actuating rod loosely connected to said pendulum rod, and means including a treadle adapted to actuate said rod to swing said lamp holder in a horizontal plane.

3. A lamp shifting mechanism for vehicles, comprising a portable platform, a lamp holder revolubly supported above said platform, an upright carried by said holder, a yoke connected to said upright, a pendulum rod attached to the underside of said platform and extending into said yoke, an actuating rod loosely connected to said pendulum rod, and means including rock shafts and a treadle for actuating said rod.

4. In a lamp shifting mechanism for vehicles, a portable platform, a lamp holder revolubly mounted upon said platform and adapted to support a lamp, a yoke supported from said holder, a pendulum rod having a goose neck movably supported below said platform with the upper end of said rod extending into said yoke, coupling member carried by said rod, an actuating rod loosely connected to said coupling member, and means including a treadle for actuating said rod.

5. The combination with a street car, and a platform detachably connected thereto, of a lamp holder revolubly mounted upon said platform, a yoke supported from said holder, a pendulum rod having a goose neck movably supported by the underneath side of said platform and provided with a pendulum, said rod extending into said yoke, an actuating rod loosely connected to said pendulum rod, and means including rock shafts and a treadle carried by said car for actuating said rod to move said pendulum rod and said lamp holder.

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

IRWIN S. HERSHBERGER.

Witnesses:
J. L. HERSHBERGER,
DAN L. PARSONS.