

No. 673,441.

Patented May 7, 1901.

F. A. MERRICK & F. W. GARRETT.

TROLLEY BASE.

(Application filed Aug. 16, 1900.)

(No Model.)

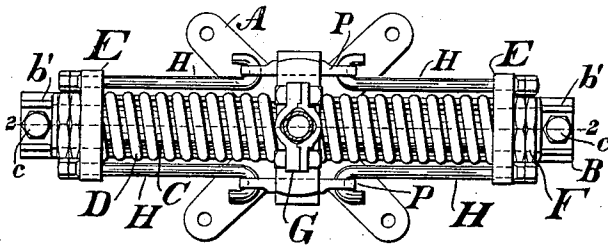


Fig. 1.

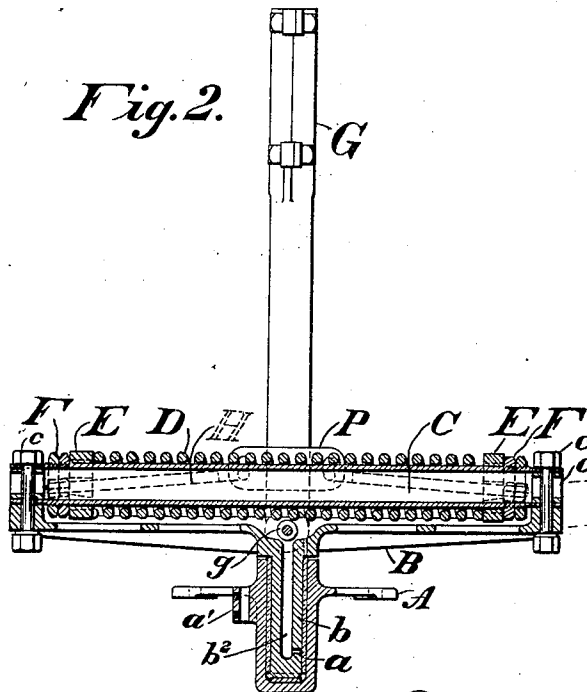
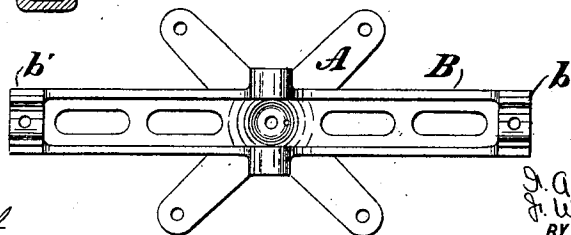
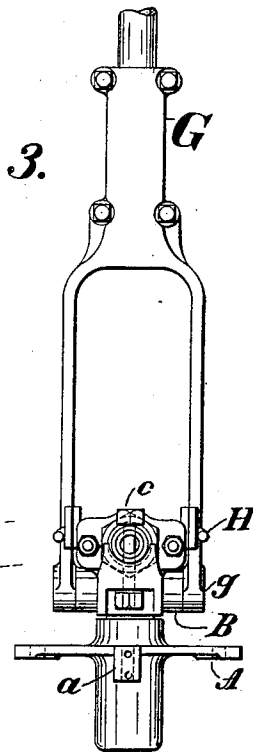


Fig. 2.

Fig. 3.



WITNESSES:

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Fig. 4.

UNITED STATES PATENT OFFICE.

FRANK A. MERRICK AND FRANK W. GARRETT, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNORS TO THE LORAIN STEEL COMPANY, OF PENNSYLVANIA.

TROLLEY-BASE.

SPECIFICATION forming part of Letters Patent No. 673,441, dated May 7, 1901.

Application filed August 16, 1900. Serial No. 27,052. (No model.)

To all whom it may concern:

Be it known that we, FRANK A. MERRICK and FRANK W. GARRETT, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Trolley-Bases, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

- 10 Our invention has relation to certain new and useful improvements in trolley-bases, and is designed mainly to provide a base of simple, light, and efficient construction of such character as to have but a comparatively
15 slight projection above the car-roof and having a socket for the pole which is so constructed with reference to the other parts of the base as to permit the pole to assume a horizontal position on the car-roof.
20 Other objects of our invention will hereinafter appear.

We attain these objects by the novel construction, arrangement, and combination of parts, all as hereinafter described, and pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of our improved trolley-base with the pole in section. Fig. 2
30 is a section on the line 2 2 of Fig. 1. Fig. 3 is an end view of the base with the pole broken off. Fig. 4 is a plan view of the base casting or bracket.

The letter A designates a socket-plate designed to be securely bolted to the roof of the car.

B is the base casting or bracket, which consists of a central stud *b*, designed to seat revolvably in the socket of the plate A and opposite longitudinally - extending arms having
40 upturned ends *b'*. The stud portion *b* is cored or hollowed out to form an oil-receptacle *b²*, leading to the bearing-surfaces to be lubricated. The interior of the socket is provided
45 with a lining *a*, preferably of brass, which not only constitutes a renewable wearing-surface, but also forms a good electrical connection between the stud and the socket-plate. The conductor (not shown) leading to the
50 car apparatus is connected to the socket-

plate by means of the perforated lug *a'*, in which the end portion of the conductor is entered and secured by binding-screws.

C is a spring-support, preferably tubular, which is seated in the upturned ends *b'* of the bracket-arms and is secured therein by means
55 of bolts *c*. The end portions of the tubular supports through which these bolts pass may be reinforced by means of plugs *c'* inserted therein.

D is a helical spring coiled about the said support between the head-slides E, the initial tension of said spring being adjusted by means of jam-nuts F.

G is the socket for the pole. The lower
65 portion of this socket is in the form of a fork, whose arms are pivoted at *g* to the central portion of the bracket B and whose opening is of a length slightly greater than the longitudinal distance between the pivots *g* and the
70 ends of the base, whereby the fork may straddle the base to permit the pole to assume a horizontal position. Connecting the two head-slides E with lugs or projections P on the lower portion of the said fork are four
75 links H, whereby when the pole is moved to either side of a vertical line one of the said slides will be moved to compress the spring D, the compression being in one direction
80 when the pole is moved to one side of the vertical and in the opposite direction when the pole is moved to the opposite side.

It will be readily seen that a base constructed in the manner above described need have but comparatively little projection above the
85 roof of the car and that inasmuch as the pole may assume a position in which it lies flat upon the roof of the car the latter is able to pass under bridges and other low overhead structures where there is but little clearance
90 room.

The construction reduces very materially the weight of the base and also the cost of manufacture.

We do not desire to limit ourselves to all
95 the mechanical details of construction and arrangement which we have herein shown and described, as these may be varied without departing from the spirit and scope of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a trolley-base, the pivotal bracket having longitudinally-extending arms, a spring-support held by said arms, slides mounted on said support, a spring between said slides, a pole socket-piece pivoted to said bracket and forked to straddle the bracket and springs in both vertical and horizontal positions of the pole, and link connections between the said socket-piece and the slides.

2. In a trolley-base, a pivotal bracket, a spring-support held in said bracket, slides on said support, a spring coiled about said support between the said slides, a pole socket-piece pivoted to the central portion of the bracket and forked to straddle the bracket and spring in all positions of the pole, and pull connections between the said socket-piece and the said slides.

3. The herein-described trolley-base, comprising a pivoted bracket having longitudinally-extending arms, formed with seats at their end portions, a spring-support secured in the said seats, slides mounted on the said support, a helical spring coiled around said support between the said slides, a forked socket-piece pivoted to the said bracket intermediate the said slides, and links connect-

ing the said socket-piece to the slides, substantially as described.

4. The herein-described trolley-base, comprising a pivoted bracket having longitudinally-extending arms formed with seats at their end portions, a spring-support secured in the said seats, slides mounted on the said support, adjusting-nuts for limiting the separation of said slides, a helical spring coiled around the said support with its ends bearing against the said slides, a forked pole-socket pivoted to the bracket, and links connected at one end to the socket-piece above its pivoted axis and at the other ends to the said slides.

5. In a trolley-base, the combination with a socket-plate designed to be secured to the roof of a car, of a base-bracket having a stud portion fitting the socket of said plate, said stud portion having therein a chamber open at its upper end and forming a lubricant-reservoir.

In testimony whereof we have affixed our signatures in presence of two witnesses.

F. A. MERRICK.
F. W. GARRETT.

Witnesses:

B. M. SMITH,
H. W. SMITH.