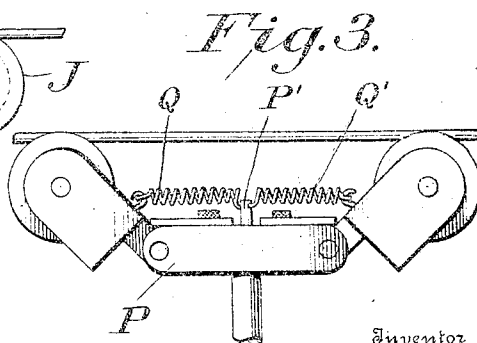
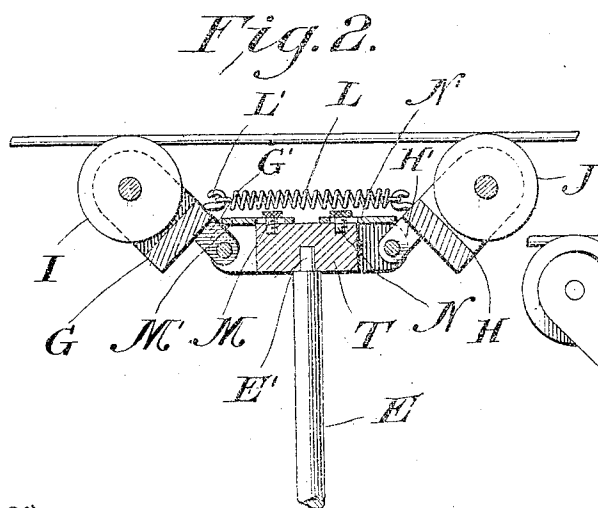
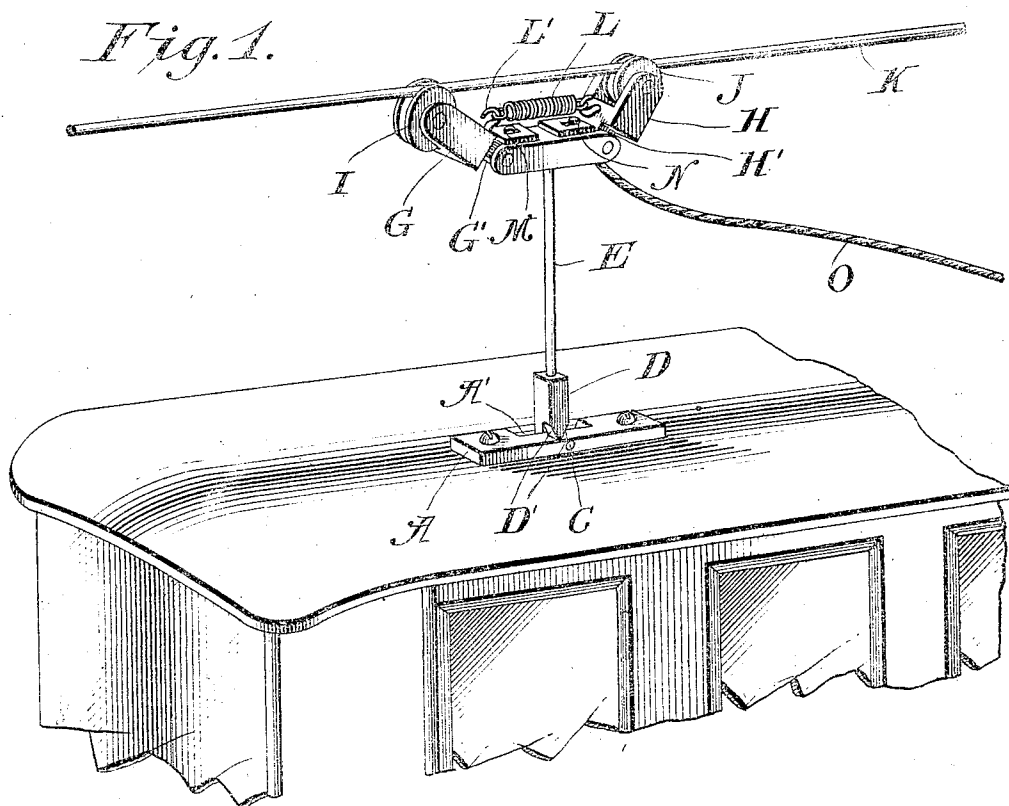


No. 884,630.

PATENTED APR. 14, 1908

A. F. BAUER.
TROLLEY POLE AND HEAD.
APPLICATION FILED NOV. 27, 1907.



Witnesses
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UNITED STATES PATENT OFFICE.

AUGUST F. BAUER, OF PHILADELPHIA, PENNSYLVANIA.

TROLLEY POLE AND HEAD.

No. 884,630.

Specification of Letters Patent.

Patented April 14, 1908.

Application filed November 27, 1907. Serial No. 494,612.

To all whom it may concern:

Be it known that I, AUGUST F. BAUER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in a Trolley Pole and Head, of which the following is a specification.

This invention relates to trolley poles and heads, the object being to provide a head with a pair of harps carrying wheels whereby a double contact will be made with the trolley wire so in case of one of the wheels becoming disengaged from the trolley wire the other will still remain thereon and will convey the other back into place.

Another object of my invention is to provide very novel means for adjusting the harps on the head whereby their upward movement can be limited.

Another object of my invention is to connect the harps together by a coil spring so that they will be normally held upward and will have the tendency to swing together thereby always being held in contact with the trolley wire.

Another object of my invention is to provide very novel means for connecting the trolley pole to the car whereby it will be held at the desired angle when the car is in motion.

A further object of my invention is to pivotally mount the head on the end of the pole whereby it can swing when rounding a curve so as to prevent the trolley from becoming disengaged from the wire.

A further object of my invention is to provide an adjustable member for each one of the pivotally mounted harps for controlling the same whereby the upward movement of each harp can be controlled independently.

These objects are attained by the novel arrangement and combination of parts hereinafter fully described and shown in the accompanying drawings, in which,

Figure 1, is a perspective view of my improved pole and head showing the application of same. Fig. 2, is a longitudinal sectional view through the head showing the trolley wheels in engagement with the trolley wire and the pole partly broken away. Fig. 3, is a side elevation view of the head showing a modified form of connecting the springs for the controlling harps.

In the drawings A, indicates a plate which

is secured to the top of the car B, by screws as clearly shown and is provided with a central cut out portion A', the end walls of which are beveled. Extending transversely through the wall of the cut out portion is a pin C, on which is mounted the reduced end of a block D, which is cut obliquely as shown at D', forming two beveled bearing surfaces one of which is adapted to rest on the top of the plate when the car is in motion.

The block is provided with a vertical bore in which is secured a pole E, having a reduced upper end E', which is pivotally mounted in a vertical bore formed in the head F, which is provided with bifurcated ends, between which are pivotally mounted shanks G' and H', of harps G and H. The harps being provided with grooved trolley wheels I and J, adapted to travel on the trolley wire K, the wheels being held into engagement with the wire by a coil spring L, the ends of which are connected to hooks J', secured to the respective harps and it will be seen that this spring has a tendency to hold the harps in a vertical position.

Slidably mounted on screws M and N, secured in bores formed in the top of the head F, are slotted plates M', and N', adapted to engage the shank of the harps whereby the upward movement of the harps can be regulated so as to hold the harps in a desired position.

An ordinary rope O, is connected to the head for controlling the same whereby it can be operated when desired.

In Fig. 3, I show a head P, constructed in the same manner as the head F, and is provided with a central upwardly projecting pin P', to which the ends of coil springs Q and Q', are connected which are carried by the respective harps for normally holding them in an upright position.

From the foregoing description it will be seen that I have provided a very novel pole and head which is exceedingly simple and cheap in construction and one which will make a double contact with the trolley wire so that the current will be collected and conveyed to the motor.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is;

1. A trolley head provided with pivoted spring actuated harps carrying wheels and means for adjusting said harps independently.

2. A trolley head provided with spring actuated harps carrying wheels and members adjustably mounted on said head adapted to engage said harps.

5 3. A trolley head provided with bifurcated ends, harps pivotally mounted between said ends provided with trolley wheels, a coil spring connecting said harps and plates adjustably mounted on said head adapted to
10 engage said harps.

4. In a device of the class described, the combination with a plate adapted to be secured to the top of a car, of a block pivotally connected to said plate provided with beveled bearing surfaces adapted to engage said
15 plate, a pole carried by said block, a head pivotally mounted on said pole, harps pivotally mounted on said head connected to-

gether by a spring and plates mounted on said head adapted to engage said harps. 20

5. In a device of the class described, the combination with a pivotally mounted head, of harps pivotally mounted on said head carrying wheels, hooks secured to said harps coil springs connecting said hooks, screws mounted in the top of said head and slotted plates
25 arranged on said screws adapted to engage said harps whereby the upward movement of said harps can be regulated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 30

AUGUST F. BAUER.

Witnesses:

R. H. KRENKEL,
REA P. WRIGHT.