

(No Model.)

A. B. DU PONT.
ELECTRIC TROLLEY DEVICE.

No. 590,589.

Patented Sept. 28, 1897.

Fig. 1.

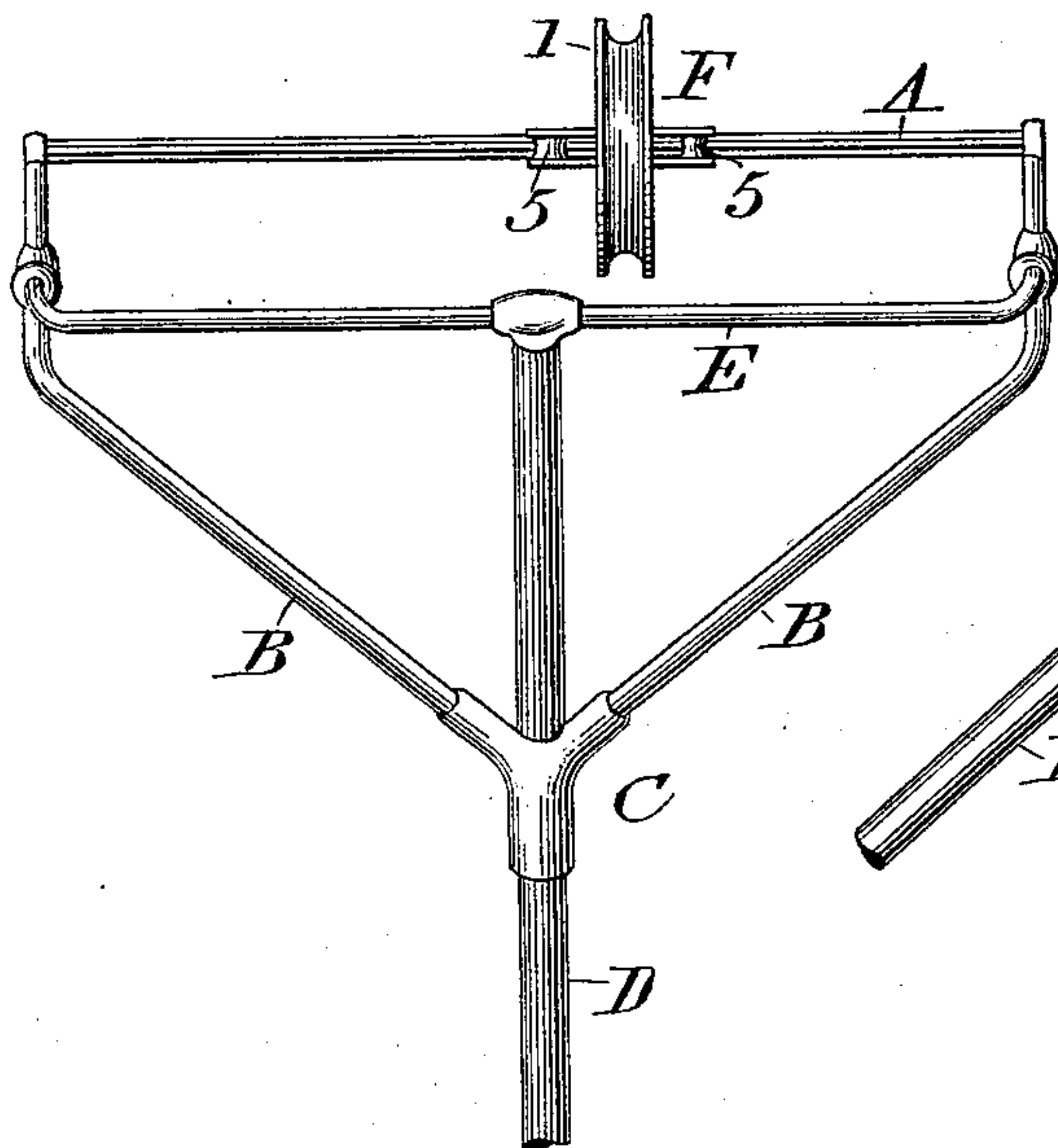


Fig. 2.

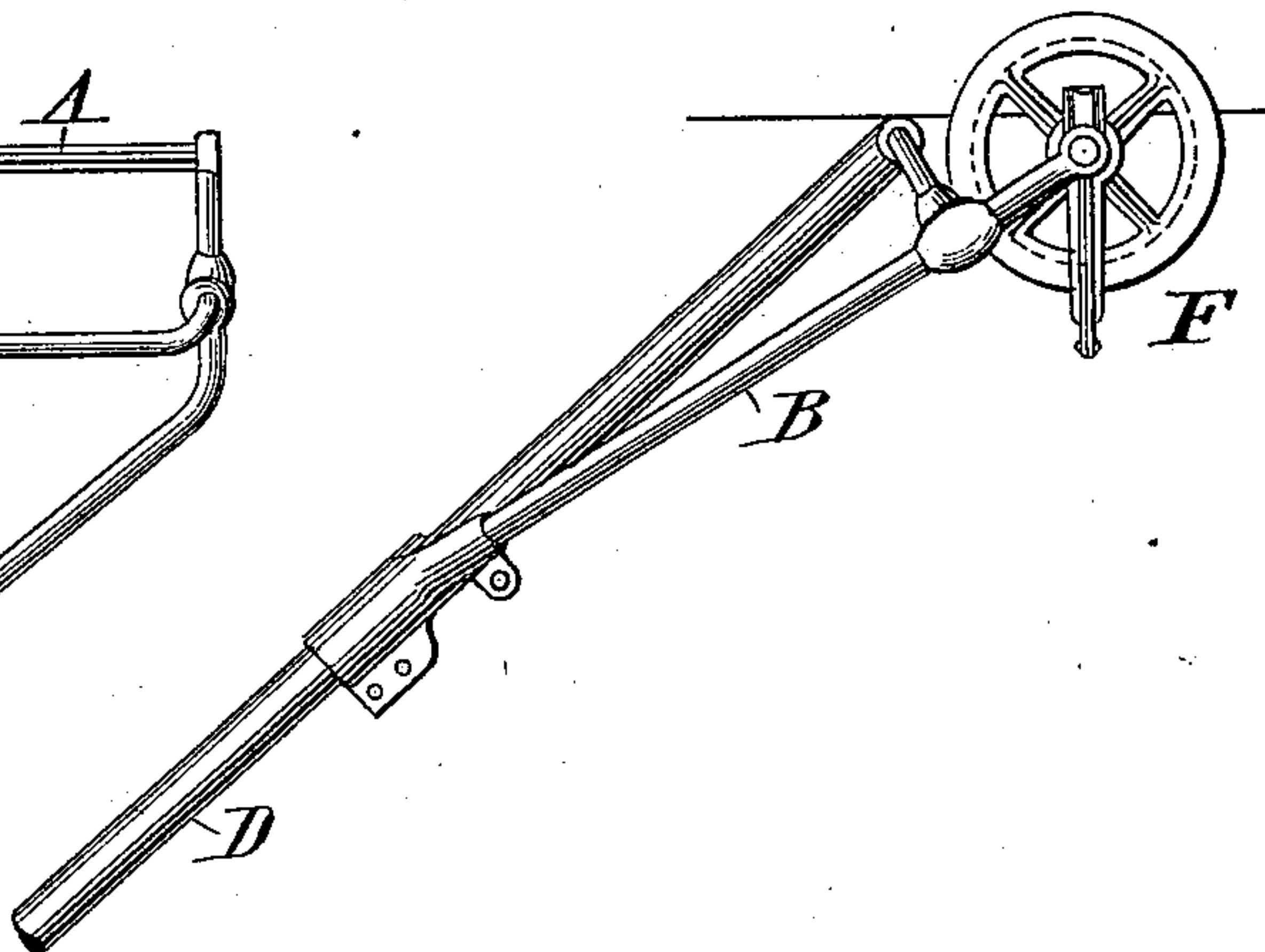


Fig. 3.

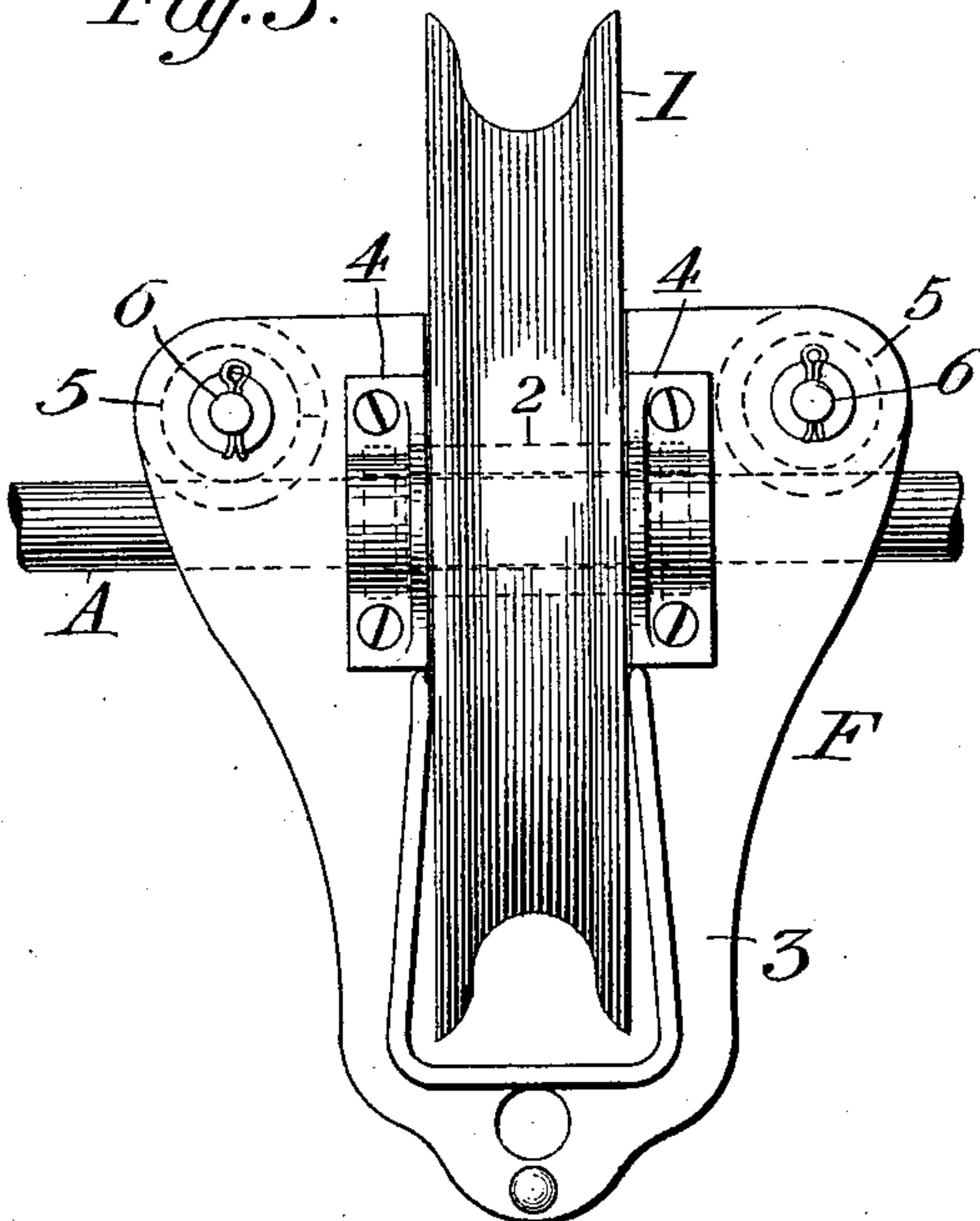
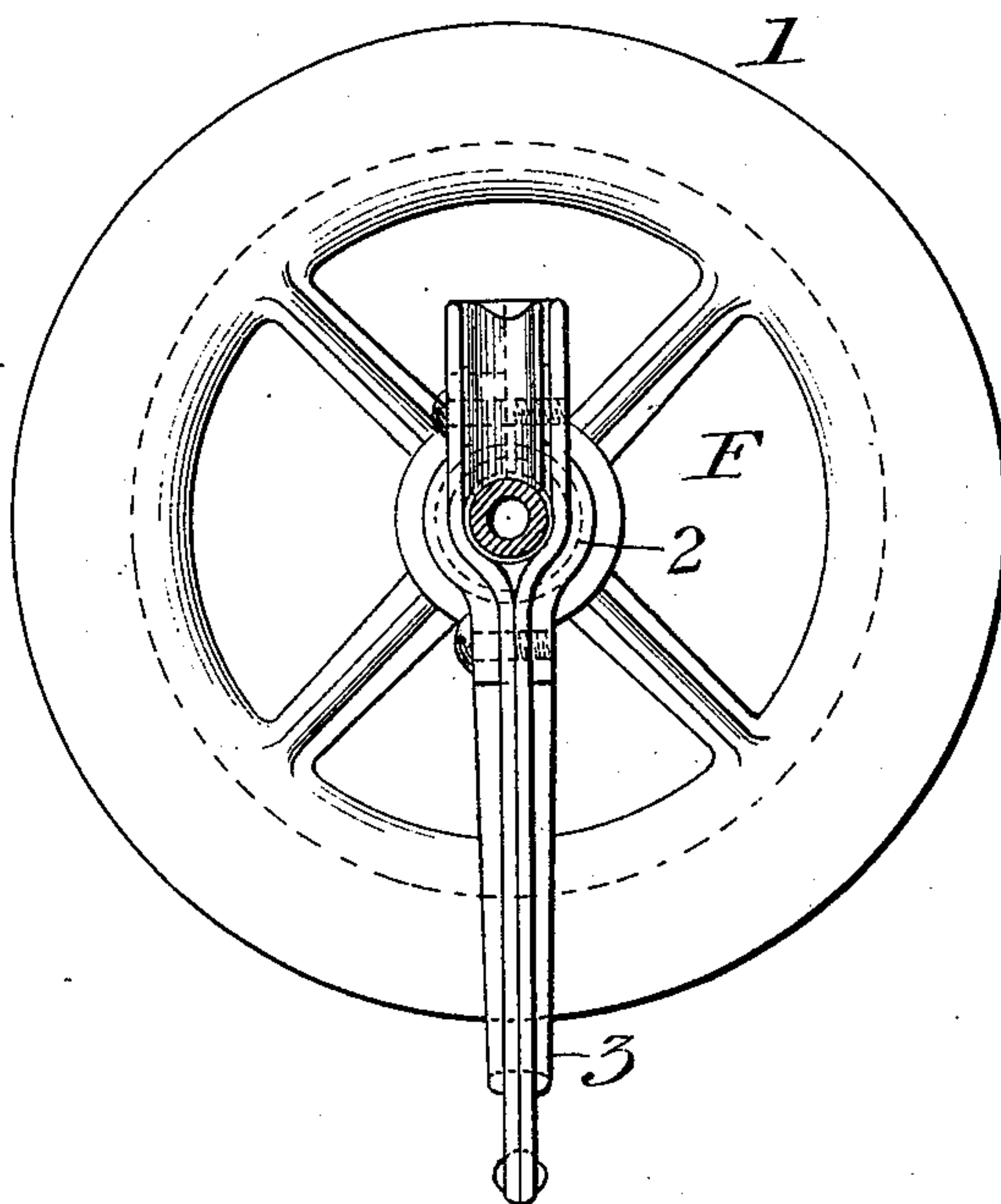


Fig. 4.



Witnesses:

M. E. Sharpe.

W. B. Lemminger.

Inventor.
A. B. du Pont
By Richard H. M. atty.

UNITED STATES PATENT OFFICE.

ANTOINE BIDERMANN DU PONT, OF DETROIT, MICHIGAN, ASSIGNOR TO
THE STEEL MOTOR COMPANY, OF JOHNSTOWN, PENNSYLVANIA.

ELECTRIC TROLLEY DEVICE.

SPECIFICATION forming part of Letters Patent No. 590,589, dated September 28, 1897.

Application filed January 15, 1897. Serial No. 619,384. (No model.)

To all whom it may concern:

Be it known that I, ANTOINE BIDERMANN DU PONT, of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Electric Trolley Devices, of which the following is a specification.

My invention relates to electric trolley devices of the class used upon railway-cars to make contact with a suspended conductor. More particularly it relates to that type of trolley device which carries a contact-maker adapted to slide upon a shaft transverse to the car, so that the contact-maker may adjust itself to all changes in the lateral position of the conductor without losing contact or changing its relative position therewith, thus reducing the wear upon both the conductor and the contact-maker to the minimum.

The objects of my invention are the provision of means for preventing any accidental contact between the shaft upon which the contact-maker slides and the conductor and for removing any danger of the contact-maker or other parts of the device becoming entangled in the conductor-switches or other overhead construction and the provision of a contact-making carriage of such improved construction and combination of parts that it may be adapted to move along the transverse shaft with the least possible friction and have a rotary movement thereon.

To these ends my invention consists in the novel construction and combination of parts, as hereinafter described and claimed.

Referring to the drawings, Figure 1 is a top and Fig. 2 a side view of my invention as it appears when mounted on the end of an ordinary trolley-pole. Fig. 3 is an enlarged end view of the transversely-movable carriage, and Fig. 4 is an enlarged side view of the same.

The transverse rod or tube A is mounted between the prongs B B, which are secured to the bifurcated bracket C upon the pole D, which is pressed upwardly toward the suspended conductor by any desired means. E

is another transverse rod or tube carried between the prongs B B and also secured to the free end of the pole D. E, as shown clearly in Fig. 2, is located at a slightly-higher altitude than A.

F is a carriage carrying the contact-wheel 1, rotatable about the tube 2, which encircles A and is held in position between the sides of the frame 3 by the removable plates 4, as clearly shown. Supporting the carriage upon shaft A are the grooved rollers 5 5, which are also mounted between the sides of the frame 3, one on each side of the contact-wheel and at right angles therewith.

The carriage F is free to adjust itself to the different lateral positions in which the conductor may be suspended. If the contact-wheel should leave the conductor, the latter would rest upon the guard-rod E, preventing any blistering of the shaft A. This blistering would occur if the conductor should come in contact with said shaft and would tend to prevent the free transverse movement of the carriage F.

As the carriage is free to turn on its axis, it will be seen by reference to Fig. 2 that there is no danger of its becoming entangled with frogs or other portions of the overhead construction, for the guard-rod A is located at such an altitude relative to that of the carriage as to cause any portion of the overhead construction to engage the said carriage above the latter's axis, thus allowing it to turn about said axis sufficiently to prevent any entanglement.

I do not limit myself to the exact details herein shown and described, nor to the use of my invention upon the free end of a pole, for it may be used on many of the other upward-pressure devices known to the art.

What I claim, and desire to protect by Letters Patent, is—

1. In an electric trolley device, the combination with a transverse shaft and a contact-wheel surrounding said shaft, of a carriage carrying the contact-wheel, adapted to move along said shaft, and adapted to turn partially about said shaft.

2. A contact-making carriage for electric trolley devices comprising, the combination of a tubular bearing, a contact-wheel mounted thereon, sides secured to the said bearings,
5 and rollers secured between the sides.

3. In an electric trolley device, the combination with a shaft carried in proximity to the conductor, of a contact-wheel and a carriage resting upon said shaft in a position of

stable equilibrium and supporting the wheel so about the said shaft.

In testimony whereof I have affixed my signature in presence of two witnesses.

ANTOINE BIDERMAN DU PONT.

Witnesses:

C. B. KING,

GEO. C. WALDO.