

No. 672,653.

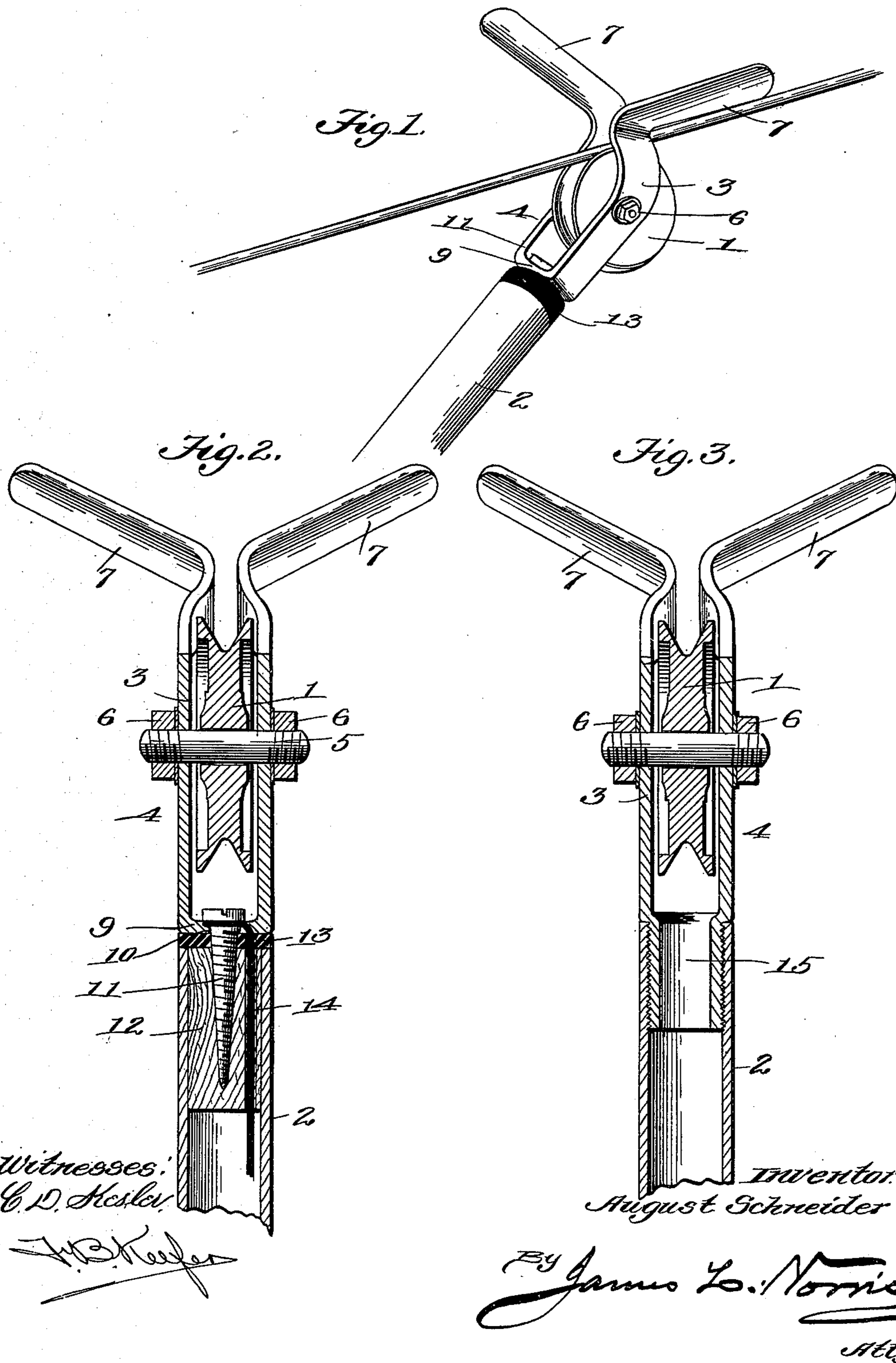
Patented Apr. 23, 1901.

A. SCHNEIDER.

TROLLEY FOR ELECTRIC RAILWAY CARS.

(Application filed Oct. 15, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

AUGUST SCHNEIDER, OF LEXINGTON, KENTUCKY, ASSIGNOR OF ONE-HALF
TO FREDERICK R. TOE WATER, OF SAME PLACE.

TROLLEY FOR ELECTRIC-RAILWAY CARS.

SPECIFICATION forming part of Letters Patent No. 672,653, dated April 23, 1901.

Application filed October 15, 1900. Serial No. 33,157. (No model.)

To all whom it may concern:

Be it known that I, AUGUST SCHNEIDER, a citizen of the United States, residing at Lexington, in the county of Fayette and State of Kentucky, have invented new and useful Improvements in Trolleys for Electric-Railway Cars, of which the following is a specification.

This invention relates to trolleys for electric-railway cars which take current from an overhead conductor, and has for its object, first, to provide an extremely simple, inexpensive, and efficient guide for supporting the trolley-wheel, for guiding the trolley-wheel onto the conductor, and for preventing the trolley-wheel from becoming disengaged from the conductor through the vibration of the trolley-pole and other causes.

It also has for its object to attach the trolley-wheel to the trolley-pole in an improved and novel manner, whereby the trolley-wheel may be readily attached to the tubular metallic trolley-poles now in common use.

To these ends my invention consists in the features and in the construction, combination, and arrangement of parts hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—
Figure 1 is a perspective view of my improved trolley. Fig. 2 is a vertical central sectional view thereof, and Fig. 3 is a similar view illustrating a modified manner of attaching the trolley to the trolley-pole.

Referring to Figs. 1 and 2 of the drawings, the numeral 1 indicates the trolley-wheel, and 2 the trolley-pole, consisting of a tubular metallic rod such as is commonly employed for the purpose. The numeral 3 indicates the trolley-wheel support, consisting of a metallic casting, the body portion 4 of which is substantially U-shaped, as shown, and is provided with two perforations through which passes a rod 5, secured in place by nuts 6, screwed over the ends thereof. The trolley-wheel 3 is journaled on the rod 5 between the two members 4 of the support, and said members terminate in two divergent arms 7, which are curved upward and forward, as shown. Said arms, immediately above the trolley-wheel, converge toward one another,

so as to overlap the grooved periphery of the wheel, and from thence are inclined outward in opposite directions at substantially right angles to one another. The divergent arms 8 constitute guides which are adapted to engage the overhead conductor-wire and guide the wheel into engagement therewith, and the contracted portion of the arms overhang and embrace the conductor-wire and operate to hold the trolley-wheel in engagement therewith. The base 9 of the support 3 is provided with a perforation 10 for the reception of a screw 11, and in the end of the trolley-pole 2 is inserted a wooden plug 12, into which the screw 11 is screwed, thus firmly attaching the trolley-wheel support to the pole. Interposed between the base 9 of the support and the end of the trolley-pole is a washer 13, of rubber or other suitable material, which will operate to insulate the trolley-wheel and its support from the pole, and said washer and the wooden plug 12 are perforated, as shown, through which is passed the feed-wire 14. The feed-wire passes down through the trolley-pole to the controller and motor in the usual manner and at its upper end is attached to the screw 11, thus putting the trolley-wheel in electrical connection with the motor.

In Fig. 3 of the drawings I have illustrated a slightly-modified construction wherein the wooden plug 12 is dispensed with and a threaded shank 15 is cast integrally with the trolley-support. The end of the trolley-pole is interiorly threaded, and the shank 15 is screwed therein, thus directly attaching the trolley-wheel support to the pole. By means of the construction shown the trolley-wheel may be readily and cheaply attached to the trolley-poles now in common use, thus avoiding the necessity of providing new poles especially constructed for the purpose.

Having described my invention, what I claim is—

1. The combination with a trolley-pole, of a trolley-wheel support comprising a single integral metallic body substantially U-shaped and screwed at its base to the end of the trolley-pole, and a trolley-wheel journaled in the parallel arms of said support, said arms diverging from one another above the trolley-

wheel at an angle of substantially ninety degrees, and said divergent arms being also deflected forward at an angle to the parallel arms, substantially as described.

5 2. The combination with a trolley-wheel, of a trolley-wheel support comprising a single integral metallic body substantially U-shaped and screwed at its base to the end of the trolley-pole, a trolley-wheel journaled in
10 the parallel arms of said support, said parallel arms immediately above the trolley-wheel being contracted or extended inward toward one another and thence extended outward at substantially a right angle to one another, said divergent portions of the arms being also deflected forward at an angle to the parallel portions, substantially as described.

15 3. The combination with a trolley-pole comprising a tubular rod having a wooden plug
20 fitted in its end, of a trolley-wheel support consisting of a substantially U-shaped me-

talic body having a screw-hole in its base, a washer of insulating material disposed between the end of the pole and the base of the trolley-wheel support, and a headed screw
25 passing through the screw-hole in the base of said support and through the washer and screwed into the wooden plug, said plug, washer and base having coincident holes formed therein, and a feed-wire passing
30 through the pole and through said coincident holes, the end of said wire being clasped between the head of the screw and the base of the support, substantially as described.

In testimony whereof I have hereunto set
35 my hand in presence of two subscribing witnesses.

AUGUST SCHNEIDER.

Witnesses:

FRANK ANNEAR,
J. L. BELL.