

No. 712,539.

Patented Nov. 4, 1902.

N. HUBLINGER.
TROLLEY.

(Application filed July 8, 1902.)

(No Model.)

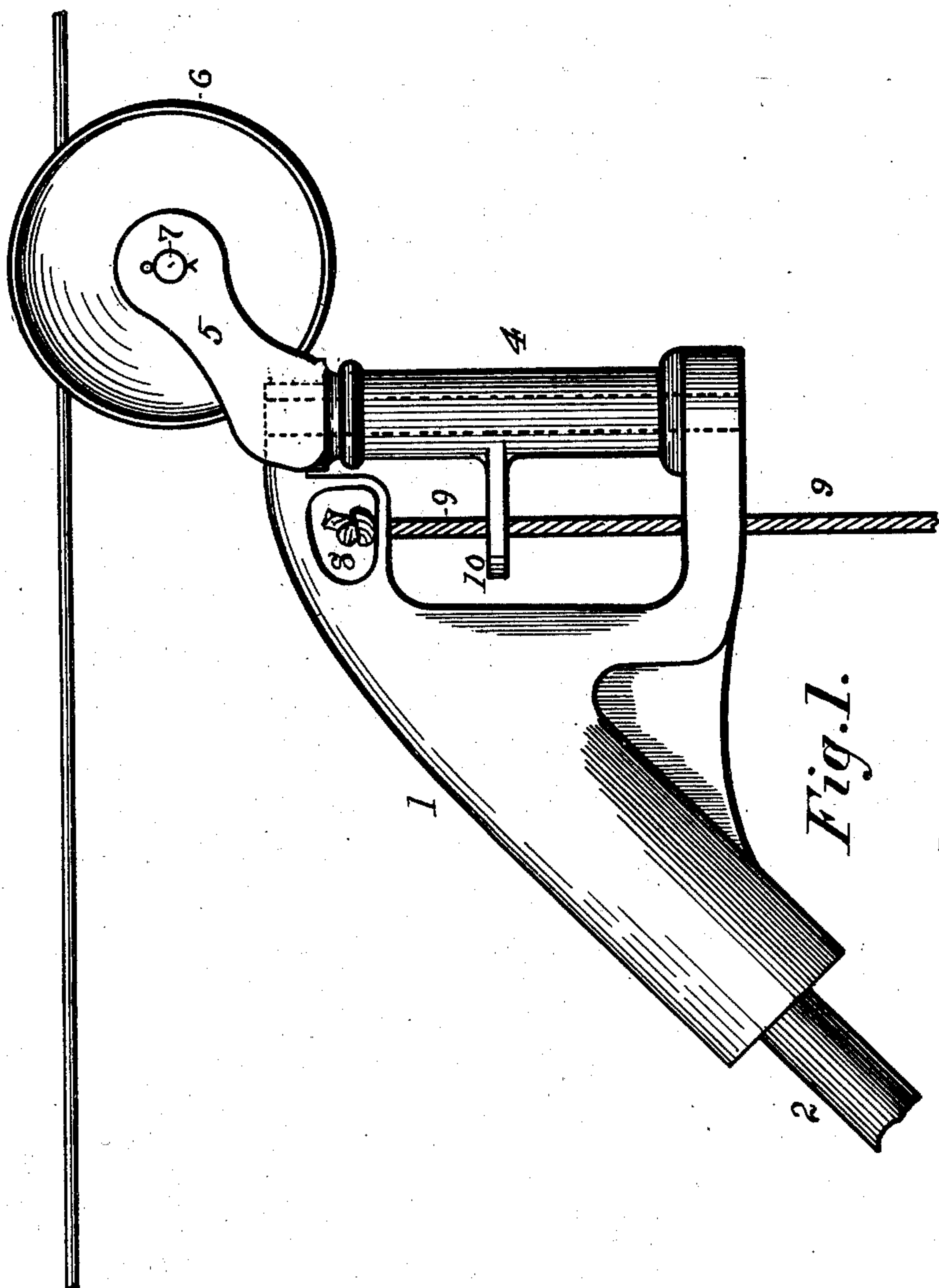


Fig. 1.

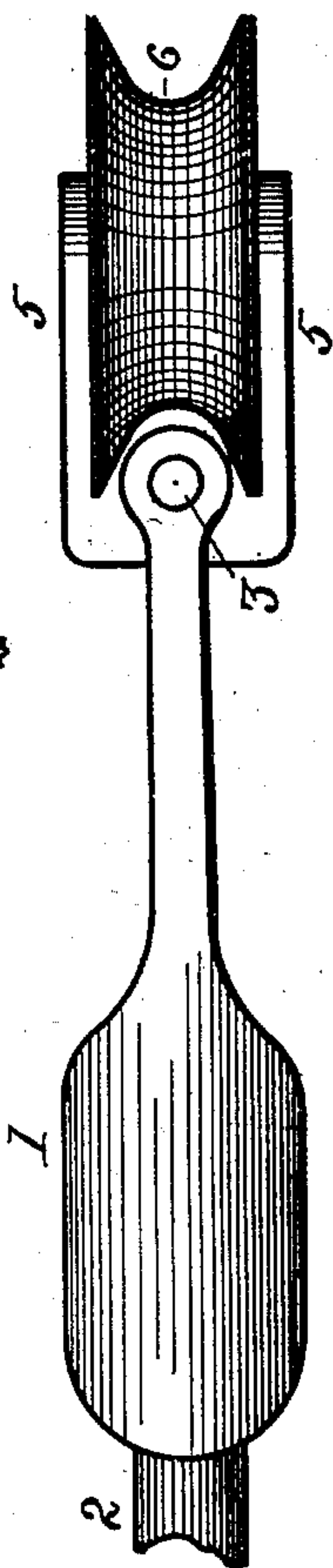


Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

NEWTON HUBLINGER, OF BARBERTON, OHIO.

TROLLEY.

SPECIFICATION forming part of Letters Patent No. 712,539, dated November 4, 1902.

Application filed July 3, 1902. Serial No. 114,212. (No model.)

To all whom it may concern:

Be it known that I, NEWTON HUBLINGER, a citizen of the United States, residing at Barberton, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Trolleys, of which the following is a specification.

My invention has relation to improvements in trolleys to be used with electrically-driven street-cars, arranged to run on the under side of a trolley-wire and conduct the electric current from said wire to suitable motors by which the power necessary to operate the car is furnished.

The object of my invention is to produce a new and improved trolley which shall ride with more ease and security against the trolley-wire and will more readily adapt itself to the curves and inequalities in said wire than those now in common use.

A further object is to provide means for pivoting the trolley-wheel vertically, so that it will be capable of following these curves in the trolley-wire and can be more readily replaced than those now in use.

To the attainment of the aforesaid objects my invention consists in the peculiar and novel construction, arrangement, and combination of parts hereinafter described and then specifically claimed, reference being had to the accompanying drawings, forming a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different views, Figure 1 is a side elevation of my improved trolley, and Fig. 2 a plan thereof.

In the drawings, 1 is a head adapted to rest on the trolley-pole and be connected therewith by means of a short stub-shaft 2, which enters the end of said pole. This head at its upper or outer end is horizontally bifurcated, and near the ends of the branches are oppositely-disposed openings, in and between which extends a shaft 3, which is designed to be substantially vertical when the trolley is against the under side of the wire. Inclosing the shaft 3, between the branches of the head 1, is a sleeve 4, terminating at its upper end in two sloping opposite like arms 5, between which is placed the trolley-wheel 6, mounted on a shaft 7, secured in said arms.

On the under side of the upper branch of the head is an eye 8, the lower part of which is perforated vertically, and in the lower branch of the trolley and in vertical alinement with the perforation in the eye of the upper branch is a like perforation. Projecting from the sleeve 4 is a short arm 10, having a like perforation with the perforations in the upper and lower branches and in alinement therewith when the trolley is in line with the head. A trolley-cord 9 passes from below through the branches and arm 10 and is secured by a knot in the eye 8. It will be seen from this construction that the sleeve 4 is capable of a large amount of rotation on the shaft 3, thereby permitting the wheel 6 to follow any irregularities of the wire, and in replacing the trolley after displacement by pulling the cord 9 the trolley is not only drawn below the trolley-wire, but into accurate alinement therewith, thereby rendering replacement of the trolley a simple matter.

Having thus described my invention, what I claim is—

1. An improved trolley consisting of a horizontally-bifurcated head, the arms of said head being perforated in alinement to receive a shaft, a shaft mounted therein, a sleeve mounted on said shaft having sloping arms, a trolley-wheel mounted between said arms, and means for revolving said sleeve on said shaft to bring the trolley in alinement with said wire, substantially as shown and described.

2. An improved trolley consisting of a horizontally-bifurcated head with means for securing it to a trolley-pole, means for securing a cord in the upper arm of said head and a hole in the lower arm through which to pass it, a shaft mounted between said arms, a sleeve mounted on said arm having an arm to extend between the arms of said head with a perforation for the trolley-cord and sloping arms with a trolley-wheel mounted between them and a cord secured in the upper arm of said head and passing through the arm of said sleeve and lower arm of said head, substantially as shown and described.

3. The herein-described trolley consisting of a bifurcated head having a perforated eye in the upper branch and a perforation in the lower branch, a vertical shaft pivotally mount-

ed between said branches with offset arms
above the upper branch, and a pivoted arm
between said branches, a wheel mounted be-
tween said offset arms and means to secure
5 said head to a trolley-pole, substantially as
shown and described.

In testimony that I claim the above I here-

unto set my hand in the presence of two sub-
scribing witnesses.

NEWTON HUBLINGER.

In presence of—

C. P. HUMPHREY,

C. E. HUMPHREY.