

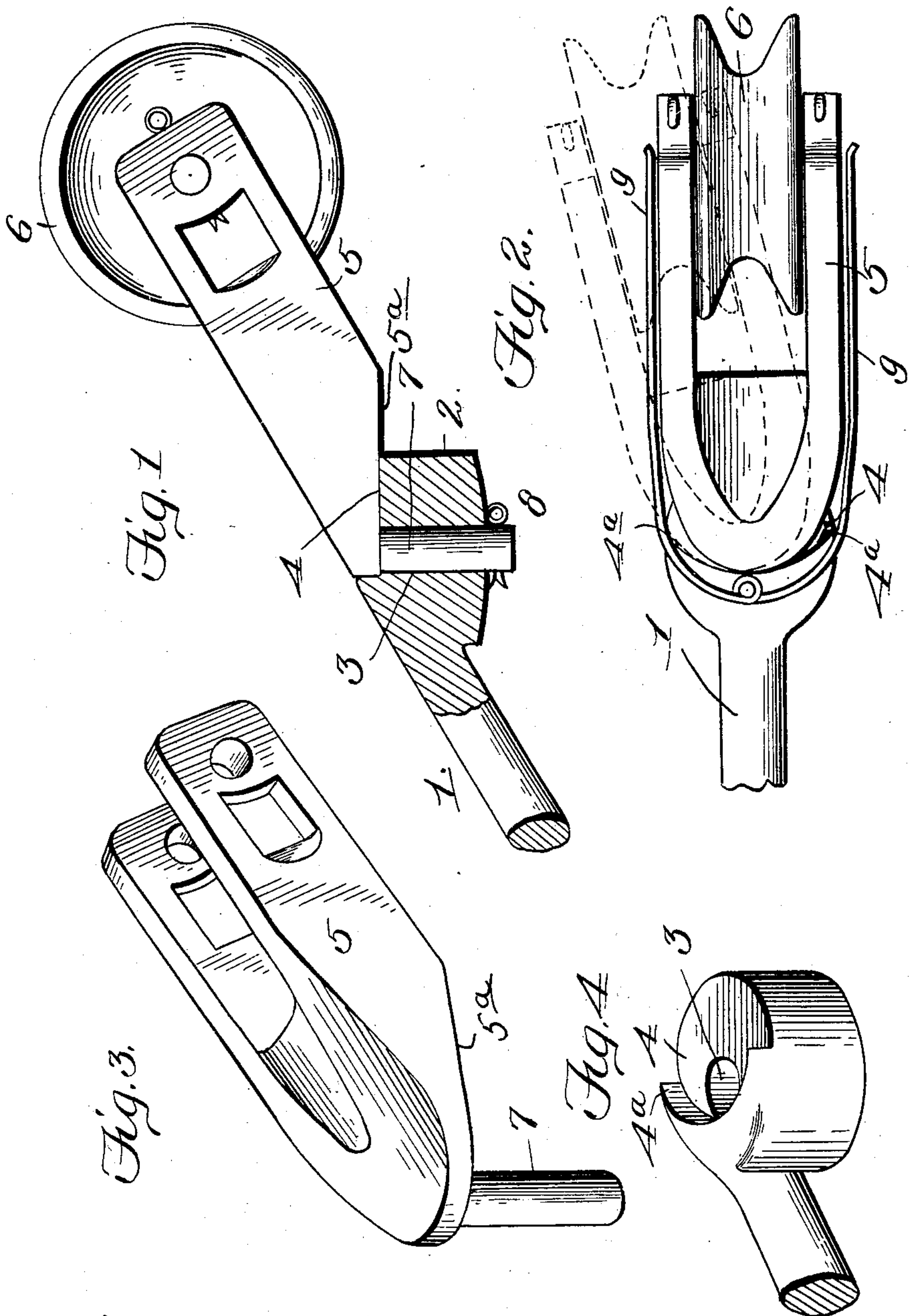
No. 747,607.

PATENTED DEC. 22, 1903.

J. R. HOLLIS.  
TROLLEY POLE.

APPLICATION FILED NOV. 7, 1902.

NO MODEL.



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# UNITED STATES PATENT OFFICE.

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## TROLLEY-POLE.

SPECIFICATION forming part of Letters Patent No. 747,607, dated December 22, 1903.

Application filed November 7, 1902. Serial No. 130,426. (No model.)

*To all whom it may concern:*

Be it known that I, JONAH R. HOLLIS, a citizen of the United States, residing at Brockton, Plymouth county, Massachusetts, have  
5 invented certain new and useful Improvements in Trolley-Poles, of which the following is a specification.

My invention relates to improvements in trolley-poles, and has for its object to provide a very simple, economical, and efficient  
10 trolley-pole, which will accommodate itself to curves or other irregularities or deviations of the wire from a straight line, so that the wheel will always travel in contact with the  
15 wire not only when the car is traveling along a straight line, but as well when it is on a curve.

To the end stated my invention consists in a trolley-pole constructed as hereinafter described, and set forth in the accompanying  
20 clauses of claim, reference being had to the accompanying drawings in explanation thereof, and in which—

Figure 1 is a view partly in elevation and  
25 partly in section. Fig. 2 is a rear elevation of my improved trolley-pole. Fig. 3 is a detail of the body of the trolley-pole; Fig. 4, a detail of the pivoted wheel-carrying section.

In the said drawing, the reference-numeral  
30 1 indicates the body of the trolley-pole, which at its upper extremity is provided with an offstanding angularly-disposed coupling part 2, having a vertical bore or perforation 3 therethrough and formed with a substantially  
35 crescent-shaped guide-seat 4.

The numeral 5 illustrates the trolley-wheel carrying the pivotal section forming a prolongation of the body 1, and in which the  
40 trolley-wheel 6 is suitably mounted. This section 5 is provided with an angular base 5<sup>a</sup>, which rests upon the seat 4, formed on the coupling part 2, and from this angular base 5<sup>a</sup> a vertical stud 7 projects downwardly and fits into the bore or perforation 3 of the coupling part of the pole and is removably secured therein by any suitable device, such as  
45 a cotter pin or key 8. The edge of the base part of this removable section is rounded to conform to the contour of the segmental  
50 guide-seat 4. It rests upon said guide-seat in practice and moves thereon in operation when rounding a curve. The points 4<sup>a</sup> of the

crescent-shaped guide-seat serve as stops to limit the lateral movement of the pivoted  
trolley-wheel-carrying section and prevent  
55 said section assuming an inoperative position.

My improved trolley-pole as shown and described is of extremely-simple construction and economical of manufacture and at the  
60 same time is delicate in its response to any curve or irregularity in the wire, permitting the trolley-wheel to follow easily any such curves or irregularities and yet limiting the lateral movement thereof, so that there shall  
65 be no abnormal lateral swinging motion of the pivoted trolley-wheel-carrying section, such as would throw the trolley-wheel out of operative position or require constant watch or attention by the operator.

The normal position of the trolley-pole, as  
70 is well known, is at a backward inclination or angle from the point of attachment to the car, and according to my invention the parts are so constructed that the pivotal trolley-wheel-carrying section constitutes a prolongation  
75 of the body of the pole in the line of inclination thereof. In such a trolley-pole arrangement in order that the pivoted wheel-carrying section may swing horizontally upon a  
80 vertical axis the hereinbefore-described construction and arrangement of coupling element and corresponding relative construction and arrangement of the base of the trolley-wheel-carrying section and the stud projecting therefrom are provided. The arrange-  
85 ment described affords a very simple and satisfactory construction of trolley-pole in which the trolley-wheel-carrying section is adapted to swing horizontally upon a vertical axis, facilitating its movement, so that it will  
90 readily follow any curve or irregularity in the trolley-wire.

I provide a spring 9, suitably and fixedly secured to the coupling part, the arms of which engage the trolley-wheel-carrying piv-  
95 otal section and which tends to maintain said section normally in a direct line with the body of the trolley-pole as a prolongation thereof and assists in returning it to that position when the trolley-wheel leaves a curved  
100 portion of the wire to enter upon a straight stretch thereof.

Having thus described my invention, what I claim is—



1. The herein-described trolley-pole, consisting of a body portion provided at its extremity with an angularly-disposed offstanding coupling part having a vertical bore or  
 5 perforation, and a substantially segmental-shaped guide-seat, and a pivoted trolley-wheel-carrying section having a trolley-wheel suitably mounted therein and provided with a vertical stud or journal arranged in the bore  
 10 or perforation of the coupling part, substantially as described.

2. The herein-described trolley-pole, consisting of a body portion provided at its extremity with an angularly-disposed offstanding  
 15 coupling part having a vertical bore or perforation and a substantially segmental-shaped guide-seat having stops, and a pivoted trolley-wheel-carrying section constituting a prolongation of the body portion of the  
 20 trolley-pole and having a vertical stud or journal arranged in the vertical bore or perforation of the coupling part, and having a

base which seats upon the segmental guide-seat, substantially as described.

3. The herein-described trolley-pole, consisting of a body portion provided at its extremity with an angularly-disposed offstanding  
 25 coupling part having a vertical bore or perforation, a substantially segmental-shaped guide-seat having stops, a pivoted trolley-  
 30 wheel-carrying section constituting a prolongation of the body portion of the trolley-pole and having a vertical stud or journal arranged in the vertical bore or perforation of the  
 35 coupling part, and a spring rigidly secured to the coupling part and having arms that engage the trolley-wheel-carrying section.

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

JONAH R. HOLLIS.

Witnesses:

ALBERT G. BROWN,  
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