

(No Model.)

J. REUTLINGER.
ELECTRIC RAILWAY TROLLEY.

No. 489,234.

Patented Jan. 3, 1893.

Fig. 1.

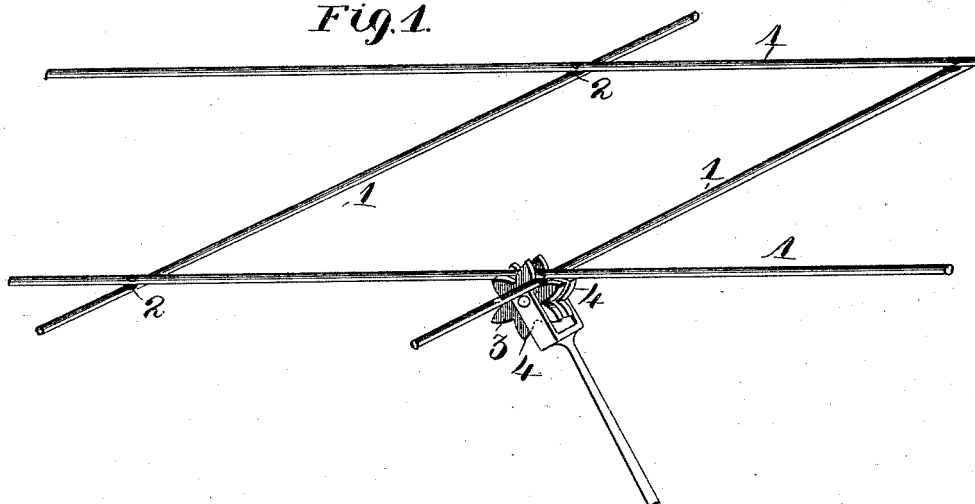


Fig. 2.

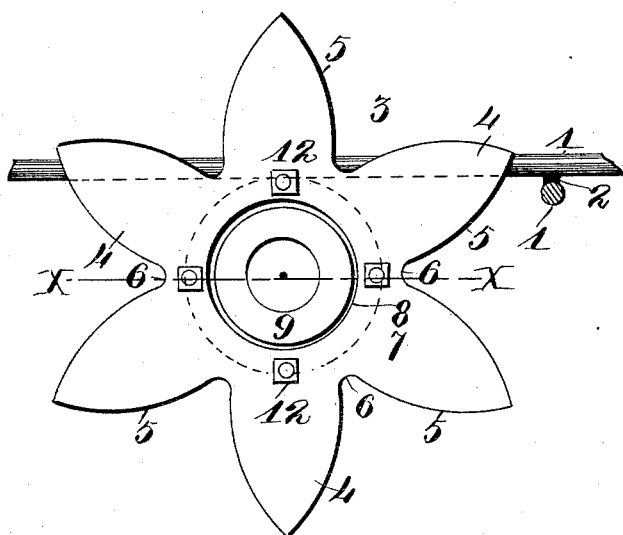
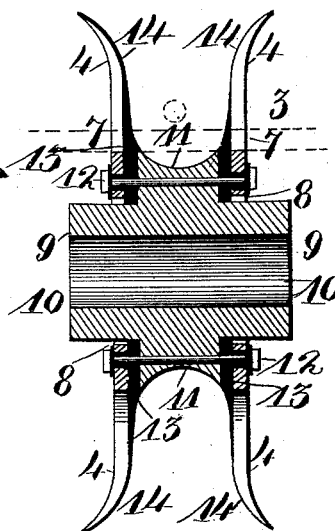


Fig. 3.



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JEAN REUTLINGER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO
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ELECTRIC-RAILWAY TROLLEY.

SPECIFICATION forming part of Letters Patent No. 489,234, dated January 3, 1893.

Application filed July 30, 1892. Serial No. 441,694. (No model.)

To all whom it may concern:

Be it known that I, JEAN REUTLINGER, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Trolleys, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in trolleys, and it consists in the novel combination and arrangement of parts as will be hereinafter more fully described and designated in the claims.

In the drawings:—Figure 1, is a perspective view of my complete invention in connection with crossing wires arranged for the purpose. Fig. 2, is a side elevation of the trolley, and, Fig. 3, is a longitudinal section of the trolley taken on the line *x, x*, of Fig. 2.

The object of my invention is to construct a trolley that will pass smoothly over the crossing conducting wires employed in certain electric railway systems, whereby the contrivances generally made use of at said crossings are dispensed with, and the delay caused by the breakage of wires overcome.

Referring to the drawings 1, represents the crossing wires which are generally found at intersecting streets, or where one road crosses the other. In this instance there is no break in the wires but they are insulated from one another where they might touch by pieces of insulation 2, thoroughly insulating the wires of one road from those of the other which is absolutely necessary.

3, represents the trolley which as shown is constructed with six teeth, but said number may be greatly increased or diminished as may be found most practical.

4, represents the teeth of the trolley the edges of which are convex as shown at 5, and are united by a smooth concave portion 6, so as to form a flowing contact surface so as to pass the crossing wire with as little resistance as possible. 7, represents, two plates on which the said teeth are formed, each of

which is provided with a circular opening 3, encircling the hub 9, of the remaining portion of the trolley but not in contact with the same, the object of which will be hereinafter more fully stated.

The body portion 10 of the trolley is made of such metal that will conduct electricity the contacting surface 11, of which is concave as shown, for receiving the wire 1. The plates 7, are fastened to the body portion 10, of the trolley by means of bolts 12 passing through the said plates and body thereby attaching the said plates rigidly to the trolley. The said plates are thoroughly insulated from the trolley or body portion 10 of the same by insulating material 13 and the said bolts are also insulated in order to prevent the current from passing into the plates. It will thus be seen that when the trolley comes in contact with the crossing wire the insulated plates 7 will only come in contact therewith and consequently no current of electricity will pass through the body portion of the trolley as the same will be moved out of contact from the wire along which it moves and thereby preventing sparking at the point where the wires intersect.

After the trolley passes the crossing wire or wires the contacting concave surface 11 of the body portion of the trolley will again come in contact with the wire along which the trolley moves and the current conducted to the motor on the car.

The inner surfaces of the teeth 4 of the trolley are flaring outward as shown at 14 which allows sufficient space between the said teeth at that point for turning curves and also facilitate the adjusting of the trolley on the wire.

Having fully described my invention what I claim is,

1. A trolley having teeth arranged on the sides of the same and insulated from the body portion thereof, substantially as and for the purpose described.

2. A trolley having a contacting body por-

tion and plates fixed to the same but insulated therefrom provided with teeth substantially as set forth.

3. A trolley consisting of a body portion
5 10 having a concave contacting surface 11, plates 7 fixed to the opposite sides of the same but insulated therefrom, teeth 4 formed in the said plates the edges of which are convex and having outwardly flaring inner sur-

faces, and bolts 12 passed through the said plates and said body portion for uniting the several parts, substantially as set forth.

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

JEAN REUTLINGER.

Witnesses:

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