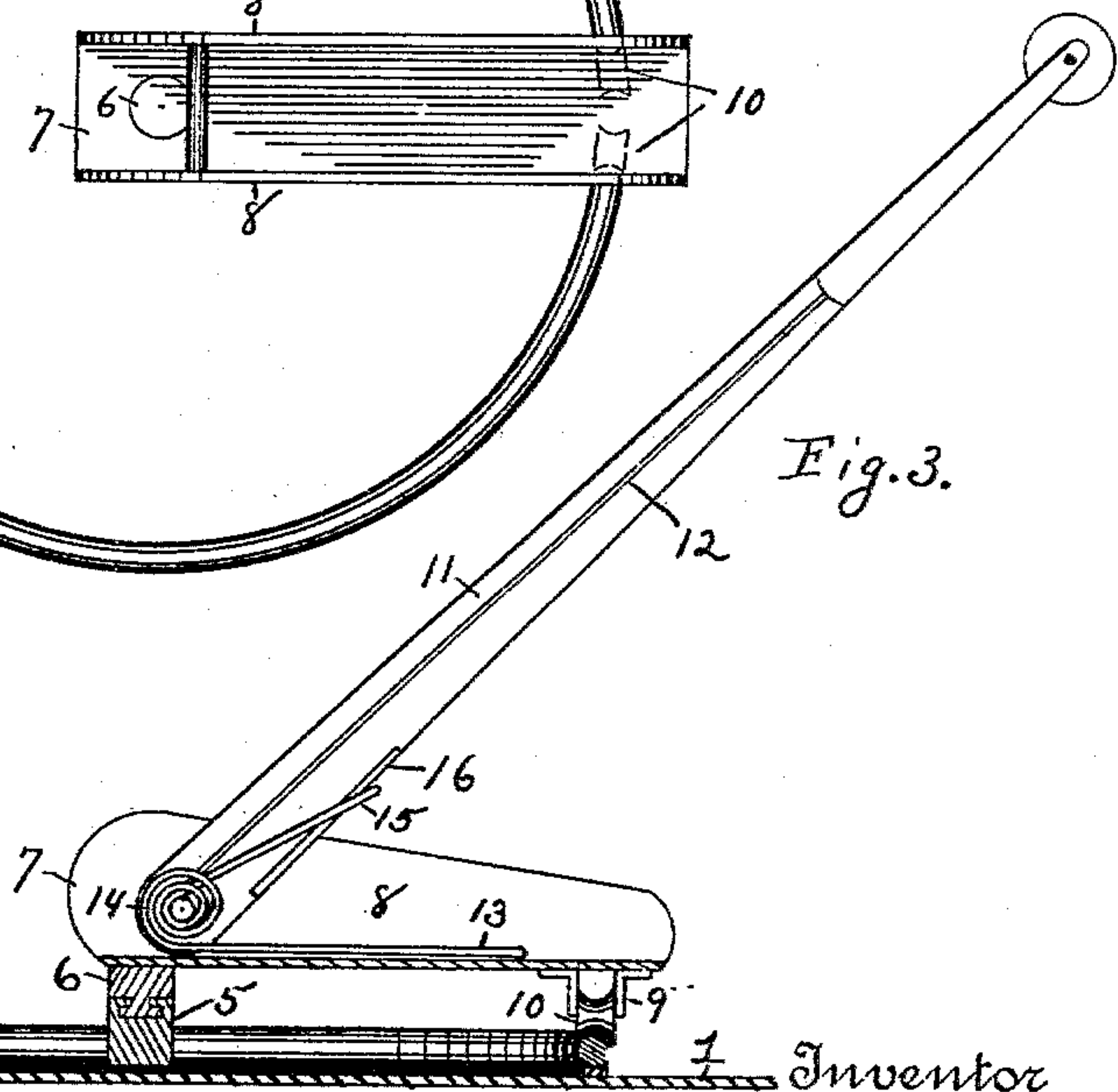
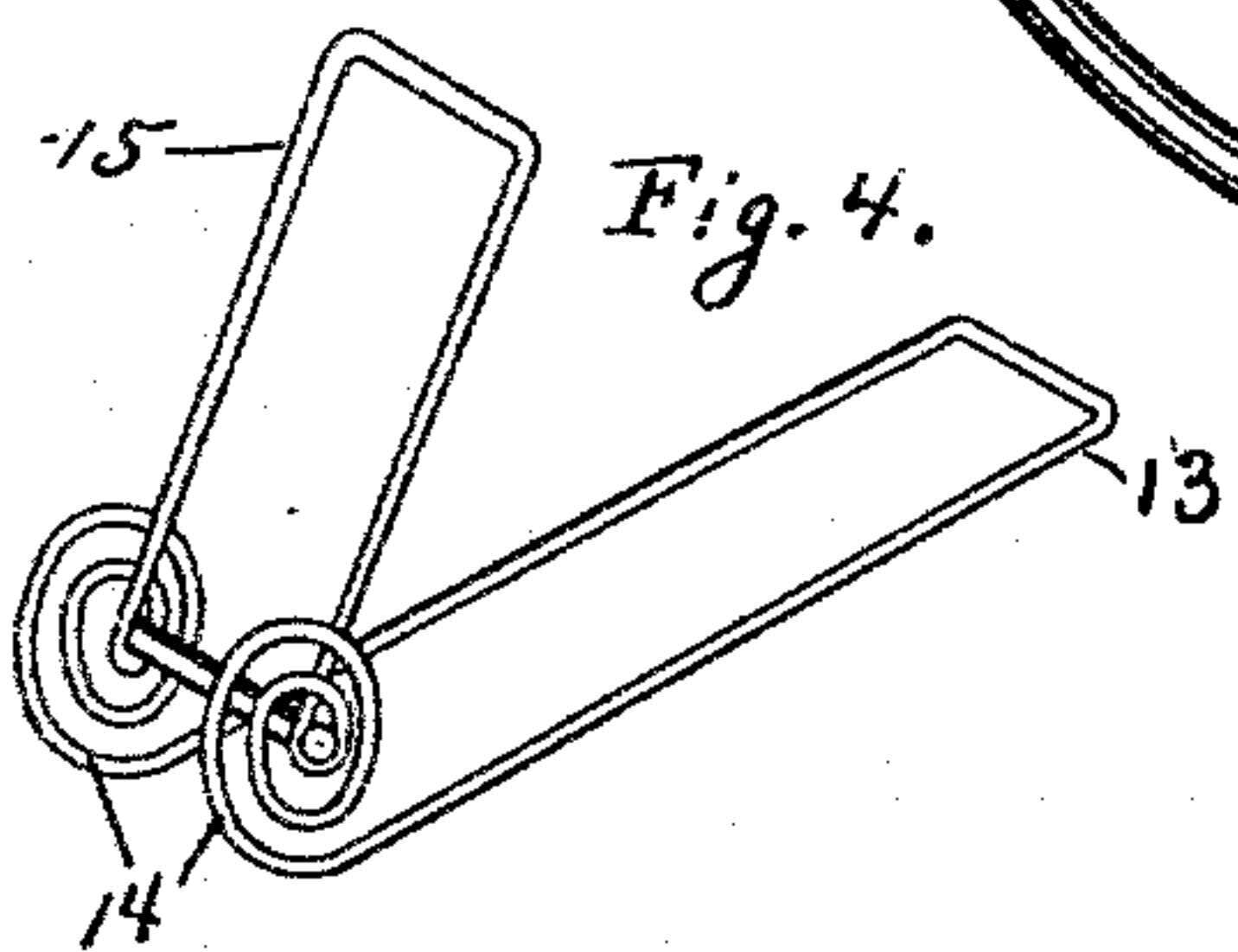
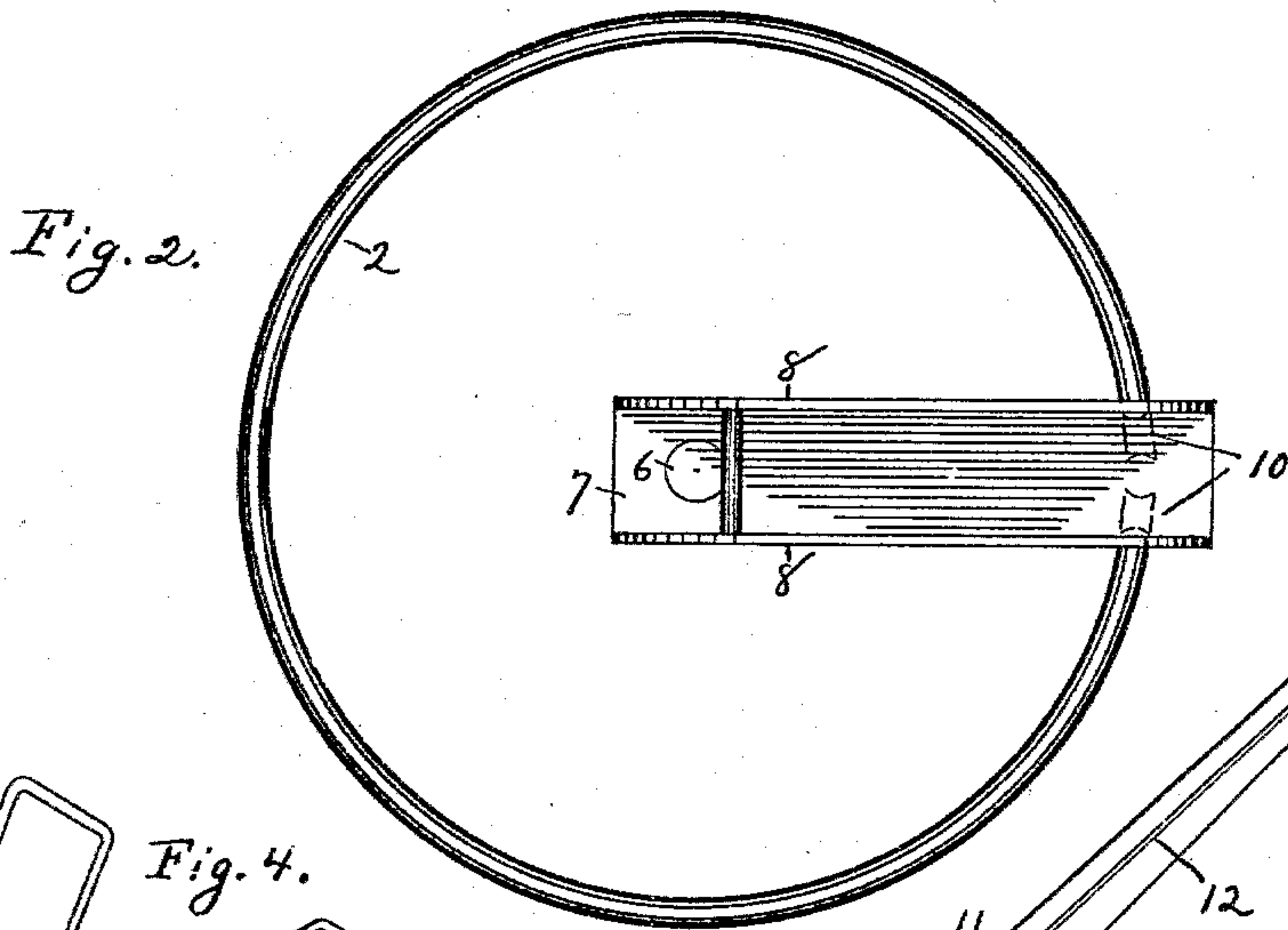
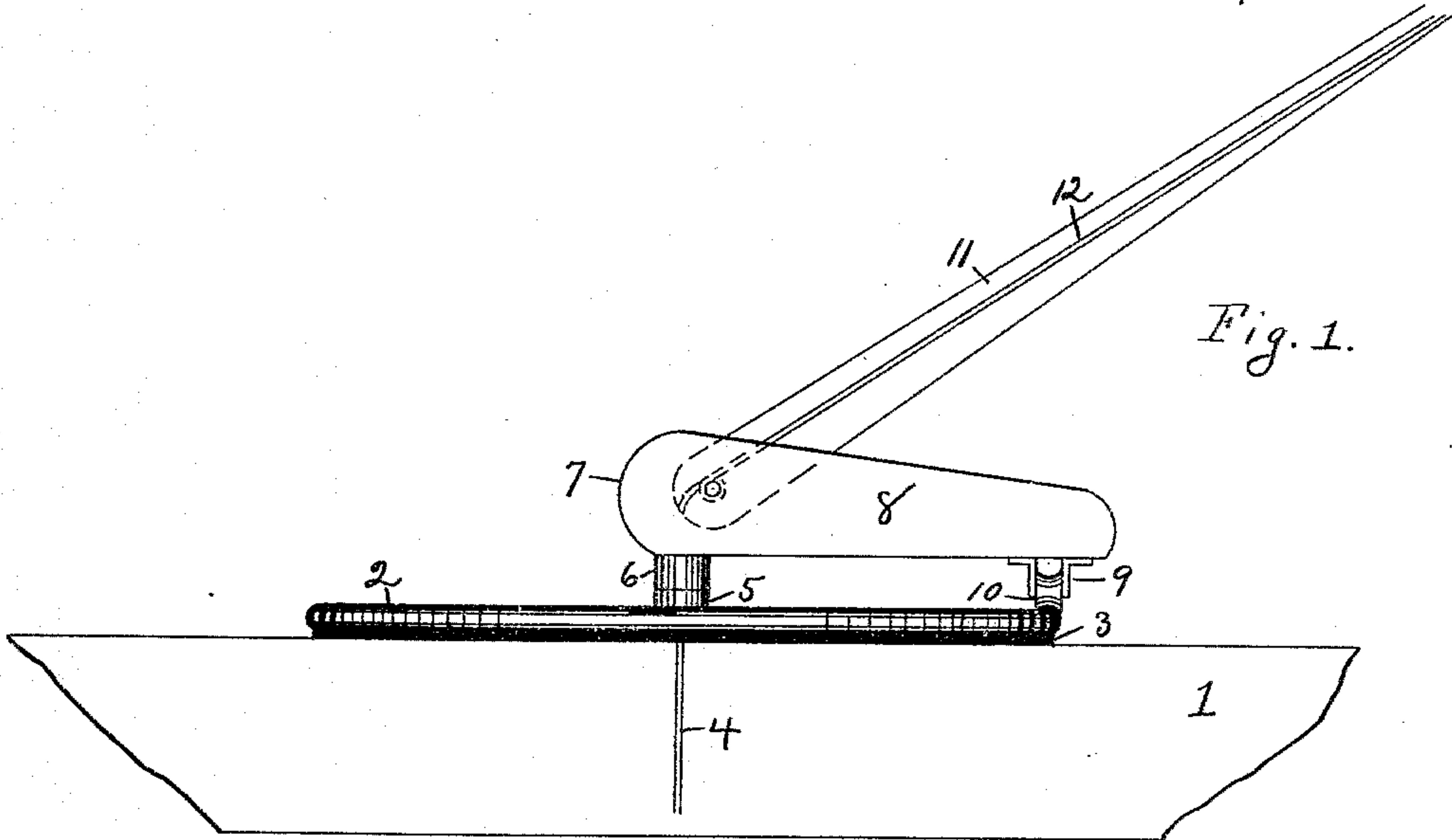


(No Model.)

W. W. HENDRIX.  
ELECTRIC RAILWAY TROLLEY.

No. 511,019.

Patented Dec. 19, 1893.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM W. HENDRIX, OF BOWLING GREEN, KENTUCKY.

## ELECTRIC-RAILWAY TROLLEY.

SPECIFICATION forming part of Letters Patent No. 511,019, dated December 19, 1893.

Application filed October 7, 1892. Renewed November 22, 1893. Serial No. 491,685. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. HENDRIX, a citizen of the United States, residing at Bowling Green, in the county of Warren and State of Kentucky, have invented a certain new, useful, and valuable Improvement in Overhead Trolleys, of which the following is a full, clear, and exact description.

My invention has relation to overhead electric trolleys for cars, and its object is to provide a trolley which will conduct the current from the wire overhead to the wire connected with the motors of the car, with as little friction as possible and at the same time making a perfect connection and thereby wasting none of the current.

My invention is also designed to provide a trolley that can be easily swung around when the car is reversed, said trolley consisting in the novel construction and arrangements of its parts as hereinafter described.

In the accompanying drawings: Figure 1, is a side view of my invention attached to the top of the car. Fig. 2, is a top plan view of Fig. 1, the trolley being removed. Fig. 3, is a view of Fig. 1, partly in section; and Fig. 4, is a detailed perspective view of the spring that keeps the trolley against the wire.

My invention is described as follows:

I, represents the top of the car, and to the top of the car is secured the circular path 2. This circular path can be a flat surface or a solid cylindrically shaped rod as shown in the drawings, the essential feature being that the path is circular. The said path is insulated from the top of the car by the insulating material 3, which is between said path and the said top of the car. Connecting the circular path is the wire 4, (see Fig. 1,) which conducts the current to the motors. This wire can pass around or over the car as desired. In the center of the car and in the center of the said circular path is the pivot 5, which is also provided on its under side with insulating material 3. To the top of the pivot 5, is swiveled the support 6, which in turn is rigidly secured to the front end of the upper side of the boot 7. In swiveling the support 6, to the pivot 5, any desirable connection can

be made without departing from the spirit of the invention. In Fig. 3, of the drawings the pivot can be made in two pieces or sections and put around the end of support 6, thus making a dovetail joint. The boot 7, is preferably made of sheet metal having on each longitudinal side a perpendicular flange 8, and to the rear end and under side of the said boot are rigidly secured suitable lugs 9, having journaled between them rollers or wheels 10; said wheels 10, are adapted to run on the circular path 2. If the said path 2, is flat the peripheries of the wheels 10, will be flat, but if the path is convex or concave the peripheries of the wheels will be made to conform to the surface of the path. Between the perpendicular flanges 8, of the said boot and near its front end is pivoted the lower end of the trolley pole 11, the upper end of said trolley pole being provided with the ordinary trolley wheel to bear against the overhead wire. The wire 12, is adapted to conduct the current down the trolley pole, and the lower end of the said wire may be twisted around the pivot of the said pole and as said pivot is connected with the perpendicular flanges of the boot, the current will pass into the boot, and from thence by means of the wheels 10, to the circular pathway 2, which is connected with the wire 4.

To keep the trolley wheel against the overhead wire I may use any known or desirable means. In the drawings I have shown a peculiar coil spring which can be used to great advantage in keeping the trolley wheel against the wire. Said spring is constructed of one continuous piece of metal, as shown in Fig. 4. The end 13, of the said spring rests in the bottom of the boot; the coil 14, runs around the pivot of the trolley pole 11; and the end 15, bears against the under side of the said trolley pole.

As shown in Fig. 3, the trolley pole is provided with a metallic plate 16, against which the end 15, of the said spring bears and thereby said spring is prevented from wearing the under side of the pole. Thus the trolley wheel is firmly kept against the overhead wire.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

5 An overhead trolley having its lower end pivoted in a swiveled boot, the trolley pole having bearing against its under side one end of the coiled spring, the coils of said spring passing around the pivot and the other end of the spring bearing against the bottom of

the boot, substantially as shown and described. 10

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

WM. W. HENDRIX.

Witnesses:

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