

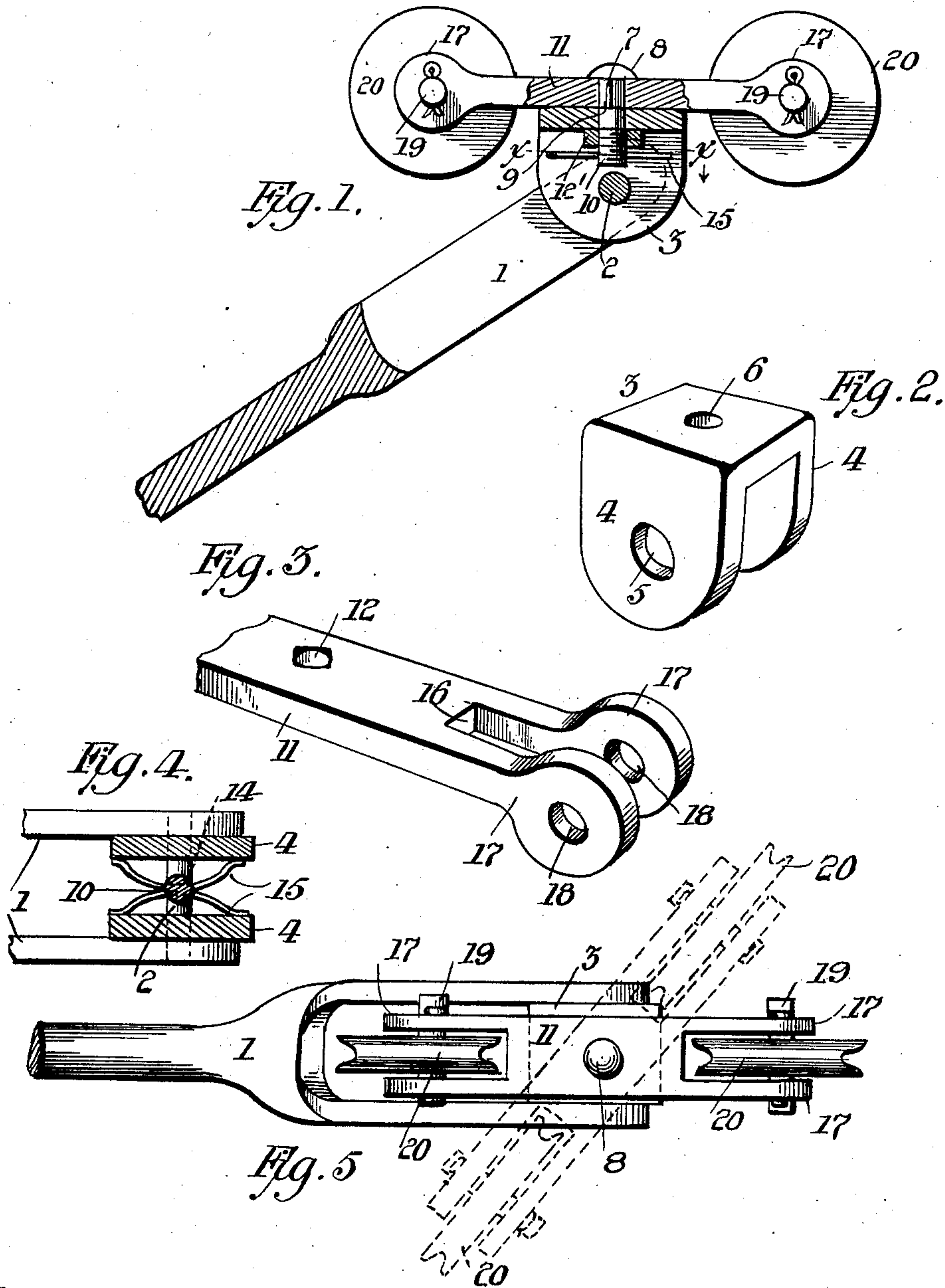
No. 762,823.

PATENTED JUNE 14, 1904.

S. J. HANLIN.
TROLLEY WHEEL.

APPLICATION FILED MAR. 29, 1904.

NO MODEL.



Witnesses:
N. W. Butler,
E. E. Patten.

Inventor,
S. J. Hanlin,
By H. C. Everett & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

STEWART J. HANLIN, OF ALLEGHENY, PENNSYLVANIA.

TROLLEY-WHEEL.

SPECIFICATION forming part of Letters Patent No. 762,823, dated June 14, 1904.

Application filed March 29, 1904. Serial No. 200,512. (No model.)

To all whom it may concern:

Be it known that I, STEWART J. HANLIN, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Trolley-Wheels, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention has relation to trolley-wheels, and has for its object to provide wheels of this character which may be readily attached to any ordinary form of trolley-pole now in use, means being provided in connection with the trolley-wheels whereby the possibility of the same being displaced is reduced to a minimum.

Another object of my invention is to provide trolley-wheels of such a construction that 20 when the same are placed upon the wire one of said wheels will always be in engagement with the trolley-wire and conform to the same when the wheels pass around curves, under bridges, and will not interfere with or obstruct the guide-wires and similar construction employed in supporting trolley-wires.

Briefly described, my invention comprises a yoke which is pivotally mounted in a harp of a trolley-pole, and upon this yoke is swiveled 30 a bar, in the ends of which are journaled trolley-wheels which are adapted to engage the trolley-wire. Means is provided in connection with the above-mentioned construction whereby the swiveled bar will be normally held in alinement with the trolley-pole.

With the above and other objects in view the many advantages of my improved trolley-wheels will be apparent from the following description, taken in connection with the drawings accompanying this application, wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a vertical sectional view, partly in elevation, of my improved trolley-wheels, 45 showing the same mounted in the harp of a trolley-pole. Fig. 2 is a detail perspective view of the yoke. Fig. 3 is a perspective view of one end of the bar in which the trolley-wheels are journaled. Fig. 4 is a horizontal sectional view taken on the line *xx* of

Fig. 1 looking in the direction of the arrow; and Fig. 5 is a top plan view of my improved trolley-wheels, showing the swiveled bar swung around in dotted lines.

To put my invention into practice, I employ 55 the ordinary trolley-pole and harp, in which are mounted my improved trolley-wheels and their appurtenant parts, and referring to the drawings the reference-numeral 1 indicates the harp of the trolley-pole, and in the upper 60 end of said harp is pivoted, by a pin 2, a yoke 3, said yoke having its downwardly-extending arms 4 4 provided with apertures 5 5, through which the pin 2 of the harp passes, and in the top of said yoke I form an aperture 65 6, through which passes a bolt 7, said bolt carrying a head 8, a square shank portion 9, and screw-threads 10 upon its lower end, this bolt being employed to swivel the bar 11 upon the top of said yoke, the square shank portion 70 9 passing through the square aperture 12, formed centrally in said bar, and the end of the bolts passes through aperture 6, and upon the screw-threaded end of this bolt is secured a nut 12'. The lower end of the bolt is provided with an aperture 14, through which are 75 passed two spring-keys 15, the object of which will be hereinafter more fully described. The bar 11 has its outer ends bifurcated, as indicated at 16, the arms 17 17 being provided with 80 apertures 18 18, through which the pins 19 pass and are keyed therein, and upon these pins are journaled the trolley-wheels 20, which are slightly smaller than the ordinary trolley-wheel now used. 85

By the construction of my trolley-wheels it will be seen that they are journaled in a swiveled arm, whereby as the trolley-pole passes around a curve the wheels will conform to the wire, and in case the trolley-wheels should be 90 displaced this swiveled bar will be normally held in alinement with the trolley-pole by the spring-keys, the outer ends of said keys being bent and adapted to engage the inner side of the arms 4 4 of the yoke 3, as clearly illustrated 95 in Fig. 4 of the drawings. By pivoting the yoke within the harp of the trolley-pole the trolley-wheels are permitted to assume a vertical position when taken from the trolley-wire, and it will be seen that always one of said 100

wheels is in a position that the same may be placed against the trolley-wire and the upper pressure of the trolley-pole will swing the wheels upon their pivot, whereby both wheels
5 will come into engagement with the wire.

It may be noted that various changes may be made in the details of construction without departing from the general spirit and scope of my invention.

10 What I claim, and desire to secure by Letters Patent, is—

In trolley-wheels, the combination with a trolley-pole, of a yoke pivotally mounted on

said pole, a bar carried by said yoke, a bolt passing through said bar and said yoke, spring- 15 keys secured through the end of said bolt and adapted to engage the side arms of the yoke, trolley-wheels journaled in the outer ends of said bar, substantially as described.

In testimony whereof I affix my signature in 20 the presence of two witnesses.

STEWART J. HANLIN.

Witnesses:

E. E. POTTER,
K. H. BUTLER.