

No. 776,954.

PATENTED DEC. 6, 1904.

C. H. SPANGLER.
TROLLEY POLE.

APPLICATION FILED FEB. 14, 1903.

NO MODEL.

FIG. 1.

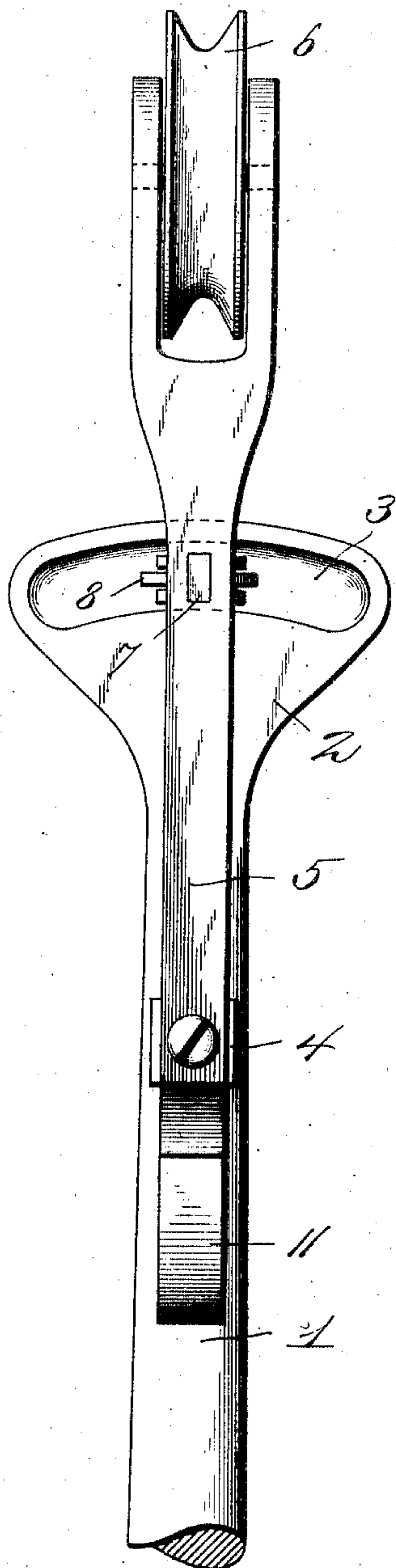
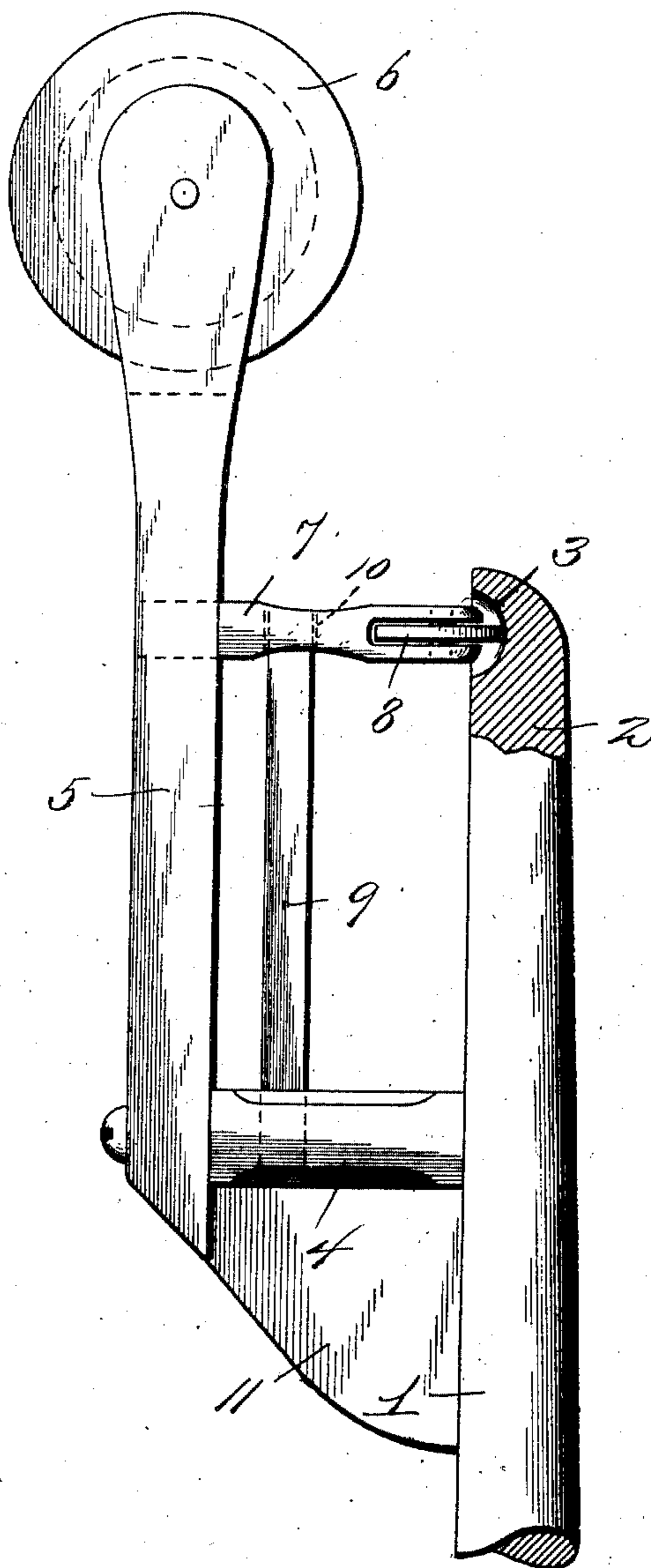


FIG. 2.



Inventor

Charles H. Spangler.

Victor J. Evans

Attorney

Witnesses

Harry L. Ames.

Herbert Lawson.

By

UNITED STATES PATENT OFFICE.

CHARLES H. SPANGLER, OF ATLANTA, GEORGIA.

TROLLEY-POLE.

SPECIFICATION forming part of Letters Patent No. 776,954, dated December 6, 1904.

Application filed February 14, 1903. Serial No. 143,405. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. SPANGLER, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented new and useful Improvements in Trolley-Poles, of which the following is a specification.

My invention relates to new and useful improvements in trolleys; and its object is to provide a device of this character the wheel of which is adapted to move laterally in relation to the pole when the trolley is traveling on a curved wire.

A further object is to provide means whereby the wheel and its connections are held normally in alinement with the pole.

With the above and other objects in view the invention consists in providing an extension to the pole upon the outer end of which is pivotally mounted a forked arm having a trolley-wheel journaled in the free end thereof. A roller is connected to this arm and adapted to bear within a raceway formed at the upper end of the trolley-pole, and a spring is provided whereby the trolley-wheel and its arm are held normally in the same plane with the trolley-pole.

The invention consists in the further novel construction and combination of parts herein-after more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a front elevation of a trolley-pole constructed in accordance with my invention, and Fig. 2 is a side elevation thereof.

Referring to the figures by numerals of reference, 1 is a trolley-pole, the upper end 2 of which is enlarged and provided within its front face with a curved raceway 3, which is in an arc concentric with a forwardly-extending arm 4, mounted upon the trolley-pole. To the outer end of this arm is pivoted a forked arm 5, having a trolley-wheel 6 journaled therein, and this arm has a rearwardly-projecting extension 7, within the end of which is journaled a roller 8, which is adapted to

travel within the raceway 3, before referred to. A spring-band 9 is secured to the arm 4 and extends through a slot 10, formed within the extension 7. This spring serves to hold arm 5 normally in the same plane with the trolley-pole 1. A block 11 is preferably arranged upon the pole below arm 4, and the lower edge of this block is flush with the lower end of the arm 5 and serves to prevent cross-wires, &c., from catching upon said arm 5 should the wheel 6 jump from the wire. When the wheel of a trolley constructed in accordance with my invention travels upon a curved wire, the arm 5 will be moved laterally upon its pivot, thereby causing roller 8 to travel within the raceway 3. This lateral movement of the arm 5 and the wheel therein will permit said wheel to retain a firm grip upon the wire and prevent it from jumping therefrom and from scraping upon and wearing the same.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. The combination with a trolley-pole; of an arm extending therefrom, a raceway upon the pole in an arc concentric with said arm, a second arm pivoted to said arm, a trolley-wheel journaled therein, an extension to the arm of the trolley-wheel, a roller journaled within the extension and adapted to bear upon the raceway, and a spring secured to the arm of the pole and loosely engaging said extension, whereby the trolley and its arm are held normally in a plane with the trolley-pole.

2. The combination with a trolley-pole having an arm extending therefrom; of a second arm pivoted to said arm, a trolley-wheel journaled therein, said wheel and its arm being adapted to swing laterally in relation to the pole, a block upon the pole and below the

arm extending therefrom, one edge of said block being flush with an end of the forked arm.

3. The combination with a trolley-pole having an enlarged end provided with a curved raceway; of an arm pivotally connected to the pole, a trolley-wheel journaled therein, an extension upon the arm, a roller therein adapted to ride within the raceway, and a spring for

exerting a pressure upon the extension, whereby the wheel and its arm are held normally in alinement with the pole.

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

CHARLES H. SPANGLER.

Witnesses:

S. R. JOHNSTON,

E. A. NORTHERN.