No. 697,828. Patented Apr. 15, 1902.

F. L. FOWLER.

TROLLEY POLE.

(Application filed July 11, 1901.)

(No Model.)

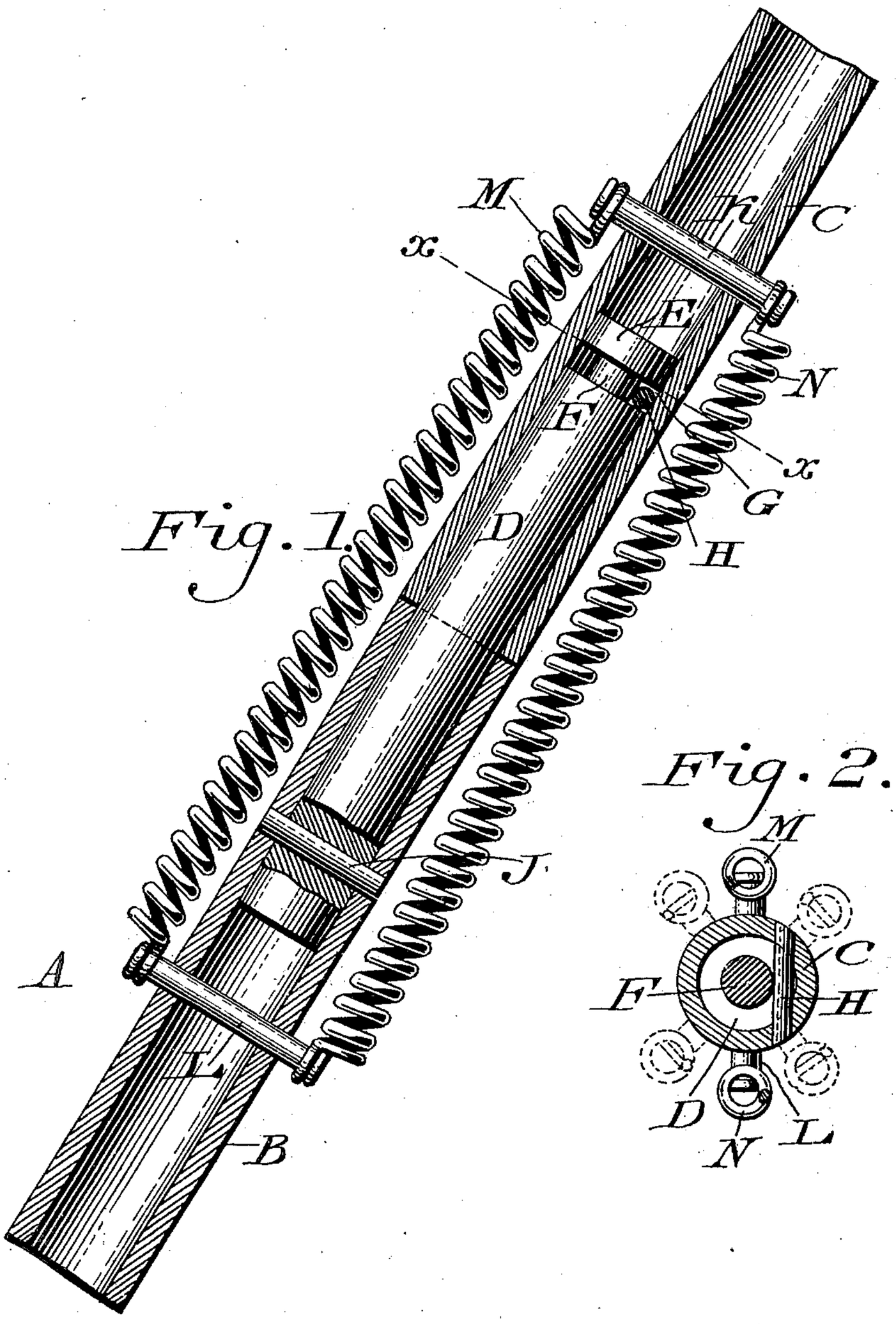

Fig. 1.

Fig. 2.

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TROLLEY-POLE.

SPECIFICATION forming part of Letters Patent No. 697,828, dated April 15, 1902.

Application filed July 11, 1901. Serial No. 67,837. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. FOWLER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Trolley-Poles, of which the following is a specification.

My invention relates to an improvement in trolley-poles; and it consists of a sectional pole having a pin for securing the same together in a longitudinal direction, but permitting axial movement, and means for returning the parts to their normal position.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a sectional view of a portion of a trolley-pole embodying my invention. Fig. 2 represents a sectional view on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a trolley-pole which is tubular or partly so and is divided into sections B and C, the former being secured to the car and latter is adapted to carry the trolley-wheel which is secured thereto in any suitable manner.

D designates a pin, which is preferably solid and is adapted to fit within the trolley-pole A and is provided with a head E and the neck or reduced portion F, forming a recess G, in which is adapted to be seated the bolt H, which is secured to the section C of the trolley-pole, and a bolt J rigidly secures the said pin D to the section B of the pole, it being noticed that the section C can turn on the pins D as an axis, but is prevented from longitudinal movement with respect to the section B.

K and L designate pins which are secured to the sections B and C, respectively, said pins having springs M and N secured thereto, which are coiled in the opposite direction from each other.

The operation is as follows: In turning a curve a trolley-wheel is liable to leave the conductor or feeder-wire owing to the rigidity of the parts; but in the present construction it will be noticed that when the wheel reaches the curve it can follow the conductor from the fact that the section C of the trolley-pole can turn therewith by reason of the movable connection with the section B due to the pin D, and the force of the springs J and L is overcome when the trolley reaches the straight portion of the conductor again. The said springs will assist in returning the parts to their normal position, and in this manner the trolley is prevented from leaving the conductor, it being seen that by this construction a very durable pole is made, while the operation of the parts permits the trolley-wheel to follow the conductor, and it being further evident that the poles now being used can be employed, it merely being necessary to cut the same at the proper place and insert the pin D and attach the springs M and N.

If necessary, a suitable cover may be employed to cover the moving parts. It will be evident that various changes may be made in the construction as herein shown and described, and I do not, therefore, desire to be limited in every instance to the form as herein shown and described, but I desire to make such changes as will come within the scope of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a trolley-pole, formed in sections, one of which is secured to a car and the other carrying the trolley-wheel, a pin rigidly secured to one section and movably connected to the other section whereby one section can turn with respect to the other section, and springs on opposite sides of said sections, each spring having one end secured to one section and the other end secured to the other section.

2. In a trolley-pole formed in sections, a pin rigidly secured to one section, means for movably securing said pin to the other section and serving as an axis therefor, pins secured to said sections and springs coiled in

opposite directions connected with said sections for holding the parts in normal position.

3. In a trolley-pole formed in sections, a pin rigidly secured to one section, a head on said pin with a reduced neck connecting the same and forming a recess around said pin, and a bolt seated in said recess and connected with the other section, whereby said pin serves as an axis for said section and connects the same together.

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