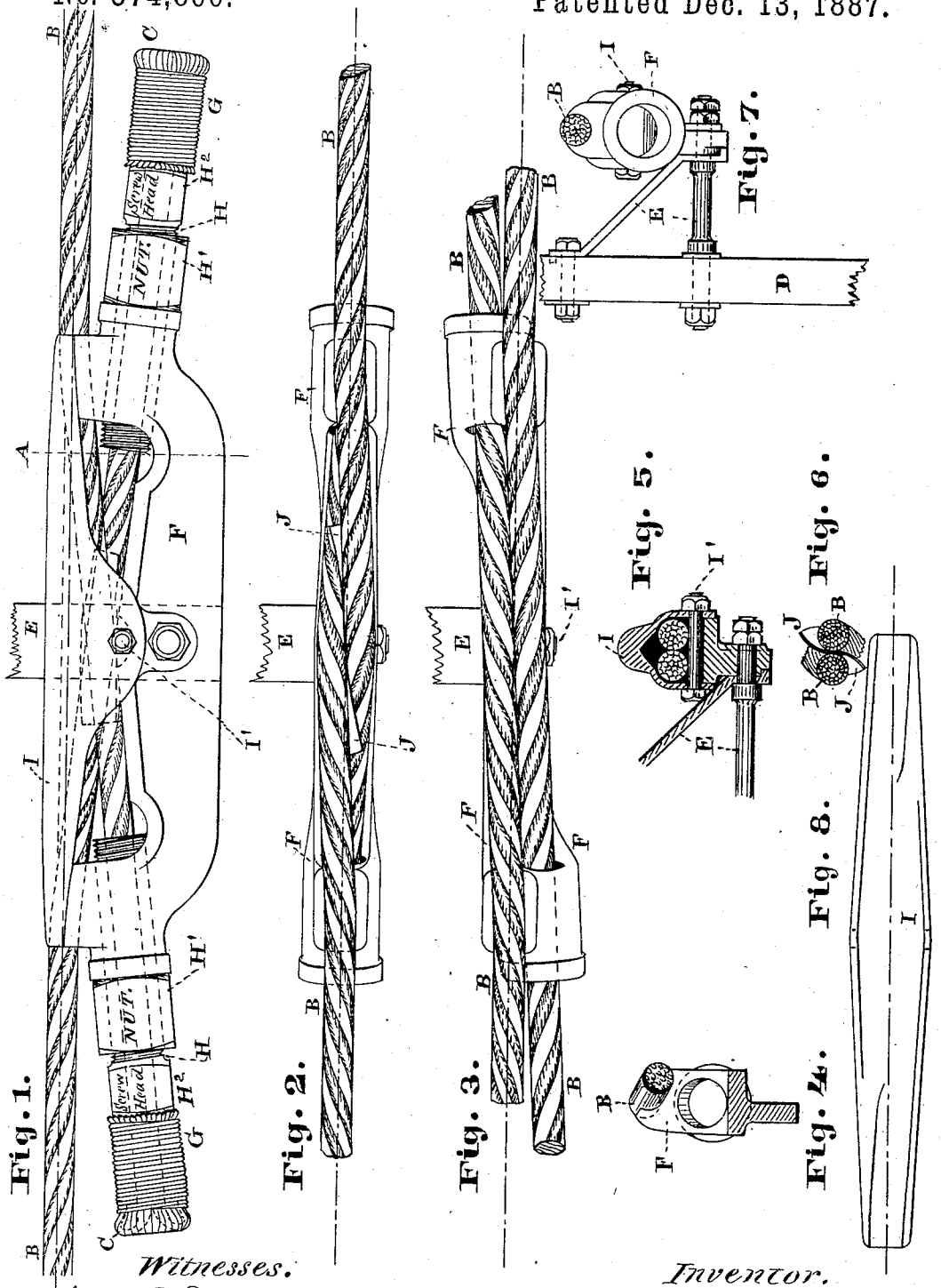
(No Model.)

C. CARR.

CABLE TRACK ROAD AND TIGHTENER FOR SAME.

No. 374,866. Patented Dec. 13, 1887.



Witnesses.
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CHARLES CARR, OF BOSTON, MASSACHUSETTS.

CABLE-TRACK ROAD AND TIGHTENER FOR SAME.

SPECIFICATION forming part of Letters Patent No. 374,866, dated December 13, 1887.

Application filed May 21, 1887. Serial No. 239,024. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CARR, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Tracks for Suspension or Cable Track Roads—viz., a cable-tightener or device for adjusting and holding the required tension of the cable—of which the following is a full and exact description, reference being had to the accompanying drawings, and to the letters of reference thereon, which make a part of this specification.

Referring to the drawings, Figure 1 is a side elevation illustrating the device. Fig. 2 is a plan of the main part. The screws and cap are omitted to expose to view the other parts. Fig. 3 is a similar plan so constructed as to avoid a second crook or bend in the cable ends. Fig. 4 is a sectional elevation, plane of section at A, Fig. 1, looking to the right. Fig. 5 is a sectional elevation, plane of section cutting transversely at the central point, looking to the right. Fig. 6 is a similar sectional view of the two cable ends and a thin steel plate between them. Fig. 7 is an elevation of the device viewed transversely to the view in Fig. 1, and showing the support, consisting of a post and bracket, upon which the device is mounted, the cable forming the track being shown in section. Fig. 8 is an under view of the cap which covers the parts of the cable ends which pass each other.

Like letters refer to corresponding parts in all the figures.

B B are the cable ends, terminating at C, of two sections or parts of a road-track composed of wire or other cable, and may likewise represent flexible rods or wire, in case such are used. These cable ends may occur at any desirable length of intervals. Wherever they do occur it is proposed to connect them by means of my invention, the cable-tightener, which not only forms a convenient connection and resting-place for the cable, but also affords the efficient means for taking up the slack of the cable and of giving it the requisite tension.

D is an ordinary post or other support, and E is the usual bracket for supporting the cable or the shoe or cable-holder, and F is a joint-bar, a part of my device. The part E, in case of an electric road, may be insulated upon the post or support, and, if preferred, the part F may be insulated with reference to part E. The joint-bar F is provided at each end with a suitable resting-place for the "cable end," and also beneath an opening within which the cable end may pass at the opposite end of the bar. This will be understood on reference to Fig. 1. The cable end is also passed through a tubular screw, and is firmly secured by any convenient method to its outer end—as, for instance, I have shown the wire ends opened and spread in return order around the head end of the screw, where they are made fast by the band of wire wound upon them and marked G. This tubular screw H is provided with a nut, H′. The screw H is also provided with a head, H^2, by means of which it may be kept from turning when the nut H′ is rotated.

The arrangement of the cable ends lying in the grooves or resting-places on joint-bar F, and passing through the opening in the opposite end of the bar, with the nut-head and wire-fastening, will all be understood by reference to the drawings.

It will be observed that the cable ends pass each other at the middle of the joint-bar and below the line of the track. To cover the depression and deviation of the track so caused and render the track continuous and approximately uniform, I provide the cap I. (Shown inverted in Fig. 8 and in proper position in Figs. 1 and 5.) This cap saddles over the cable-ends crossing, and is secured in any suitable manner—as, for instance, by the bolt I′, passing under and close to the cables.

When it is required to occupy as little thickness of track as possible transversely measured, I place the resting-place for the cable ends and the opening through which they pass in one right line, as illustrated in Fig. 2. This of course causes the divergence of the cable through reversed curves, and causes more or less friction of one cable against the other. I therefore, to prevent chafing and give easy movement to the cable end in tightening, interpose between the two cables the thin sheet J, of steel, as illustrated in Figs. 2 and 6. When a little more breadth taken up by the track is not objectionable, the openings in the end of joint-bar F may be made on the line of the first divergence of the cable, as illustrated in Fig. 3.

When it is required to take up the slack of the cable, it is only necessary to turn the nuts H', which, bearing against the ends of joint-bar F, draw the cable ends each in the direction opposite to the other.

The parts may be made of any suitable material, preferably of steel, and most easily of steel castings.

The joint-bar or cable-rest may, if preferred, be rigidly secured to the bracket or other support. I have shown it pivoted or journaled so as to be free to oscillate as the car-wheels approach and leave it.

The cables may, if preferred, be insulated upon the joint-bar F, in which case the steel bridge-cap I becomes the sufficient electrical connection between the two cable ends.

I claim—

1. In combination with cable-wire or flexible-rod sections forming a road-track, a joint-bar constructed with cable-bearings or resting-places and screw-openings, sleeve-screws and nuts, and a bridge-cap, substantially as described.

2. In combination with cable-wire or flexible-rod sections, a tightening device as constructed—viz., having two sleeve-screws inclosing and secured to the said sections and arranged in a bearing-bar common to both, with nuts and a bridge or cap, substantially as described.

3. In combination with the sections of a cable-wire or flexible-rod road-track, the two sleeve-screws and nuts and cable-holder bar, substantially as described.

4. The bridge-cap I, in combination with the two cable ends and the joint bar for electrical transmission, substantially as described.

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Witnesses:

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