

(No Model.)

W. H. YOUNG.

CABLE TRACTION RAILWAY TRACK.

No. 379,922.

Patented Mar. 20, 1888.

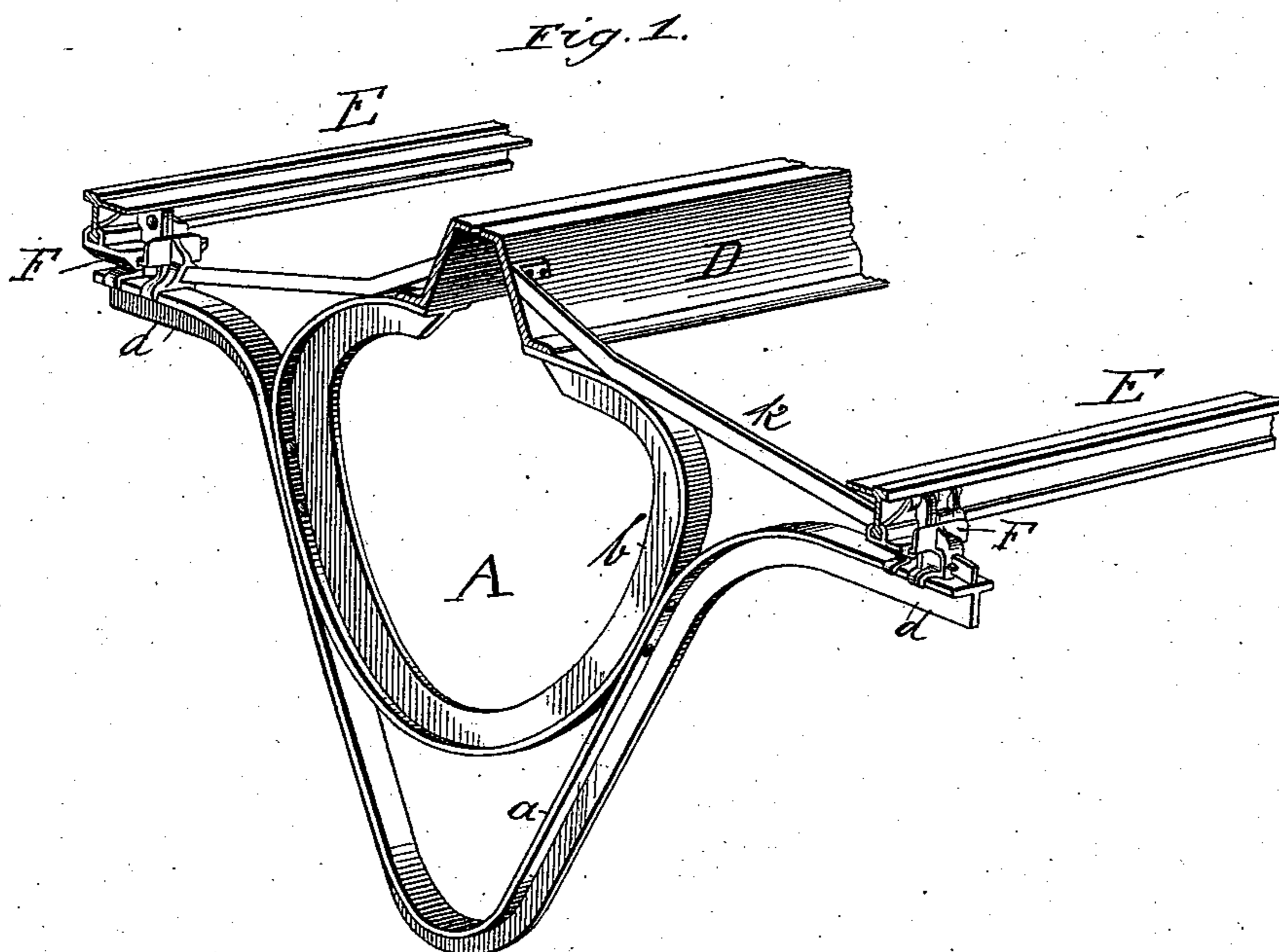


Fig. 2.

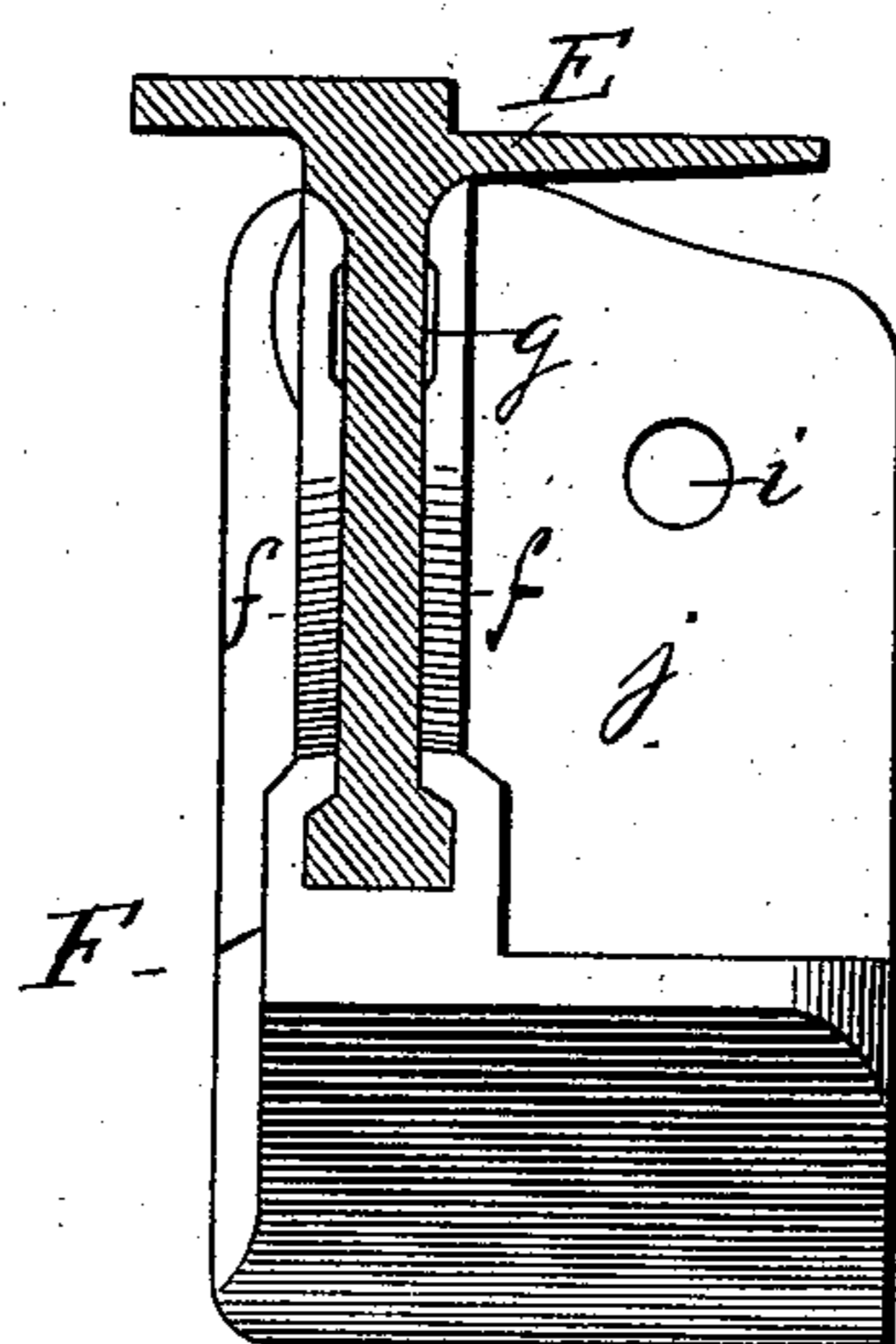
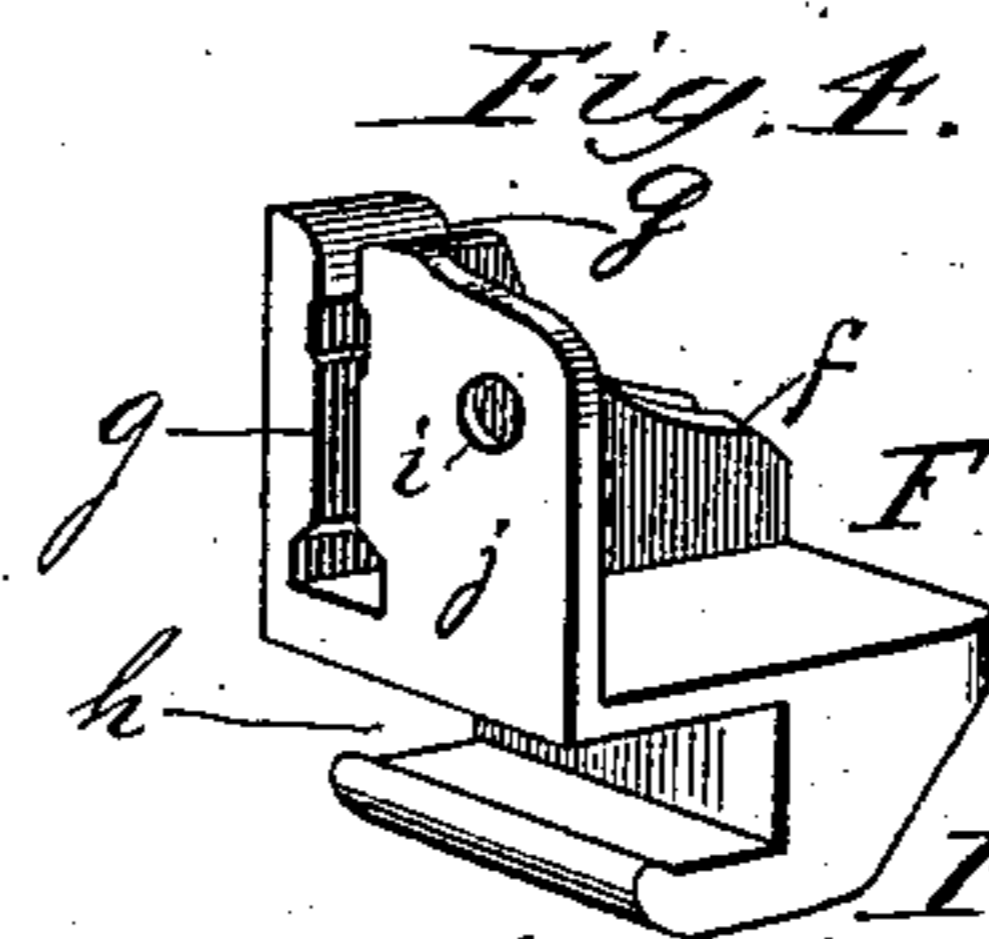
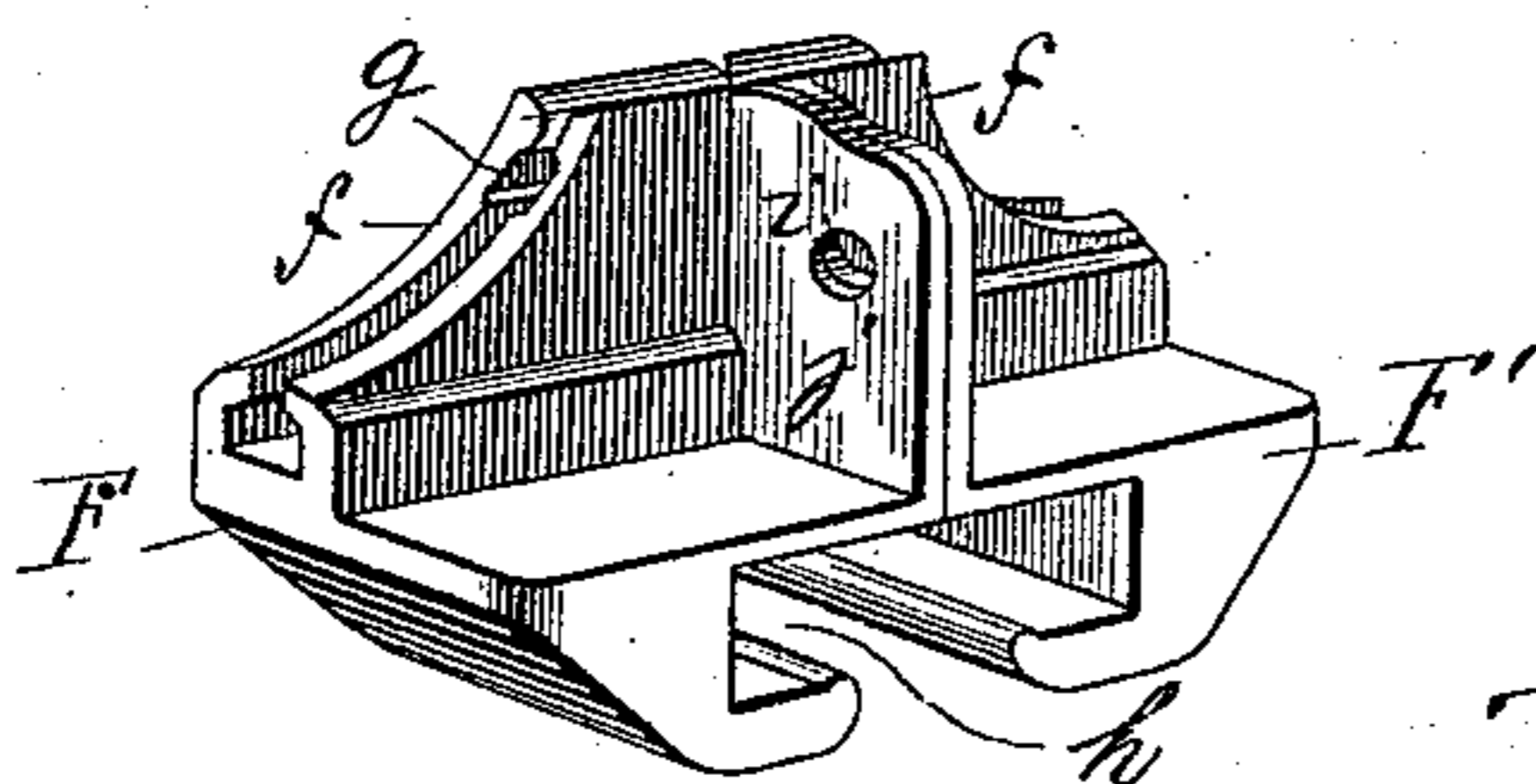


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM H. YOUNG, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
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CABLE-TRACTION-RAILWAY TRACK.

SPECIFICATION forming part of Letters Patent No. 379,922, dated March 20, 1888.

Application filed August 9, 1887. Serial No. 246,492. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. YOUNG, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cable-Traction-Railway Tracks, of which the following is a specification, reference being had therein to the accompanying drawings.

The nature of my invention relates to the construction of tunnels and tracks for cable railways, and more particularly to the connection of the track-rails to the yokes in a quick and more substantial manner; and with that object in view my invention consists of a casting adapted to be clamped upon the side extensions of the yokes that form the skeleton for the tunnel, and which castings form the chairs for the rails, all as will be hereinafter more fully described and specifically claimed.

In the accompanying drawings, Figure 1 represents a perspective view of one of the yokes with rails connected; Fig. 2, an end elevation of the chair, with the track-rail shown in section; Fig. 3, a perspective view of the rail-chair detached, and Fig. 4 a perspective view of one of the two halves composing a rail-chair.

Corresponding referential characters in the several figures of the drawings designate like parts.

A denotes one of the yokes that are inserted in the ground for forming the cable-tunnel and for providing supports for the track and slit rails, which yoke in this case consists of a V-shaped frame, *a*, and a heart-shaped frame, *b*, both bent of T-iron, and the frame *b* secured between the shanks of frame *a* by rivets. The frame *b* being open in its upper end, Z-bars *D* are secured thereto that form the slit for the cable-grip, the side extension, *d*, of frame *a* of yoke *A* forming the supports for the track-rails *E*. These rails were formerly secured to wooden stringers that were bolted upon these extensions *d*; but these stringers, rotting away within a limited time, were frequently the cause of expensive repairing, interfering with the regular traffic, and therefore my improvement consist in providing cast-iron chairs, each made of two sections, *F* and *F'*.

The sections *F* and *F'* have vertical flanges *f*, providing an intermediate groove, *g*, that

corresponds in shape with the base and web of the rails, *E*, to be inserted therein. The said sections *F* *F'* are also provided with a horizontal plate portion or base, *g*, adapted to overlie and be secured to or upon the extension *d* of the yoke by any suitable means. As one means of securing said part I have shown the base formed with grooves *h*, which embrace the upper extensions of the yoke, and is secured by a single bolt or rivet passed through holes *i* in vertical flanges *j*.

It will be readily seen that a rail-chair thus constructed can be quickly attached and secured by clamping upon the yoke, and will hold the rail placed into or through the groove of the same in a very rigid position. Brace-rods *K* may be attached in any usual manner.

While in the foregoing description I have specified in detail the several parts embraced in the construction of tracks that are old, and to which my improvement is supplementary, I have also given in detail the parts involved in this example of my invention as selected for illustration; yet the scope of my improvement, in fact, embraces the substitution of chairs seated above the tunnel-yoke in the construction of tramways for cable cars that are adapted to support rails in suspension—that is, furnish supports at intervals along the rails—and thereby supplant the expensive and rapidly-deteriorating wooden stringers. It is of great importance as bearing upon the cost of construction that these supplementary chairs shall be as light in weight as consistent with their function, and also as simple in construction as will effectually serve the purpose for which they are designed, yet any particular form for securing them to the structure is not important. There is one condition, however, that I deem essential, and that is a vertical channel in the chair to receive and support the web of the rail, and also deem it essential that the chair be made in two or more parts adapted to be fitted together and clamped or bolted upon or above the yoke and firmly secured thereto, the clamping being such as to prevent the chairs from movement in the direction of the rail length, which would preferably be transversely thereto, as shown.

What I claim is—

1. In cable traction railways, chairs as inter-

val bearings for the rails that are provided with channels or recesses adapted to receive and support the web of the rail, and that are also formed of two or more parts that meet
5 with a joint in line with and adapting them to be clamped and secured to or upon the yoke of the substructure.

2. In cable traction railways, a chair consisting of two parts having flanges terminating beneath, adapted to grasp a metallic sub-
10 structure, a channel in the upper portion adapted to receive and hold the web of the rail, and lateral flanges adapting the two portions of the chair to be bolted or secured together,
15 substantially as set forth.

3. The combination, with yoke A and rails E, of cast-metal rail-chairs made in sections, with grooves in their bases for grasping the

T-extensions of the yokes from opposite sides and for clamping the same by a single bolt, 20 substantially as set forth.

4. The combination, with yoke A and rails E, of cast-metal chairs, each made in two sections, with grooves in their bases for grasping the T-extensions of the yoke from opposite
25 sides and for securing the same by clamping with a single bolt, each such chair being provided with an upper groove for inserting and holding the track-rails, substantially as set forth.

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

WILLIAM H. YOUNG.

Witnesses:

WILLIAM H. LOTZ,
A. MARITZEN.