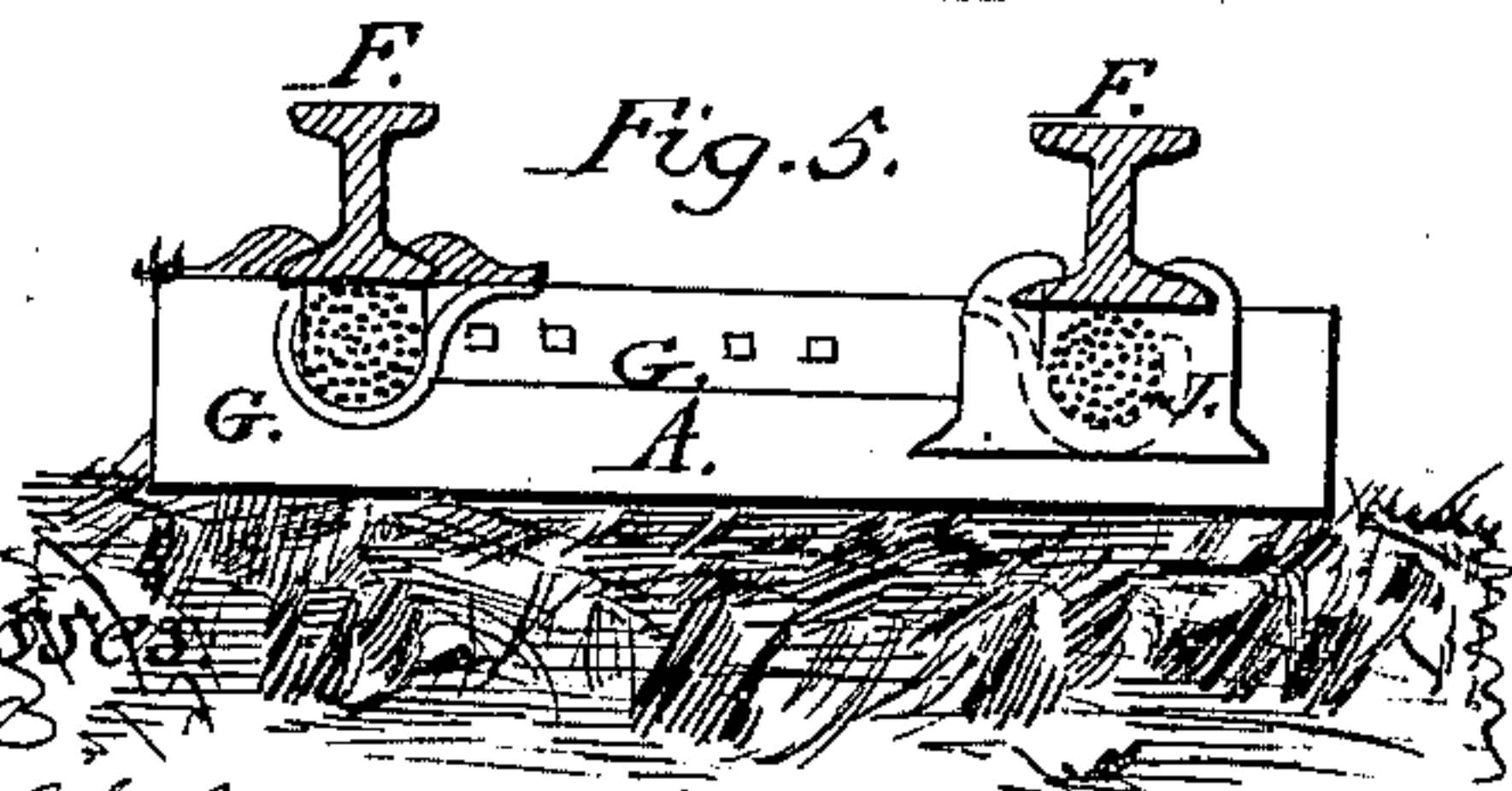
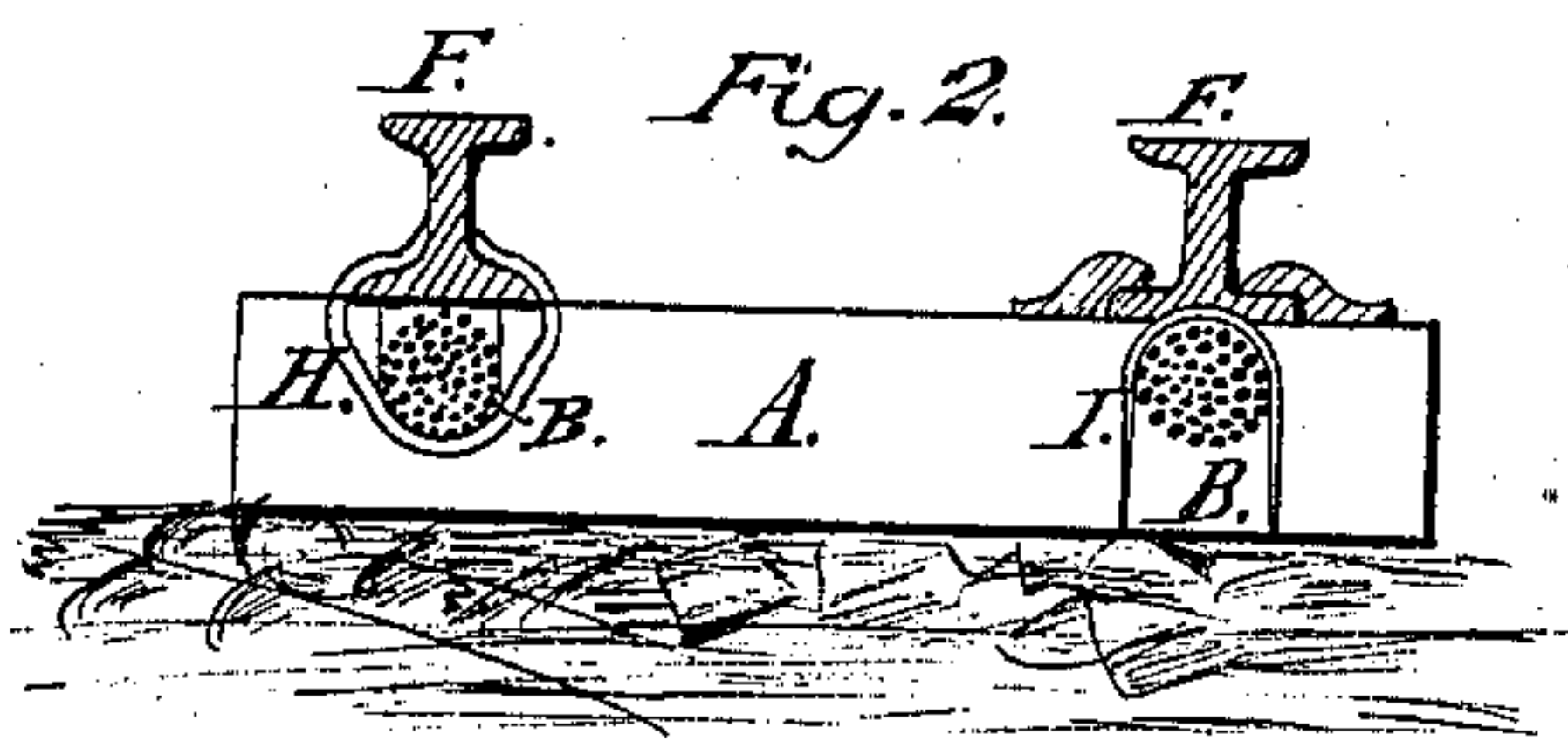
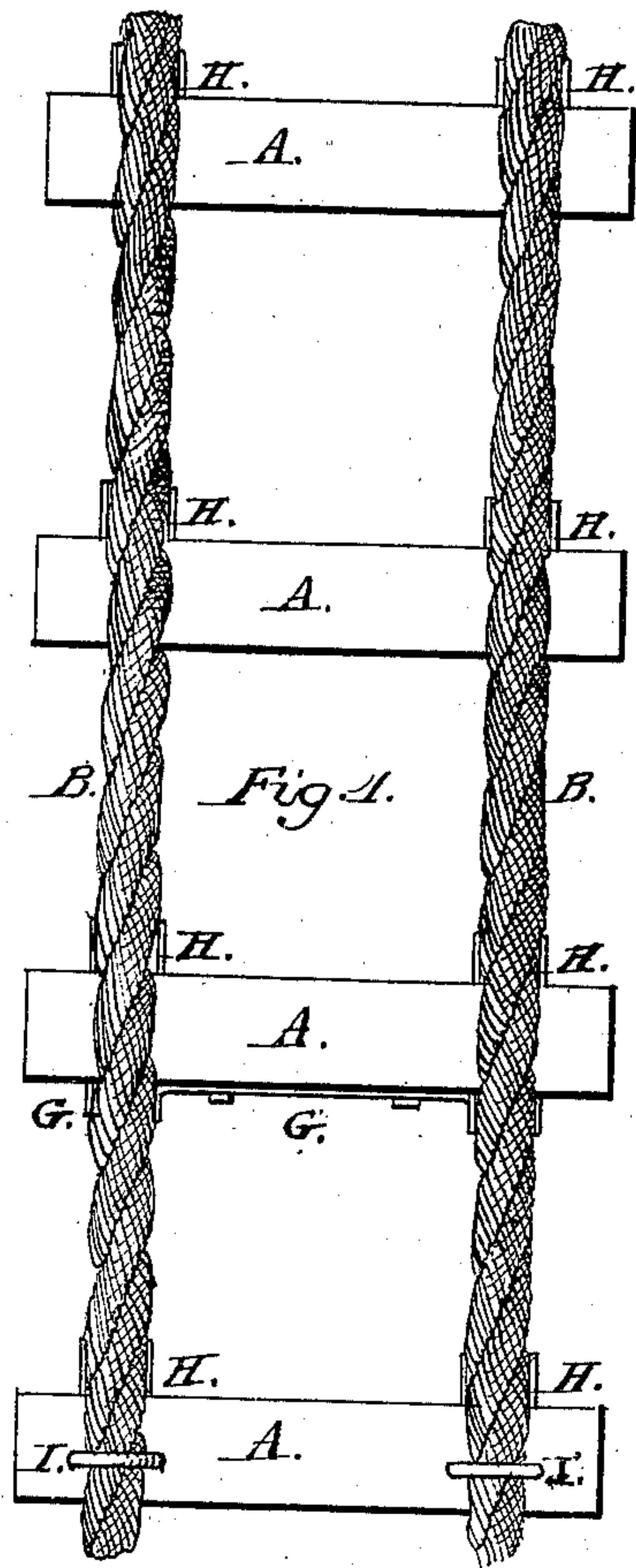


M. B. Edson,

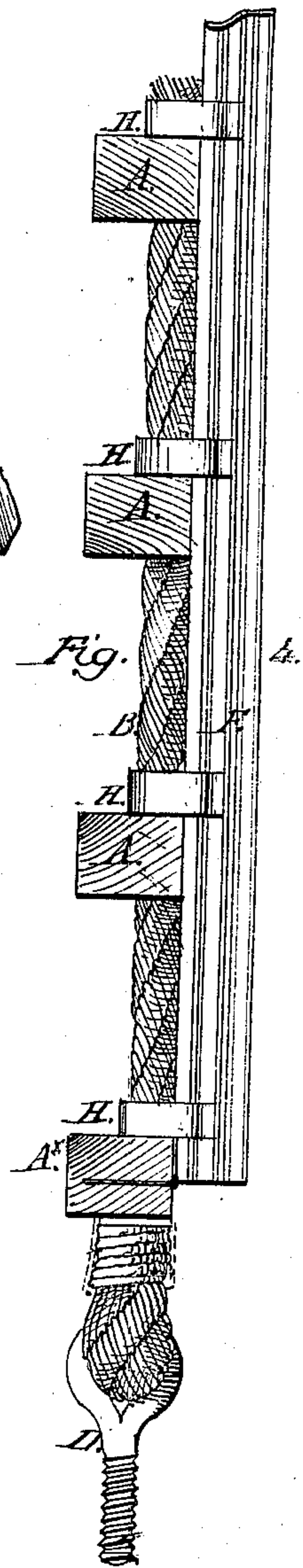
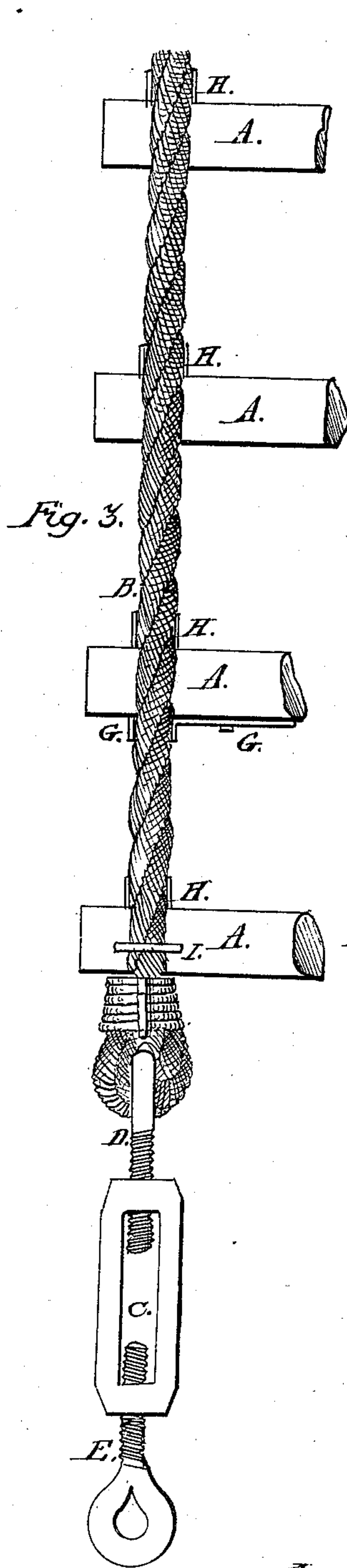
Railway Track.

No. 88,284.

Patented Mar. 30, 1869.



Witnesses
G. Pearson
Geo. P. Clarke.



Inventor
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United States Patent Office.

MARMONT B. EDSON, OF NEW YORK, N. Y.

Letters Patent No. 88,284, dated March 30, 1869; antedated March 18, 1869.

IMPROVED RAILWAY-TRACK

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MARMONT B. EDSON, in the city of New York, and county of New York, and State of New York, have invented a new, original, and useful Improvement in the Construction of Railroads; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in placing underneath the rails of a railroad, and embedded in and even with the top of the cross-ties, or string-piece, a continuous rope, of iron wire or other material, in such a manner, that when a rail breaks, it is still held in its proper position, or, if displaced, the wheels of the car will roll upon the said rope until it reaches the permanent rail, thus allowing the cars to continue on their course, instead of running off the track, or dropping between the cross-ties, as at present occurs.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, in which—

Figure 1 represents a plan of a railroad-track, with the wire rope B laid along the line, and under the rail, at right angles to the cross-ties A; showing also the stiffening-bar G.

Figure 2 represents an end view of a railroad-track, showing the position of the wire rope B as it is embedded in the cross-ties A; also, the application of the bow-clasp H, which assists to secure the rail F to the wire rope B, and the staple, I, which secures the wire rope B to the cross-ties A.

Figure 3 represents a view of the wire rope B, with the application of the turn-buckle C, for the purpose of tightening up the same.

Figure 4 represents a longitudinal elevation of a railroad-track, showing the position of the wire rope B under the rail, the staple, I, the bow-clasps H H, and the right-hand screw D.

Figure 5 represents an end view, in section, of the railroad-track, showing the application of the strengthening-bar G and the chair J.

Its Operation.

I furnish a wire rope, B B, fig. 1, and place it under the rails, by cutting out the cross-ties A A sufficient to admit the said wire rope B, and allow the rails F to rest flat upon the cross-ties A A, as shown at F, fig. 2.

I next place the wire rope B B in position, and secure it down to the cross-ties A A by means of the staple, I, fig. 2, after which I place the rails F F in position, and secure said rails to the wire rope B B by means of the bow-clasp H, as shown at H F, fig. 2, at

the same time placing in position the chair J, fig. 5, which secures the two ends of the two rails together in the usual way.

I next connect the two wire ropes B B, fig. 1, by the application of the stiffening-bar G, which, in its construction, has the ends twisted one-quarter round, so as to allow the flat way of the iron to clasp the wire rope B B, as shown at G, fig. 5, while the edge, throughout its length between the rails, is caused to be up. Thus its utmost strength, as well as facilities for fastening the said bar to the cross-ties, is secured, as shown at G □ □, fig. 5.

I next furnish a turn-buckle, C, fig. 3, with right and left-hand threads and screws, D E, for the purpose of tightening up the said wire rope B B while in the act of placing it in position, or after it has become slackened by use.

Having described and arranged each and every piece and part of my improved railroad, I will suppose a rail to break, in the common course of events, when it is very evident that the bow-clasps H H, figs. 2, 4, will prevent the broken rail from being displaced; but, in the event of a very extraordinary break, and the displacement of a rail, the wire rope B B is still in its proper position, and presents a continuous track for the car-wheels to travel on until they reach the next permanent rail, thus preventing accidents, so destructive to life and property.

Again, the wire rope being continuous between the cross-ties, it forms an auxiliary track, or rail, preventing the car-wheels from dropping between the cross-ties, which causes them to break by the sudden concussion which necessarily occurs under such circumstances.

The strengthening-bar G, connecting the wire ropes B B, together with the two rails F F, constitute an additional support, in connection with the recess cut in the cross-ties for the reception of the said wire rope B B, thus securing a permanent auxiliary rail, which it is almost impossible to displace, the wire rope thus becoming a substitute for the string-pieces formerly used on railroads, but at present dispensed with.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The wire rope B B, either round or flat, in combination with the rails F F, substantially as and for the purpose set forth.

2. The stiffening-bar G, as constructed, in connection with the bow-clasps H H, wire rope B B, and rails F F, for the purposes herein specified.

MARMONT B. EDSON.

Witnesses:

G. HARSIN,
GEORGE P. CLARKE.