(No Model.)

S. H. JENKINS.

CABLE TRAMWAY.

No. 299,394. Patented May 27, 1884.

Fig. 1.

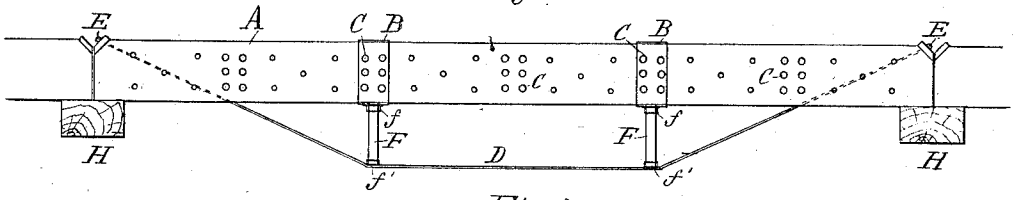


Fig. 2.

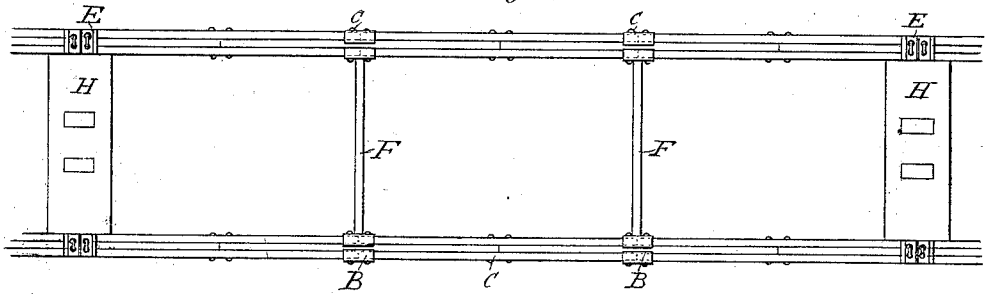


Fig. 5.

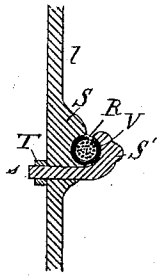


Fig. 6.



Fig. 3.

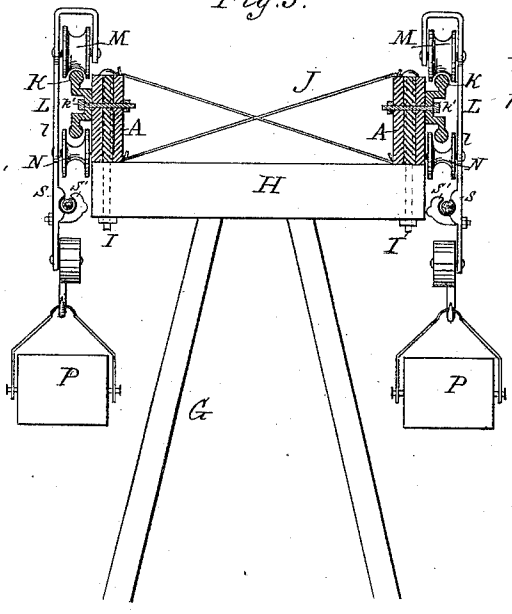
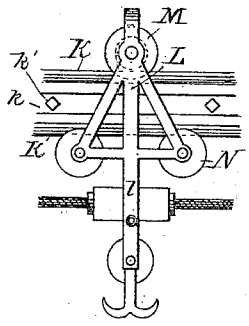


Fig. 4.



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UNITED STATES PATENT OFFICE.

SAMUEL H. JENKINS, OF NEW YORK, N. Y.

CABLE TRAMWAY.

SPECIFICATION forming part of Letters Patent No. 299,394, dated May 27, 1884.

Application filed February 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. JENKINS, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Cable Tramways, of which the following is a specification.

My invention relates especially to cable tramways employed for transporting ore in suspended buckets or cars, and has for its object the provision of a tramway which is particularly adapted for use in hilly, broken, or mountainous localities, being light, simple, cheap, and strong, and effective in operation.

My invention consists, essentially, of double supporting-trusses, constructed of planks or boards placed upon edge and secured together by bolts or nails, a double tie wire or rod running under each truss, the said tie-wires being held in position by suitable boards or planks running across between the parallel trusses connecting the same.

My invention further consists in a double-headed rail provided with an offset between the heads, the same being so constructed as to be attached to the trusses or to string-pieces, and permit the flanges of the wheels of the carriers to pass between the rail-heads and the vertical side of the truss.

My invention further consists in a grip for engaging with the driving-cable, one part of said grip being formed with the carrier-frame and the other part secured thereto by a bolt, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my improved truss, and Fig. 2 is a plan view thereof. Fig. 3 is a cross-sectional view of my completed tramway, showing all the parts in place. Fig. 4 is a front elevation of the carrier. Fig. 5 is a vertical section through the grip, and Fig. 6 is a plan view of the portion of the grip formed with the carrier-frame.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

A are the boards or planks out of which the truss is formed. These boards may be of any desired thickness and length. In the drawings three thicknesses of board are shown; but two or more than three may be used, if found necessary. The boards A are so placed as to break the joints, and at each exterior joint thin metal plates B are placed, through which bolts or screws C pass, to hold the parts securely in place. Other nails or bolts are used wherever it is found necessary between said plates.

D are longitudinal tie wires or rods, passing from end to end of the truss-beam, the extremities of the wire being secured to a block or cleat, E, as shown.

F are braces formed of plank, and engaging with the tie-wires and the bottom of each truss-beam. In placing said braces in position, the tie-wires are first secured at the extremities of the truss-beams, and then the braces are sprung into place. A socket, *f*, secures said brace against displacement where it engages with the truss-beam, and a metal plate, *f'*, is placed between the tie-wires and the brace at bottom. This truss possesses peculiar advantages. The separate parts may be transported through a mountainous and broken country, where heavy beams could not be moved, and when the parts are assembled for use the completed truss is of great strength and durability.

G are uprights engaging with a cross-piece, H, upon each extremity whereof the trusses are mounted, said trusses being secured to pieces H by means of bolts I, and braced against outward strain by means of cross-wires J.

K is a double-headed rail, provided with a longitudinal offset, *k*, which rests against the side of a string-piece or truss, where it is secured by means of bolts *k'*. The advantages of this form of rail are obvious. It may be supported upon the side of a string-piece or truss of any width. As the heads stand away from the support, the flanges of the wheels of a carrier have sufficient room to move unobstructedly. The heads of the rail may be brought closely together, and the rail and carrier made more compact, materially reducing the weight and cost both of the rail and carrier, while increasing the strength of the parts.

The carrier consists of a frame, L, having at top a double-flanged wheel, M, and at bottom two double-flanged wheels, N. A bar, *l*, extending downward from the frame, engages with a double hook, for supporting the buckets P.

The grip for engaging with the operating-

cable R consists of a stationary jaw, S, formed with the bar *l* of the carrier, the inner surface of said jaw conforming to the shape of the cable, and the body thereof forming a segment of a circle, as illustrated in Fig. 6. S' is the movable jaw, conforming in shape to jaw S, but being provided with a screw-threaded shank, *s*, which passes through bar *l* and engages with a nut, T, for compressing the jaws around the cable. In placing the latter in position, an elastic thimble, V, is put therearound at the point where the cable is embraced by the grip, preventing abrading or wear of the wires of the cable.

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

1. In a tramway of the character herein specified, the series of trusses, each consisting of two parallel beams formed of planks secured directly to each other, as set forth, and provided with longitudinal tie-wires, in combination with the braces located at right angles to the truss-beams and tie-wires, and the cross brace-wires extending between the truss-beams, substantially as shown and described.

2. The trusses formed of planks A, united by means of plates B and bolts C, tie-wires D, secured to cleats E, and transversal braces F, substantially as shown and described.

3. A double-headed rail, K, having an offset, *k*, substantially as and for the uses and purposes shown and described.

4. The combination, with supporting-trusses or string-pieces, of a double-headed rail affixed to the outer face thereof, said rail being provided with an offset, *k*, substantially as shown and described.

5. The grip consisting of the stationary jaw formed upon the carrier-bar, as set forth, in combination with the movable jaw bearing the screw-threaded shank adapted and arranged to pass through the carrier-bar and engage with a nut, substantially as shown and described.

Signed at New York, in the county of New York and State of New York, this 16th day of February, A. D. 1884.

SAMUEL H. JENKINS.

Witnesses:

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A. M. PIERCE.