

(No Model.)

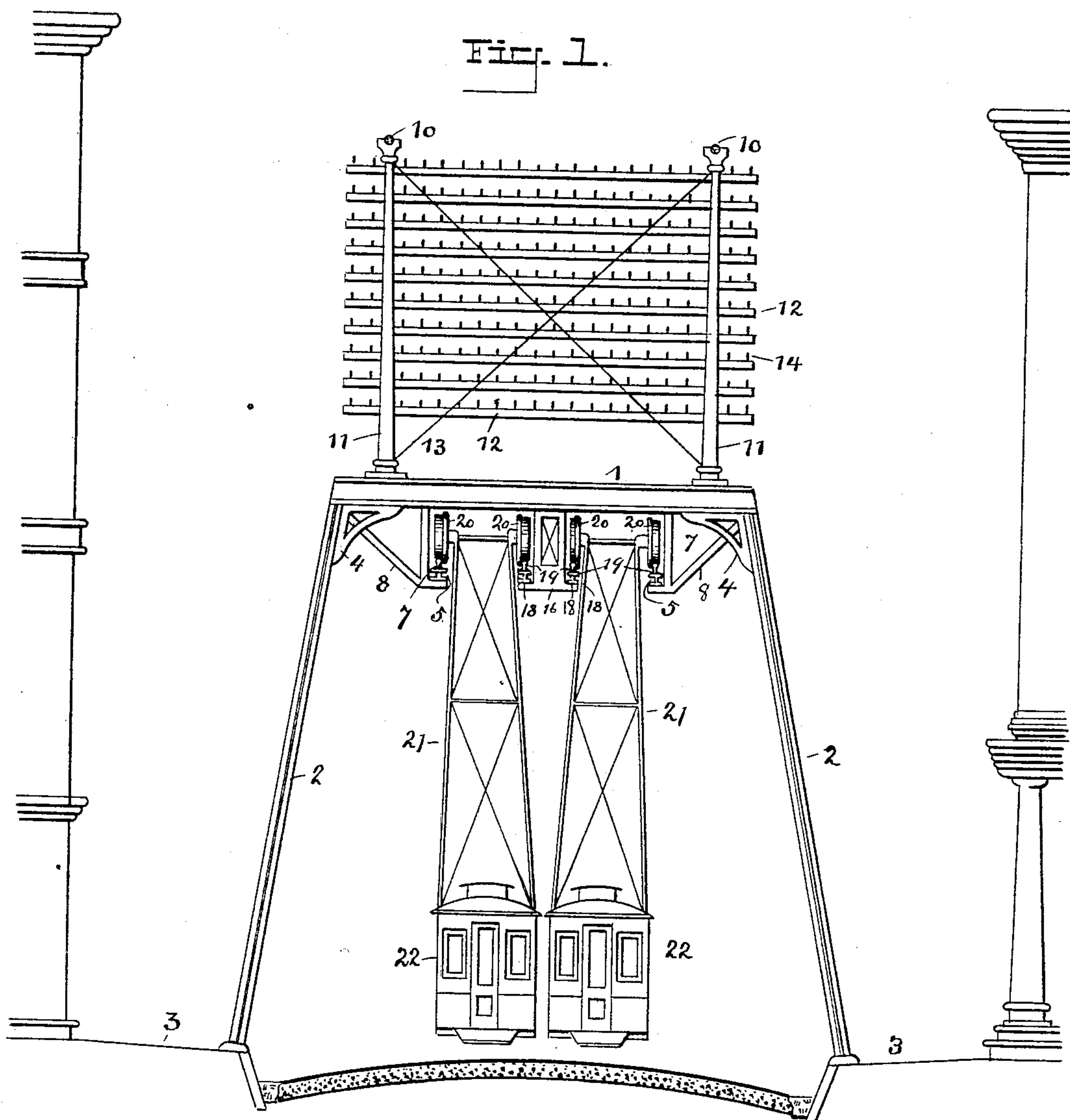
2 Sheets—Sheet 1.

L. W. BROWN.
ELEVATED FRAME WORK AND SUPPORT FOR ELECTRIC WIRES AND
STREET RAILWAYS.

No. 390,001.

Patented Sept. 25, 1888.

Fig. 1.



WITNESSES:

D. W. Mott
W. Sedgwick

INVENTOR:

L. W. Brown
BY *Munn & Co*
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

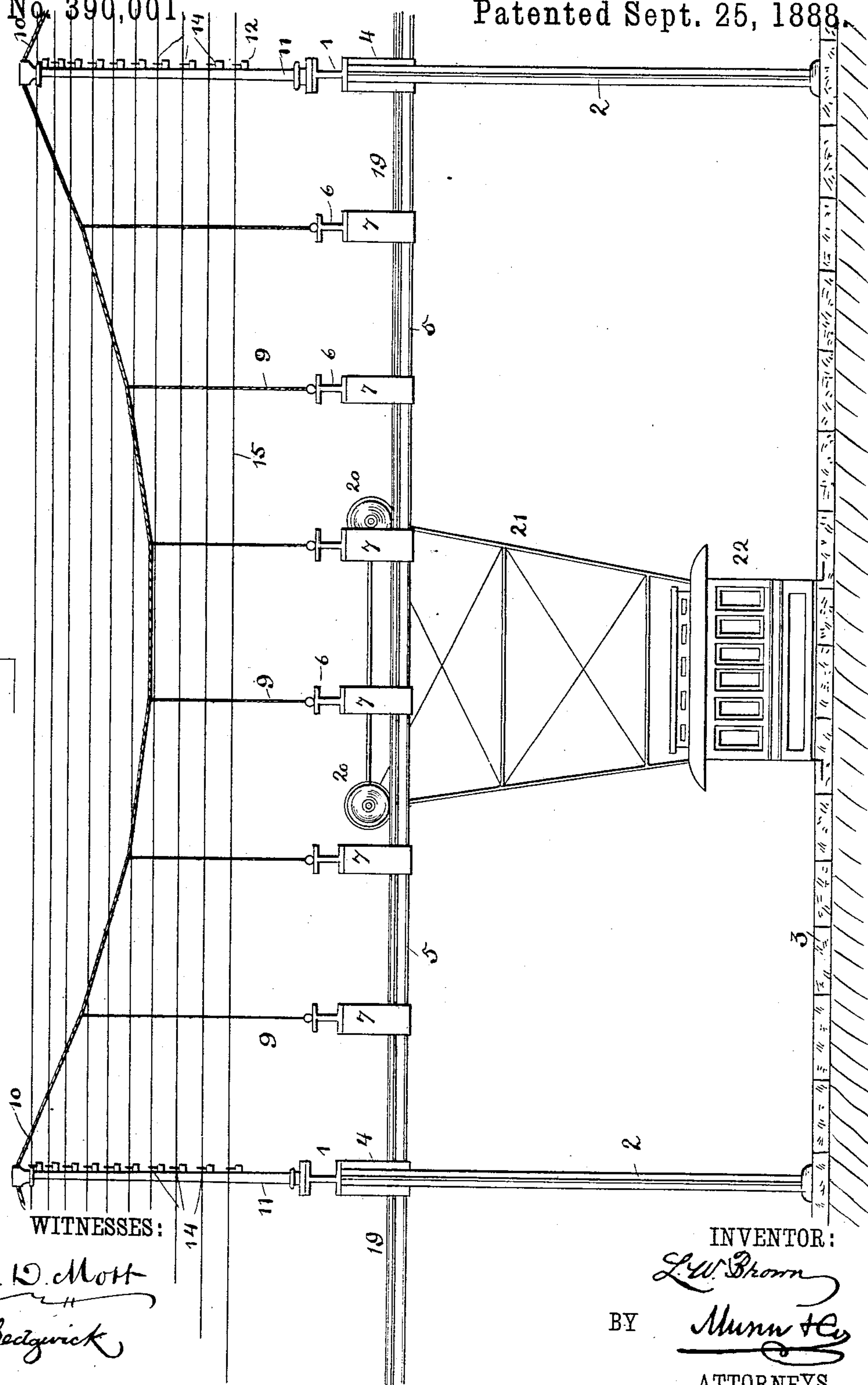
L. W. BROWN.

ELEVATED FRAME WORK AND SUPPORT FOR ELECTRIC WIRES AND
STREET RAILWAYS.

No. 390,001

Patented Sept. 25, 1888

214



WITNESSES:

D. D. Mott
C. Sedgwick

INVENTOR:

L. W. Brown

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LINUS W. BROWN, OF NEW ORLEANS, LOUISIANA.

ELEVATED FRAME-WORK AND SUPPORT FOR ELECTRIC WIRES AND STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 390,001, dated September 25, 1888.

Application filed January 21, 1888. Serial No. 261,499. (No model.)

To all whom it may concern:

Be it known that I, LINUS W. BROWN, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and
5 Improved Elevated Frame-Work and Support for Electric Wires and Street-Railways, of which the following is a full, clear, and exact description.

This invention relates to an elevated support
10 and frame-work for street-railways and electric wires, and has for its objects to avoid laying tracks in the streets and to dispense with the use of poles for supporting the electric wires. The structure would also form an elevated gal-
15 lery or platform, from which suitable fire escapes, ladders, and hose-connections could be attached, to use in case of fire.

The invention consists in devices for the purposes above referred to, constructed and
20 arranged as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both views.

25 Figure 1 is an end view illustrating this invention, and Fig. 2 is a side view of a section thereof.

In carrying out this invention iron cross beams or girders 1 are attached to and sup-
30 ported by upright iron posts or columns 2, said posts 2 resting on a suitable foundation at the curb of sidewalk 3, one on each side of street. These posts 2 are inclined toward each other at top, to form a steady support, and
35 are provided with the angled braces 4, to brace and strengthen their connection with the iron cross-beam 1.

Resting on top and secured to the cross-
40 beam 1 are two upright posts or columns, 11, which receive and support the cables 10 and the cross-arms 12, to which are attached the electric wires 15 by the projections 14. These posts 11 are further braced by the diagonal rods or braces 13, as shown in Fig. 1. These
45 frames, composed of the cross-piece 1, posts 2, braces 4, and posts 10, braced as shown, are placed, as above described, at any desired distance apart—say seventy-five or one hundred feet—and are connected by the cables 10, rest-
50 ing on and secured to posts 11, as shown in Fig. 2. The posts 11 form the connection and

bearing for cross-arms 12, carrying the elec-
tric wires, and also the support for the cables 10, which cables support and sustain the track on which cars are suspended, as shown. 55

At suitable distances between the frames above described, and suspended from the ca-
bles 10 by iron rods or wires 9, are placed iron cross-beams 6. To the under side of the cross-beams 6 and 1 are placed and secured 60 the side blocking-pieces, 7, secured by braces 8, and the center blocking piece, 16, receiving the longitudinal girders 5 and 18 and railway-rails 19, as shown in Fig. 1. This railway-rail 19 may be formed or shaped so as to con- 65 stitute the girder and rail combined. The blocking-pieces 7 and 16 are of sufficient length to allow the proper-sized car-wheel 20 to roll on track 19 and to pass under the cross-beams 1 and 6, as shown. The cars 22 are 70 suspended by the trussed frame 21 from the axles of the trucks placed on the rails 19, as shown. The trucks are kept in position by the flanged wheels 20. The cars are thus sus- 75 pended from the wheels 20, rolling on track 19, and extend to within a short distance from the ground, and are hauled along by either traction, cable, electricity, or motors. The frame-work supporting the track may be con- 80 structed by placing the bents or supports closer and having a rigid girder connection, dispensing with the cables. The cable system, as above described, is preferable on account of its offering less obstruction to passage of light.

By means of the foregoing description it 85 will be seen that any number of electric wires may be supported by a frame-work which does not obstruct the streets, and which also serves as a means whereby street-cars may be moved through the streets by traction, cable, elec- 90 tricity, or other suitable propelling-power, and without putting down surface rails or obstructing the surface of the street. The arrangement and construction of the structure are such that it will be strong, durable, and 95 light, and will take up the least possible room and offer the least possible obstruction to the passage of light.

Having thus described my invention, I claim as new and desire to secure by Letters Patent— 100

1. In a combined elevated structure for street-cars and support for electric wires, a

frame work consisting of uprights and cross-beams, on which are mounted posts provided with cross-arms having electrical wire-connections, the supports, cross-arms, and vertical posts being connected by longitudinal cables having cross-beams suspended therefrom, provided with hangers or blocking-pieces, on which are mounted longitudinal girders provided with railroad-rails, in combination with traveling trucks mounted on wheels carrying trussed frames supporting street-cars adjacent to the surface of the street, substantially as described.

2. In an elevated structure for supporting electric wires and street-cars, the combination, with cross-beams mounted on posts or supports, the cross-beams supporting vertical posts connected by cross-arms supporting electric wires, of longitudinal cables suspended from the vertical posts, and cross-beams suspended from the longitudinal cables, having hangers or blocking-pieces supporting longitudinal girders, the hangers and longitudinal girders supporting railroad-rails, substantially as described.

3. In an elevated structure and electric-wire support, the combination, with supports 2, having cross-beams 1, angle-braces 4, and supporting vertical posts 11, connected by means of braces 13 and cross arms 12, having projections 14, to which are secured electric wires 15, cables 10, mounted on the posts 11 and having hangers 9, on which are suspended cross-beams 6, having braced hangers or blocking-pieces 7, longitudinal girders 5, with rails 19, and longitudinal girders 18, with railroad-rails 19, of the trussed frames 21, with cars 22,

mounted on wheels 20, resting on the rails 19, substantially as described.

4. In an elevated structure for supporting electric wires and street-cars in suspended position, the combination, with the uprights 2 and cross-beams 1, having angle-braces 4, and vertical posts 11, connected by means of braces 13 and cross-arms 12, having projections 14, to which are secured electric wires 15, of cables 10, mounted on the vertical posts 11, and cross-beams 6, suspended from the cables 10, and having braced hangers or blocking-pieces 7, provided with longitudinal girders 5 and 18, supporting rails 19.

5. In an elevated structure, as herein described, the combination, with supports 2, braces 4, cross-beams 1, and continuous longitudinal girders 5 and 18, supporting longitudinal rails 19, of braced supports 11, cables 10, and cross-beams 6, suspended therefrom, having hangers 7 and 16, supporting longitudinal bars 5 and 18 and rails 19, substantially as described.

6. In an elevated structure, as herein described, supports, braces, and cross-beams connected together, substantially as described, and supporting a frame-work for electrical wires, in combination with longitudinal suspension-cables mounted on said frame-work, and having cross-beams suspended therefrom, supporting a frame and rails for suspended railway-cars, substantially as described.

LINUS W. BROWN.

Witnesses:

F. S. WALSH,
L. A. DE BLANC.