No. 815,377. PATENTED MAR. 20, 1906.

W. M. REED.

ELEVATED RAILWAY.

APPLICATION FILED DEC. 4, 1905.

Fig. 1.

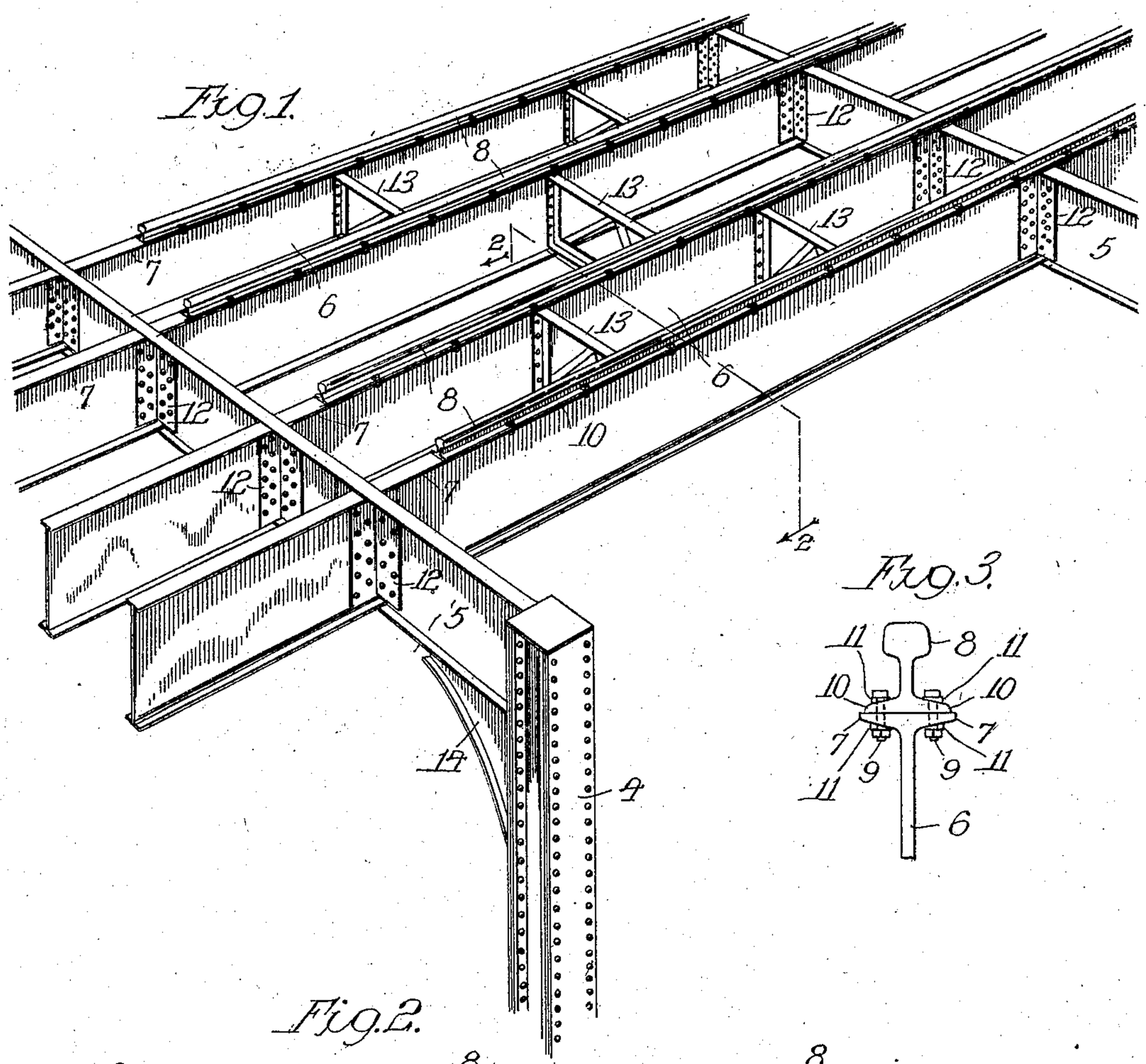
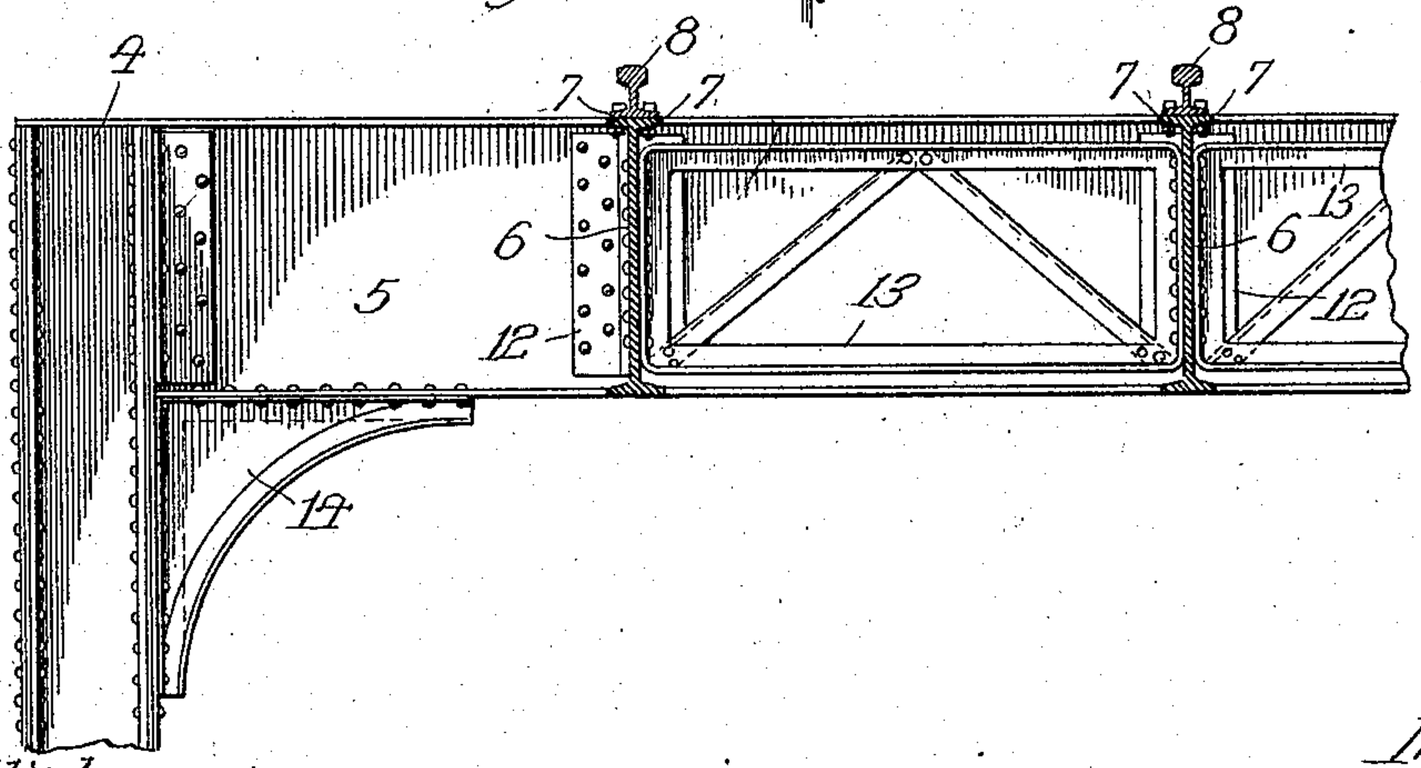


Fig. 3.

Fig. 2.



Witnesses:
Edw. R. Barrett
Ernestine Morstadt

Inventor
William M. Reed
By Clarence W. Taylor.
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM M. REED, OF CHICAGO, ILLINOIS.

ELEVATED RAILWAY.

No. 815,377. Specification of Letters Patent. Patented March 20, 1906.

Application filed December 4, 1905. Serial No. 290,190.

To all whom it may concern:

Be it known that I, WILLIAM M. REED, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Elevated Railways, of which the following is a specification.

This invention relates to new and useful improvements in elevated railways, and has for its objects, first, to dispense with the use of the usual cross-ties and to provide a longitudinal base for the track-rail; second, to provide an elevated railway construction in which, excepting the supporting means, the longitudinal girders and the track-rails form substantially the complete structure; third, to provide a construction that shall offer less obstruction to light and air and obviate much of the noise incident to the present construction, and, fourth, to provide a simple, durable, and comparatively inexpensive construction.

With the above and other objects in view this invention consists of the novel form and the combination and arrangement of parts hereinafter more specifically described, illustrated in the drawings, and particularly pointed out in the claims hereunto appended.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views, and in which—

Figure 1 is a perspective view. Fig. 2 is a cross-section on line 2 2 of Fig. 1. Fig. 3 is an enlarged detail end view of the track-rail and girder.

Referring to the drawings by reference-numerals, 4 denotes the usual post or column by which the different sections of the structure are supported.

5 5 represent cross-beams from post to post.

I provide an I-beam 6 6 or other girder or base having a horizontal upper flange 7 7 and a track-rail 8 fastened to the same. Preferably the girders 6 6 are of metal and may be the ordinary I-beam or a suitable built-up girder or stringer. The track-rails 8 8 are of the usual form and may be secured to the longitudinal girders by any suitable means, such as bolts 9, passing through the rail-foot 10 and the head or top flange 7 of the girder 6, washers or bosses 11 11 on the rail foot and the head providing even surfaces for contact with the head and nut of the bolts.

The girders 6 6 are fastened at their ends to the cross-beams 5 5, preferably by angle-plates or gussets 12 12. When girders 6 6 are used for an ordinary two-railed track, they may be made more firm against lateral deflection by braces of any desired character, such as 13, placed at suitable intervals. 14 shows the common braces fastened to post 4 and supporting cross-beam 5.

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

1. In an elevated railway, the combination of a supporting structure comprising columns, cross-beams and longitudinal metal girders of uniform height with and supported by said cross-beams, and track-rails seated directly on said longitudinal girders, substantially as shown and described.

2. In an elevated railway, the combination of a supporting structure comprising columns, cross-beams, longitudinal metal girders of uniform height with the tops of said cross-beams, means adapted to give lateral stiffness to said girders, and track-rails seated on said longitudinal girders, substantially as shown and described.

3. In an elevated railway, the combination of a supporting structure comprising supporting-columns, cross-beams, longitudinal metal girders of uniform height with said supporting cross-beams, means adapted to give lateral stiffness to said girders, and track-rails seated directly on said longitudinal metal girders, and means for securing the track-rails to said girders, substantially as shown and described.

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

WILLIAM M. REED.

Witnesses:
S. ELVA KELLOGG,
ERNESTINE MORSTADT.