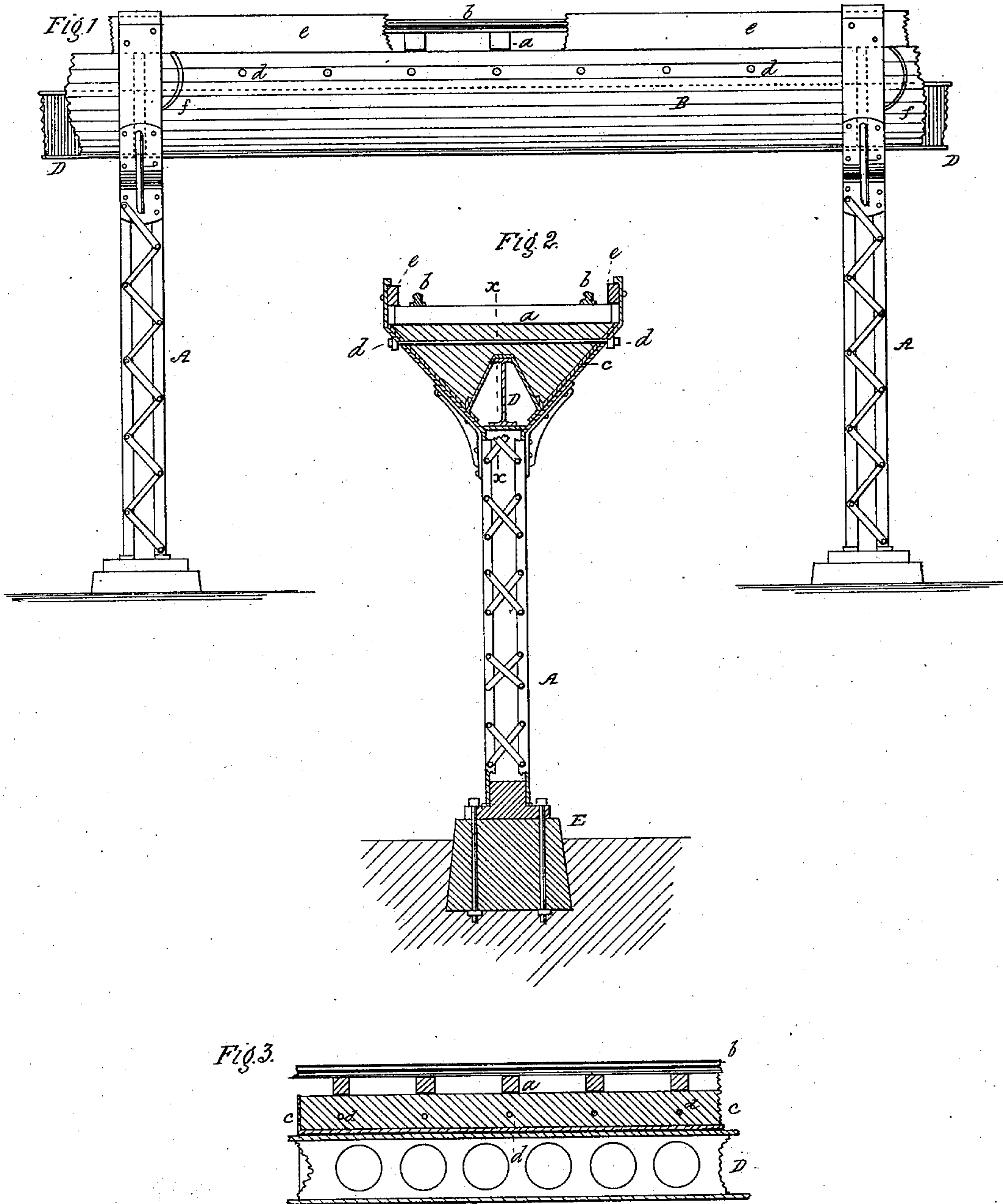


(No Model.)

J. JENKINSON.  
ELEVATED RAILROAD.

No. 314,247.

Patented Mar. 24, 1885.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JAMES JENKINSON, OF BROOKLYN, NEW YORK.

## ELEVATED RAILROAD.

SPECIFICATION forming part of Letters Patent No. 314,247, dated March 24, 1885.

Application filed March 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES JENKINSON, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Elevated Railroads; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

The object of this invention is to construct an elevated railroad in such manner as to prevent the noise arising from the jarring of the structure occasioned by trains passing over the same. To this end I construct the same in such manner that the ties and rails rest upon a solid bed of concrete or similar material, and do not come in contact with the metallic superstructure, and by means of this construction the trains will pass over the road almost noiselessly.

The main feature of my invention consists in an elevated railroad having its roadway formed of a series of metallic boxes or troughs filled with concrete or similar material, and suspended between the ordinary pillars or posts, the ties and rails being laid on said bed of concrete out of contact with the metal of which the superstructure is formed, all as hereinafter particularly described; and the said invention further consists in certain novel constructions and combinations of parts, as hereinafter particularly set forth.

In the accompanying drawings, Figure 1 represents a side elevation of my improved roadway. Fig. 2 is an end elevation, partly in section; and Fig. 3 is a longitudinal vertical section on the line *x x* of Fig. 2.

Similar letters of reference indicate the same parts in all the figures.

A may represent the posts or pillars, the lower portions of which may be of any suitable form, and securely fitted to a foundation, E, of any suitable construction.

B represents the roadway upon which the ties *a* and rails *b* are laid. This roadway is composed of a series of metallic troughs or boxes, *c*, which are filled with concrete. This concrete may be a mixture of gravel, sand, and lime, or other substances which after being mixed in a plastic state will form a solid mass. The ends of the boxes *c* are closed and

are laid upon the tops of the pillars A, adjoining ends being placed a short distance apart to allow for expansion. The shape of the troughs or boxes *c* in cross-section may be of the form shown in Fig. 2—that is to say, contracted to a point on each side—for the purpose of avoiding the use of an undue quantity of material, and they are strengthened along their sides by stay-bolts *d*. Suitable means may be employed for supporting the body of the boxes *c* between the pillars A, and in the drawings I have shown the preferred mode. In this D is a metal beam or girder supported by said pillars, upon the upper surface of which said beam the under surfaces of the boxes *c* rest along their entire length, as shown.

The upper ends of the pillars A are forked to receive the ends of the boxes *c*, the ends of the latter being laid thereon, as above mentioned.

The rails *b* are attached to the ties *a* in the usual manner, and the ties *a* are laid upon or embedded in the upper surface of the concrete, so that their ends do not come in contact with the pillars.

By means of this construction, as above described, there is no metallic contact whatever between the track and the superstructure, and the noise is effectually deadened by the interposed mass of concrete. This improvement also secures the additional advantage of avoiding the dropping of oil, cinders, and bolts, or similar articles from the track into the street below, which has hitherto proved to be a serious inconvenience in elevated railroads.

*e* is a guard-rail for preventing the cars from falling off the track in case the train should accidentally get off the rails. This may consist of a plank attached to the upper ends of the pillars A, as shown, or it may be a plank bolted down to the ties.

*f* is a pipe for conducting any water or rain that may fall upon the track into the interior of the pillars A and thence to the ground.

I do not broadly claim as my invention a sound-deadening substance laid under the rails, as I am aware that is not new. Nor do I claim, in a railway structure, a trough containing sand or other incompact substance, in combination with a stringer secured lengthwise within said trough, and provided with side flanges that rest upon the upper edges of

said trough, on which said stringer the rail is secured; nor a V-shaped trough filled with a sound-deadening substance placed under the ties, as I am aware that such constructions have heretofore been used.

What I claim as my invention is—

1. In an elevated railroad, a roadway, B, composed of a series of metallic boxes or troughs, *c*, filled with concrete or similar material, suspended from or supported by the ordinary metallic posts or pillars A, and constructed as described to support the ties *a* and rails *b* without permitting the same to come in contact with the metallic superstructure.

2. In combination with the posts or pillars

A, the roadway B, composed of a series of metallic boxes or troughs filled with concrete, said boxes being constructed substantially as described, and supported at their ends by said posts or pillars, as and for the purpose set forth.

3. In an elevated railroad, the combination of the posts or pillars A, the metallic boxes B, constructed as described and filled with concrete, and the beam or girder D, the whole constructed and arranged substantially as shown and described.

JAMES JENKINSON.

Witnesses:

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