H. BARTON.

Truss-Bridge.

No. 164,511. Patented June 15, 1875.

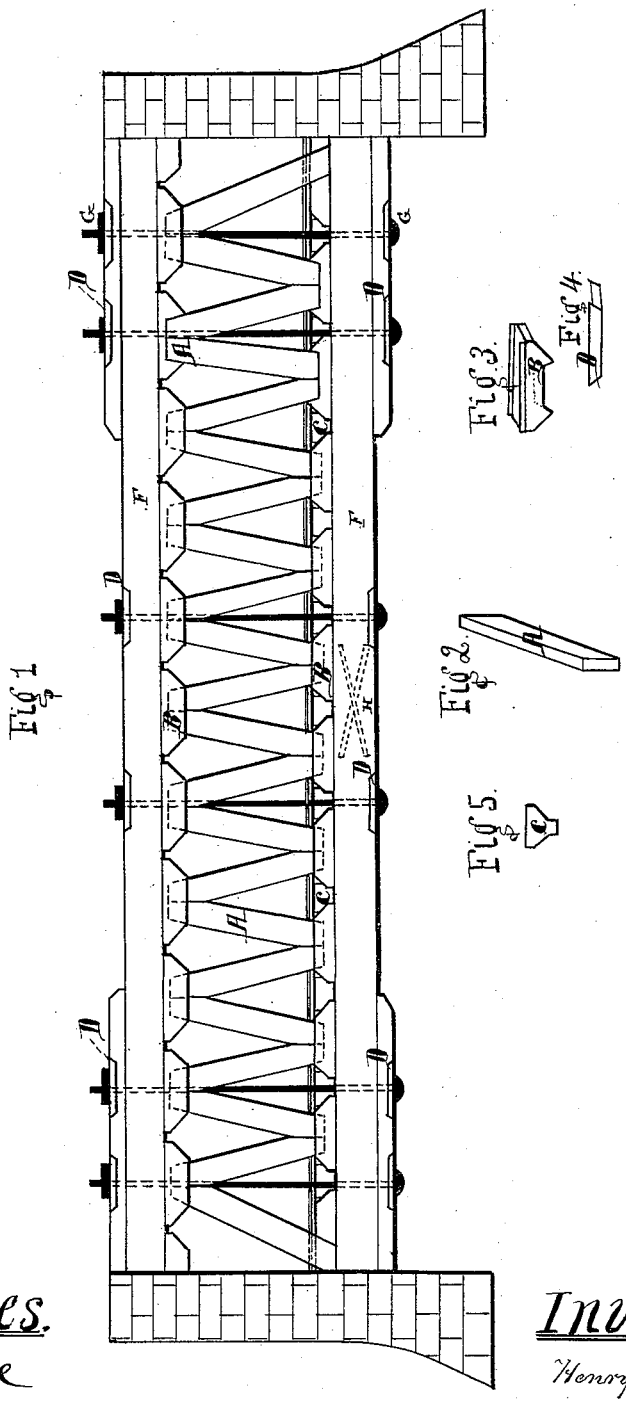

Fig 1.

Fig 3.

Fig 4.

Fig 2.

Fig 5.

Witnesses.

D R Cowl

N. S. Miller

Inventor.

Henry Barton

By his Atty. J. F. Reigart

UNITED STATES PATENT OFFICE.

HENRY BARTON, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN TRUSS-BRIDGES.

Specification forming part of Letters Patent No. **164,511**, dated June 15, 1875; application filed June 5, 1875.

To all whom it may concern:

Be it known that I, HENRY BARTON, of the city of Washington, District of Columbia, have invented new and useful Improvements in Bridges; and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a side elevation of the bridge. Fig. 2 exhibits the shape and construction of the angular uprights, with their beveled or sloping ends. Fig. 3 represents a side view of the hollow boxes, into which the angular uprights are inserted above and below, and permanently held. Fig. 4 are square plates, with turn-over flanged sides that hold and support the stay-rods. Fig. 5 shows the end view and shape of the cross-ties that rest between the boxes and support the flooring or rails for a railway-track.

The nature of my invention consists in the construction and combination of the angular uprights as fitted into their corresponding shaped boxes, flanged plates above and below to support the stay-rods, and the beveled cross-ties to support the flooring and railway-track.

The object of my invention is to have the pieces of the bridge all ready made of wrought or cast iron, so as to be erected without any delay in the quickest possible time, forming, when completed, one of the simplest, most economical, and durable bridges that could be constructed.

A represents the angular uprights, made of wood or iron, having their ends formed with a slope or beveled, so that when they are fitted together at their sloped ends the uprights have an angular position, and when inserted into the hollow boxes B the pressure and strain are equal on all sides, and effectually prevent any lateral or vertical motion. B are hollow boxes, with flanged and square bottoms that firmly support the angular uprights. They rest upon the stringers F below and against the stringers F above. C are the cross-ties of a triangular shape, and so constructed as to fit into the spaces between each one of the boxes B, giving a solid support to the cross-tie, binding it firmly on all its three sides. D are flanged plates that fit across the stringers F above and below, and through which the stay-bolts G pass, and are thus permanently supported. H are cross-rods extending across the bottom of the bridge, attached permanently to the stringers F, so as to brace the stringers and prevent a lateral vibration.

The flooring of this bridge can be laid on the top and bottom of the stringers F, and it can be used as a carriage and railway bridge at the same time.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the angular and beveled end uprights A, fitting into their angular and flanged boxes B above and below, with their cross-ties C between each box, and flanged plates D supporting the stay-rods G, as herein described, and for the purposes set forth.

HENRY BARTON.

Witnesses:

J. FRANKLIN REIGART,

DANIEL REIGART.