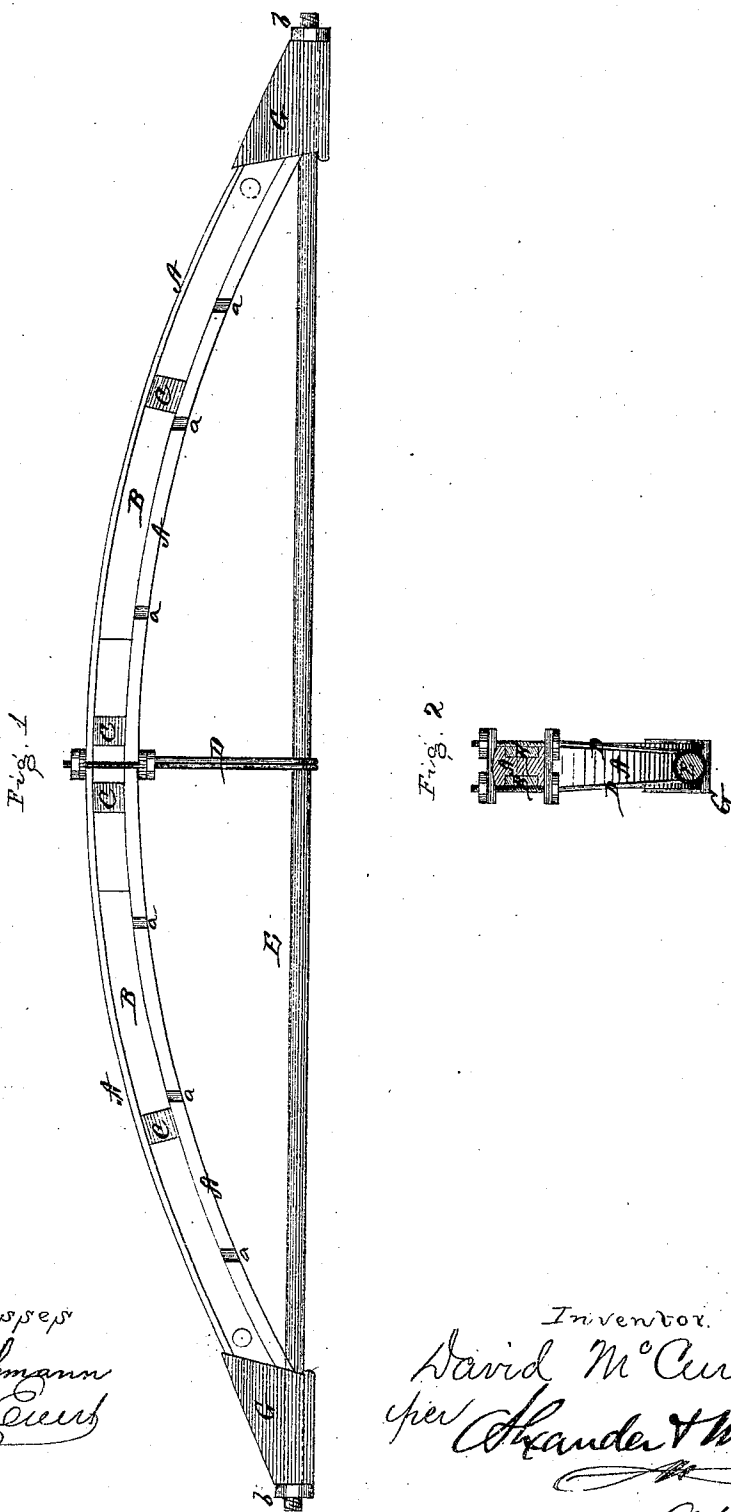


J. M. Curdy,

Truss Bridge.

No. 104,868.

Patented June 28, 1870.



Witnesses
J. Lehmann
C. L. Curtis

Inventor
David M. Curdy
per *Alexander Mason*
Atty

United States Patent Office.

DAVID McCURDY, OF OTTAWA, OHIO.

Letters Patent No. 104,868, dated June 28, 1870; antedated June 17, 1870.

IMPROVED BRIDGE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID McCURDY, of Ottawa, in county of Putnam and State of Ohio, have invented certain new and useful Improvements in Bridges; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of an "iron bridge," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction referring to the annexed drawing, in which—

Figure 1 is a side view of an arch of my bridge; and

Figure 2 is a vertical cross-section of the same.

My bridge is formed of arches or girders constructed of railroad iron or approximate form.

A represents such T-rail clamped with bars or fish-plates, B B, the entire length, as shown in fig. 1.

The fish-plates or clamps B B may be made in sections, and are, in the full sized bridge, made half oval, and of such size that, when the bars are spliced to the T-rail A, the iron will be twice as thick, and bolted by a suitable number of bolts, C C. The base of the T-rail A to be somewhat wider and thicker than common railroad iron, so that the loops, clevises, or stirrups, D D, may pass through or be clamped up to it,

as shown by the notches *a a*. The loops or stirrups D D are to be put on about every five feet, and, to prevent them from slipping down from their places on the arch, a bolt, C, is passed through just above each notch *a*, and at its side.

The chords E, to be made of rods, or bars, or links, or wire-cables, the loops D D being placed loosely around, or may grasp the same firmly. The chords are secured at the ends by suitable nuts and jam-nuts, *b*, or keys passing outside at the ends of the shoes G G.

Having thus fully described my invention,

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

1. The combination of the arched T-shaped rail A, fish-pieces B B, and bolts C, all substantially as set forth.

2. The combination of the stirrups D, rail A, and chord or chords E, all substantially as set forth.

3. In combination with T-rail A, having notches *a a*, bars or fish-plates B B and bolts C C, the loops or stirrups D, chords E, and shoes G, all constructed and arranged as described, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 1st day of November, 1869.

DAVID McCURDY.

Witnesses:

J. J. MOORE,
C. J. SWAN.