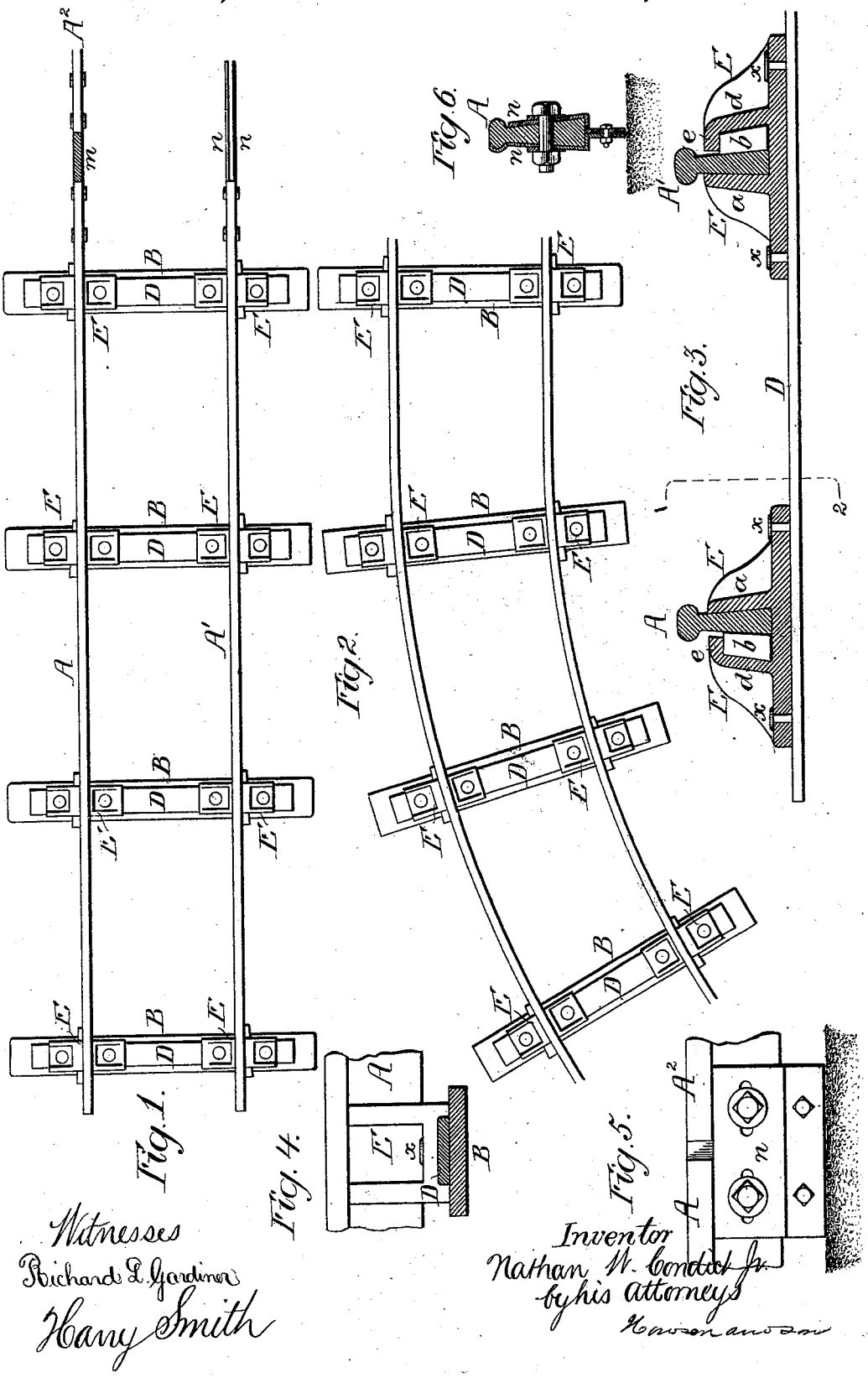
N. W. CONDICT, Jr.

Portable Railroad Track.

No. 204,006. Patented May 21, 1878.



Witnesses

Richard L. Gardiner

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UNITED STATES PATENT OFFICE.

NATHAN W. CONDICT, JR., OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN PORTABLE RAILROAD-TRACKS.

Specification forming part of Letters Patent No. **204,006**, dated May 21, 1878; application filed October 8, 1877.

To all whom it may concern:

Be it known that I, NATHAN W. CONDICT, Jr., of Jersey City, New Jersey, have invented a new and useful Improvement in Portable Railroad-Tracks, of which the following is a specification:

The object of my invention is to make a portable railroad-track which can be readily bent to any desired curve and secured after adjustment.

In the accompanying drawing, Figure 1 is a plan view of a section of the track; Fig. 2, the same as it appears when bent; Fig. 3, a transverse section of the track, drawn to an enlarged scale; Fig. 4, a vertical section on the line 1 2; and Figs. 5 and 6, side and sectional views, respectively, of the rail and splicing-bars.

A and A′ are the opposite rails of a section of the track; B B, the sleepers; D D, the tie-bars, and E the chairs. The rails have the usual treads, but are without the usual lower flanges, so that they can be easily bent laterally.

The webs of the rails may be of uniform thickness throughout; but I prefer to make them thickest at the base and thinner where they meet the tread, so as to present opposite-inclined sides, as shown in Fig. 3.

The opposite rails of the track are connected together through the medium of the chairs E and tie-bars D, the chairs being preferably of cast-iron, and adapted to the webs of the rails, as shown in Fig. 3, where it will be observed that each chair has a deep flange, *a*, forming an inclined lateral bearing for the inside face of the web of the rail, which is confined to its place by a wedge, *b*, adapted to the flange *d* of the chair, and confined vertically by a lip, *e*, on the said flange.

I prefer to recess the base of each chair on the under side, as shown in Fig. 4, for the reception of the bar D, the chair and bar being properly secured together by bolts or rivets *x*.

Supposing the bending of the section of straight track, Fig. 1, to the condition shown in Fig. 2 be required, all that will be necessary will be to loosen the wedges which confine the rail A, when the track will be at liberty to be bent laterally to the desired curve, after which the wedges must be tightened, and this will insure the retention of the track in the curved condition to which it has been adjusted.

Each section of the track should be made with rails of equal length, for more straight sections will generally be required than curved sections; but when a section of track is bent, as in the drawing, the outer rail A will be insufficient in length to form a continuation of adjoining rails of other sections; hence the employment of splicing-bars *n n*, Figs. 5 and 6. These splicing-bars are slotted for the passage of the bolts, so that the latter can move in accordance with the varying radii of different curves; and the outer bar is carried up to the level of the top of the rails, so that it serves as a filling-piece between the ends of the rails, and supports the wheels when the latter cross the gap. The splicing-bars *n n* are arranged to embrace the rail closely, and, in the present instance, meet, and are bolted together below the center of said rail.

Separate filling-pieces *m*, Fig. 1, may be inserted between the ends of the rails in place of, or in addition to, carrying up one of the splicing-bars to the level of the top of the rail.

I prefer to make the tie-bars D of wrought-iron; but they may be made of wood, providing they are made sufficiently substantial.

Screws passing through the flanges *d* of the chair, and bearing against, or arranged to force a plate against, the web of the rail, may be substituted for the wedges; but I prefer the latter.

I claim as my invention—

The within-described section of a laterally-flexible railroad-track, consisting of rails A A′, without lower flanges, tie-bars D, chairs E, and devices whereby the chairs may be secured to or released from the rails, all being combined substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NATHAN W. CONDICT, JR.

Witnesses:

FLAVEL MCGEE,

J. A. ROMEYN.