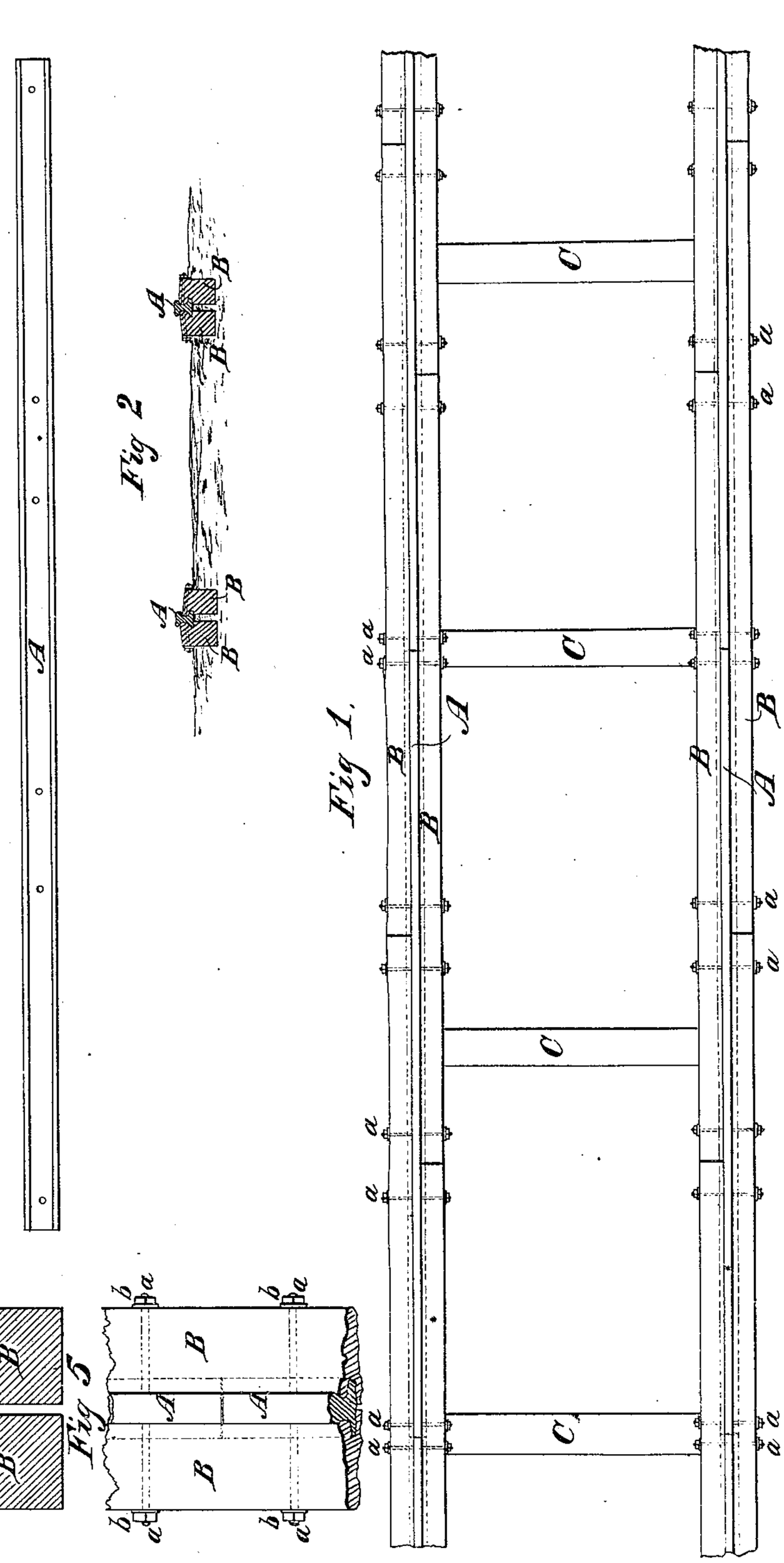
F. P. Dimpfel.

Railroad Track.

No. 19,241. Patented Feb. 2, 1858.



UNITED STATES PATENT OFFICE.

F. P. DIMPFEL, OF PHILADELPHIA, PENNSYLVANIA.

MODE OF LAYING RAILROAD-TRACKS.

Specification of Letters Patent No. 19,241, dated February 2, 1858.

To all whom it may concern:

Be it known that I, FREDERIC PIERRE DIMPFEL, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Mode of Laying Railway-Tracks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan of a railroad track laid according to my invention. Fig. 2 is a transverse section of the same. Fig. 3 is a side view of one of the rails. Fig. 4 is a transverse section, on a larger scale than the former figures of one of the rails and its bearing timbers. Fig. 5 is a plan corresponding with Fig. 4.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in supporting and securing the rails by clamping them between two string timbers which are properly recessed to receive them, so as to give them a vertical as well as a lateral support along their whole length; the vertical support being given to the head as well as to the base of the rail. This improvement effectually prevents the rails rising or sinking or getting out of line at the joints without the use of chairs or other similar bearings, and, by enabling a lighter rail to be used, makes a track which is less solid and consequently less productive of injury to the head of the rail and to the "rolling stock", though at the same time by the support given to the head and neck of the rail by the timbers, it is less flexible.

The invention is applicable to rails of various forms; but I propose generally to employ a rail substantially like that in most common use in this country, but somewhat lighter in its base and neck, as is shown in the drawings; as, on account of the support that is given to the rail by clamping it between the string timbers, the same strength is not required as is given to rails that are supported in the usual manner.

A, A, in the drawing, are the rails.

B, B, are the string timbers, which are cut out on their inner or adjacent sides to fit to and receive each nearly one half of their respective rail, so that when the rail is placed between them they nearly meet as is shown in Fig. 4.

a, *a*, are bolts which pass through the two string-timbers and through holes in the rail, and are made by means of nuts *b*, *b*, or their equivalents to clamp the rail and its two string timbers firmly together. The rail is thus embedded firmly in the string timbers with only its head above them. The string timbers may be laid with or without transverse sleepers, but those of the two rails of a track should be tied together by cross-ties of wood or iron.

C, C, in Fig. 1, represent wooden cross-ties.

The lengths of rail and the string-timbers are so arranged as to break joint with each other at nearly equal distances.

I do not claim laying rails on string timbers, but

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

The clamping of each line of rail between two lines of string timbers into which the rails are fitted substantially as described, so as to receive not only a lateral but a vertical support therefrom, both at the base and head, thereby increasing the bearing surface of the rail, keeping the several lengths of rail in plate at the joints and other parts, enabling a lighter rail to be used than that ordinarily employed, and making a less solid and at the same time a less flexible track.

F. P. DIMPFEL.

Witnesses:

S. H. WALES,

J. F. BUCKLEY.