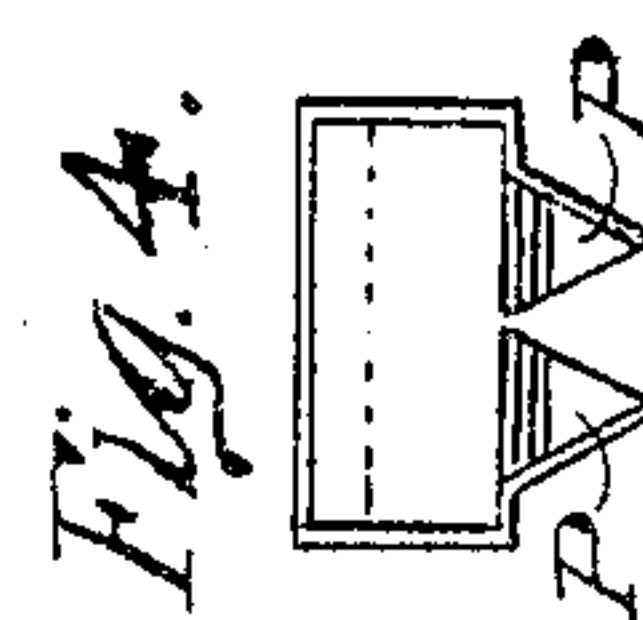
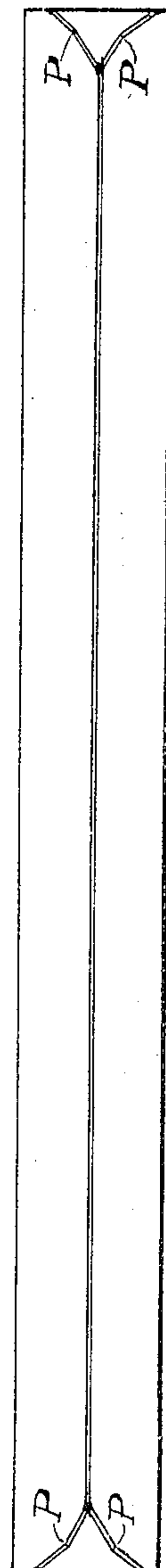
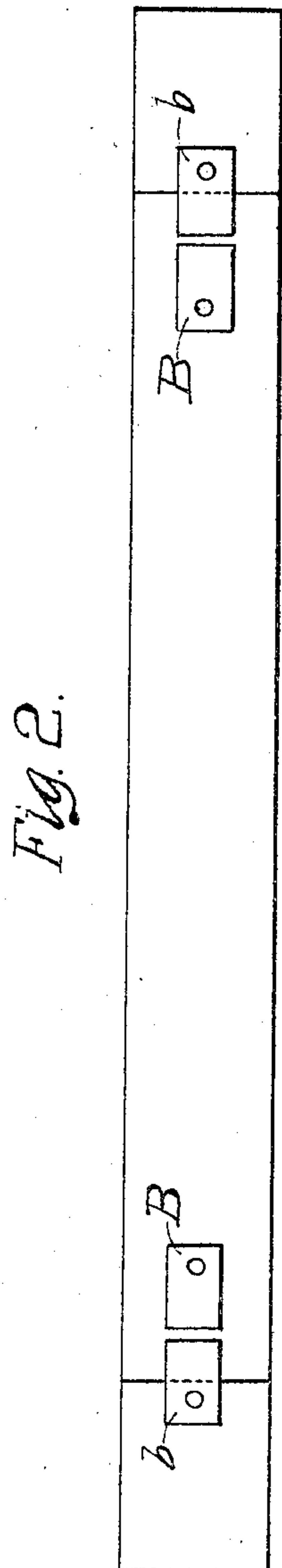
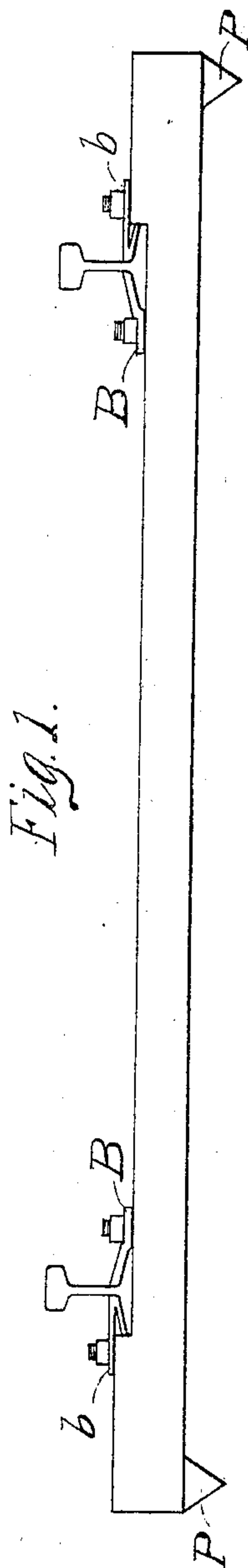


No. 796,525.

PATENTED AUG. 8, 1905.

F. McCUNE.
SHEET STEEL RAILROAD TIE AND RAIL BRACE.

APPLICATION FILED OCT. 20, 1904.



Witnesses

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FRANK McCUNE, OF PITTSBURG, PENNSYLVANIA.

SHEET-STEEL RAILROAD-TIE AND RAIL-BRACE.

No. 796,525.

Specification of Letters Patent.

Patented Aug. 8, 1905.

Application filed October 20, 1904. Serial No. 229,313.

To all whom it may concern:

Be it known that I, FRANK McCUNE, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Sheet-Steel Railroad-Tie and Rail-Brace in Combination, the Rail-Brace being an Integral Part of the Tie, of which the following is a specification.

My invention consists of a sheet-steel railroad-tie and rail-brace combined, of suitable dimensions, made in one piece, preferably from three-sixteenths ($\frac{3}{16}$) or number seven (7) sheet-steel, in combination with clamps for fastening the rails to the tie, as shown in the accompanying drawings.

Following is a description of the drawings of my railroad-tie and rail-brace, similar letters representing similar parts.

Figure 1 shows side view of the tie and clamps and sectional view of the rail, also depression in top surface of tie extending from outside to outside of rails and forming seat and brace for rails. *bb* are the outside clamps, and *B B* the inside clamps, which are bolted to the tie and project over the flanges of the rail, thus fastening it to the tie. *P P* are four projections, formed by turning down the corners of the sheet-steels at the line where the edges meet in the bottom of the tie. Fig. 2 is a top view. Fig. 3 is a bottom view showing manner of turning down the corners to form projections *P P P P* and middle line showing the meeting-line of the two edges after the sheet has been pressed into shape. Fig. 4 is an end view showing section of tie and corners turned down to form projections.

The construction of this tie is as follows: The tie is pressed into rectangular shape, the dimensions for standard-gage track being preferably seven feet long by eight inches wide by four inches deep. Extending along the top face of the tie two feet eight and one-

fourth inches, more or less, from the center each way is a depressed surface one inch in depth. On this depressed surface and at the extreme ends thereof the rails are fastened, as hereinafter set forth, so that the higher surface at each end forms a brace which prevents the rail from spreading or being moved out of gage. The rails are fastened to the tie by clamps *B b*, which are bolted to the tie, and project over the flanges of the rail, as shown in the drawings, Figs. 1 and 2. On the bottom surface of the tie the two corners *P P*, Figs. 1, 3, and 4, at each end are turned down about three inches, forming a projection, the object of which is to afford resistance to any end thrust of the tie and so preserve the alignment of the track.

I claim for my invention and desire to secure by Letters Patent—

1. A sheet-steel railroad-tie and rail-brace, formed of steel pressed into the shape of a rectangular box, the edges of the sheet meeting in the bottom of the box, and the top face having a depressed surface extending to the outside edge of the rail, forming a seat for the rail; together with suitable clamps for fastening the rail, substantially as set forth.

2. A sheet-steel tie and rail-brace having two projections on the bottom surface, at each end, said projections being formed by turning down the four corners of the sheet from which the tie is made, so that when the tie is pressed into shape, these projections will be located on the center line, where the edges of the sheet meet, substantially as set forth.

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

FRANK McCUNE.

Witnesses:

H. W. WATTS,

OLIVER G. FERGUSON.