T. J. BUSH.

CLAMP PLATE FOR RAILROAD RAILS.

No. 301,668.

Patented July 8, 1884.

Fig. 1.

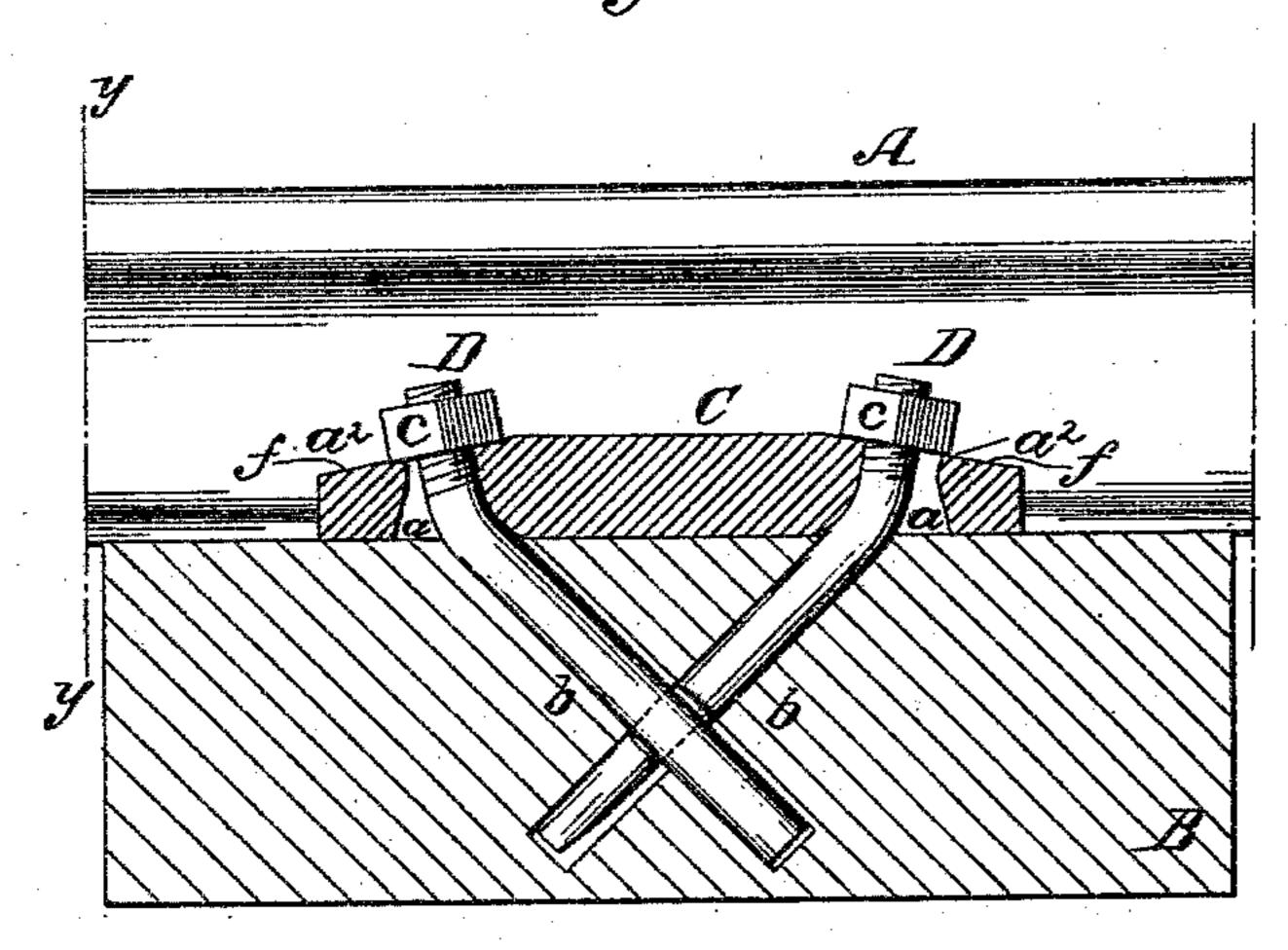


Fig. 2.

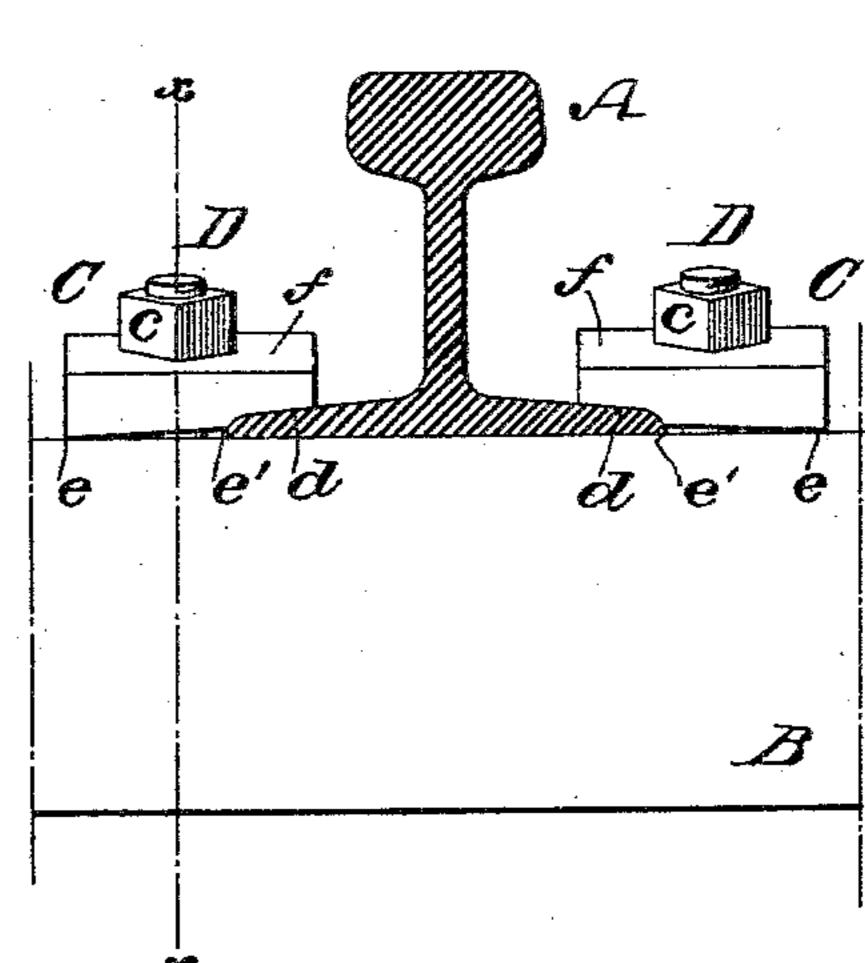
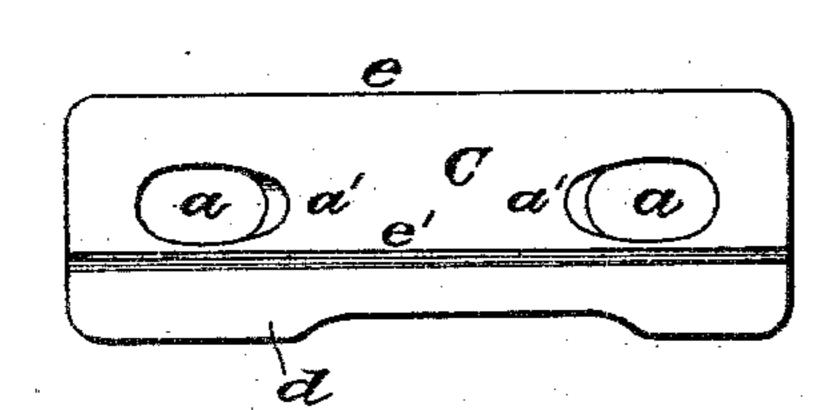
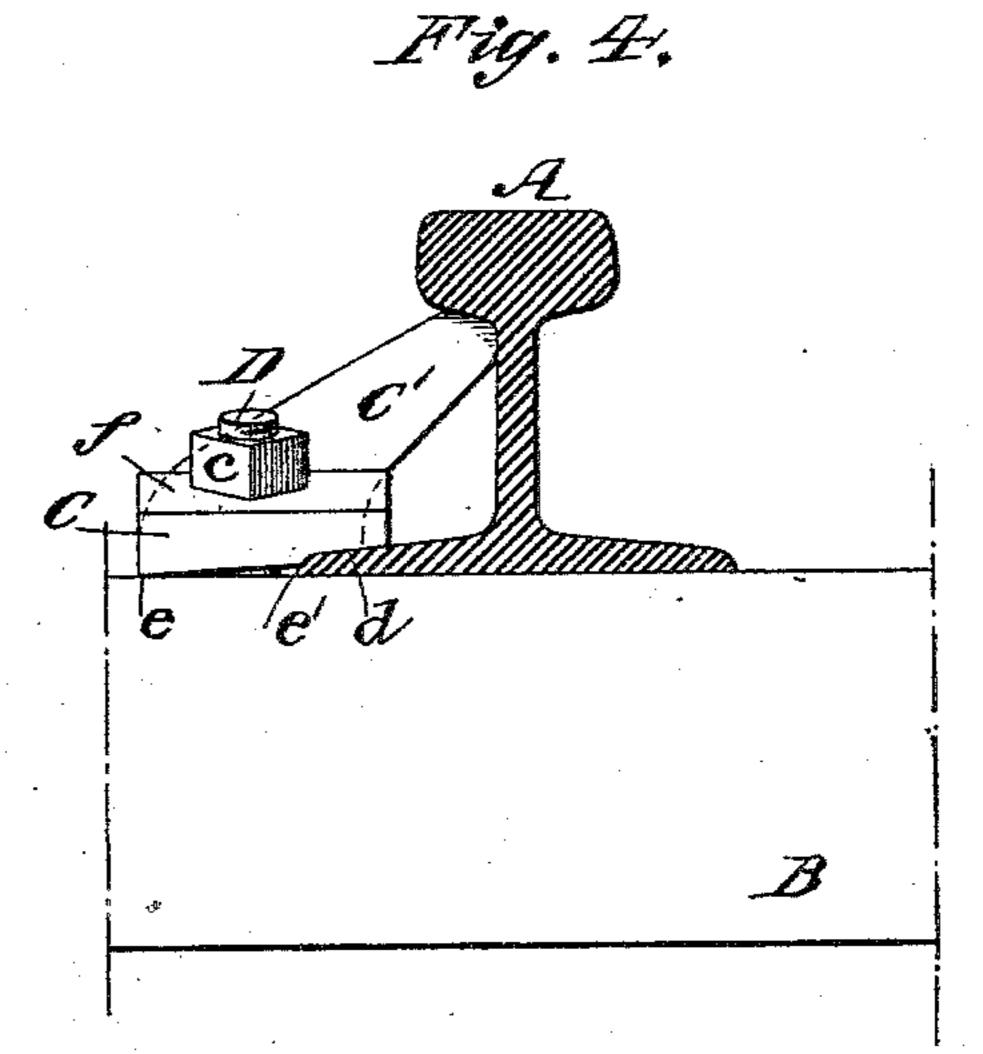


Fig. 3.





INVENTOR:

United States Patent Office.

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CLAMP-PLATE FOR RAILROAD-RAILS.

SPECIFICATION forming part of Letters Patent No. 301,668, dated July 8, 1884.

Application filed October 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, Thomas J. Bush, of Lexington, Fayette county, Kentucky, have invented a new and Improved Clamp-Plate for Railroad-Rails, of which the following is a full,

clear, and exact description.

This invention relates to a new form of plate for holding railroad-rails to the cross-ties, to be used in connection with my new locking and interlocking bolts covered by my Patents dated May 2, 1882, and September 19, 1882, and numbered, respectively, 257,287 and 264,622.

My invention consists, first, of a plate adapted to be placed upon the cross-tie and flange of a railroad-rail, combined with interlockingbolts inserted in the plate and cross-tie par-

allel with the rail.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate cor-

responding parts in all the figures.

Figure 1 shows, in sectional elevation taken on the line x x of Fig. 2, a railroad-rail secured to the cross-tie by my new plate and interlocking-bolts. Fig. 2 is a sectional elevation of the same, taken on the line y y of Fig. 1. Fig. 3 is an inverted plan view of the plate, and Fig. 4 is a sectional elevation showing a

30 modification of the plate.

A represents the railroad-rail, B the crosstie, C the plates placed upon the flanges of the rail and upon the cross-ties B, and D D represent the bent interlocking-bolts for securing 35 the plates to the cross-ties and upon the flanges of the rail. The plates C are formed with the two holes a a, through which the bolts D D pass, and the said bolts are inserted in the intersecting diagonal holes b b, made in the 40 cross-tie B parallel with the rail A, and the bolts are locked in said holes and the nuts c applied to them above the plates C in the man-

ner fully described in my above-mentioned patents. The plates C are cut away upon the under side, as shown at d, to properly fit upon 45 the flanges of the rail A, and they are also beveled upward upon the under side from the rear edge e to the line e', where the cut-away portion d begins, so that by turning nut c the plates may be clamped upon the flanges of the 50 rail with great firmness in the first instance, and any wear taken up by turning nuts c, as will be understood from Figs. 2 and 4. The nuts c are made to fit firmly upon the plates C by beveling the plates upon the upper surfaces, 55 as shown at ff; and in order to enable the bolts D D to be readily inserted, the holes a a are made elliptical in form and beveled, as shown at a', Fig. 3, and also as shown at a^2 , Fig. 1. Where the plates C are to be used on curves, 60 they will be formed in the center with the upwardly and inwardly projecting strut C', which is adapted to fit under the head of the rail, as shown in Fig. 4, for bracing the rail so that it will not tip under the lateral strain of trains 65 passing the curve.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The plate C, adapted to clamp the flange of the rail A upon the cross-tie B, in combination with the bent interlocking-bolts D D, inserted in the plate and cross-tie parallel with the rail, substantially as described.

2. The plate C, formed with the beveled holes a a, and beveled upon its upper side to 75 form seats f for the nuts c c, and cut away and beveled upon the under side and formed with or without the stud C', substantially as described.

THOMAS J. BUSH.

Witnesses:

H. A. WEST, C. SEDGWICK.