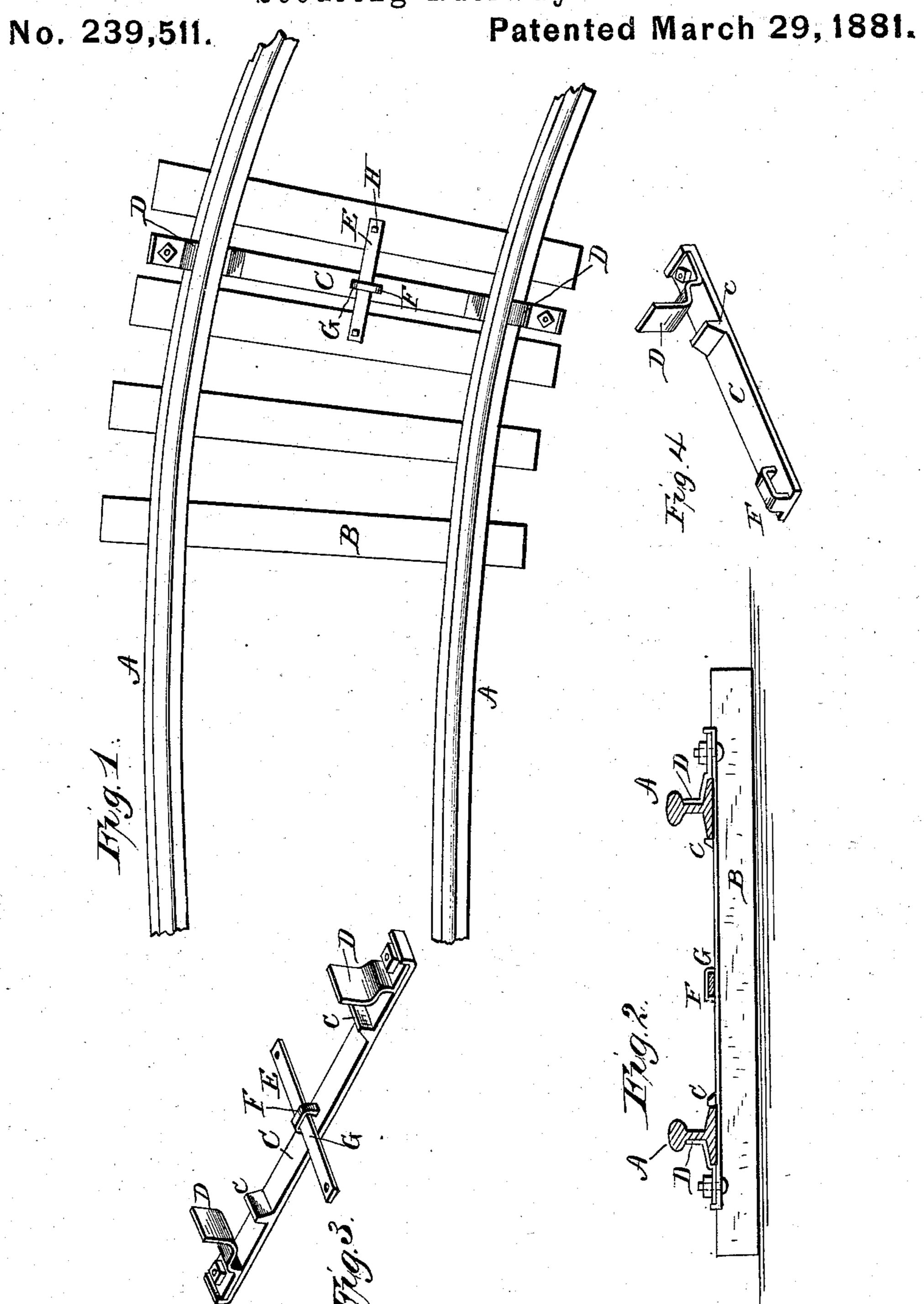
(No Model.)

## J. KINDELAN.

Securing Railway Rails.



Witnesses. Franck L. Ourand H. Aubrey Taulinin

By Shrandra Mason

## United States Patent Office.

JOSEPH KINDELAN, OF PUEBLO, COLORADO.

## SECURING RAILWAY-RAILS.

SPECIFICATION forming part of Letters Patent No. 239,511, dated March 29, 1881.

Application filed January 10, 1881. (No model.)

To all whom it may concern:

Be it known that I, Joseph Kindelan, of Pueblo, in the county of Pueblo, and in the State of Colorado, have invented certain new 5 and useful Improvements in Securing Railway-Rails; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of refer-10 ence marked thereon, making a part of this specification.

This invention has for its objects to provide an improved curve-brace for railroads, whereby the rails at a curve may be securely fast-15 ened together, so that they cannot by any possibility be pressed apart, and which may be applied to the rails when in position without removing or disturbing them, as more fully

hereinafter specified.

Braces of this class have heretofore been constructed either without removable or adjustable shoes, or with such shoes so situated as to bear against the inner sides of the rails. In either case it is impossible to attach or de-25 tach the brace without disturbing the track.

These objects I attain by the devices illustrated in the accompanying drawings, in

which—

Figure 1 represents a plan view of the 30 curved portion of a railroad-track, showing my improvement applied thereto. Fig. 2 represents a transverse section of the track, showing my invention. Fig. 3 represents a detached perspective view of my improved brace, 35 and Fig. 4 a view of a modification of the brace.

The letter A indicates the rails of the track, which are constructed in the usual manner, and B the sleepers which support the rails, 40 the said rails being secured thereto by means

of the ordinary spikes.

The letter C indicates a transverse bar, of metal or other suitable material, formed with projections c on its upper face, near the ex-45 tremities, which projections bear against the inner flanges of the rails when the brace is in place, as indicated in Figs. 1 and 2 of the drawings.

The letter D indicates two removable shoes, 50 one secured to each extremity of the brace-

bar by means of the screw-bolts and nuts d, or other equivalent devices. The said shoes are of a configuration to fit closely against the outer lower flanges of the rail and against the outer faces of the webs of the rails, as clearly 55 indicated in Fig. 2 of the drawings.

The letter E indicates a cross-bar, secured at F to the brace-bar, and to the sleepers at each side of said brace-bar, as indicated in Fig. 1 of the drawings. The said cross-bar is 60 secured to the brace-bar by means of a strap, G, or in any other convenient manner, and is secured to the sleepers by means of the spikes H, or otherwise.

In the modification illustrated in Fig. 4 of 65 the drawings the brace-bar is provided with the projection and shoe at one end only, and is intended in this case to brace the outer rail alone of the curve. The brace-rod, in this instance, is secured simply to the cross-bar at- 70 tached to the sleepers, and does not extend to

the inner rail.

It will be perceived that as thus constructed the brace-bar can be easily applied to a railroad already constructed, without removing or 75 disturbing the rails, by simply slipping the bar under the rails until it is in the proper position, and then applying and securing the shoes by means of the bolts or other fastening devices, as before mentioned. When in place it 80 will be evident that the brace-bar will hold the rails beyond any possibility of lateral displacement.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 85

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In combination with the brace-bar C, provided with a projection, c, and removable shoe at one or both ends, the cross-bar secured to the brace-bar C and to the sleepers at either 90 side, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of January, 1881.

JOSEPH KINDELAN.

Witnesses:

H. AUBREY TOULMIN, C. U. ALEXANDER.