To all whom it may concern:

Be it known that I, RUFFUS H. SANDERS, a citizen of the United States, residing at Sacramento, in the county of Sacramento, and State of California, have invented a new and useful Improvement in Independent Rail Brace and Locks, of which the following is a specification.

This invention relates to a rail brace, and the object of the invention is to provide independent braces for the adjacent ends of rails, whereby one rail can be removed without disturbing or loosening the brace locking the other rail in position. A further object of the invention is to brace rails at the joints in such a manner that there is no danger of lateral spreading of the rails.

With these objects in view, the invention consists of two interlocking chairs, each adapted to receive the end portion of a rail and each adapted to be secured independent of the other to a cross tie.

In the accompanying drawings, Figure 1 is a plan view of the device, the tread portion of one of the rails being partly broken away, and the web being shown in section. Fig. 2 is a side elevation, one of the rails being shown in section. Fig. 3 is an inverted plan view of one of the chairs.

In these drawings, 1 represents the meeting end portions of rails of the ordinary construction and to secure said end portions together, I provide two duplicate braces or chairs 2. Each of these chairs consists of a plate 3 adapted to rest longitudinally upon a tie and to extend beneath the rail. The central portions of the plates carry the chair 4 which is formed upon the plate and said chair is provided with a suitable transverse recess 5 having the outline of the rail and adapted to receive the rail base and web, these parts being slidable in the recess 5. The chair 4 fits snugly upon the base, against the web and also supports and braces the over-hanging portion of the rail tread. Upon one side of the plate 3 is a central extension 6 upon which the rail rests and this extension is notched as shown at 7 to receive spikes, the heads of which bear upon the rail base. In the drawings, the spikes have been omitted in order to more clearly illustrate the construction of the device. Also upon the under portion of the plate 3 V-shaped lugs 8 are formed, which are adapted to sink into the tie and serve to more firmly lock the brace or chair in position. The plate 3 is also slotted as shown at 9 for the purpose of receiving spikes. Each plate 3 has upon the side opposite the extension 6, a suitable recess 10 and a projecting lug 11. In use the braces are placed side by side and the lugs and recesses interlock as shown in Fig. 1.

It will be noted that these braces do not overlap the joint and consequently one brace can be loosened and a rail removed without loosening the other brace or in any way disturbing the rail braced by it. At the same time by reason of the interlocking of the 70 braces or chairs the rails are braced as securely against either vertical or lateral movement as though the ordinary overlapping fish plates were employed and it will be further noted that with devices of this kind it is not necessary to drill any bolt openings in the rails.

What I claim is:

1. In a device of the kind described, two parallel plates, a chair carried by each plate, each chair being adapted to receive the end portion of a rail, a lug carried by each plate and each plate having a recess formed in its side, the lug of one plate engaging the recess of the other.

2. A device of the kind described comprising a pair of plates, rail receiving chairs carried by said plates, central side extensions carried by said plates, said extensions extending longitudinally beneath the rails, and being notched to receive spikes, each plate being provided with a recess upon the side opposite said extensions, and a lug integral with each plate and adapted to enter the recess of the other plate.

RUFFUS H. SANDERS.

 Witnesses:

O. G. HOPKINS,
CHARLES O. BUSICK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."