J. M. FOUNTAIN.

RAIL FASTENING.

APPLICATION FILED NOV. 25, 1908.

915,423.

Patented Mar. 16, 1909.

2 SHEETS—SHEET 1.

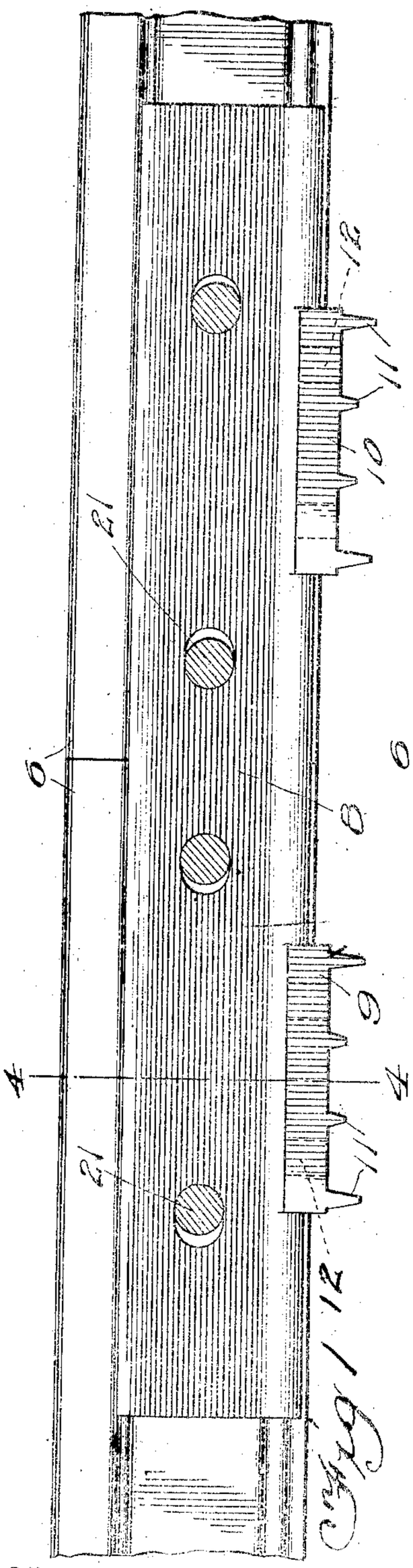

Fig. 1.

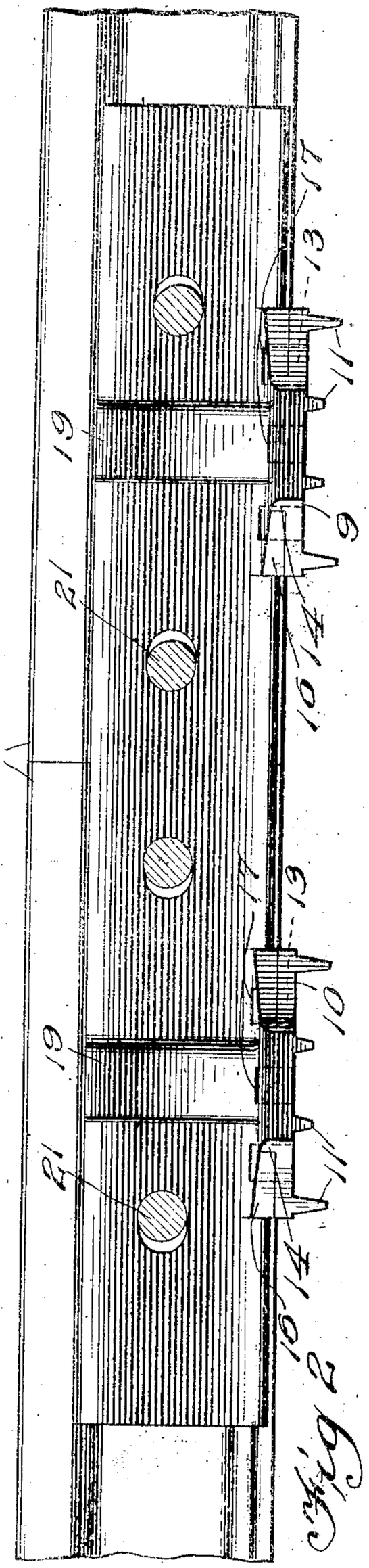

Fig. 2.

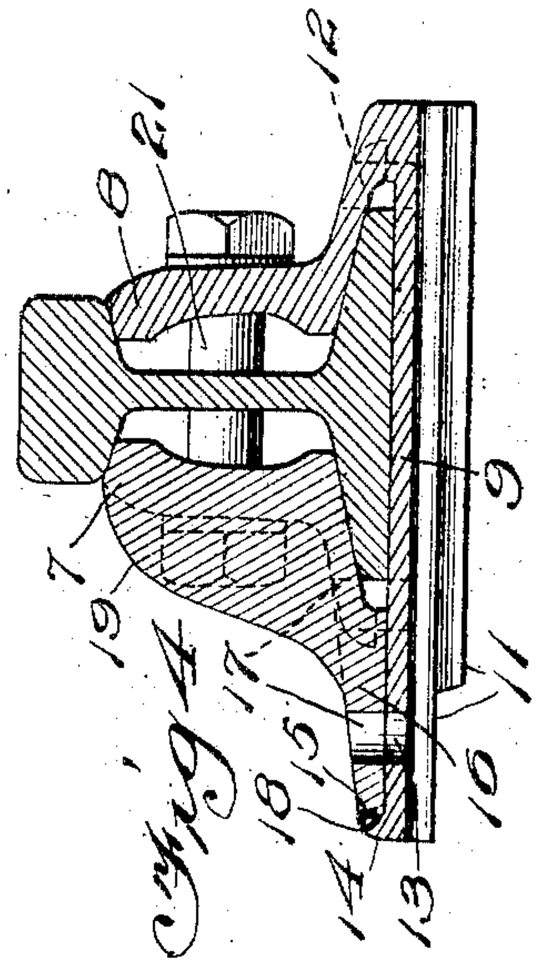

Fig. 4.

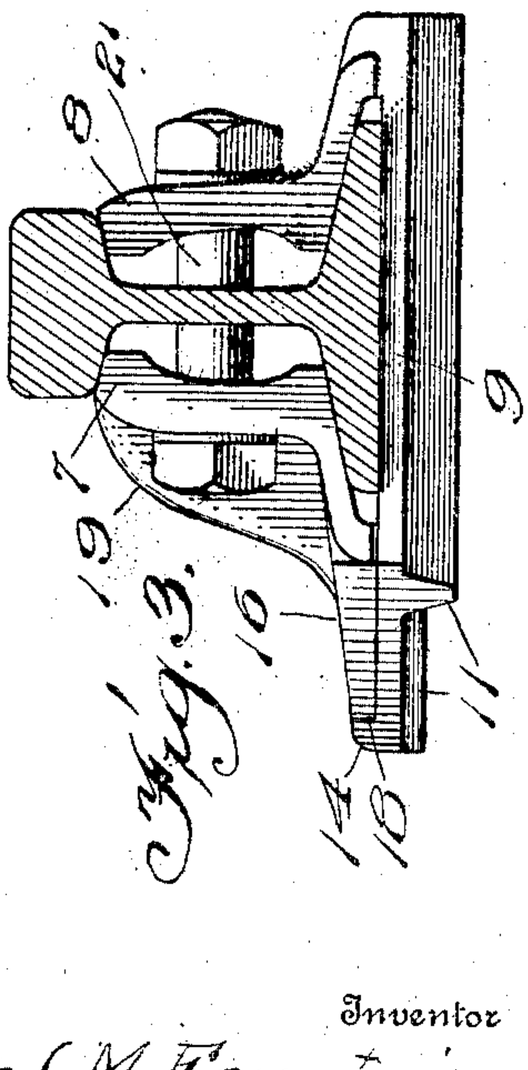

Fig. 3.

Witnesses

Inventor

J. M. Fountain.

By

Attorney

J. M. FOUNTAIN.

RAIL FASTENING.

APPLICATION FILED NOV. 25, 1908.

915,423.

Patented Mar. 16, 1909.

2 SHEETS—SHEET 2.

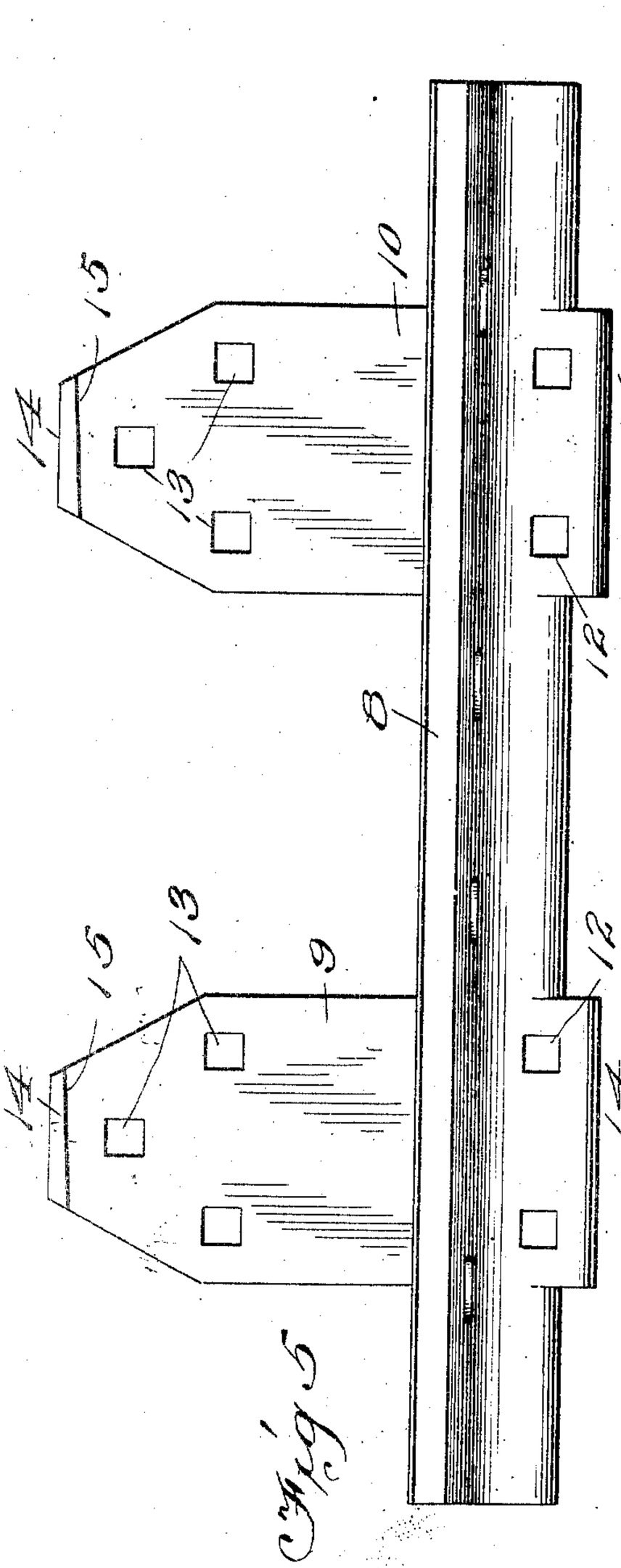

Fig. 5

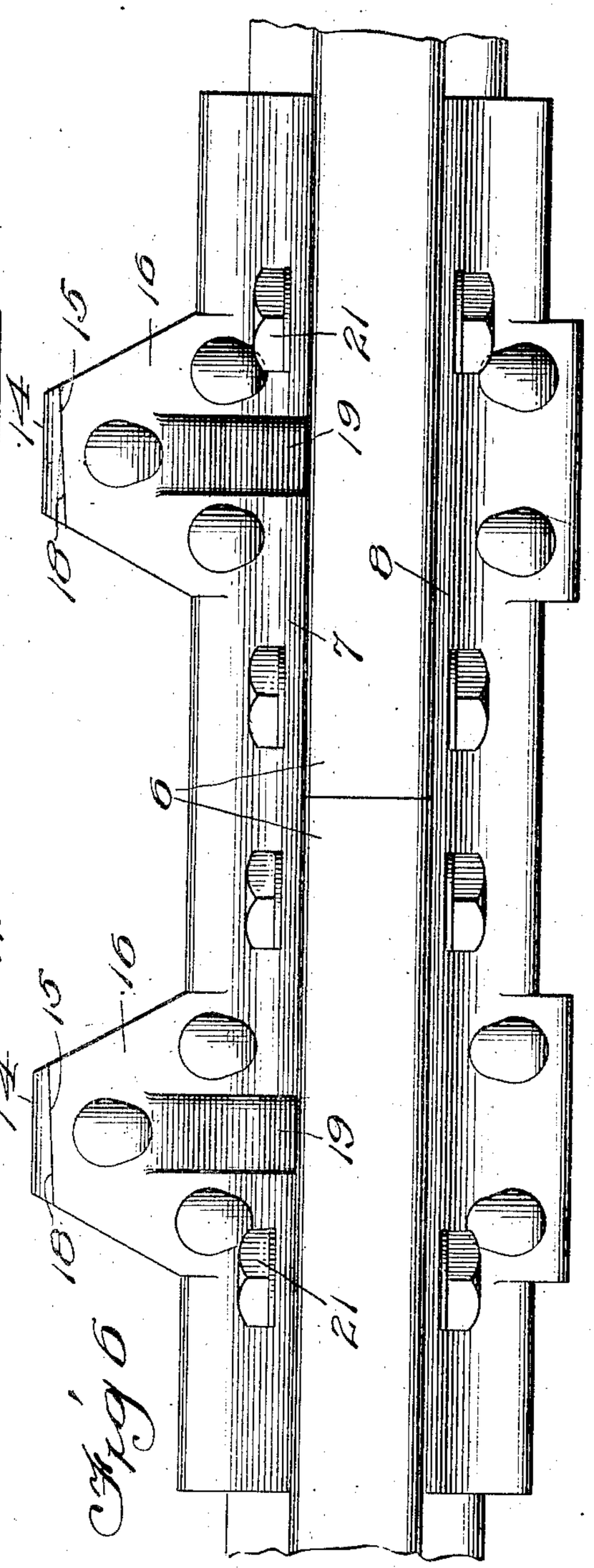

Fig. 6

Witnesses

Geo. Thom

"

Arthur Manley

Inventor

J. M. Fountain.

By Geo. E. Thom

Attorney

UNITED STATES PATENT OFFICE.

JAMES MIKE FOUNTAIN, OF EAST MACON, GEORGIA.

RAIL-FASTENING.

No. 915,423. Specification of Letters Patent. Patented March 16, 1909.

Application filed November 25, 1908. Serial No. 464,399.

To all whom it may concern:

Be it known that I, JAMES MIKE FOUNTAIN, citizen of the United States, residing at East Macon, in the county of Bibb and State of Georgia, have invented certain new and useful Improvements in Rail-Fastenings, of which the following is a specification.

This invention is a combined angle bar, tie plate, and rail brace, for connecting and supporting the joints of railway rails, and has for its object to provide an improved device of the kind, which will provide a strong and stout fastening adapted for connecting the ends of two rails and for holding the same on the ties, and which will brace the meeting ends of the rails and give the benefit of a combined tie plate and brace.

The nature of the invention will more fully appear from the following description and the accompanying drawings in which—

Figure 1 is a side elevation of one side; Fig. 2 is a side elevation of the other side; Fig. 3 is an end view; Fig. 4 is a cross section on the line 4—4 of Fig. 1; Fig. 5 is a plan view of one section or part of the device removed from the rails; Fig. 6 is a plan view of the complete structure.

Referring specifically to the drawings, the rail ends are indicated at 6, the rails being of the usual form and construction. The joint and brace consist of two parts, each including a fish plate or angle plate, and one including a pair of tie plates, and the other including brace devices which are secured to the tie plates when the parts are assembled.

The fish plate on one side is indicated at 7 and on the other side at 8. These are made in the form of angle plates the upper edges of which contact with the under side of the head of the rail, and the lower flanges of which rest or lie upon the upper surface of the rail base. The angle bar 8 is made integral with two tie plates 9 and 10 which project inwardly under the rail base, which rests thereon, and these tie plates have depending cross ribs 11 which sink into the ties when the plates are applied thereto. As stated, these plates are formed integral with the angle bar 8. Holes 12 are provided to receive the spikes on one side and holes 13 are provided to receive the spikes on the other side, and at the end of the tie plates opposite to the angle bar 8 they have an upwardly projecting lip 14 the inner edge 15 of which is inclined. The angle bar 7 on the opposite side of the rail is provided with extensions 16 at its lower edge or flange, projecting outwardly and horizontally to rest upon the tie plates 9 and 10 and to match therewith. These extensions 16 have spike holes 17 which, when the parts are assembled, register with the spike holes 13. The outer edge 18 of the extensions is beveled or inclined, and when the parts are assembled rests against the inclined edge 15 on the lip of the tie plates, producing a wedge effect or action when the parts are placed together, the angle bar 7 being slid in lengthwise. This angle bar is also provided with solid rail braces 19 which lie or are located between the extensions 16 and the upper flange of the angle bar, thereby bracing the angle bar and forming a solid structure.

In assembling the parts the angle bar 8 and the tie plates formed integral therewith are placed on the joint, with the tie plates under the rails and resting on the ties. The angle bar 7 is then applied or slid in lengthwise and hammered up to position, and the wedge action above described forces the angle bars together and clamps the rail ends therebetween. The spikes are then driven, and as they pass on one side through the holes 17 and 13, the two sections of the joint are firmly fastened together and the parts all clamped against the rails. And the usual bolts are also inserted through holes in the angle bars and the webs of the rails, as indicated at 21.

The plates rest on the ties adjacent the joint of the rails, and the ribs 11 being forced into the ties prevent creeping of the chairs and consequently the rails and also assist in holding the parts in position. The use of independent devices for preventing creeping of the rails is therefore obviated.

To separate the joint, it is necessary to first take out the bolts 21 and the spikes in the holes 17 and then knock out the tie plate 7 endwise, thereby loosening the wedge and permitting the rails to be lifted out; and to do this it is not necessary to remove the tie plates or take out the spikes on the other side.

Although shown in connection with a rail joint, the invention may obviously be used in other positions along the rail. When applied to a joint, it forms the complete joint, tie plate, and rail brace, and will be found very effective for the purpose intended

I claim:

A rail fastening comprising two sections, one consisting of an angle bar with tie plates projecting inwardly from the lower flange

thereof and having spike holes and also having inclined lips at their free ends, and the other consisting of an angle bar having projections extending outwardly and having spike holes which register with said holes when the parts are assembled, and also provided with inclined edges at their outer ends adapted to fit against said lips with a wedge action, to force the angle bars against the rails when the parts are assembled.

In testimony whereof, I affix my signature in presence of two witnesses.

JAMES MIKE FOUNTAIN.

Witnesses:

O. C. HANCOCK,

W. B. HARDIE.