

No. 627,058.

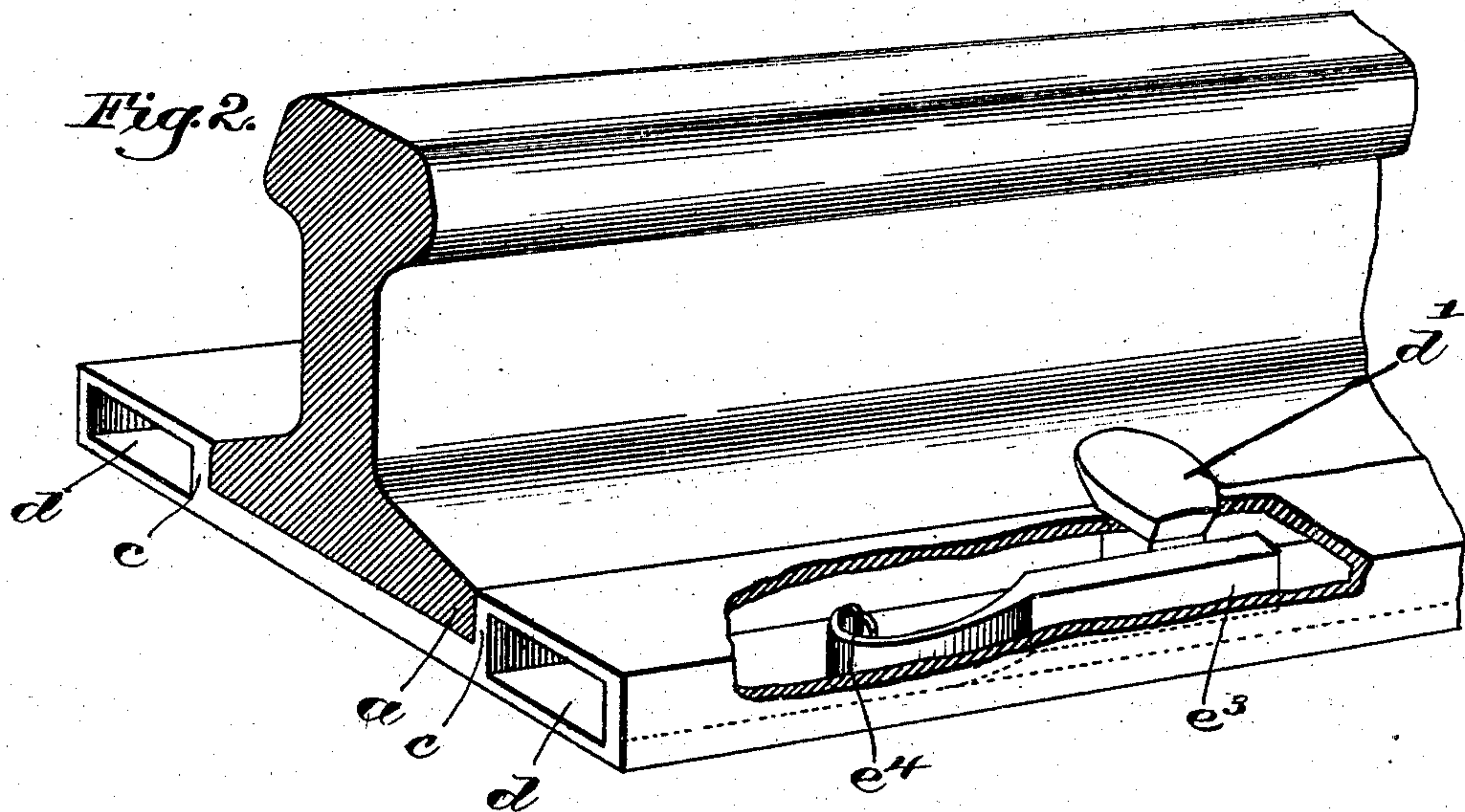
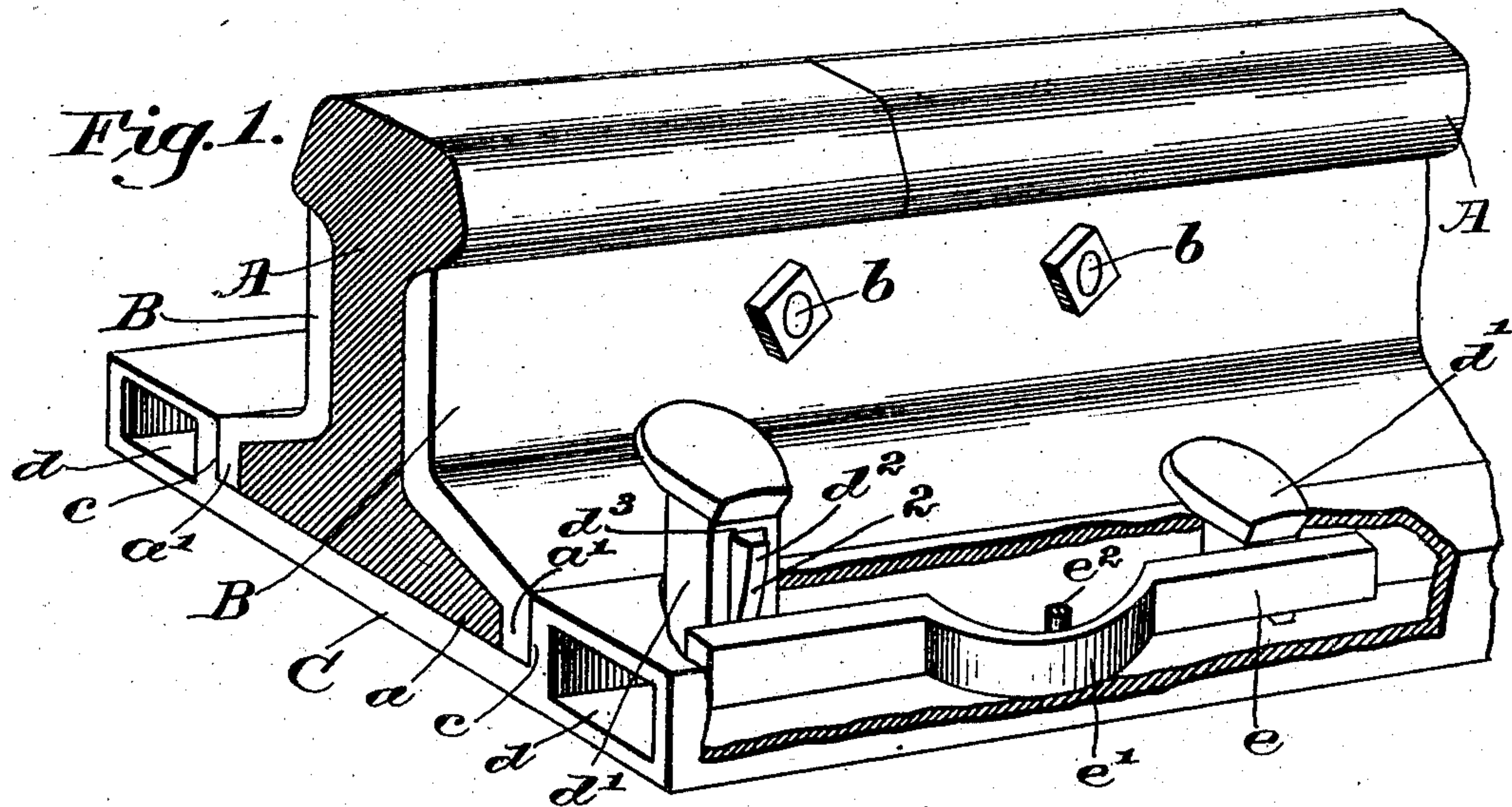
Patented June 13, 1899.

B. J. GILLIES.

CHAIR FOR HOLDING RAILWAY RAILS.

(Application filed Mar. 3, 1900.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

BEVERLY J. GILLIES, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

CHAIR FOR HOLDING RAILWAY-RAILS.

SPECIFICATION forming part of Letters Patent No. 627,058, dated June 13, 1899.

Application filed March 3, 1899. Serial No. 707,619. (No model.)

To all whom it may concern:

Be it known that I, BEVERLY J. GILLIES, of South Framingham, county of Middlesex, State of Massachusetts, have invented an Improvement in Chairs to Hold Railway-Rails, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

In laying tracks for railways great difficulty is experienced in keeping the rails seated on the ties or sleepers, and the pounding of the wheels running on the track tends to loosen the spikes, so that the rails are not firmly held, and the loosened spikes are liable to be removed and the sleeper is worn. To obviate the tendency of the rails to spread, I have mounted the base of the rail in a chair having walls or projections to contact with the opposite edges of the base, and this chair is provided with a pocket, in which may be placed a locking device to engage a suitable notch or projection of the spike when the same is driven through said chair, so that its head overlaps said flange.

Figure 1, in perspective, shows two rails abutted in one of my improved chairs and a fish-plate applied to the rails, a portion of the chair being broken out to show the locking device; and Fig. 2 shows a rail in a chair, one of the pockets being broken out.

Let A A represent rails of usual construction, each having a flanged base a . The fish-plates B may be applied to the junction of two rails by suitable bolts b in usual manner.

My invention relates more especially to the chair C. It is composed of a metallic plate having suitable shoulders c to constitute abutments to restrain any sidewise movement of the rail under pressure of a car running on the rails. The chair has at one or both edges (preferably both) pockets d . Each pocket is provided with one or more spike-holes, in which may be driven one or more spikes d' .

These spikes have suitable projections d^2 to leave suitable notches d^3 , which when the spikes are fully driven, as at the right in Figs. 1 and 2, may be engaged or entered by a suitable locking device e . The locking device e in Fig. 1 is made as a double-acting spring, free to yield somewhat at its central portion

e' , said spring being contained in said pocket and kept therein by a pin or stud e^2 .

In Fig. 2 the device e^3 is made as a single spring held in place in the pocket by a suitable stud e^4 . When a spike is being driven through the chair into the sleeper or tie, the wedge part 2 of the projection d^2 acts against the end of the locking device and forces said end back, and when the spike has been fully driven the spring part of the locking device acts to cause the free end of the locking device to enter the space d^3 and hold the spike locked in its driven position. To withdraw a spike, a wedge may be driven into the open end of the pocket and, acting against one side of the locking device near its end, said locking device may be forced back to free the spike and let it be lifted by any usual driver or tool.

When a fish-plate is needed, it may be provided near its lower end with a downturned lip a' , which may be interposed between the edge of the base of the rail and the shoulder c .

I am not aware prior to my invention that a chair has ever been provided with a shoulder or shoulders to contact with the base of the flange and outside said shoulder or shoulders with a pocket to receive a locking device, a spike being extended through said pocket and chair, and hence this invention is not limited to the exact shape of chair or pocket or of locking device shown, as the same might be variously modified with the exercise of only mechanical skill and without the exercise of invention.

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

1. A rail-supporting chair adapted to rest on and cross a tie transversely, said chair presenting parallel projections to receive between them the edges of the base of the rail, and a longitudinal pocket at the edge of the rail, said pocket having a transverse spike-hole and receiving a locking device to cooperate with and lock in position a spike driven through said pocket of said chair into a tie, substantially as described.

2. A chair composed of a bottom plate, having a pocket at each longitudinal edge, said pocket being provided with a transverse

spike-hole, a movable locking device in said pocket and crossing said spike-hole and adapted to enter a notch in one edge of the spike, substantially as described.

5 3. A chair having a pocket provided with a transverse spike-hole, a locking device pivoted in said pocket and crossing said spike-hole, and a spike having a notch at one edge to be engaged by said locking device, substantially as described.

10 4. A chair having a pocket provided with a transverse spike-hole, a locking device in said pocket and crossing said spike-hole, a spike having a cam-shaped projection and a notch, said projection acting against said locking device to spring it back so that it may thereafter return and enter said notch, substantially as described.

15 5. A chair to support meeting ends of rails, 20 said chair having a shoulder, a fish-plate bolted to said rails and having a lip extended into the space between the shoulder of the

chair and the edge of the base of the rail, and a spike driven through said chair and overlapping the fish-plate, substantially as described.

6. A chair for railway-rails, it presenting parallel shoulders to hold the edges of the base parts of the rails in position against lateral displacement, pockets extended parallel with said shoulders and having spike-holes, suitable locking devices located in said pockets, and fish-plates united to the ends of rails and extended toward said spike-holes, combined with spikes driven into said spike-holes and overlapping parts of said fish-plates, substantially as described.

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

BEVERLY J. GILLIES.

Witnesses:

GEO. W. GREGORY,
EDITH M. STODDARD.