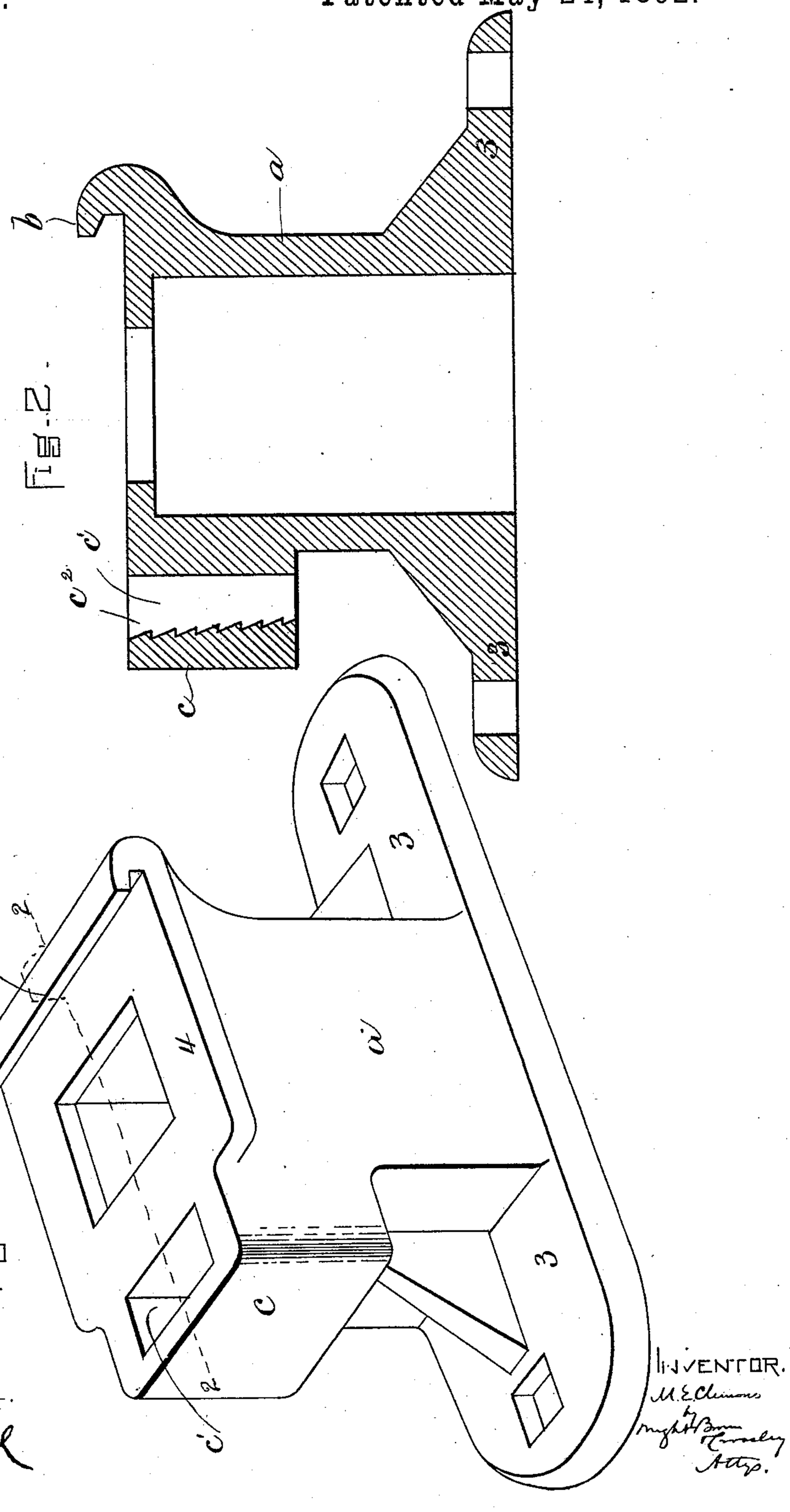
(No Model.) 2 Sheets—Sheet 1.

M. E. CLEMONS.

CHAIR FOR RAILWAY RAILS.

No. 475,539. Patented May 24, 1892.



WITNESSES:
A. D. Harrison.
B. E. Underwood

INVENTOR.
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(No Model.) 2 Sheets—Sheet 2.

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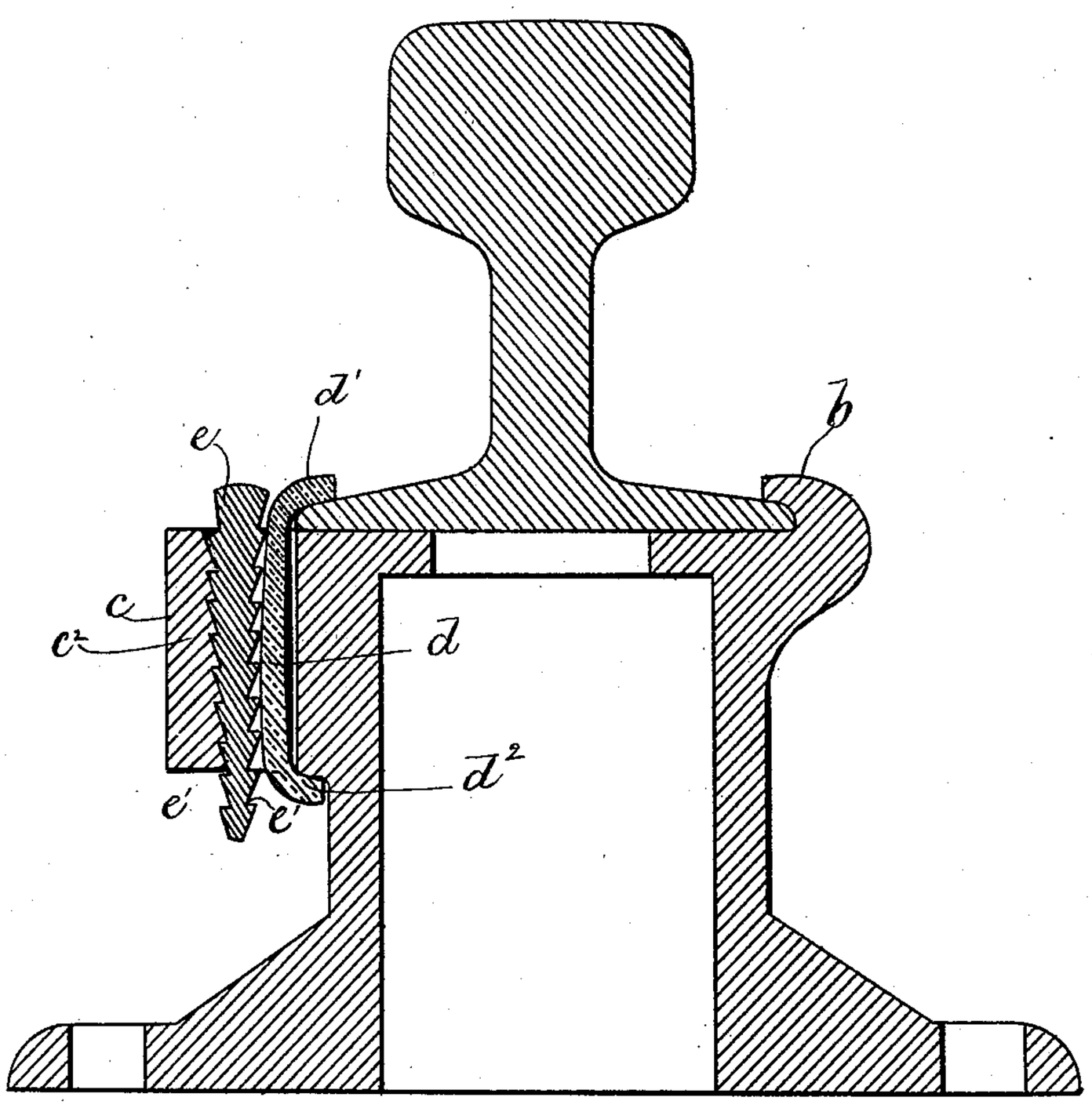
Fig. 3.



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UNITED STATES PATENT OFFICE.

MAYNARD E. CLEMONS, OF ATTLEBOROUGH, MASSACHUSETTS.

CHAIR FOR RAILWAY-RAILS.

SPECIFICATION forming part of Letters Patent No. 475,539, dated May 24, 1892.

Application filed August 14, 1891. Serial No. 402,650. (No model.)

To all whom it may concern:

Be it known that I, MAYNARD E. CLEMONS, of Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Chairs for Railway-Rails, of which the following is a specification.

This invention has for its object to provide a rail-chair adapted to securely support railway-rails.

The invention consists in the improvements which I will now proceed to describe and claim.

In the accompanying drawings, forming a a part of this specification, Figure 1 represents a perspective view of my improved chair, the movable devices that grasp one of the flanges of the rail being removed. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a transverse section of the chair with its rail-grasping devices, showing also a rail in place on the chair.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the body of the chair, which comprises a strong metal casting having at its lower end ears or flanges 3 3, which are secured to a supporting bed or timber. The upper end of the chair is formed as a flat seat 4 to support the base of the rail and is provided at one side of said seat with a clip or ear *b*, which is preferably cast with the body of the chair, although, if desired, said clip may be made in a separate piece secured detachably or otherwise to the chair. *c* represents a projection or offset at the side of the chair opposite the clip *b*, said projection being provided with a socket or mortise *c'* of tapering form, said socket being wider at the upper end of the projection *c* than at the lower end and extending entirely through said projection from top to bottom.

d represents a movable plate adapted to be inserted in the socket *c'* and provided at its ends with ears or clips *d' d²*, which are bent laterally from the body of the plate. One of said clips projects over one of the flanges of the rail, while the other projects under the lower end of the projection *c*, as shown in Fig. 3, when the plate is in place in the socket *c'*.

e represents a wedge, which is formed to be inserted in the socket *c'* between the outer side of the plate *d* and the outer side of said socket, the wedge being of such form that when driven into the socket it will press the plate *d* toward the inner side of the socket, and thus hold the clip *d'* firmly against the rail. The sides of the wedge *e* are provided with teeth *e'*, formed, as shown in Fig. 3, to oppose the upward movement of the wedge without opposing its entering or downward movement, the teeth having longer inclined sides and shorter sides which are substantially at right angles with the length of the wedge, said shorter sides facing upwardly. The outer side of the socket *c'* is provided with teeth c^2, which are in form the reverse of the teeth of the wedge—that is to say, each tooth c^2 has an inclined longer side and a shorter side substantially at right angles with the direction of length of the socket, the shorter side facing downwardly.

The plate *d* is preferably slightly curved, as shown in Fig. 3, its side adjoining the wedge being convex or curved outwardly, while its inner side is concave. This form makes the plate somewhat elastic and enables it to serve as a spring, which is caused to yield by the pressure of the wedge against it when the wedge is driven into the socket, the effort of the spring to assume its normal position causing it to press outwardly against the wedge.

It will be seen that the serrated wedge and the serrated outer side of the socket *c'* insure a firm engagement of the wedge with the socket and prevent liability of accidental loosening of the wedge. The downward movement of the wedge into the socket causes the clip *d'* to be pressed firmly down upon the rail-flange and hold the latter closely to its seat.

The wedge *e* projects below the projection *c'*, so that the wedge may be dislodged and removed by blows directed upwardly on its lower end, there being a sufficient space under the projection *c* to permit the wedge to be driven upwardly.

I do not limit myself in all cases to the teeth or serrations on the wedge and on the inner side of the socket, as the plate *d* may be held in place with a reasonable degree of security if the sides of the wedge and outer

side of the socket are made plain or flat. I prefer the serrated form, however, on account of the greater security afforded thereby.

I claim—

1. In a rail-chair, the body *a*, having at its upper end a rail-seat, a flat rail-engaging clip, as *b*, at one edge of said seat, and an offset or projection at the opposite edge of said seat, provided with a tapered socket below its upper face, combined with a loose plate adapted to enter said socket and provided with a rail-engaging ear or clip at its upper end, and a wedge adapted to enter the socket beside said plate, as set forth.

2. In a rail-chair, the body *a*, having at its upper end a rail-seat, a rail-engaging clip, as *b*, at one edge of said seat, and an offset or projection at the opposite edge of said seat, provided with a tapered socket, combined with a curved plate having a rail-engaging ear or clip at its upper end and another ear at its lower end formed to engage the under side of the projection, and a wedge adapted to enter the socket beside said plate, as set forth.

3. In a rail-chair, the body *a*, having at its upper end a rail-seat, a rail-engaging clip, as *b*, at one edge of said seat, and an offset or projection at the opposite edge of said seat, provided with a tapered socket having a serrated outer side, combined with a curved plate having a rail-engaging ear or clip at its upper end and another ear at its lower end formed to engage the under side of the projection, and a wedge adapted to enter the socket beside said plate, said wedge having serrated sides, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 7th day of August, A. D. 1891.

MAYNARD E. CLEMONS.

Witnesses:

C. F. BROWN,

A. D. HARRISON.