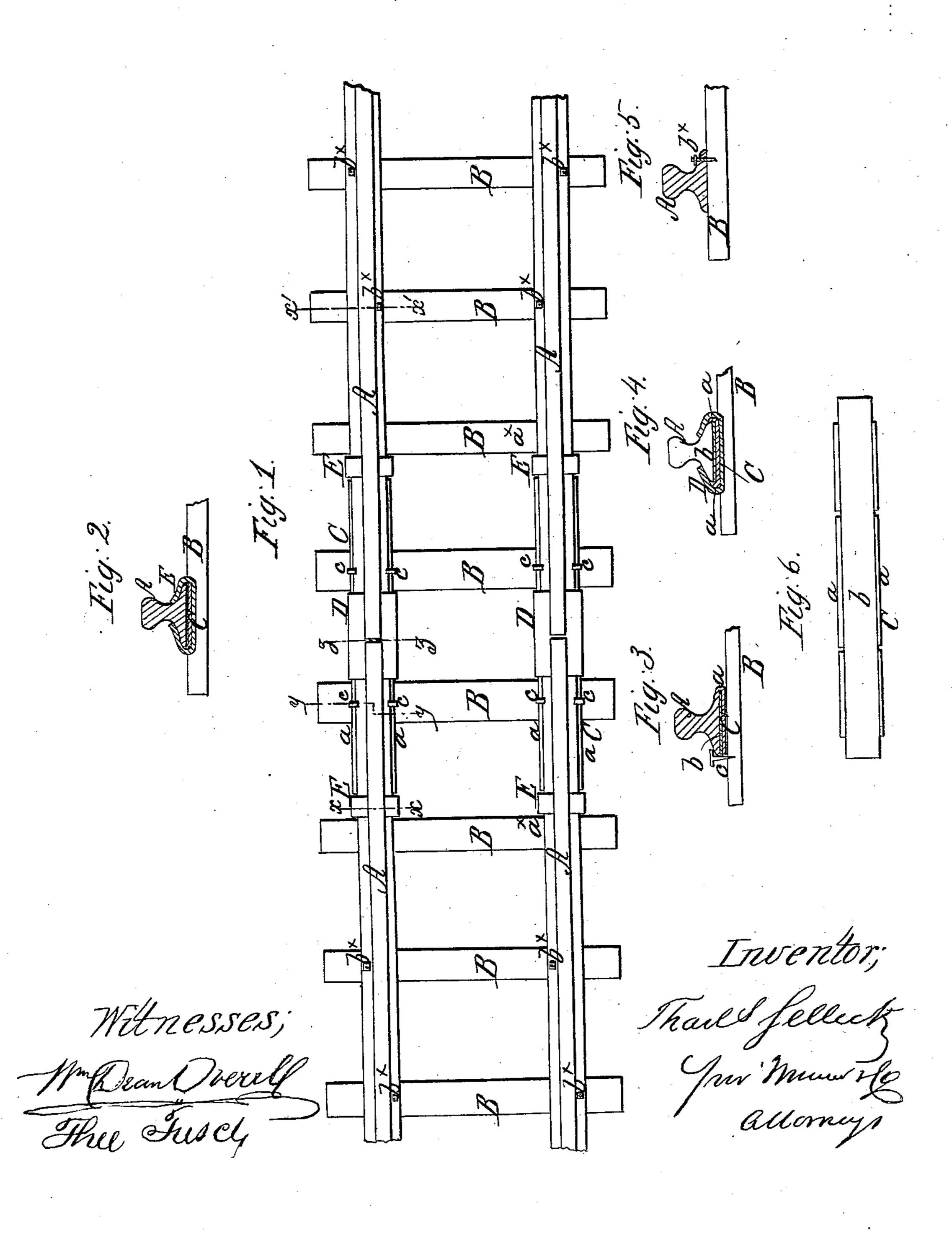
I. Selleck, Railroad Chair, 1. Selleck, Railroad Chair, Patented May-7, 1867.



Anited States Patent Effice

THADDEUS SELLECK, OF GREENWICH, CONNECTICUT.

Letters Patent No. 64,453, dated May 7, 1867.

IMPROVED RAILWAY CHAIR.

The Schedule referred to in these Xetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THADDEUS SELLECK, of Greenwich, in the county of Fairfield, and State of Connecticut, have invented a new and improved Mode of Securing Railroad Rails to their Sleepers or Ties; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which-

Figure 1 is a plan or top view of my invention.

Figure 2, a transverse section of the same, taken in the line x x, fig. 1.

Figure 3, a transverse section of the same, taken in the line y y, fig. 1.

Figure 4, a transverse section of the same, taken in the line z z, fig. 1.

Figure 5, a transverse section of the same, taken in the line x' x', fig. 1.

Figure 6, a detached plan or top view of the flanged plate pertaining to the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved mode of securing railroad rails to their sleepers or ties, and it has for its object the avoiding of several difficulties attending the ordinary "chairs," so termed, and other fastenings hitherto devised for the same purpose. The principal difficulty attending the different means hitherto employed for securing the rails to the sleepers or ties has been the expansion and contraction of the rails, and also the vertical play of the latter due to the passage of the car-wheels over them, and which cause the ends of the rails to be hammered or battered down under the action of the wheels. These difficulties, it is believed, are

fully obviated by my invention.

A represents the rails of a portion of a track, the abutting ends or joints of the rails being shown. B are the sleepers or ties on which the rails rest and are secured. C C represent two metal plates, the edges of which are curved or bent upward to form lips or flanges, a a, between which the bases of the rails are fitted, the lips or flanges bearing against the sides of the bases or lower parts of the rails, as shown clearly in fig. 4. The adjoining or abutting ends of the rails A are at the centres of the plates C C, and the latter are shown in the present instance resting on two sleepers, B B, but they may rest on more than two sleepers if long plates be used. The plates C C, whether resting upon two or more sleepers, are fitted snugly between the sleepers at their ends, designated in fig. 1 by a^{\times} a^{\times} , so as to preclude any longitudinal play or movement of said plates; and in order to admit of this the sleepers on which the plates rest are rather lower than those at their ends designated by ax, or the first-mentioned sleepers may be notched out to receive the plates C C, the same end being attained in either case. On each plate C there is placed a strip of sheet metal, b, one or more, and the rails rest on these plates, which serve to prevent the rails being subjected to any material amount of concussion or hammering under the weight or action of the car-wheels. The plates C C, and consequently the rails, are prevented from moving laterally by means of the ordinary spikes c, which are fitted in notches in the flanges, the heads of the spikes projecting over the upper edges of the flanges a a, and also over the bases of the rails if desired. The rails are secured firmly in the plates C C, between the flanges a a, by means of clamps D E E. The principal clamp D is at the centre of the plates, and it is simply a wrought or rolled rectangular plate placed under the plates, curved upward at each end, and secured down upon the rails by means of a hammer or any suitable means. (See fig. 4.) These clamps D are fitted between the sleepers on which the plates C C rest, and they are consequently prevented from moving in a longitudinal direction. The clamps EE are constructed precisely similar to D, but they do not encompass the flanges a a of the plates C C, said flanges being cut out or notched so that the clamps E E will bear or press against the sides of the bases of the rails. (See fig. 2.)

From the above description it will be seen that the plates C C are secured to the sleepers by the spikes c, and longitudinal play or movement of said plates prevented by said spikes, and also by having their ends fitted between the sleepers $a^* \not = a^*$, while the clamps D E secure the rails in or to the plates. It will further be seen that the rails are not cut or punched in any manner near their ends for bolts or spikes to pass through, as is usual in ordinary couplings, and consequently the rails are allowed to expand and contract freely in a longitudinal direction without affecting in the least any parts of the fastening described. The rails are secured at their centres to the sleepers by two screws or spikes, b^{\times} , but these will not interfere with the free expansion and contraction of the rails, owing to their position being a central one. The rails may also be secured to the sleepers by the ordinary spikes, the heads of the latter fitting over the bars of the rails, but not in notehes made therein so as to interfere with the expansion and contraction of the rails.

I do not confine myself to any particular length for the plates C C, nor to any number of clamps D E E, nor to any number of metal plates b for the rails to rest upon on plates C C. I claim as new, and desire to secure by Letters Patent—

In combination with the rails A A the flanged plate C, extending the distance of three or more intervals of the ties, the clamp D extending across the middle interval and embracing the point of junction of the rails, and the end clamps E E, all arranged substantially as herein described and represented.

Witnesses:

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C. L. TOPLIFF.

THADDEUS SELLECK.