

(No Model.)

R. O. BINGHAM.
RAILROAD RAIL CHAIR.

No. 566,708.

Patented Aug. 25, 1896.

Fig. 1.

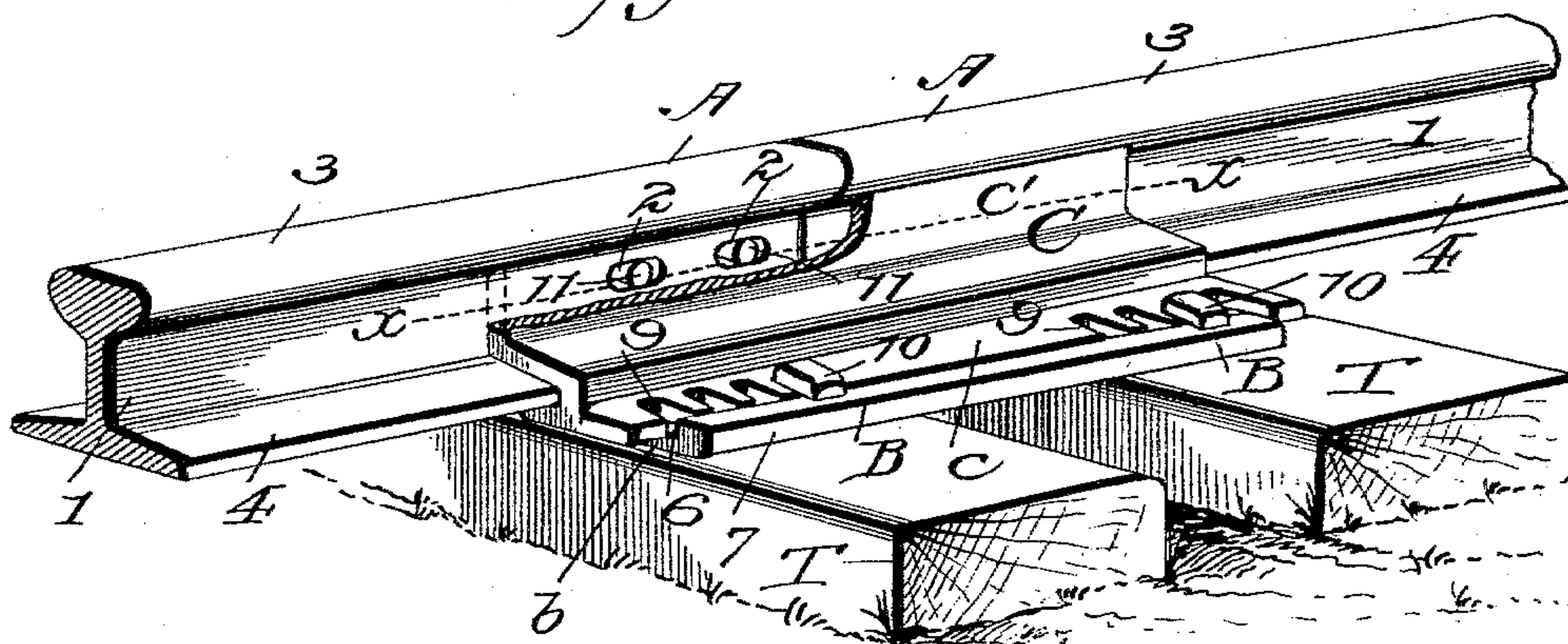


Fig. 2.

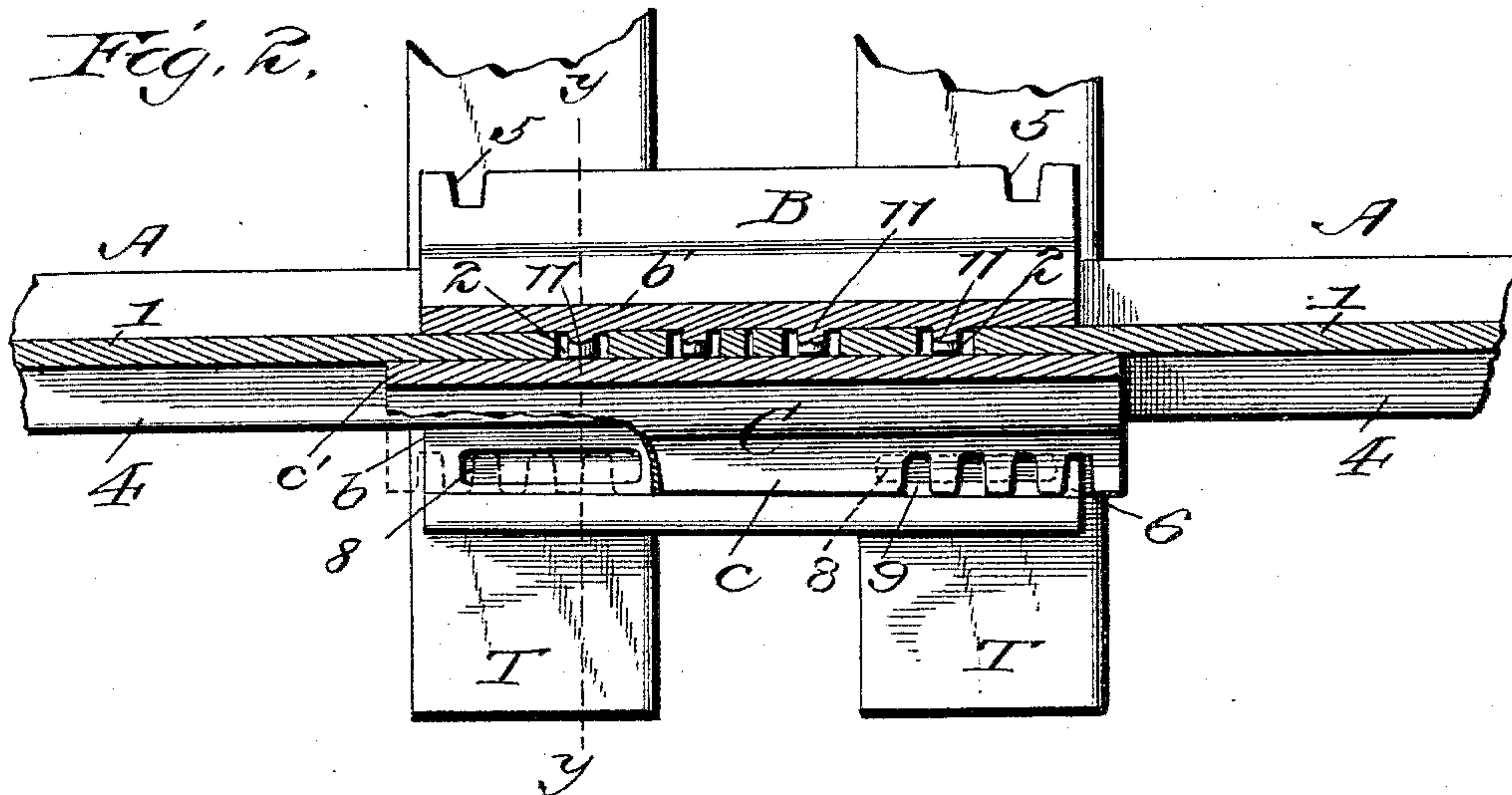


Fig. 3.

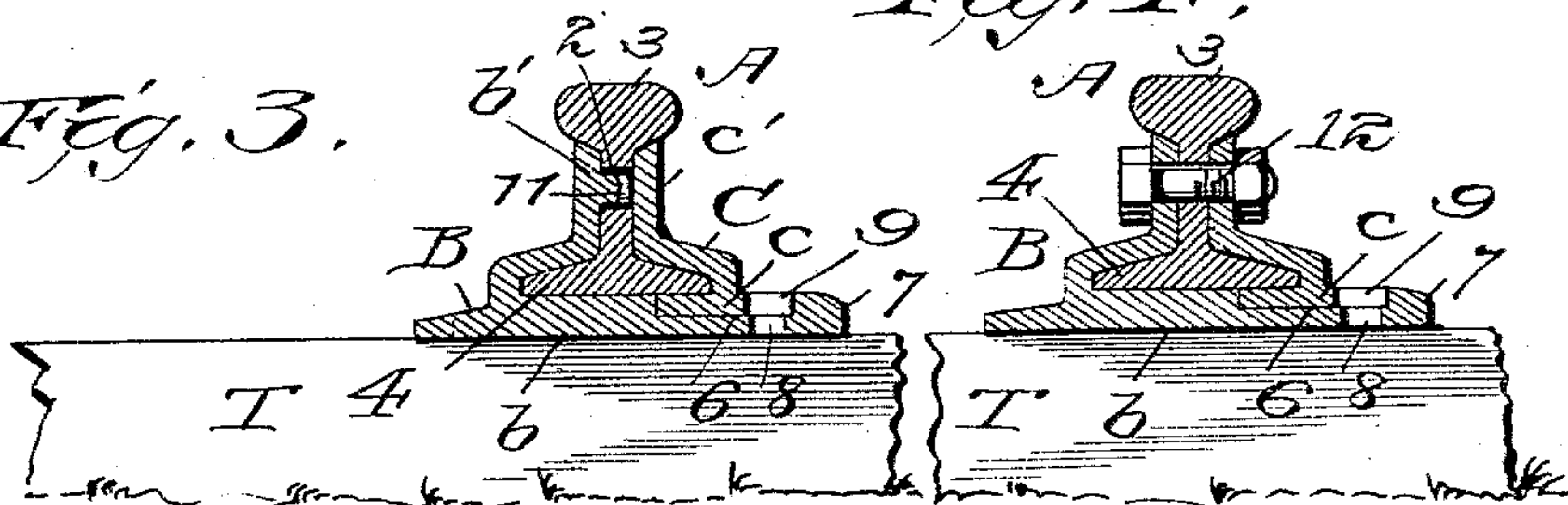
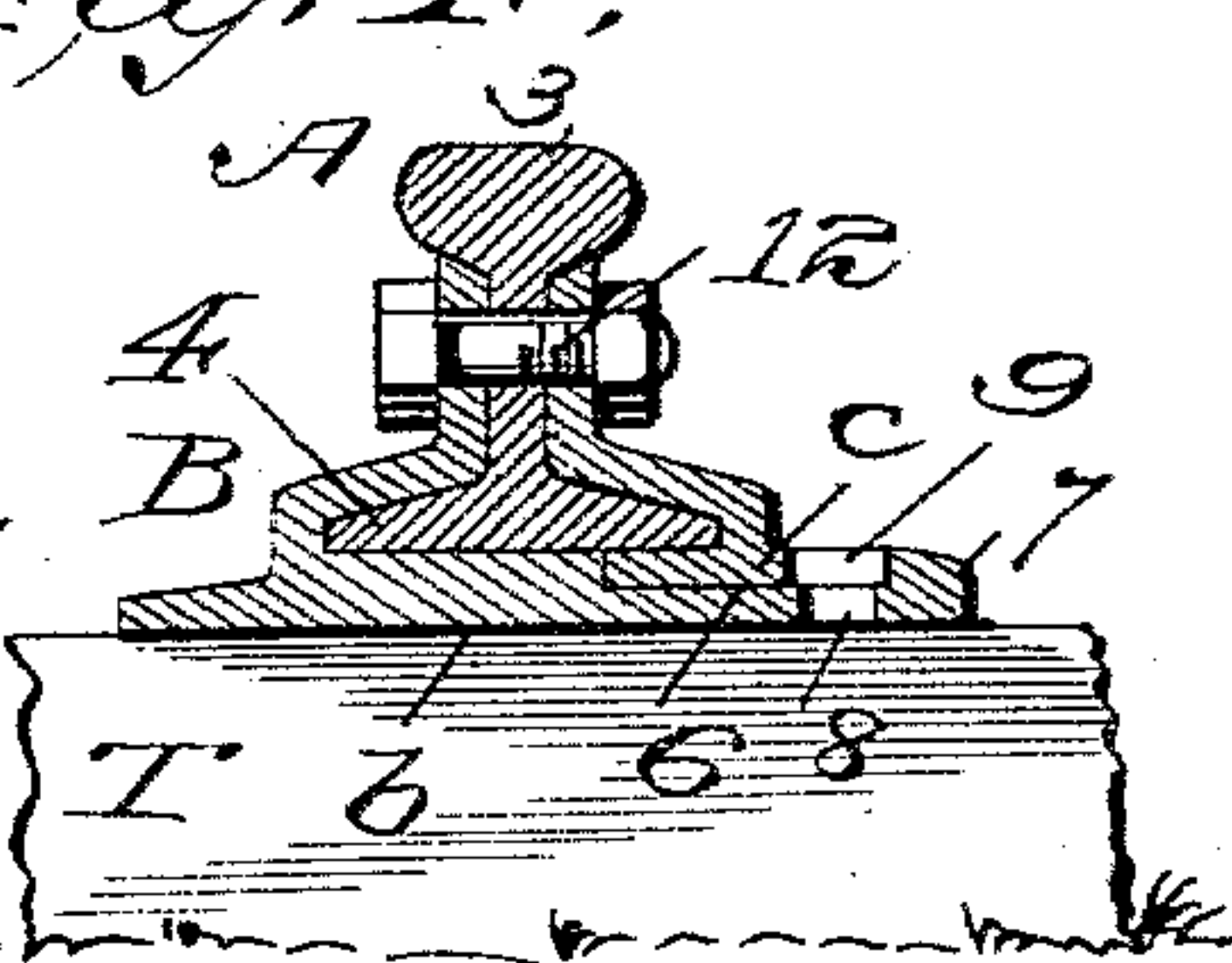


Fig. 4.



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RAILROAD-RAIL CHAIR.

SPECIFICATION forming part of Letters Patent No. 566,708, dated August 25, 1896.

Application filed April 20, 1896. Serial No. 588,235. (No model.)

To all whom it may concern:

Be it known that I, ROBERT O. BINGHAM, a citizen of the United States, residing at Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Railroad-Rail Chairs, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved railroad-rail chair made in two parts or sections adapted to support and hold together the meeting ends of two railroad-rails, said chair comprising a main section and a cuneal key-section operating in a cuneal channel in the main section, both sections being provided with registering openings through which spikes may be driven into the cross-ties to hold the sections in proper relative position.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

Figure 1 of the drawings is a perspective view showing two rails joined together at their meeting ends by my improved chair, a portion of the key-section being broken out to show the engagement of the lugs on the main section with the elongated holes in the web of the rail. Fig. 2 is a horizontal sectional view of the same on the line *xx*, Fig. 1, a portion of the key-section being broken away to show one of the slots in the base of the main section, the broken-out portion being shown in dotted lines and the spikes omitted. Fig. 3 is a transverse sectional view on the line *yy*, Fig. 2. Fig. 4 is a like view illustrating the substitution of bolts and nuts for the lugs shown in the other figures.

In the drawings, A represent two railroad-rails, in the webs 1 of which, near their meeting ends, are formed elongated holes 2, for a purpose hereinafter described.

3 is the tread of the rail, and 4 the base.

B is the main section of my improved rail-chair comprising a base *b*, which underlies the ends of the rails and extends some distance on each side of them, and a jaw *b'*, shaped so as to overlie the tops of one side of the bases of the rails and bear against the webs of the rails, the upper edge of the jaw resting against the under side of the caps or treads of the rails, all as clearly seen in

Figs. 3 and 4. In this side of the base of the main section are formed notches 5 for the reception of spikes. (Not shown.) In the upper side of the base *b* of the main section, opposite the jaw, is formed a cuneal channel 6, the outer wall 7 of which is of the same height as the inner wall; and in said base, near each end and in register with the channel 6, is formed a slot 8, for a purpose hereinafter described.

C represents a key-section, comprising a flat cuneal plate *c* and an integral jaw *c'*, adapted to embrace the ends of the rails opposite the jaw *b'* and in a precisely similar manner. The plate *c* of the key-section is of such thickness that when it is in place in the channel 6, which extends some distance under the bases of the rails, its upper surface will lie flush with the upper surface of the base *b* of the main section, as clearly shown in the drawings, so that the upper surfaces of the bases of the two sections together form the rail-seat, whereby the inner edge of the key-section will be firmly held in place by the rails. In the outer edge of plate *c* of the key-section, near each end, is formed a series of notches 9, through either of which, and through the slots 8 in the base *b* of the main section, and into the ties T may be driven spikes 10.

For the purpose of securing the ends of the rails together, allowing only for the natural expansion and contraction of the rails, I prefer to provide the jaw *b'* of the main section with integral lateral lugs 11, adapted to enter the holes 2 in the webs 1 of the rails. By this construction I dispense entirely with the use of bolts and nuts, an advantage that will be at once apparent to those familiar with railroad construction. If desired, however, the lugs may be dispensed with, and bolts 12 passed through both jaws and the rail-webs, as seen in Fig. 4.

In using my improved rail-chair the main section is first placed on the rails and then spiked to the cross-ties, after which the key-section is put in place, with its plate in the channel 6, and then driven forward with a wedging action until the parts are firmly secured together, when the two parts are spiked together and to the ties, as shown in Fig. 1. Should the key-section at any time become

so loose as to be ineffective, the spikes can be withdrawn and the key-section driven farther forward until a proper tightness is secured, when the spikes may be again inserted 5 through any of the notches.

It will be seen that by my invention I have materially simplified the construction of railroad-rail chairs, in that I employ but two parts, and these are capable of being very 10 easily and quickly assembled with the rails.

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

1. A two-part railroad-rail chair comprising 15 a main section of the full width of the chair having a longitudinal cuneal channel and a vertical slot near each end in register with said channel, and a cuneal key-section adapted to operate in the channel in the main 20 section and having a series of spike-receiving notches near each end in register with the slots in the main section, each of said sections having a jaw adapted to bear against the respective sides of the rails.

2. A two-part railroad-rail chair comprising 25 a main section of the full width of the chair having a longitudinal cuneal channel and a vertical slot near each end in register with said channel, and a cuneal key-section 30 adapted to operate in the channel in the main

section and having a series of spike-receiving notches in its outer edge near each end in register with the slots in the main section, each of said sections having a jaw adapted to bear against the respective sides of the 35 rails, the jaws of the main section being provided with fixed studs designed to enter holes formed in the ends of the rails.

3. A two-part railroad-rail chair comprising a main section of the full width of the 40 chair, but forming only a portion of the rail-seat, said section having a longitudinal cuneal channel in its base and a vertical slot near each end in register with said channel, and a cuneal key-section adapted to operate 45 in the channel in the main section, the inner portion of its base lying flush with the inner wall of the channel and thus completing the rail-seat, the outer portion of its base having a series of spike-receiving notches formed 50 therein near each end in register with the slots in the main section, each of said sections having a jaw adapted to bear against the respective sides of the rails.

In testimony whereof I affix my signature 55 in presence of two witnesses.

ROBERT O. BINGHAM.

Witnesses:

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