

No. 774,899.

PATENTED NOV. 15, 1904.

B. H. TRIPP.
RAIL JOINT CHAIR.
APPLICATION FILED JUNE 7, 1904.

NO MODEL.

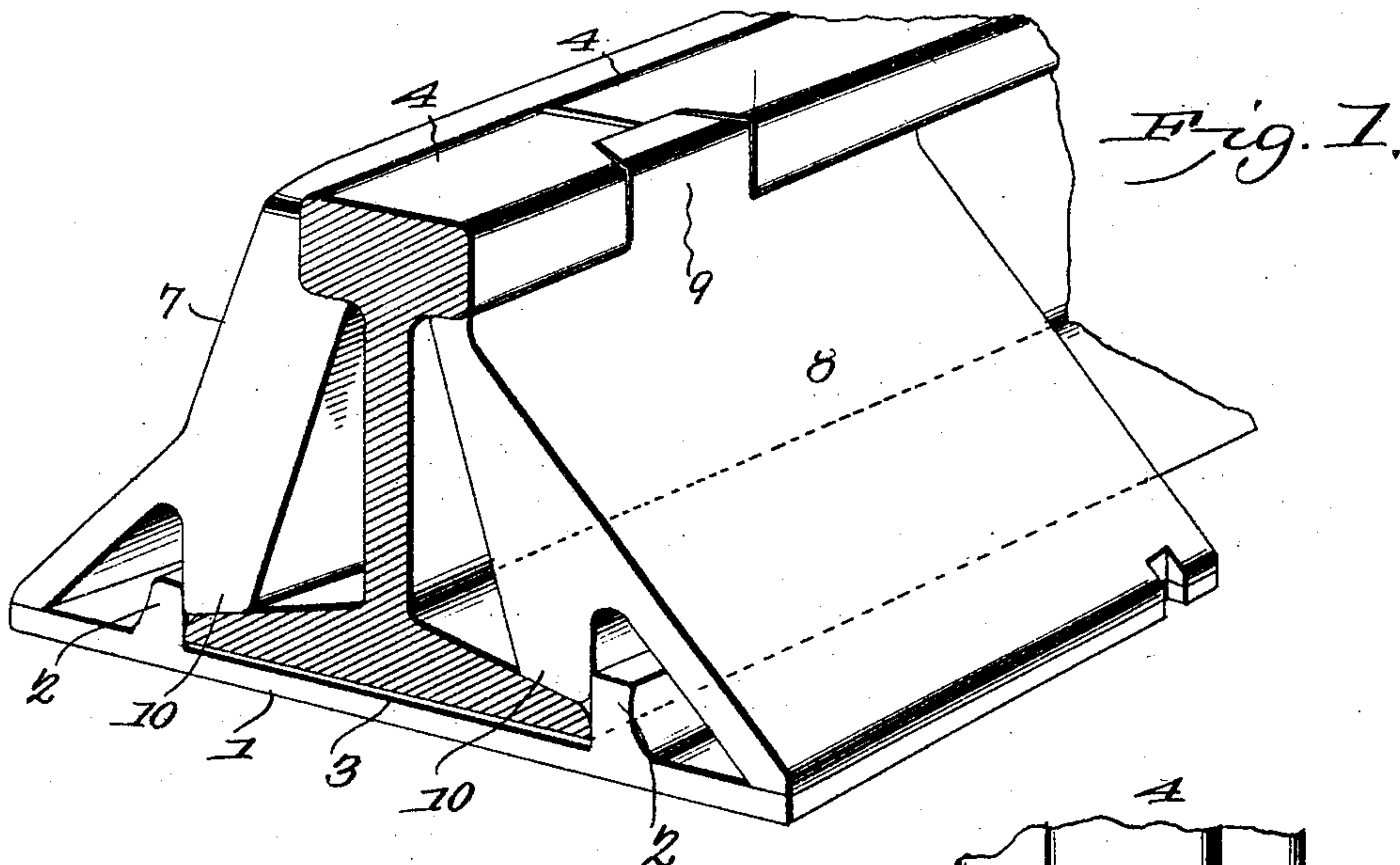


Fig. 2.

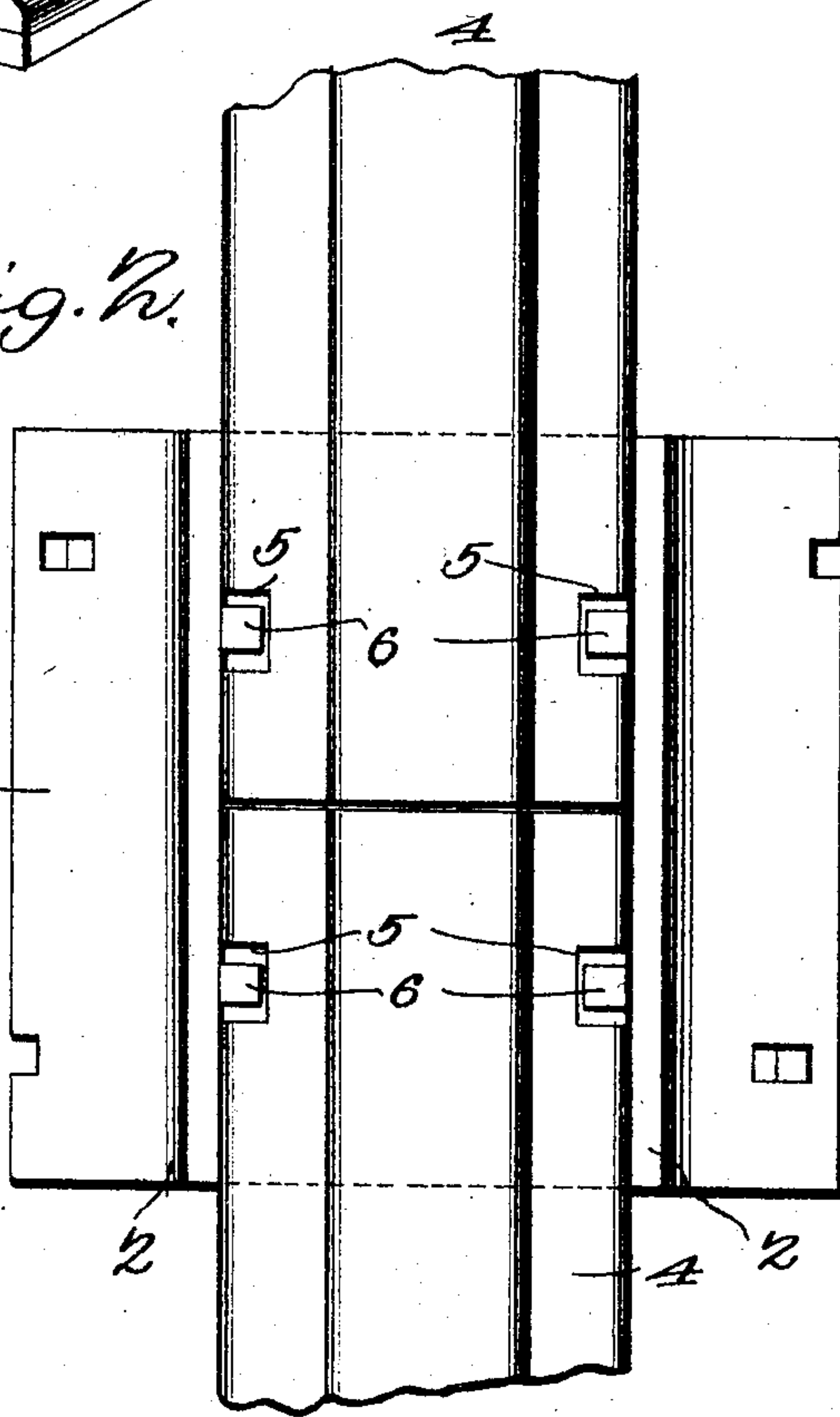
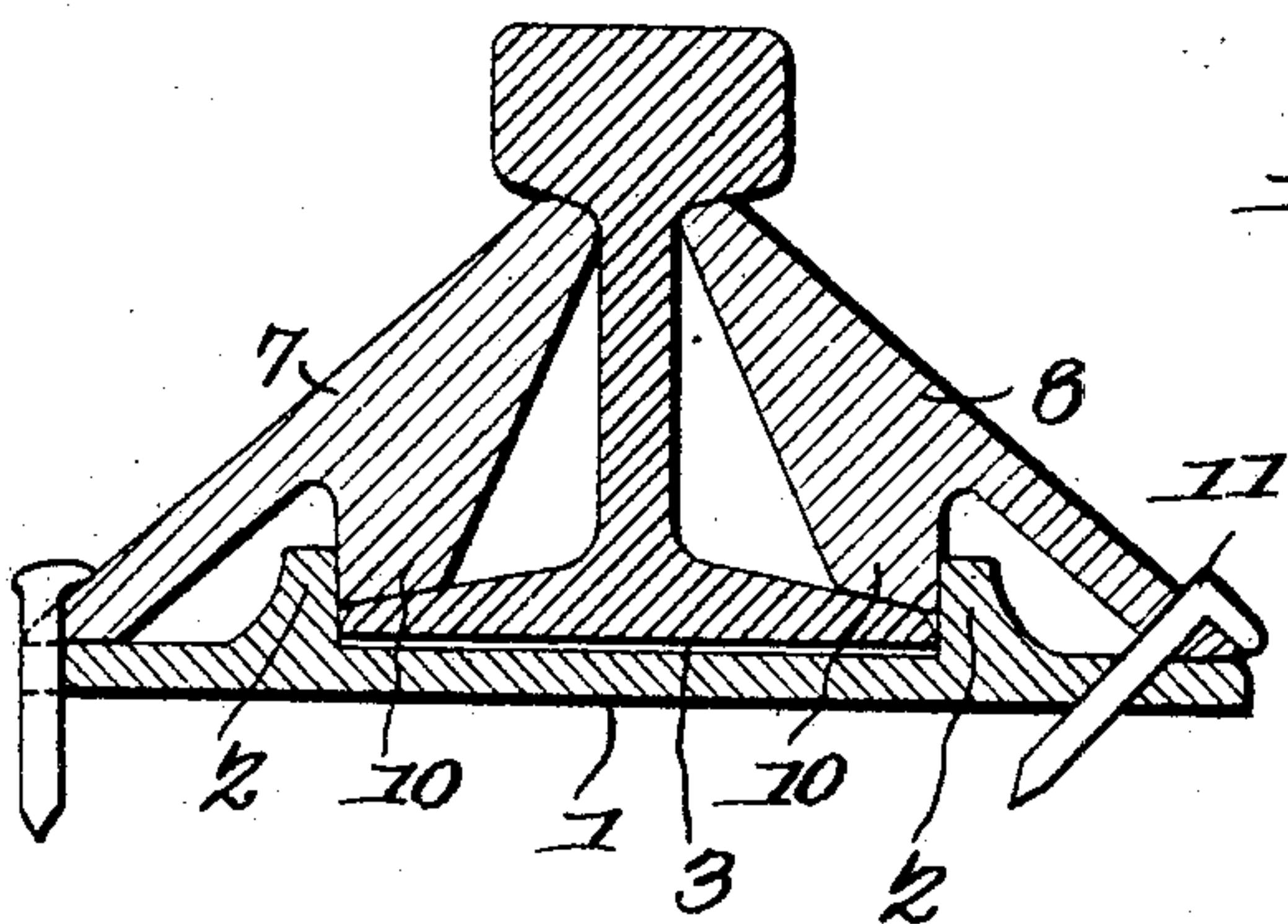


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

BRADFORD H. TRIPP, OF MARCUS, IOWA, ASSIGNOR OF ONE-HALF TO FRANCIS S. BARNES AND BENJAMIN RADCLIFFE, OF MARCUS, IOWA.

RAIL-JOINT CHAIR.

SPECIFICATION forming part of Letters Patent No. 774,899, dated November 15, 1904.

Application filed June 7, 1904. Serial No. 211,505. (No model.)

To all whom it may concern:

Be it known that I, BRADFORD H. TRIPP, a citizen of the United States, residing at Marcus, in the county of Cherokee and State of Iowa, have invented a new and useful Rail-Joint Chair, of which the following is a specification.

This invention relates to railroad-chairs.

The objects of the invention are to improve and simplify the construction of such devices.

With these objects in view the invention resides in a railroad-chair having means whereby a rail is locked thereon by downward pressure.

The invention also resides in means whereby the downward pressure of the rail is taken by the chair in a direction transverse to the rail as well as in a downward direction and whereby the transverse pressure also serves effectually to lock the rail in place.

Furthermore, the invention resides in the particular combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment of the invention.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a rail-chair constructed in accordance with the invention. Fig. 2 is a plan view of the same with the truss members removed. Fig. 3 is a transverse sectional view of the chair applied to a rail intermediate of the ends of the latter.

Like characters of reference indicate corresponding parts in the different views.

The idea of the invention is applicable either to ordinary railroad-chairs or to such chairs as are intended in combination with a peculiar form of truss-brace to produce a firm tread-surface at the meeting-point of two rails, whereby the rails are prevented from wearing at that point and whereby passing trains are not subjected to annoying rattle as the wheels cross the rail-joint. For convenience of understanding both forms of truss-brace and chair have been illustrated in the drawings, the improvements of the present invention being combined with each form.

The numeral 1 indicates a railroad-chair

which is provided with ribs 2 2, that form between them a channel 3, adapted to receive the meeting ends of two rails 4 4, each having slots 5 to receive projections 6 on the chair. The slots 5 and projections 6 constitute means to prevent longitudinal displacement of the rails from the chair and to permit the normal expansion and contraction thereof. The inner walls of the channel 3 are vertical or of such form that the rails can move vertically therein. The truss-braces 7 8 exert a trussing action between the chair and the upper portions or heads of the rails, as will be apparent hereinafter. Each of the rails 4 is cut away on one side at the joint to receive a projection 9 on the truss-brace 8. The upper end of the brace 7 terminates on a level with the tread-surface of the rails, whereby the upper ends of the two truss-braces constitute means to produce a smooth tread-surface at the joint and to prevent wearing of the rails. When the truss-braces are used intermediate the ends of a rail, the upper portions of each brace terminate beneath the head of the rail, as shown in Fig. 3 of the drawings.

Each truss-brace bears at its upper end against the head of the rail and at its lower end against a portion of the chair outside the channel 3. Furthermore, each truss-brace is formed with a flange 10, that rests normally against the base of a rail and bears against the inner wall of the channel.

In assembling the different parts the truss-braces are fitted against the rail, and the rail and braces are lowered into the channel of the chair. The form of the truss-braces is such that when their lower ends are resting upon the chair outside the channel with their upper ends against the head of the rail and their flanges against the inner walls of the channel the rail is supported a slight distance above the bottom of the channel. For this reason downward pressure on the rail causes the lower ends of the truss-braces to spread or slide slightly on the chair, thus drawing the flanges 10 outwardly against the wall of the channel and locking the rail securely upon the chair, at the same time exerting the downward pressure of the rail in a direction to the

rail as well as in a downward direction upon the chair. In this way a much stronger and more resilient support is afforded for the rail.

From the foregoing description it will be apparent that the truss-brace and channel constitute means whereby the rail is locked upon the chair by downward pressure and, furthermore, that they constitute means whereby the downward pressure of the rail is taken by the chair in a direction transverse to the rail as well as in a downward direction. After each truss-brace has been placed in position a spike may be passed through a suitable slot or perforation therein, the spike being disposed at a right angle to the brace and extending at an incline through the chair, thus constituting means for preventing longitudinal displacement of the brace from the chair.

Changes in the precise embodiment of invention illustrated and described may be made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

I claim—

1. In a rail-joint, a base member having a pair of spaced parallel ribs between which the rails may be inserted, and a pair of truss members for engaging under the heads of the rails and holding the same suspended, each of said truss members bearing at its outer end on the base and being provided with a pendent flange bearing against the inner wall of one of the ribs.

2. A rail-chair having a channel with walls of such form that a rail can move vertically therein, and truss-braces bearing against the head of the rail, engaging the channel and resting upon the chair outside the channel, where-

by the downward pressure of the rail is taken by the chair in a direction transverse to the rail as well as in a downward direction.

3. A rail-chair having a channel with walls of such form that a rail can move vertically therein, and truss-braces bearing against the head of the rail, and the base thereof engaging the walls of the channel and resting upon the chair outside the channel thereof, whereby the rail is locked upon the chair by downward pressure and said downward pressure is taken by the chair in a direction transverse to the rail as well as in a downward direction.

4. A rail-chair having means whereby rails are locked thereon by downward pressure and means to produce a smooth tread-surface at the joint and to prevent wearing of the rails.

5. A rail-chair having means including truss-braces, whereby a rail is locked upon the chair by downward pressure, and a spike disposed at a right angle to each truss-brace and extending at an incline through the chair for preventing longitudinal displacement of the brace.

6. A rail-chair having means, including truss-braces, whereby rails are locked thereon by downward pressure, and a projection on one of the braces adapted to enter cut-away portions of the rail to produce a smooth tread-surface at the joint and to prevent wearing of the rails.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BRADFORD H. TRIPP.

Witnesses:

JAMES P. BOOTH,
F. S. BARNES, Jr.