

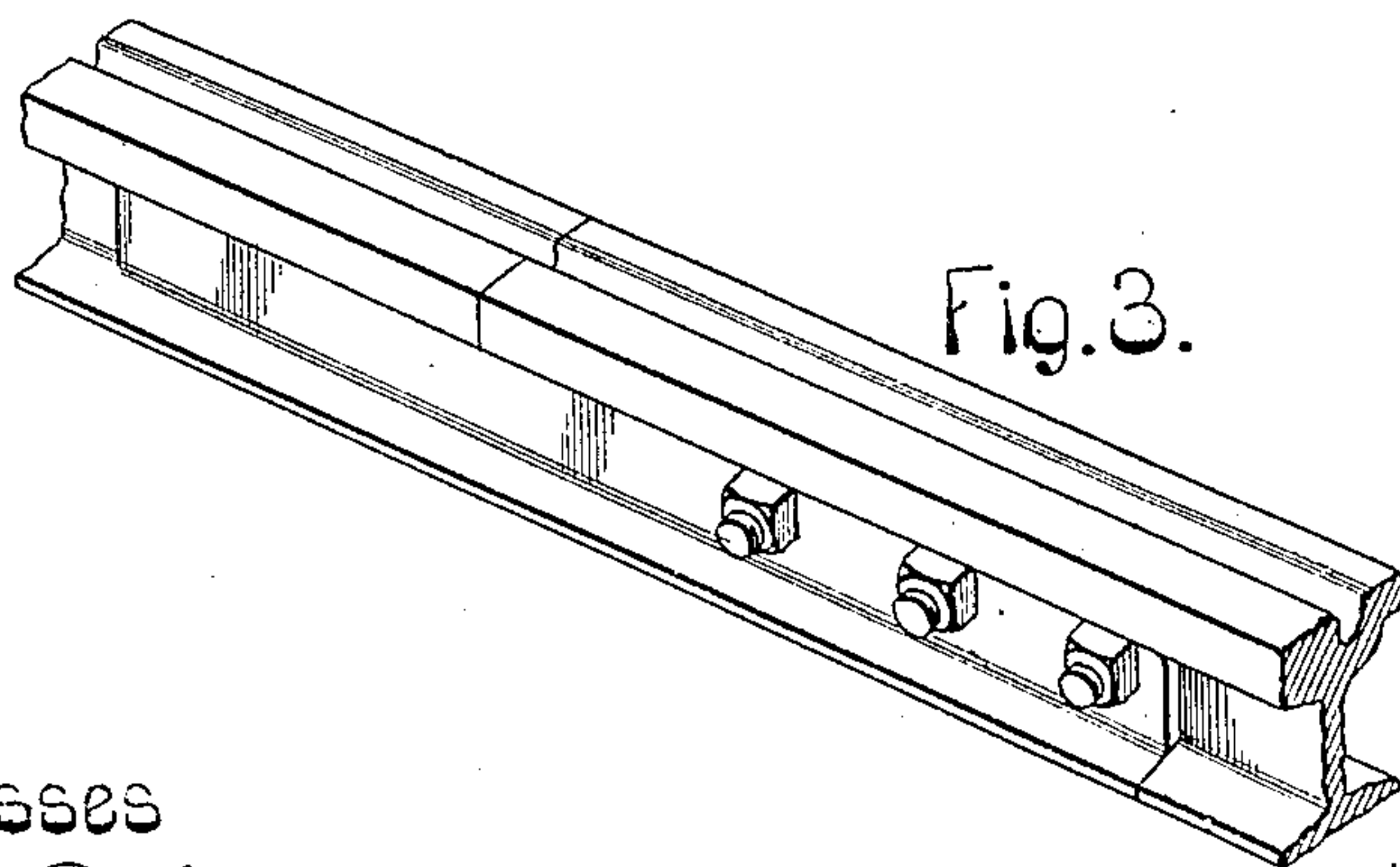
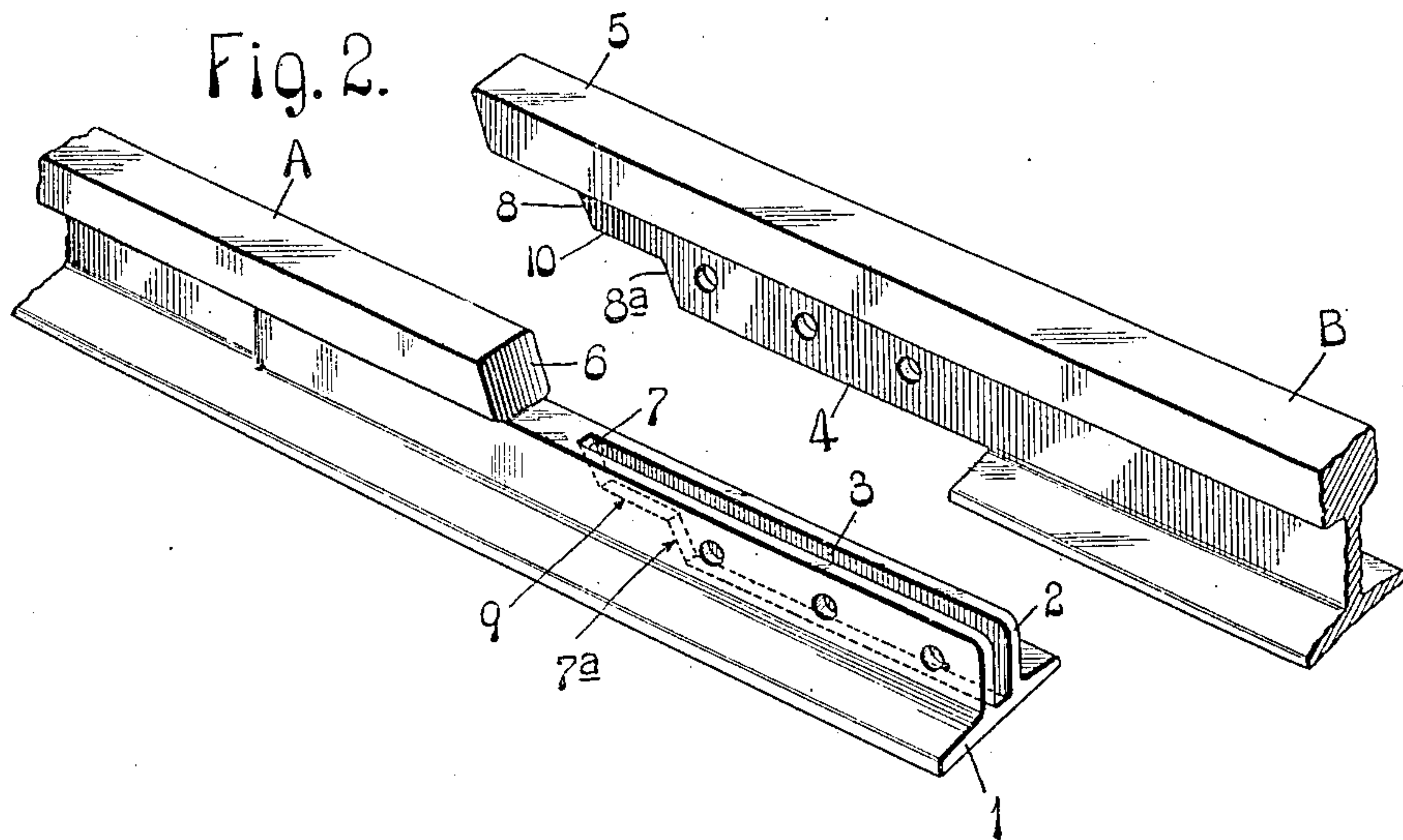
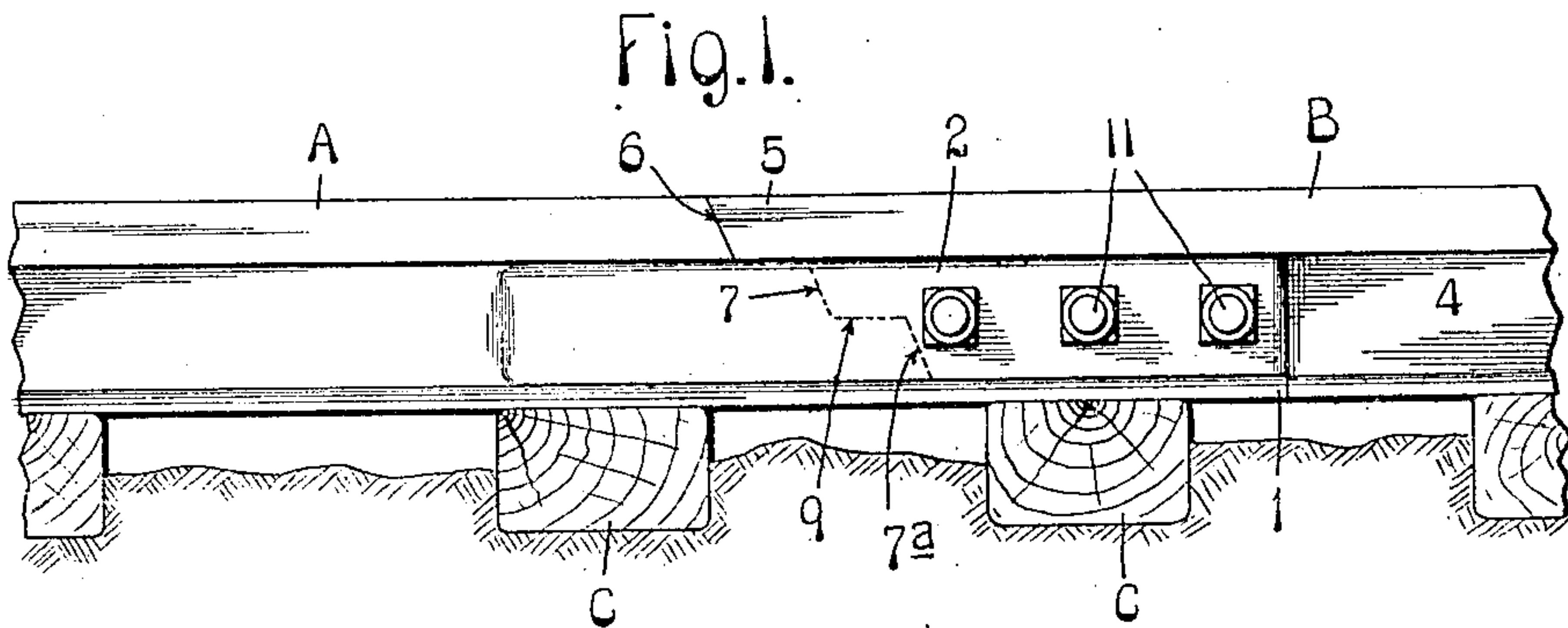
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RAIL JOINT.

APPLICATION FILED APR. 27, 1908.

904,812.

Patented Nov. 24, 1908.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOSEPH F. SCHONLAU AND GEORGE R. HEINRICH, OF ST. LOUIS, MISSOURI.

## RAIL-JOINT.

No. 904,812.

Specification of Letters Patent.

Patented Nov. 24, 1908.

Application filed April 27, 1908. Serial No. 429,520.

*To all whom it may concern:*

Be it known that we, JOSEPH F. SCHONLAU and GEORGE R. HEINRICH, both citizens of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Rail-Joints, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a rail joint constructed in accordance with our invention; Fig. 2 is a perspective view illustrating said joint; and Fig. 3 is a perspective view of two grooved rails embodying our invention.

This invention relates to rail joints.

The object of our invention is to provide an efficient rail joint that will prevent the ends of two abutting rails from bending downwardly or getting out of longitudinal alinement with each other.

Referring to the drawings which illustrate the preferred form of our invention, A and B designate two T-rails that are arranged in longitudinal alinement with each other. At one end of the rail A the base 1 thereof projects some distance beyond the end of the rail and this projecting portion of the base is provided with an integral thickened vertical web 2 in which a longitudinally extending slot 3 is formed so as to produce a channel-shaped portion. At one end of the rail B its base is cut away, as shown in Fig. 2, so that the vertical web 4 of said rail can enter the slot 3 formed in the thickened web 2 of the rail A. A portion of the vertical web 4 of the rail B is also cut away so that the head 5 of said rail can rest upon the top of the thickened web 2 of the rail A and butt against an inclined end face 6 on the head of rail A. We also prefer to provide the thickened web 2 of rail A with inclined bearing faces 7 and 7<sup>a</sup> against which inclined bearing faces 8 and 8<sup>a</sup> on the web of rail B bear, and a horizontal bearing face 9 on the web of rail B rests, the lower edge of that

portion of the web of rail B, which is not provided with a base, resting upon the bottom of the slot 3 in the web of rail A. Bolts 11 or other suitable fastening devices pass through the channel-shaped portion of the rail A and the web of rail B which said channel-shaped portion embraces to connect the two rails together.

The portion of the base of rail A which extends beyond the end of said rail rests on a tie C, and as the rail B has an extended bearing surface on the rail A, the ends of said rails cannot bend downwardly. With a construction of this description it will also be impossible for the rails to move laterally out of longitudinal alinement with each other for the integral upwardly projecting flanges on the projecting base 1 of the rail A embrace the web 4 of rail B.

Either T-rails or grooved rails can be connected together in this manner, as shown in Figs. 2 and 3 of the drawings, respectively, and instead of providing the abutting heads of the rails with inclined faces 6, as shown in Figs. 1 and 2, the heads of the rails can be provided with vertical abutting faces, as shown in Fig. 3.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A T-rail having a base that projects beyond one end of said rail, a thickened vertical web on the projecting portion of said base, said web being provided with a longitudinally extending slot of varying depth, a cooperating rail having a vertical web which projects into said slot and conforms to the shape thereof, and a head on the web of the second rail that rests on a portion of said thickened web and butts against the end of the head of the rail first referred to; substantially as described.

2. A T-rail having a base that projects from one end of said rail, a thickened vertical web on the projecting portion of said base and provided with a longitudinally extending slot of varying depth and inclined contact faces 7 and 7<sup>a</sup>, a cooperating rail having a vertical web which projects into said slot, said web being provided with

coöperating inclined contact faces, and a head on the web of the second rail resting on a portion of said thickened web and provided with an inclined end face which butts  
5 against an inclined end face on the head of the rail first referred to; substantially as described.

In testimony whereof, we hereunto affix

our signatures, in the presence of two witnesses, this 23rd day of April, 1908.

JOSEPH F. SCHONLAU.  
GEORGE R. HEINRICH.

Witnesses:

WELLS L. CHURCH,  
GEORGE BAKEWELL.