

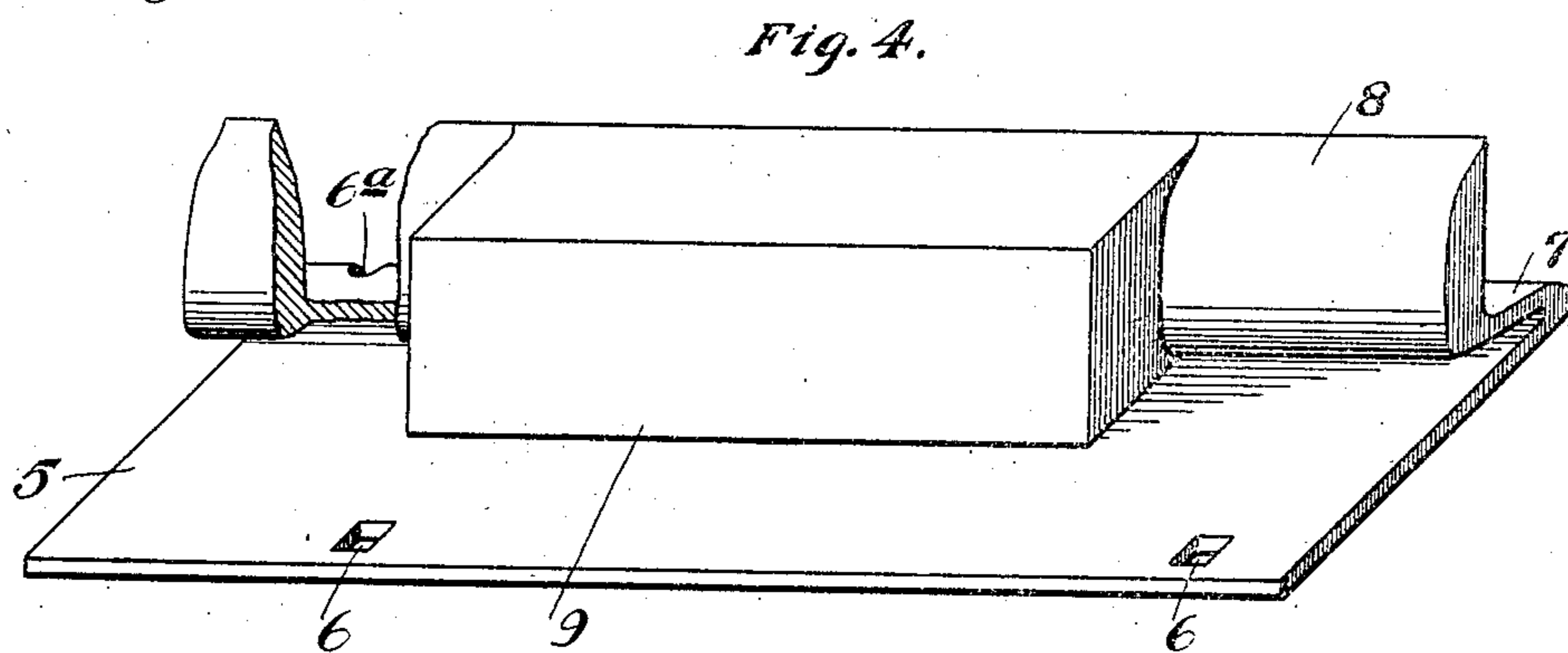
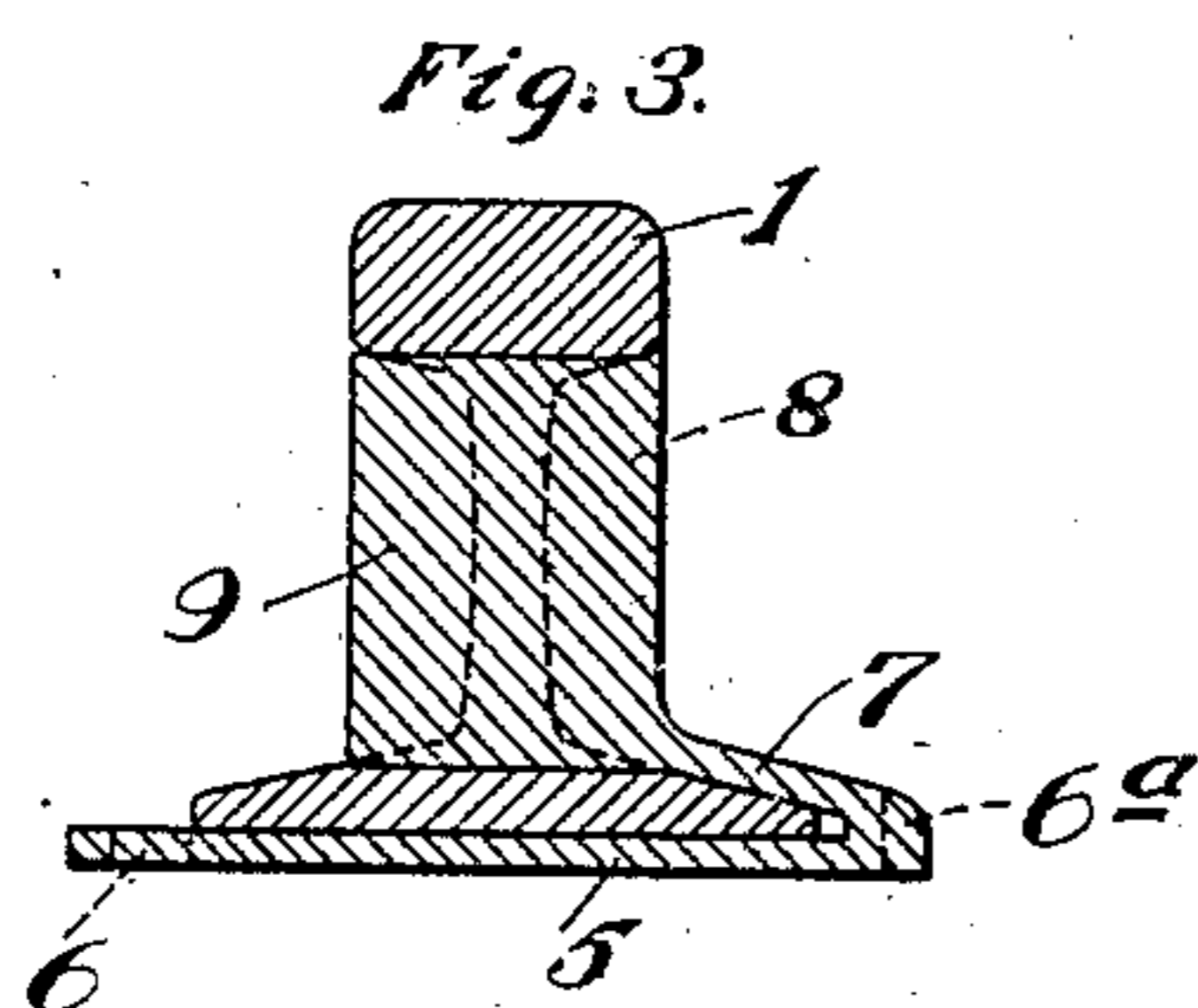
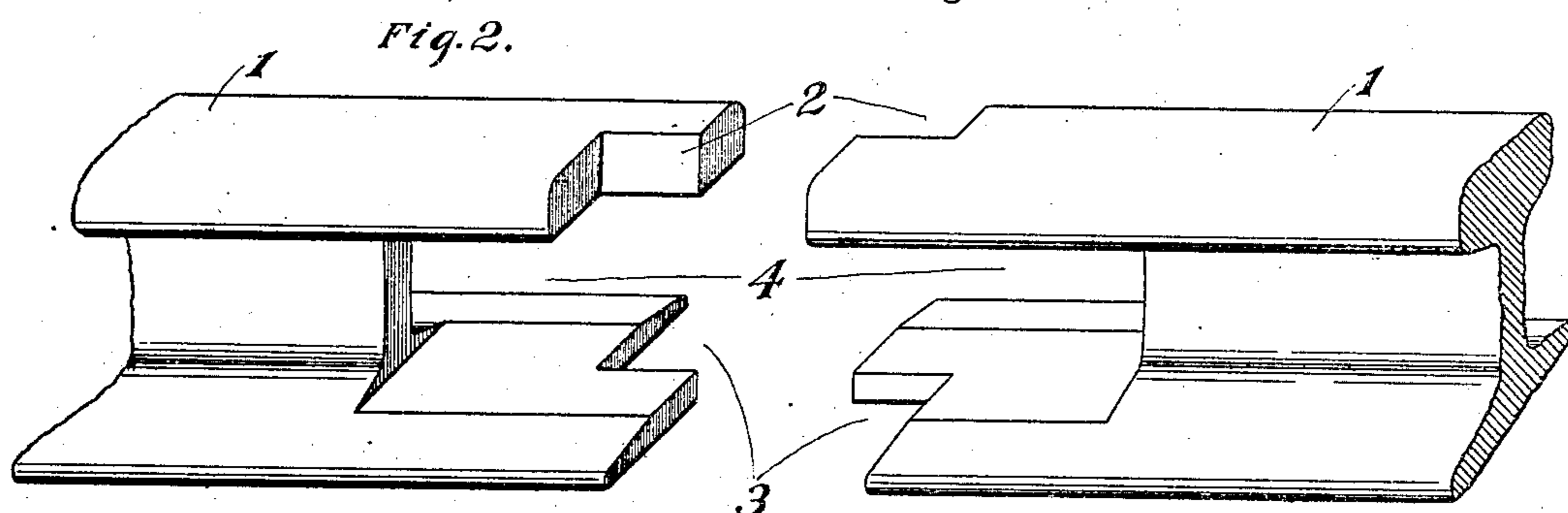
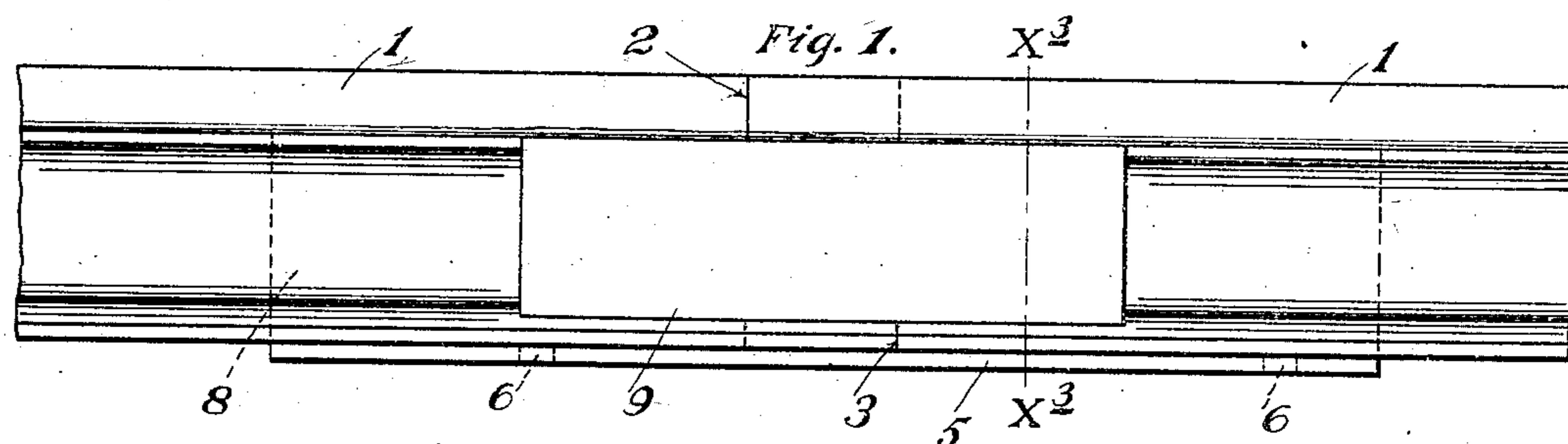
No. 894,202.

PATENTED JULY 28, 1908.

O. P. HANSON.

RAIL JOINT.

APPLICATION FILED MAR. 20, 1908.



Witnesses:

W. H. Souba.

Harry Opsahl.

Inventor:

Oscar P. Hanson.

By his Attorneys.

William M. Muehl

UNITED STATES PATENT OFFICE.

OSCAR P. HANSON, OF MINNEAPOLIS, MINNESOTA.

RAIL-JOINT.

No. 894,202.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed March 20, 1908. Serial No. 422,339.

To all whom it may concern:

Be it known that I, OSCAR P. HANSON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an improved rail joint, and to this end it consists of the novel devices and combinations of devices hereinafter described and defined in the claim.

The invention is illustrated in the accompanying drawings wherein like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view in side elevation, illustrating the construction of the improved rail joint. Fig. 2 is a perspective view of the abutting ends of the alined rails shown in Fig. 1, said rails being separated. Fig. 3 is a transverse vertical section taken on the line $x^3 x^3$ of Fig. 1; and Fig. 4 is a perspective view of the saddle plate and so-called joint block.

The numeral 1 indicates two alined rails, the ends of which abut. The abutting ends of the tread flanges are rabbeted as indicated at 2, and the abutting ends of the base flanges are rabbeted as indicated at 3, to form lap joints. It will be noted that the lap joint in the tread flanges is reversely formed from the lap joint in the base flanges, thus holding the abutting ends of the rails 1 against lateral movements with respect to each other. The vertical flanges of the rails 1, adjacent to the lap joints 2 and 3, are cut away to afford a seat 4, the purpose of which will presently appear. The base flanges of the rails 1 bear directly upon a saddle plate 5 that rests upon adjacent ties, not shown. Said saddle plate 5 is provided with suitable openings 6 and notches 6^a through which spikes may be passed for the

purpose of securing said saddle plate 5 to the ties. The saddle plate 5 is formed at one side with an upturned and inwardly extended web or flange 7 that engages the upper surfaces of the base flanges of the rails 1, which flange is provided with a vertical extension 8 that constitutes a fish plate of the rail joint. This fish plate 8, at its upper edge, bears against the under surfaces of the tread flanges of the rails 1 and closely engages the vertical webs of the said rails. A joint block 9 is secured to the inside of the intermediate portion of the fish plate 8 and is of such size as to completely fill the seat 4, thereby securing the abutting ends of the rails 1 against vertical movement in respect to each other and forming a support for the abutting and overlapping ends of the tread flanges of the rails 1. The saddle plate 5, flange 7, fish plate 8 and joint block 9 are preferably cast integral one with the other.

A rail joint constructed in accordance with my invention securely holds the abutting ends of the rails against lateral and vertical movements with respect to each other without the use of bolts.

The device described, while simple and of small cost, is efficient for the purpose had in view.

What I claim is:—

In a rail joint, the combination with alined rails, the abutting ends of which are rabbeted to form lap joints in the tread flanges and base flanges of said rails, and a seat formed by cutting away the vertical webs of said abutting ends, of a saddle plate underlying the abutting ends of said rails and having a fish plate connected thereto by a flange, and a joint block secured to said fish plate and adapted to fit within said seat, substantially as described.

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

OSCAR P. HANSON.

Witnesses:

H. D. KILGORE,
M. E. RONEY.