

No. 804,074.

PATENTED NOV. 7, 1905.

G. J. WALSH.
RAIL JOINT.

APPLICATION FILED MAR. 7, 1905.

Fig. 1.

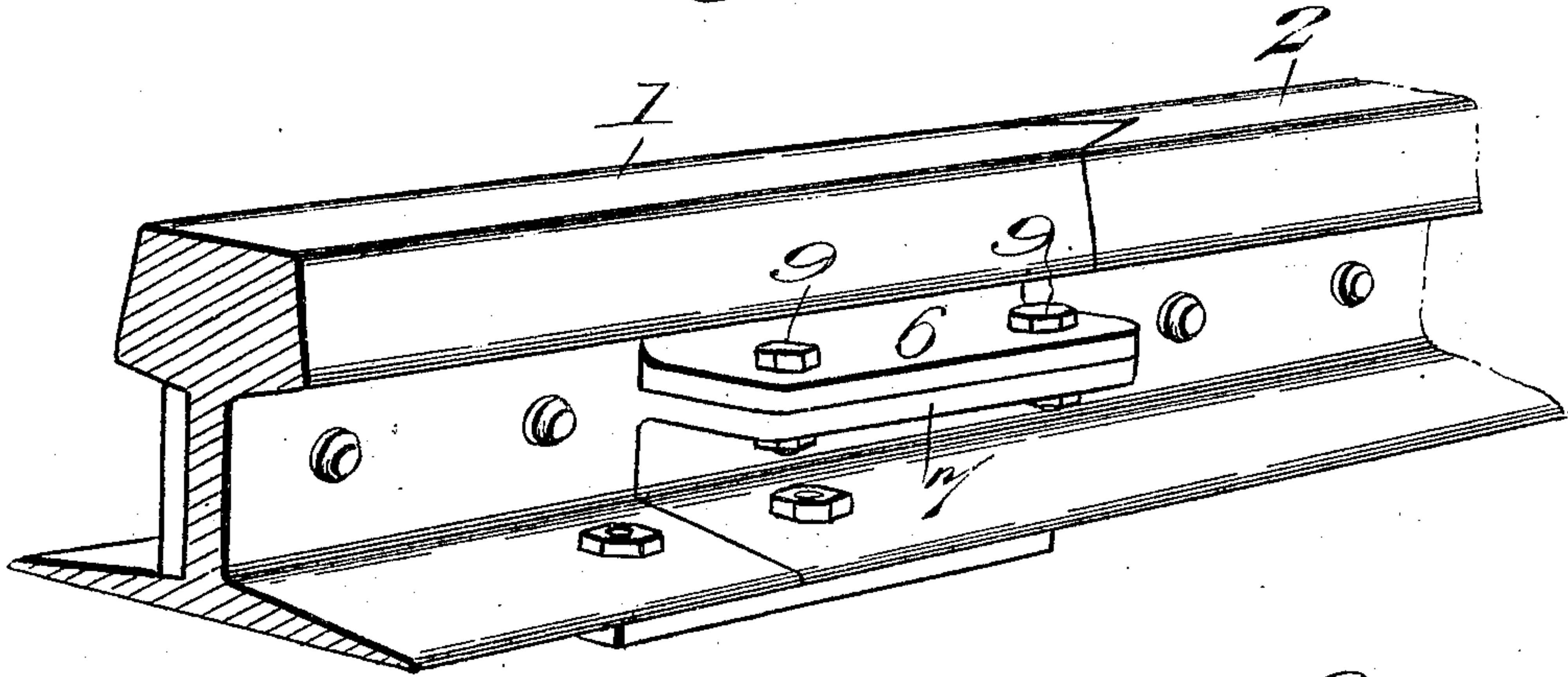


Fig. 2.

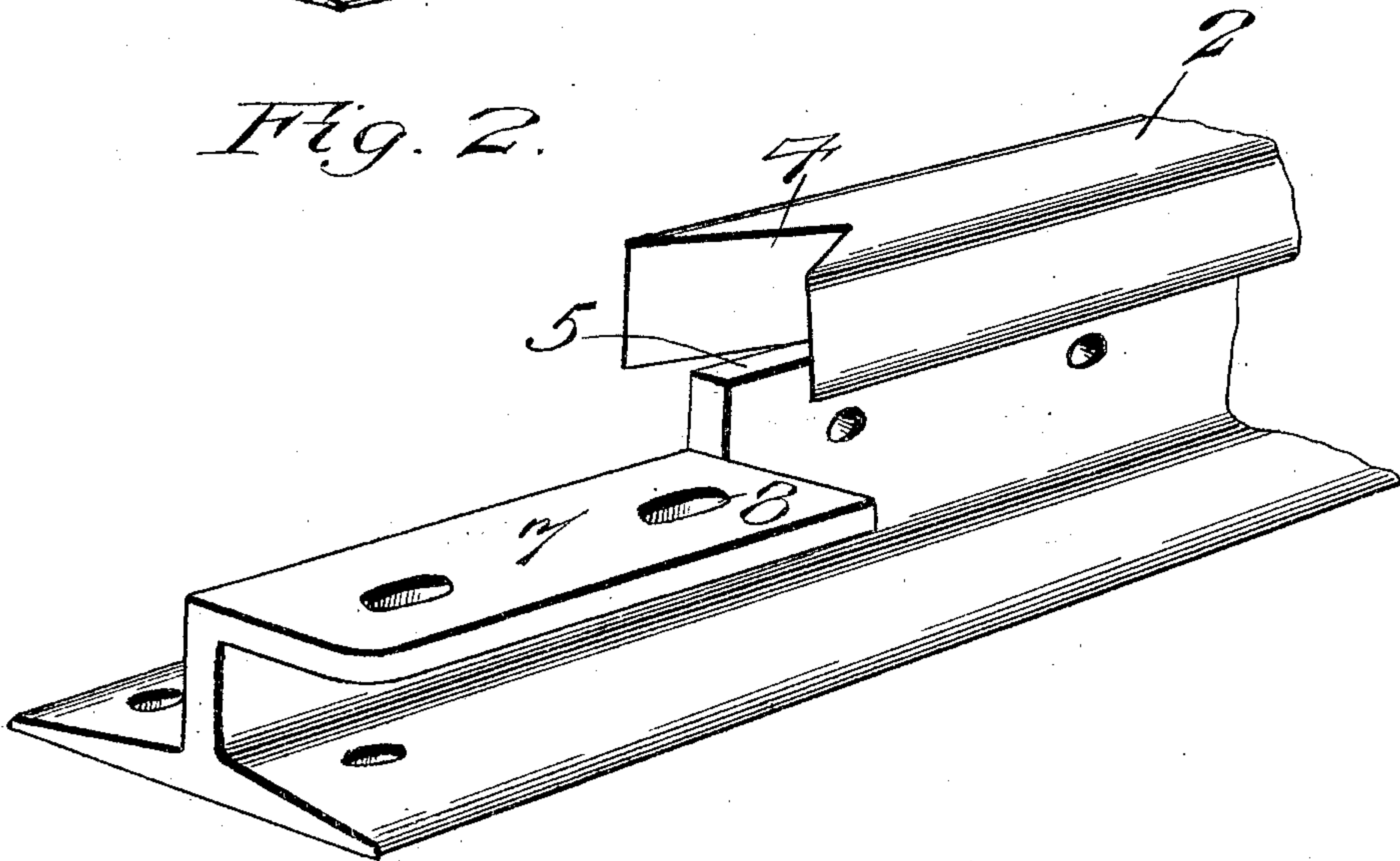
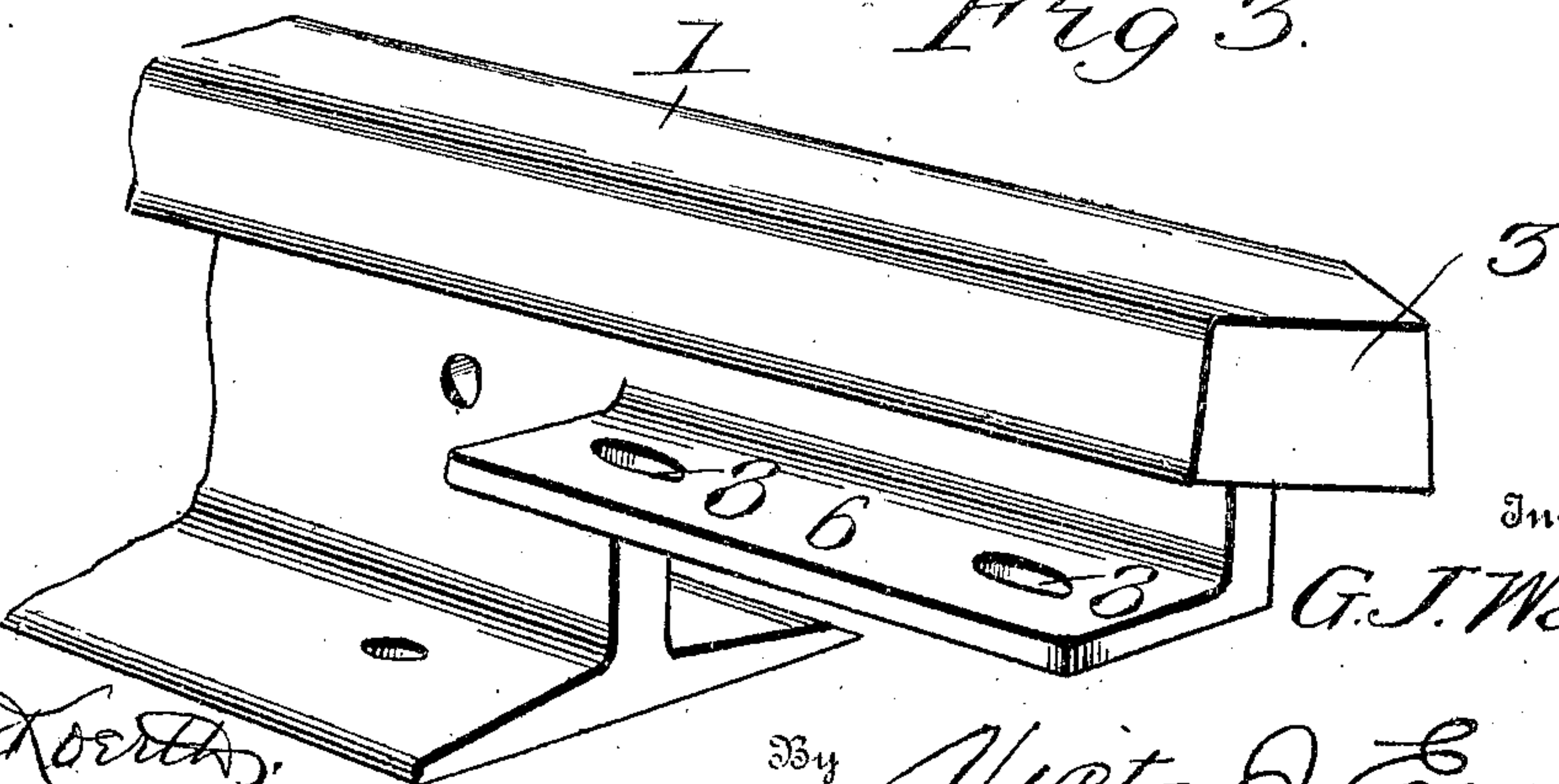


Fig 3.



Witnesses

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RAIL-JOINT.

No. 804,074.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE J. WALSH, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to improvements in rail-joints, and aims to provide a joint which dispenses with the use of fish-plates and obviates the objections incident thereto and which provides a construction which prevents depression of the rail ends and effectually braces the same against both vertical and lateral strain.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a rail-joint embodying the invention. Fig. 2 is a perspective view of one member of the joint, and Fig. 3 is a similar view of the other member of the joint.

The joint comprises the members 1 and 2, which represent the ends of adjacent railroad-rails.

The rails 1 and 2 are of ordinary construction, with the exception of the joint parts, and the member 1 is provided at its end with a tongue 3, constituting an extension of the head of the rail. The tongue 3 is preferably V-shaped and is adapted to fit within a correspondingly-shaped recess 4, formed in the connecting end of the head of the member 2. By this manner of connecting the two members the heads are joined in such a way as to support them effectually against lateral movement. The web of the member 2 extends outwardly to the plane of the outer end walls of the recess 4, thus forming a seat 5, on which the tongue 3 is adapted to rest.

The member 1 has its web reduced in depth at its connecting end and bent laterally to provide a joint-flange 6, and the member 2 is provided with a corresponding joint-flange 7. These flanges are formed with openings 8 for the passage of the usual connecting-bolt 9. It will be observed that the flange 6 of the member 1 constitutes a lateral continuation of the upper half of its web, while the flange 7 of the member 2 constitutes a lateral continuation of the lower half of its web, the flanges thus constituting, in effect, laterally-offset por-

tions formed by the removed sections of the webs at the joint parts. When the members 1 and 2 are fitted together, the flanges 6 and 7 lie in meeting contact, the flange 6 resting squarely upon the flange 7, so that when the fastening-bolts 9 are applied the flanges and bolts will hold the members from endwise movement, except to the slight extent required for expansion and contraction, while they will at the same time effectually support the joined ends and supplement the tongue-and-groove connections to hold the members against depression and brace them against both vertical and lateral strain.

It will thus be seen that my invention provides a joint which is simple, strong, and durable and which dispenses with the use of fish-plates and other like fastenings, which become loosened by vibration and permit the rail ends to have independent play and to separate when excessive strain falls thereon.

Having thus described my invention, what is claimed as new is—

1. In a rail-joint, members having partially cut-away interfitting portions provided with lateral fastening-flanges, and means for connecting said flanges to join the interfitting portions together.

2. In a rail-joint, a member having its upper portion cut away and provided with a flange extending laterally from the base portion of its web, a second member having its lower portion cut away and provided with a flange extending laterally from the upper portion of its web, and means for connecting said flanges.

3. In a rail-joint, a member having a recess and a laterally-projecting flange, a second member having a tongue to fit within said recess and a cooperating laterally-projecting flange, and means for connecting said flanges.

4. In a rail-joint, a rail having its end partially cut away and provided with a laterally-extending flange.

5. In a rail-joint, members having interfitting halved ends provided with horizontal lateral fastening-flanges, and means for connecting said flanges to join the rail ends together.

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

GEORGE J. WALSH.

Witnesses:

W. H. CLARKE,
H. G. ROSE.