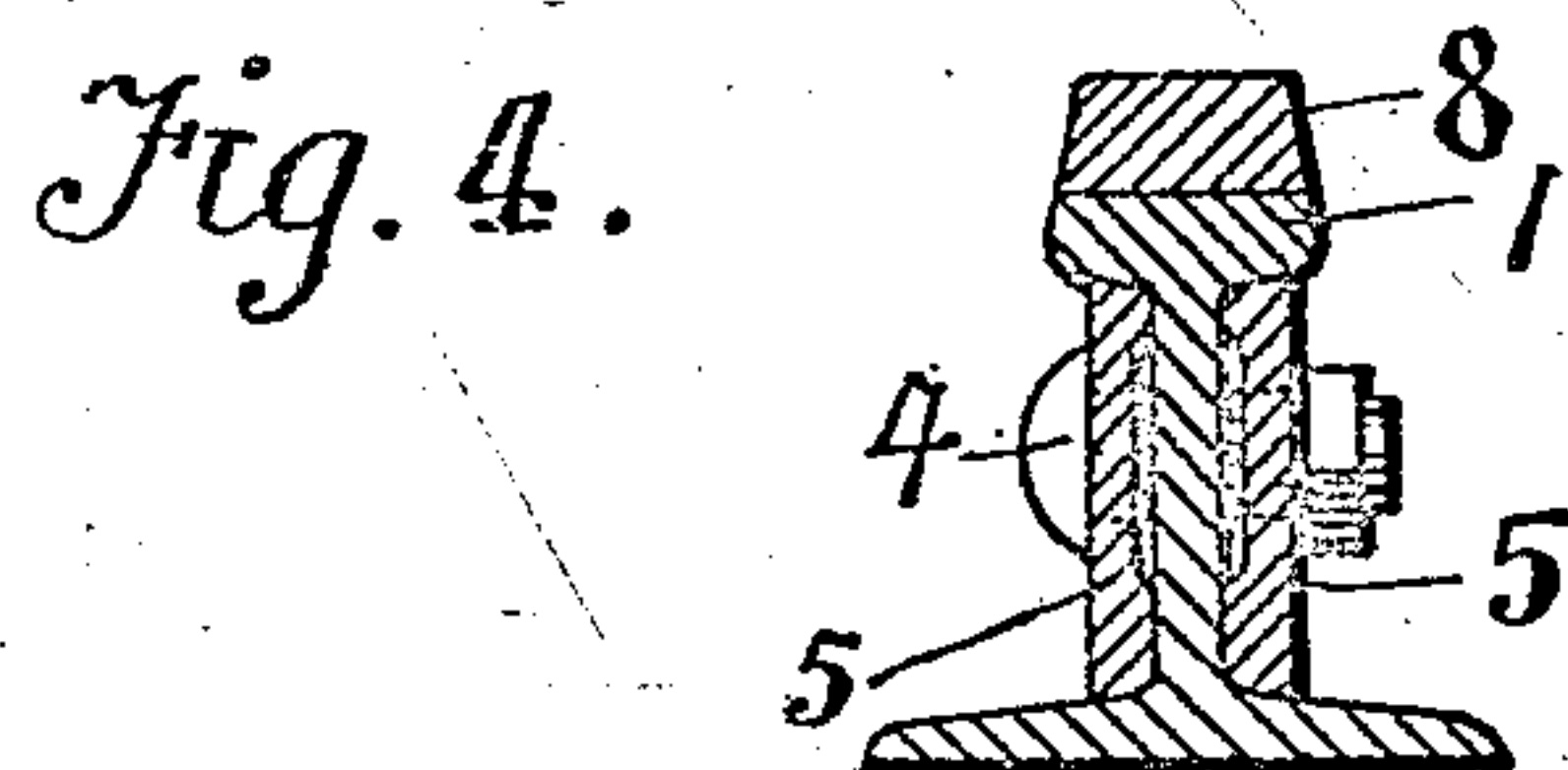
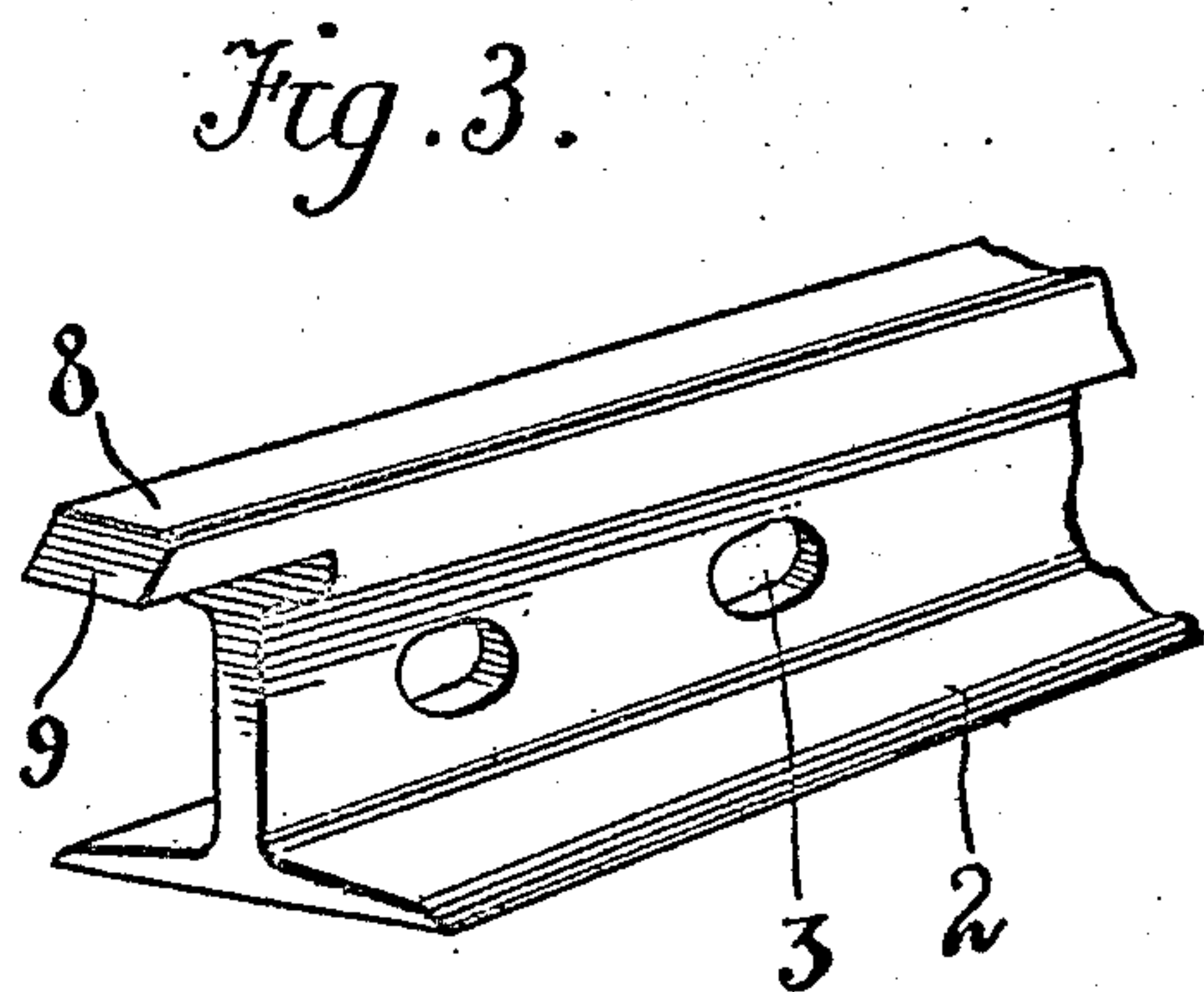
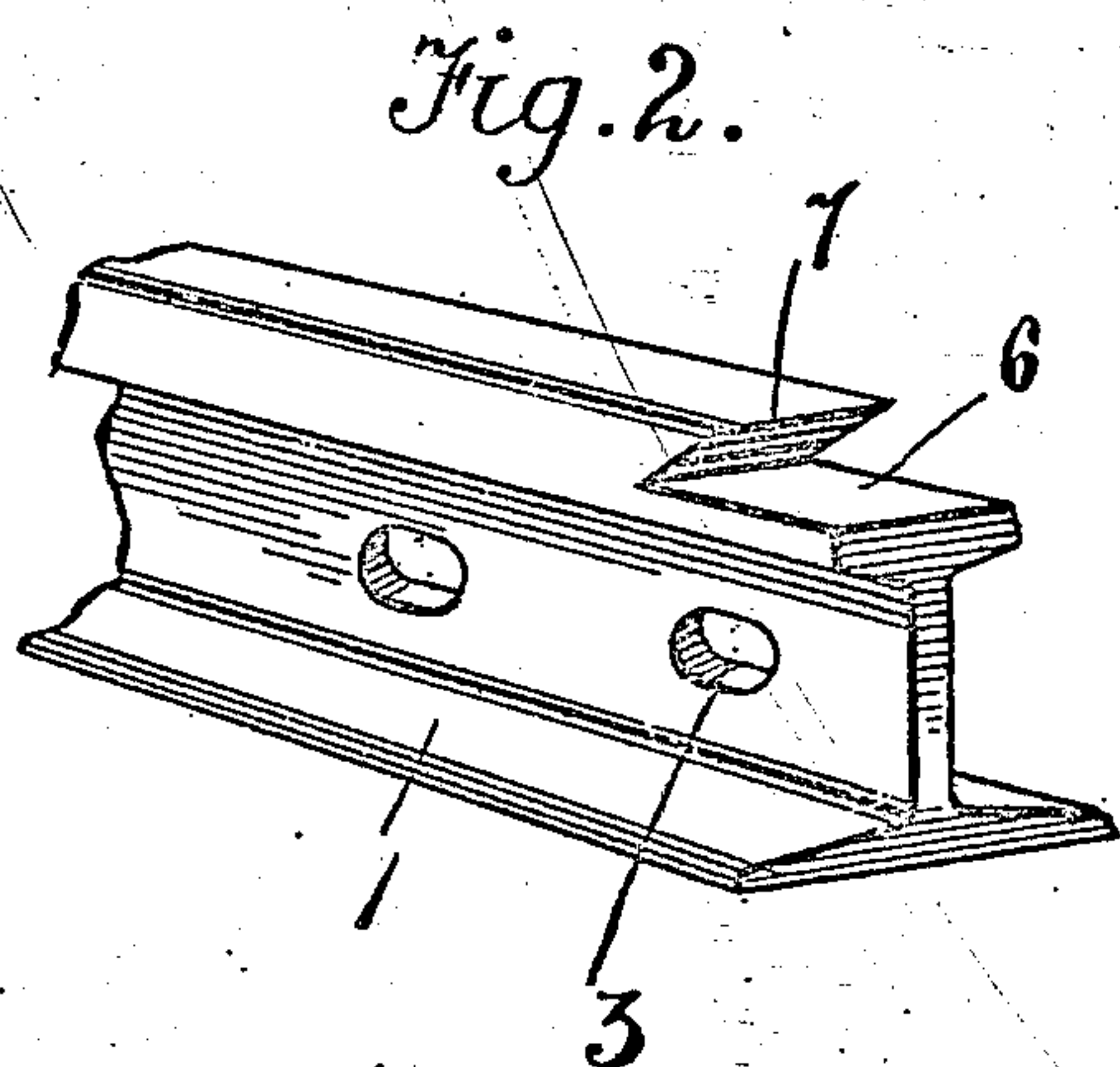
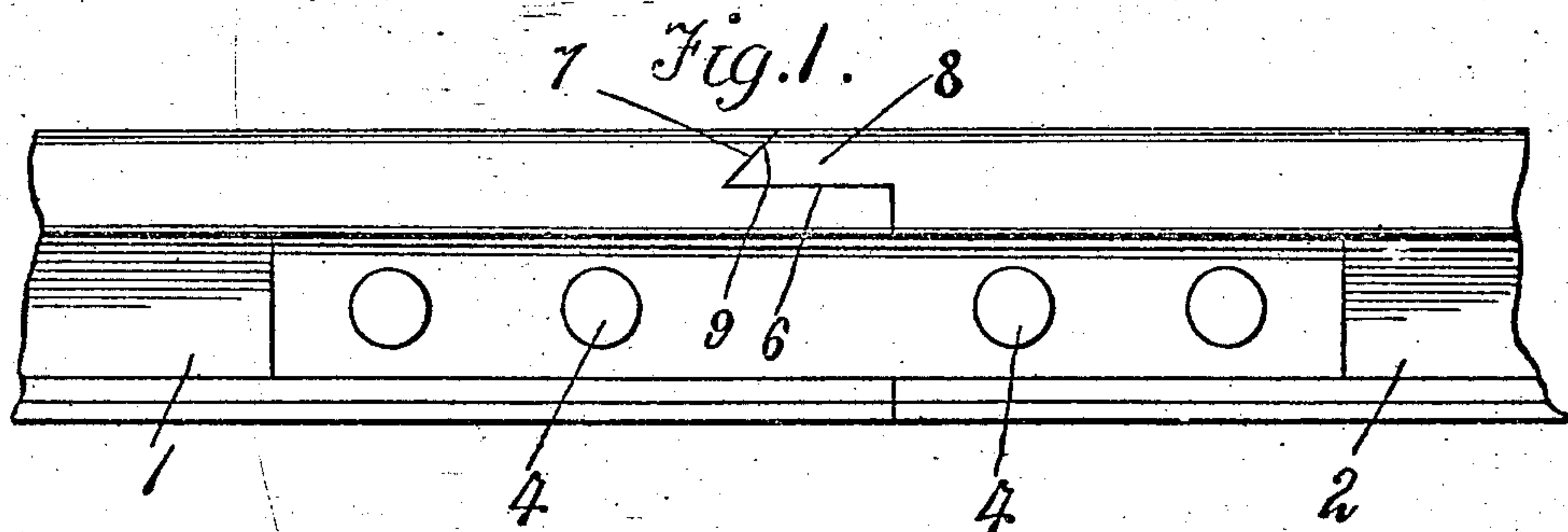


T. OLSEN.
RAIL JOINT.
APPLICATION FILED APR. 17, 1907.

898,917.

Patented Sept. 15, 1908.



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Witnesses

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TOMMIE OLSEN, OF IRON RIVER, MICHIGAN.

RAIL-JOINT.

No. 898,917.

Specification of Letters Patent.

Patented Sept. 15, 1908.

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To all whom it may concern:

Be it known that I, TOMMIE OLSEN, a citizen of the United States, residing at Iron River, in the county of Iron and State of Michigan, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to improvements in rail joints, the object of the invention being to provide a novel construction of the meeting ends of rails, whereby a smooth joint will be provided and hammering upon and depression of the meeting ends prevented to a material extent, thus prolonging the life of the rails and increasing the strength of the joint.

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

Figure 1 is a side elevation of two united rails embodying my invention. Figs. 2 and 3 are perspective views of the meeting ends of the rails. Fig. 4 is a cross section through the joint.

Referring to the drawing, 1 and 2 designate railway rails of ordinary construction, except as to the novel coupling features at the meeting ends, hereinafter described, the webs of the rails being provided with the usual holes 3 for the passage of bolts 4 employed in conjunction with the usual fish plates 5 to couple the ends of the rails together.

In accordance with my invention, the end of one rail, as the rail 1, has its head portion cut away to form a supporting shelf 6 extending inwardly a suitable distance from the end of the rail and terminating in a beveled or undercut shoulder 7, formed by the adjacent end of the upper portion of the head or tread of the rail. The other rail 2 is formed at its adjacent end with a tongue 8 extending longitudinally from its head, said tongue being of sufficient depth to fit over upon the shelf 6 and to bring the tread surface of its head into alinement with the tread surface of the head of the rail 1. The outer end of the tongue is formed with a beveled face 9 to bear against the beveled surface of the shoulder 7.

In the operation of assembling the rails, the ends of the rails are brought together in the usual manner, and the tongue 8 projects

over upon the shelf 6 and rests squarely thereon, thereby reinforcing the rail beyond the joint and effectually preventing depression thereof, the beveled end 9 of the tongue fitting against the beveled wall 7 of the shoulder and preventing any tendency of the rail ends to upward movement. It will be seen from this construction that the coupling portions will prevent any up or down movement of the meeting ends, thus avoiding the hammering and depression and wear upon the rails common to those of ordinary construction, and providing a joint of maximum strength, whereby the life of the rails will be prolonged to a material extent. Both the shelf and tongue are coextensive in width with the heads of the rails, thus allowing the rails to be manufactured at a minimum amount of trouble and expense.

Having thus described the invention, what is claimed as new, is:—

1. A rail having an end portion of its head reduced to form an undercut shoulder and a supporting shelf extending longitudinally from said shoulder and having a plane horizontal face, said shelf and shoulder being coextensive in width with the head so as to extend fully to the lateral faces thereof.

2. In a rail joint, a rail section having an end portion of its head reduced to form an undercut shoulder and a supporting shelf extending longitudinally from said shoulder to the end of the rail and having a plane horizontal face, said shelf and shoulder being coextensive in width with the head so as to extend transversely fully to the lateral faces thereof, and a cooperating rail section having an end portion of its head reduced to form a tongue constituting a longitudinal extension from the upper portion of the head, said tongue having a plane horizontal lower bearing face to rest upon said shelf and a beveled outer end inclined outwardly and downwardly to said face to engage the said undercut shoulder.

3. In a rail joint, a rail section having the upper portion of its head transversely cut away for a distance from its end to form a shelf having a plane or unbrokenly-smooth face throughout its length and extending inwardly from the end and terminating in an undercut shoulder, said shelf being coextensive in width with the head, and extending

to the lateral faces thereof, and a cooperating
rail section provided with a tongue extending
from and coextensive in width with its head
and having a plane or smooth bottom face to
5 slidably engage and rest upon said shelf,
whereby the rail sections may be engaged
and disengaged by a relative sliding move-
ment in their normal plane, said tongue being

provided with a beveled end to engage said
undercut shoulder.

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

TOMMIE OLSEN.

Witnesses:

ANTONE OLSEN,
A. W. TAKOCK.