

No. 685,276.

Patented Oct. 29, 1901.

W. H. HAMILTON.
FISH PLATE AND RAIL CHAIR.

(Application filed June 4, 1901.)

(No Model.)

Fig. 1.

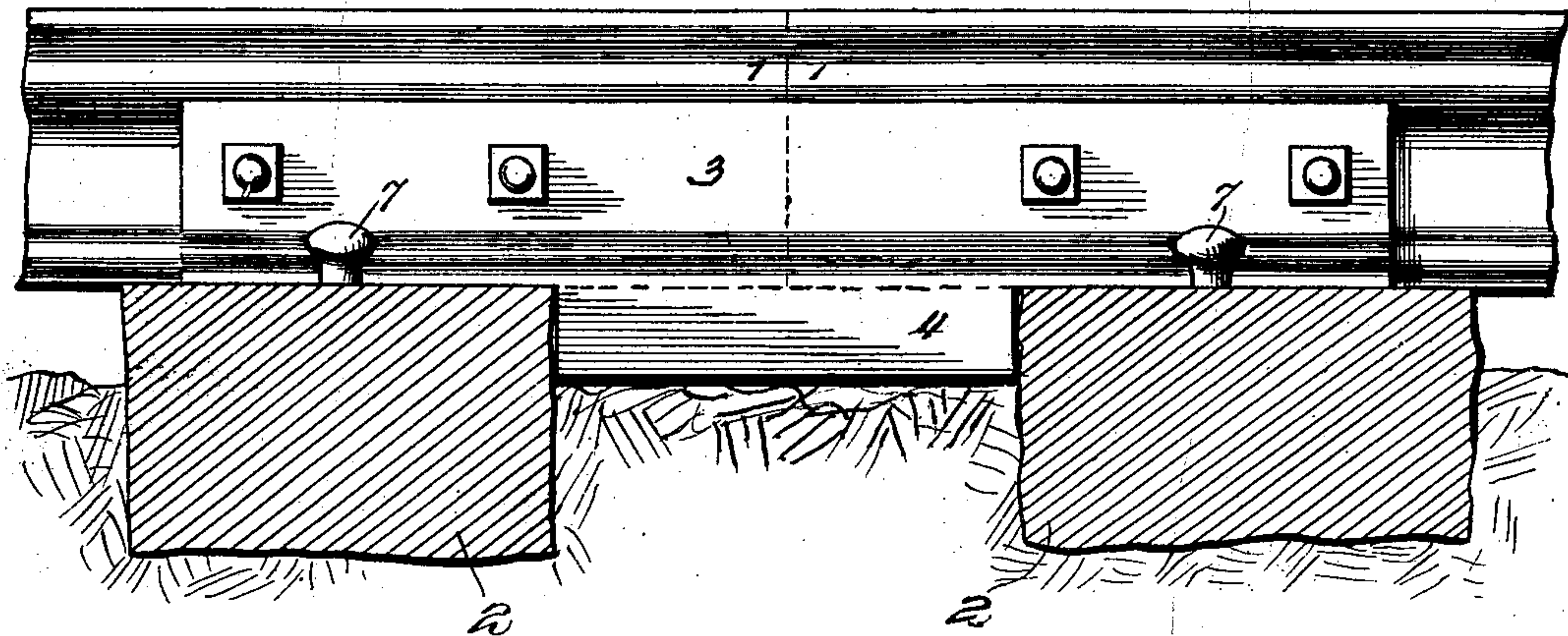


Fig. 2.

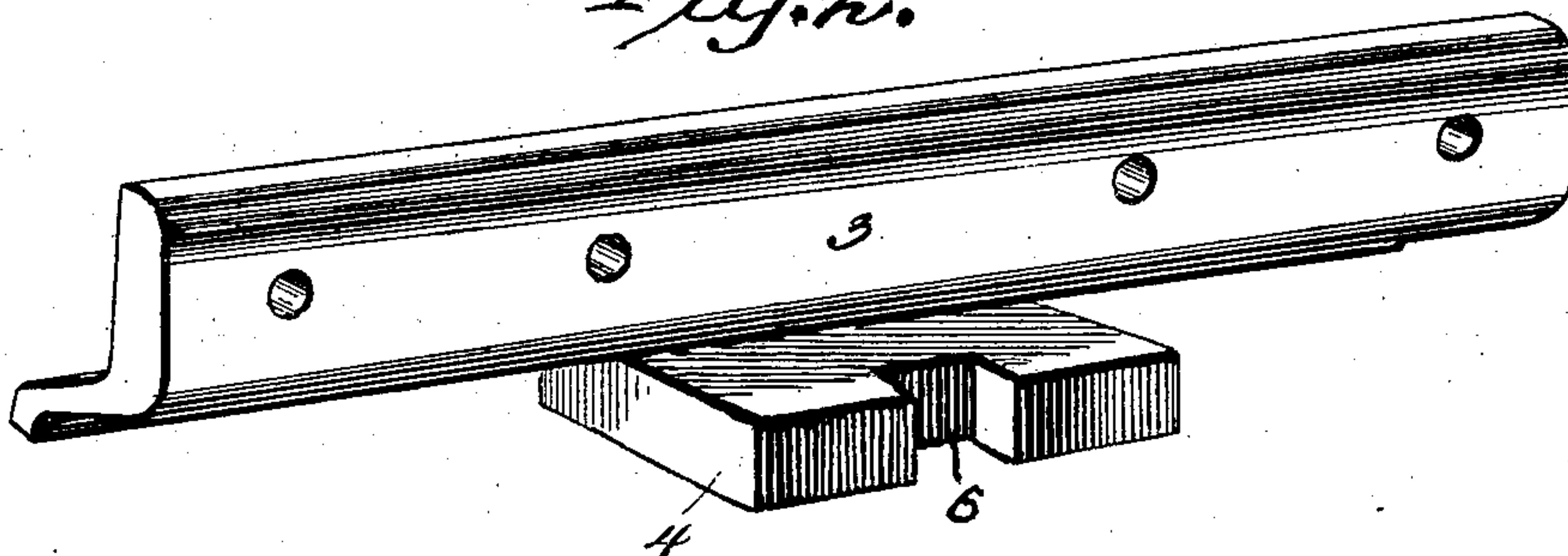
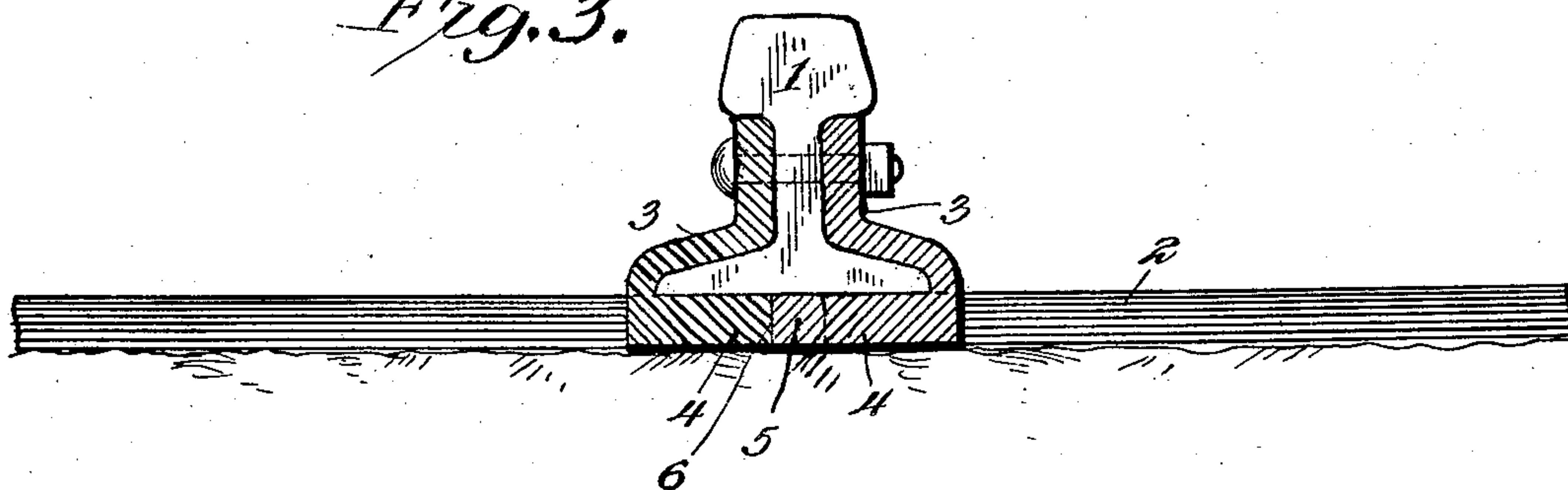


Fig. 3.



Witnesses
Edgar M. Lyon
Alfred J. Briggs.

Inventor
William H. Hamilton
by Frank S. Appelman
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM H. HAMILTON, OF LEXINGTON, KENTUCKY.

FISH-PLATE AND RAIL-CHAIR.

SPECIFICATION forming part of Letters Patent No. 685,276, dated October 29, 1901.

Application filed June 4, 1901. Serial No. 63,136. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HAMILTON, a citizen of the United States of America, residing at Lexington, in the county of Fayette and State of Kentucky, have invented certain new and useful Improvements in Fish-Plates and Rail-Chairs, of which the following is a specification:

This invention relates to railways, and particularly to fish-plates and chairs.

The object of the invention is to produce a novel and combined fish-plate and rail-chair whereby the abutting ends of rails may be secured together and anchored to the cross-ties in such manner as to prevent movement of either the cross-ties or the fish-plate, the said ties being held against displacement by the securing-spikes and by novel means on the base of the chair-sections.

Furthermore, the object of the invention is to produce a device for fastening the abutting ends of rails which will tend to hold said rails in alinement and in a vertical position even though the spikes are removed or become loose.

Furthermore, the object of the invention is to produce a combined fish-plate and rail-joint which in combination with the cross-ties will possess advantages in points of simplicity, efficiency, durability, and inexpensive structure.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a side view of a section of a track, showing the combined fish-plate and chair in relation to the cross-ties. Fig. 2 is a perspective view of one section of the fish-plate and chair; and Fig. 3 is a cross-section centrally of the fish-plate and chair, showing the rail in place.

In the drawings, 1 denotes the abutting ends of the rail, and 2 the ties, which may be of any ordinary construction.

The fish-plates 3 have their inner surfaces shaped to the contour of the web and base-flange of the rail, with their upper edges in contact with the under surface of the head of the rail.

The lower edges of the fish-plates extend down to the plane of the base and rest on the ties 2. By this arrangement it will be seen that in addition to the support which is afforded by the bases of the rails the fish-plates extending from the ties to the under surface of the heads afford an additional support on each side, so that turning of the rail is obviated.

Centrally of the fish-plates and approximately one-third their length are downwardly and inwardly extending lugs 4, having an interlocking tongue and groove 5 and 6, respectively. From an inspection of the drawings it will be observed that as the lower surfaces of the fish-plates are supported on and anchored to the ties the lugs 4 depend between the ties, with the ballast compactly placed thereunder in order to support the central section of the fish-plates. It will be observed also that the relation of the ties to the depending lugs is such that the ties abut the ends of the lugs, so that when the fish-plates are secured by the spikes 7 the rails are held against movement both transversely and longitudinally.

It is noted that various changes in the proportions and details of construction may be resorted to for successfully carrying the invention into practice without departing from the scope of the invention.

Having fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

In a device of the character described, the combination with the meeting ends of the rails, of two fish-plates, each extending from the under surface of the head of each rail, to the ties, said plates being supported on the ties, a downwardly and inwardly extending

lug on each plate, said lugs being interlock-
ingly connected, under the meeting ends of
the rails, bolts for attaching the fish-plates
to the rails, the said lugs lying between and
5 having their ends in engagement with the
ties on which the fish-plates are supported,
as and for the purpose described.

In testimony whereof I affix my signature,
in the presence of two witnesses, this 28th day
of May, 1901.

WILLIAM H. HAMILTON.

Witnesses:

MARY BELLE MITCHELL,
E. L. HUTCHINSON.