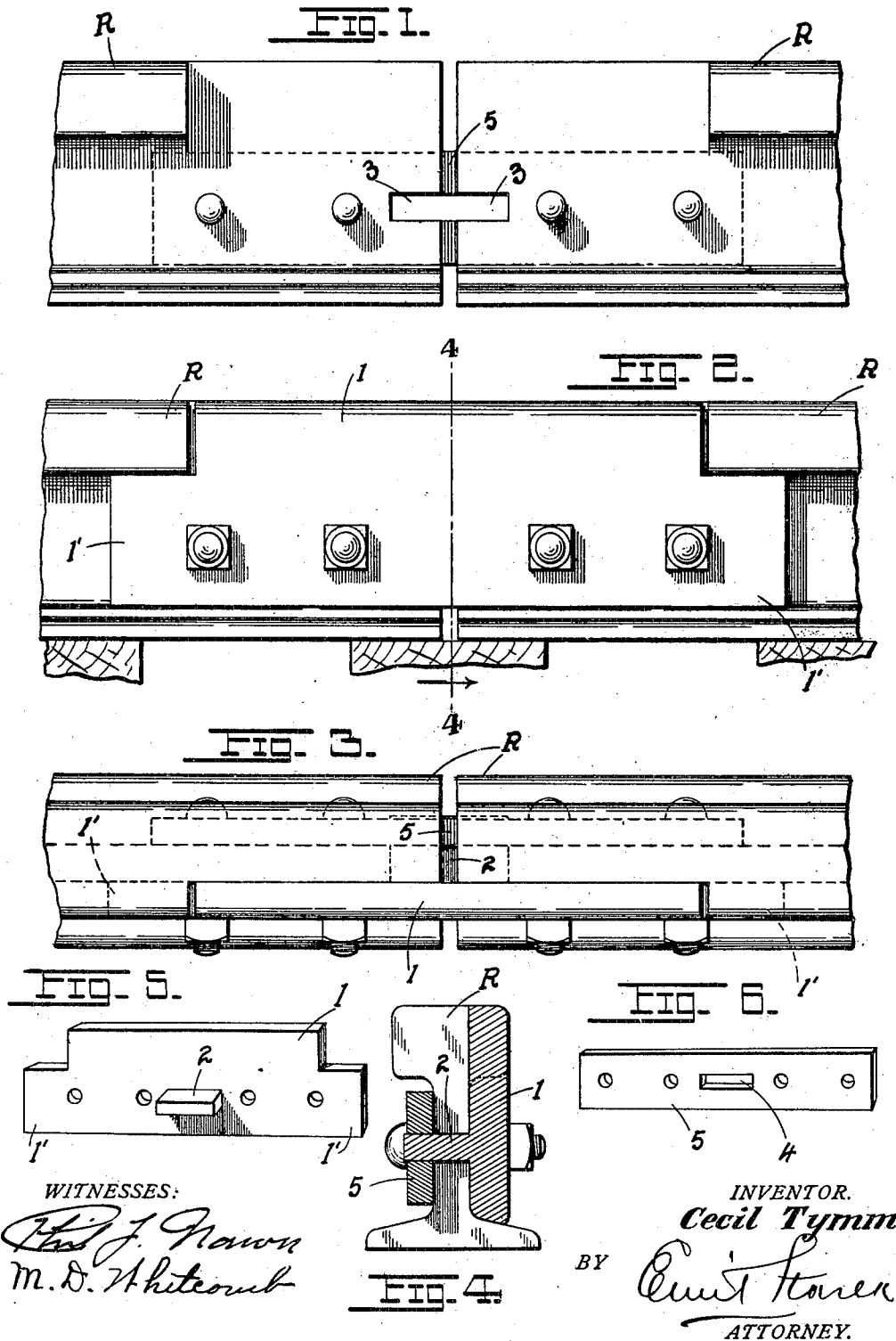


No. 838,288.

PATENTED DEC. 11, 1906.

C. TYMM.
RAIL JOINT.
APPLICATION FILED APR. 21, 1906.



UNITED STATES PATENT OFFICE.

CECIL TYMM, OF ST. LOUIS, MISSOURI, ASSIGNOR OF FORTY-NINE ONE-HUNDREDTHS TO LUDWIG F. MARZ AND WILLIAM D. PATTERSON, OF ST. LOUIS, MISSOURI.

RAIL-JOINT.

No. 838,288.

Specification of Letters Patent.

Patented Dec. 11, 1906.

Application filed April 21, 1906. Serial No. 313,065.

To all whom it may concern:

Be it known that I, CECIL TYMM, a subject of the King of Great Britain, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Rail-Joints, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in rail-joints; and it consists in the novel details of construction more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is an elevation of the meeting ends of two contiguous rails. Fig. 2 is a similar view with the fish-plates in position. Fig. 3 is a top plan of Fig. 2. Fig. 4 is a vertical cross-section on line 4 4 of Fig. 2. Fig. 5 is a perspective of the extended fish-plate, and Fig. 6 is a perspective of the opposite fish-plate.

The object of my invention is to construct a rail-joint which shall insure stiffness for the meeting ends of contiguous rails, one which shall insure a noiseless and continuous passage of the wheel over the rails, one which shall be simple, cheap, and durable and necessitate a minimum amount of repair, and one possessing further and other advantages better apparent from a detailed description of the invention, which is as follows:

Referring to the drawings, R R represent two contiguous rails of any approved design, each having removed a short section of the tread thereof at their end and on the same side of their web portions, the joint between the rails being spanned by a fish-plate 1, bearing against the web and extending upward to the plane of the upper surfaces of the treads, the said plate 1 terminating in reduced extensions or wings 1' 1', which pass beyond the excised portions of the tread and which serve to support the tread at points contiguous to such excised portion. The inner face of the fish-plate 1 is provided with a laterally-projecting tongue 2, which passes through the opposite recesses 3, formed in the webs of the contiguous rails, said tongue projecting beyond the opposite faces of the webs and being received by an oblong opening 4, formed in the opposite fish-plate 5. The fish-plate 5 is of ordinary construction and only extends the depth of the rail-web,

being confined between the tread and the basal flange of the rail, Fig. 4. The upper edge of the fish-plate 1 spanning as it does the joint between the rails forms a tread for the wheel as the latter passes over the joint, and since the joints between upper edges of the fish-plate 1 and the tread of the rail beyond the excised portions do not extend entirely across the rail the tread of the wheel has always a supporting-surface over which it may pass, and hence any thumping and noise incident thereto are entirely eliminated. The tongue 2 forms a supporting member for the ends of the rails at a point intermediate the tread and flange and resists any tendency for the rails to depress under the load they are designed to carry. The tongue, furthermore, entering the fish-plate 5 locks the parts securely together, insuring a rigid joint, and deterioration of the parts is reduced to a minimum. The fish-plates once in place are bolted to the rails in the usual manner, as fully illustrated on the drawings.

Having described my invention, what I claim is—

In combination with contiguous rails having tread portions removed a suitable distance from the ends of the rails on the same side of the webs thereof, and having opposite recesses formed in the ends of the web portions, a fish-plate inserted in the place left by the removal of said portions of the tread, extensions formed with the fish-plate and passing beneath the treads contiguous to the removed portions, the upper edge of the fish-plate occupying a plane even with the rail-treads, a tongue projecting laterally from the inner face of the fish-plate and being received by the recesses of the web portions for the purpose of locking the rails and frictionally holding the said plate to the rails, a second fish-plate disposed on the opposite faces of the rail-webs between the treads and flanges thereof, and having an opening for the reception of the projecting end of the tongue leading from the first-mentioned fish-plate, and means for securing the several parts to the rails, substantially as set forth.

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

CECIL TYMM.

Witnesses:

EMIL STAREK,
MARY D. WHITCOMB.