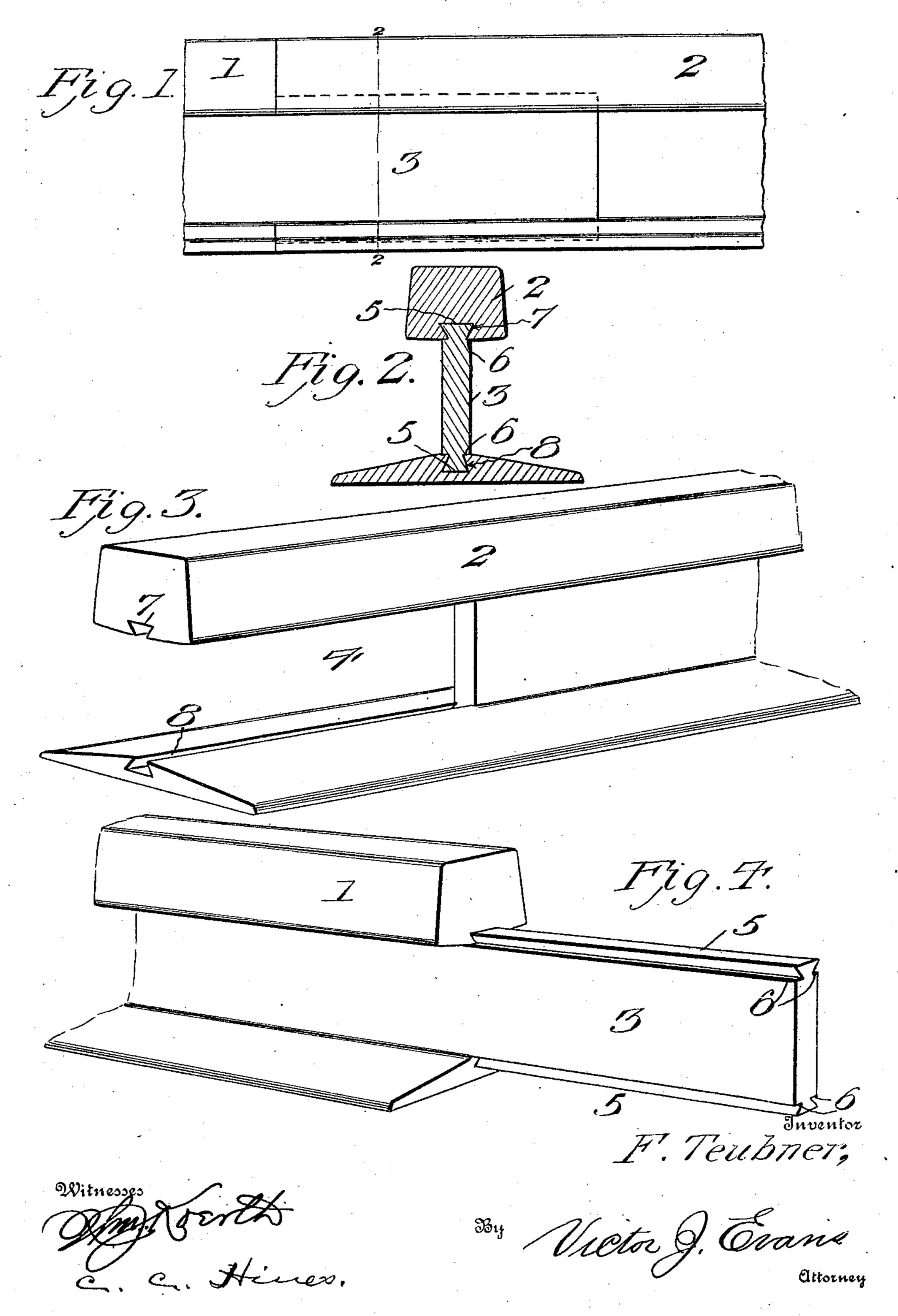
F. TEUBNER.

RAIL JOINT.

APPLICATION FILED JUNE 16, 1906.



UNITED STATES PATENT OFFICE.

FREDERICK TEUBNER, OF DALLAS, TEXAS.

RAIL-JOINT.

No. 840,970.

Specification of Letters Patent.

Patented Jan. 8, 1907.

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To all whom it may concern:

Be it known that I, FREDERICK TEUBNER, a citizen of the United States of America, residing at Dallas, in the county of Dallas | 5 and State of Texas, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints, the object of the invention being to provide sim-10 ple and efficient means for joining the meeting ends of rail-sections in such a manner as to firmly tie the rail-sections against relative movement in any direction under the strains falling thereon, except to the slight longi-15 tudinal extent required for expansion and contraction, and further to provide a joint which obviates the use of fish-plates, bolts, and other extraneous fastenings.

In the accompanying drawings, Figure 1 20 is an elevation of a joint constructed in accordance with my invention. Fig. 2 is a cross-section on line 2 2 of Fig. 1. Figs. 3 and 4 are perspective views of the rail-sec-

tions separated.

Referring to the drawings, 1 designates one of the rails, and 2 the adjoining rail. The end of the rail 1 is formed with a tongue 3, adapted to fit within a groove or slot 4, formed in the rail 2. The tongue 3 consti-30 tutes an extension from the web of the rail 1 and is substantially coextensive in height and thickness therewith and is provided at its upper and lower edges with dovetailed projections 5, at the inner ends of which are 35 formed bearing-shoulders 6, arranged at opposite sides thereof. The groove or slot 4 in the rail 2 is formed by cutting away the web of said rail for a distance from its end equivalent to the length of the tongue, and 40 providing the head and base of said rail with similar dovetailed longitudinal recesses 7 and 8. These recesses receive the dovetailed projections 5 on the tongue 3, the intermediate portion of the tongue fitting in 45 the slot or space 4, formed by cutting away the end portion of the web of the rail 2. By this construction of the rail-sections the tongue 3 extends across the joint and forms a practically continuous rail, the sections of 50 which are united in such a manner as to be

firmly secured against all relative movements except to the slight extent required for expansion and contraction, which may be secured by fitting the tongue loosely within the groove. The shoulders 6 of the tongue 55 bear, respectively, against the head and base of the rail-section 2 on opposite sides of the recesses therein, and accordingly produce a firmer support and connection and relieve the dovetailed projections 5 from strain.

It will be observed that the construction is such that the use of fish-plates, bolts, and other extraneous fastenings in order to secure a firm joint is obviated, the rails being securely connected and held against both 65 lateral and vertical movement under the weight of the cars passing over the joint.

Having thus described the invention, what

is claimed as new is—

In a rail-joint, the combination of a rail 70 having its web cut away inwardly from the end thereof to form a slot, leaving the base and head of the rail intact with their abutting ends in vertical alinement, the base and head being formed with dovetailed recesses 75 communicating with said slot and coextensive in length therewith, and an adjacent rail having the abutting portions of its base and head arranged in the same plane and its web provided with a tongue projecting for- 80 wardly therefrom to fit within said slot, said tongue being coextensive in length with the slot and provided at its upper and lower edges with dovetailed projections to engage said recesses, said tongue being formed with 85 lateral longitudinal shoulders on opposite sides of said projection to respectively bear against the under side of the head and upper side of the base of the slotted rail, the construction being such as to adapt the abutting 90 ends of the heads and bases of the rails to meet in the usual manner when said rails are coupled together.

In testimony whereof I affix my signature

in presence of two witnesses.

FREDERICK TEUBNER.

Witnesses:

JOHN PROCTOR, FERDINAND SIEBENHAUSEN.