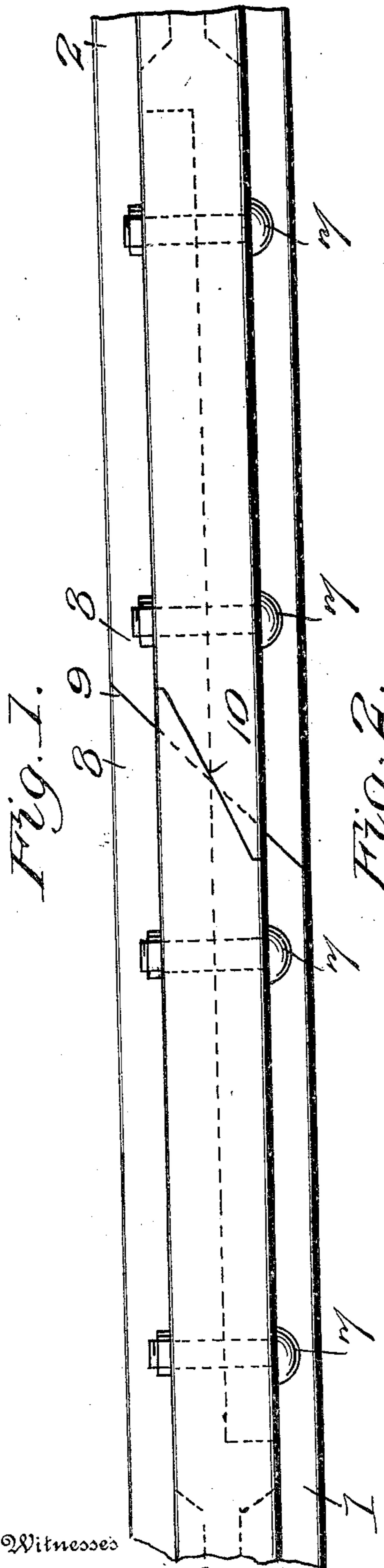


No. 804,768.

PATENTED NOV. 14, 1905.

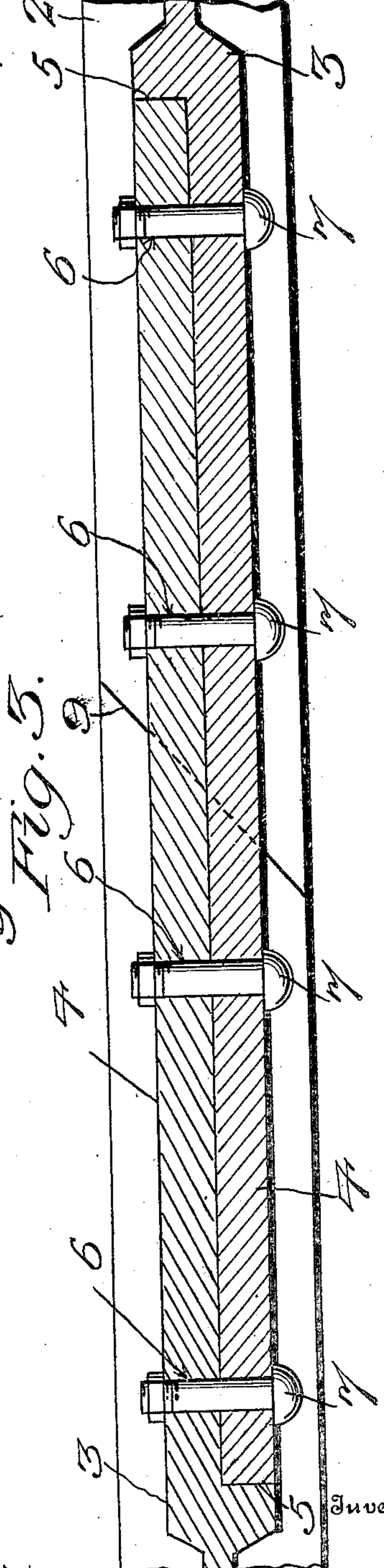
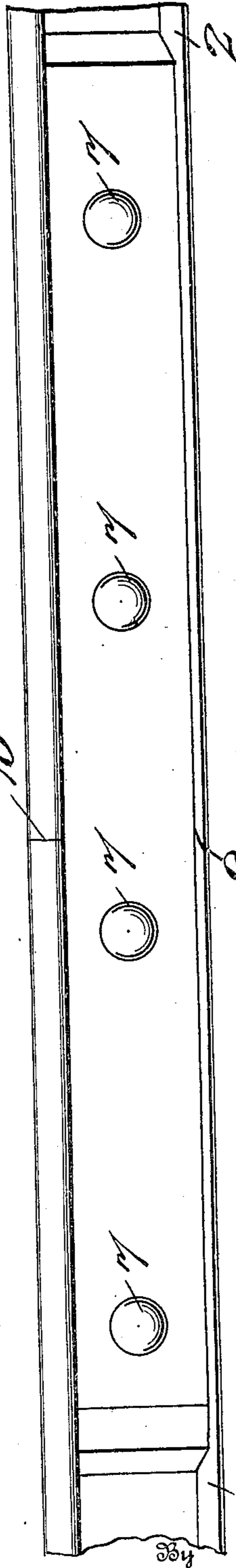
E. ROBERTS.
RAIL JOINT.

APPLICATION FILED JULY 7, 1905.



Witnesses

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ELBERT ROBERTS, OF CORSICANA, TEXAS.

RAIL-JOINT.

No. 804,768.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ELBERT ROBERTS, a citizen of the United States, residing at Corsicana, in the county of Navarro and State of Texas, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

The invention relates to an improved rail-joint designed to suitably connect the meeting ends of railroad-rails.

The main object of the present invention is to provide means to securely fasten the meeting ends of the rails together in a manner to prevent movement.

The invention consists in the details of construction and arrangement of parts described in the following specification and with particular reference to the accompanying drawings, wherein—

Figure 1 is a plan illustrating my improved rail-joint. Fig. 2 is a side elevation of the same, and Fig. 3 a longitudinal transverse section.

Referring to the drawings, the meeting ends of the rails 1 and 2 are thickened in their web portions, as at 3, said thickened portion extending equally on opposite sides of the normal web. These thickened portions are cut out for the greater part of their length to provide tongues 4, the arrangement being such as to leave a shoulder 5 immediately adjacent the junction of the thickened portion 3 with the base of the rail 1. The tongues 4 are of a length to extend beyond the ends of the base-flanges and balls of the rails and are designed to seat respectively in the cut-out portion of the adjacent rail-web and terminally bear against the shoulder 5 of said cut-out portion, it being understood that the adjacent rail ends are cut out on reverse sides to provide for the junction described. The tongues 4 are formed with transverse openings 6, adapted when the rails are in locking position to register with each other to provide for the passage therethrough of the ordinary fish-bolts 7.

In the construction described it will be noted that the joints between the rail ends are somewhat remote from the ends of the base-flanges and balls, as said tongues terminally project beyond the ends of said parts and with the tongues together provide an uninterrupted thickened web lengthwise beneath the rail-balls at the joint, thus provid-

ing practically a continuous rail, which from the longitudinal bearing of the tongues one upon the other and from the end bearings of said tongues against the shoulder 5 insures a secure fastening of the rail ends.

The base-flanges 8 of the rail are cut on reverse inclines, as 9, whereby to provide for opposite spiking of the rail ends on a single tie, thus insuring a more complete bond and secure fastening of the rail ends. The balls and treads of the rails at their meeting ends are also inclined at 10 at approximately sixty degrees to the transverse line, whereby to permit the wheel to contact with the tread of one rail before leaving the tread of the preceding rail, thus obviating the noise incident to the passage of the wheels over the meeting ends of the rails as usually constructed. It will be further noted that the inclination of the bar ends is at an angle to the inclination of the base-flange ends, whereby to further insure the bonding of the rail ends, as will be apparent.

The structure described provides practically a continuous rail having the balls or treads cut at a certain definite incline and the base-flanges meeting at an incline varying angularly from the incline of the ball ends.

Having thus described the invention, what I claim as new is—

1. A rail-joint comprising adjacent rails having their base-flanges meeting at an incline to a transverse line, and their tread ends meeting at an incline angularly disposed with relation to the incline of the base-flanges, the webs of the rails being extended beyond said ball ends and interlocking.

2. A rail-joint comprising adjacent rails having their base-flanges meeting at an incline to a transverse line, and the ends of the tread meeting at an incline angularly disposed with relation to the incline of the base-flanges, the webs of the rails being thickened and cut away for a portion of their length to provide tongues projecting beyond the tread ends of the rails, said tongues being arranged in longitudinal contact, and means for securing said tongues together.

3. A rail-joint comprising adjacent rails having their base-flanges meeting at an incline to a transverse line, and their tread ends meeting at an incline angularly disposed with relation to the incline of the base-flanges, the webs of the rails being thickened for a por-

tion of their length, and cut out to provide
projecting tongues and shoulders extending
at a right angle from the base of said tongues,
the tongues being arranged in longitudinal
5 contact and abutting against the respective
shoulders, and bolts passed transversely
through the tongues to secure the rails.

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

ELBERT ROBERTS.

Witnesses:

DEXTER HAMILTON,
RICHD. MAYS.