W. J. ALLIN.

RAIL FASTENER.

APPLICATION FILED MAY 22, 1906. RENEWED OCT. 9, 1908.

911,359. Patented Feb. 2, 1909.

3 SHEETS—SHEET 1.

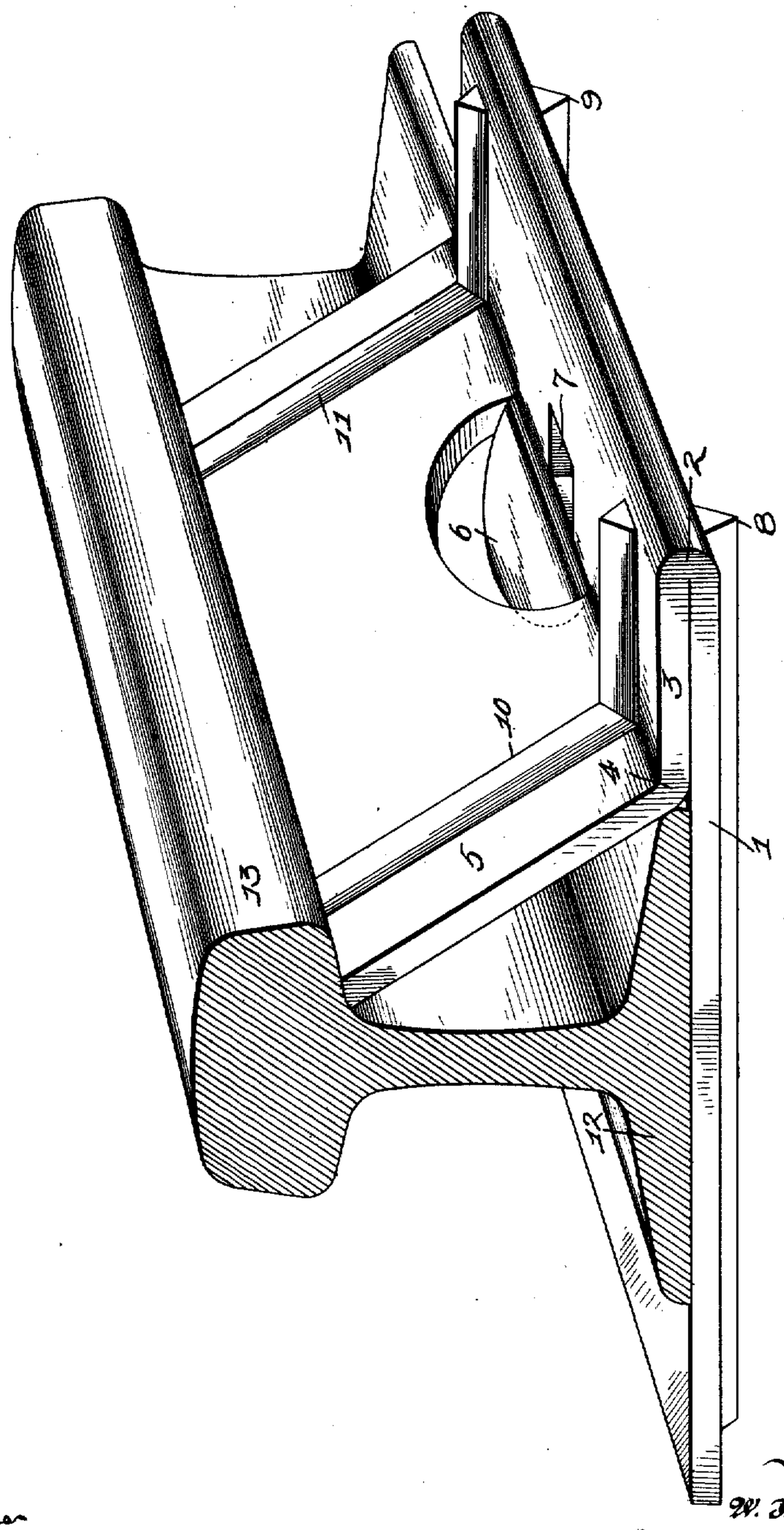

Fig. 1.

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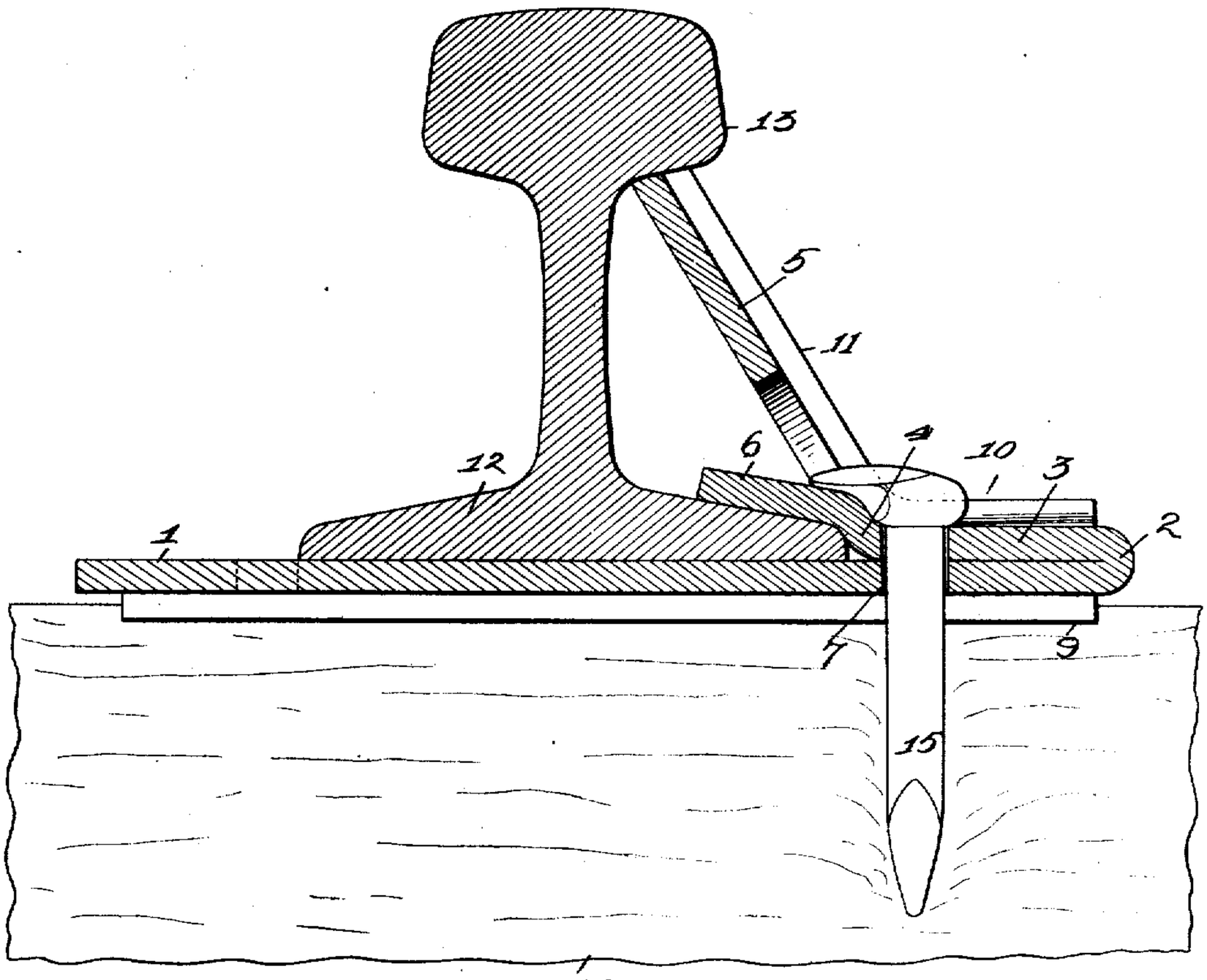
3 SHEETS—SHEET 2.

Fig. 2.



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3 SHEETS—SHEET 3.

FIG. 3.

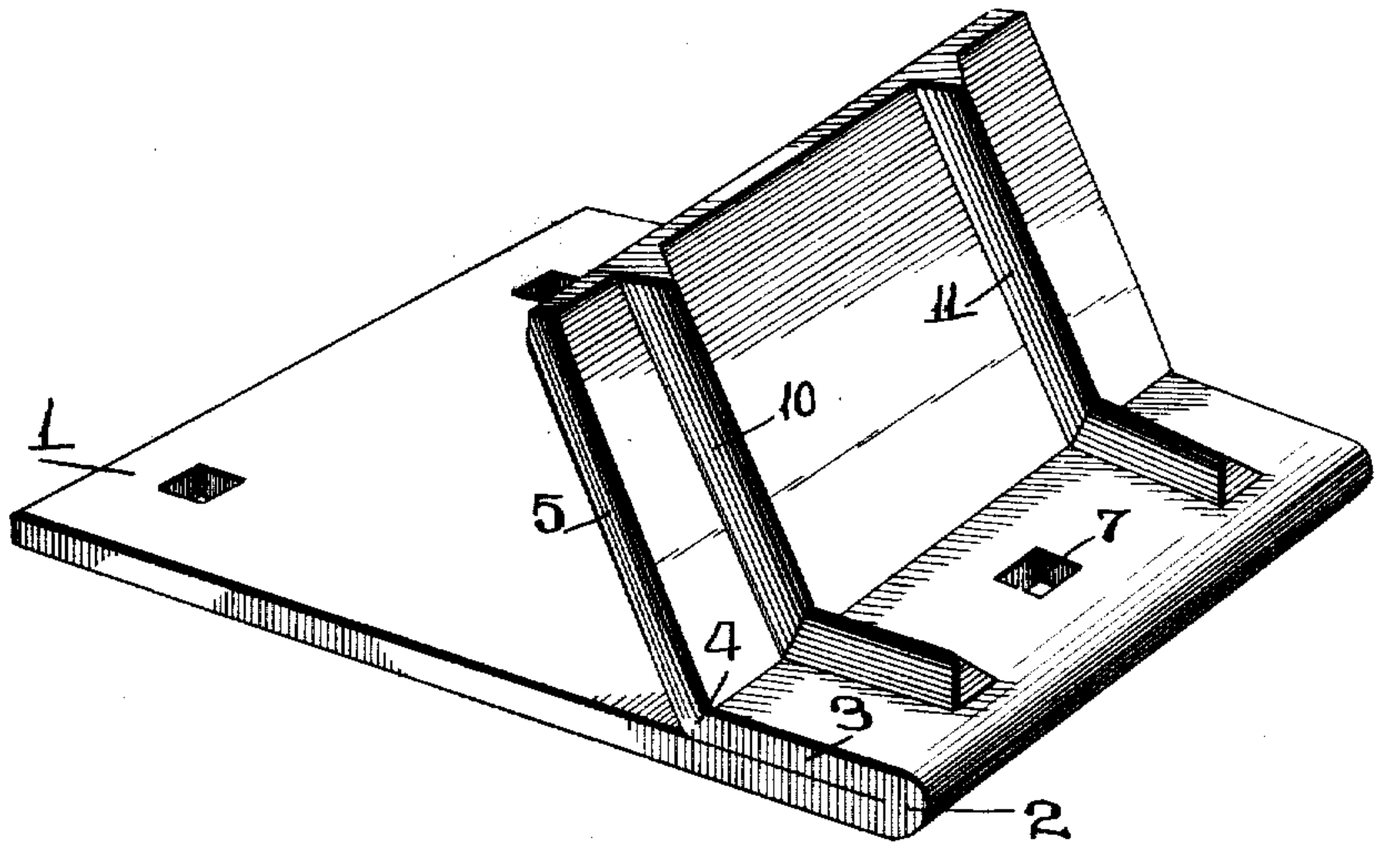
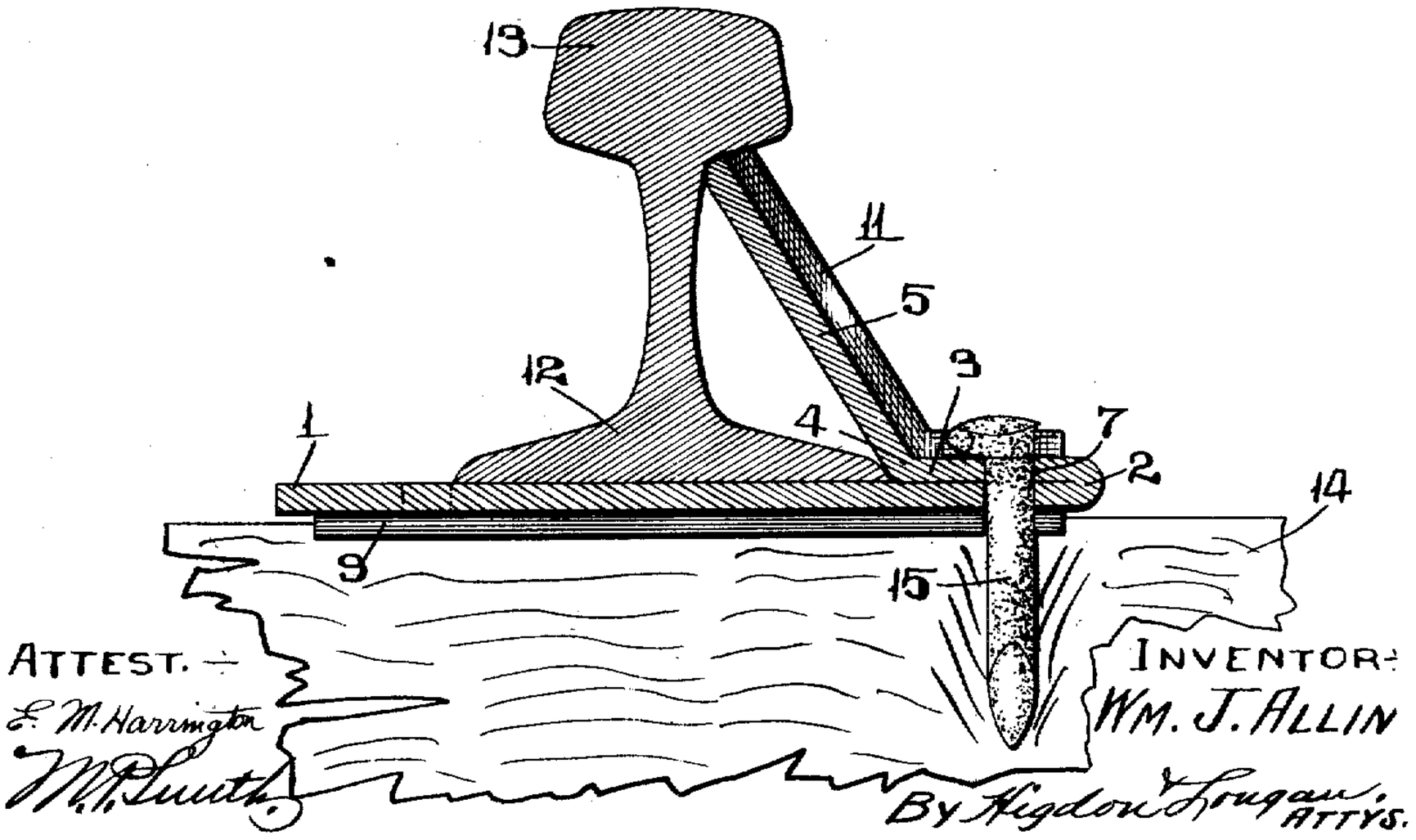


FIG. 4.



ATTEST.

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UNITED STATES PATENT OFFICE.

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RAIL-FASTENER.

No. 911,359. Specification of Letters Patent. Patented Feb. 2, 1909.

Application filed May 22, 1906, Serial No. 318,235. Renewed October 9, 1908. Serial No. 456,884.

To all whom it may concern:

Be it known that I, WILLIAM J. ALLIN, a subject of the King of Great Britain, and resident of Clarendon, Monroe county, Arkansas, have invented certain new and useful Improvements in Rail-Fasteners, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention consists of improvements in rail fasteners, and the object of my invention is to provide a simple and inexpensive fastener made from a single piece of sheet metal, which shall serve as a base plate for the rail and as a brace to protect the flange of the rail from lateral thrust.

My invention consists in the peculiar construction and arrangement of parts hereinafter described and claimed, and which will be more readily understood by reference to the accompanying drawings, in which:—

Figure 1 is a perspective view of my rail fastener in place; Fig. 2 is a transverse section of a rail held in place by means of my fastener; Fig. 3 is a perspective view of a modified form of the fastener; Fig. 4 is a transverse section taken through the modified form of the fastener and a rail.

My improved fastener consists of a single piece of sheet metal from which is formed a base plate 1, which is bent over upon itself at the point indicated by 2 so as to form a flange composed of a double thickness of the plate of which the upper thickness is indicated by the numeral 3. The upper thickness of the plate is then bent along the line indicated by 4 to form the upwardly extending brace 5. From the brace 5 a semi-circular tongue is cut adjacent to the spike opening 7, which extends through both thicknesses of the plate, namely the portions 1 and 3. The bottom of the plate 1 is provided with the transverse strengthening lugs 8 and 9, and the upper surface of the rail fastener is provided with the strengthening lugs 10 and 11.

When my improved rail fastener is in position for use, the base flange 12 of the track rail rests squarely upon the plate 1, and the tongue 6 is depressed or bent downwardly onto the outer edge of the flange by the head of the spike 15, which is driven through the opening 7 to secure the fastener in position. The brace 5 extends upwardly, and engages beneath the outer portion of the ball 13 of the rail. The tongue 6 thus serves as a clamp for the rail, and materially assists in holding the rail in a firm and rigid position.

In the form of the fastener seen in Figs. 3 and 4, the tongue 6 is dispensed with, and the spike opening 7 is located at a point midway between the point 2 where the plate is doubled back, and the line 4 where the plate is bent upwardly to form the brace 5. This location of the hole permits the spike that is positioned therein to be readily driven into or removed from the fastener and tie.

The fastener is preferably manufactured of rolled steel plate cut into proper lengths and folded into shape by suitable machinery, although in some instances it may be a steel or malleable casting.

I claim:

1. A rail fastener, constructed of a single piece of metal and comprising a flat base portion, integral ribs on the under side of said base portion, an integral brace extending upwardly at an angle so as to bear against the ball of the rail, the top side of which brace being provided with integral ribs, and there being a tongue cut from said brace and adapted to be bent downwardly by one of the spikes which secures the fastener to the tie; substantially as specified.

2. A rail fastener, constructed of a single piece of metal, the main body portion of which lies flat upon the tie to form a rail base, one end of the base being doubled backwardly upon itself and thence upwardly at an angle to bear against the under side of the ball of the rail, ribs integral with the top side of the doubled back and upwardly bent portions, the upper ends of which ribs and the upper end of the upwardly bent portion bearing against and lying entirely beneath one side of the ball of the rail, there being spike openings formed through the base portions of the fastener, and transversely disposed ribs formed integral with the under side of the main body portion of the fastener.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

WILLIAM J. ALLIN.

Witnesses:
A L. SMITH,
G. W. SHERRILL, Jr.