

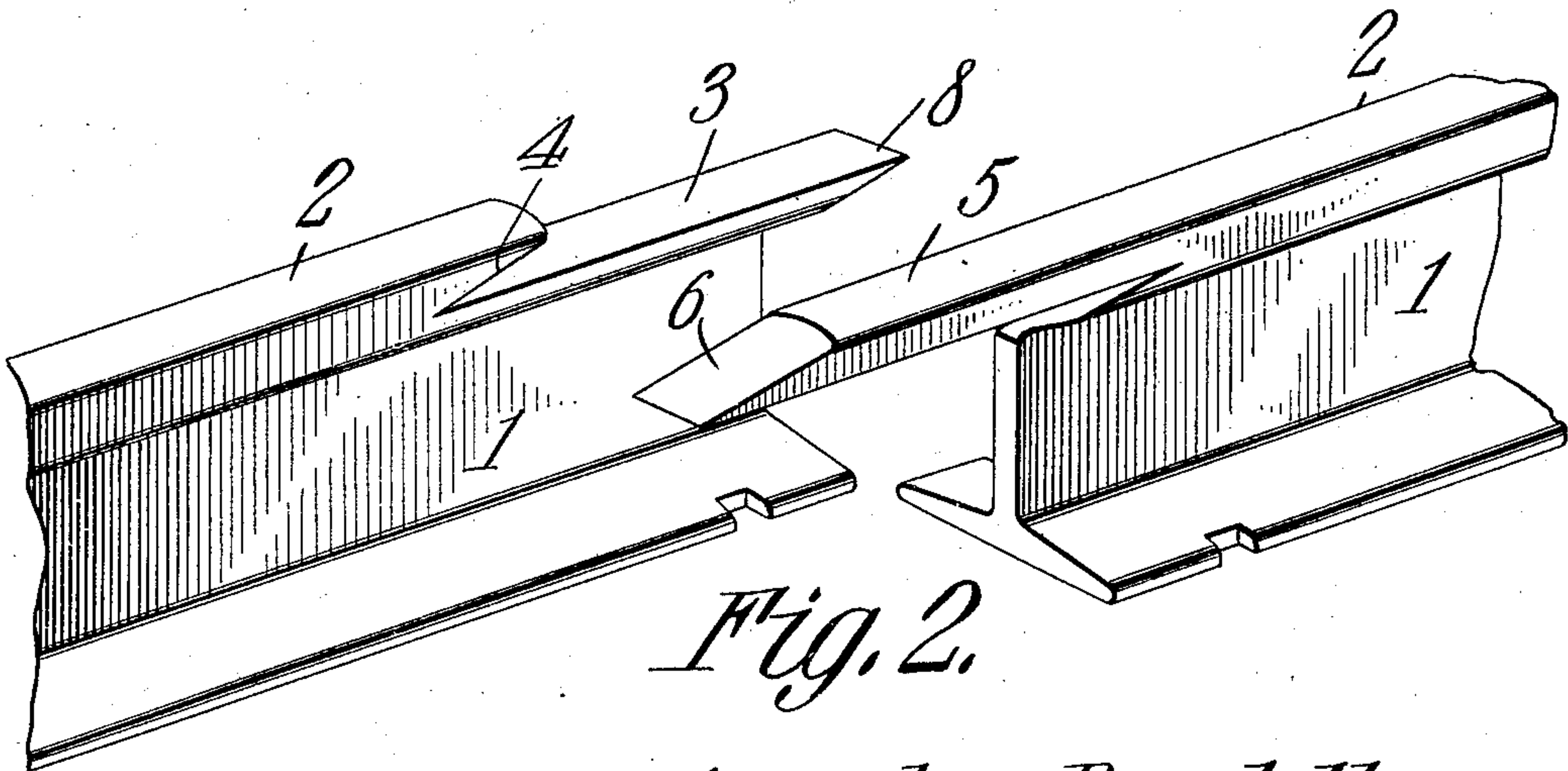
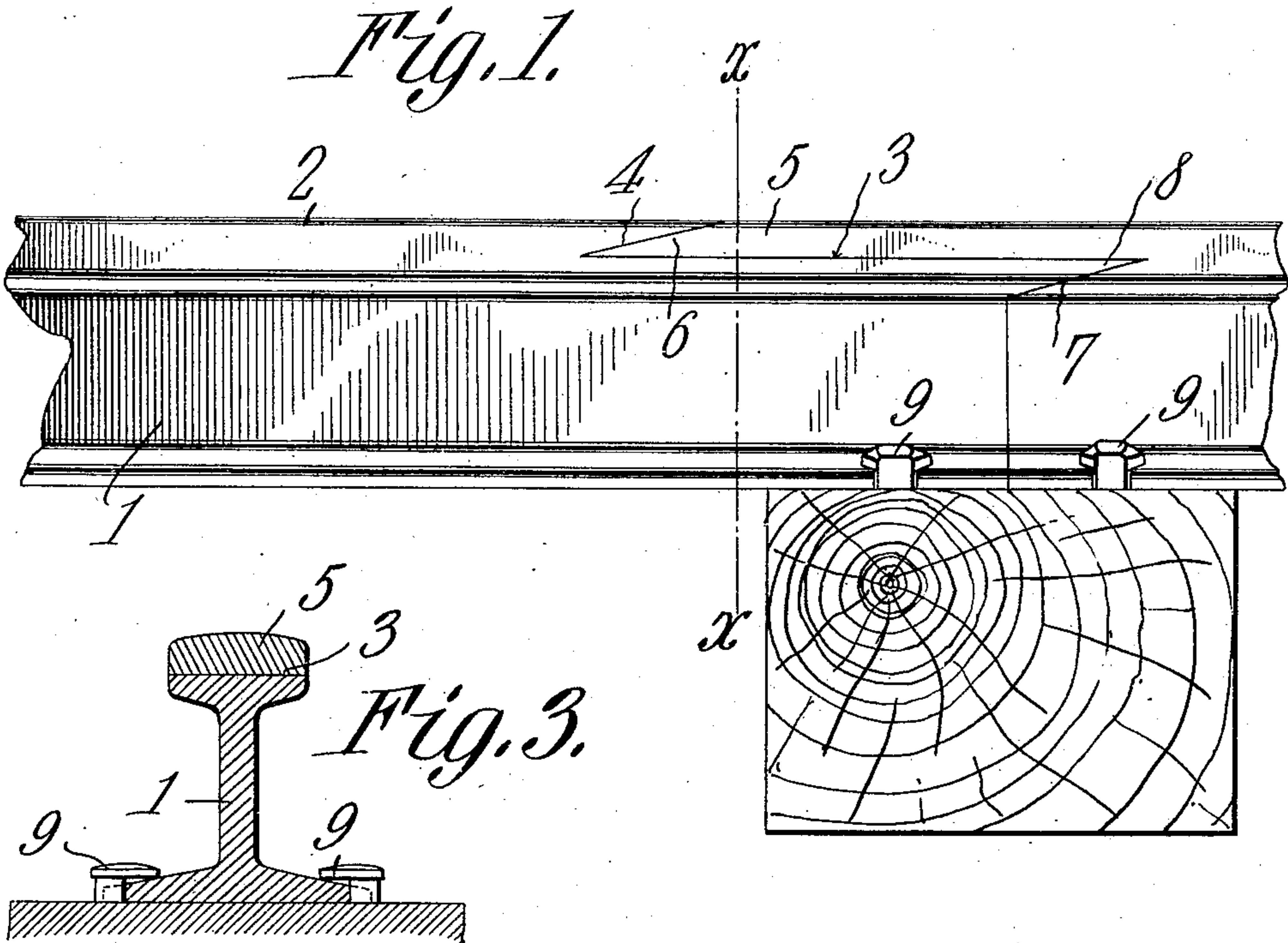
No. 865,770.

PATENTED SEPT. 10, 1907.

A. DORATELLA.

RAIL JOINT.

APPLICATION FILED JUNE 6, 1907.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

AUGUSTUS DORATELLA, OF STEELTON, PENNSYLVANIA.

## RAIL-JOINT.

No. 865,770.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed June 6, 1907. Serial No. 377,642.

*To all whom it may concern:*

Be it known that I, AUGUSTUS DORATELLA, a citizen of the United States, residing at Steelton, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Rail-Joint, of which the following is a specification.

This invention relates to rail joints and its object is to provide rails having integral means designed to interlock at their meeting ends and to support each other so as to prevent pounding by wheels passing from one rail to another.

A still further object is to provide rails which can be fastened together without the necessity of employing fish plates or like fastening devices.

Another object is to provide rails which can be easily manufactured and quickly assembled.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a side elevation of the meeting ends of two rails embodying the present improvements. Fig. 2 is a perspective view showing said ends detached. Fig. 3 is a section on line  $x-x$ , Fig. 1.

Referring to the figures by characters of reference, 1 designates a rail, the head 2 of which is cut away at one end to form a flat bearing surface 3 and the shoulder formed by cutting away the head is undercut as shown at 4 so as to form an angular recess. The other end of the rail has a tongue 5 extending from one end thereof and constituting a continuation of the upper portion of the head. This tongue is beveled at one end as shown at 6, said beveled portion being of the same proportions as the recess formed under the shoulder 4. An angular recess 7 is formed in the head of the rail above one end of the web of the rail and close to the tongue 5 and this recess is of the same proportions as an angular tongue 8 which extends from the other end of the rail and constitutes a continuation of the cut away portion of the head.

In assembling the rails herein described the same are placed in the usual manner with their ends abutting.

The tongues 5 will therefore rest upon the flat faces 3 and with their beveled ends 6 disposed beneath the shoulders 4. The tongues 8 will rest within the recesses 7. These positions of the parts are illustrated in Fig. 1 and it will be apparent that, when the rails interlock in the manner described, they will positively prevent the end portions thereof from sagging because each rail constitutes a support for the adjoining rail. As a lap joint is formed by the upper portions of the rail heads it will also be obvious that the wheels of cars passing over the rails will be prevented from pounding. The rails are designed to be held in alinement in the usual manner by means of spikes 9 and in view of the interlocked relation of the parts it becomes unnecessary to employ fish plates or similar fastening means.

What is claimed is:

1. A rail having one end portion of its head reduced to form an undercut shoulder, a tongue extending from said reduced portion, and a tongue extending from the opposite end of the rail and having a recess thereunder, said tongues being of the same proportions as the recess and the removed portion of the head respectively.

2. A rail having one end portion of the head reduced to form a shoulder, said shoulder being undercut to form a recess, a tapered tongue extending from the reduced portion of the head, a tongue extending from the opposite end of the head and of the same proportions as the removed portion of the head and the recess, there being a recess within the rail and adjacent the last mentioned tongue, said recess being of the same proportions as the tapered tongue.

3. The combination with a rail having a reduced head at one end thereof, said head forming an undercut shoulder, and a tapered tongue projecting beyond the reduced portion of the head; of a rail having a recess in one end of the head thereof and designed to receive the tongue, and a tongue extending from said head and beyond the recess and disposed to rest upon the reduced portion of the head and to be lapped by the shoulder.

4. The combination with a rail having its head reduced at one end to form an undercut shoulder, and a tapered tongue extending from the reduced portion of the head; of a rail having integral means disposed to engage the tongue and shoulder and interlock therewith.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

AUGUSTUS DORATELLA.

Witnesses:

ALBERT T. NICELY,  
THOMAS RUBY.