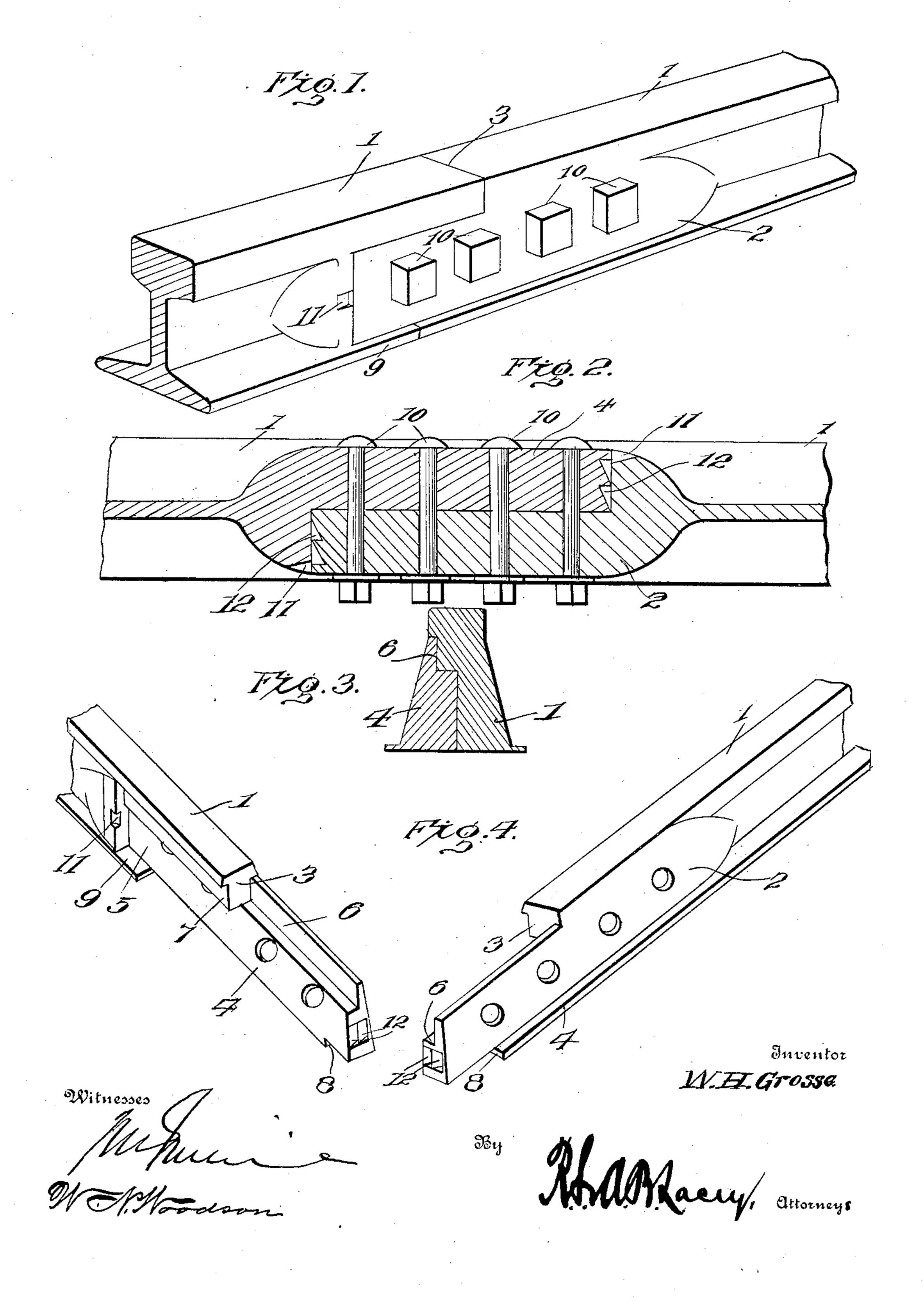
W. H. GROSSE.

RAIL JOINT.

APPLICATION FILED OUT. 5, 1907.



STATES PATENT OFFICE.

WILLIAM H. GROSSE, OF GREEN BAY, WISCONSIN.

RAIL-JOINT.

No. 887,792.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. GROSSE, citizen of the United States, residing at Green Bay, in the county of Brown and State of Wisconsin, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

The present invention relates to a novel means for connecting the abutting ends of 10 rails or like members, and aims primarily to design an improved rail joint embodying novel features of construction whereby the rail ends are held rigidly against relative displacement.

A further object of the invention is the provision of a rail joint which is simple in its construction, which can be readily assembled or taken apart, and which eliminates the use of fish plates or like members.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and ac-

25 companying drawings, in which:

Figure 1 is a perspective view of a rail joint embodying the invention. Fig. 2 is a horizontal sectional view through the same. Fig. 3 is a transverse sectional view through 30 the joint. Fig. 4 is a perspective view showing the rail ends detached.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

35 reference characters.

Referring to the drawing the numerals 1—1 designate the rail ends which are of the conventional type and have the web portion thereof enlarged adjacent the joint as indi-40 cated at 2 so as to extend outwardly approximately flush with the head portion of the rails. Each of the abutting rail ends 1 has the head thereof cut off transversely as indicated at 3 and is provided upon one side with an extension 4 designed to be received within a corresponding recess 5 in the opposite rail end. These extensions 4 comprise substantially one-half of that portion of the rail below the head when divided by a longitudinal 50 vertical plane. The upper and inner longitudinal edge of each of the extensions 4 is rabbeted as indicated at 6 to receive a rib 7 disposed within the recess 5 and extending along the base of the head of the rail. It will also be observed that the extremities of the extensions 4 have the lower corners thereof !

notched at 8 to receive a shelf 9, an interlocking connection being thereby produced which holds the rails rigidly in alinement with each other. The extensions 4 are held 60 securely within the corresponding recesses in the opposite rail ends by means of the bolts 10 and when these bolts are in position the abutting rail ends are locked against pulling apart and lateral and vertical displacement 65 relative to each other.

For the purpose of facilitating dismounting of the joint a cut away portion 11 is formed in the end wall of each of the recesses 5 and depressions 12 are provided in the ex- 70 tremities of the extensions 4, the said depressions being designed to be engaged by the end of a pinch-bar or like tool placed within the

cut away portion 11.

Having thus described the invention, what 75 is claimed as new is:

1. In a rail joint, the combination of abutting rail ends each of which has the head portion thereof cut off transversely and is provided upon one side with a longitudinal ex- 80 tension and upon the opposite side with a corresponding recess, the upper longitudinal edge of the extension being rabbeted and a corresponding longitudinal rib being formed in the upper portion of the recess, the longi- 85 tudinal extension of one of the rail ends being designed to be received within the recess of the opposite rail end and the longitudinal rib in each recess being designed to fit within the rabbeted edge of the extension received 90 therein.

2. In a rail joint, the combination of a pair of abutting rail ends each of which is provided with an extension and also with a recess, the extension upon one rail being designed to be 95 received within the recess of the opposite rail and the end wall of one of the recesses being cut away and the extremity of the corresponding extension being notched for engagement with a tool inserted within the 100

said cut away portion.

3. In a rail joint, the combination of a pair of abutting rail ends, each of which has the head portion thereof cut off transversely and is provided upon one side with a longitudinal 105 extension and upon the opposite side with a corresponding recess, one of the longitudinal edges of each of the extensions being rabbeted and a corresponding rib being formed in each of the recesses, the extension of one 110 of the rail ends being designed to be received within the recess of the opposite rail end and

the rabbeted portion of the extension being designed to receive the rib in the corresponding recess, the end wall of one of the recesses being cut away and the extremity of the corresponding extension being provided with a depression adapted to engage a tool inserted within the said cut away portion.

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

WILLIAM H. GROSSE. [L. s.]

Witnesses:

MARTIN DE BOTH, G. Bong.