

No. 791,333.

PATENTED MAY 30, 1905.

G. ENGLEHARDT.

RAIL JOINT.

APPLICATION FILED NOV. 26, 1904.

Fig. 1.

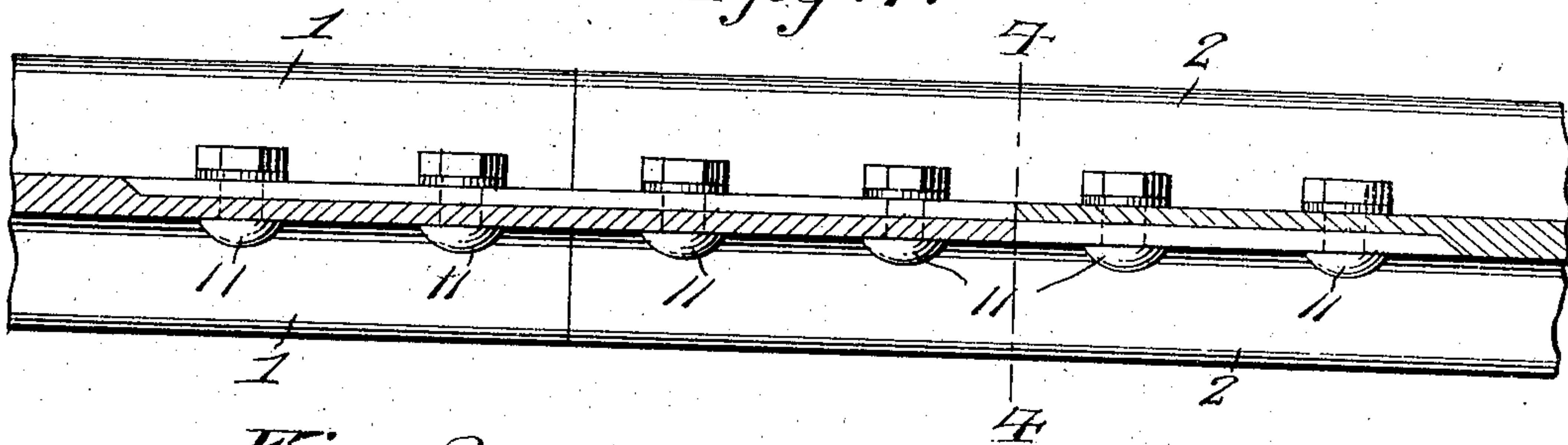


Fig. 2.

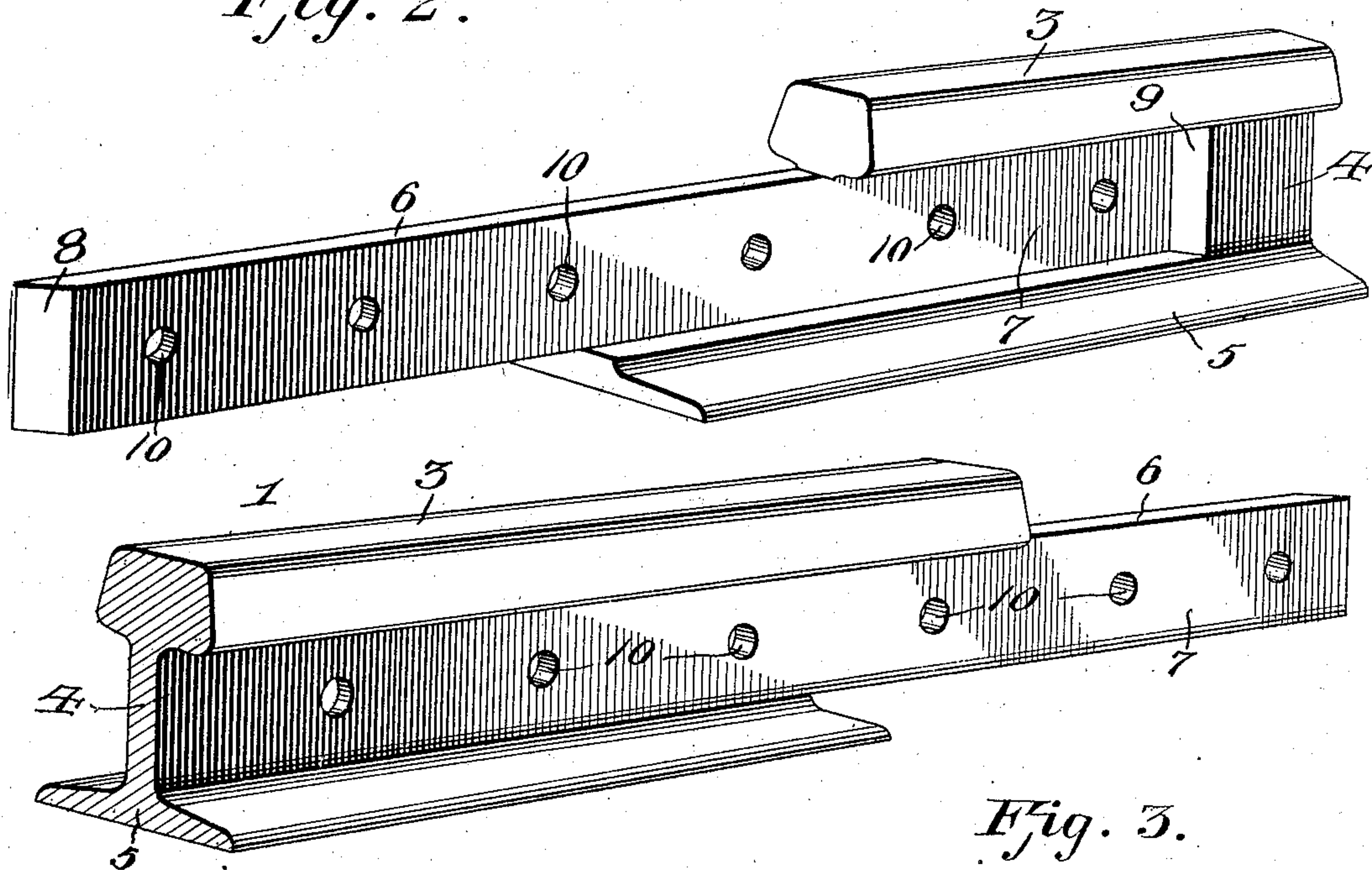


Fig. 3.

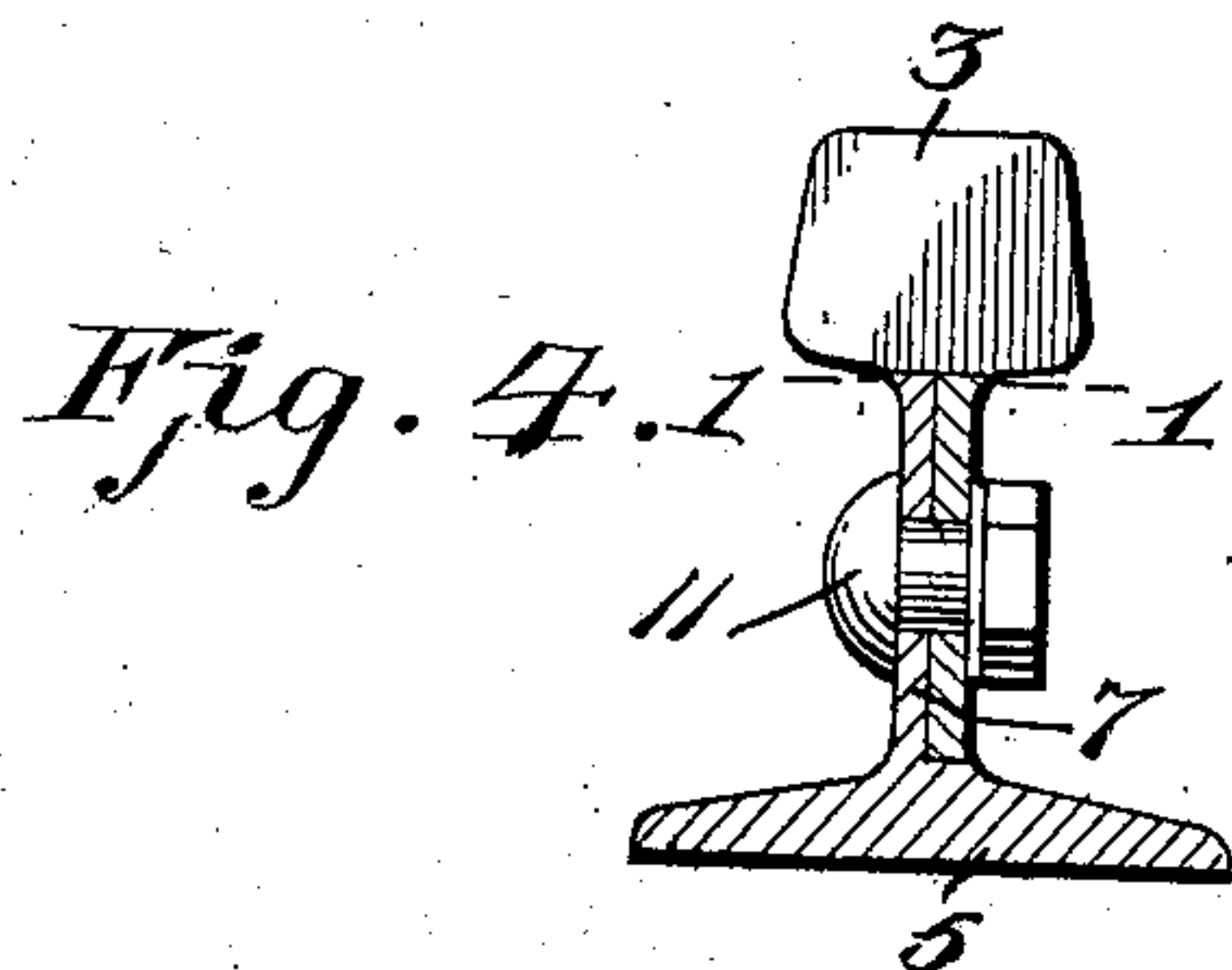
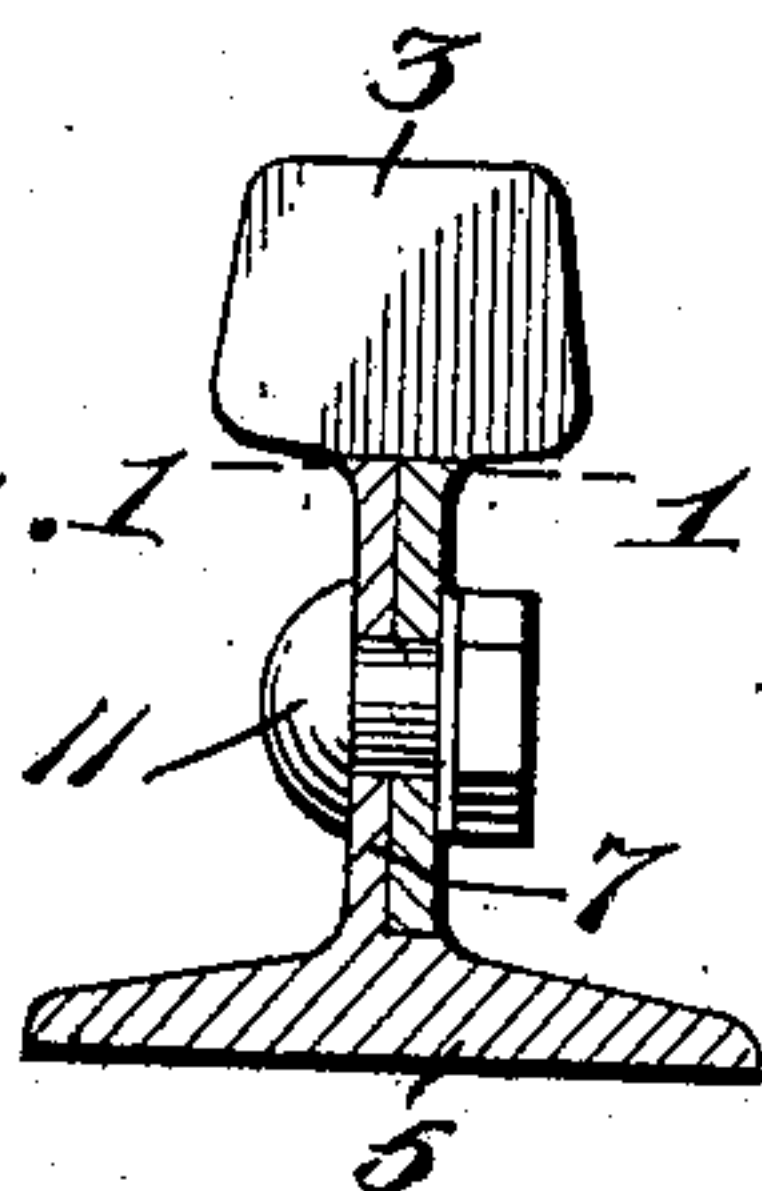


Fig. 4.



Witnesses

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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 791,333, dated May 30, 1905.

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To all whom it may concern:

Be it known that I, GEORGE ENGLEHARDT, a citizen of the United States, residing at Salem, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints, and has for its objects to produce a comparatively simple inexpensive device of this character wherein the meeting ends of the rail-sections will be firmly and securely connected, the use of fish-plates obviated, and relative vertical movement of the rail ends, with consequent pounding of the latter, wholly obviated.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a sectional plan illustrating the meeting ends of a pair of rail-sections connected in accordance with my invention, the section being taken on the line 1 1 of Fig. 4. Fig. 2 is a perspective view of one of the rail-sections. Fig. 3 is a similar view of the companion rail-section. Fig. 4 is a vertical cross-section taken on the line 4 4 of Fig. 1.

Referring to the drawings, 1 and 2 designate a pair of rail-sections of the usual form and material and each comprising a tread 3, a web 4, and a base 5. As seen more clearly in Figs. 2 and 3, the rail-section 2 has its base 5 extended or prolonged at its end a suitable distance beyond the terminal of its tread 3, while the adjacent end of the companion rail-section 1 has its tread 3 prolonged or extended longitudinally beyond the terminal of its base 5, whereby when the sections are assembled the tread 3 of section 1 will overlap the base 5 of section 2.

Formed upon and integral with the web 4 of each rail-section at their adjacent or meeting ends is a web extension or plate 6, which projects longitudinally an appropriate distance beyond the terminal of the rail-section, each plate being one-half the width or thickness of webs 4, whereby there is produced in each web and between the tread 3 and base 5

a seat or recess 7, designed for the reception of and in which the plate 6 of the companion rail-section accurately seats. The outer terminals of the plates 6 are beveled or inclined, as at 8, and the inner terminal end walls of the recesses 7 are correspondingly beveled or inclined, as at 9, to accurately coincide with the end of the plate, which when the parts are assembled is seated within the recess. The webs 4 and web extensions 6 are transversely perforated at appropriately-spaced intervals, as at 10, these perforations being adapted to register for the reception of fastening members or bolts 11, by means of which the rail-sections are connected.

In practice when the rail-sections are arranged in endwise relation with their adjacent ends meeting the plate 6 on each section fits within the seat or recess 7 of the other section and the tread of one rail overlaps the base of the other rail, as heretofore explained. It is to be particularly noted that under this construction the webs 4 will be practically continuous between the rail-sections and that the outer faces of the extensions 6 will be flush with the corresponding faces of the webs, thus rendering the latter free from objectionable surface projections, and, furthermore, that owing to the extensions being of a thickness equaling half the thickness of the webs seats in which the extensions fit are provided and undue thickening of the webs is obviated. It is also to be observed that under my improved construction relative vertical movement of the meeting ends of the rail-sections, with consequent pounding of the ends of the treads at the joint, is wholly obviated.

From the foregoing it is apparent that I produce a simple inexpensive device admirably adapted for the attainment of the ends in view, it being understood that minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus fully described the invention, what is claimed as new is—

1. A rail-section comprising a tread, a web and a base, and a web extension projected be-

yond the terminal of the said tread and base of the rail, said extension being of a thickness equaling one-half the thickness of the web.

2. A rail-section comprising a tread, a web
5 and a base, said web terminating in a plate of a thickness equaling one-half the thickness of the web to thus provide at one side of the plate a recess for the reception of a corresponding
10 plate provided on a companion rail-section, and extending beyond the terminal of the tread and base of the rail.

3. In a rail-joint, a pair of rail-sections adapted for arrangement in endwise continu-
15 ance, one on the other, said sections each comprising a tread, a web and a base, the web of each rail having a longitudinal recess of a depth equaling one-half the thickness of the web, and overlapping plates provided in con-
20 tinuation of the webs, each plate being of a thickness equaling one-half the thickness of the webs and adapted to seat within the re-

cess formed in the companion rail-section, and extending beyond the terminal of the tread and base of the rail.

4. A rail-section, having a tread, web and
25 base, said web being divided vertically along part of its length and extending beyond the tread and base of the rail, and having its end face beveled.

5. A pair of rail-sections each comprising a
30 tread, web and base, said webs being cut vertically along a part of their lengths to form recesses, the inner ends of said recesses being beveled, the outer ends of said webs being also
35 beveled to engage with the beveled ends of said recesses.

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

GEORGE ENGLEHARDT.

Witnesses:

ERNEST ENGLEHARDT,
JOSEPH ENGLEHARDT.