

No. 771,722.

PATENTED OCT. 4, 1904.

A. W. DOUGLASS.
RAIL JOINT.

APPLICATION FILED DEC. 5, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

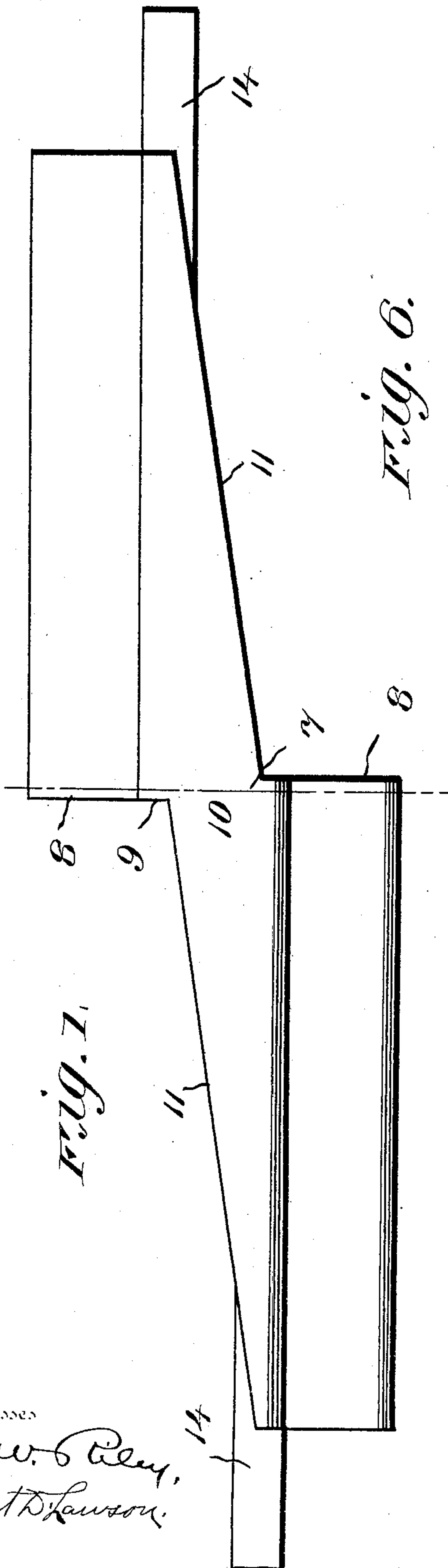


Fig. 1.

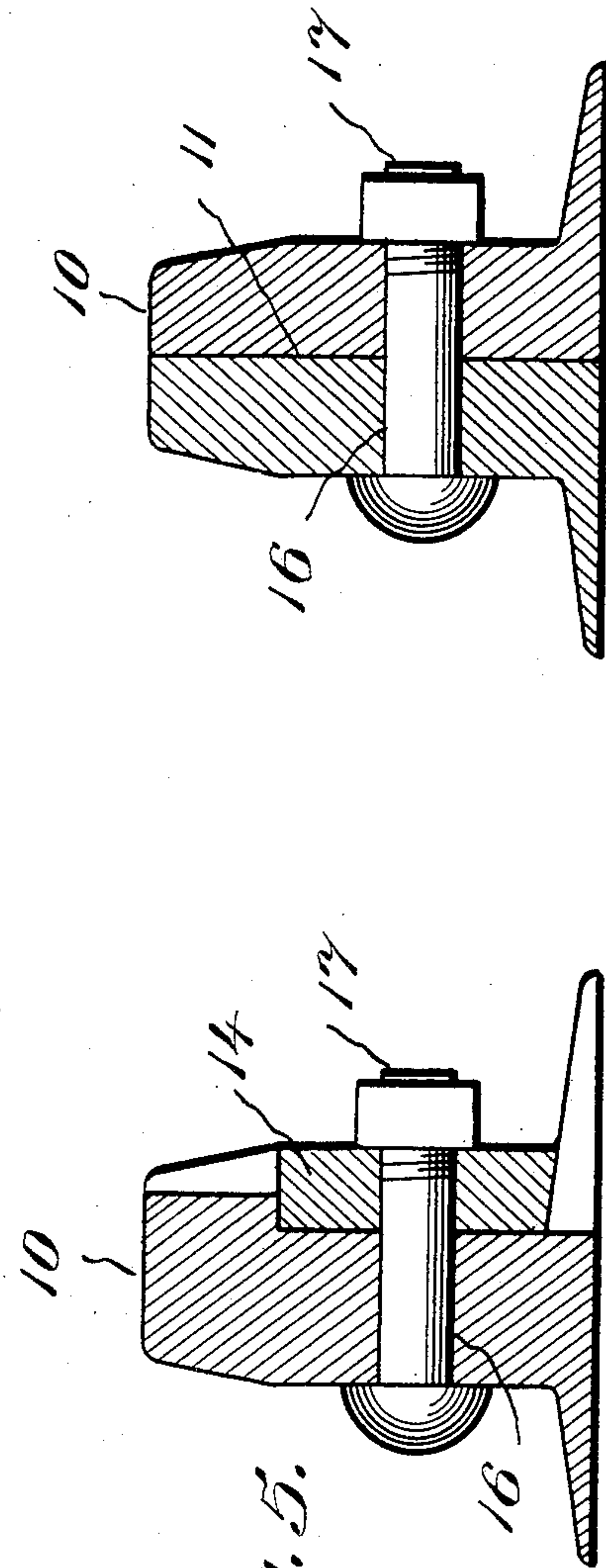


Fig. 5.

Witnesses
J. W. Carey,
Herbert D. Lawson.

Inventor
Allen W. Douglass.
By Victor J. Evans
Attorney

No. 771,722.

PATENTED OCT. 4, 1904.

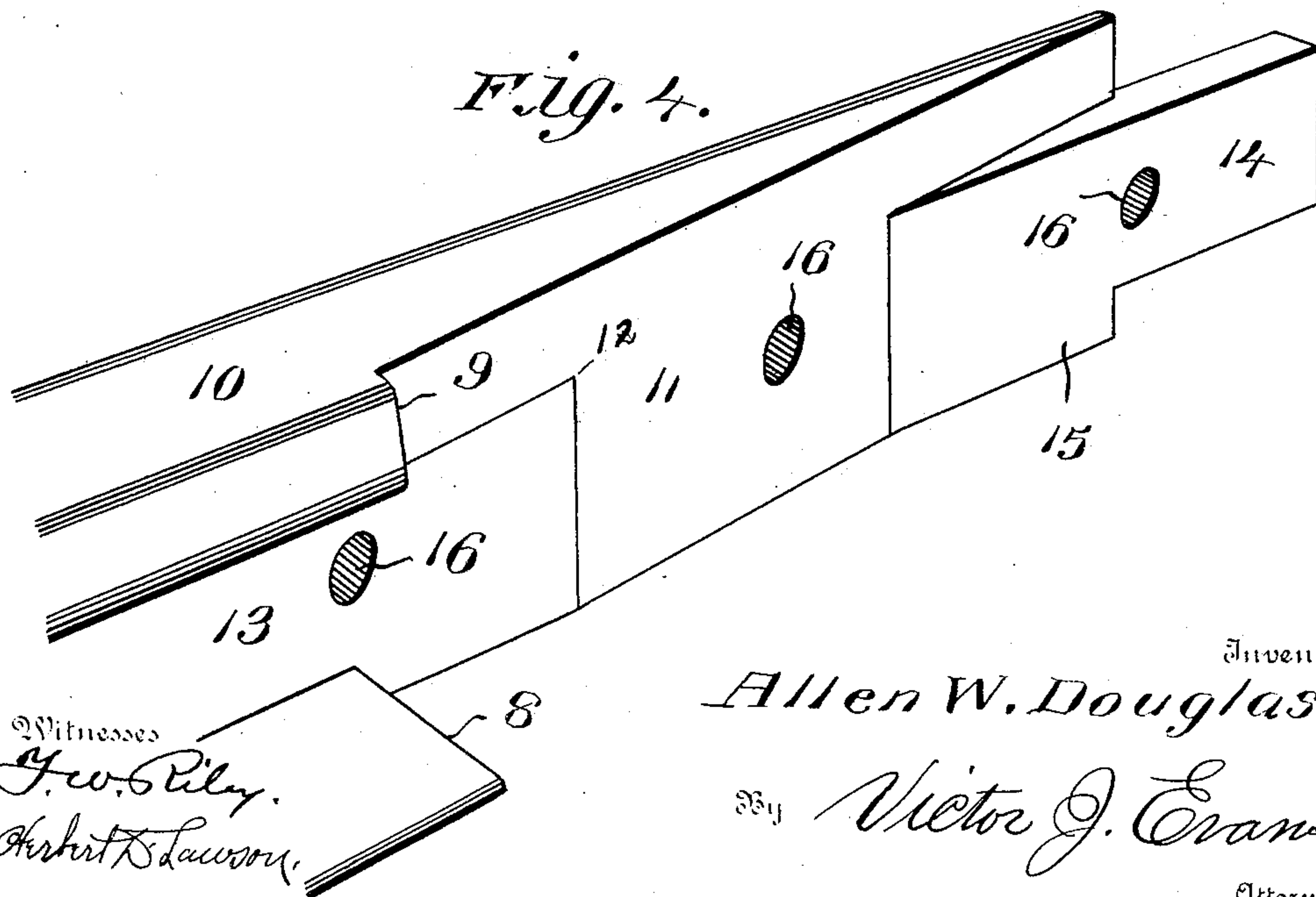
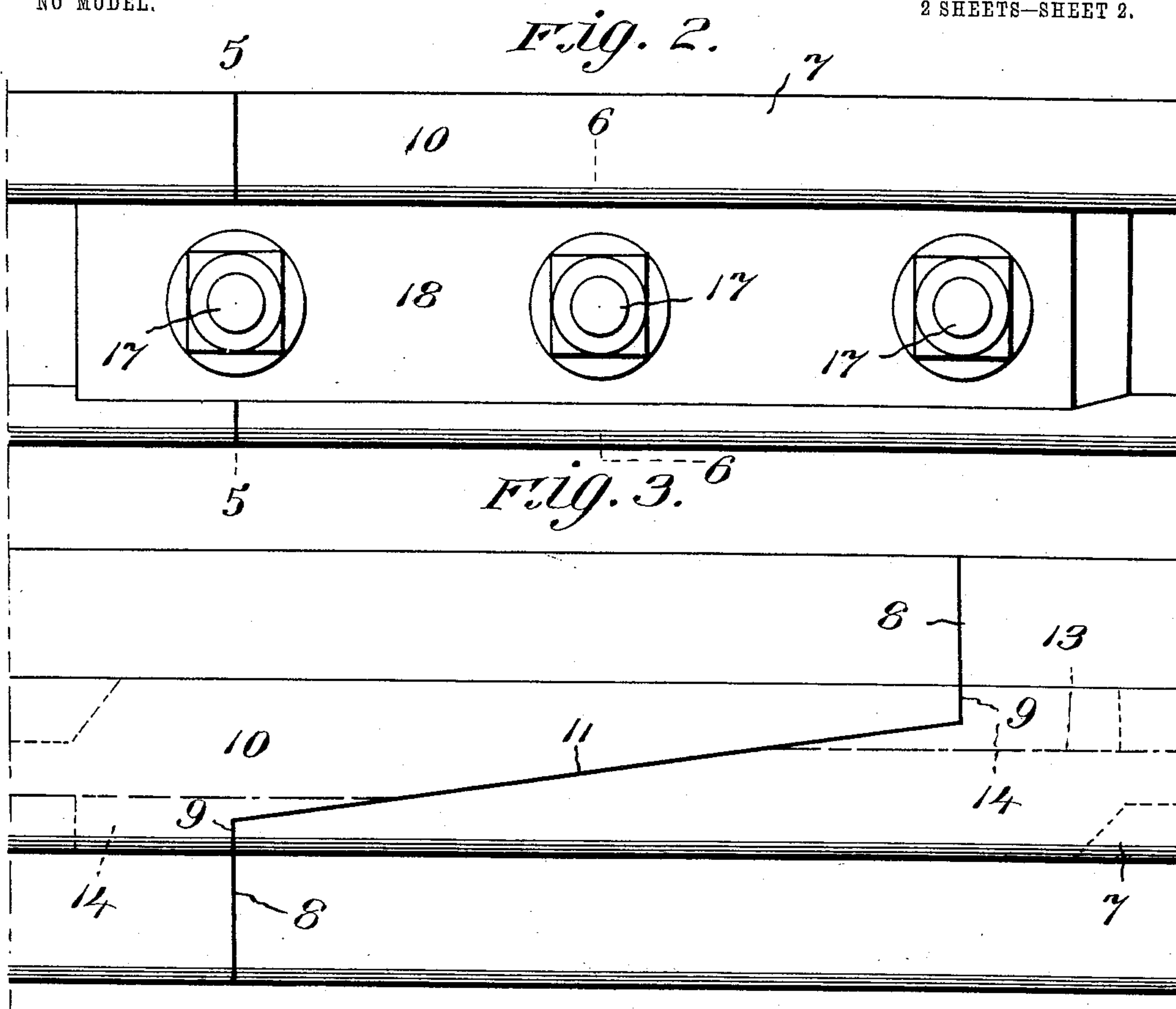
A. W. DOUGLASS.

RAIL JOINT.

APPLICATION FILED DEC. 5, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses

Geo. P. Riley.

Arthur S. Lacey.

Inventor

Allen W. Douglass.

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

ALLEN W. DOUGLASS, OF SENATH, MISSOURI.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 771,722, dated October 4, 1904.

Application filed December 5, 1903. Serial No. 183,922. (No model.)

To all whom it may concern:

Be it known that I, ALLEN W. DOUGLASS, a citizen of the United States, residing at Senath, in the county of Dunklin and State of Missouri, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to new and useful improvements in rail-joints; and its object is to provide a rail the ends of which are so constructed that two or more rails can be securely fastened together at their adjoining ends in such a manner as to prevent said ends from sagging, and thereby overcome pounding by the wheels of cars passing thereover.

The invention consists in a rail having oppositely-arranged similar ends which are reduced in thickness, but which are so shaped as to form a lap-joint having interlocking portions which serve to support the ends of the rails when the same are secured together.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a plan view of a rail constructed in accordance with my invention, the central portion of said rail being removed. Fig. 2 is a side elevation of the joined ends of two of these rails. Fig. 3 is a plan view thereof. Fig. 4 is a perspective view of one end of a rail. Fig. 5 is a section on line 5 5, Fig. 2; and Fig. 6 is a section on line 6 6, Fig. 2.

Referring to the figures by numerals of reference, 7 is a rail having one of its base-flanges 8 cut away to produce a shoulder, the edge of which is at right angles to the side of the flange. A shoulder 9 is formed within the head 10 of the rail in vertical alinement with the end of the flange 8, and the end of the rail is beveled, as shown at 11, said beveled face extending from the end of a rail to a point 12 removed from the end of the flange 8, before referred to. That portion of the head 10 of the rail which projects over the flange 8 is also beveled, so as to aline with the face 11 of the rail, the inner end of said beveled portion of the head terminating at the shoulder 9. It

will be understood that one face of the web 13 of the rail merges with the beveled face 11 on a line extending from the point 12 and at right angles to the bottom of the rail. A tongue 14 projects from the reduced end of the rail and from the inclined face 11 thereof, and this tongue is equal in height to the distance from the flange 8 to the head 10. The side faces of the tongue are parallel with the faces of the web, and the lower portion of the rail is thickened, as shown at 15, whereby the inner face thereof is flush with the corresponding face of the tongue. Both ends of the rails are similar, but are oppositely arranged, and therefore when it is desired to secure together a series of rails constructed in this manner it is merely necessary to overlap the adjoining ends thereof, so as to bring the tongues 14 into position between the base-flanges 8 and heads 10 and with the reduced ends of the rail in contact with said flanges 8 and the shoulders 9. It will be understood that the tongues 14 will project under the beveled portions of the heads 10, and the interlocking rails will therefore firmly support each other and prevent sagging. Apertures 16 are so located within the rails and tongues as to permit the insertion of bolts 17 therethrough after the rails have been assembled, thereby securely fastening them together. The webs of the rails at the tapered ends thereof are preferably enlarged in thickness, as shown at 18, the outer faces of said enlarged portions being flush with the corresponding faces of the heads 10. It will be seen that the rail is very simple in construction and can be readily formed in the manner described. It is unnecessary to employ fish-plates at the joints.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

In a rail-joint, the combination with a rail having one end cut away to form a beveled

face having a shoulder at its inner end formed
by the head of the rail and the base-flange,
and a tongue extending from the beveled face
and from the end of the rail, said tongue hav-
5 ing faces parallel with the web of the rail and
having its lower edge cut away; of a second
rail having one end cut away to form a bev-
eled face provided with shoulders at its inner
end formed by one side of the head of the rail
10 and one of the base-flanges of said rail, a
tongue extending from the beveled face and
from the end of the rail, the sides of said
tongue being parallel with the faces of the
webs of the rail, and said tongue having its

lower edge cut away, the cut-away portions 15
of the tongues being seated upon the shoul-
ders formed by the base-flanges and the bev-
eled faces of the rails contacting, whereby the
tongue of each rail is seated between the head
and base-flange of the other rail, and means 20
for securing the rails together.

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

ALLEN W. DOUGLASS.

Witnesses:

C. P. McDANIEL,
HULDAH D. McDANIEL.