

No. 735,223.

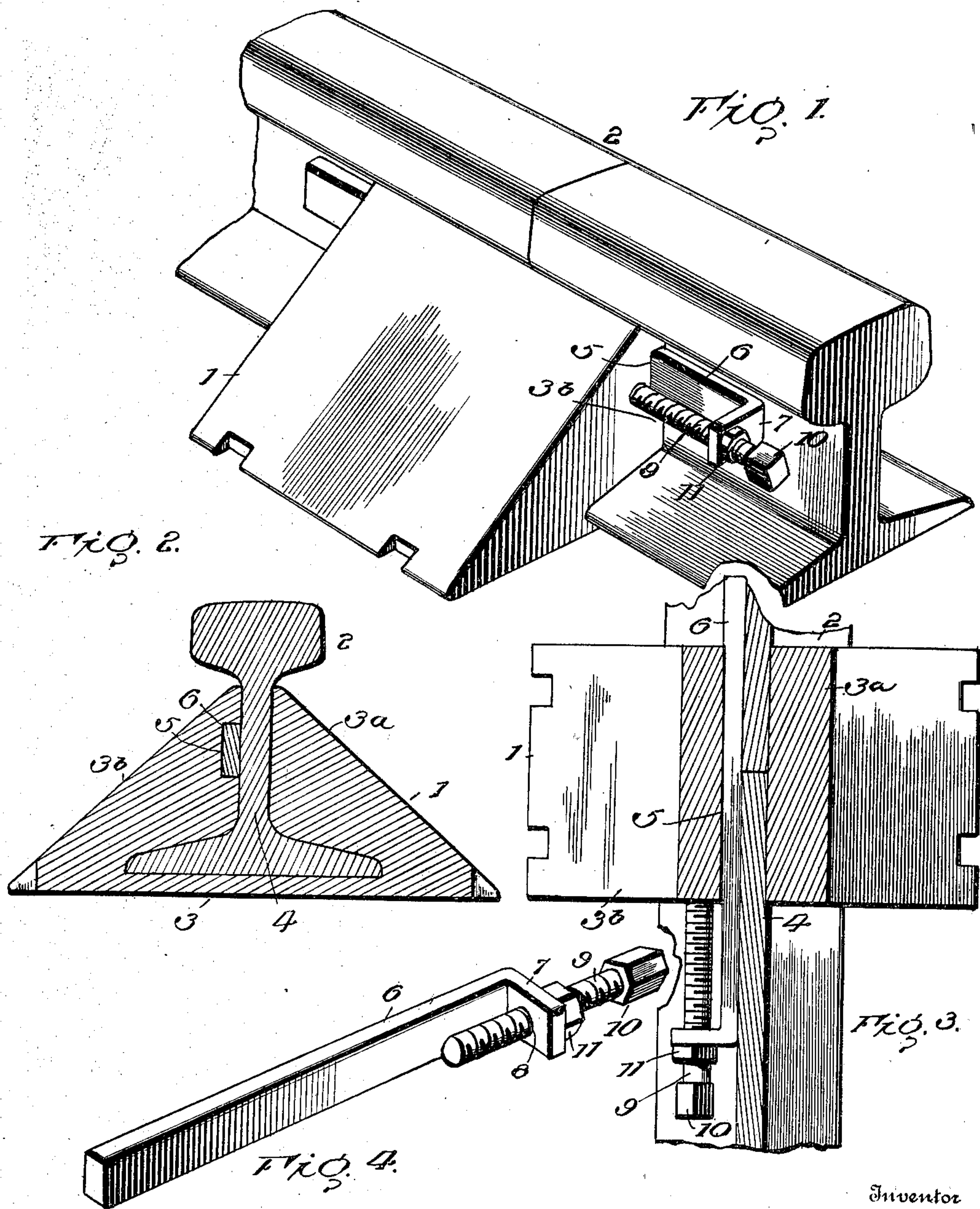
PATENTED AUG. 4, 1903.

W. S. DUNAGAN.

RAIL JOINT.

APPLICATION FILED MAY 4, 1903.

NO MODEL.



Inventor

Witnesses

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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 735,223, dated August 4, 1903.

Application filed May 4, 1903. Serial No. 155,633. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. DUNAGAN, a citizen of the United States, residing at Everett, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention aims to provide a simple, inexpensive, and otherwise desirable connection for the meeting ends of rails. The joint obviates the necessity for the use of the present form of fish-plates now of general adoption, thus doing away with bolts, nuts, and appurtenant devices.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the invention applied. Fig. 2 is a vertical sectional view through the joint. Fig. 3 is a horizontal sectional view. Fig. 4 is a perspective view of the locking-wedge.

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

It is objective as regards the means employed in this invention to provide a device embodying a minimum number of parts, so that it may be adapted to be readily and quickly applied and when necessary to be quickly removed.

The joint comprises, essentially, two members—namely, a chair 1, which receives the end portions of the adjacent rails, which are designated 2. The chair consists of the base 3 and brace members 3^a and 3^b, which extend approximately into contact with the web portion 4 of the rail ends. The chair is made in one piece and is provided upon the inner face of one of its brace members—namely, 3^b—with a longitudinal slot 5. This slot 5 extends the length of the chair and receives a wedge member 6. The wedge member 6, which tapers

toward one end, may be made of suitable material and is provided at its reduced end portion with a lateral extension 7. The lateral extension 7 has a threaded opening 8 thereon, and a set-screw 9 is provided for adjustment within the opening 8. The set-screw 9 is provided with a suitable head 10, to which a wrench or like tool may be applied in effecting the adjustment of the set-screw. A jam-nut 11 is utilized for reasons which are obvious and will not be described.

As will be noted in Fig. 1 of the drawings, the inner end of the set-screw 9 is adapted to bear against the end of the rail-chair 1, and through this medium the adjustment of said screw 9 will cause a longitudinal movement of the wedge member 6 within the slot 5. It will be seen that at intervals of time the set-screw 9 may be adjusted to cause further wedge action of the member 6 to take up wear of the joint while the same is in use. This is essentially advantageous, because it is well known that the constant passage of rolling-stock over the rails tends to loosen a joint and cause rattling and general unsafeness thereof.

The operation of assembling the parts is extremely simple, the wedge member 6 being first disposed within the slot 5 and the chair by slidable movement is then placed on the end of one of the rails. The end of the adjacent rail is then disposed within the chair and the wedge 6, by adjustment of the set-screw 9, given a longitudinal movement in its seat to firmly clamp the end portions of the rails 2 in their respective positions within the chair. Spikes or like fastenings 11 may be utilized to hold the chair rigidly in place upon the rail-ties.

Having thus described the invention, the claim now is—

1. The combination, in means for connecting the meeting ends of rails and the like, of a chair embracing the rails upon the under sides and web portions thereof, and a wedge member disposed between the webs of adjacent rail ends and the chair and provided with a lateral extension, adjustable means disposed upon and carried by the lateral extension for cooperation with the end of the chair to cause longitudinal wedging action of the wedge member.

2. The combination, in means for connect-

ing the meeting ends of rails and the like of
a rail-chair embracing the base and web por-
tions thereof, one of the web-embracing por-
tions being provided with a longitudinal slot
5 upon the inner face thereof, a wedge member
disposed within the aforesaid slot and be-
tween the embracing portions of the chair and
the web portions of the rails, a lateral exten-
sion projected from the reduced end of the
10 wedge member and provided with a threaded
opening thereon, and a set-screw adjustable
within the aforesaid opening having its inner

end adapted to bear against the end portion
of the chair, whereby adjustment thereof will
cause longitudinal wedging action of the 15
wedge member and clamp the adjacent rail
ends within the chair.

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

WILLIAM S. DUNAGAN. [L. S.]

Witnesses:

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