Jan. 2, 1923.

1,440,932.

L. ORBÁN.

RAILROAD TRACK JOINT.

FILED SEPT. 25, 1922.

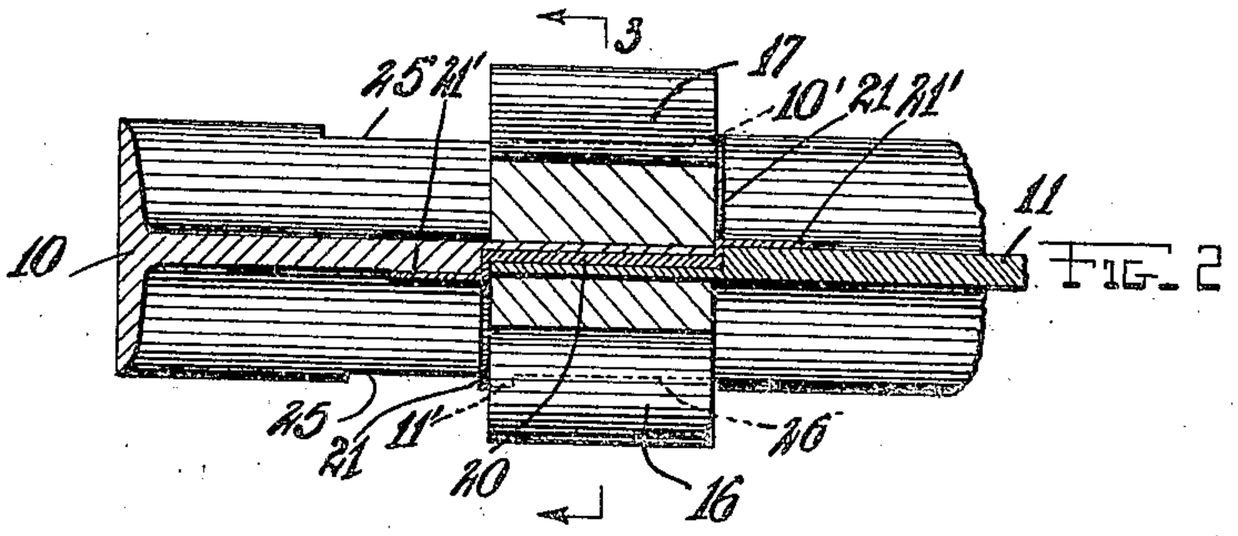


FIG. 2

FIG. 3

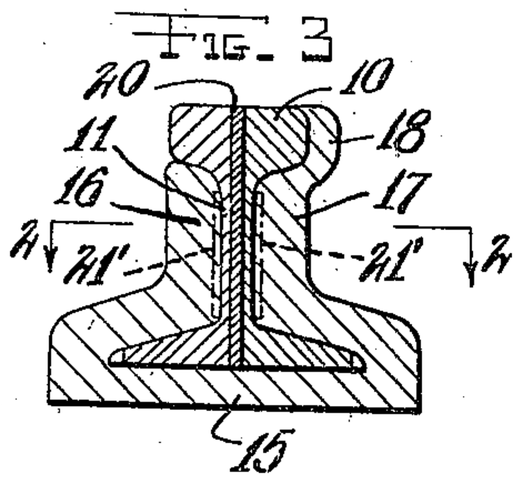


FIG. 1

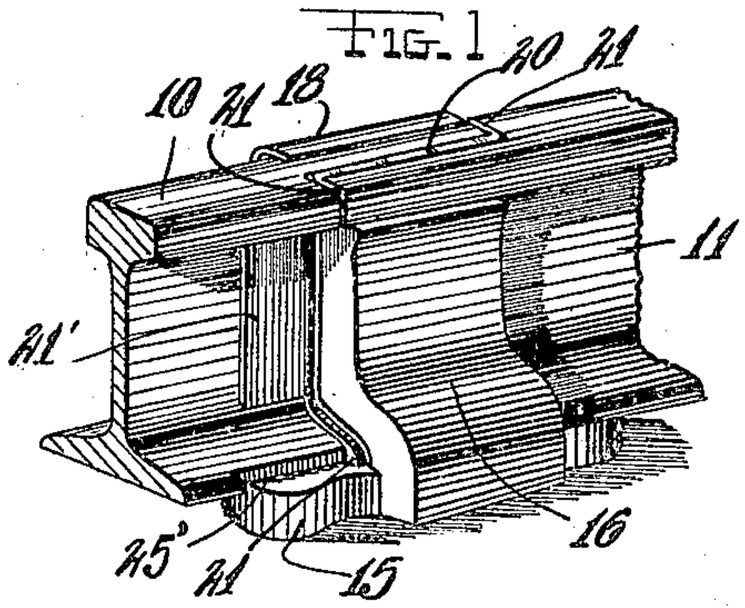


FIG. 4

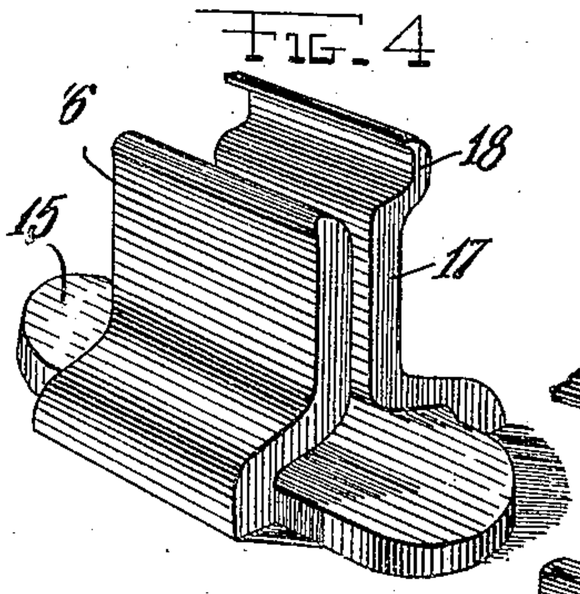


FIG. 5

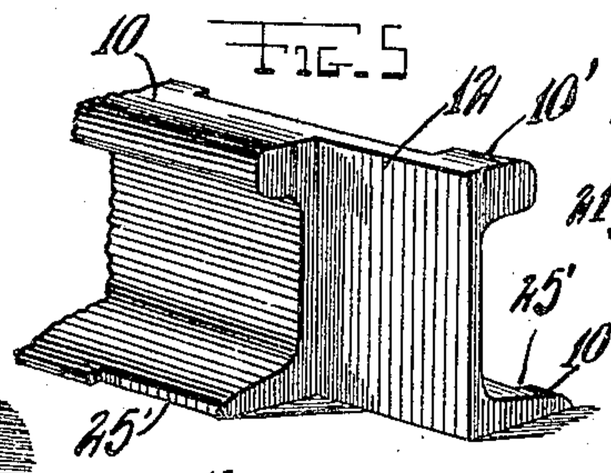
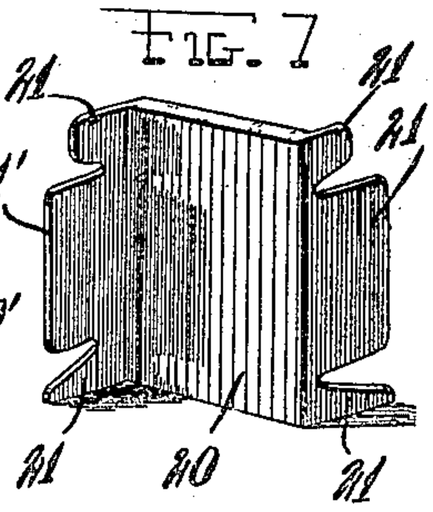


FIG. 7



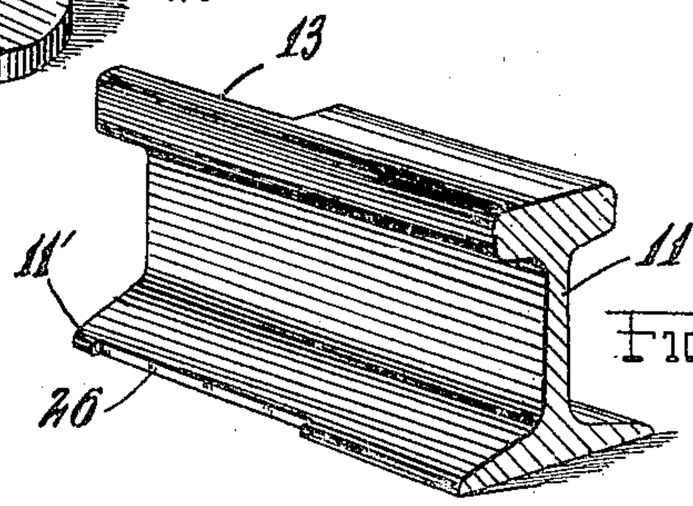


FIG. 6

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UNITED STATES PATENT OFFICE.

LÖRINCZ ORBÁN, OF BEAVER FALLS, PENNSYLVANIA.

RAILROAD TRACK JOINT.

Application filed September 25, 1922. Serial No. 590,236.

To all whom it may concern:

Be it known that I, LÖRINCZ ORBÁN, a citizen of Hungary, residing at Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Railroad Track Joints, of which the following is a specification.

This invention relates to rail joints and it has for an object to provide a novel form of rail joint adapted to lock the two rail ends securely together without the use of bolts or like fastening means, a further object being to provide an efficient type of joint with overlapping rail ends.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

Fig. 1 of the drawings is a perspective view of a rail joint embodying my invention.

Fig. 2 is a horizontal sectional view thereof, this view being taken on the line 2—2 of Fig. 3.

Fig. 3 is transverse sectional view thereof taken on the line 3—3 of Fig. 2.

Fig. 4 is a detail perspective view of the chair member.

Figs. 5 and 6 are detail perspective views of the respective rail ends.

Fig. 7 is a detail perspective view of the locking key.

In the drawings the reference numerals 10 and 11 indicate a pair of rail ends. In forming my improved joint these rail ends are rabbeted out to form complementary recesses, 12 and 13 respectively, each recess receiving the projecting portion of the other rail whereby the two ends are brought into overlapping relation to one another as shown. The transverse depth of each recess is slightly more than half the width of the rail so that when the ends are overlapped there is a space left to receive a key.

The overlapped rail ends are engaged by a chair element in the form of an elongated base-plate 15 of equal width to the base-flange of the rail and on which the rails rest, a pair of flanges 16 and 17 projecting upwardly from opposite sides of the base-plate and being shaped to snugly fit against the sides of the joined rail ends. These flanges fit closely at their upper ends against the bottom of the rail tread while the outer flange 17 preferably has an upward extension 18 which fits snugly against the side of said tread.

The locking key above referred to is in the form of a plate 20 of a size corresponding to the space left as above stated between the overlapped rail ends, this plate having thin flanges 21 on opposite ends which project outwardly across the respective rail ends. At the top and bottom these flanges are shaped in correspondence to the tread and base-flange of the rail, the intermediate portions, vertically considered, being in the form of wings 21′ which are hammered inwardly to lie against the web of the rail as shown in Fig. 2.

Formed in the opposite edges of the base-flange of the rail end 10 are notches or recesses 25, 25′ which are of sufficient length to accommodate the chair-flanges 16, 17 when the chair is pushed off the rail end 11. The notch 25 extends completely to the end of the rail, while the notch 25′ stops short of said end, leaving a projecting tongue 10′. Formed in the base-flange of the rail end 11, on the long side thereof, is a recess 26 which is separated from the end of the rail by a short tongue 11′, the overlapped ends projecting longitudinally beyond the chair flanges a distance equal to the length of these tongues. The recesses are of a depth equal to the thickness of the key-plate 20 and when the latter is in place the rail ends are locked to the chair by reason of the flanges 16, 17 of the latter being engaged in the recesses 25′ and 26.

When it is desired to separate the two rails the key 20 is removed, and the rail end 11 moved laterally to free the tongue 11′ from the chair-flange 16. The chair can then be disengaged from the rail end 11 by pushing it onto the end 10.

My improved rail joint, as will be apparent, is of solid construction, and moreover, pounding of the wheels of trains at the joint is obviated by reason of the overlapping of the rail ends whereby a continuous tread is provided.

Having thus described my invention what I claim as new and desire to protect by Letters Patent of the United States is as follows:

1. In combination, a pair of overlapped rail ends, a chair in which said rail ends are engaged. and a key inserted between said rail ends to lock the same to the chair, said key

having integral wings on opposite ends engaging the webs of the respective rail ends on opposite sides thereof.

2. In combination, a pair of overlapped rail ends, a chair comprising a base plate and side flanges, said side flanges closely engaging the sides of the respective rail ends, and a key inserted between said rail ends to lock the same to the chair, the base-flanges of the rail ends being recessed at their edges, said key being adapted to hold the chain flanges in engagement with said recesses.

3. In combination, a pair of overlapped rail ends, a chair comprising a base plate and side flanges, said side flanges closely engaging the sides of the respective rail ends, and a key inserted between said rail ends to lock the same to the chair, the base-flanges of the rail ends being recessed at their edges, said key being adapted to hold the chair flanges in engagement with said recesses, the base-flange of one of said rail ends having additional recesses adapted to accommodate the chair-flanges when the chair is pushed laterally off the other rail end.

4. In combination, a pair of rail ends each rabbeted out on one side to a depth slightly more than half the width of the rail, said rail ends being overlapped, a chair comprising a base plate and side flanges, said side flanges closely engaging the sides of the respective rail ends, the base-flanges of the rail ends having recesses in their edges in which the chair flanges are engaged, and a locking key in the form of a plate inserted between the overlapped rail ends.

5. In combination, a pair of rail ends each rabbeted but in one side to a depth slightly more than half the width of the rail, said rail ends being overlapped, a chair comprising a base plate and side flanges, said side flanges closely engaging the sides of the respective rail ends, the base-flanges of the rail ends having recesses in their edges in which the chair flanges are engaged, and a locking key in the form of a plate inserted between the overlapped rail ends, said key having wings engaging the web of the rail to prevent displacement of the key.

In testimony whereof I have affixed my signature.

LÖRINCZ ORBÁN.