

G. L. FISK.  
RAIL FASTENER.  
APPLICATION FILED DEC. 20, 1919.

1,358,535.

Patented Nov. 9, 1920.  
2 SHEETS—SHEET 2.

FIG. 3

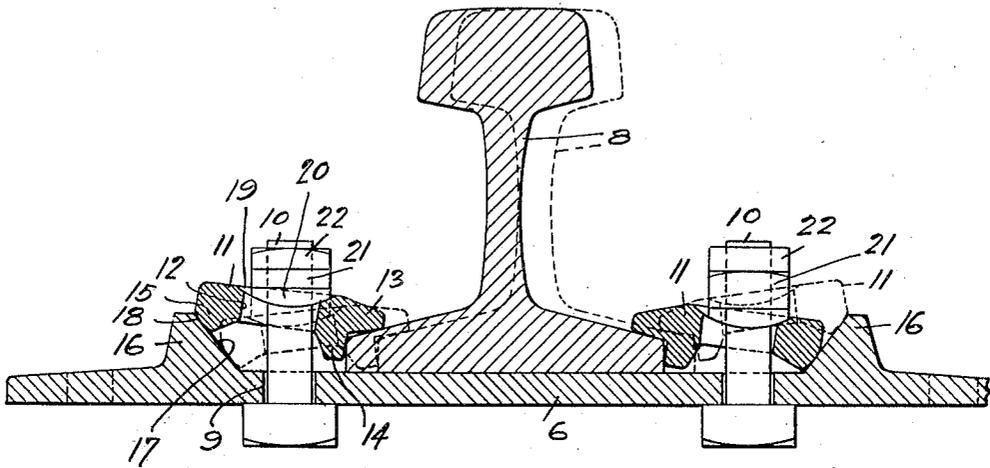


FIG. 4

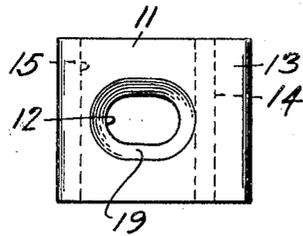
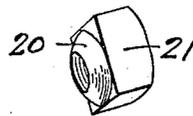


FIG. 5

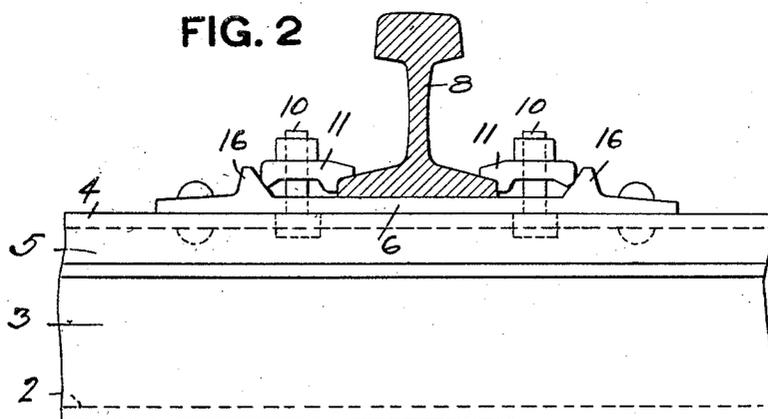
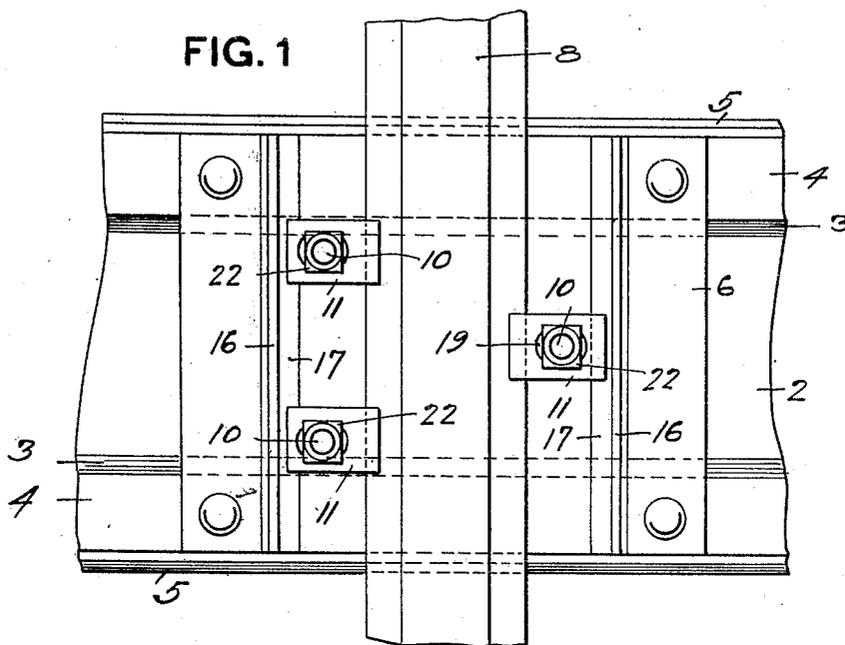


INVENTOR  
*Gustaf L. Fisk*  
By *Kay + Lotter*  
Attorneys

G. L. FISK.  
RAIL FASTENER.  
APPLICATION FILED DEC. 20, 1919.

1,358,535.

Patented Nov. 9, 1920.  
2 SHEETS—SHEET 1.



INVENTOR  
*Gustaf L. Fisk*  
By *Kay & Jotten*  
Attorneys

# UNITED STATES PATENT OFFICE.

GUSTAF L. FISK, OF HARRISBURG, PENNSYLVANIA.

## RAIL-FASTENER.

1,358,535.

Specification of Letters Patent.

Patented Nov. 9, 1920.

Application filed December 20, 1919. Serial No. 346,313.

*To all whom it may concern:*

Be it known that I, GUSTAF L. FISK, a subject of the King of Sweden, and resident of Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Improvement in Rail-Fasteners; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to railroad rail fasteners.

The object of my invention is to provide a simple and efficient form of fastening by which the rail is held securely in position, and at the same time provision is made for permitting rail adjustment to desired gage and take-up for wear of rails without the use of fillers or insertions.

In the accompanying drawing, Figure 1 is a plan view of my improved rail fastening device; Fig. 2 is a side view of a portion of the tie showing the rail in section; Fig. 3 is an enlarged cross section; and Figs. 4 and 5 are details.

I have illustrated my invention in connection with a railroad tie which forms the subject matter of an application for Letters Patent of the United States filed by me of even date herewith, Serial No. 346,314.

This tie consists of the flat bottom portion 2 with the upwardly extending diverging sides 3, and the outwardly extending flanges 4 with the downwardly extending lips 5.

The tie-plates 6 are riveted to the flanges 4 of the tie, said plates forming the support for the rail 8. The plates 6 are formed with the bolt-openings 9 through which the bolts 10 extend upwardly. Clamps 11 have the enlarged openings 12 through which the bolts 10 pass. These clamps are formed with the toe-portions 13 which engage the flange of the rail, and the downwardly extending portion 14 which abuts against the side of the flange of the rail. A heel portion 15 engages the rib 16 formed on the plate, said rib having the inclined or beveled face 17. The heel 15 is slightly curved as at 18 to engage the beveled face 17 of the rib 16.

The clamp 11 has the rounded or concave seat 19, which forms a seat for the rounded face 20 of the nut 21. A suitable lock-nut 22 is employed for holding the nut 21 in position.

The clamping of the rails in position on the tie is carried out as follows:

The clamp-bolts 10 are inserted upwardly through the holes 9 in the plates 6 from the under side and the clamps 11 are placed on top of the tie-plates over the projecting bolts and in such position that the toe 13 of the rail clamp rests on the flange of the rail, and the heel 15 on the inclined or beveled face 17 of the rib 16. The nuts 21 are then secured on to the clamp bolts until the rounded faces 20 rest on the concave seats 19 of the clamps whereupon the track rails are held firmly and securely in place.

When it is desired to adjust the rails to obtain the proper track gage the nuts 21 on one side of the rail are loosened and the nuts on the opposite side tightened. This operation will move the rail sidewise the amount desired due to the motion of the clamps caused by the heel 15 moving or sliding down the beveled face 17 of the ribs 16 which changes the position of the clamps to the positions indicated in dotted lines Fig. 3. When the rails have been finally adjusted the lock-nuts 22 serve to prevent the nuts 21 from turning.

What I claim is:

1. In a rail fastener, the combination of a suitable plate or support for the rail, having bolt openings therein, bolts extending up through said openings, a clamp surrounding said bolt and having an enlarged opening for the passage of the bolt, a toe on said clamp adapted to engage the rail flange, a heel on said clamp, an abutment on said plate having an inclined face engaged by said heel, said clamp having a concave seat, and a nut on said bolt having a rounded face engaging said seat.

2. In a rail fastener, the combination of a suitable plate or support for the rail, having inclined abutments, rail clamps engaging the opposite sides of the rail, bolts securing said clamps in position, said clamps having a sliding engagement with said abutments, nuts on said bolts, and interengaging means between said nuts and said clamps whereby said clamps and the rail secured thereby are moved by adjusting said nuts.

In testimony whereof, I, the said GUSTAF L. FISK, have hereunto set my hand.

GUSTAF L. FISK.

Witnesses:

ROY D. GOOD,  
L. D. PERRY.