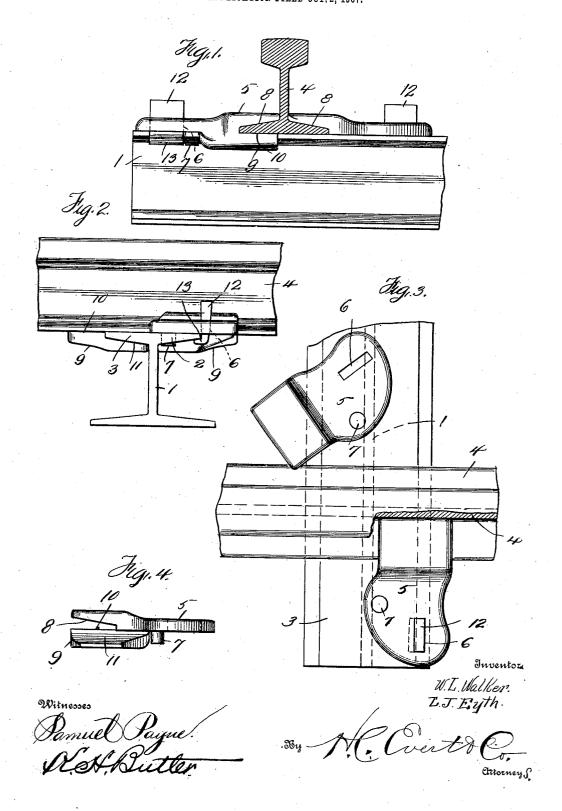
No. 898,291.

PATENTED SEPT. 8, 1908.

## W. L. WALKER & L. J. EYTH. RAIL FASTENER. APPLICATION FILED OCT. 2, 1907.



## UNITED STATES PATENT OFFICE.

WILLIAM L. WALKER AND LOUIS J. EYTH, OF BUTLER, PENNSYLVANIA.

## RAIL-FASTENER.

No. 898,291.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed October 2, 1907. Serial No. 395,583.

To all whom it may concern:

Be it known that we, WILLIAM L. WALKER and Louis J. Eyth, citizens of the United States of America, residing at Butler, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail fasteners, and its object is, to provide novel means for securing railway rails to metallic ties.

The invention comprises a clamp adapted to embrace the flange of a metallic tie and 51 the base of a rail and having a depending pin entering an opening in the tie, and a wedge key for securing the clamp in place.

The construction of the improvement will be fully described hereinafter, in connection 20 with the accompanying drawing which forms a part of this specification, and its novel features will be set forth in the appended claims.

In the drawing:—Figure 1 is a sectional view of a rail secured to a metallic tie by our 25 improved fastener, the fastener and tie being shown in elevation, Fig. 2 is a side elevation of a part of the rail, the metallic tie being shown in end elevation, Fig. 3 is a top plan view of the rail and tie with two of our im-30 proved fasteners applied thereto, and a part of the tread of the rail broken away, and, Fig. 4 is a side elevation of one of the fasteners detached.

The reference numeral 1 designates a me-35 tallic railway-tie of I-shape in cross-section, and formed with openings 2 in its flange 3 on opposite sides of its web portion. The rail 4 rests on the tie, and is secured thereto by our improved clamps located one on each side 40 of the rail. As the two clamps are of similar construction, a description of one will suffice. The clamp or fastener consists of a single piece preferably formed by drop-forging, and comprises a body portion 5 formed with an elongated slot 6 and a depending pin 7. The inner end of the body portion 5 is beveled on its under surface as at 8 to adapt it to overlap the base of the rail. Depending from the body portion 5 the clamp has a lip 50 9 having a portion 10 of its upper surface flattened to fit under the base of the rail, and the remainder of said upper surface is beveled as shown at 11 to adapt it to embrace the under surface of the flange 3 of the tie.

To secure a rail the clamps are applied on 55 opposite sides thereof as shown. The pins 7 of the fasteners are inserted into the openings 2 of the flange of the tie, after which the clamps are turned to embrace the rail and the flange 3 of the tie. This brings the elon- 60 gated slots 6 of the clamps parallel with the edges of the flange 3 of the tie the inner walls of said slots being flush with said edges. Wedges 12 are then driven into said slots, and the lower ends 13 of said wedges are 65 clenched or bent under the flange 3 of the tie as shown in Fig. 2.

It will be apparent that the fasteners may be readily applied or removed, and provide a firm and reliable means for connecting the 70 rail to a metallic tie.

Having fully described our invention what we claim as new and desire to secure by Letters Patent is,

1. The combination with a rail-way rail 75 and a metallic tie having its flange formed with openings, of clamps or fasteners, each comprising a body portion formed with a slot, and a depending pin, and a lip fitting below the flange of the tie while said body 80 portion overlaps the base of the rail, and

keys extending through said slots.

2. The combination with a railway rail, and a metallic tie having its flanges formed with openings on opposite sides of its web, of 85 clamps or fastenings arranged on opposite sides of the rail and each comprising a body portion beveled to fit the base of the rail, and formed with a slot and a depending pin, and a lip flattened to fit below the rail and 90 beveled to fit the under surface of the flange of the tie, and wedge keys driven into said slots and having their ends bent under the flange of the tie.

3. A rail fastener comprising a body por- 95 tion formed with an elongated slot and a depending pin, and beveled on its under surface, and an integral lip having a portion of its upper surface flat and the remainder thereof beveled.

In testimony whereof we affix our signatures in the presence of two witnesses.

> WILLIAM L. WALKER. LOUIS J. EYTH.

Witnesses:

A. J. Trigg, K. H. Butler.