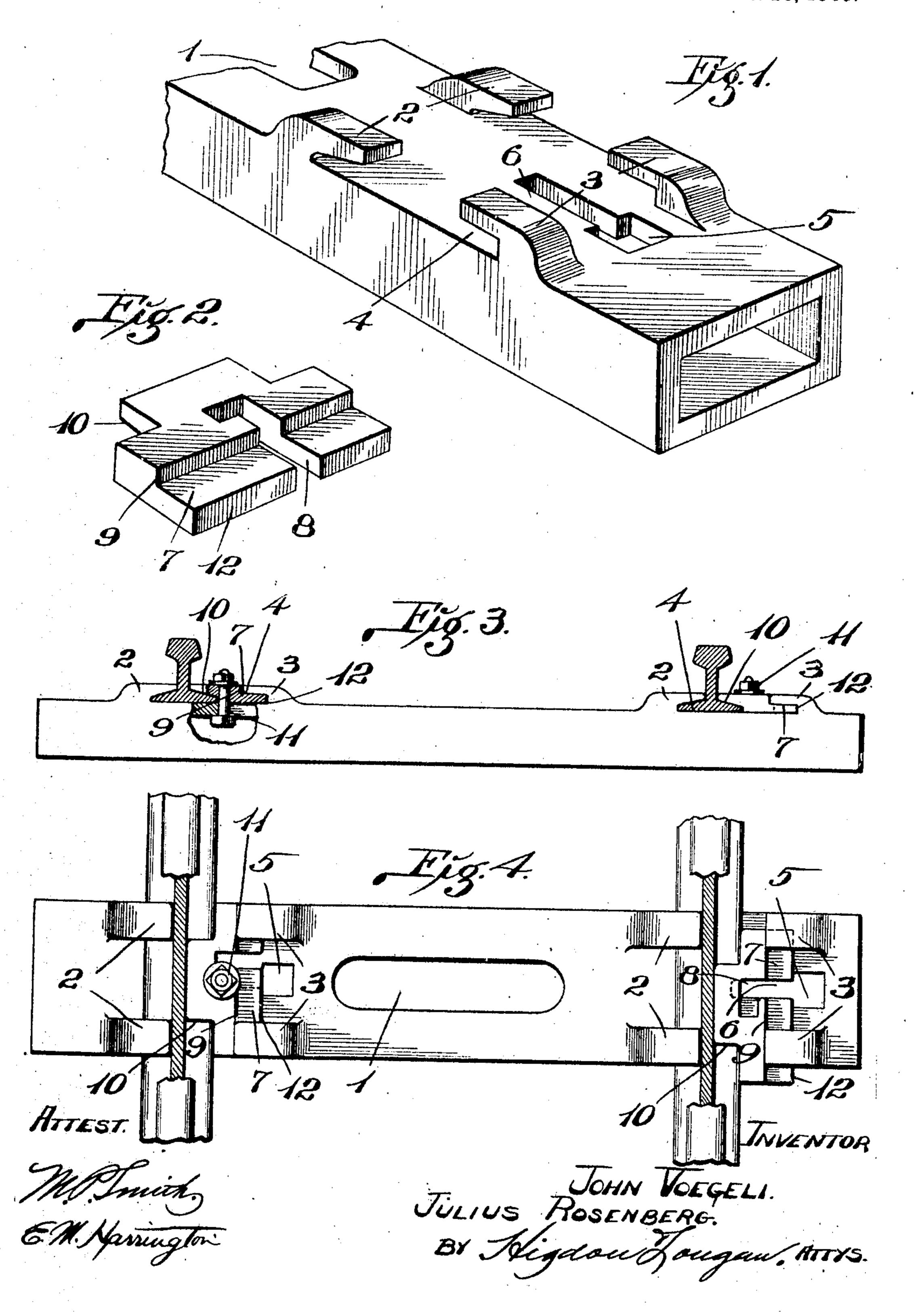
## J. VOEGELI & J. ROSENBERG. COMBINED METALLIC RAILWAY TIE AND BAIL FASTENER. APPLICATION FILED MAY 19, 1908.

912,760.

Patented Feb. 16, 1909.



## UNITED STATES PATENT OFFICE.

JOHN VOEGELI AND JULIUS ROSENBERG, OF GRANITE CITY, ILLINOIS.

## COMBINED METALLIC RAILWAY-TIE AND RAIL-FASTENER.

No. 912,760.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed May 19, 1908. Serial No. 433,742.

To all whom it may concern:

Be it known that we, John Voegell and United States, and residents of Granite City, 5 Madison county, Illinois, have invented certain new and useful Improvements in a Combined Metallic Railway-Tie and Rail-Fastener, of which the following is a specification containing a full, clear, and exact 10 description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to a combined metallic railway tie and rail fastener, and con-15 sists in certain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in the claims, and illustrated in the accompanying drawings, in which:—

20 Figure 1 is a perspective view of our metallic tie with a part broken away; Fig. 2 is a perspective view of our improved fastener; Fig. 3 is a side view of the tie with a part broken away, showing the fastening bolt, the 25 fastener in side elevation, and the rails in section; and Fig. 4 is a top plan view of our invention with the rails secured thereto, parts of the rails being broken away.

Our improved tie is preferably cast of 30 metal, in the form of a box or channel, having its center portion cut away, as at 1, and both ends of the tie are similarly constructed. Formed on the top of the tie are integral lugs 2, there being a space or open-35 ing between the free ends of said lugs and. the tie body. This space or opening is adapted to receive one of the base flanges of the rails. The lugs 2 are spaced apart, as indicated in Figs. 1 and 4.

3 indicates other integral lugs formed on the tie. These lugs are in alinement with the lugs 2, and it will be seen by referring to the drawings that beneath the free ends of these lugs there is formed a rectangular

45 opening 4. Formed in the top of the tie is an opening | slot. 5, which terminates in a narrow opening 6. These openings 5 and 6 are for the purpose | fastener, comprising a body, provided with of receiving the locking bolts. The rail is | a pair of lugs adapted to receive one side of

held in its position on the tie by means of the 50 key illustrated in Fig. 2. This key is pro-Julius Rosenberg, both citizens of the | vided with a recessed portion 7 and an Lshaped slot 8, a shoulder 9, and a cut away portion 10. The cut away portion 10 is adapted to fit over one side of the rail base 55 flange.

11 indicates the bolt by means of which the key is secured to the tie. The manner in which the rails are secured to the tie is as follows: One side of the base flange of the 60 rail is inserted in the openings beneath the free ends of the lugs 2. The key is then inserted from the side, the rectangular portion 12 of the key being placed in the rectangular openings 4 beneath the free ends of the lugs 65 3. The key is driven in until the opening 8 and the opening 6 coincide. The head of the locking bolt 11 is inserted through the opening 5 and slipped toward the rail in the openings 6 and 8, and when it has reached 70 the end of the opening 8, the key is further driven, as illustrated at the left hand of Fig. 4, and when in this position the rail is securely locked to the tie.

It will be seen from the foregoing that the 75 rail is secured to the tie or held fastened to the tie by means of the lugs 2 passing over one side of the base flange of the rail, the key passing over the opposite side of the base flange of the rail, and the locking bolt 80 which secures the key to the tie.

Having fully described our invention, what we claim is:

1. A combined metallic railway tie and rail fastener, comprising a body, pairs of 85 oppositely disposed lugs formed on said body, one of which pairs of lugs receives one of the base flanges of the rail, a key adapted to fit between the opposite pair of lugs and engage over the corresponding base 90 flange of the rail, in which key is formed a slot having an offset inner end, and a bolt for locking the key to the body, which bolt normally occupies the offset inner end of the

2. A combined metallic railway tie and

the base flange of the rail, another pair of lugs, an opening between said lugs, a key provided with an L-shaped slot, and adapted to be received by said last mentioned pair of lugs, which key is adapted to receive the opposite side of the base flange, and a locking bolt for securing said key to the tie.

In testimony whereof, we have signed our

names to this specification, in presence of two subscribing witnesses.

JOHN VOEGELI.
JULIUS ROSENBERG.

Witnesses:

M. P. SMITH, E. L. WALLACE.