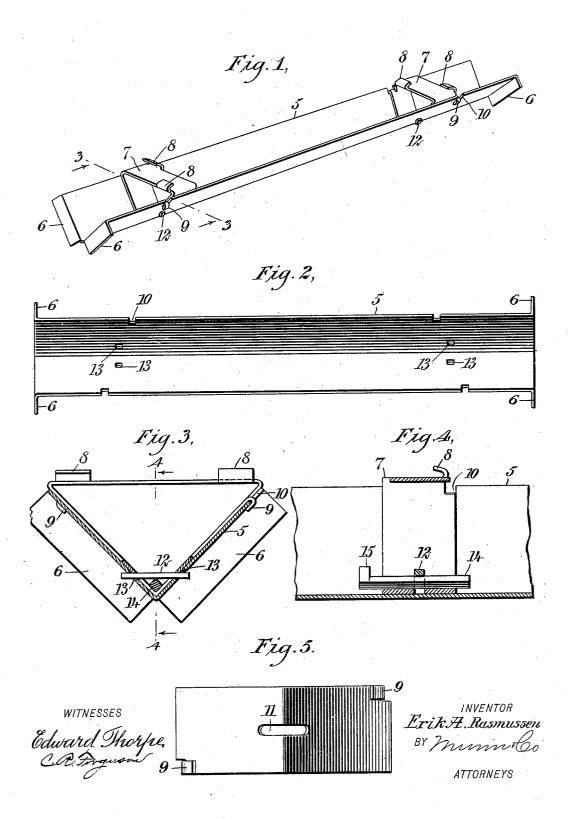
PATENTED JAN. 8, 1907.

No. 840,959.

E. A. RASMUSSEN.
RAILWAY TIE.
APPLICATION FILED SEPT. 5, 1906.



## UNITED STATES PATENT OFFICE.

ERIK ANDREW RASMUSSEN, OF HOT SPRINGS, SOUTH DAKOTA.

## RAILWAY-TIE.

No. 840,959.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed September 5, 1906. Serial No. 333,302.

To all whom it may concern:

Be it known that I, ERIK ANDREW RASMUSSEN, a citizen of the United States, and a resident of Hot Springs, in the county of Fall River and State of South Dakota, have invented a new and Improved Railway-Tie, of which the following is a full, clear, and exact description.

This invention relates to improvements in no metallic ties and rail-fastenings for railways, the object being to provide a metal tie that will be comparatively light, yet strong and serviceable, and having a novel means for securing the rails.

I will describe a railway-tie embodying my invention and then point out the novel

features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specifi-20 cation, in which similar characters of reference indicate corresponding parts in all the

Figure 1 is a perspective view of a railway tie and rail-fastening embodying my invention. Fig. 2 is a plan of the tie. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a section on the line 4 4 of Fig. 3, and Fig. 5 is a bottom view of the rail-fastening.

Referring to the drawings, 5 designates the 30 tie, consisting of metal and, as here shown, Vshaped in cross-section. The ends of the tie are flanged outward, as indicated at 6, these flanges when the tie is arranged in the roadbed serving as anchors to prevent longitu-

35 dinal movement of the tie. The rail-fastenings 7 are triangular in shape, their side walls conforming to the an-

gle of the tie-walls, while the top members extend transversely of the tie and form bed-40 plates for the railway-rails, which are secured in place by clips 8, which are turned inward from the top members of the fastenings. The side walls of the fastening devices are also provided with hook members 45 9, which pass into notches 10, formed in the side walls of the tie, and said hook members 9 engage against the outer sides of said side walls of the tie, as clearly indicated in the drawings

The lower portion of each fastening device 50 is provided with a slot 11 for receiving a pin 12, which passes through perforations 13 in the side walls of the tie near the bottom, and between the pin 12 and the bottom of the fastening device a key 14 is driven, said key 55 having at its outer end a head 15, with which a suitable instrument may be engaged for drawing the key when necessary.

It is obvious that a tie embodying my invention is to be inserted in the road-bed and 60 the interior filled or packed with dirt, cement, or the like. The rail-fastenings will be held securely in place by means above mentioned, and the hooks 9 will prevent any possible spreading of the tie.

Having thus described my invention, I

claim as new and desire to secure by Letters

1. A metal railway-tie substantially Vshaped in cross-section and having openings 70 in its opposite walls near the bottom, triangular rail-fastenings slotted at the bottom, pins for passing through the openings in said side walls of the tie and through said slots, and keys for engaging between said pins and 75 the bottom of the fastenings.

2. A metal railway-tie substantially Vshaped in cross-section and having openings in its opposite walls near the bottom, and notches at the top, triangular rail-fastenings 80 slotted at the bottom and having hook portions for engaging in said notches, pins for passing through the openings in the said side walls of the tie, and through said slots, and keys for engaging between said pins and the 85 bottom of the fastenings.

3. A railway-tie consisting of metal and substantially V-shaped in cross-section, outwardly-extended flanges at the ends of the tie, and triangular rail-fastening devices se- 90

cured in the tie.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERIK ANDREW RASMUSSEN.

 ${
m Witnesses}$ :

M. A. Pool, G. Horras.