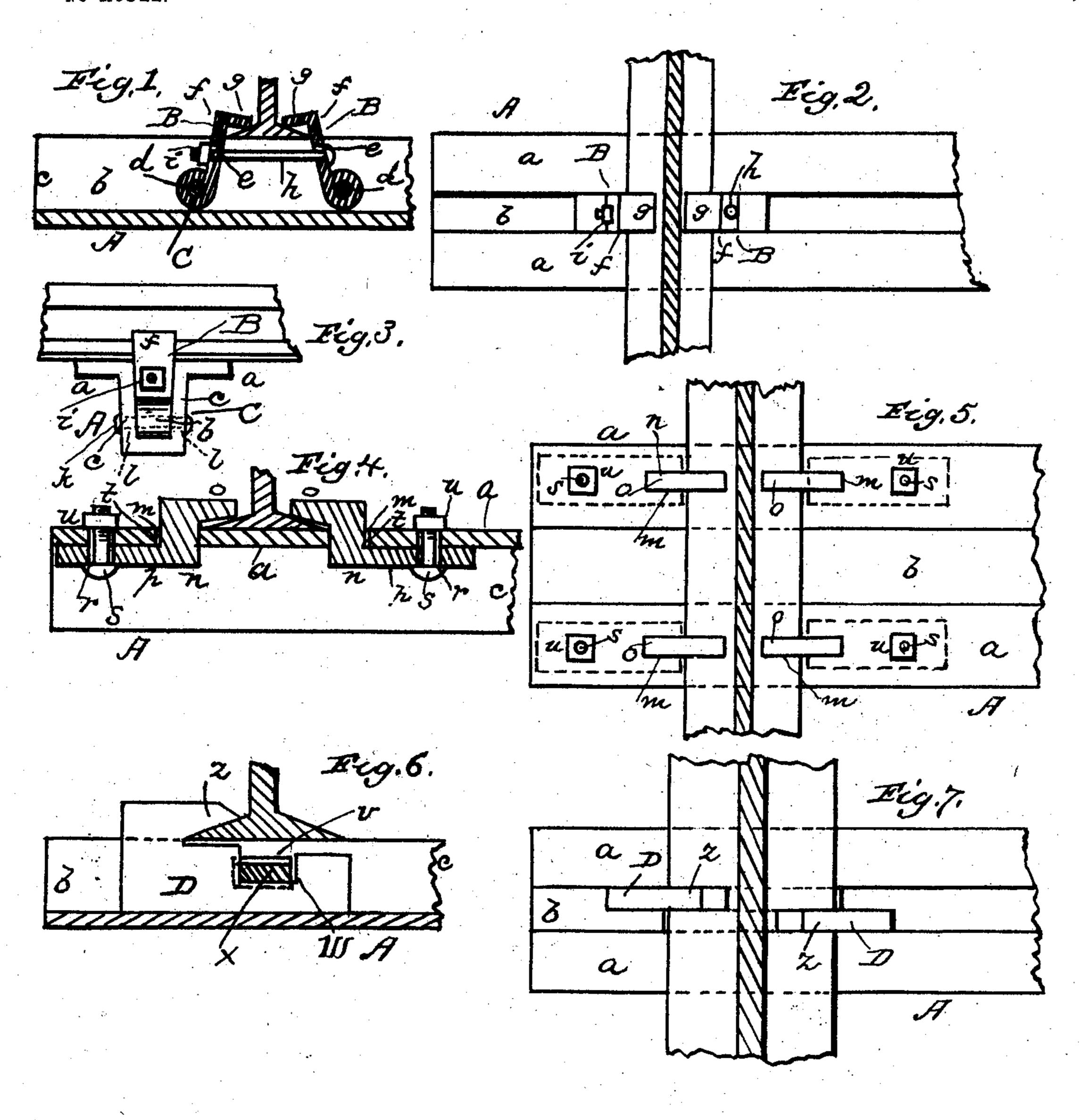
R. R. SPOORE. RAILWAY TIE. APPLICATION FILED MAY 6, 1904.

NO MODEL.



John H. Mone den. Jas. L. Skidmore

Ransom R. Spoore By MmH Bates sworner

United States Patent Office.

RANSOM R. SPOORE, OF KENT, OHIO.

RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 768,349, dated August 23, 1904.

Application filed May 6, 1904. Serial No. 206,678. (No model.)

To all whom it may concern:

Be it known that I, Ransom R. Spoore, a citizen of the United States, residing at Kent, in the county of Portage and State of Ohio, have invented new and useful Improvements in Railway-Ties, of which the following is a specification.

My invention relates to improvements in railway-ties and fasteners; and it consists in the novel construction, combination, and arrangement of the same, all as will be hereinafter more fully described, and particularly pointed out in the appended claim.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a vertical sectional view of my device in modified form. Fig. 2 is a plan view of the same. Fig. 3 is an end of the tie. Fig. 4 is a vertical sectional view of my device. Fig. 5 is a plan view of the same. Fig. 6 is a vertical sectional view of my device, showing another construction; and Fig. 7 is a plan view of the same.

Referring by letter to the accompanying drawings, A designates a railway-tie which is constructed of metal, the same consisting of longitudinal flanges a a and a groove b, said flanges extending at right angles to the vertical walls c c of said groove.

n designates **Z**-shaped fasteners for the rail, whereby the latter is held firmly to the tie. These fasteners consist of hook-shaped locking-plates arranged on each side of the rail, said plates having gripping ends o, that engage the base of the rail, and an arm p, having a perforation r, through which a bolt s passes, that also passes through perforation t in the flange and is secured by a nut u, thus binding the angular clamp to the tie.

In Figs. 1, 2, and 3 I show my device in modified form, wherein B designates the fasteners for the rail, having hooked ends, the

lower end provided with eyes d and perforations e, and the upper portion f is bent into 45 the hooks or clamping-arms g, that engage the base of the rail. A bolt h passes beneath the rail and connects the clamps having a nut i, whereby the clamps are secured to the rail. C C are transverse bolts arranged in the 50 grooves and pass through the eyes d, the ends k k of which are secured in perforations l l in the vertical walls e l, thus providing a hinged connection between the clamps and tie.

It will be readily seen that by my construction of the securing-clamps for the rails the tighter the nut *i* is screwed up the gripping and holding arms bite or grasp the base of the rail.

In Figs. 6 and 7 I show still another construction of my device. The grooved tie is provided with slots v v in its vertical walls, and I employ twin locking-plates D D, arranged within the groove of the tie, said plates having the depression w, in which the transfers key x engages, the ends of the key entering the slots in the side walls of the groove. An inclined gripping nose or point z engages the base of the rail and firmly holds the same to the tie.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with the tie provided with the perforations and slots, of the **Z**-shaped 75 locking-plates having the perforations, and the bolts for securing said plates to the tie, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two sub- 80 scribing witnesses.

RANSOM R. SPOORE.

Witnesses:

J. W. LEE,

B. L. SMITH.