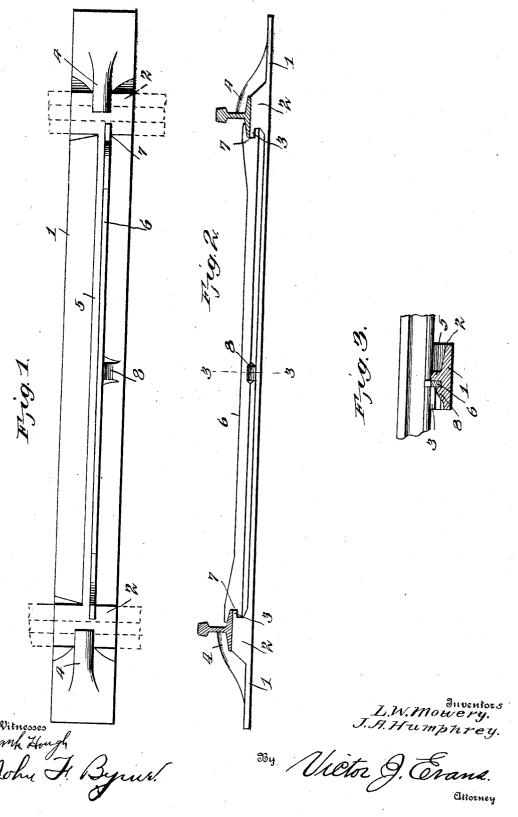
L. W. MOWERY & J. A. HUMPHREY.

RAILWAY RAIL TIE.

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UNITED STATES PATENT OFFICE.

LEWIS W. MOWERY AND JAMES A. HUMPHREY, OF LIMA, OHIO.

RAILWAY-RAIL TIE.

No. 829,282.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, Lewis W. Mowery and James A. Humphrey, citizens of the United States, residing at Lima, in the 5 county of Allen and State of Ohio, have invented new and useful Improvements in Railway-Rail Ties, of which the following is

a specification.

Our invention relates to railway-rail ties; 10 and its primary object is to provide a novel and highly useful device of this character wherein means is provided for securing rails thereto which obviates the necessity of the use of spikes, bolts, or their equivalents for 15 this purpose and which provides more effective means for securing the railway-rails to the ties.

A further object of the invention is to provide railway-rail-locking means which is re-20 tained in applied position without the use of bolts and which may be easily and quickly applied to the ties to secure firmly the rails thereto or removed therefrom to permit of the removal of the rails.

A still further object is to provide a railway-rail tie which comprises but few parts, which is simple of construction, and which may be manufactured and sold at a compar-

atively low cost.

With the above and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter fully described, claimed, and illustrated in the accompanying drawings, where-35 in-

Figure 1 is a top plan view of a railway-rail tie constructed in accordance with our invention. Fig. 2 is a side elevation thereof, and Fig. 3 is a sectional view on the line 3 3

40 of Fig. 2.

Referring to the drawings by referencenumerals, I designates the body of the tie, which is of the usual length and which is constructed, preferably, from some suitable 45 metal. The body of the tie is increased in thickness at points slightly removed from its opposite ends to provide rail-receiving heads or blocks 2, which have their opposing faces provided with inwardly-directed flanges 3. 50 The opposite ends of the body of the tie are also provided with lips 4, located above the rail-receiving heads or blocks 2, and are adapted to embrace portions of the outer flanges of the rails when the rails are posi-55 tioned upon said heads or blocks. The upper face of the body of the tie is provided

with a centrally-located rib or flange 5, which extends from block to block. rib or flange 5 serves to strengthen the body of the tie and also as a stop for the means for 60

securing the rails to the tie.

6 designates a yielding locking-bar which is provided with bifurcated ends 7, said bifurcated ends being adapted to embrace the flanges 3 of the rail-receiving heads or blocks 65 2 and portions of the inner flanges of the rails and being of a length a little greater than the distance between the inner opposing edges of the flanges 3 and those of the rails, so that those portions of the locking- 70 bar 6 which engage said flanges will be held firmly thereagainst. The locking-bar is held in position against the rib or flange 5 by means of a locking-lug 8, and which, as before stated, forms a stop therefor. The 75 locking-lug 8 is spaced from the rib or flange 5 sufficiently to permit of the reception of the locking-bar 6 therebetween and is provided with an inclined face which permits of the easy application of the locking-bar. 80 The locking-bar 6 yields laterally, and thereby permits of its being inserted in applied position and removed.

It should be apparent from the above description, taken in connection with the ac- 85 companying drawings, that as the lockingbar is of a length slightly greater than the distance between the opposing edges of the bases of the rails it exerts outward pressure, and thereby firmly clamps the rails between 90 the lips upon the ties and itself. It should be further apparent that the use of the lug 8 provides a simple, cheap, and durable means of retaining the locking-bar in applied position, that the resiliency of the locking- 95 bar permits its application and removal, and that the engagement of the flanges 3 by the locking-bar prevents the locking-bar from

moving upward.

From the foregoing description, taken in 100 connection with the accompanying drawings, the construction and mode of operation of the invention will be understood without a further extended description. Changes in the form, proportions, and minor details of 105 construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages

Having fully described and illustrated our 110 invention, what we claim is-

1. A railway-rail tie comprising a body

portion provided with rail-receiving heads or blocks having inwardly-disposed flanges, lips extending over said heads or blocks and adapted to embrace the outer flanges of rails, 5 and a single locking-bar provided with bifurcated ends adapted to receive the inner flanges of the rails and the flanges of the heads or blocks.

2. A railway-rail tie comprising a body portion provided with rail-receiving heads or blocks having inwardly-directed flanges, lips disposed over said heads or blocks to engage the outer flanges of rails, a rib secured centrally of the body portion, a locking-lug se-

15 cured to the body portion and spaced from said rib, and a spring locking-bar having bifurcated ends adapted to receive the inner flanges of rails and the flanges of said heads or blocks.

3. A railway-rail tie provided with rail-

engaging means, rails applied to the tie, a locking-bar, said locking-bar exerting outward pressure to clamp the rails between itself and the rail-engaging means, and a lug upon the tie to secure the locking-bar in applied position.

4. A railway-rail tie provided with railengaging means, rails applied to the tie, a yielding locking-bar, said locking-bar exerting outward pressure to clamp the rails be- 30 tween itself and the rail-engaging means, and a lug upon the tie to secure the locking-bar in applied position.

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

LEWIS W. MOWERY.
JAMES A. HUMPHREY.

Witnesses:
CHAS. B. ADGATE,
E. B. CROY.