A. T. SPEARS.

DEVICE FOR FASTENING RAILS TO RAILROAD TIES.

APPLICATION FILED MAY 23, 1913.

1,123,415. Patented Jan. 5, 1915.

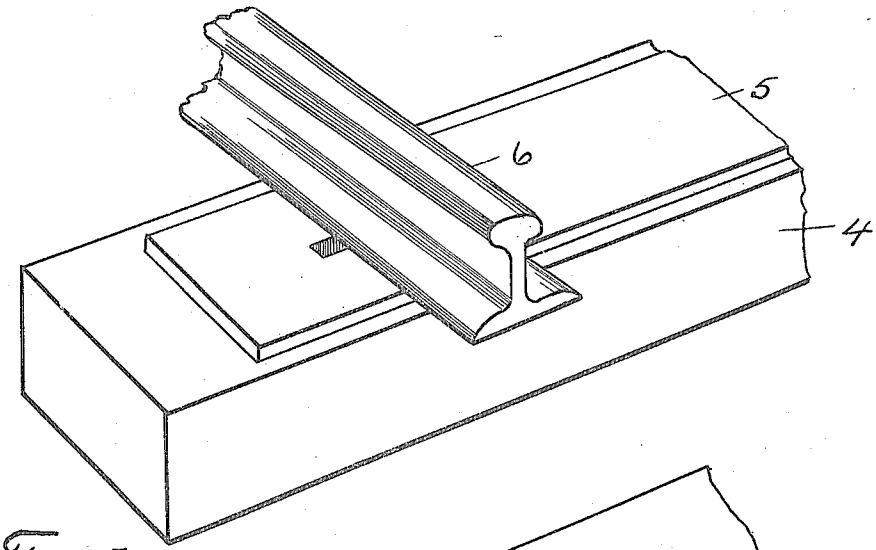


Fig. 1

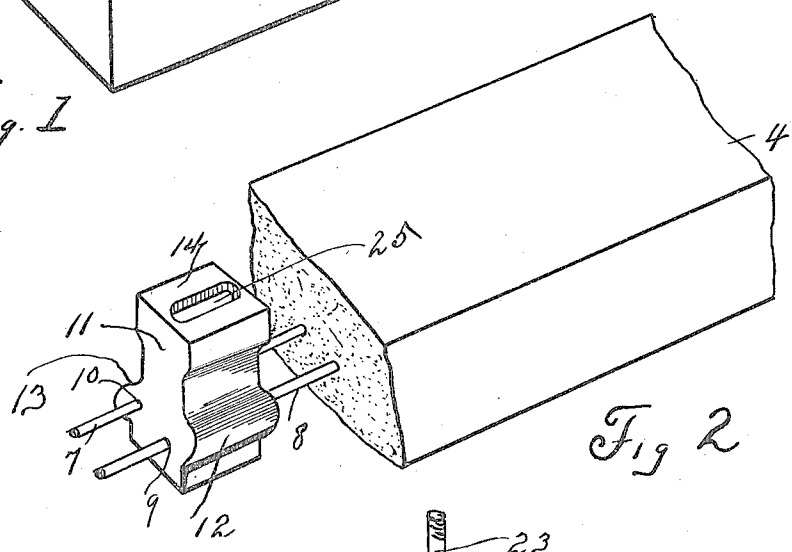


Fig 2

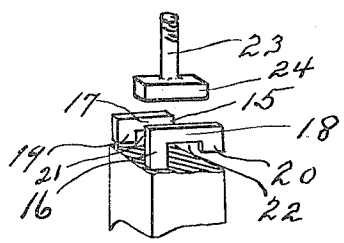


Fig 3

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALFRED T. SPEARS, OF OKLAHOMA, OKLAHOMA, ASSIGNOR TO THE SPEARS IMPROVED TIE COMPANY, A CORPORATION OF OKLAHOMA.

DEVICE FOR FASTENING RAILS TO RAILROAD-TIES.

1,123,415. Specification of Letters Patent. Patented Jan. 5, 1915.

Application filed May 23, 1913. Serial No. 769,449.

To all whom it may concern:

Be it known that I, ALFRED T. SPEARS, a citizen of the United States, residing in the city, county, and State of Oklahoma, have invented a Device for Fastening Rails to Railroad-Ties, of which the following is a specification, reference being had to the accompanying drawing.

This invention relates to railway ties and to means to be associated therewith for fastening the rail to the same.

It is an object of the invention to easily fasten the rail to the tie, and to employ an anchor for the bolt of the fastening means that will hold the bolt and fastening means in place, and at the same time permit the bolt to be removed at will without harm to the tie body.

Other objects of the invention will become apparent from a full reading of the following specification taken in connection with the sheet of drawings accompanying the same.

On this sheet of drawings, Figure 1 represents the tie body in perspective, and a rail plate and a portion of a rail. Fig. 2 is a fragmentary perspective view of the same showing the anchor, and Fig. 3 is a detail perspective view of the interior of the anchor, showing the bolt holding means, and the way in which the bolt is to be initially applied.

In these views, similar characters of reference indicate similar parts.

The tie body 4, the rail plate 5 and the rail 6 may of course be of any suitable type, and therefore special description concerning the same need not be here recited. The tie body is, in the present instance, reinforced by rods 7 and 8, and to these are attached, in a suitable manner, for instance by having the rods pass through openings 9 and 10, anchors 11, one of which is shown in the drawing. This anchor construction may be of any suitable character, the present one being shown as provided with retainers or lugs 12 and 13 that will serve to more steadily and rigidly hold the same in the body of the tie, which may be of an advantage in case the tie is constructed of concrete.

The interior of the anchor is adapted and designed to be provided with bolt head gripping or holding means, so that the bolt when inserted into place will be rigidly maintained, and yet at the same time when it is desirable to remove the bolt it can be easily accomplished without rupture either to the tie body or the anchor. These holding means for the bolt may be of any suitable character best calculated to produce the result desired and so long as they are so arranged that the bolt may be inserted, then turned, and then lifted into place for final retainment, the same may be made in any suitable way. In the present instance, and for purpose of convenience of illustration, the body of the anchor has rising therefrom and beneath the upper face 14 standards 15 and 16 that bear laterally disposed arms 17 and 18, each of which extends in directions opposite, and these arms terminate in downwardly extending beaks 19 and 20, thus leaving spaces or recesses 21 and 22. This construction is clearly indicated in Fig. 3. The bolt 23 is provided with a T-head 24 which, when it is desired to insert the bolt into the anchor is passed into the slot 25 of the upper face 14 and down between the holding means until by turning the bolt it is found that the head will pass beyond the beaks 19 and 20 into the holding means and against the standards 15 and 16, at which time the head may be then drawn up into place into the recesses 21 and 22. Thus will the bolt be held firmly in place, and any suitable rail fastening means may then be attached to the bolt. When it is desirable to remove the bolt, the reverse of the operation just recited is had and the bolt may be easily withdrawn.

Having thus described this invention, I claim:

1. In a device of the kind set forth, a tie, an anchor embedded therein, said anchor comprising a hollow head, having an opening leading into the hollow thereof, hooks, diametrically opposed within the opening, a bolt adapted to drop into said opening and be drawn into place in the hooks, and means to hold the bolt in an uplifted position.

2. In a device of the kind described, a tie, an anchor, embedded therein, said anchor comprising a hollow head, having an opening leading into the hollow, a pair of hooks,

diametrically opposed in said hollow, a bolt passed through said opening and adapted to be lifted to position against the hooks, means to hold the bolt in lifted position, said anchor having an elongated hollow shank and means to retain the structure within the tie.

Signed at the city, county and State of Oklahoma, this 20 day of May in the year of Our Lord, nineteen hundred and thirteen.

ALFRED T. SPEARS.

In the presence of—
G. F. HOBERG,
JAMES BELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."