

1,029,195.

Patented June 11, 1912.

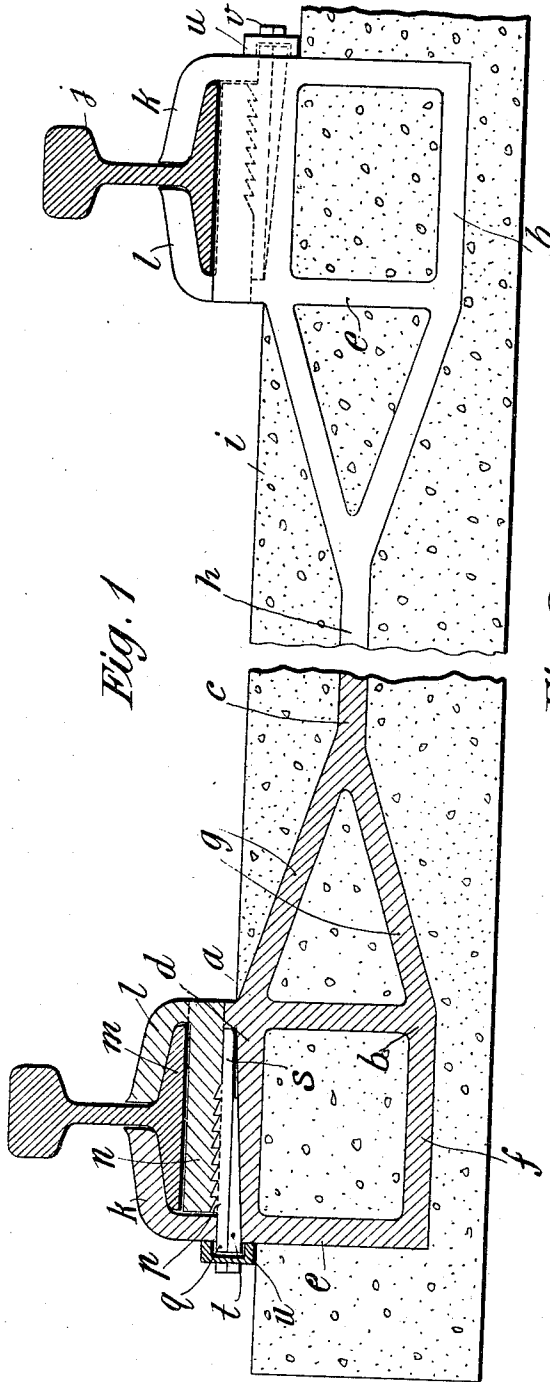


Fig. 1

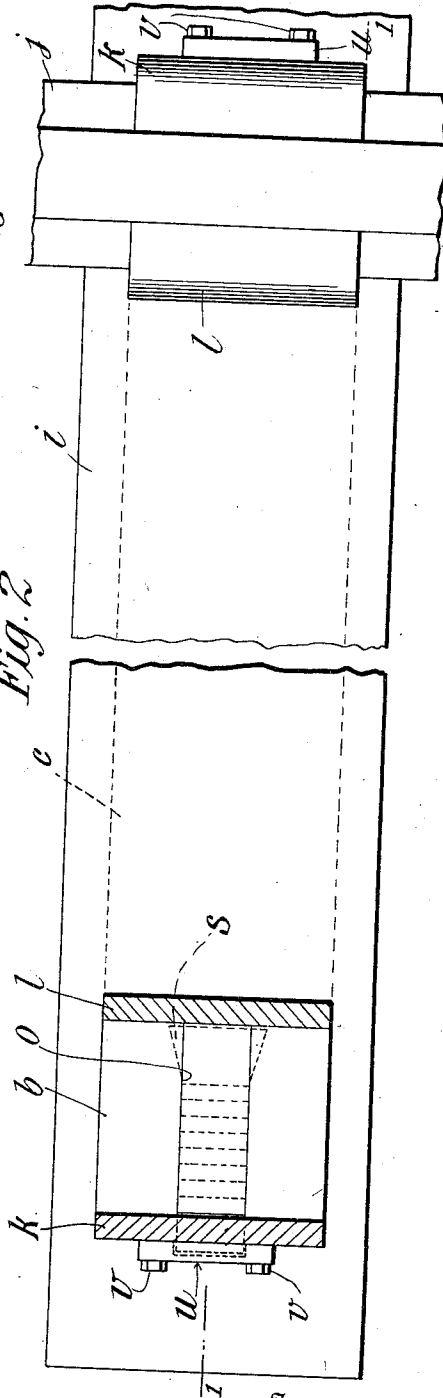


Fig. 2

Witnesses:
Raphael Lutter
Oliver B. King

Inventor
William Iring.
By his Attorney
Samuel C. Yeaton

UNITED STATES PATENT OFFICE.

WILLIAM IRING, OF NEW YORK, N. Y.

RAILWAY-TIE.

1,029,195.

Specification of Letters Patent.

Patented June 11, 1912.

Continuation of application Serial No. 631,839, filed June 7, 1911. This application filed September 16, 1911. Serial No. 649,688.

To all whom it may concern:

Be it known that I, WILLIAM IRING, a citizen of the United States, residing in the city, county, and State of New York, have
5 invented certain new and useful Improvements in Railway-Ties, of which the following is a specification.

This invention relates to railway ties, and its object is to provide a metal tie embedded
10 in cement for affording a metal seat for the rails and a metal spanner to secure the parallel rails rigidly in place.

This application is a continuation of my application filed June 7, 1911, bearing Serial No. 631,839.

In the drawings forming part of this application, Figure 1 is a sectional elevation taken through the line 1—1, Fig. 2, of a tie embodying my invention; and Fig. 2 is a
20 plan partly in section of Fig. 1 with the rail on the left side removed.

In the drawings I have shown a rail securing means similar to that shown in my former application, only in the present application I have secured the rail in place by means of jaws directly gripping the usual
25 flanges at the base of the rail instead of gripping the lug, as in my former application, shown formed on the bottom of the rail. I am thus enabled to use a standard
30 rail if desired, and can do away entirely with the extra lug at the bottom.

The metal part *a* of the tie comprises hollow rectangular rail supporting blocks *b*,
35 *b*, secured together by spanner *c*. The blocks are comprised of the upper face plates *d*, the uprights *e*, and the bottom plate *f*, the ends being left open. The spanner *c* comprises pairs of stretches *g*, *g*, extending
40 from opposite sides of the inner uprights *e*, preferably from the upper and lower edges, converging gradually toward the center where they meet in the common bar *h*. This iron structure is inclosed in a rectangular
45 block of cement *i* in suitable position to leave the upper face plates *d* exposed to af-

ford seats for the rails and to permit of suitable securing means for holding the rails firmly in place.

The securing means shown accommodates 50 a rail *j* of usual formation. It comprises a rigid jaw *k* formed preferably integrally with the iron structure of the tie and a movable jaw *l*. The jaws grip the flanges *m* of the rail and hold it securely in place. 55 The movable jaw has a rack bar *n* extending from it, which engages in a groove *o* formed in the face plate *d* having preferably beveled sides to engage the correspondingly beveled sides formed on the bar to retain it in place. 60

In the base of the groove is fitted a locking rack bar *p* having the end *q* projecting outwardly providing a handle for giving the rack a swinging movement up and down
65 about its opposite end, which is provided with a head *s* for securing the rack in place. The swinging upward locks the two racks together and consequently the rail in place, as clearly shown in the drawings. In this
70 position an operating space is formed below the rack, and a wedge *t* is wedged therein from the opening at the end of the tie. This locks the members together, and the rail securely in place. The end of the wedge is
75 permitted to extend outwardly evenly with the end of the rack affording holding means for withdrawing the wedge when desired. The ends of the rack and wedge are preferably concealed by the facing plate *u* secured
80 in place by bolts *v*.

My tie, as is obvious, is not limited to any particular rail securing means, but may be used whenever mechanism is employed for holding the rail to the tie. 85

Having thus described my invention, I claim:

1. A railway tie comprising rail supporting plates, uprights depending therefrom, base plates connecting the uprights, pairs
90 of converging members extending from the inner of said uprights and meeting at the

center of the tie and an inclosing block of cement exposing the rail supporting plates.

2. A railway tie comprising rail supporting plates, jaws extending therefrom for gripping the rail flanges, uprights depending therefrom, base plates connecting the uprights, pairs of converging members extending from the inner of said uprights and meeting at the center of the tie and an in-

closing block of cement exposing the rail supporting plates.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM IRING.

Witnesses:

WM. G. McGRATH,

OLIVE B. KING.

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