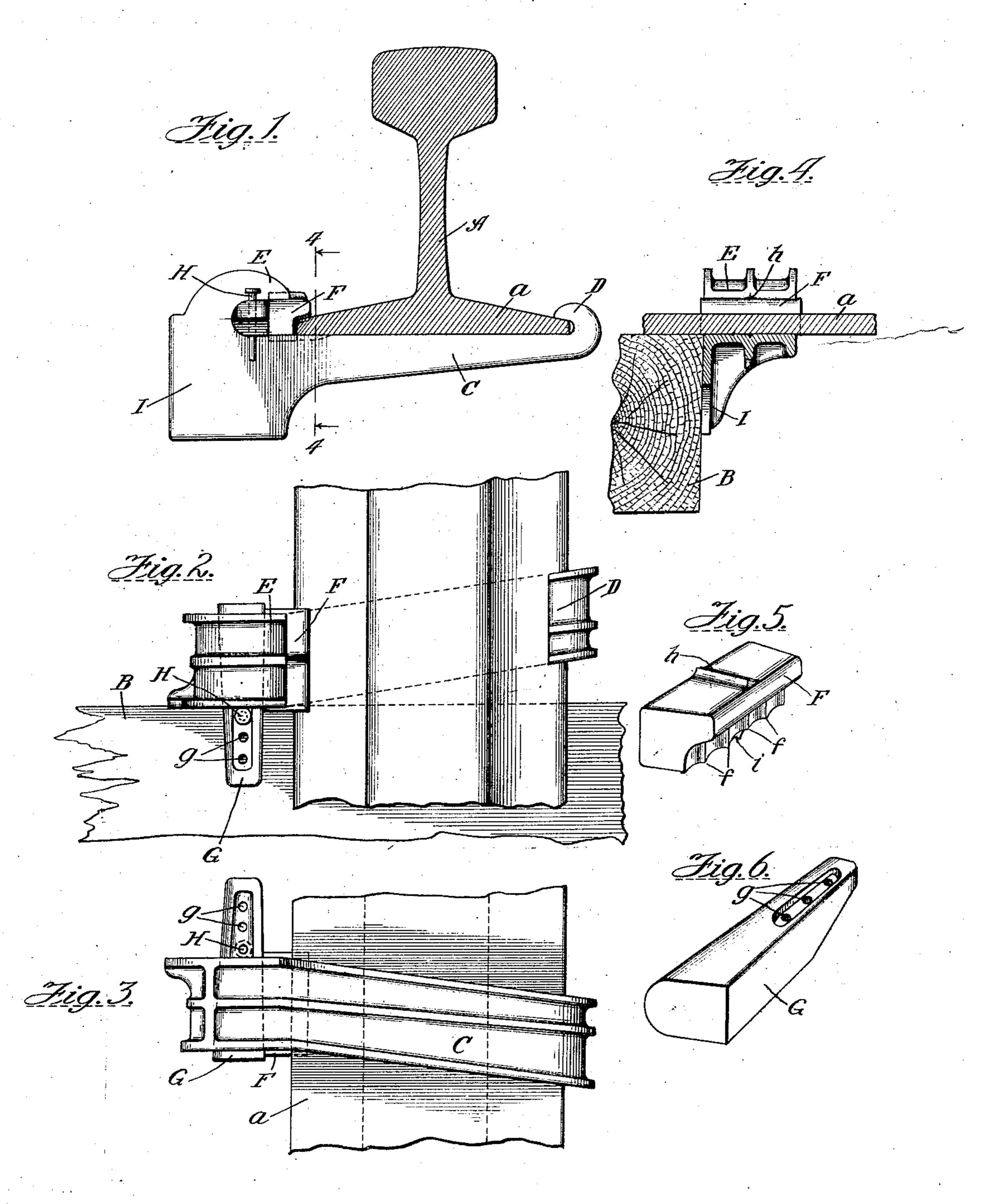
## J. J. O. FISCHER. RAILWAY RAIL STAY. APPLICATION FILED JAN. 22, 1907.



Witnesses: BaDTerry Ano.H. Helson J. J. O. Fischer

By Get Randt

## UNITED STATES PATENT OFFICE.

JENS JORGENSEN OVE FISCHER, OF RACINE, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO LAAS & SPONENBURG CO., A CORPORATION OF ILLINOIS.

## RAILWAY-RAIL STAY.

No. 847,403.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed January 22, 1907. Serial No. 353,502.

To all whom it may concern:

Be it known that I, JENS JORGENSEN OVE Fischer, a citizen of the United States, residing at Racine, in the county of Racine and 5 State of Wisconsin, have invented certain mow and useful Improvements in Railway-Rail Stays, of which the following is a specification.

This invention relates to improvements in to devices adapted to be applied to the base of a railway-rail for the purpose of anchoring the rail, so as to prevent longitudinal creeping of the rail.

The object of the present invention is to 15 provide a device of this class, which while simple in construction and easy of application to a rail is yet capable of holding the rail very securely.

The device herein shown and described is 20 in the nature of an improvement on the device covered by United States Letters Patent No. 738,499, granted to H. H. Sponenburg, September 8, 1903.

In the drawings accompanying this speci-25 fication, Figure 1 is an elevational side view of my improved rail-stay applied to a rail. Fig. 2 is a top plan view of the same. Fig. 3 is a bottom plan view of the same. Fig. 4 shows a section through the base of the rail and the 30 rail-stay, the section being taken on the line 4 4 of Fig. 1 looking in the direction indicated by the arrows. Fig. 5 shows in perspective a rail-gripping member used with this device. Fig. 6 shows in perspective a wedge employed 35 to lock the parts of the device to the rail.

In the several figures of the drawings A is the rail, and B is a tire upon which the rail is supported. Extending across the under side of the base a of the rail A is a bar-con-40 necting member C, provided with a jaw D upon one of its ends, adapted to hook over one edge of the rail-base a. The opposite end of this member is also provided with a hook or jaw E.

F is a rail-gripping member adapted to be inserted into one of the jaws between the latter and the edge of the rail-base. This railgripping member is preferably formed of metal harder than that of the rail and is provided 50 with projections or teeth f, adapted to bite

into the rail.

G is a key, in the form of a wedge, adapted to be driven into the jaw E behind the gripping

member F and to force the latter outward into engagement with the rail-base. This key is 55 preferably formed with a series of openings g therethrough. After the wedge is driven in and the member F is caused to grip the rail-base a pin H may be passed through one of these holes g to prevent the wedge from 60 working backward, and thus permitting the parts the device to become loosened from the rail. This pin may consist of an ordinary round wire nail.

To prevent movement of the part F in the 65 direction of its length, I provide this part F with a rib h, extending transversely across the upper side thereof, and a similar rib i, extending across its lower side. These ribs lit into suitable corresponding depressions in 70

the bar C and jaw E.

The bar C is provided with a tie-abutting member, consisting of a downwardly-projecting apron I. The device is placed upon the rail, with this apron I in contact with the side 75 of a tie, and is so disposed that creeping of the rail in the direction in which it tends to creep will be prevented.

In the drawings I have shown the invention as applied to a rail-stay of that type 80 wherein the jaws D and E are disposed at an angle other than a right angle with the bar C, so that when the device is secured to the rail said bar will be inclined at an angle to a line passing directly across the rail-base. 85 By this arrangement, as is now well known to those skilled in this art, any creeping of the rail tends to tighten the jaws upon said rail. This feature, however, is well known and neither serves to characterize nor to limit my 90 present invention, which consists, primarily, in providing a familiar type of anticreeper, with a rail-biting member movable transversely of the rail, a wedge for tightening the rail-biting member against the flange of the 95 rail and combined, preferably, with coengaging means providing a positive stop to prevent the movement of the rail-biting member longitudinally of the rail.

I claim— 1. A rail-stay comprising a pair of jaws, a connecting member arranged to extend beneath the base of the rail and connect the said jaws, a rail-gripping member adapted to be interposed between one of said jaws and 105 one edge of the rail-base and movable trans-

versely of the rail, coengaging means on said rail-stay and said rail-gripping member to prevent the movement of said rail-gripping member lengthwise of the rail, and a wedge arranged to be interposed between said r. !gripping member and an abutment on the anticreeper so as to force said rail-gripping member into gripping engagement with the rail-base.

2. A rail-stay comprising a pair of facing jaws having fixed relation to each other, a connecting member adapted to extend beneath the base of the rail and connect said jaws, a rail-gripping member movable lengthvise of the rail-stay and arranged to be interposed between one of said jaws and one edge of the rail-base, coengaging abutments upon the rail-gripping member and the body of the rail-stay to prevent movement of the rail-20 gripping member lengthwise of the rail, and means for forcing the rail-gripping member. into gripping engagement with the base of the rail.

3. A rail-stay comprising a connecting 25 member extending across the lower side of the base of the rail, and having a jaw upon each of its ends, a rail-gripping member inserted in one of said jaws and movable transversely of the rail, and a wedge adapted to be inserted behind said rail-gripping member to force said member into engagement with the base of the rail.

4. A rail-stay comprising a connecting member extending across the lower side of the base of the rail and provided with means at one end for abutting a tie, and having also a jaw upon each of its ends, a rail-gripping member movably arranged in one of said jaws, said rail-gripping member being com-40 posed of harder material than the rail, and a tapered key adapted to be inserted into said jaw and to force said rail-gripping member G. Y. SKINNER, into holding engagement with the rail-base. O. R. BARNETT.

5. A rail-stay comprising a connecting member extending across the lower side of 45 the base of the rail and provided with means for abutting a tie, and having also a jaw upon each of its ends, a rail-gripping member movably arranged in one of said jaws, and a tapered key adapted to be inserted into said 50 jaw and to force said rail-gripping member into holding engagement with the rail-base.

6. A rail-stay comprising a connecting member extending across the lower side of the base of the rail and provided with means 55 at one end for abutting a tie, and wing also a jaw upon each of its ends, a rail-gripping member movably arranged in one of said jaws, said rail-gripping member being composed of harder material than the rail, and a 60 tapered key adapted to be inserted into said jaw and to force said rail-gripping member into holding engagement with the rail-base.

7. A rail-stay comprising a bar extending across the lower side of the base of the rail 65 and provided with means for abutting a tie, said bar having also a jaw upon each of its ends, a rail-gripping member movably arranged in one of said jaws, and a tapered key adapted to be inserted into said jaw and to 70 force said rail-gripping member into holding engagement with the rail-base, and means for locking said key in position.

8. A rail-stay comprising a bar extending across the lower side of the base of the rail 75 and provided with means for abutting a tie, said bar having also a jaw upon each of its ends, a toothed rail-gripping member movably arranged in one of said jaws, and a tapered key adapted to be inserted into said 8c jaw and to force said rail-gripping member into holding engagement with the rail-base.

JENS JORGENSEN OVE FISCHER. Witnesses: