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PATENTED MAY 17, 1904.

E. LAAS & H. H. SPONENBURG.

RAILWAY RAIL STAY.

APPLICATION FILED DEC. 26, 1903.

NO MODEL.

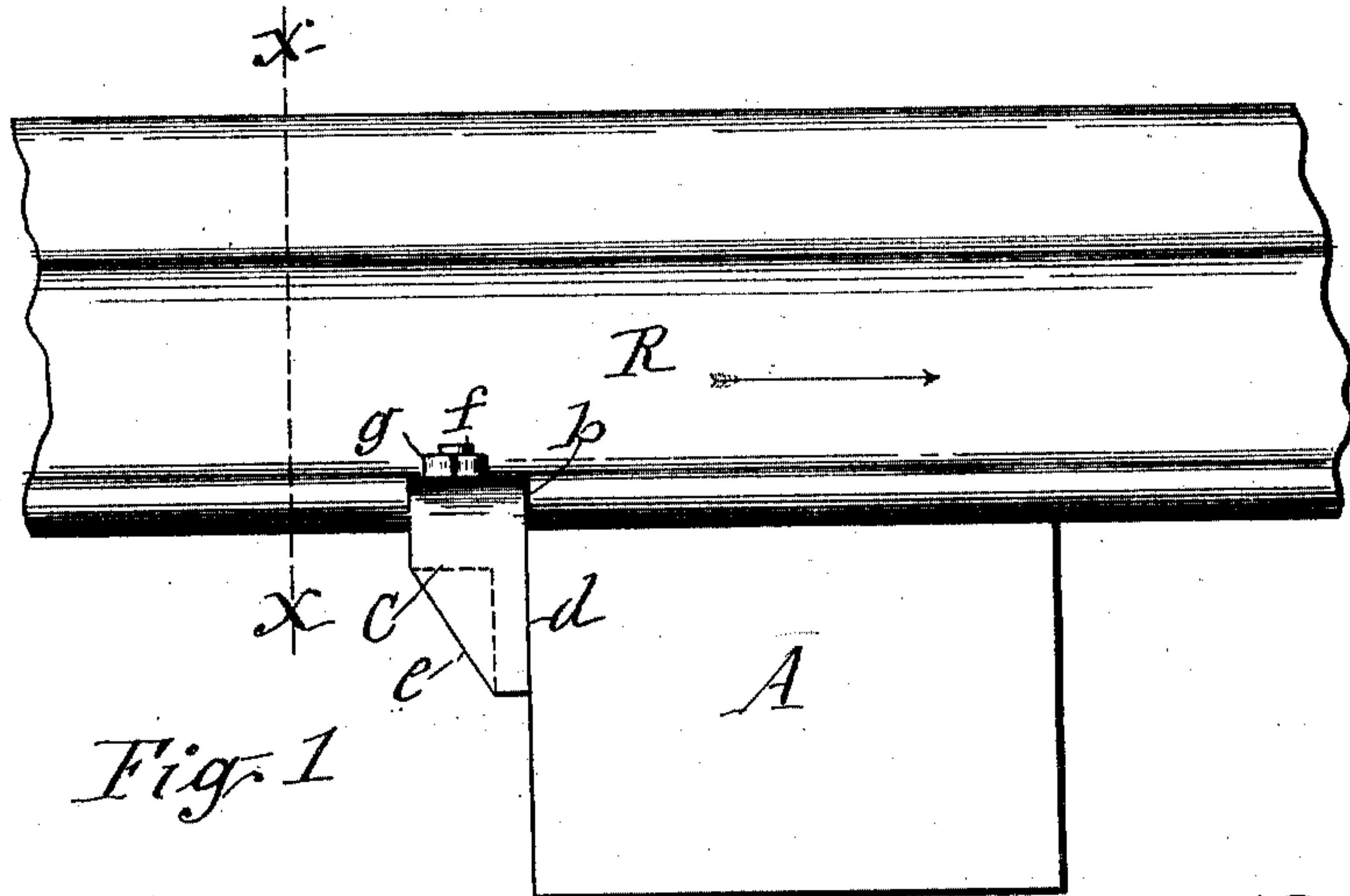


Fig. 1

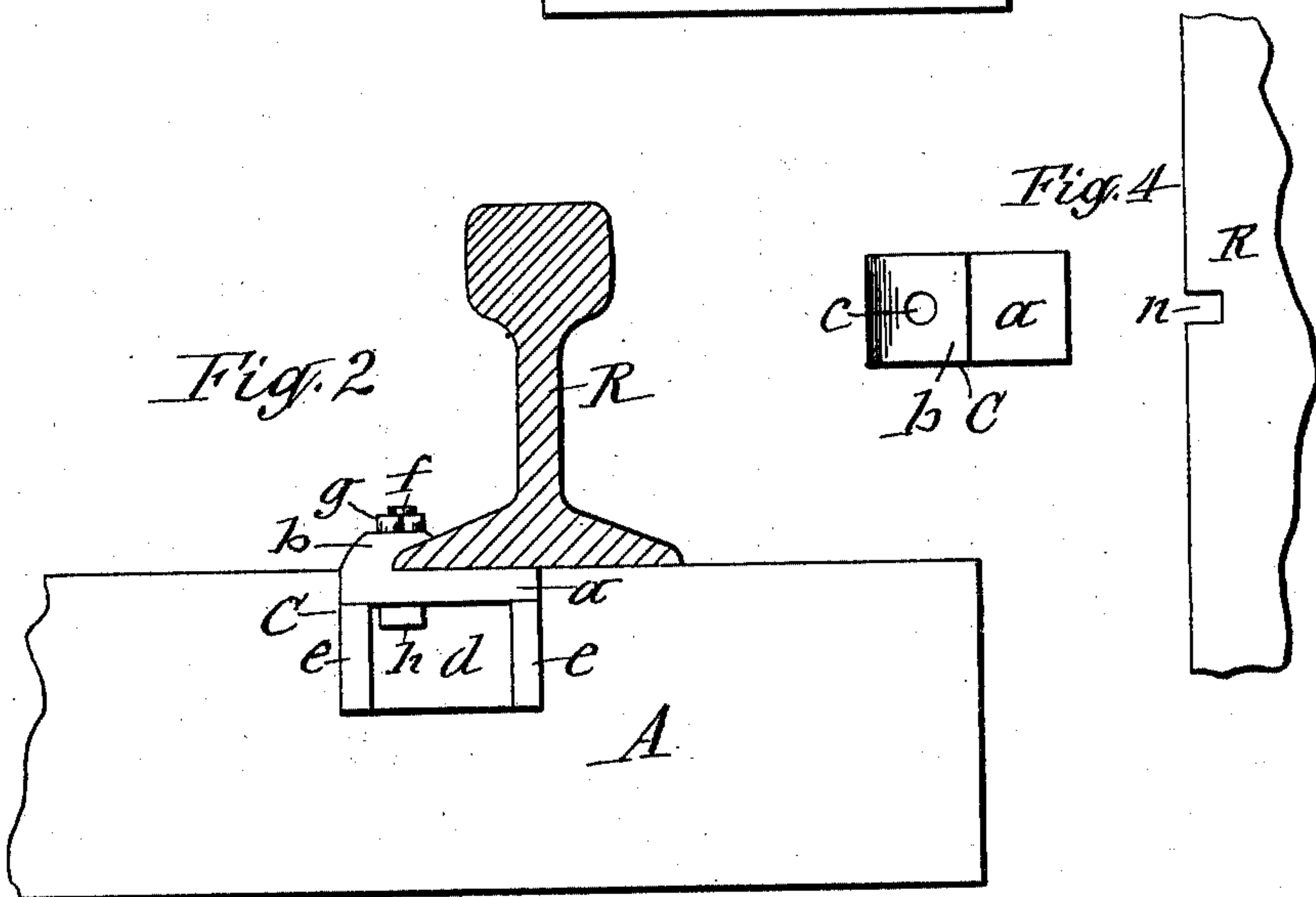


Fig. 2

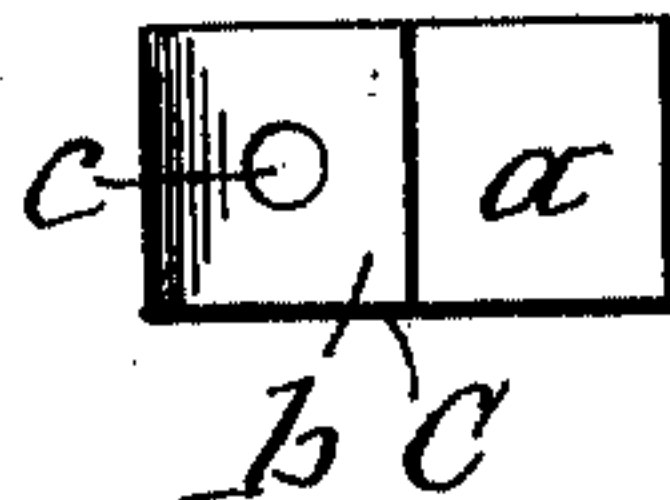


Fig. 3

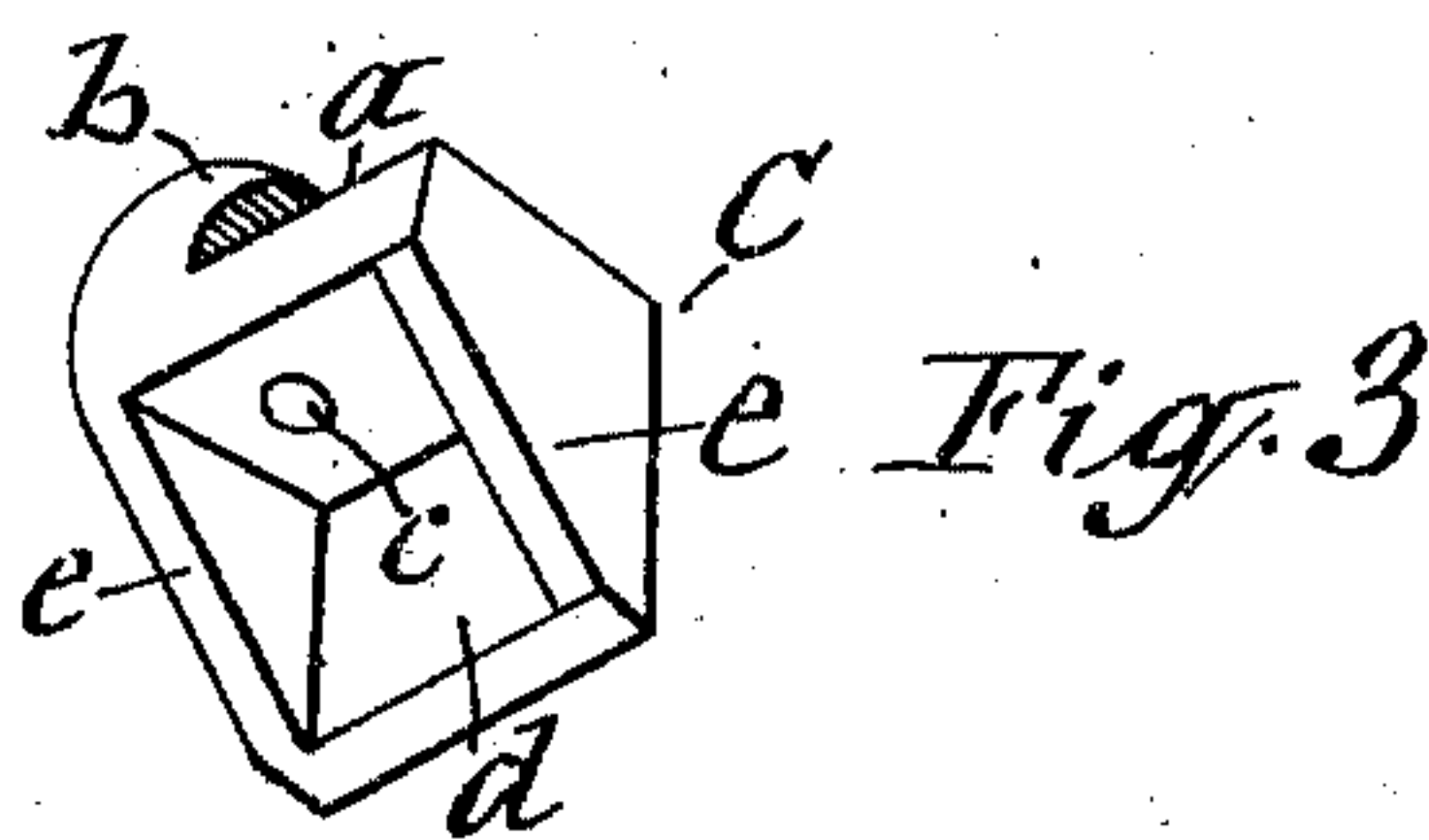


Fig. 4

WITNESSES:

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## UNITED STATES PATENT OFFICE.

EDWARD LAAS, OF ELGIN, AND HIRAM H. SPONENBURG, OF WADSWORTH, ILLINOIS.

## RAILWAY-RAIL STAY.

SPECIFICATION forming part of Letters Patent No. 760,129, dated May 17, 1904.

Application filed December 26, 1903. Serial No. 186,672. (No model.)

*To all whom it may concern:*

Be it known that we, EDWARD LAAS, a resident of Elgin, in the county of Kane, and HIRAM H. SPONENBURG, a resident of Wadsworth, in the county of Lake, in the State of Illinois, citizens of the United States, have invented new and useful Improvements in Railway-Rail Stays, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The object of this invention is to provide a simple, inexpensive, and efficient device for preventing the rail of a railway from creeping or shifting lengthwise of the track; and to that end the invention consists, essentially, of a bracket engaging the side of the cross-tie and provided with a jaw gripping the base of the rail and means for interlocking the bracket with the rail, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side view of a railway-rail equipped with our improved rail-stay. Fig. 2 is a transverse section on line X X in Fig. 1, showing the rail-stay applied to the inner side of the rail. Fig. 3 is a detached isometric view of the rail-stay bracket; and Fig. 4 is a detail plan view of the said bracket and the portion of the rail to which the bracket is applied.

Similar letters of reference indicate corresponding parts.

R represents the rail, and A one of the cross-ties which supports said rail.

The arrow in Fig. 1 indicates the direction of the shifting or creeping of the rail, which the rail-stay is to resist.

C denotes the said rail-stay, which consists of a bracket composed of a horizontal top plate *a*, a hook-shaped jaw *b*, projecting from the top of said plate and provided with a bolt-hole *c*, extending vertically through said jaw and top plate, a vertical plate *d*, depending from the edge of the top plate and disposed at right angles to the jaw *b*, and braces *e e*, extending from the bottom of the top plate *a* to the depending plate *d*, all of which parts are formed in one piece, of cast iron or steel, or otherwise firmly united to cooperate in resisting the creeping of the rail R.

The flange or base of the rail is provided with a notch *n* or other suitable perforation for reception of means for interlocking the rail-stay with the rail.

To properly apply the bracket C to the rail so as to interlock therewith and at the same time cause said bracket to abut against the side of the cross-tie, the latter must be placed in position to allow the bolt-hole *c* of the bracket to coincide with the notch *n* in the rail R when the vertical plate *d* rests on the side of the cross-tie.

The bracket C is placed with its top rail *a* on the under side of the rail R and with the jaw *b* gripping the base of the rail, as shown in Figs. 1 and 2 of the drawings. When thus properly placed, the bracket C is fastened to the rail R by a bolt *f*, passing through the hole *c* and provided on its lower end with a head *h*, engaging the bottom of the plate *a*, and a nut *g* on the upper end of the bolt, bearing on top of the jaw, as shown in Fig. 2 of the drawings. Said bolt passing through the notch *n* in the rail causes the bracket C to be interlocked with the rail, and thus obtain a positive hold thereon, so as to cause the rail to be prevented from creeping by the abutting of the bracket against the side of the cross-tie.

We do not limit ourselves to the exact shape of either the bracket C or the notch or perforation *n*, herein shown, as it may be modified without impairing the efficiency of the rail-stay.

What we claim as our invention is—

1. The combination with the rail provided with a notch in its base, and the supporting cross-tie, of a bracket abutting against the side of said cross-tie, and means attached to said bracket and engaging the notch in the rail.

2. The combination with the rail provided with a notch in its base, and the supporting cross-tie, of a bracket abutting against the side of said cross-tie and provided with a rigid jaw gripping the base of the rail, and a bolt secured to the bracket and engaging the notch in the rail.

3. The combination with the rail provided



with a notch in its base, and the cross-tie, of  
a bracket abutting against the side of the cross-  
tie and formed with a jaw gripping the base  
of the rail and with a bolt-hole extending ver-  
5 tically through said jaw and subjacent portion  
of the bracket, and a bolt passing through said  
bolt-hole and notch in the rail as set forth.

4. A rail-stay consisting of a horizontal top  
plate, a hook-shaped jaw projecting from the  
10 top of said plate and provided with a bolt-hole  
extending vertically through said jaw and top

plate, a vertical plate depending from the edge  
of the top plate and disposed at right angles  
to the jaw, and braces extending from the  
bottom of the plate to the depending plate 15  
all formed in one piece as set forth.

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Witnesses:

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