

(No Model.)

J. PARR.
IRON CROSS TIE.

No. 277,333.

Patented May 8, 1883.

Fig. 1.

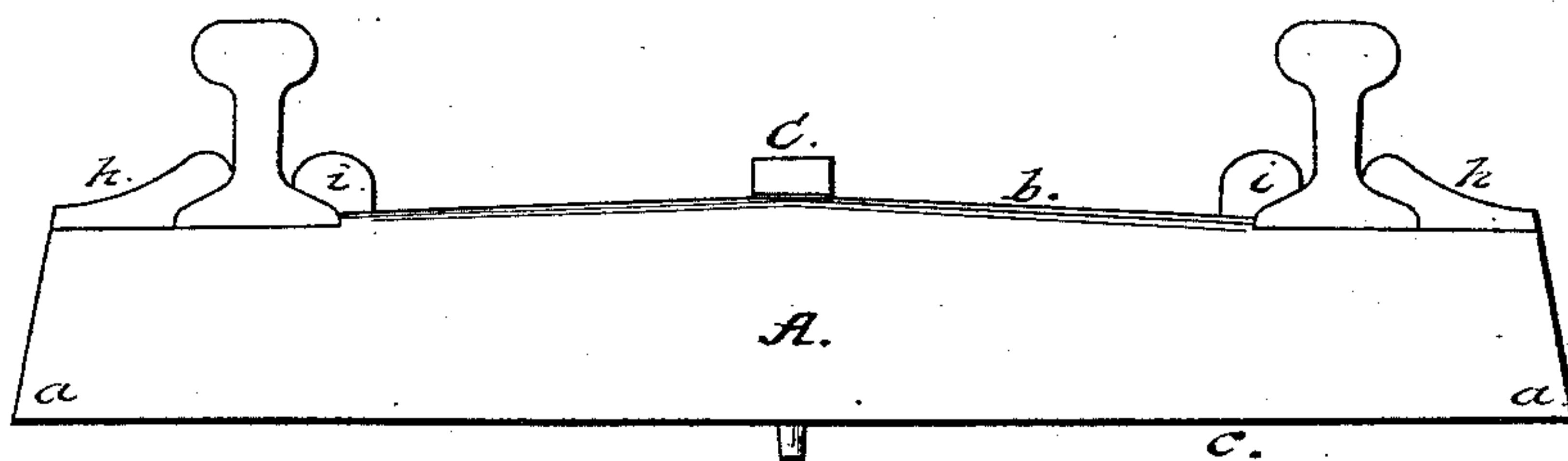


Fig. 2.

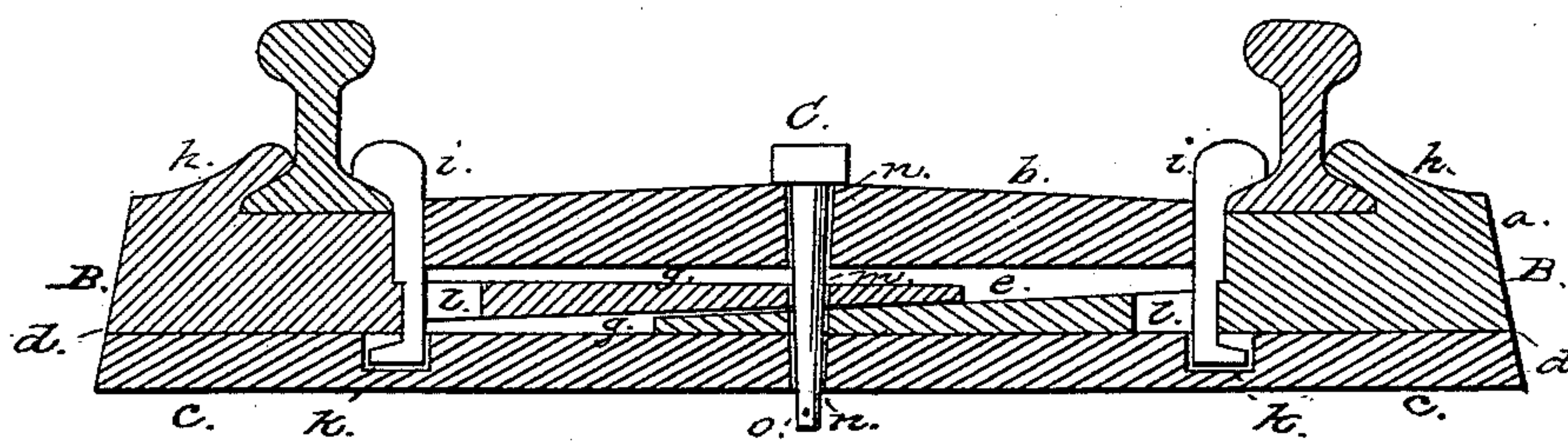
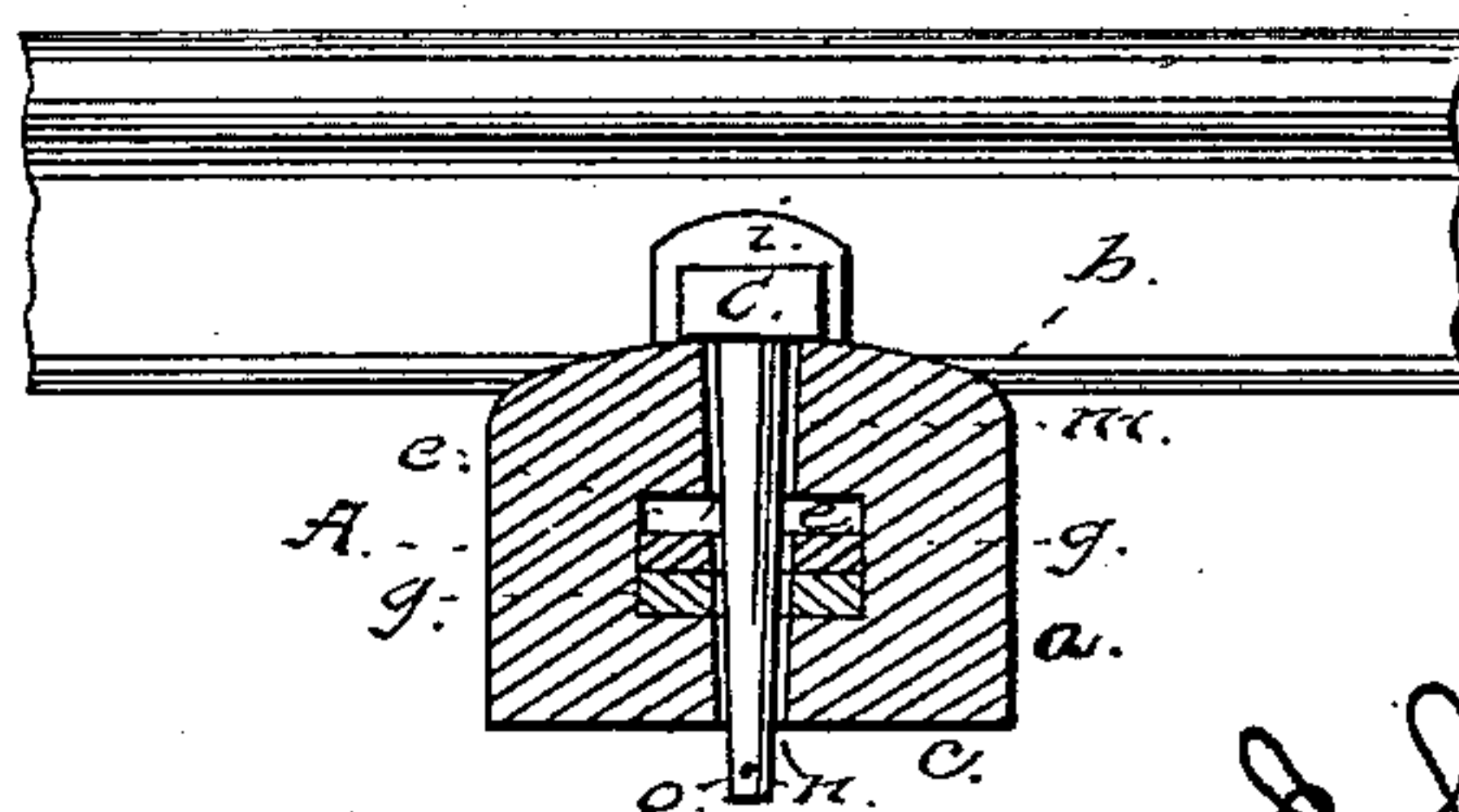


Fig. 3.



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JOHN PARR, OF HUMBOLDT, NEBRASKA.

IRON CROSS-TIE.

SPECIFICATION forming part of Letters Patent No. 277,333, dated May 8, 1883.

Application filed December 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN PARR, a citizen of the United States, residing at Humboldt, in the county of Richardson and State of Nebraska, have invented certain new and useful Improvements in Iron Cross-Ties; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification. My invention relates to certain improve- 15 ments in iron rail-supporting girders or cross-ties for railroads, the object of my improvements being to provide a simplified and novel locking mechanism, whereby the rails may be readily secured to said cross-ties or detached 20 therefrom in the quickest and best possible manner, without the aid of spikes usually employed for such purpose; and it consists, essentially, in the details of construction and general arrangement of parts, all as will be 25 hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my improve- 30 ments; Fig. 2, a vertical longitudinal section, and Fig. 3 a transverse section thereof.

Similar letters of reference indicate like parts in the several figures.

35 A represents the cross-tie, which is made of metal, preferably of cast-iron, and has flaring sides *a*, merging into the slightly-rounding top *b*, as shown in Fig. 3.

40 The bottom *c* of the tie is flat and closed, as shown, and at each end is provided a deep recess, *d*, which opens outwardly, and also connects with a hollow space, *e*, through the center of said tie.

45 At each end of the tie, and adapted to fit smoothly within the recess *d*, is provided a sliding clamping-block, B, each having an inward-projecting and beveled end, *g*, which enters the space *e* until the two ends connect and overlap each other a short distance, as fully shown in Fig. 2.

50 At the outer ends of the blocks B, and cast solid therewith, is provided the overlapping projection *h*, adapted to snugly fit over the flanges of the rail on the outer side, while a removable clamp, *i*, is provided upon the op-

on the inner side. The lower part of this re- 55 movable clamp is adapted to pass down within the recess *d* in the ends of the tie, and, being provided at its base with a projecting lug, *k*, engages with a slot, *l*, in the sliding block B in such manner that when the said block is 60 pushed inwardly the lug *k* catches under the edge of said slot to firmly secure the clamp *i* in a vertical position, with its head overlap-

65 Upon the inner ends of the clamping-blocks B are provided openings *m*, which come into juxtaposition with a vertical opening, *n*, in the center of the cross-tie, when the blocks are pushed in place, for engagement therewith of a suitable coupling pin or bolt, C, to securely 70 hold the clamping mechanism in place upon the flanges of the rails, as fully shown in Fig. 2.

75 The bottom of the coupling pin or bolt C is provided with a suitable opening, *o*, for the introduction of a wire or split pin to keep the said bolt in its place.

By means of my improvements the rails may be readily secured to the ties, and as readily 80 removed therefrom when it is desirable to turn the same or replace worn rails by new ones, obviating the disadvantages consequent upon the use of spikes or such removable clamps as have to be secured in place by bolts 85 and nuts.

Having thus described my invention, what I claim as new and useful is—

1. The herein-described metallic cross-tie A, provided with the recesses *d* and *e*, and cen- 90 tral opening, *n*, in combination with the sliding clamps B, having lugs *k* and slots *l* and *m*, removable clamps *i*, having projections *k*, and the pin or bolt C, having opening *o* in its base, all substantially as and for the purpose 95 specified.

2. In a metallic cross-tie, the sliding clamps B, provided with openings *m* and slots *l*, re- 100 movable clamps *i*, provided with lugs *k*, and central pin or bolt, C, in combination with the recesses *d* and hollow space *e* in said tie, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN PARR.

Witnesses:

PETER F. THIESSEN,
E. A. TUCKER.