

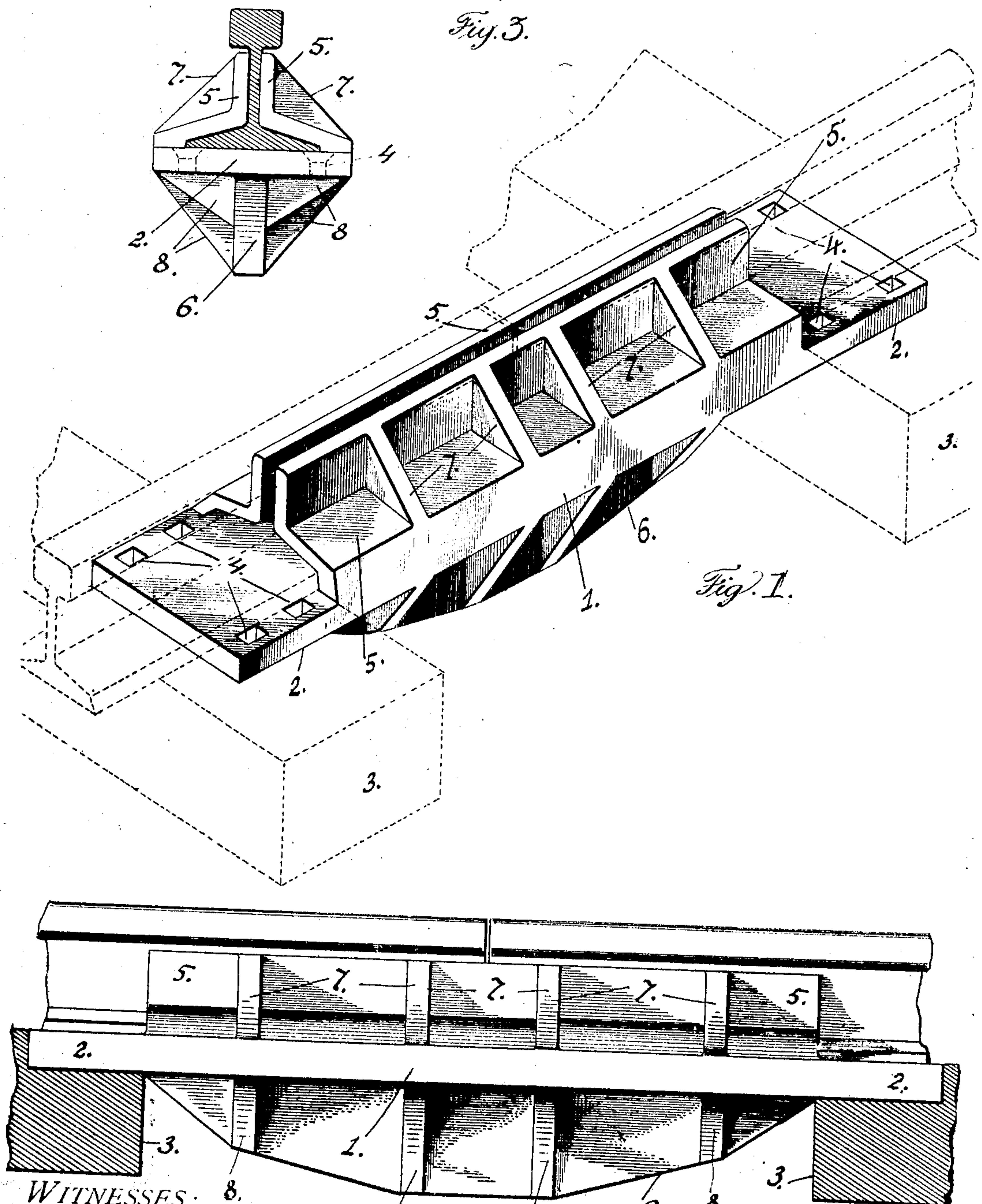
No. 887,488.

PATENTED MAY 12, 1908.

V. MALIK & E. W. COOK.

COMBINED RAILWAY CHAIR AND RAIL FASTENER.

APPLICATION FILED MAY 18, 1907.



WITNESSES:

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Fig. 28.

 $B_Y$ 

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# UNITED STATES PATENT OFFICE.

VINCENZ MALIK, OF NORTH BRADDOCK, AND ERNEST W. COOK, OF WILKINSBURG,  
PENNSYLVANIA.

## COMBINED RAILWAY-CHAIR AND RAIL-FASTENER.

No. 887,488.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed May 18, 1907. Serial No. 374,380.

*To all whom it may concern:*

Be it known that we, VINCENZ MALIK, a subject of the Emperor of Austria-Hungary, residing at North Braddock, and ERNEST W. COOK, a citizen of the United States, residing at Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combined Railway-Chairs and Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to combined railway-chairs and rail fasteners, and its primary object is to provide a combination chair and fastener of very strong and durable construction comprising a single integral reinforced casting, and adapted to be supported upon the railway ties, and to extend between the latter.

The invention consists of a railway-chair and fastener comprising a base or body portion having extended ends adapted to rest on the ties, upwardly extending splice-bars to overlap the base and web portions of the rails, a strengthening rib depending centrally from the body portion, and transversely disposed reinforcing webs for said splice bars, and rib.

The construction of the improvement will be more specifically described hereinafter in connection with the accompanying drawing, which forms a part of this specification, and its novel features will be set forth in the appended claims.

In the drawing,—Figure 1 is a view in perspective of a combination railway-chair, and rail fastener embodying the invention, the railway ties and rails being shown by dotted lines, Fig. 2 is a side elevation of the same applied to the meeting ends of two rails, and supported upon two adjacent ties, and Fig. 3 is a transverse vertical section of Fig. 2.

The reference numeral 1 designates the base or body portion of the device formed with flat ends 2 adapted to rest upon two adjacent railway ties 3, the latter being recessed as shown in Fig. 2 so that the upper surfaces of the ends of the base 1 will be flush with the surfaces of the ties. The ends 2 are formed with holes 4 for the reception of spikes for securing the device to the ties. From the opposite sides of the base 1 extend integral splice bars 5 which extend inward

of the base and web of the rails which they overlap.

Depending centrally from the under side of the base 1 is a longitudinal strengthening rib or flange 6, graduated in depth from its ends toward the center so that the vertical dimension thereof is greatest at the center of its length.

The splice-bars 5 are each braced and reinforced, by a series of integral triangular webs 7 connecting the outer sides of the vertical portions of said bars, with the upper surfaces of the inwardly extending base portions thereof.

The central longitudinal flange or rib 6 is also reinforced by a series of triangular integral webs 8 oppositely disposed with relation to the webs 7 of the splice bars, but in vertical alignment with said webs 7.

The entire structure constituting the invention is formed in a single casting, and it will be apparent that the same is reinforced both longitudinally and transversely, thus insuring a firm and reliable support for the rails, as well as a substantial fastening for the meeting ends thereof, without the employment of the usual bolts and nuts.

The ends of the rails are forced into the open ends of the chair and are securely held in position by the splice bars.

An important advantage of the improvement is that it may be readily applied to the rails, and in case of breakage of a section of rail a temporary connection between broken ends may be quickly effected, one or more of the improved chairs or fasteners being carried by a locomotive for emergencies. As the improvement must be supported between adjacent ties, it may be necessary in thus making emergency repairs to remove one of the ties to secure it in proper relation to another one to support the chair and fastener.

As the device is constructed from a single integral casting it may be manufactured at comparatively small expense, and the absence of bolts and nuts permits the ends of the rails to be secured with a minimum expenditure of time and labor.

What I claim and desire to secure by Letters Patent, is:—

1. A combined railway chair and rail fastener comprising a flat base of a length for mounting upon a pair of railway ties, said base having each end thereof provided with



openings through which is adapted to extend holdfast devices to secure the base in position, splice bars formed integral with the longitudinal marginal portions of the upper face of said base and adapted to overlap the bases and webs of a pair of rail sections, the length of said splice bars being such and said bars being so disposed with respect to the base as to terminate at a point removed from each end of the base whereby the portions of the base provided with openings will project from the ends of the splice bars, a central longitudinal flange depending from the lower face of the base, an upper series of transversely disposed reinforcing webs formed integral with the outer face of the splice bars, and a lower series of transversely extending webs formed integral with the lower face of the base and with said flange, said upper series of webs in vertical alinement with respect to said lower series of webs.

2. A combined railway chair and rail fastener comprising a flat base of a length for mounting upon a pair of railway ties, said base having each end thereof provided with openings through which is adapted to extend holdfast devices to secure the base in position, splice bars formed integral with the lon-

gitudinal marginal portions of the upper face of said base and adapted to overlap the bases and webs of a pair of rail sections, the length of said splice bars being such and said bars being so disposed with respect to the base as to terminate at a point removed from each end of the base whereby the portions of the base provided with openings will project from the ends of the splice bars, a central longitudinal flange depending from the lower face of the base, an upper series of transversely disposed reinforcing webs formed integral with the outer face of the splice bars, and a lower series of transversely extending webs formed integral with the lower face of the base and with said flange, said upper series of webs in vertical alinement with respect to said lower series of webs, the inner webs of each series being closer to each other than to the outer webs of the series.

In testimony whereof we affix our signatures in the presence of two witnesses.

VINCENZ MALIK.  
ERNEST W. COOK.

Witnesses:

A. H. ROBSON,  
MAX H. SRLOVITZ.