(No Model.)

M. MALONEY.

RAIL CHAIR.

No. 500,589. Patented July 4, 1893.

Fig. 1.

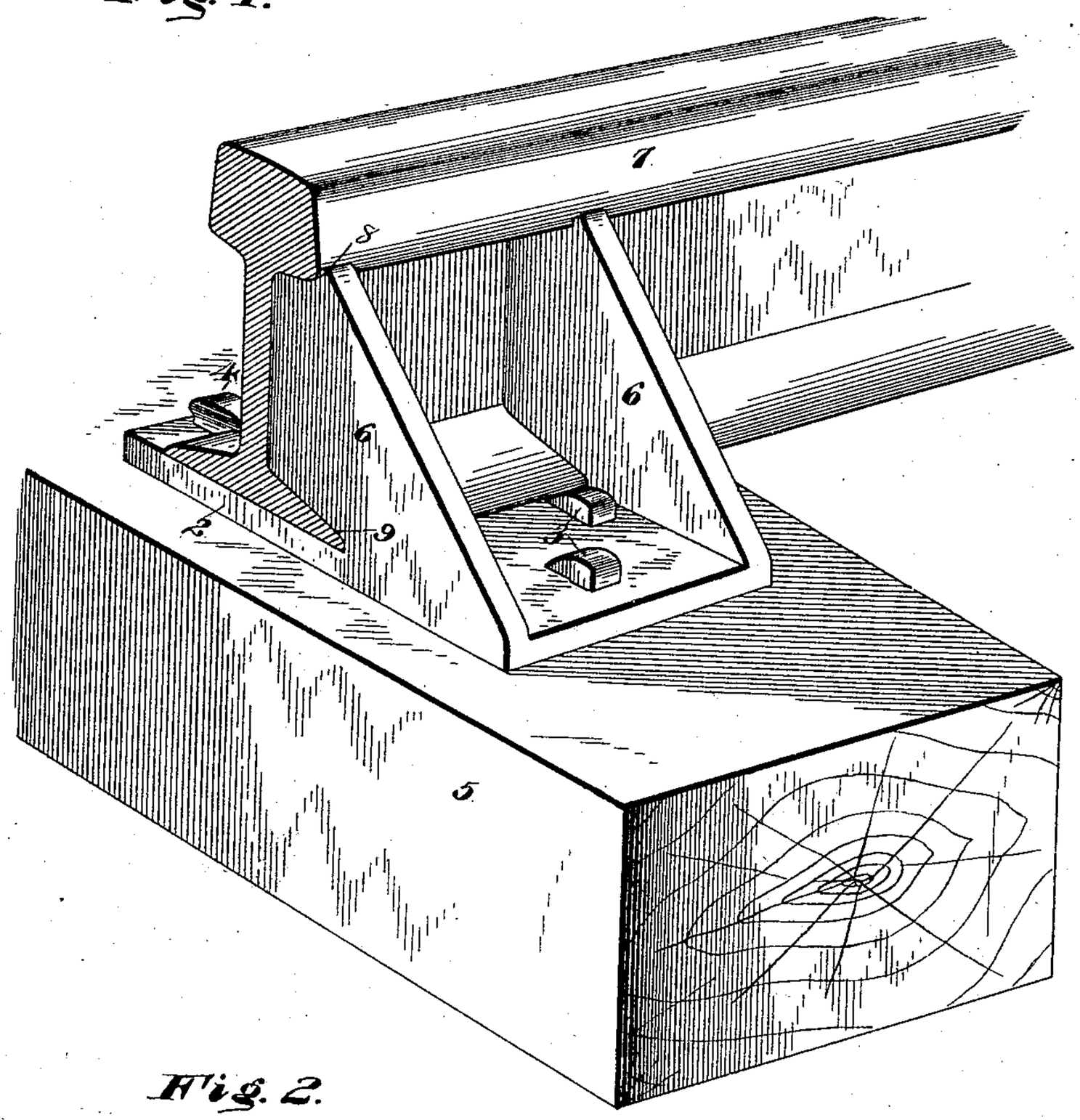
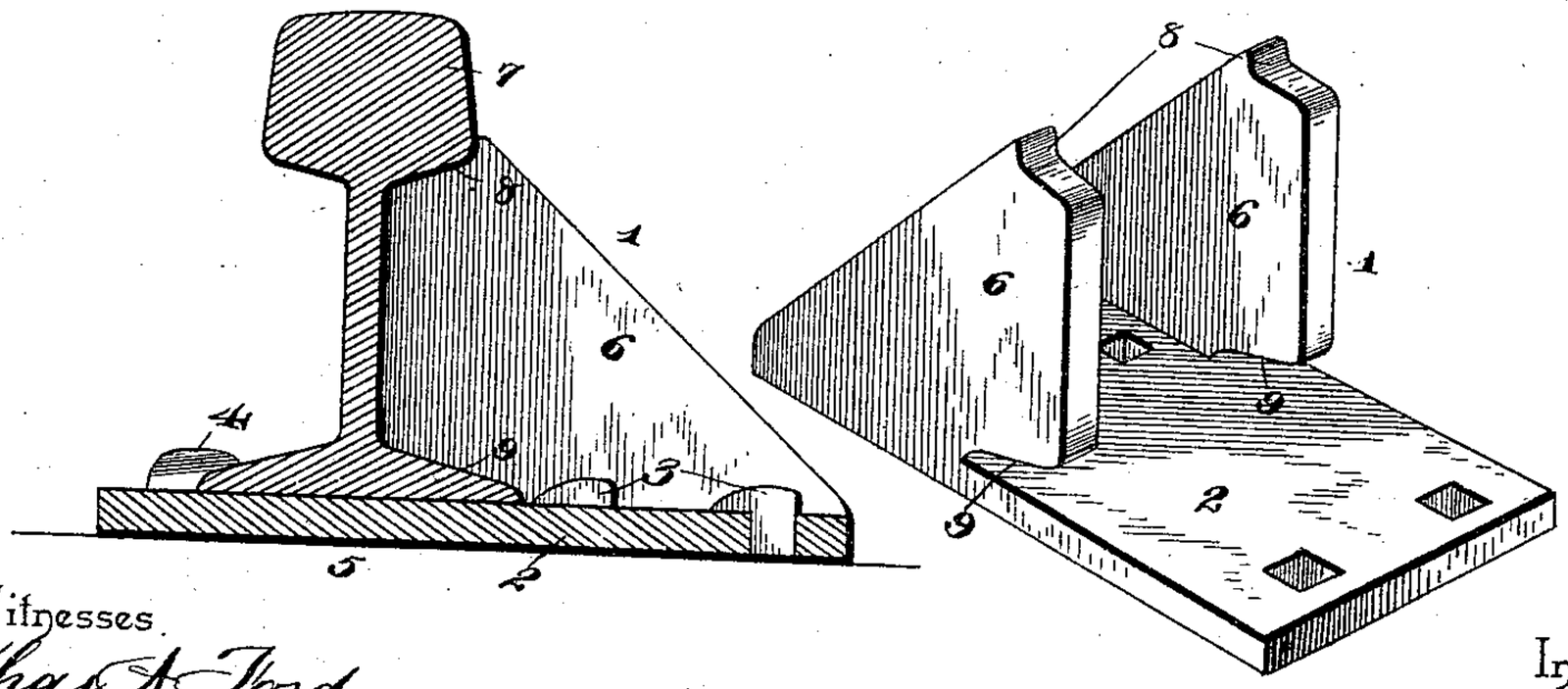


Fig. 2.

Fig. 3.



Witnesses.
Chas. A. Ford.
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UNITED STATES PATENT OFFICE.

MICHAEL MALONEY, OF IRONTON, OHIO.

RAIL-CHAIR.

SPECIFICATION forming part of Letters Patent No. 500,589, dated July 4, 1893.

Application filed April 30, 1892. Serial No. 431,299. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL MALONEY, a citizen of the United States, residing at Ironton, in the county of Lawrence and State of Ohio, have invented a new and useful Rail-Chair, of which the following is a specification.

The invention relates to improvements in railway rail chairs.

The object of the present invention is to simplify and improve the construction of railway rail chairs, and to provide one which will securely hold rails in their proper position and prevent them spreading, sagging or canting and which will prevent a rail cutting into a cross-tie, and thereby greatly increase the durability of the latter.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claim hereto appended.

In the drawings—Figure 1 is a perspective view of a rail chair constructed in accordance with this invention and shown applied to a rail. Fig. 2 is a vertical sectional view taken longitudinally of the rail chair. Fig. 3 is a perspective view of a rail chair detached.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a railway rail chair preferably constructed of rolled metal, and composed of a base-plate 2, which is secured by spikes 3 and 4 to a cross-tie 5, and vertical bracing flanges 6 rising from the outer end of the base-plate and arranged at the sides thereof and having their outer edges inclined. The inner edges of the vertical flanges 6 conform to the configuration of a rail 7, and have recesses 8 and 9 adapted to receive the bottom flange and the head of the rail, the portion between the recesses 8 and 9 fitting against the web of the rail. The spikes 3 are arranged between the vertical bracing flanges and pass through suitable openings in the base-plate; and the spikes 4 are arranged at the other end of the base plate on the opposite side of the rail and engage the bottom flange at that side of the rail and secure the latter in the recesses of the inner edges of the vertical flanges, whereby the rail is securely fastened in place. The base plate forms a broad bearing for the rail which is thereby prevented from sagging and canting, and the chair effectually prevents any spreading.

It will be seen that the railway rail chair is simple and inexpensive in construction, and easy to manufacture, that it effects a great saving of metal, and that it is capable of holding a rail in proper position and preventing the same canting, sagging, or embedding itself in a tie and destroying the latter.

The rail chair is applicable to frogs, switches, curves, and analogous uses, and it greatly assists in the preservation of a rail by maintaining it in proper position and thereby in a measure preventing it being splintered and mashed by the wheels of a train.

What I claim is—

As a new article of manufacture, a rail chair having a base-plate 2 provided with suitable spike openings, and integral vertically-disposed flanges, 6, flush with the side edges of the base-plate, extending inwardly from one end of the same and terminating at a point adjacent to the center of its length, the outer edges of said flanges being beveled or inclined and the inner edges thereof being provided with upper notches, 8, to receive the tread, under-cut lower notches, 9, to receive the flange, the lower sides of such notches being in the plane of the upper surface of the base-plate, and a vertical intermediate portion to bear against the web of the rail, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MICHAEL MALONEY.

Witnesses:

EVAN T. WILLIAMS,

JOHN COMBS.