

(No Model.)

M. MALONEY.  
RAIL CHAIR.

No. 500,589.

Patented July 4, 1893.

Fig. 1.

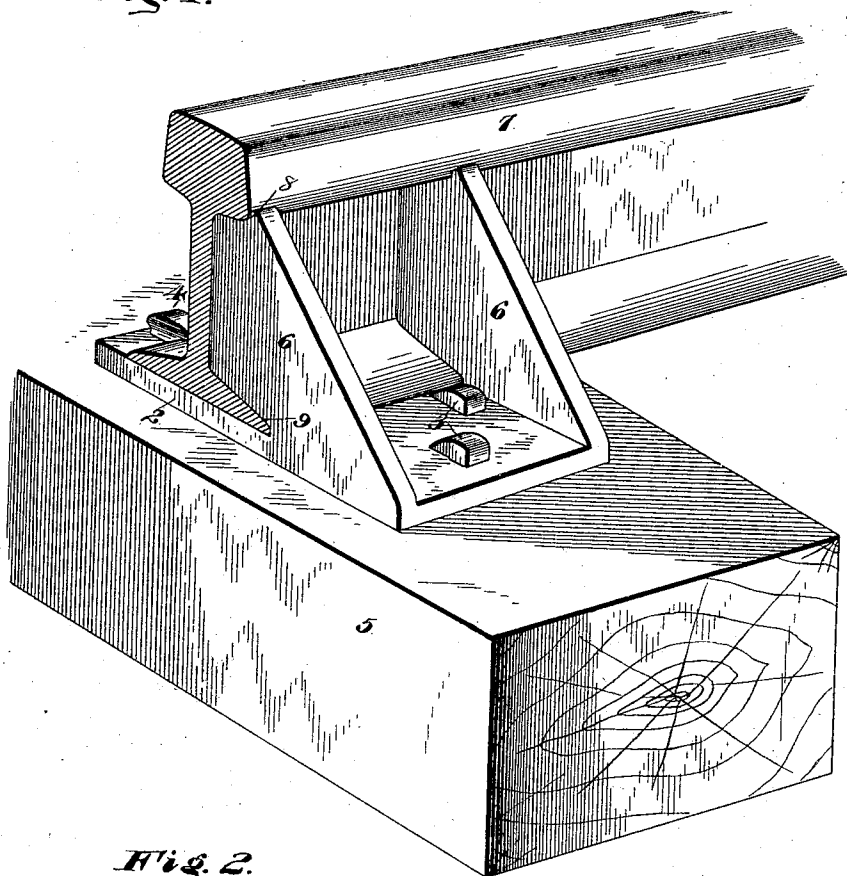
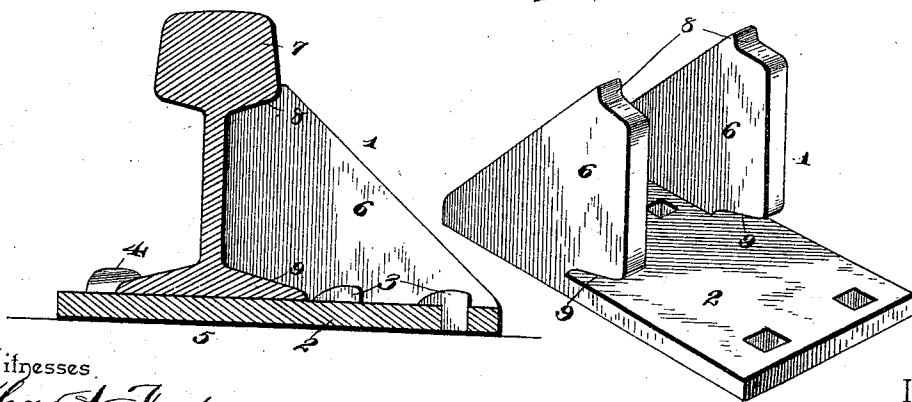


Fig. 2.

Fig. 3.



Witnesses.

Chas. A. Ford  
A. H. Riley

By his Attorneys,

Michael Maloney.

Inventor

Chas. A. Ford & Co.

# 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 Iron-  
ton, 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 rail-  
way rail chairs, and to provide one which  
will securely hold rails in their proper posi-  
tion 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 cor-  
responding parts in all the figures of the draw-  
ings.

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 re-  
cesses 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 ar-  
ranged 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 op-  
posite 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 prevent-  
ing 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 as-  
sists in the preservation of a rail by main-  
taining 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 verti-  
cally-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.