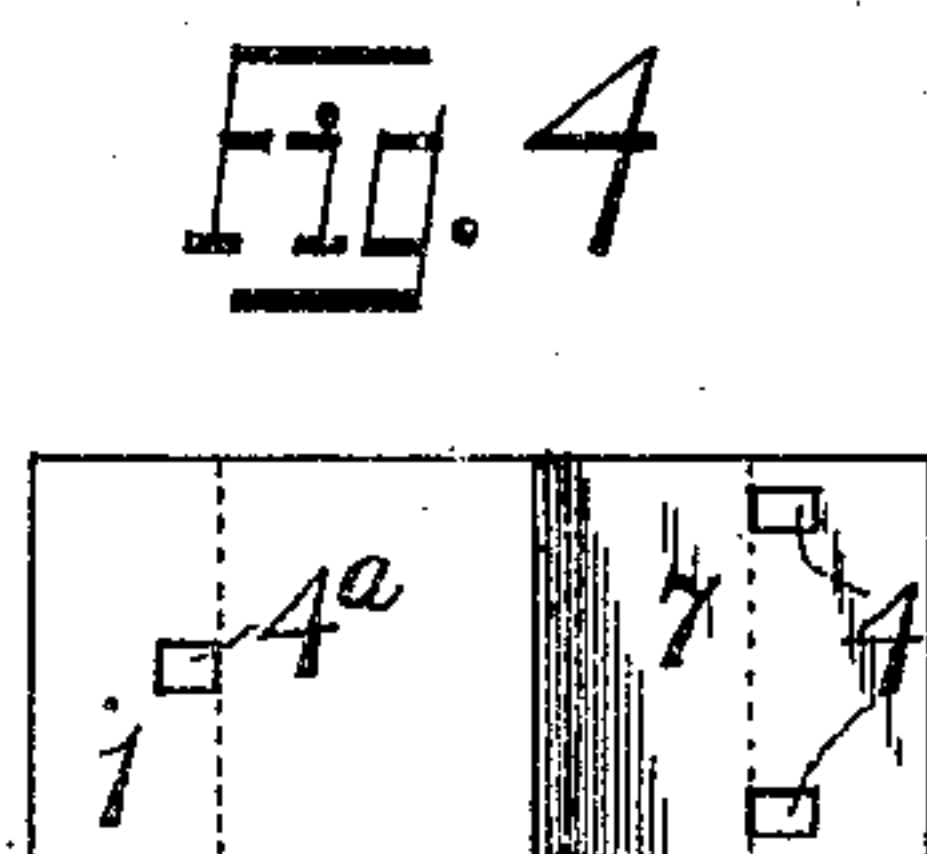
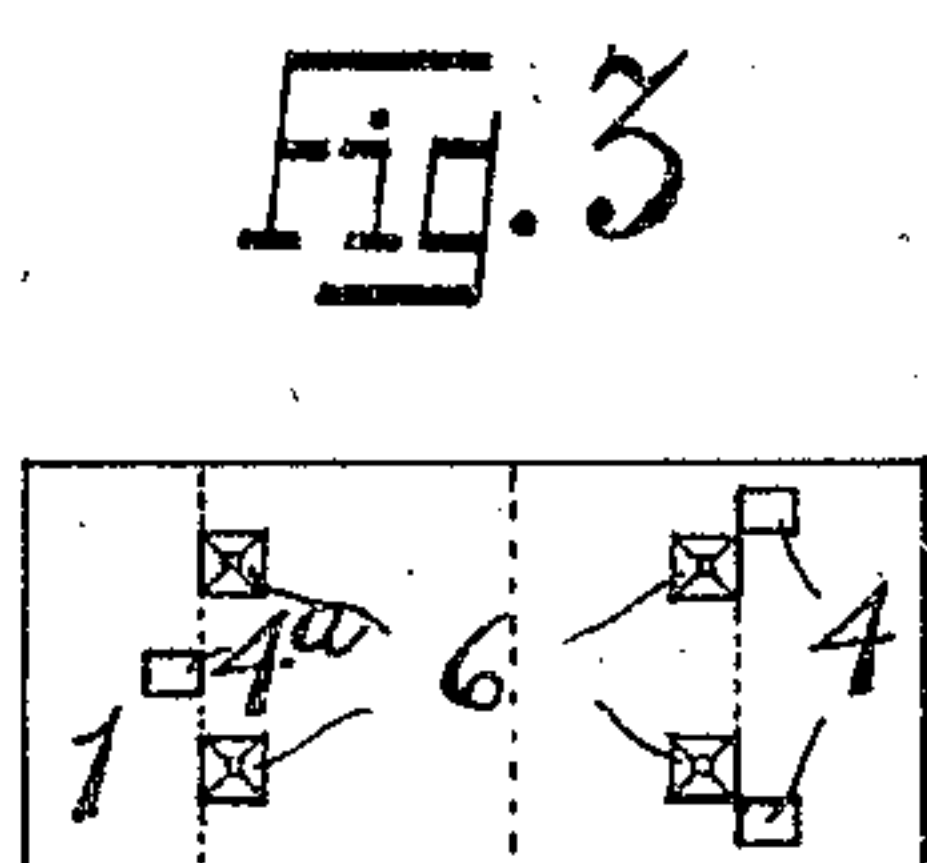
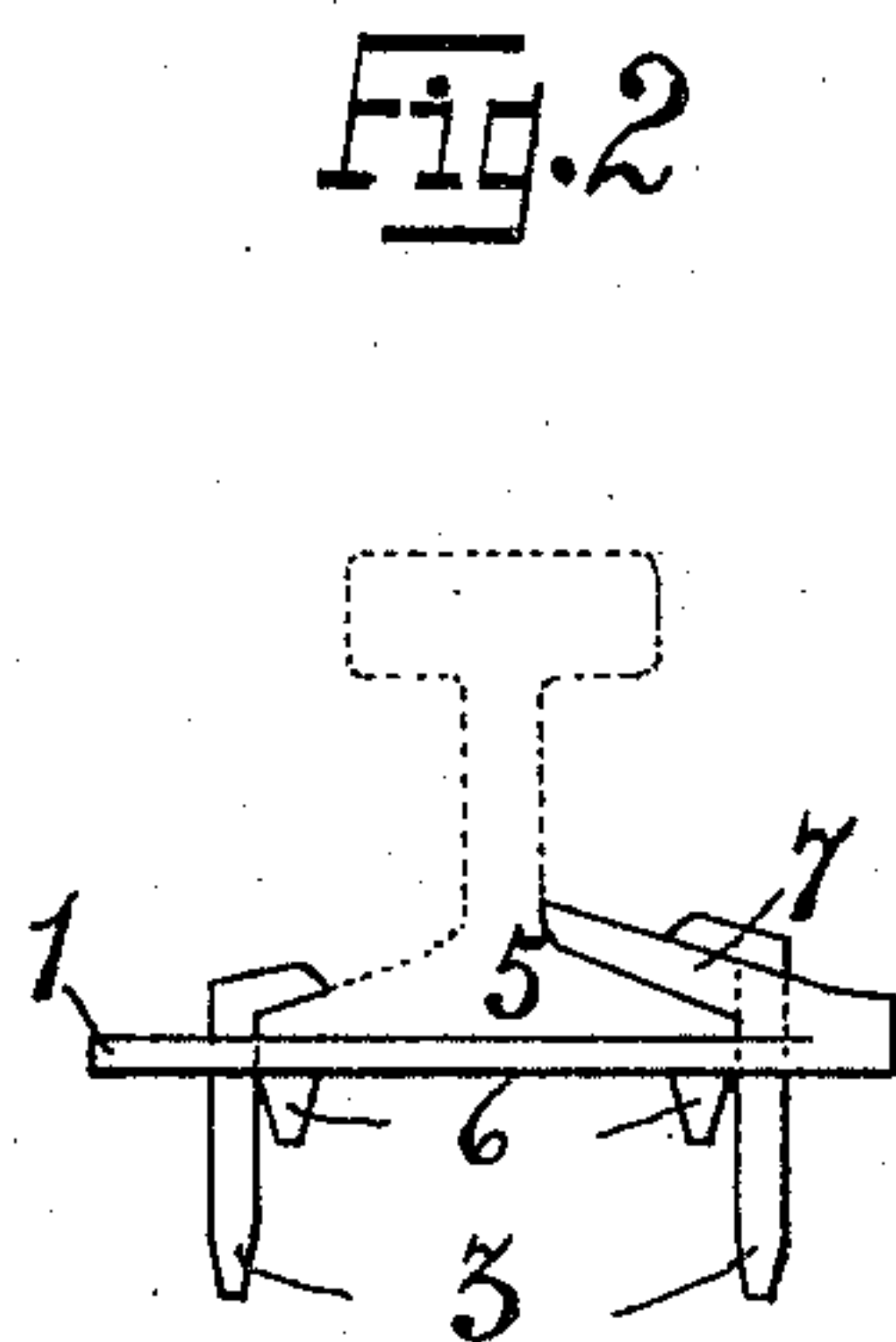
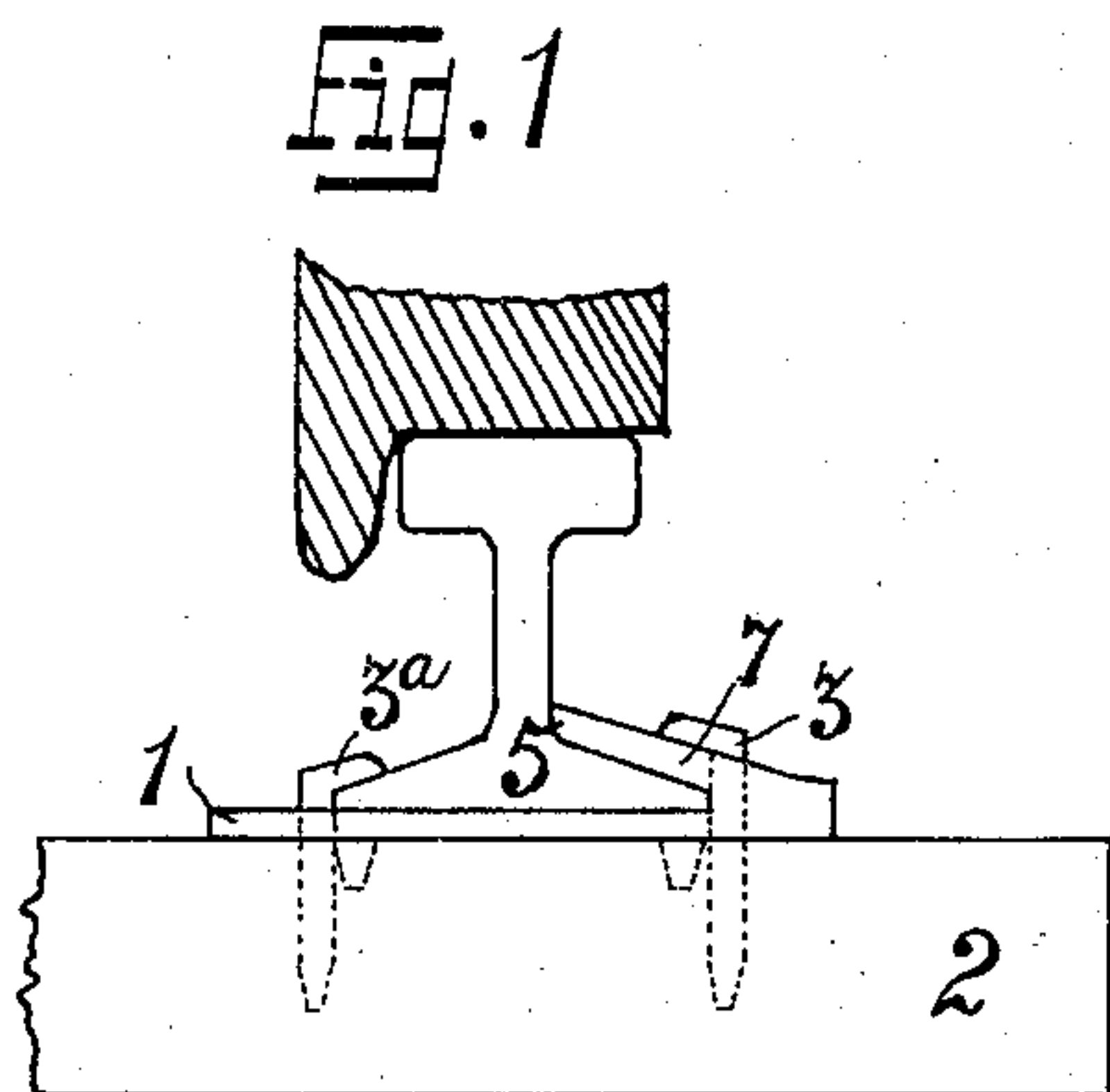


No. 788,326.

PATENTED APR. 25, 1905.

J. H. MCGUANE.
RAILWAY BRACE AND CHAIR.
APPLICATION FILED OCT. 20, 1904.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES H. McGUANE, OF PORT JERVIS, NEW YORK.

RAILWAY BRACE AND CHAIR.

SPECIFICATION forming part of Letters Patent No. 788,326, dated April 25, 1905.

Application filed October 20, 1904. Serial No. 229,315.

To all whom it may concern:

Be it known that I, JAMES H. McGUANE, a citizen of the United States, residing at Port Jervis, in the county of Orange and State of New York, have invented new and useful Improvements in Railway Braces and Chairs, of which the following is a specification.

My invention relates to improvements in railway braces and chairs; and the object of the invention is to provide a generally improved device of this class which will be exceedingly simple in construction, cheap of manufacture, efficient in use, and much better adapted to its intended purposes than any other device of the same class with which I am acquainted.

My invention provides a simple and efficient means whereby upon curves the rails are not only secured to the ties and protected from wearing the same, but are provided with a strong and sufficient brace to withstand the thrust of the train when passing rapidly over the rails.

With these ends in view the invention consists in the novel construction, arrangement, and combination of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

Referring now to the accompanying drawings, forming a part of this specification, Figure 1 is an end view of my improved rail brace and chair in its operative position with a wheel of the car indicated on the rail. Fig. 2 is a similar view of the same with the rail and tie removed. Fig. 3 is a view of the lower or bottom side of the same. Fig. 4 is a top plan view of the same.

In the drawings, 1 designates the base or bottom of the brace and chair or the tie-plate proper mounted and secured to the tie 2 by means of spikes 3, two of which in the present instance pass through two openings 4, formed in the outer side of the base or bottom 1, and which are adapted to abut or impinge against the outer side of the base or lower flange of the rail 5.

The base or bottom 1 of the brace and chair or the tie-plate proper is provided in the present instance with four studs or pins 6, formed

integral therewith and which are adapted to be driven into the tie when the brace and chair is mounted and placed in position upon the tie.

3^a designates a spike passing in the present instance through a corresponding opening 4^a, formed in the inner side of the base or bottom 1 or in the tie-plate proper, and which is adapted to abut or impinge against the inner side of the lower flange of the rail 5.

7 designates an outwardly-extending flange or wing formed at one side of the base or bottom 1 integral therewith and extending inwardly over and about the outer side of the base or lower side of the rail with its end abutting or impinging against the web of the rail.

My improved rail brace and chair may be formed of a single piece of sheet metal bent upon itself in proper form, or it may be formed from casting or worked from wrought-iron or otherwise, as may be desired.

It will be observed that the studs or pins 6 are placed out of alinement with the openings 4 and opening 4^a for the reception of the spikes 3 and the spike 3^a in order that the tie may not be so liable to split as it would if all were in alinement and to more properly brace the tie-plate proper and strengthen the same.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A railway brace and chair, consisting of a strip of iron or steel having a plate to extend under the rail from one side to the other and having its outer end bent inwardly over and about the outer side of the base or lower flange of the rail with its end abutting or impinging against the web of the rail, openings formed in the outer side of said plate, spikes mounted in said openings and abutting or impinging against the outer side of the base of said rail, and studs or pins formed with the said plate near said openings but out of alinement therewith.

2. A railway brace and chair, consisting of a single piece of metal bent upon itself to form an outer inwardly-extending flange conforming to the upper contour of the outer side of the flange of the rail, and having the

end of said flange abutting or impinging
against the web of said rail, opening formed
therein for the reception of spikes adapted to
abut against the flange of said rail, and studs
5 or pins formed integral with the base of said
brace and chairs, adjacent to but out of aline-
ment with said openings.

3. A railway brace and chair, consisting of
a strip of metal having a plate to extend un-
10 der the rail from side to side, an inwardly-
extending flange formed integral therewith
and over and about the outer flange of the
rail, openings formed in said flange and plate
and intersecting the recess formed by said

plate and flange for the reception of the outer 15
flange of said rail, spikes mounted in said
openings and abutting against said flange of
said rail, and studs or pins formed integral
with said plate and out of alinement with said
openings. 20

In testimony whereof I have affixed my sig-
nature in presence of two subscribing wit-
nesses.

JAMES H. MCGUANE.

Witnesses:

OTTO BERGNER,
SAMUEL C. CARMER.