

No. 751,511.

PATENTED FEB. 9, 1904.

L. A. HOERR.
TIE PLATE.

APPLICATION FILED SEPT. 30, 1903.

NO MODEL.

Fig. 1.

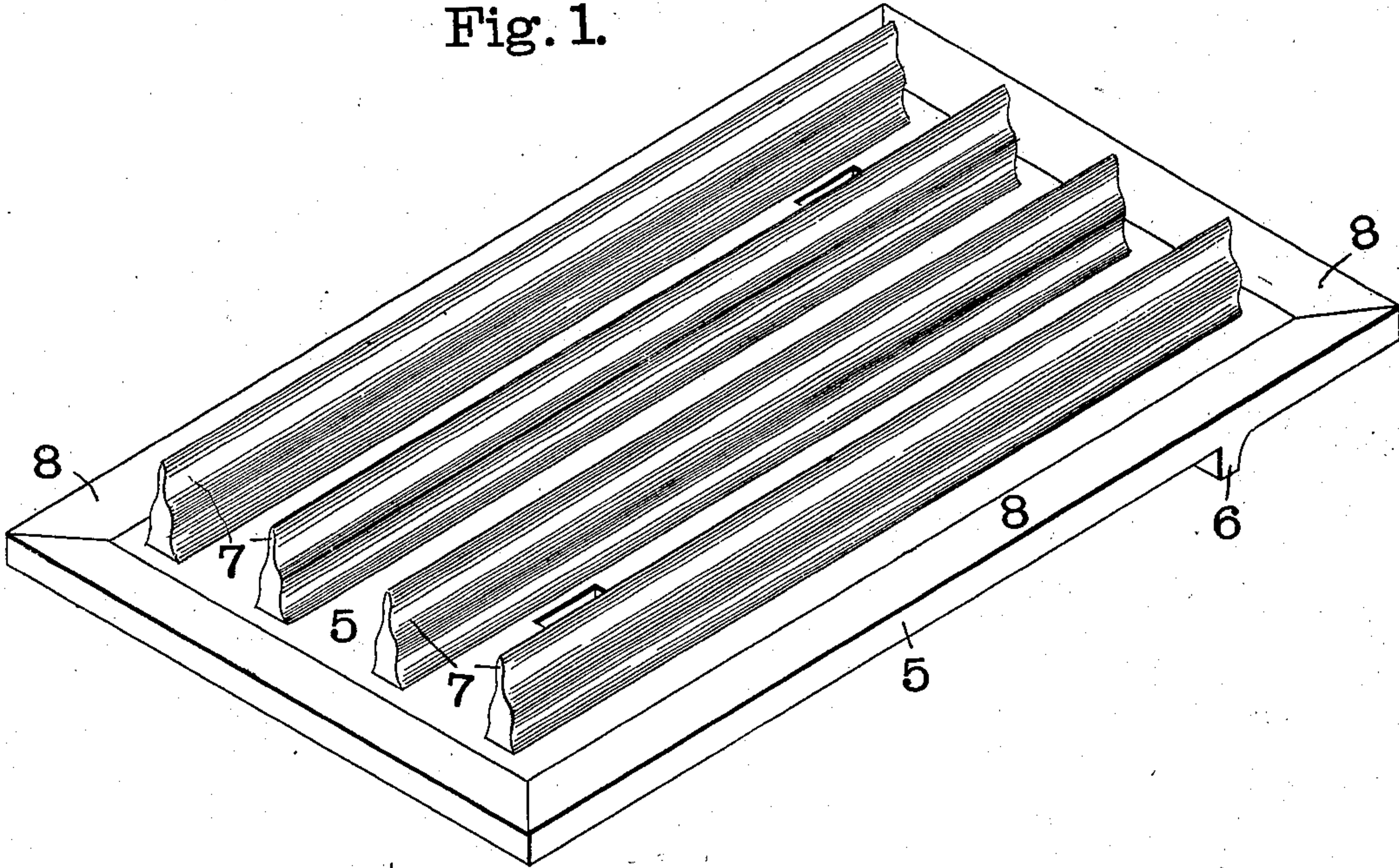
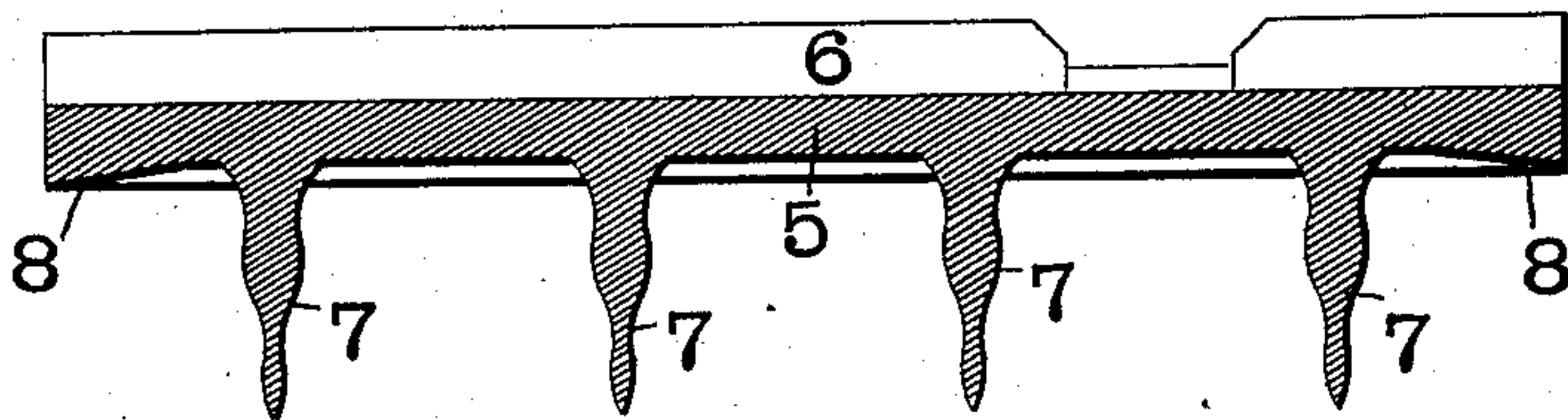


Fig. 2.



Witnesses

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LOUIS A. HOERR, OF ST. LOUIS, MISSOURI.

TIE-PLATE.

SPECIFICATION forming part of Letters Patent No. 751,511, dated February 9, 1904.

Application filed September 30, 1903. Serial No. 175,163. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. HOERR, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have
5 invented a certain new and useful Tie-Plate, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this
10 specification.

My invention relates to railway tie-plates, and more particularly to that class of tie-plates which have formed on their under faces
15 ribs which are adapted to enter the wood of the tie, and so hold the plate in position against both vertical and longitudinal movement.

The object of my invention is to so form the ribs on the under face of the tie-plate that the
20 ribs will compress the wood and also afford means for the wood to anchor the plate firmly in position.

My invention consists in part in a railway tie-plate having one or more downwardly-projecting
25 sinuously-tapered ribs.

In the accompanying drawings, which illustrate one form of tie-plate made in accordance with my invention, Figure 1 is an isometric
30 projection showing the lower face of the plate, and Fig. 2 is an enlarged cross-section.

The same marks of reference refer to similar parts in both views of the drawings.

5 is the plate, which is preferably rectangular in shape and is preferably formed of cast
35 metal. The plate 5 is provided on its upper face with a shoulder 6 of the usual form, against which the lower edge of the rail abuts. Formed on the lower face of the plate 5 are a number of ribs 7. These ribs are preferably
40 four in number, as shown in the drawings, and preferably extend through a greater part of the length of the plate. These ribs 7 are sinuously tapered from the plate downwardly—that is, the sides of the ribs are alternately
45 concave and convex—and are made to meet at the lower edge of the rib, so as to form a knife-

like edge which will readily enter the wood of the tie. Surrounding the plate is a continuous flange 8, which is adapted to be held
50 firmly in contact with the wood by means of the ribs 7, and thus form a water-tight joint to protect both the plate and the tie. This feature of my invention, however, is claimed in another application of even date herewith.

When the ribs 7 are driven into the tie, they
55 compress the wood of the tie between them, owing to their tapered form, and at the same time the wood enters the concave portions of the faces of the ribs, and thus anchors the plate firmly in position. 60

I am aware that tie-plates have been previously made which were provided on their lower faces with ribs which were corrugated or sinuous in the direction of the length of the
65 rib, and therefore I do not claim such construction.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A railway tie-plate having one or more
70 downwardly - projecting sinuously - tapered ribs, said plate extending beyond said ribs to form overlapping ends for contact with the tie.

2. A railway tie-plate having two substantially parallel ribs, the opposing faces of
75 which extend in a sinuous line from the plate downwardly, said plate extending beyond said ribs to form overlapping ends for contact with the tie.

3. A railway tie-plate having a plurality of
80 substantially parallel ribs sinuously tapered from the plate downward, said plate extending beyond said ribs to form overlapping ends for contact with the tie.

In testimony whereof I have hereunto set
85 my hand and affixed my seal in the presence of the two subscribing witnesses.

LOUIS A. HOERR. [L. s.]

Witnesses:

W. A. ALEXANDER,
JAMES H. BRYSON.