

(No Model.)

E. DIETRICH.
RAILROAD TIE.

No. 450,145.

Patented Apr. 14, 1891.

Fig. 1.

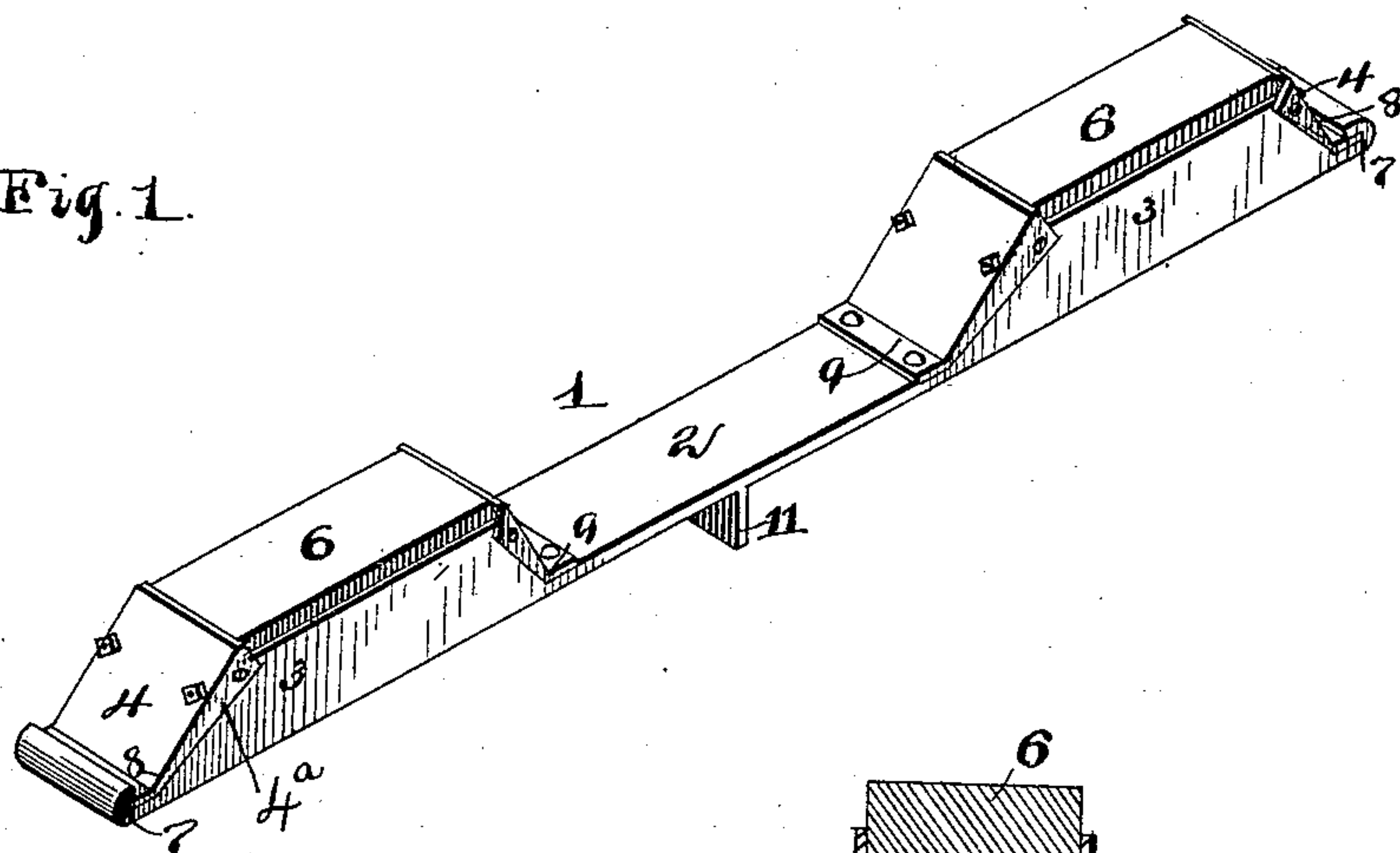


Fig. 4.

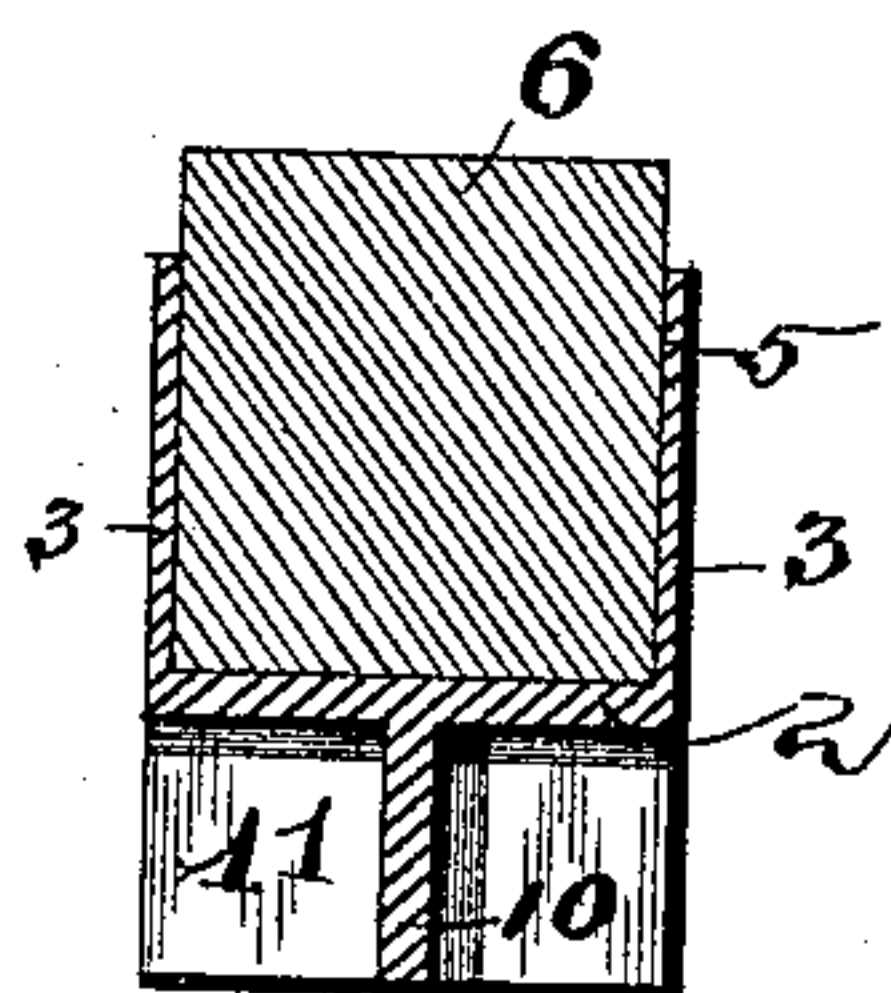


Fig. 2.

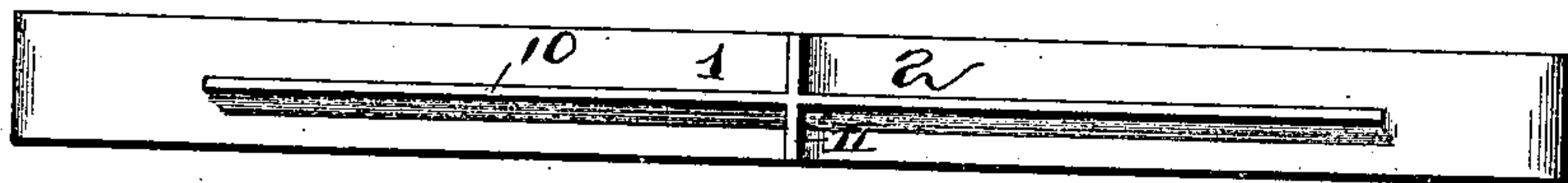
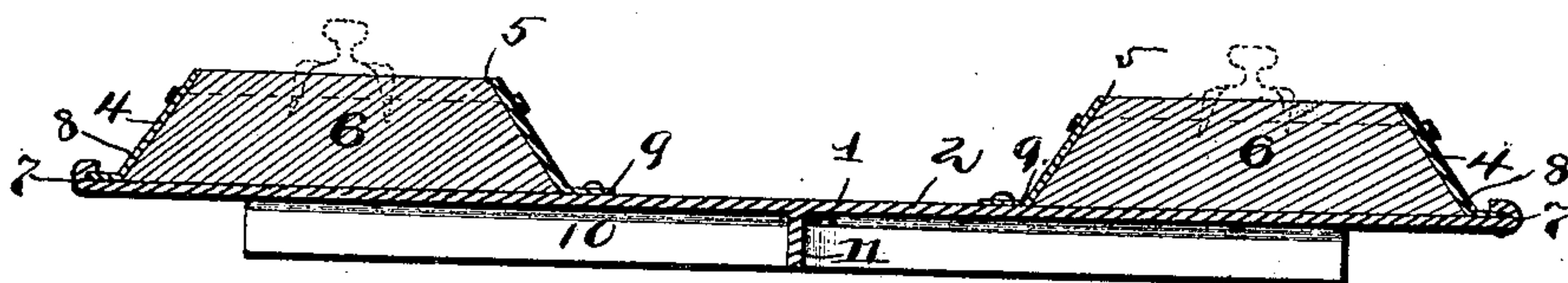


Fig. 3.



Witnesses

H. G. Seitz
J. P. Riley

Inventor

E. Dietrich,

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ELIAS DIETRICH, OF ROCHESTER, NEW YORK.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 450,145, dated April 14, 1891.

Application filed October 28, 1890. Serial No. 369,583. (No model.)

To all whom it may concern:

Be it known that I, ELIAS DIETRICH, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Railroad-Tie, of which the following is a specification.

The invention relates to improvements in metallic railway-ties.

The object of the present invention is to provide a simple and durable tie in which the portions subject to wear and to which the rails are attached may be readily renewed when worn.

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 claims hereto appended.

In the drawings, Figure 1 is a perspective view of a railway-tie embodying the invention. Fig. 2 is a reverse plan view. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view.

Referring to the accompanying drawings, 1 designates a railway-tie constructed of metal and consisting of rectangular plates 2, provided at each end with vertically-extending side flanges 3, which form, with removable end plate 4, boxes 5, adapted for the reception of wooden blocks 6, to which the rails of a track are secured by spikes in a manner similar to securing rails for ordinary wooden ties, and the said blocks when worn may be readily removed and replaced by new ones at a small amount of labor and cost, and an ordinary wooden tie will readily make four such blocks. The ends of the ties are bent upon themselves to form transverse grooves 7, in which the lower ends 8 of the outer plates 4 engage, and the said ends are slightly bent to facilitate engagement with the grooves. The side flanges 4^a of the plates are bolted to the vertical flanges 3, and when a block is to be removed the end plate is first taken off. The lower ends 9 of the inner plates are bolted and said plates are not necessarily removed when blocks are to be inserted. The boxes 5, which are arranged at the ends of the ties, form between them an openspace, which is a convenient receptacle for a water-trough, when desired. The lower face of the rectangular metal plate 2 is provided with a longitudinal flange or web 10, which

prevents lateral movement of the tie and longitudinal movement of the same by a transverse flange 11. The longitudinal flange or web 10 extends nearly the entire length of the tie, and the transverse flange 11 is arranged about midway the length of the same. The sleeper-blocks, which are secured in the casing or boxes, and which may be either of ordinary or vulcanized wood, render the metallic tie fully as elastic as the ordinary tie, and one ordinary wooden tie will readily supply four blocks, thereby greatly lessening the cost of ties and at the same time securing all the advantages of wooden ones.

When ordinary wooden ties are employed they are coated with gas-tar or a similar preservative, together with its joints of the boxes.

It will be seen that the metal tie is simple and inexpensive in construction, and the blocks can be readily removed and new ones inserted when the parts become worn.

From the foregoing description and the accompanying drawings, the construction, operation, and advantages of the invention will readily be understood.

What I claim is—

1. In a metallic tie, the combination of the rectangular plate 2, provided at its end with transverse grooves 7 and having at its sides the integral vertical flanges 3, the inner end plates secured to the tie, the outer end plates secured to the tie and having their lower ends engaging the said transverse grooves and the blocks, substantially as described.

2. In a metallic tie, the combination of the rectangular plate 2, having its ends bent upon themselves to form grooves and provided with vertical flanges 3, the depending longitudinal and transverse flanges formed integral with the plate, the inner end plates secured to the plate 2 and provided at their sides with flanges lapping the vertical flanges, and the outer end plates engaging the grooves and provided with the side flanges, substantially as described.

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

ELIAS DIETRICH.

Witnesses:

J. O. KELLY,
JOHN C. McNAB.