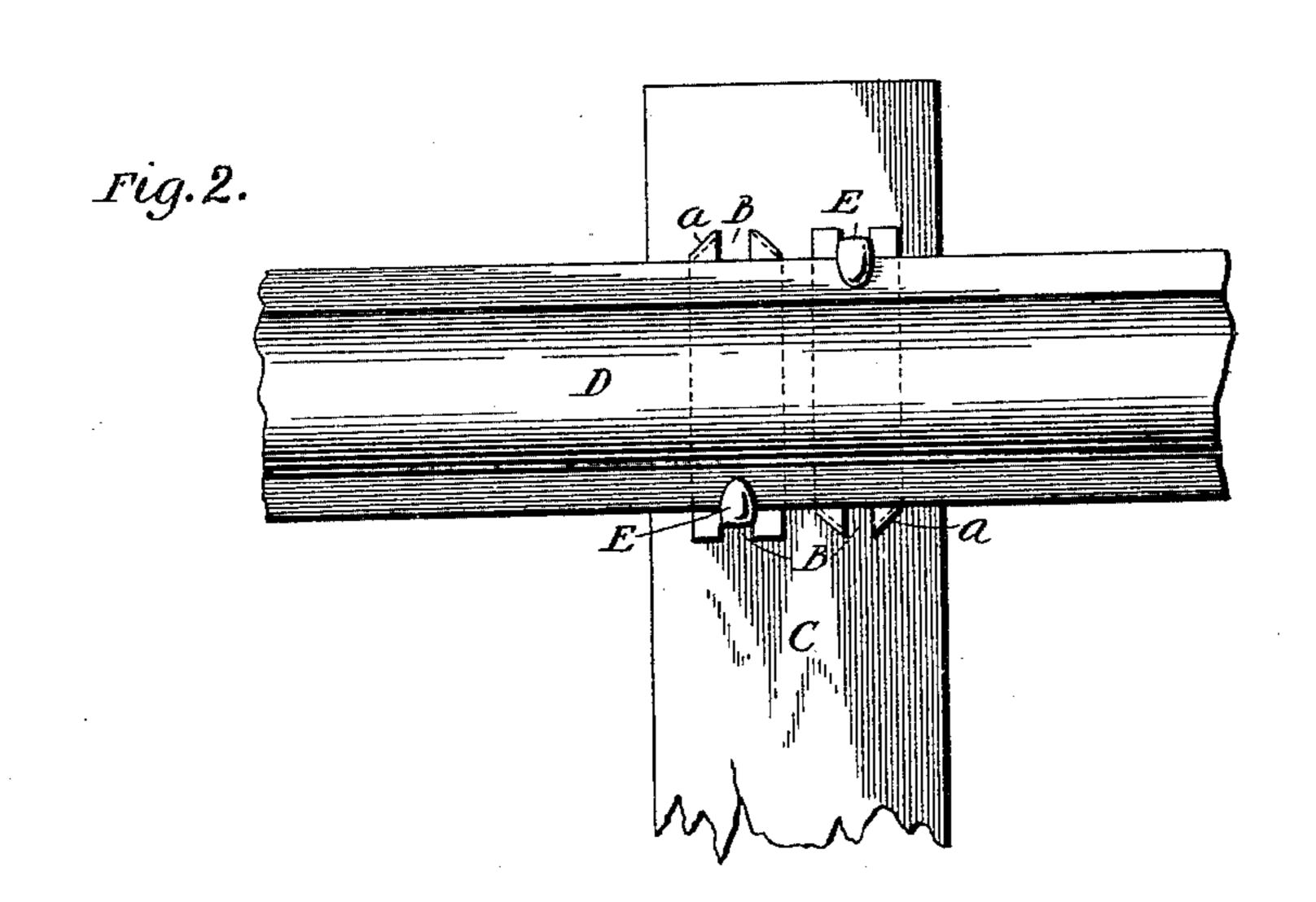
(No Model.)

M. R. PERKINS.

WEAR PLATE FOR RAILWAY TIES.

No. 454,594.

Patented June 23, 1891.



Witnesses:

Miles. Nortonf

Momas Durant

Inventor:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

MICHAEL R. PERKINS, OF PORTSMOUTH, NEW HAMPSHIRE.

## WEAR-PLATE FOR RAILWAY-TIES.

SPECIFICATION forming part of Letters Patent No. 454,594, dated June 23, 1891.

Application filed April 5, 1890. Serial No. 346,749. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL R. PERKINS, a citizen of the United States, residing at Portsmouth, in the county of Rockingham and 5 State of New Hampshire, have invented certain new and useful Improvements in Wear-Plates for Railway-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in wear-plates for railway-ties; and it consists in certain novelty in the construction and arrangement of the same, all of which I will now proceed to point out and describe, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective showing the under side of the preferred form of the invention. Fig. 2 is a top plan view showing a portion of a rail and tie provided with my invention.

Referring to said drawings, A represents a flat metal wear-plate having the corners of one end bent or struck up forming flat pointed spurs a projecting substantially at right angles to the plane of the plate. Said spurs are adapted to be driven into the tie, preferably in a line transverse to the grain thereof. If desired, both ends of the plate may be provided with spurs.

B are notches or recesses formed in the ends of the plate through which the spikes are adapted to be driven. The notches or recesses at the end which is provided with spurs may be omitted.

C represents the tie, and D represents the rail. I employ two wear-plates at each end of the tie, as shown in Fig. 2. Said plates are placed upon the tie and the spurs driven into same, the rail resting upon the plates, which are so arranged that the spurs of one plate

are on one side of the rail and the spurs of the other plate at the same end of the tie are 45 on the opposite side of said rail. The spikes E are driven into the tie through the notches or recesses at the ends of the plates which are not provided with spurs, one spike only being used with each plate, so that at each 50 end of the tie a line drawn between the spikes on opposite sides of the rail will be diagonal to the grain of said tie, thus preventing any possibility of splitting the same.

The wear-plate I have described is prefer- 55 ably made about one-eighth of an inch thick. It is a simple and effective wear-plate, which can be easily and cheaply manufactured, and will greatly add to the life of the tie. By means of the spurs it is securely held in position from the time it is placed upon the tie and the spurs driven in and does not depend entirely upon the spikes to hold the same in place.

Having thus fully described my invention, 65 what I claim as new, and desire to secure by Letters Patent, is—

1. A wear-plate for railway-ties, consisting of a flat metal plate having a slot or opening at each end for the reception of the spike, and 70 one or more corners of said plate struck up at right angles to the same, forming spurs to enter the tie, substantially as specified.

2. A wear-plate for railway-ties, consisting of a flat plate having a slot at each end and the 75 corners at one or both ends struck up at right angles to the same, forming angular spurs to enter the tie at an angle to the grain of said tie, substantially as specified.

In testimony whereof I affix my signature in 85 presence of two witnesses.

MICHAEL R. PERKINS.

Witnesses:

HENRY II. IIAM, FRANCIS W. HAM.