

(No Model.)

T. A. DAVIES.

WEAR PLATE FOR RAILROAD RAIL TIES.

No. 421,678.

Patented Feb. 18, 1890.

Fig: 1.

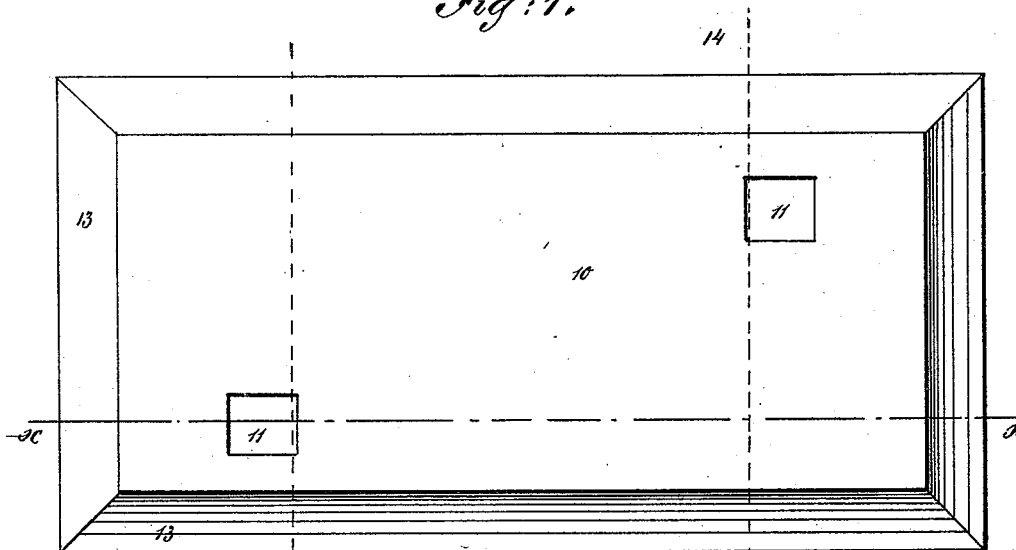
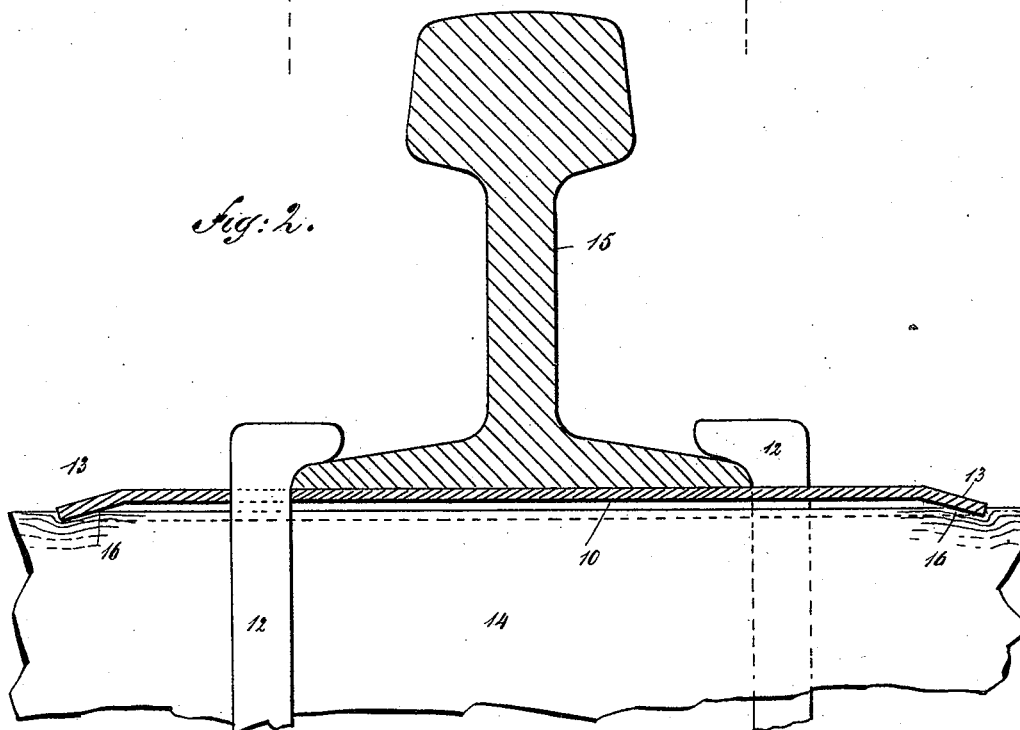


Fig: 2.



WITNESSES:

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WEAR-PLATE FOR RAILROAD-RAIL TIES.

SPECIFICATION forming part of Letters Patent No. 421,678, dated February 18, 1890.

Application filed July 5, 1889. Serial No. 316,507. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. DAVIES, of the city, county, and State of New York, have invented a new and useful Improvement in Wear-Plates for Railway-Rail Ties, of which the following is a full, clear, and exact description.

My invention relates to an improvement in wear-plates for railway-rail ties, and has for its object to provide a plate which will effectually protect the surface of the tie covered thereby from the action of water, and especially to prevent the ingress of water between the plate and the tie.

A further object of the invention is to provide a wear-plate capable of being firmly attached to the tie, but which when so attached will not cut or otherwise injure the fibers of the wood, but simply compress the same.

The invention consists in the novel construction of the plate, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the plate, and Fig. 2 is a section on line *x x* of Fig. 1.

The tie-plate is preferably made from a single plate of metal stamped, forged, or otherwise manipulated in process of manufacture, comprising a flat body 10, usually rectangular in general contour, in which side openings 11 are produced to receive the spikes 12 and a downwardly and outwardly extending marginal flange 13, constituting a hood, the end surface of the flange being essentially straight or unsharpened. The angle of the flange with respect to the body is pref-

erably very slight, as illustrated in Fig. 2, in which figure the angle represented is approximately correct. The plate is placed upon the tie 14, the flanges only contacting therewith, and the rail 15 is laid upon the plate. Spikes are then driven down through the openings 11, and when the spikes force the plate downward the flanges of the plate being unsharpened simply compress the fibers of the tie as they sink to a seat therein, as shown in Fig. 2, and in no manner cut or injure the fibers, whereby the tie is not only protected from wear, but is not lacerated in being so protected.

It is obvious that when the plate has been seated upon the tie it is impossible for rain or snow to gain access to the surface covered by the plate to rot the same, and even were it possible for a driving storm to force rain or snow between the outer end of the flange and the contiguous surface of the tie neither rain or snow could be forced farther, as either of them must ascend the inclined plane 16, created by the plate seating itself, which inclined plane is in contact with the inner surface of the flange.

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

As an improved article of manufacture, a wear-plate for railway-rail ties, comprising a rectangular flattened body provided with an integral continuous marginal flange extending outward and downward at an angle to the body for contact with the tie, as and for the purpose specified.

THOS. A. DAVIES.

Witnesses:

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