(No Model.)

P. H. DUDLEY.

RAIL SECTION.

No. 442,366. Patented Dec. 9, 1890.

Fig. 1.

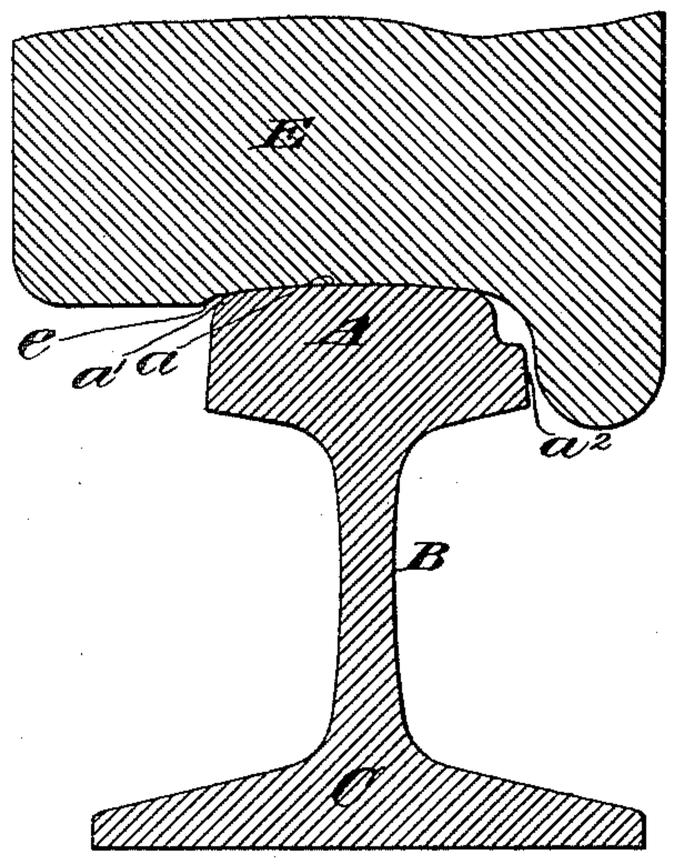
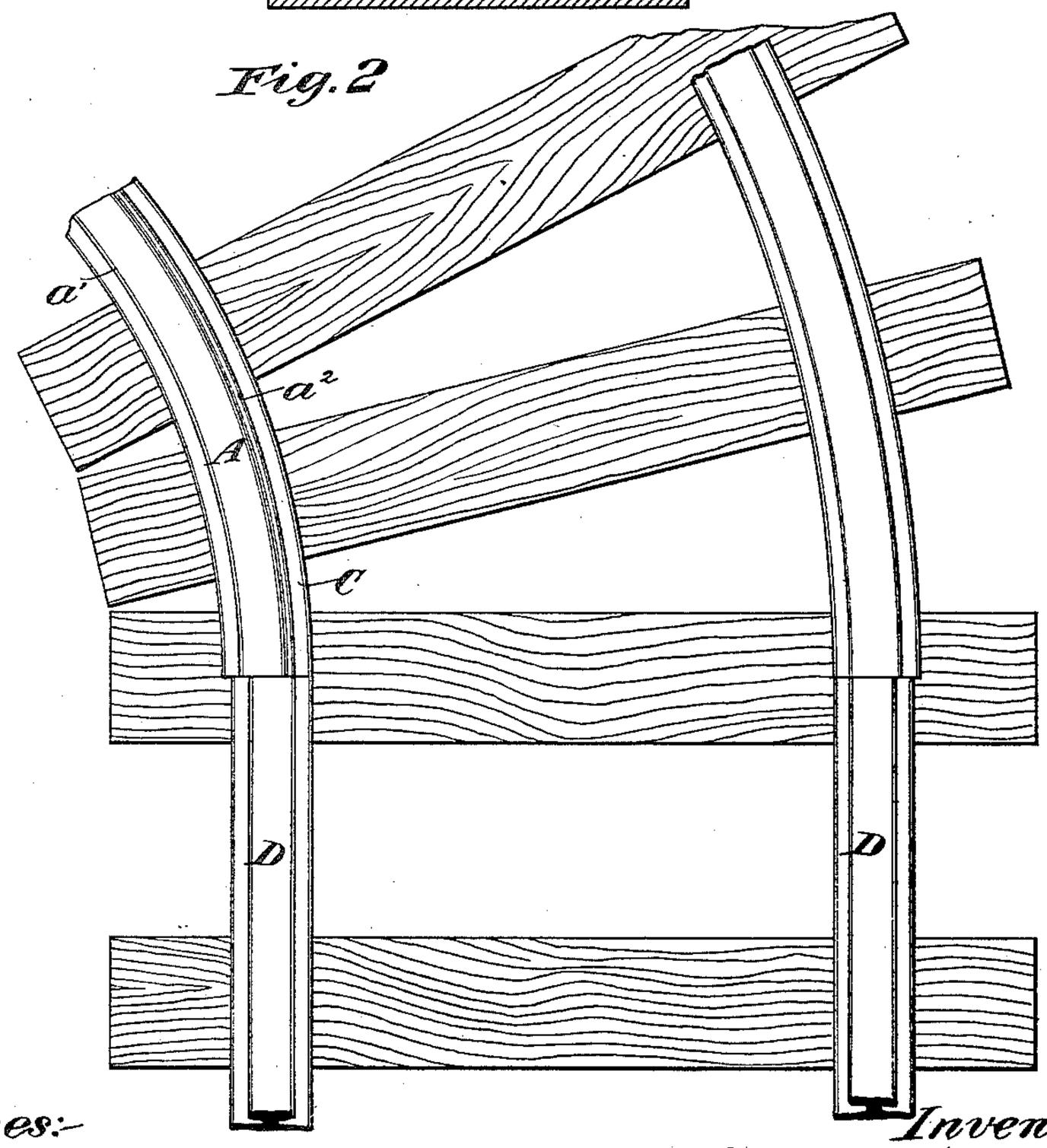


Fig. 2



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UNITED STATES PATENT OFFICE.

PLIMMON H. DUDLEY, OF NEW YORK, N. Y.

RAIL-SECTION.

SPECIFICATION forming part of Letters Patent No. 442,366, dated December 9, 1890.

Application filed August 8, 1890. Serial No. 361,412. (No model.)

To all whom it may concern:

Be it known that I, PLIMMON H. DUDLEY, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Rail-Sections, of which the following is a specification.

My invention relates to an improvement in rail-sections, and more particularly to sections which are intended to be laid along the curved portions of a track. In my pending application, Serial No. 343,483, filed March 11, 1890, and allowed June 11, 1890, I set forth at some length the causes for the more rapid wear of the rails at the curved portions of the track and showed, described, and claimed certain rail structures intended to render the lives of rails uniform throughout the level tangent, the gradient tangent, and the curved portions of the track.

The object of my present invention is to provide a form of rail-section which may be practically employed to overcome in a considerable degree the cutting of the inner edge of the outer rail, due to the forward thrust of the inner end of the axial line of the truck in front of the center of the arc of the curve and the consequent thrust of the forward portion of the flanges of the outer wheels of the track toward the inner edge of the outer rail, and at the same time preserve the bearing-surface of the rail of substantially the same width upon the curve as upon the other track-sections.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a vertical transverse section through the rail-section, showing the position of the tread of a wheel thereon as passing around a curve section of track; and Fig. 2 represents a plan view of a curve section of track, the rail-section forming the subject of my present invention being represented as the inner rail, and a rail-section having a bearing-surface of increased width being represented as the outer rail.

A represents the head of the inner rail of the curve, B its web, and C its base. The bearing-face *a* of the said rail is of substantially the same width as the bearing-faces of the rails D, which form the tangent sections of the track. The width of the bearing-face *a* is not, however, necessarily restricted to the exact width of the bearing-faces of the rails on the tangent sections, but is preferably about the same width.

The corner *a'* of the head A—viz., the corner toward the center of the arc of the curve—is intended to occupy a position along the line which the incline *e* nearest the outer side of the wheel E would occupy in traveling around the curve, with the flange of the wheel in proximity to the opposite edge of the head A. To preserve the uniform distance between the rails of the curved track-section, the edge of the head A farthest from the center of the arc of the curve is provided with a laterally-projecting rib a^2, located below the bearing-surface of the rail, its edge forming a continuation of the edge of the head adjacent thereto. The outer ledge of the hollow in the treads of car-wheels is thus utilized by causing it to contact with the corner of the rail to hold the flange of the outer wheel of the truck away from the edge of the rail, and the cutting is thereby materially decreased.

What I claim as my invention is—

1. A railway-rail the head of which has a substantially flat bearing-surface, and is provided with a rib projecting laterally from the head below the bearing-surface and in position to engage at its edge the side of the depending flange of a car-wheel, substantially as set forth.

2. In combination with a tangent section of track, a curved section of track, the rail-section on the curve having a bearing-surface corresponding to the bearing-surfaces of the rail-sections on the tangent and having its outer edge set out of the line of the outer edge of the adjacent rail-section and provided with a laterally-extending rib on the inner edge of its head below the bearing-surface of the rail, substantially as set forth.

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