

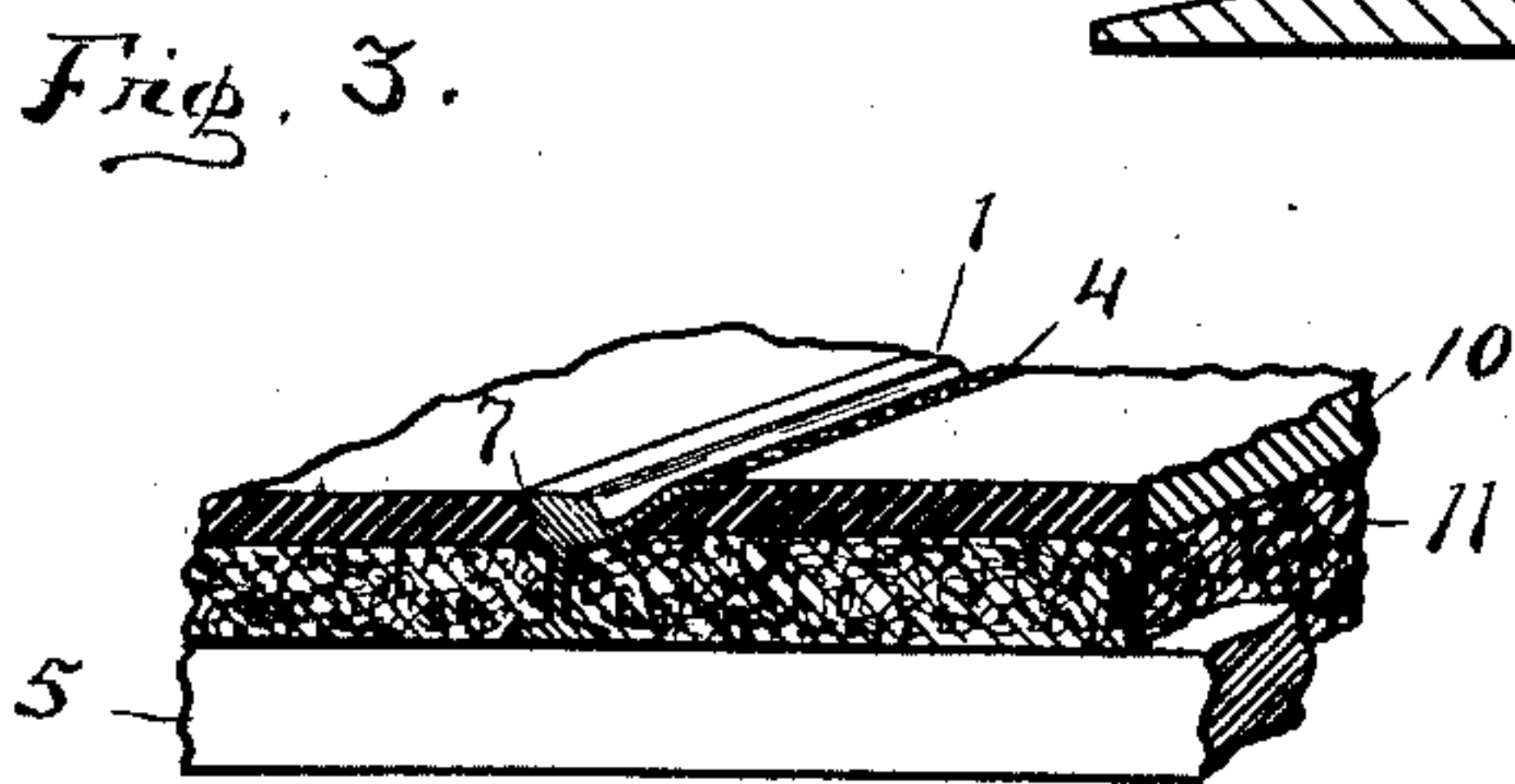
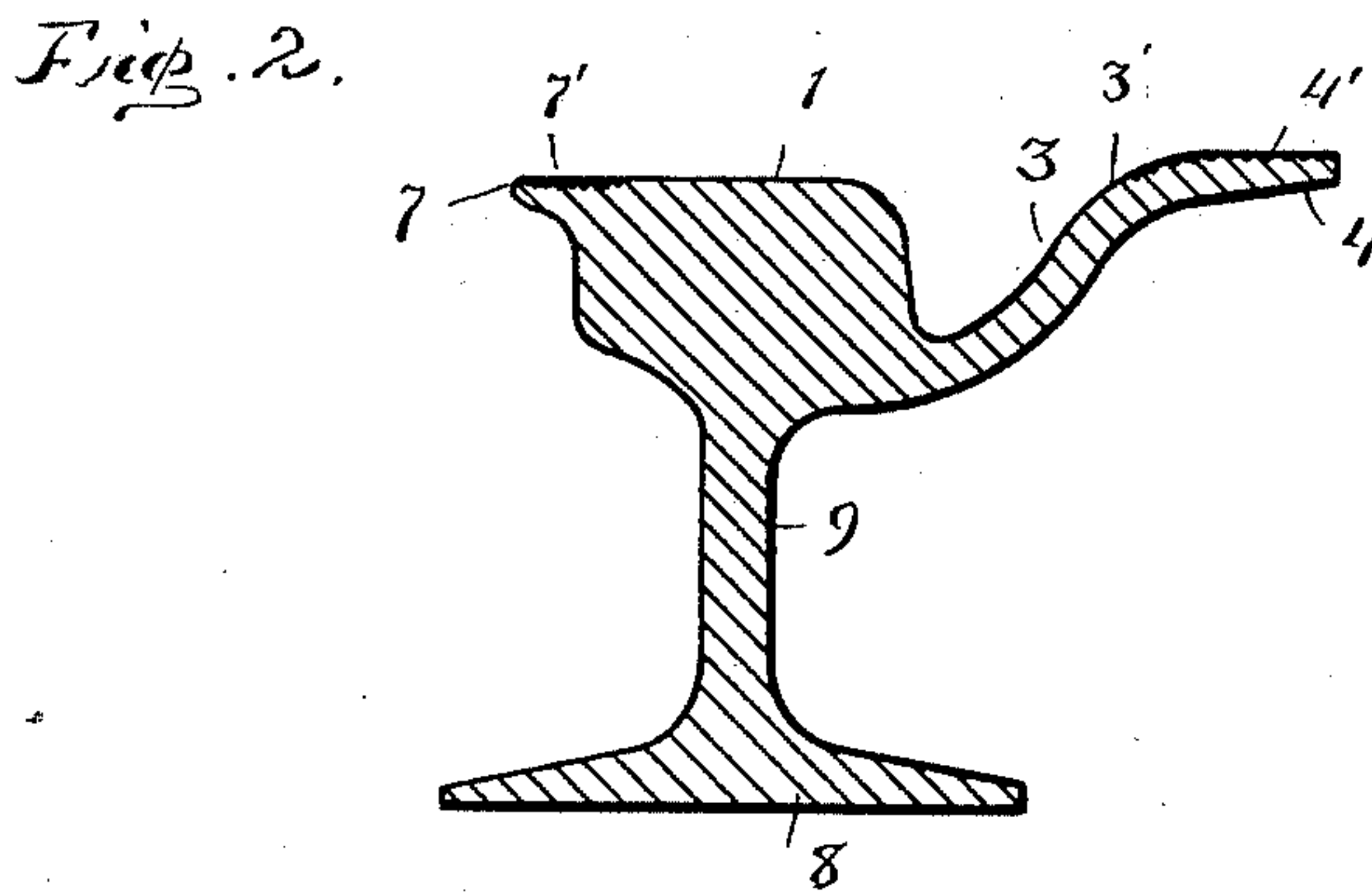
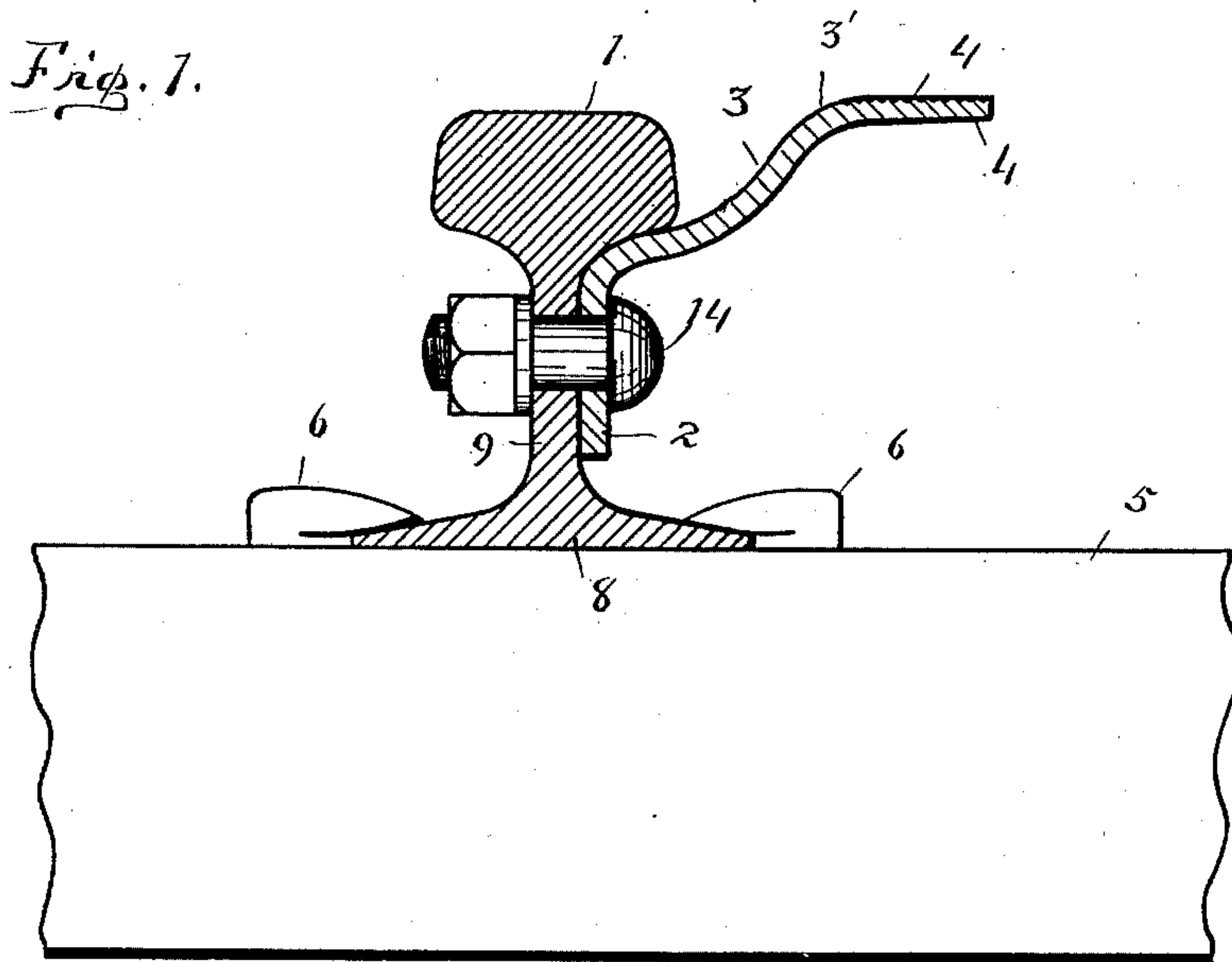
No. 715,096.

Patented Dec. 2, 1902.

W. LEONARD.
RAILWAY RAIL.

(Application filed Aug. 22, 1900.)

(No Model.)



WITNESSES:

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WILMER LEONARD, OF FORT WAYNE, INDIANA.

RAILWAY-RAIL.

SPECIFICATION forming part of Letters Patent No. 715,096, dated December 2, 1902.

Application filed August 22, 1900. Serial No. 27,647. (No model.)

To all whom it may concern:

Be it known that I, WILMER LEONARD, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Railway-Rails; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in railway-rails wherein an extending flange ranges along the inner side of the rail; and the objects of my improvement are, first, to afford an efficient juncture of the rails and the abutting pavement; second, to provide a guard for preventing wagon-wheels from lodging and sliding between said rails and pavement, and, third, to provide a self-cleaning channel along the inner side of the rail.

I accomplish my objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a cross-section of an ordinary rail, showing my invention applied as an attachment. Fig. 2 is a similar view of a rail with my invention made integral therewith; and Fig. 3 is a perspective view of a section of pavement, showing my invention in position.

Similar numerals of reference indicate corresponding parts throughout the several views.

In Fig. 1 is illustrated a form of my invention adapted to be used in conjunction with rails of the T type, which may be already laid and in use. In this form my invention consists of a continuous strip of metal which is formed with a downturned or vertical portion 2, a concave central portion 3, and an outwardly-extending or horizontal portion 4. The said strip is formed so that the vertical portion 2 and that portion next adjoining will conform, respectively, with the web 9 and the under side of the tread 1 of the rail 8. The concave portion 3 extends outward and upward from the lower side of the tread 1, and

from thence the strip is turned outward, forming a convex shoulder or riser 3' and shelf 4. The upper surface of said shelf ranges in a plane above the tread 1 and is roughened, corrugated, or serrated, as shown at 4'. The strip thus formed is secured to the rail by means of rivets or bolts 14, which pass through suitable bolt-holes made in the vertical portion 2 of the strip and in the web 9 of the rail.

In Fig. 2 is shown another form of my invention, in which a flange 3 protrudes outward and upward from the lower portion of the tread 1 of the rail 8 and presents a convex shoulder or riser 3' and an extending shelf 4. The upper surface of said shelf is roughened, as in the former instance. In this form I also provide a lateral extension 7, which ranges along the side of the rail opposite to the shelf 4. The upper surface of said extension may be roughened, as shown at 7'.

In the section of pavement illustrated in Fig. 3, 11 indicates the lower body or base of the pavement, 10 indicates a layer of asphalt, such as is in common use, and 5 is a tie upon which my rail is mounted. The asphalt layer 10, ranging along the rail, underlies the shelf 4 upon the one side and the extension 7 upon the other. Thus should the pavement slightly separate from the rail the consequent crevice would be so slight as not to be objectionable or even noticeable and would present no obstruction to wagon-wheels.

By extending the riser 3' and shelf 4 in a plane ranging above the tread 1 wagon-wheels having broad treads are thereby prevented from riding against the inner side of the rail, as is common and objectionable in ordinary rails. Should wheels having narrow treads be admitted between the riser and side of the rail, such wheels are elevated by the riser when turned at an angle relative to the rail sufficiently to free it from interference with the rail.

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

1. A continuous strip having a vertical portion secured to and along the rail beneath the tread thereof; a concave central portion extending outward and upward from the lower side of said tread; and an outwardly-extend-

ing or horizontal portion, the said central portion and horizontal portion forming a riser and shelf respectively.

5 2. In a railway-rail, the flange extending outward and upward from the lower side of the tread of the rail, and from thence outward forming a convex riser and shelf, the said shelf being suited to extend over the abutting pavement.

10 3. In a railway-rail, the flange extending outward and upward from the lower side of the tread of the rail, and from thence outward forming a convex riser and shelf, and

the lateral extension ranging along the top of the tread of the rail upon the side thereof opposite the said flange, the said shelf and extension being suited to extend over the abutting pavement upon the respective sides of the rail. 15

In testimony whereof I affix my signature 20 in presence of two witnesses.

WILMER LEONARD.

Witnesses:

FRANK J. BERCOT,
FRANCES MALLOY.