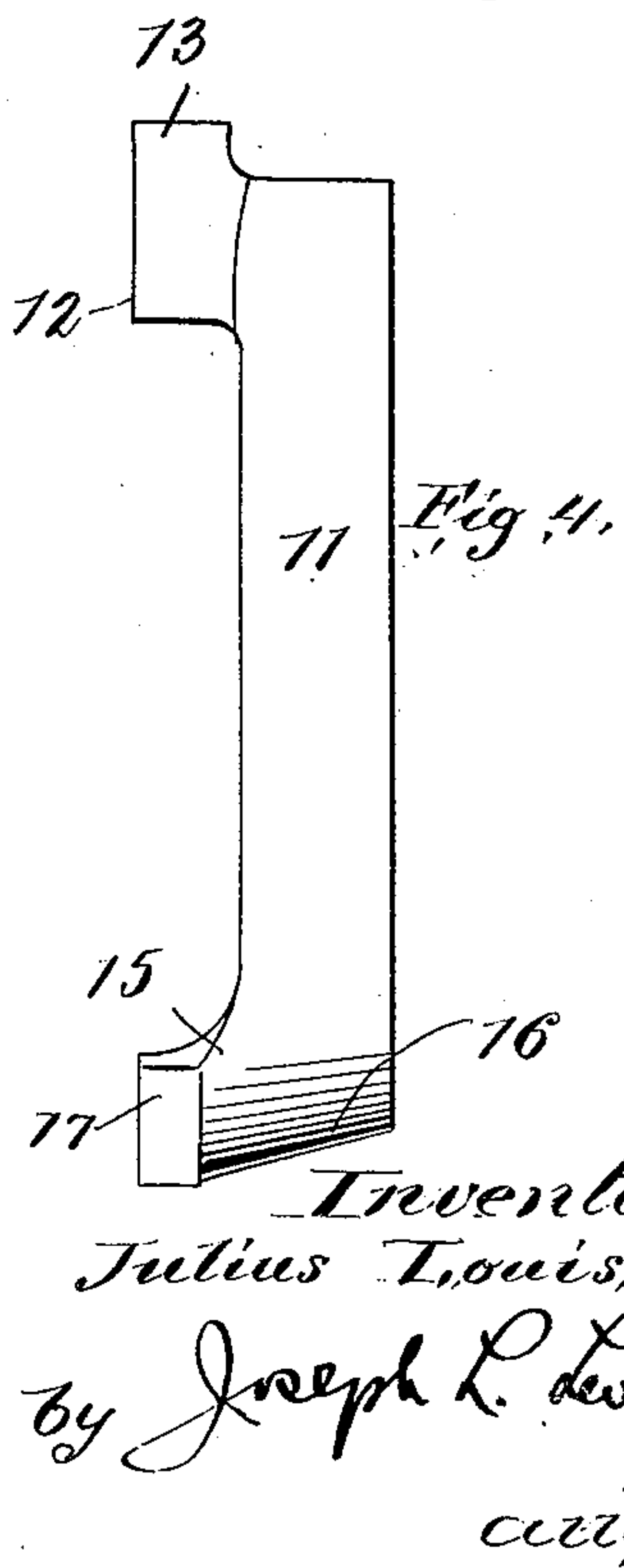
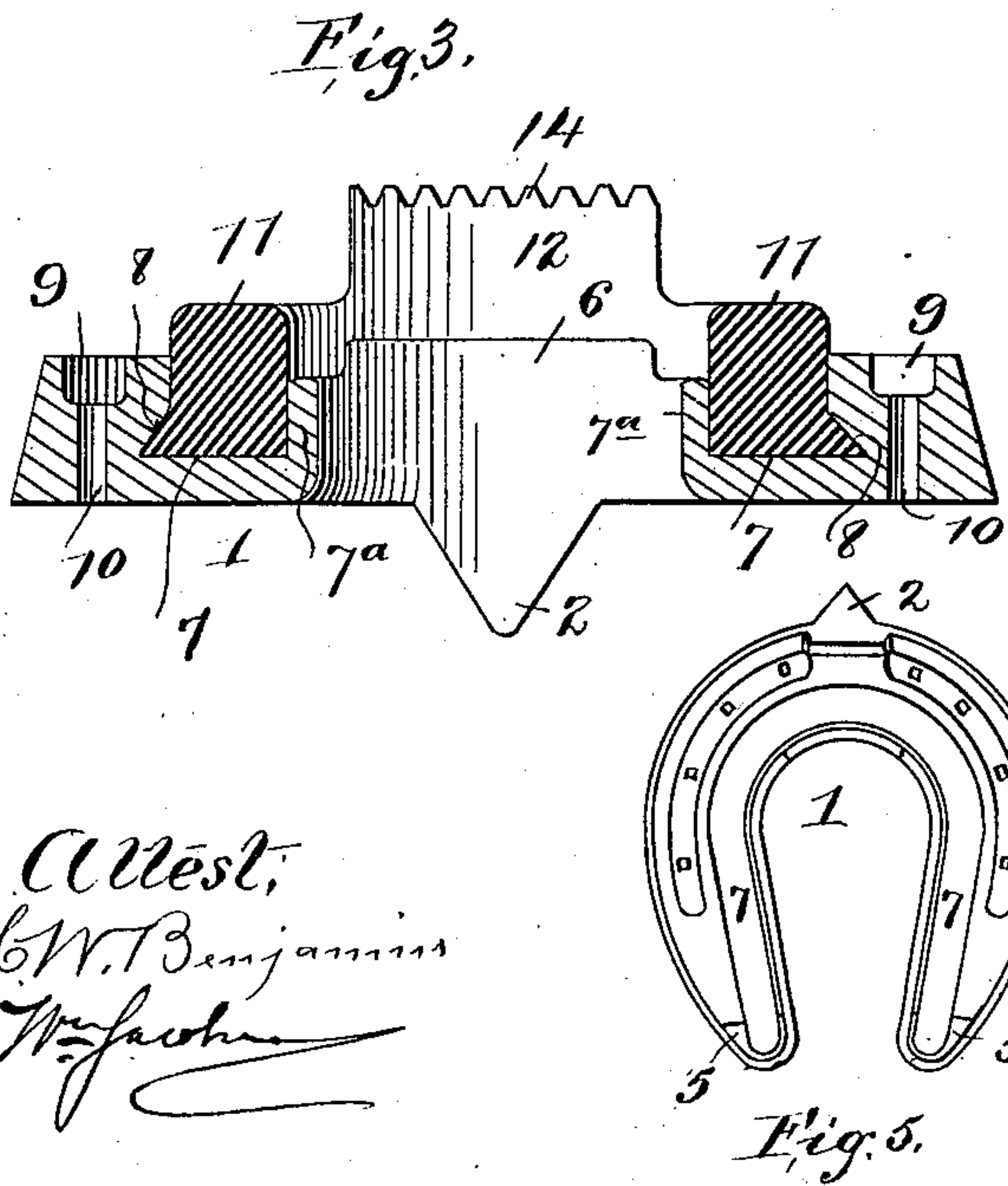
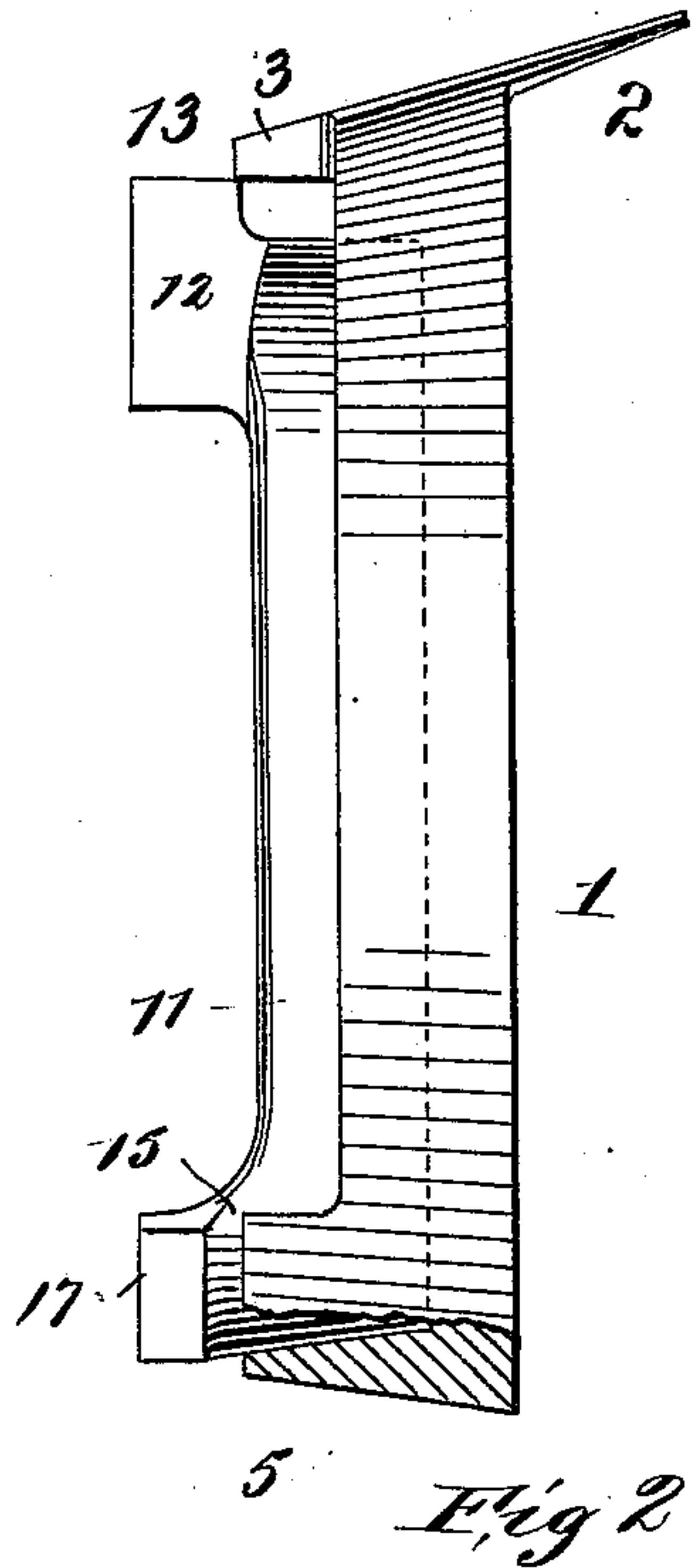
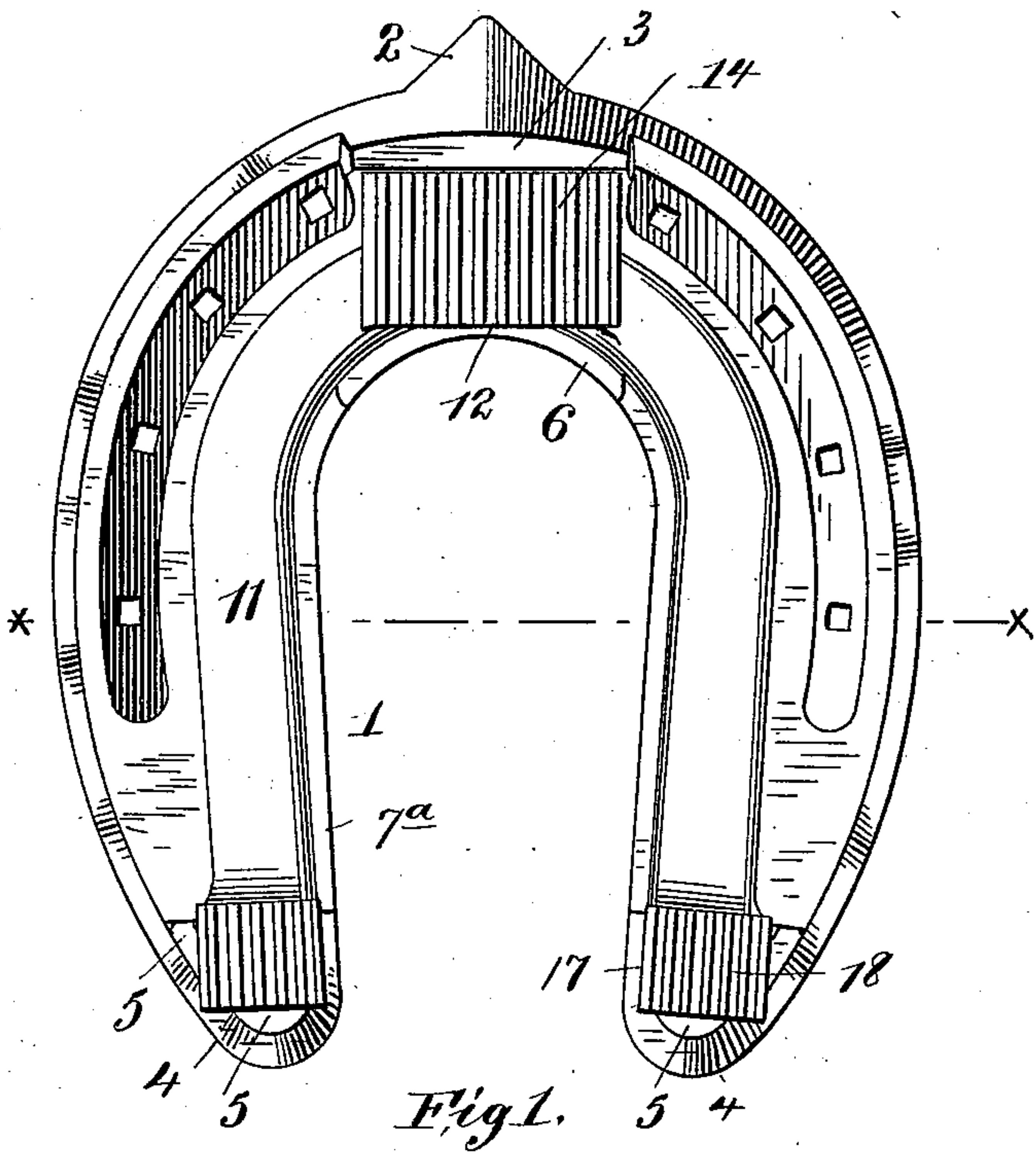


(No Model.)

J. LOUIS.
ELASTIC TREAD HORSESHOE.

No. 556,154.

Patented Mar. 10, 1896.



UNITED STATES PATENT OFFICE.

JULIUS LOUIS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO JEANNETTE HILGERS, OF SAME PLACE.

ELASTIC-TREAD HORSESHOE.

SPECIFICATION forming part of Letters Patent No. 556,154, dated March 10, 1896.

Application filed December 24, 1895. Serial No. 573,179. (No model.)

To all whom it may concern:

Be it known that I, JULIUS LOUIS, a subject of the Emperor of Germany, residing in the city, county, and State of New York, have made certain new and useful Improvements in Horseshoes, of which the following is a specification.

My invention has for its object to provide among other things a soft and elastic tread for the shoe as well as to provide means for preventing the horse from slipping on hard pavements, such as asphalt and the like, and also to increase the friction of the shoe on the pavements.

My invention therefore consists in the construction and combination of parts hereinafter described, and further pointed out in the claim.

Reference is had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of the shoe. Fig. 2 is a side elevation of the same; Fig. 3, a transverse sectional elevation on the line *xx* of Fig. 1. Fig. 4 is a side elevation of the rubber tread; and Fig. 5 is a plan view similar to Fig. 1, but much reduced and with the tread removed, showing the receiving-groove, &c.

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

At 1 is the shoe of conventional form. The upper surface of the shoe is provided with the hoof-clip 2, and dependent from the under surface is a toe-calk 3.

At the heels 4 of the shoe the shoe is provided with outwardly-extending projections 5, which follow the contour of the heels 4, and opposite the calk 3 and on the inside of the toe of the shoe is provided a lug or projection 6.

At 7 is a groove formed in the under face of the shoe and approximating it in contour, the groove ending in the projections by forming the wall 7^a, from which the projection 6 extends. The outer corner of the bottom of the groove is formed into an angular-shaped recess, as shown at 8 in Fig. 3.

On the lower face of the shoe, between the groove 7 and the outer edge of the shoe, are formed two disconnected grooves 9 of less

depth than the grooves 7, through the bottom of which holes 10 are formed to provide means for securing the shoe to the hoof, and it will be noted that this groove and the holes form means independent of the groove 7 for securing the shoe to the hoof.

At 11, and best seen in Fig. 4, is the tread, which comprises a continuous piece of rubber or like material, shaped approximately to the contour of the groove 7 and adapted to be secured in the groove and to the shoe by forcing the lower portion thereof into the angular recess 8, as shown in Fig. 3.

At the toe portion of the tread 11 is formed integral therewith a lug or projection 12, which extends outwardly from the toe of the tread and forwardly to form a flange, as at 13. The surface of the projection 12 is preferably serrated, as at 14, to provide means for a better gripping of the tread to the road. The heels of the tread 11 are likewise provided with flanged projections 15, the ends of the heels being narrowed and curved, as at 16, to form a close fit with the ends of the groove 7 at the projections 5, the narrowing of the heels forming flanges 17 which lie over the top of the projections 5, as shown in Figs. 1 and 2. The surfaces of these projections 15 are likewise serrated, as at 18.

It will be noticed by reference to Figs. 1 and 3 that the calk 3 and projections 6, between which the toe of the tread extends, provide means for preventing longitudinal distortion or displacement of the tread, at the same time allowing of sufficient elastic action of the tread, and that the projections 5 provide means for preventing the projections 15 of the tread from becoming transversely distorted or displaced.

The tread projects out beyond all of the projections from the shoe, so that should the projections of the tread wear out or break off the body or face of the tread would present an elastic surface to the road and prevent the shoe from coming in contact therewith.

What I claim, and desire to secure by Letters Patent, is—

The combination in a horseshoe having a groove continuous with the shoe, the toe-calk 3 and projection 6 at either side of the groove

and at the toe of the shoe, the projections 5 extending from the heels of the shoes, said groove terminating at said projections, a single-piece elastic tread secured in said groove, 5 a toe projection 12 having a lug 13 adapted to engage the toe-calk 3, the projection 6 engaging the toe of the tread, and flanged projections 15 at the heels of the tread lying within

the projections 5 and over the same, substantially as described.

Signed in the city and county of New York this 21st day of December, 1895.

JULIUS LOUIS.

Witnesses:

WM. JACOBSEN,

JOSEPH L. LEVY.