

(No Model)

W. L. RICHEN.
ARTIFICIAL FOOT.

No. 579,009.

Patented Mar. 16, 1897.

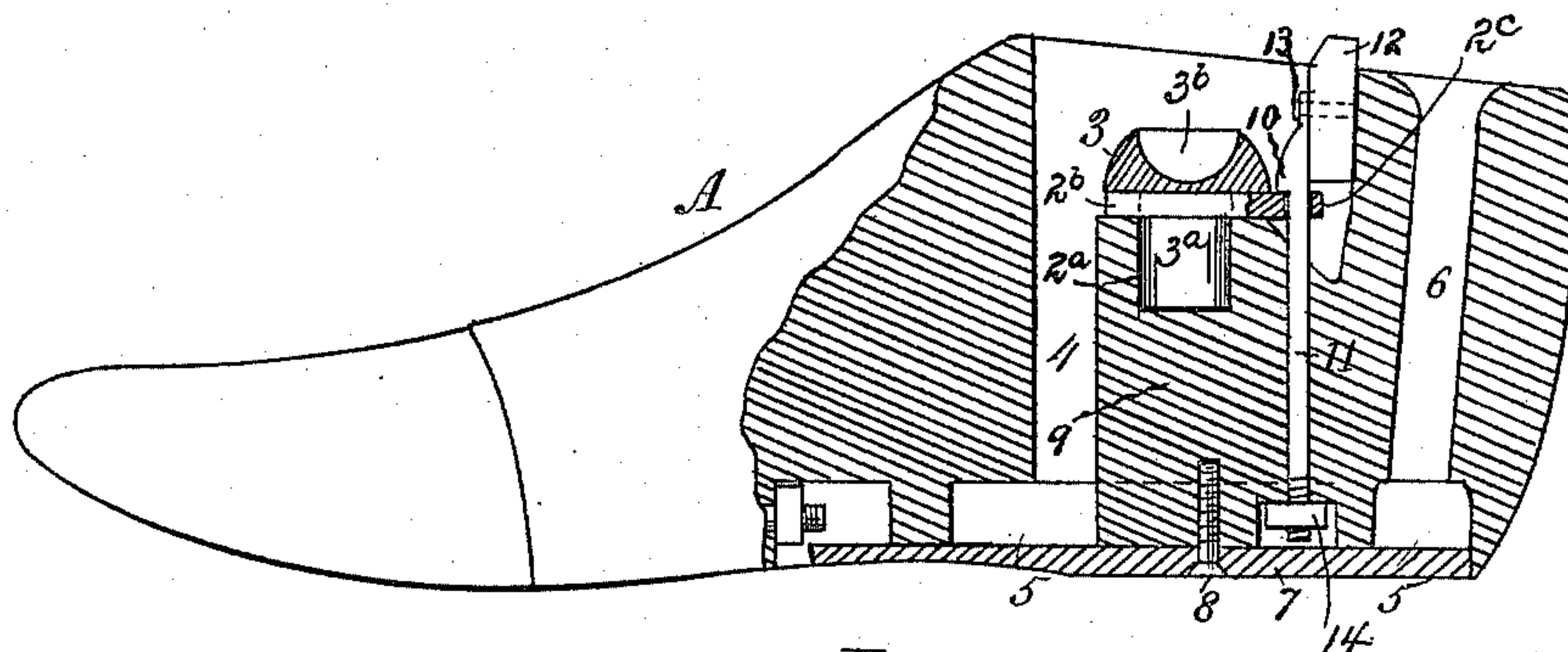


Fig. I.

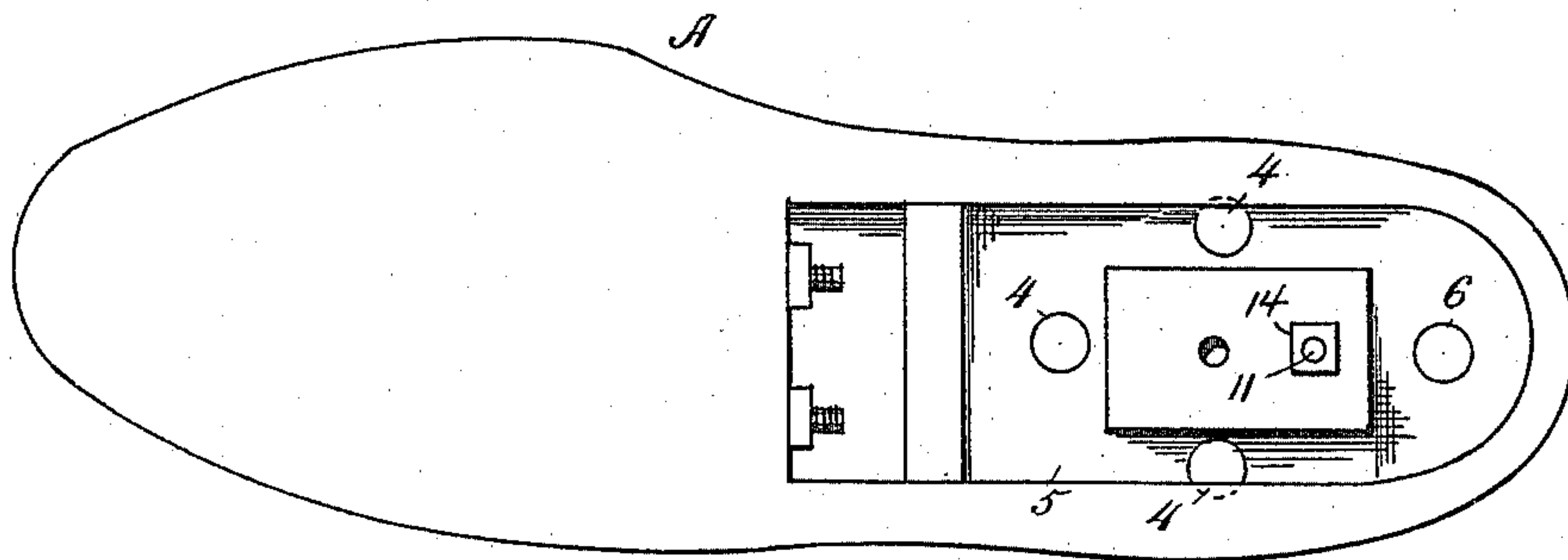


Fig. II.

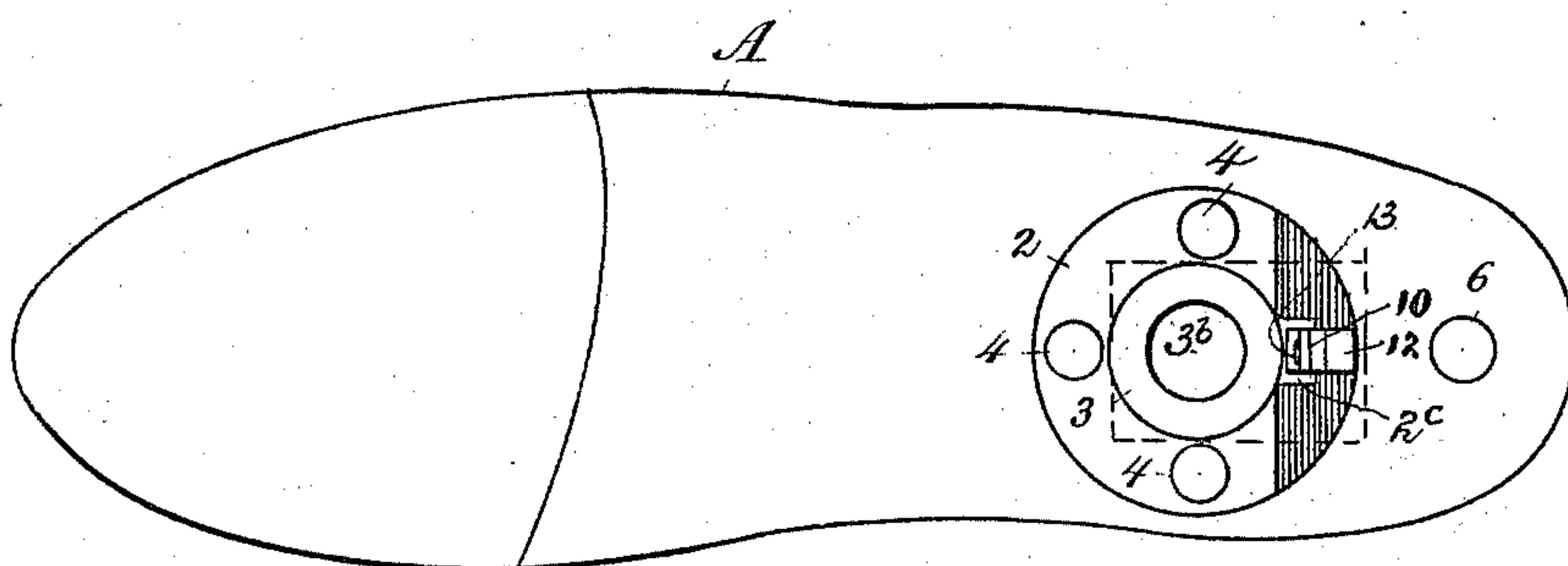


Fig. III.

Witnesses

R. S. Millar
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Inventor

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by J. Bailey Atty

UNITED STATES PATENT OFFICE.

WILLIAM L. RICHEN, OF CINCINNATI, OHIO.

ARTIFICIAL FOOT.

SPECIFICATION forming part of Letters Patent No. 579,009, dated March 16, 1897.

Application filed June 29, 1896. Serial No. 597,384. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. RICHEN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Artificial Feet, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a central longitudinal section of my improved artificial foot. Fig. 2 is a bottom view. Fig. 3 is a plan view.

My invention relates to improvements in artificial feet, and my purpose is to provide a simple, inexpensive, and durable device designed to obviate certain prevalent defects in the conformation and adjustment of the several parts of the foot as usually constructed. These defects are of such a character that they increase with the progress of time, and repairs become difficult if not impossible.

It is conceded that it is of the first importance in the manufacture of artificial limbs to use material of the lightest available character consistent with necessary strength, for the reason that every ounce of needless weight causes discomfort and fatigue to the wearer. It is therefore expedient that the utmost care and skill should be exercised in the fabrication of this exceptionally useful invention.

In the said drawings the letter A designates the body of the foot, which is made of a solid block of suitable wood, having a circular recess 2, formed in the top at the rear end, extending downward a short distance. In the top of the said recessed portion is formed a socket 2^a to receive a plug, hereinafter described, and the said block is provided with a series of apertures 4, communicating at the upper ends with said recess 2 and at the lower ends with a groove or recess 5 in the bottom of the block, which is closed by a plate 7, secured to the block by a screw 8. There is formed a recess 6 at the rear of the block, and these recesses serve for the passage of the

cords or tendons which connect the foot with the leg and support the ankle-joint.

The numeral 3 designates a plug having a cylindrical shank 3^a, which fits in the socket 2^a, and in its upper side is formed a cup-shaped recess 3^b.

The numeral 2^b designates a circular plate located just below the head of the plug and fitting tightly around the same, having a hole therein through which the shank 3^a passes, and is provided at the rear with an apertured lug 2^c, through which passes a vertical rod 11, provided at its upper end with a catch 10, which engages with the upper side of said lug. The lower end of this rod is screw-threaded and provided with a nut 14, which holds it in place. Interposed between the said catch and the block is a wedge 12, which is connected with the upper end of the catch by means of a screw 13, which passes through an aperture in the catch.

By the above construction the plug is held securely in place, so as to form a rigid support for the flexible ankle-joint, and by means of the wedge secured to the catch the latter is greatly strengthened and liability of the rod 11 breaking is obviated.

To remove the plug, the nut is unscrewed from rod 11, when the wedge, rod, and plug can be easily pulled out.

What I claim as new is—

In an artificial foot, the combination of a recessed foot-body as described, with the socket-plug 3, a catch-bolt securing said plug to the foot-body, a wedge engaging the said catch-bolt with said plug, and the sole-plate, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of June, 1896, in the presence of witnesses.

WILLIAM L. RICHEN.

Witnesses:

L. H. PUMMILL,
SIMEON M. JOHNSON.