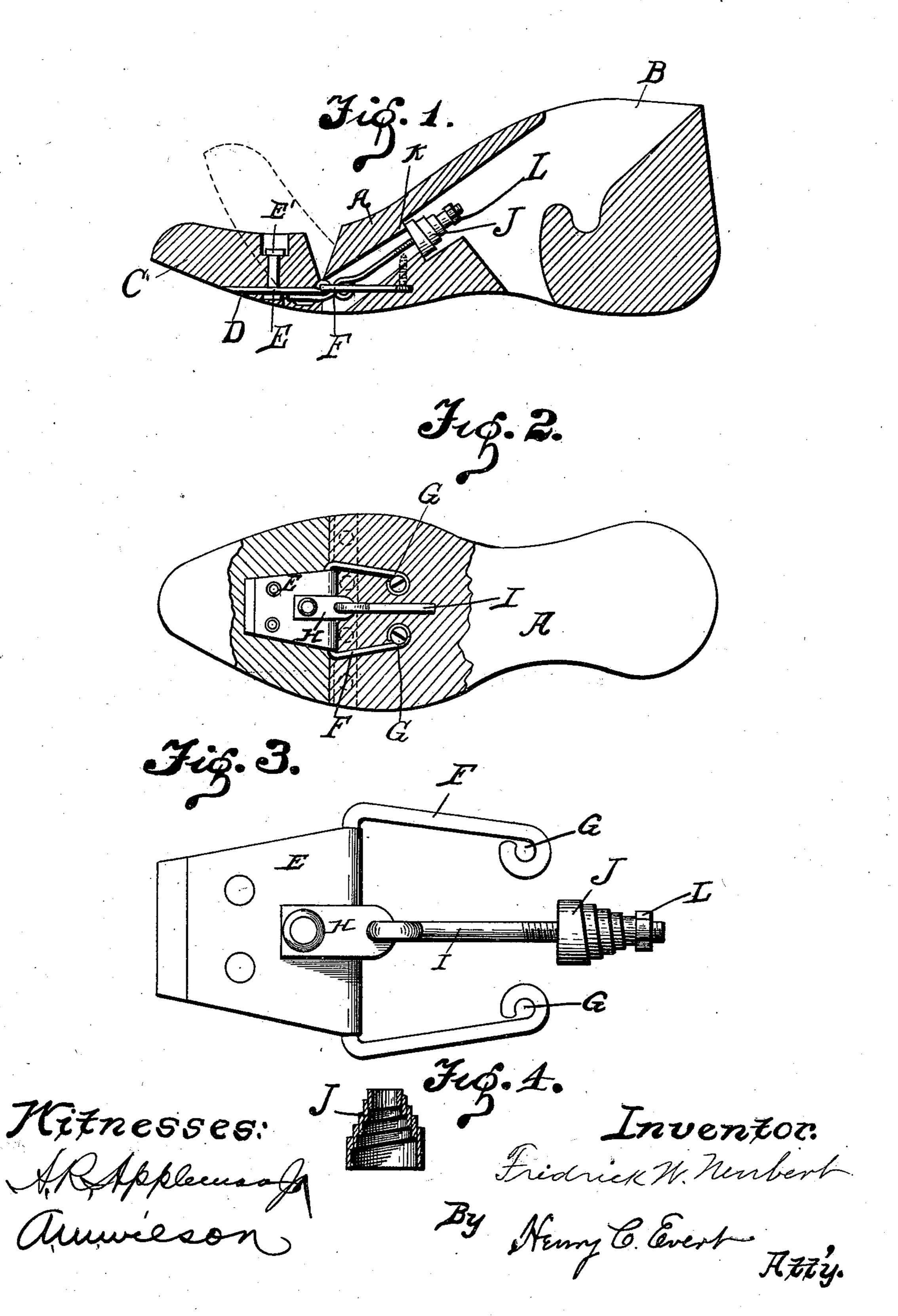
(No Model.)

F. W. NEUBERT. ARTIFICIAL LIMB.

No. 556,201.

Patented Mar. 10, 1896.



United States Patent Office.

FRIDRICK W. NEUBERT, OF PITTSBURG, PENNSYLVANIA.

ARTIFICIAL LIMB.

SPECIFICATION forming part of Letters Patent No. 556,201, dated March 10, 1896.

Application filed December 16, 1895. Serial No. 572,242. (No model.)

To all whom it may concern:

Be it known that I, FRIDRICK W. NEUBERT, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Artificial Limbs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in artificial limbs, and relates more particularly to that portion

known as the "toe-joint."

The invention has for its object the provision of novel means whereby a joint of the above-described class is produced that possesses advantages in points of strength, durability, and elasticity.

The invention has for its further object to construct a joint of the above-referred-to class that will be extremely simple in its construction and comparatively inexpensive to manu-

facture.

With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claims.

In describing the invention in detail, reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a vertical sectional view of an artificial foot provided with my improved joint. Fig. 2 is an underneath plan view, partly in section. Fig. 3 is an enlarged detail plan view of the hinge and its attachatel ments. Fig. 4 is an enlarged detail vertical sectional view of the spring.

In the drawings, A indicates the artificial foot proper; B, the recessed portion formed to receive the ankle-joint attachments.

The reference-letter C indicates the toepiece. The latter is recessed at D on its underneath face, said recess extending rearwardly for the reception of the plate E. This plate is secured in the recess by means of 50 bolts, screws, or rivets E', and carries on its rear end a yoke F, the ends of said yoke being provided with eyelets G G, which engage

screws in the foot portion, thereby forming a hinge. To this plate is rigidly secured a lug H, having an eyelet in which is secured an 55 arm or bolt I, carrying on its outer end a screw-thread. This arm or bolt extends into the foot portion through a slot in same, and carries a cone-shaped spiral spring J, the base of said spring resting on the shoulder K, 60 formed in the foot portion, and is retained in position by a nut L, adapted to fit on the end of the screw-threaded arm or bolt.

The operation of my improved toe portion for artificial limbs will be readily apparent. 65

The body portion is preferably composed of willow wood to conform with the balance of the body portion, and the plate carrying the arm or bolt is placed in position, as heretofore described. When the parts have been 70 thus secured in position the yoke and the screw-threaded bolt will act as hinges, allowing the free movement of the toe portion. When the toe portion operates on its hinges and is forced upwardly, the cone-shaped 75 spring on the arm or bolt will act as a means for returning the same to its normal position.

By the use of my improved toe portion a much more free and easy movement is obtained, and many other advantages could be 80 enumerated, principally among them being the simplicity of construction, there being no delicate mechanism liable to get out of order or become worn out, and another advantage resides in the construction being such that 85 the portion can be readily removed and a new one substituted should it become worn or damaged.

This application for patent should be considered with one granted to me on April 14, 90 1891, No. 450,297, for an artificial limb, and

is an improvement thereon.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my 95 invention.

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

1. A toe portion for artificial limbs having arecess in the underneath side a plate rigidly secured thereon a yoke on the rear of the plate a lug secured to the plate and an arm hinged to the lug and resting upon a spring

at its inner end, as and for the purpose described.

2. In a toe portion for artificial limbs, a recess in the underneath side of said portion having a plate rigidly secured therein, said plate having in its rear end a yoke, the arms of said yoke having eyelets in their free ends, a lug secured to the plate, a bolt or arm hinged to said lug, said bolt or arm having a screw-

threaded end, and carrying a nut and coneshape spring, substantially as shown and described.

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

FRIDRICK W. NEUBERT.

Witnesses:

H. C. EVERT,

H. E. SEIBERT.