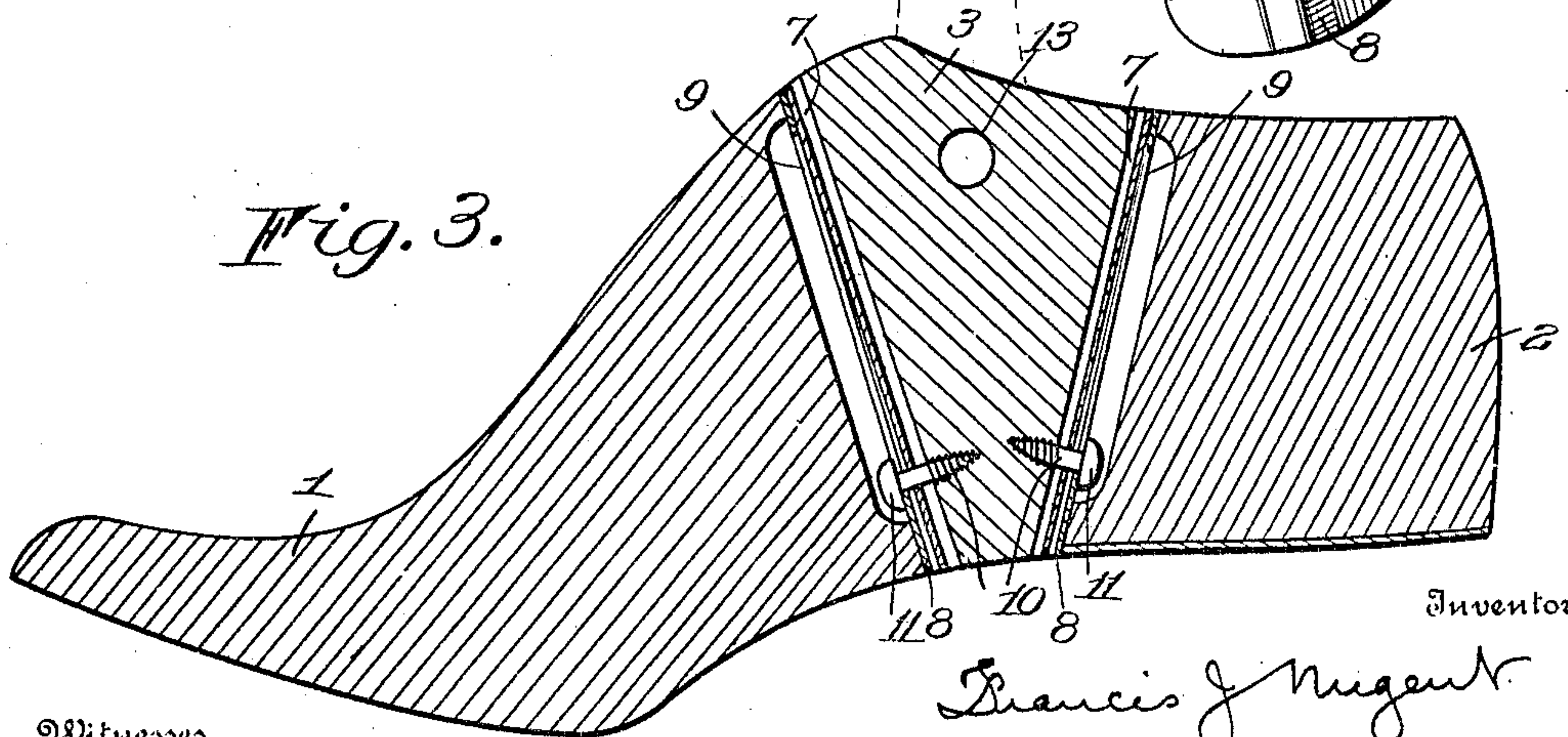
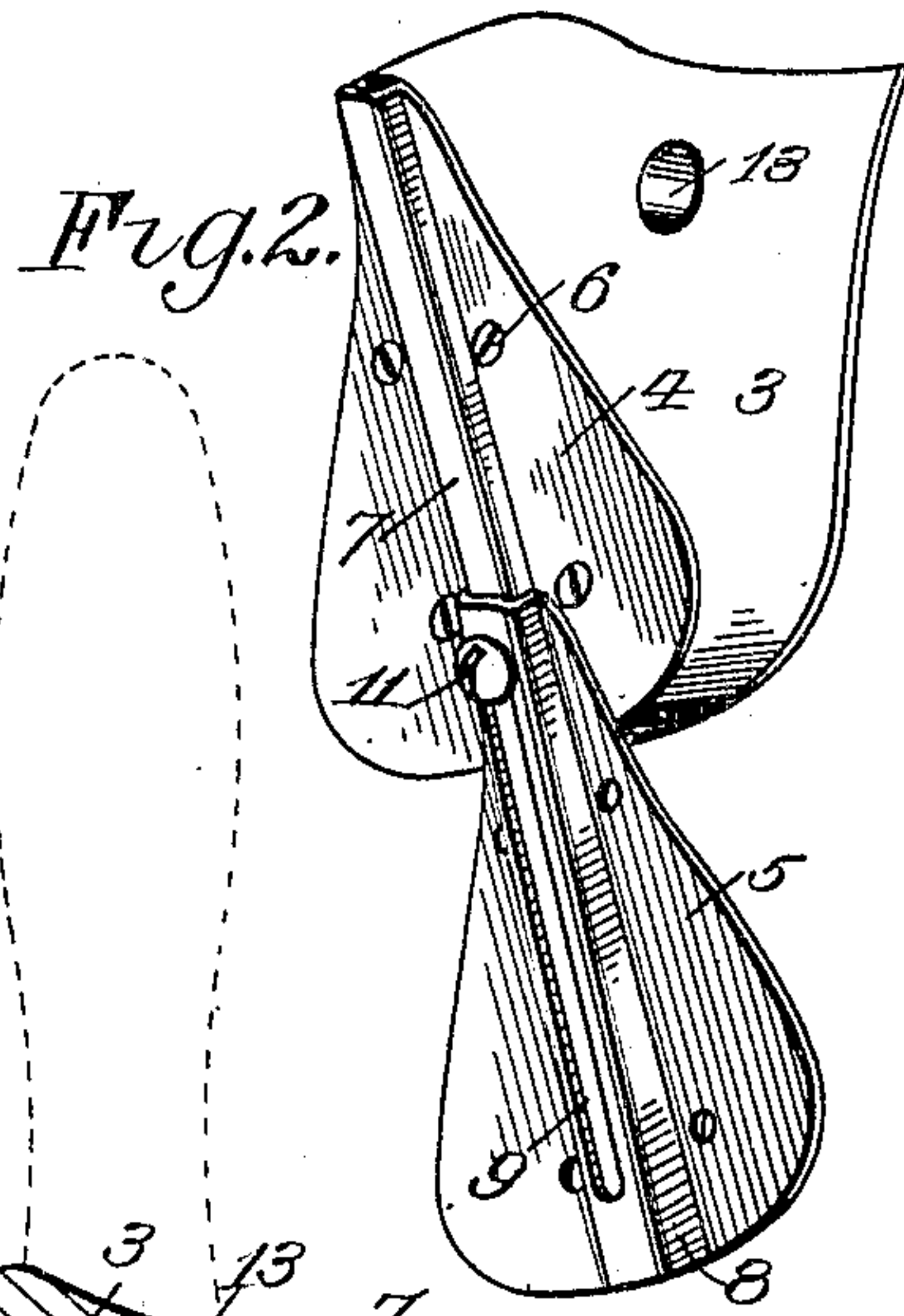
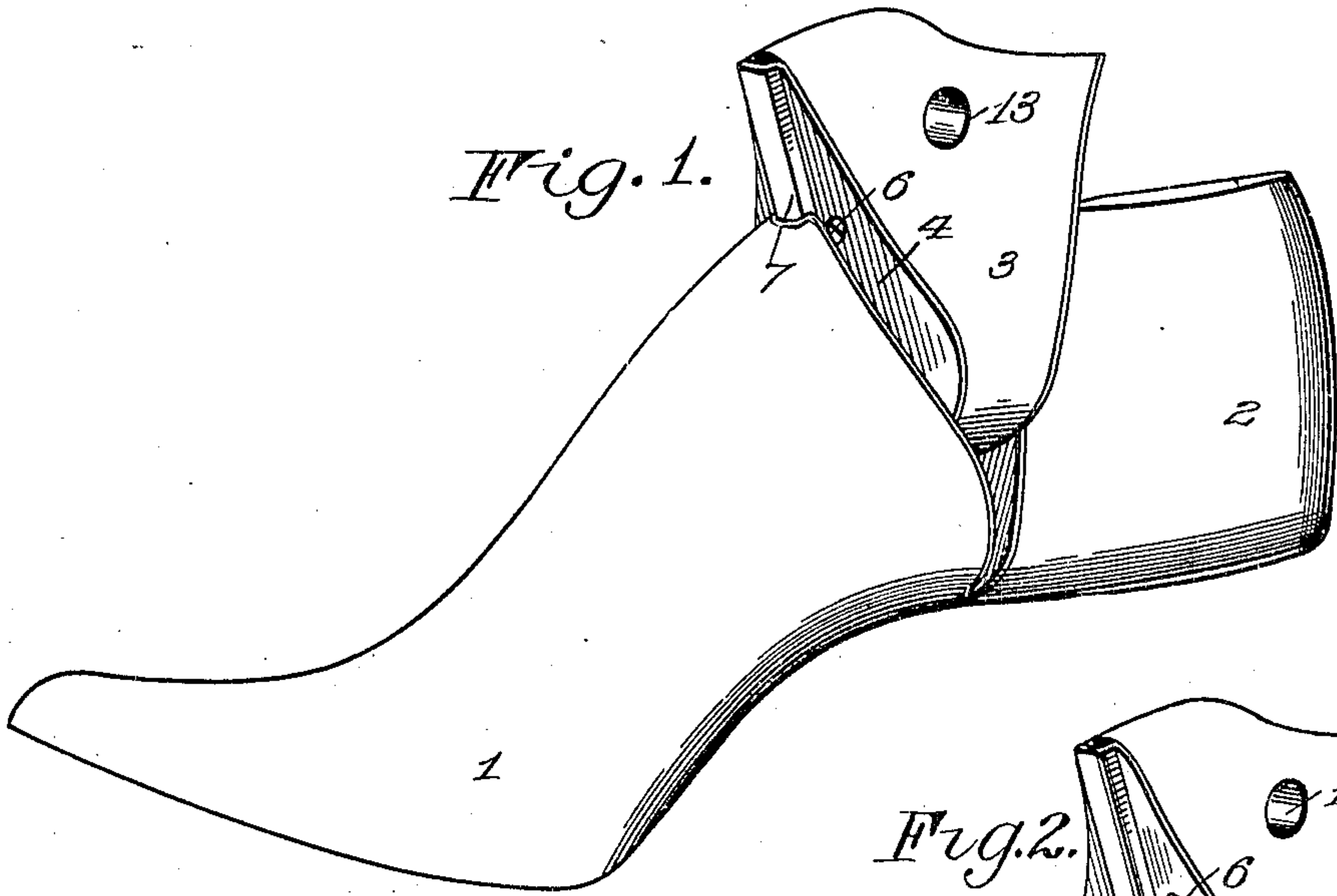


No. 871,138.

PATENTED NOV. 19, 1907.

F. J. NUGENT.  
COLLAPSIBLE LAST.  
APPLICATION FILED DEC. 29, 1904.



Witnesses

Halter B Payne.  
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# UNITED STATES PATENT OFFICE.

FRANCIS J. NUGENT, OF ROCHESTER, NEW YORK.

## COLLAPSIBLE LAST.

No. 871,138.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed December 29, 1904. Serial No. 238,846.

*To all whom it may concern:*

Be it known that I, FRANCIS J. NUGENT, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Collapsible Lasts; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention relates to lasts for boots or shoes and particularly to the class of divided or collapsible lasts and it has for its object to provide one embodying a plurality of parts which are capable of relative movement to collapse the last to facilitate its removal from the boot or shoe.

My invention has for its further object to provide means for securing the parts together whereby they may be held in alignment and when in the operative position will be securely held against displacement.

To these and other ends my invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a perspective view of a divided last embodying my invention shown contracted. Fig. 2 is a detail view of the central division and attachments, and Fig. 3 is a longitudinal sectional view showing the last expanded to its normal position.

Similar reference numerals in the several figures indicate similar parts.

A last embodying my invention is divided into toe and heel sections 1 and 2, and a central section or member 3, the planes of their adjacent faces diverging upwardly so that the central section is wedge shape, its narrow edge being in the lower or arch side of the last and capable of being withdrawn upwardly in the direction of the instep. Connections are provided for securing the several sections together which permit their relative movement and hold them in alignment and in the present illustration I have shown the connections as comprising plates 4 and 5 arranged in pairs and secured to the adjacent faces of the several sections by suitable securing devices such as screws 6. One plate of each pair is provided with a central longitudinal rib 7 fitting within a

channel or guide 8 in the other plate lying in a groove or recess in one of the sections of the last. The bottom of the channel 8 is provided with an elongated aperture or slot 9 and extending therethrough is a screw 10 the head 11 of which engages the rear side of the channel and forms means for securing the plates and also permitting their relative movement. As it is desirable that the parts of the last be held rigidly when they are in operative position I form the bottom of the channel 8 at a slight angle to the face of the plate so that its lower end is deeper than its upper end, as shown in Figs. 2 and 3. From this construction it will be seen that a slidable connection between the parts is provided which holds them in alignment and permits the last to be collapsed by a relative longitudinal movement of the toe and heel sections. When the central section 3 is in its normal position as shown in Fig. 3 the heel and toe sections are held firmly thereon by the wedging action of the bottoms of the channels 8, which is relieved as soon as the section 3 begins to move upwardly, permitting it to be elevated freely. The screws 10 are a convenient form of connecting device between the several members as they may be easily applied and readily adjusted.

When it is desired to use the last for stretching purposes it is inserted in the shoe in the collapsed position. The central or wedge section is then pressed downwardly forcing the toe and heel sections apart, in which position they are tightly held by the locking of the wedge member or central section in its normal position. To withdraw the last the operator inserts a hook or other instrument in the eye 13 and jerks the section 3 upward thus loosening the securing devices and causing the heel and toe sections to be drawn together, as will be understood.

My device is admirably adapted for use as a boot or shoe tree and when it is so employed a suitable handle, as shown in dotted lines Fig. 3, is fitted to the central section affording a convenient means for operating it.

A last embodying my invention is simple in construction and possesses the advantage of collapsing sufficiently to permit it to be withdrawn from a shoe without in anywise straining either the shoe or the last. If desired, the engaging rib and slot on the two plates may be dovetailed together and other changes may be made in the form of connections between the several sections of the last

without departing from the spirit of my invention.

I claim as my invention:

5 The combination with a divided last composed of two or more sections having abutting faces, of a channel in one of said faces, and a rib cooperating therewith and arranged on the corresponding face of the other section, a slotted bottom in said channel in-

clined relatively to the face of the section, 10 and a projection on the rib extending through the bottom and having a head engaging in rear thereof.

FRANCIS J. NUGENT.

Witnesses:

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