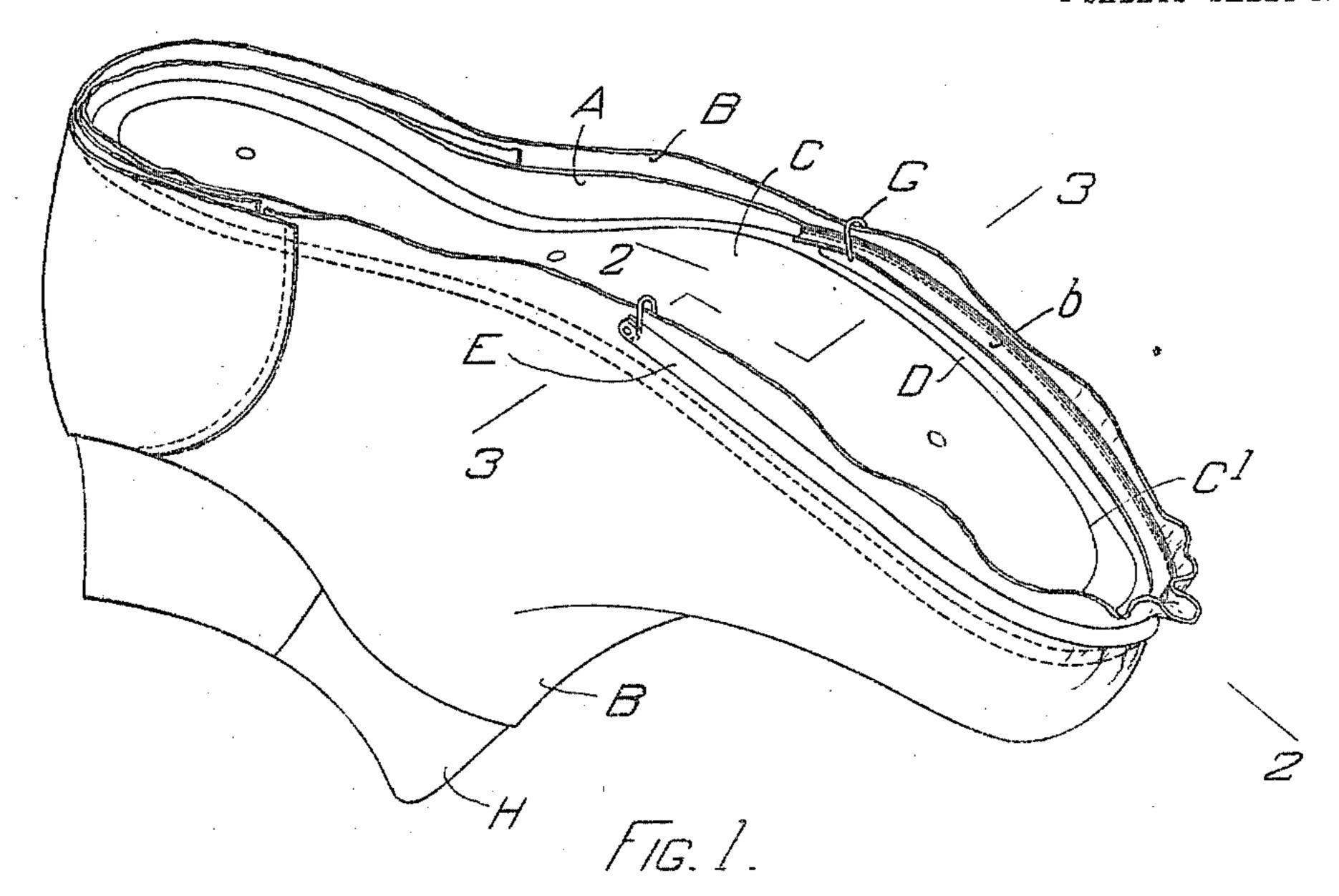
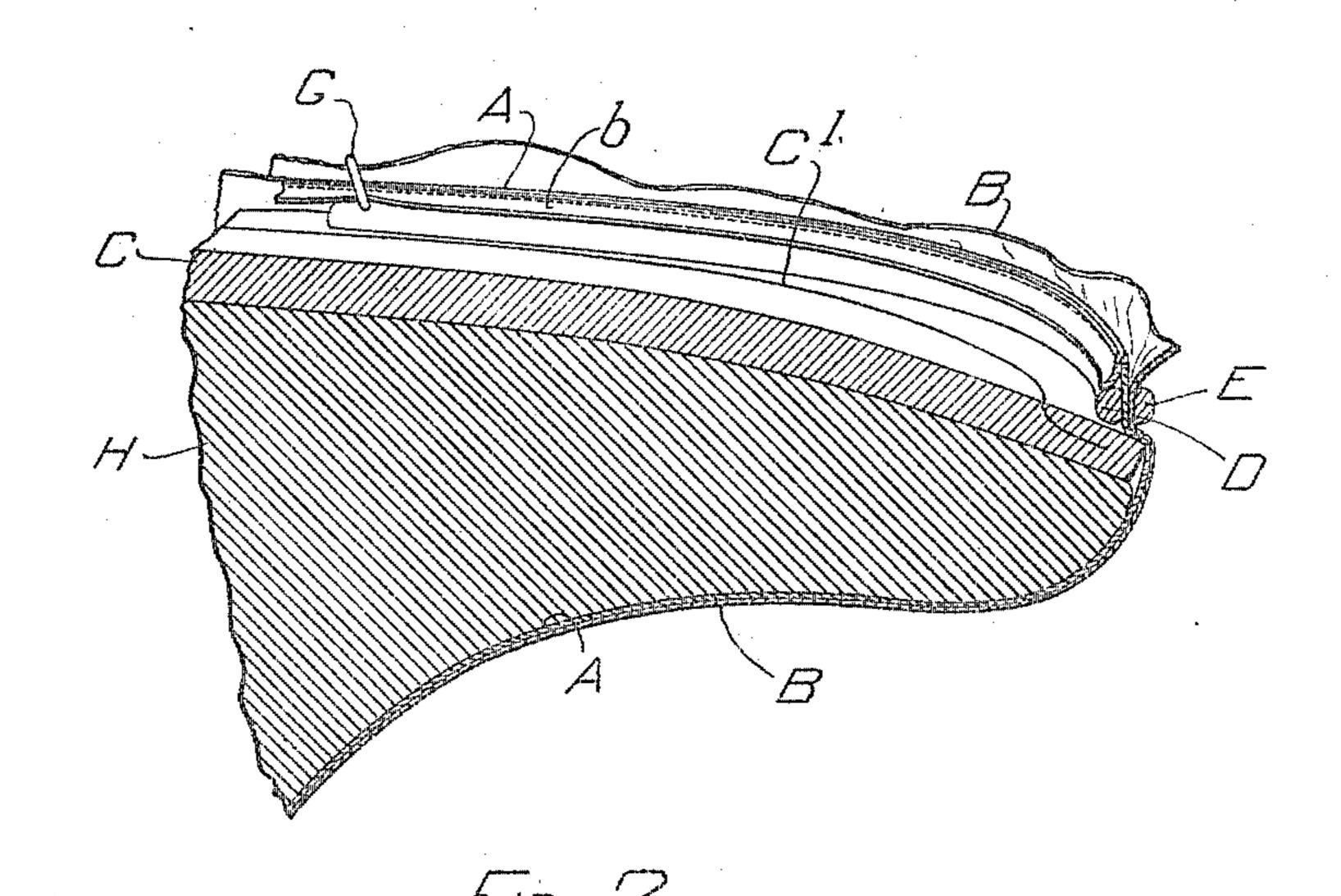
J. O. JONES.

UPPER HOLDING CLAMP FOR LASTING BOOTS AND SHOES. APPLICATION FILED OCT. 20, 1904.

2 SHEETS-SHEET 1.





WITNESSES A.E. Calmin Alvah le Stare INVENTOR

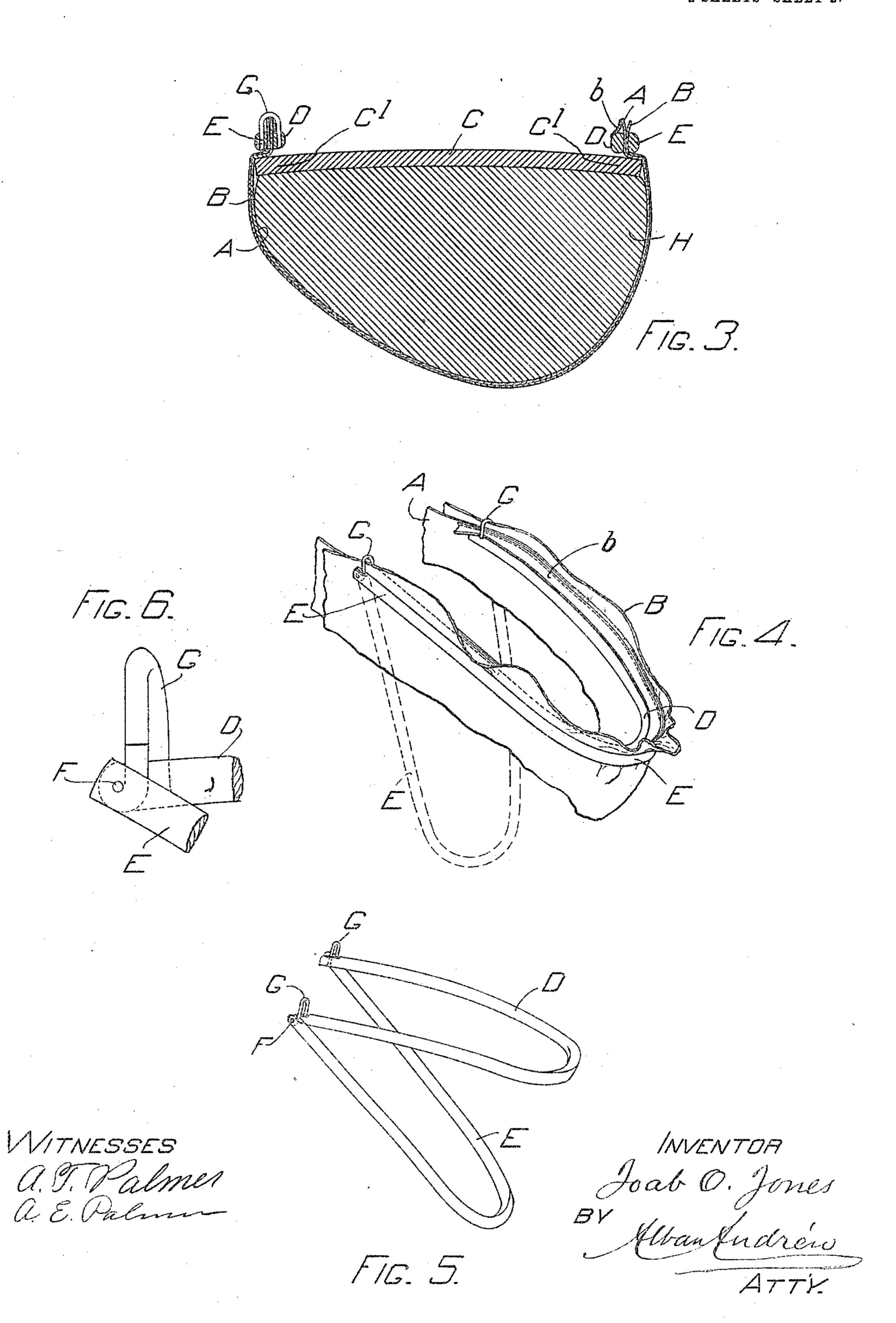
BY Joab. O. Jones

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2 SHEETS-SHEET 2.





UNITED STATES PATENT OFFICE.

JOAB O. JONES, OF BEVERLY, MASSACHUSETTS.

UPPER-HOLDING CLAMP FOR LASTING BOOTS AND SHOES.

No. 817,373.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed October 20, 1904. Serial No. 229,256.

To all whom it may concern:

zen of the United States, and a resident of | departing from the essence of my invention. Beverly, in the county of Essex and State of 5 Massachusetts, have invented certain new and useful Improvements in Upper-Holding Clamps for Lasting Boots and Shoes, of which the following is a specification.

This invention relates to improvements in 10 upper-holding clamps for lasting boots and shoes, and it is adapted for use in holding the edges of the lining and upper of a turn shoe in proper position on the last during the stitching operation for attaching said upper 15 and lining to the channel of the outer sole.

By the use of this my improved clamping device I dispense with the usual method of tacking the edges of the lining and upper to the sole of the boot or shoe, as will hereinaf-20 ter be more fully shown and described.

The invention is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 is a perspective view of a shoe 25 with my device attached ready for stitching the upper and lining to the shoe-sole. Fig. 2 is a perspective section on the line 2 2 shown in Fig. 1. Fig. 3 is a cross-section on the broken line 3 3 shown in Fig. 1. Fig. 4 is a 30 partial perspective view of the toe portion of the upper and lining, showing my device attached thereto before the last is inserted in the upper. Fig. 5 is a perspective view of the two-part pivoted clamp shown detached 35 from the upper, and Fig. 6 is an enlarged detail view of the hinge of the clamp.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In the drawings, A is the upper, and B the lining, of a turned shoe, on which C is the outer sole, having a channel C' for stitching the edge of the upper and lining thereto by a Goodyear turn-sewing machine or other well-45 known sewing-machine, as usual.

My improved clamping device consists of a pair of semicircular, or nearly so, shaped clamps DE, of which D is the inner one and E is the outer or lower one. The inner ends 50 of said clamps are pivoted together at F, preferably by a curved metal piece G, firmly attached to the end of the clamp D and having its outer end pivotally connected at F to the end of the clamp E, as shown. I do not

Be it known that I, Joab O. Jones, a citi- may be otherwise pivoted together without

H is a last as usual.

On the interior edge portion of the upper I 60 stitch a narrow stay b, against which is placed the outer periphery of the inner clamp D during the clamping operation, so as to hold the thus reinforced edge of the upper from slipping off the clamps when holding 65 the upper and lining together between the clamps during the lasting operation.

The operation of the device is as follows: The clamps D E are first held open, as shown in Fig. 5. The upper or inner portion D is 70 then placed inside the toe portion of the upper against the under side of the stay b and held in such position, after which the lower clamp E is swung upward to the position shown in full lines in Fig. 4 until the edges of 75 the upper and lining are compressed and held together by the now closed clamps D E. The last H, with its sole C attached, is then inserted with its toe portion foremost into the rear part of the upper and pushed for- 80 ward until the sole is forced against the upper and lining below the clamps D E, as shown in Figs. 1 and 2, causing the upper and lining to be held properly stretched on the last ready for stitching the sole to the upper 85 and lining, which is done by the use of a Goodyear turn-sewing machine or other wellknown sewing - machine for such purpose. The stitches are made through the outer edge of the upper and lining below the clamps and 90 through the channel of the sole. After the lasting operation is completed the clamps are removed, the last is withdrawn from the upper, and the latter turned, as usual. By this operation I am able to dispense with the usual 95 and laborious tacking of the upper to the sole and am also enabled to fit the upper more closely on the last, thus saving in stock.

The clamps may be of any required size roo and may be made to extend from the toe toward the shank or even beyond the latter, as may be desired.

It will be observed that when closed the jaws are a fixed distance apart and that the 105 upper and lining are gripped and compressed in this distance between the jaws. The stresses due to the compression of the upper and lining are exerted radially in opposite di-55 wish to confine myself to this exact means of | rections on the jaws, tending to force the in- 110 ner jaw inward and the outer jaw outward. These stresses are transmitted by each jaw to its pivotal connection with the other jaw, and there they balance each other, so that the clamp locks itself when closed and there is no tendency of the jaws to fly open. In this respect it differs from pincers and other devices operated with a lever, in which continued pressure of the hand or otherwise has to be applied to the lever while the pincers are in use and in which upon removing the hand the grip is released.

What I wish to secure by Letters Patent

and claim is—

15 1. An upper-holding device for lasting boots and shoes, comprising a clamp, consisting of two curved jaws; said jaws being set in the same plane, one within the other, when closed, with their compressing-surfaces approximately at right angles to said plane and arranged to compress the upper and lining radially between them; there being a

bearing between the two jaws in the same

plane at their rear.

2. An upper-holding device for lasting 25 boots and shoes, comprising a clamp consisting of two curved jaws, one being set at a fixed distance within the other when closed, said jaws being pivoted together at their rear ends, whereby the stress upon each when 30 closed is balanced by the stress upon the other at said pivot.

3. An upper-holding device for lasting boots and shoes, comprising a clamp having a pair of curved jaws pivoted together, in 35 combination with a stay attached to the inner side of the upper and adapted to serve

as a rest for the inner jaw.

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

JOAB O. JONES

Witnesses:

Alban Andrén, Thekla Andrén.