

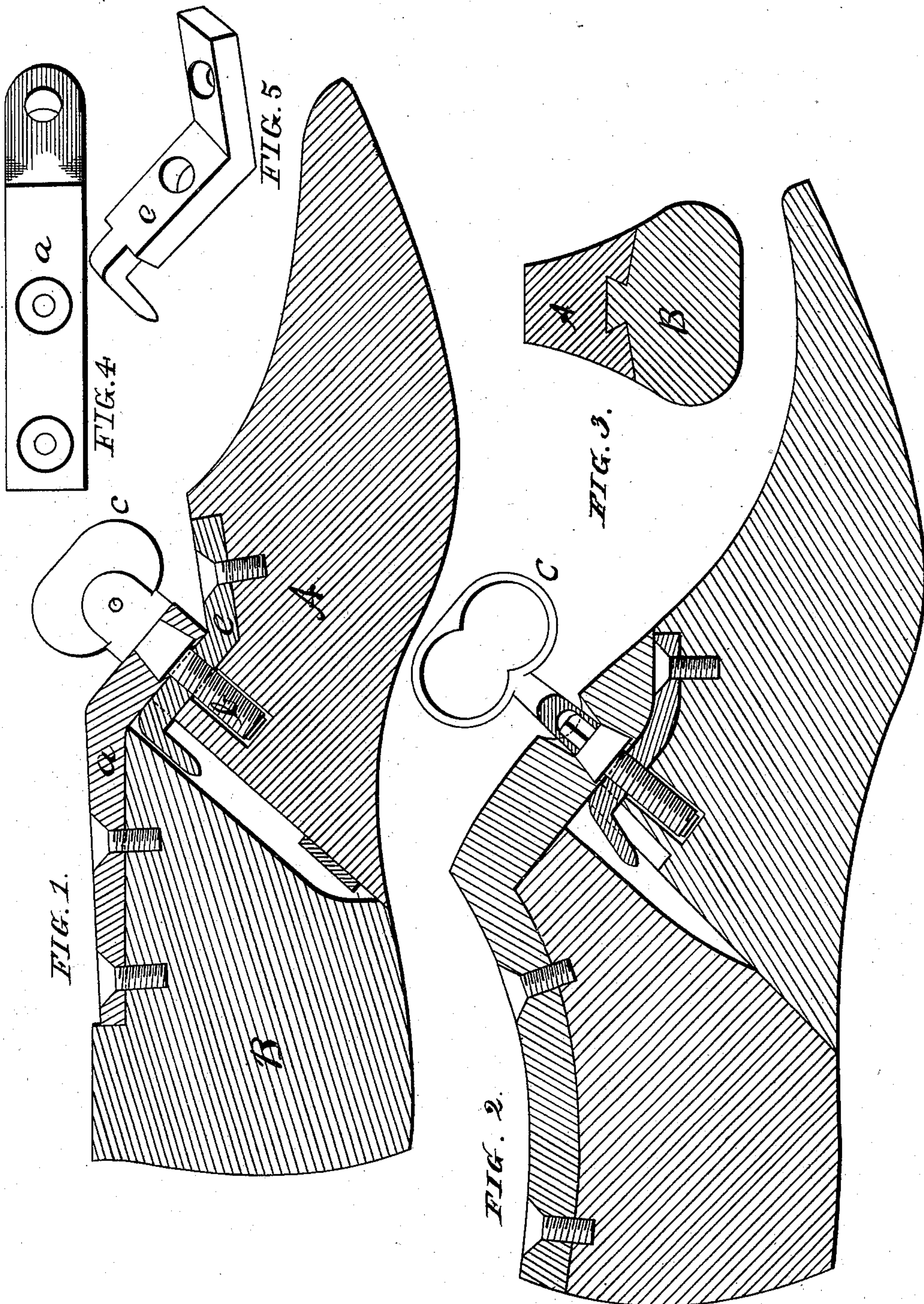
(No Model.)

C. H. BUCHANAN.

LAST.

No. 384,015.

Patented June 5, 1888.



WITNESSES:
Walter H. Walton.
Isaac Stein.

INVENTOR:
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UNITED STATES PATENT OFFICE.

CHARLES H. BUCHANAN, OF PHILADELPHIA, PENNSYLVANIA.

LAST.

SPECIFICATION forming part of Letters Patent No. 384,015, dated June 5, 1888.

Application filed September 5, 1887. Serial No. 248,795. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BUCHANAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Lasts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part thereof.

Figures 1 and 2 are side views of longitudinal sections of a last. Fig. 3 is a cross-section through the body of a last. Figs. 4 and 5 are detail views showing slight modifications in the method of securing the parts together.

The last is made of two parts which are united at a line running diagonally from the instep to the sole near the heel. The larger part (hereinafter designated as part *a'*) has a slightly rounded surface at the point of contact with the smaller part, (marked B on the drawings) This rounded surface fits into a groove in part B, making a close joint along the diagonal line between A and B. The object of this arrangement is to prevent any side movement of the parts—such as would be possible were flat surfaces used; but for some purposes I prefer to dovetail the two parts together, as shown at Fig. 3; or, if preferred, a V-groove may be substituted. For the pur-

pose of binding the parts firmly together I use a screw, *b*, attached to an overhanging arm, *a*, securely fastened to part B. This screw passes through a tapped hole in angle-block *c*, as shown in Figs. 1 and 2. By this arrangement I not only bind the parts firmly together, but also secure a movement which enables me to lengthen or shorten the last at pleasure, which permits of its ready removal from the shoe without tearing or straining the lining. Another important advantage is, that I can make the upper part of the heel of my last conform to the natural shape of that portion of the human heel, thereby avoiding the loose baggy appearance at the ankle of shoes made on the ordinary last.

I am aware that heretofore lasts have been made of two or more parts united in various ways; but so far as I know no last having a diagonal line of separation running from the instep to the sole has been made.

What I claim as my invention is—

The last herein described, composed of two parts united at a diagonal line running from the instep to the sole, and capable of expansion and contraction by means of a screw moving in a nut parallel with the line of division, as described.

CHARLES H. BUCHANAN.

Witnesses:

WALTER H. WALTON,
ISAAC STEIN.