

No. 748,239.

PATENTED DEC. 29, 1903.

B. A. WAGGAMAN.
BOOT OR SHOE STRETCHER.

APPLICATION FILED MAR. 17, 1903.

NO MODEL.

FIG. 1

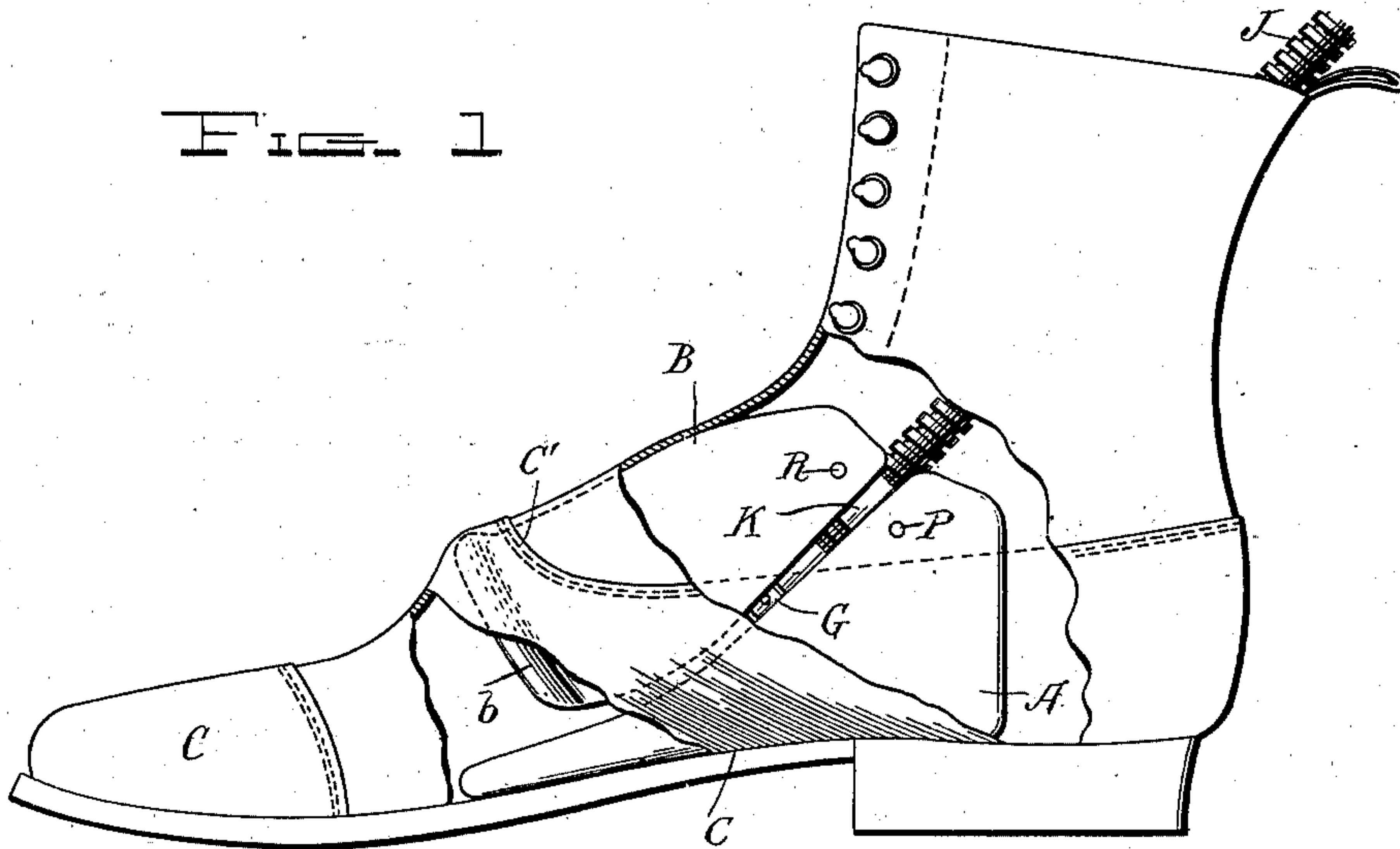
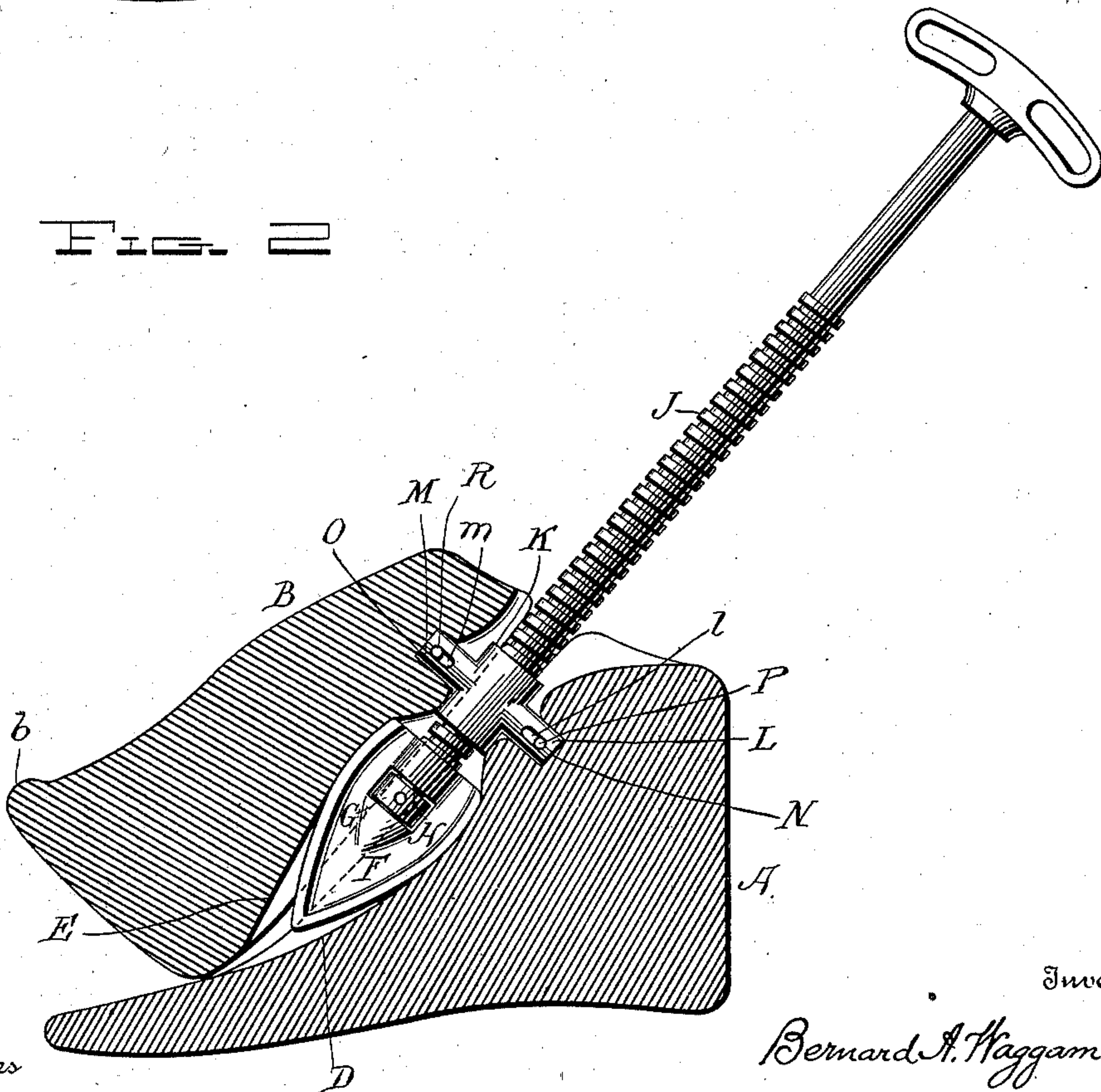


FIG. 2



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BOOT OR SHOE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 748,239, dated December 29, 1903.

Application filed March 17, 1903. Serial No. 148,219. (No model.)

To all whom it may concern:

Be it known that I, BERNARD A. WAGGAMAN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Boot or Shoe Stretchers; and I do 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, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to boot and shoe stretchers, and has for its object the production of a special device for enlarging shoes at the throat-seam.

There are on the market numerous stretching contrivances, most of them operating upon the principle of a last or portion of a last cut into separate pieces pivotally or in some manner joined together and provided with coacting elements, usually screw-operated, by means of which those pieces are forced apart after the divided last has been placed within the shoe to be stretched. In those stretchers with which I am familiar either the whole upper is stretched or some certain area is affected by the action, and in more than one instance known to me the effect of the stretcher is not only to distort the sole of the shoe, but it often happens that the stitching securing the upper and welt is materially weakened and sometimes the threads are broken in places. So far as I am aware there is at present no stretcher designed particularly for stretching the throat-seam or instep of a shoe by drawing upon the leather of the upper throughout an area adjacent to the throat-seam and extending backward toward the heel of the shoe along that seam.

My invention in the form herein shown and described is of peculiar construction and arrangement determined by trial as effective in drawing upon a relatively long area of the upper-leather extending in an inclined direction downwardly and rearwardly instead of from the instep directly down to the junction

of upper and sole. Therefore as there is a longer piece of leather acted upon greater stretching will result from less or the same pressure exerted in other cases and with less permanent distortion of the shape of the shoe.

I accomplish the stated objects by employing the parts and associating them as illustrated in the accompanying drawings, of which—

Figure 1 is a side view of my invention placed in a shoe of common pattern, portions of the shoe being broken away to show the device within. Their regular lines bound the rearwardly-extending area of the upper affected by the stretching action. Fig. 2 is a vertical sectional view of my invention, exhibiting the operating mechanism assembled.

Like letters refer to like parts in the two views.

Letter A marks the lower portion of a last, which may or may not be abbreviated at the heel, as shown. From the forward part of the sole the last is divided by an upward and rearwardly inclined cut which separates the upper division B of my invention. It will be noted that the lower division of the last rests on the insole of the shoe and extends more or less forward into the toe of the shoe C. The toe portion of the last would, if present, belong to the upper division B of my invention; but the entire toe portion has been removed, leaving only the instep portion referred to by the letter B and provided with a raised and rounded edge *b*. (See Fig. 1.)

Considering Fig. 2, it will be noted that the meeting surfaces of the last-divisions A and B are provided with corresponding recesses D and E, which are least in depth toward the toe of the last. Within the convergent chamber formed by the two recesses combined is an arrowhead or flat heart-shaped spreader F, retained by a collar G on the spindle end H of screw J. This screw passes through the threaded sleeve K, which is provided with trunnions L and M, pierced diametrically by orifices *l* and *m*. Trunnions L and M fit suitable cavities bored in last-divisions A and B and marked N and O, and

the pivot-pins P and R, passed through the sides of the last-divisions and through the diametrical orifices in the trunnions, render the division B pivotal up or down with respect to division A.

It is thought to be now clear that if the spreader F be forced downward the divisions of the last will be pressed apart and the shoe stretched. The lift or movement of the upper division B is not, however, directly upward, and the stretching strain is not caused to act directly downward altogether, thereby endangering the stitching *c*. Such movement or pressure is exerted in directions inclined forward and upward, thus drawing upon an area of the upper-leather, as illustrated in Fig. 1, extending downward and backward toward the heel, a relatively long area of leather and correspondingly easy to stretch. The raised edge *b* rises just in front of the throat-seam *c'* of the shoe and serves to prevent the division B from forcing itself backward, carrying with it the lower division A. By extending the lower last-division A well forward the pressure upon the sole is distributed over a considerable space and the distortion of the sole avoided almost entirely.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a boot and shoe stretcher, the combination of a last cut into two divisions, the inclined plane of separation extending transversely through the last and beginning at a point situated on the bottom of the last toward the front or toe portion and continuing upwardly and rearwardly cutting the last into independent upper and lower divisions, the rearward parts of the said divisions of the last

being pivotally connected at the top, and means constructed and arranged to spread the divisions apart, the forward portion of the said upper division terminating near and below the instep whereby the throat-seam and instep of a shoe may be stretched by an upward and forward movement of the front end of the said upper division which draws upon that portion of the shoe-upper which extends downwardly and rearwardly from the point of application of the stretcher, substantially as shown and described.

2. In a boot and shoe stretcher, the combination of a last cut into two divisions, the inclined plane of separation extending transversely through the last and beginning at a point situated on the bottom of the last toward the front or toe portion and continuing upwardly and rearwardly cutting the last into independent upper and lower divisions, the rearward parts of the said divisions of the last being pivotally connected at the top, and means constructed and arranged to spread the divisions apart, the forward portion of the said upper division having the raised edge *b* and terminating near and below the instep whereby the throat-seam and instep of a shoe may be stretched by an upward and forward movement of the front end of the said upper division which draws upon that portion of the shoe-upper which extends downwardly and rearwardly from the point of application of the stretcher, substantially as shown and described.

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

BERNARD A. WAGGAMAN.

Witnesses:

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