

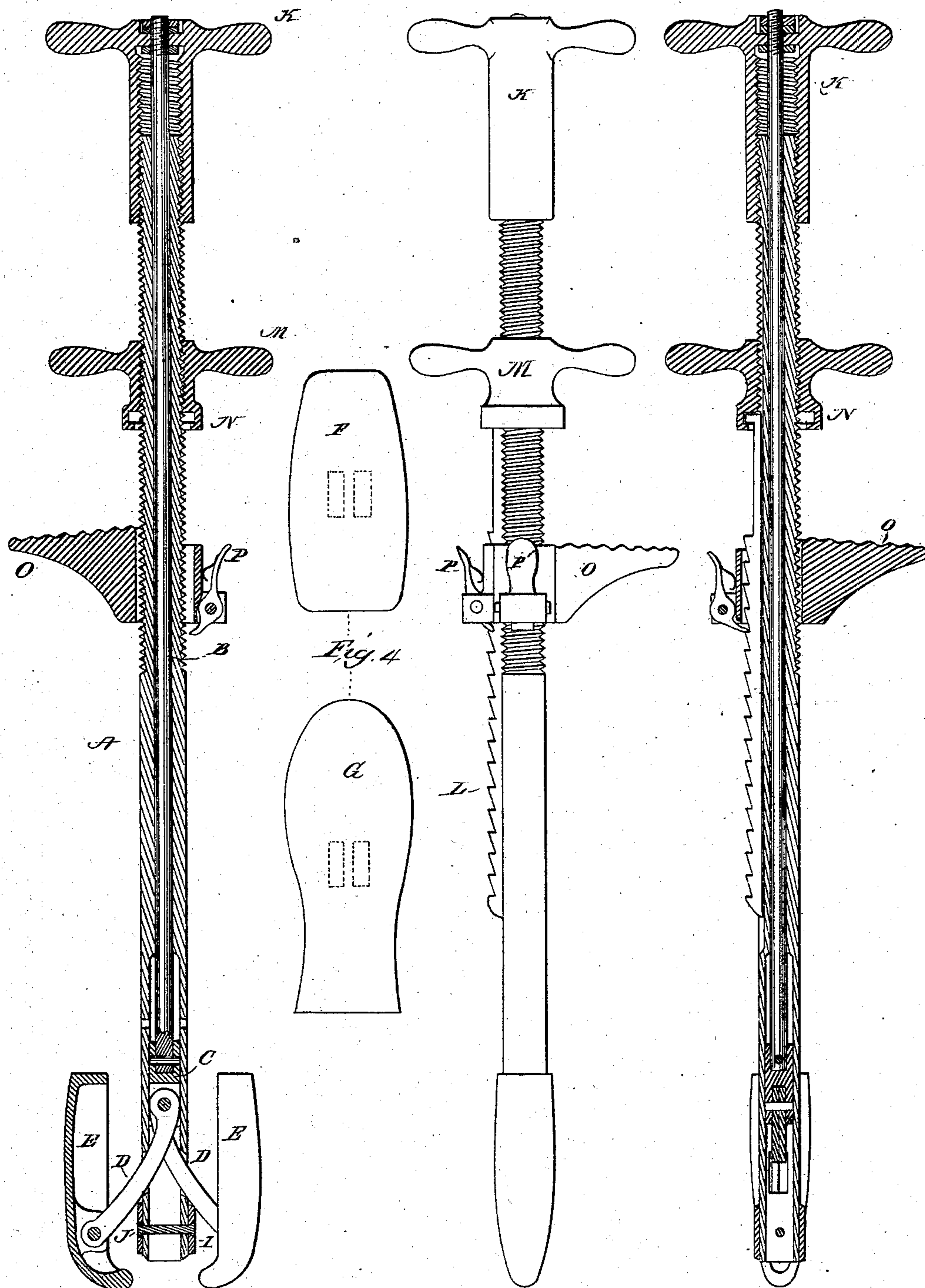
(No Model.)

G. H. COUCH & H. GLINES.

Boot and Shoe Stretcher.

No. 238,357.

Patented March 1, 1881.



Witnesses.
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UNITED STATES PATENT OFFICE

GEORGE H. COUCH AND HORACE GLINES, OF BRIDGEPORT, CONNECTICUT.

BOOT AND SHOE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 238,357, dated March 1, 1881.

Application filed December 6, 1880. (No model.)

To all whom it may concern:

Be it known that we, GEORGE H. COUCH and HORACE GLINES, citizens of the United States, residing at Bridgeport, Connecticut, have invented new and useful Improvements in Boot and Shoe Stretchers, of which the following is a specification.

Our invention relates to certain novel improvements in devices for stretching boots and shoes. It has for its object to render the device readily adapted for use in boots or shoes of all sizes, and to avoid excessive pressure at the end of the toe and secure a uniform action over the surface to be stretched; and with these ends in view our invention consists of the peculiar construction and arrangement of parts hereinafter and in detail explained.

In order that those skilled in the art may fully understand our invention, we will describe the construction and operation of the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a plan or side view of a stretcher embodying our invention; Fig. 2, a longitudinal horizontal section of the same; Fig. 3, a similar section taken on a line transverse to that at which Fig. 2 is taken, and with the heel-brace turned at right angles to the position shown in Fig. 1. Fig. 4 represents plan views of devices employed in stretching in-

steps.

Similar letters indicate like parts in the several views.

A represents a metallic tube, one end of which, or about one-half its length, is formed with an external screw-thread, as clearly shown. Arranged within the tube A is a round rod, B, to the inner end of which is secured by a rivet a head-block, C, within a slot in the end of which are pivoted two arms, D D, slightly curved for the purpose presently explained.

The outer edges of the arms D D are provided each with a pivot-hole, by means of which and a suitable pivot or bolt toe-stretching devices, E E, or instep-stretching devices, F G, Fig. 4, are attached. The arms D D pass through slots or openings in the sides of the tube, near the lower end thereof, and the curved sides of said arms, being forced against the metal of the tube at the ends of the slots, cause the distending of the stretching devices.

The lower end of the tube may be re-enforced

by a collar, I, secured by a rivet, J, or otherwise. This collar may also serve the purpose of increasing the shoulder or bearing surface against which the arms D press.

The rod B is attached at its upper or outer end by any suitable swivel-connection to a hand-nut, K, which travels on the thread cut upon the tube A, and consequently as the nut is run up or down on said tube the stretcher-arms D are drawn together or diverged.

Arranged within a suitable channel cut in one side of the tube A is a longitudinally-movable rack, L, the upper end of which is connected to a nut, M, by means of an L-projection lying within an annular groove, N, in the nut, so that as the nut is run up or down upon the thread on the tube A the rack L will be forced up or down. (See Fig. 2.)

O is a heel-brace, having its rear serrated or roughened, as clearly shown, and is adapted to run freely over or upon the tube A, and is provided with two or more spring pawls or dogs, P P', adapted to connect the brace to the rack L and secure the upward movement of the brace when the nut M is so rotated as to draw the rack L up.

The object of having more than one pawl or dog is that the brace may be turned at different angles, as may be necessary. The arrangement of the pawls is such that the brace may be, without the intervention of the nut M, drawn into position ready for further movement by said nut.

The operation of the device is as follows: When it is desired to stretch the toe of a boot or shoe, the stretcher-blocks E E are pivoted to the ends of the arms D D, the rod B being drawn up so that the blocks E E may lie close to the tube A. The heel-brace O is turned to facilitate the entrance into the shoe. When the blocks E have reached the toe, the brace O is turned so that its roughened surface comes parallel with the counter of the shoe, and the pawl locked with the rack L. The nut M is now turned, which draws the heel-brace back, and accordingly forces the toe-blocks firmly into their place in the toe of the shoe. When this has been done the hand-nut K is run down on the thread of the tube A. This carries the rod B down and forces the curved edges of the arms D against the shoulders or ends of the slots in the tube, and causes said arms to

expand, carrying with them the blocks E E. When the instep is to be stretched the blocks F G are substituted for E E. The block G is designed to rest upon the inside of the sole, 5 while the block F is made to conform to the instep, and pressure being exerted, the instep is stretched in an obvious manner.

We have shown the swivel-connection between the rod B and the nut K, made by two 10 nuts, and a jam-nut on the end of the bar, and an annular shelf or wing in the nut, and we have shown the rod B provided with a separable head, C; but we do not wish to confine ourselves to these details of construction, as any 15 other well-known and applicable swivel-connection may be employed, and the rod B and head C may be made of one piece.

What we claim as new, and desire to secure by Letters Patent, is—

20 1. A shoe-stretching device consisting of a tube provided with a hand-nut, heel-brace, piv-

oted stretching-arms, and rack, as described, in combination with an interiorly-arranged bar connected by a swivel to a hand-nut, which is adapted to travel on the tube, substantially as 25 and for the purpose set forth.

2. In a shoe-stretching device, as described, the combination of the hand-nut M, rack L, and heel-brace O, provided with pawls P P', 30 substantially as and for the purpose set forth.

3. The brace O, provided with pawls P P', in combination with the hand-nut M, rack L, hand-nut K, rod B, and arms D, provided with stretchers E, substantially as described.

In testimony whereof we have hereunto set 35 our hands in the presence of two subscribing witnesses.

GEO. H. COUCH.
HORACE GLINES.

Witnesses:

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