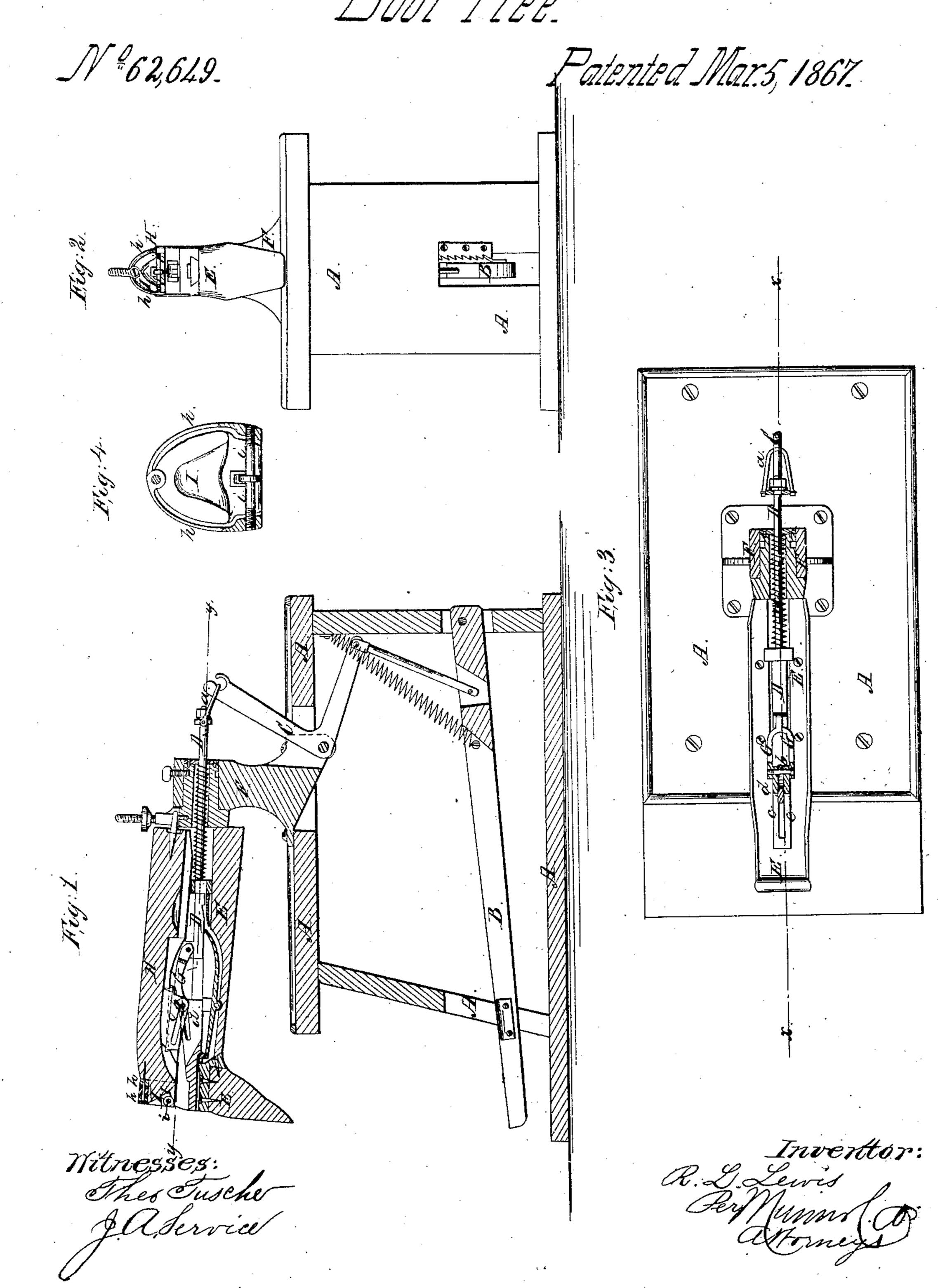
Boot Tree.



Anited States Patent Pffice.

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Letters Patent No. 62,649, dated March 5, 1867.

IMPROVED BOOT-TREE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Reuben L. Lewis, of Worcester, in the country of Worcester, and State of Massachusetts, have invented a new and improved Mounted Swivelling Boot-Tree; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention is designed as an improvement on the patents which were granted to J. Howe, October 24, 1848; to myself, March 2, 1858; to A. P. Richardson, June 23, 1863, and on the reissue granted on the patent

of C. T. Eames, on the 26th day of March, 1862.

The invention consists in the arrangement of a laterally adjustable heel-plate, whereby the counters of boots are pressed out, said heel-plate consisting of two parts, which are hinged together, and which are operated by a differential screw, so as to be adjusted to boots of any size. And my invention further consists in the manner of attaching and operating the adjustable back, whereby the same can be adjusted to a great number of different-sized boots, while heretofore only half of the extension could be attained; or otherwise the back was made removable, so as to be readily changed. In the annexed drawing my invention is illustrated—

Figure 1 being a longitudinal vertical section of my improved boot-tree, taken on the line x x, fig. 3.

Figure 2 is an end elevation of the same.

Figure 3 is a sectional plan view of the same, the plane of section being indicated by the line y y, fig. 1.

Figure 4 is an enlarged partly sectional detail view of the heel-piece.

Similar letters of reference indicate like parts.

A is the table upon which the apparatus stands. The same is operated by means of a treadle, B, which is connected by a pivoted elbow-lever, C, with the central sliding or stretching-rod D. Said rod is secured to the lever C by a swivel-joint, a, and passes through the cylindrical rear end of the front E of the boot-tree. This cylindrical rear end is mounted in an upright, F, which is attached to the table, and revolves in the same. 'All these parts are arranged as usual, and I do not claim any of them. But my invention consists in the manner of distending the parts of the boot-tree, so that when the treadle is pressed down, the boot which is placed upon the tree will be stretched, the device being such, that boots of different sizes can be stretched thereon. To the front end of the rod D is hinged or pivoted a curved arm, G, to the front end of which a cross-bar or bar b is secured. To the back H, as well as to the front E, are respectively secured two slotted inclines, c and d. The pin b, which is secured to the hinged arm G of the stretching-rod D, passes through the slots of the inclines c and d, as shown in the drawings. Thus, as the rod D is moved back by the action of the treadle, the pin b is pulled in the slots, which incline towards the centre, and thereby the parts are distended, the back H being moved from the front E. The device hitherto used for the purpose consisted of a cross-head attached to the end of the bar D, which traversed upon an inclined plane located in the back of the tree, or upon inclined guides arranged in the back; this, it is seen, only offered one incline to the pin or cross-head on the stretching-rod; but I use two inclines, whereby the double expansion can be attained, thus making this apparatus available for a greater number of sizes of boots than any heretofore used for the purpose. The sides of the heel I of the back H are surrounded by two plates h h, which are hinged together at the rear, as seen, and which may be distended or contracted by means of a right and left screw i, or by any other suitable device, so as to more fully adapt this machine to boots of different sizes.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1: A boot-tree, distended by means of a pin, b, attached to an arm, G, of the stretching-rod D, which traverses upon two inclined planes or slotted inclines, attached respectively to the front and back of the boot-tree, substantially as and for the purposes herein shown and described.

2. A mounted swivelling boot-tree, which is provided with an adjustable heel-piece, I, substantially as and

for the purpose herein shown and described.

3. The manner of operating the adjustable heel-piece, by means of a differential screw, i, and plates h h, substantially as herein shown and described.

REUBEN L. LEWIS.

Witnesses:

SAMUEL MAWHINNEY, ROBERT L. GOLBUT.