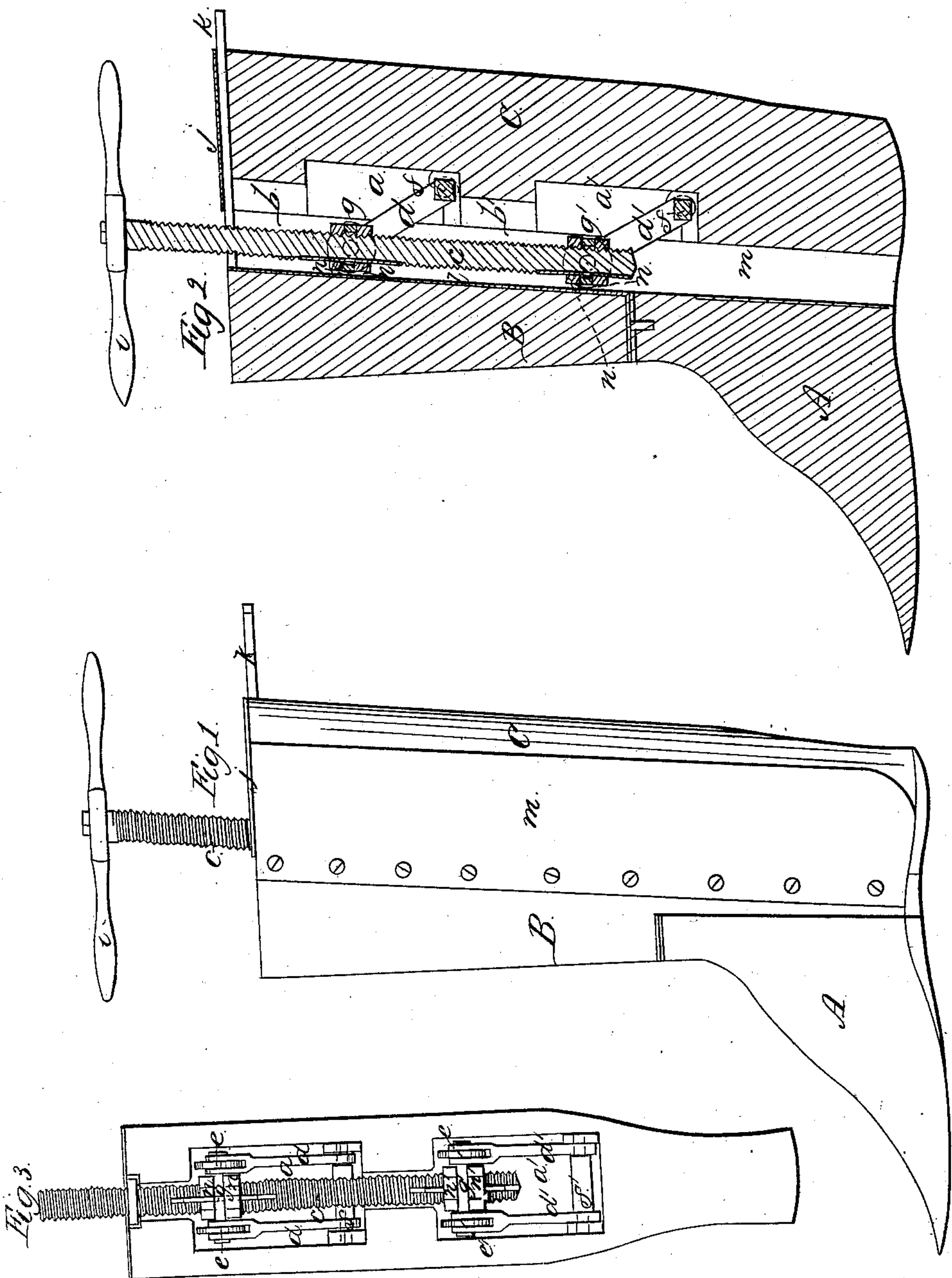


D. Sadleir,

Boot Tree.

N^o 9425.

Patented Nov. 23, 1852.



UNITED STATES PATENT OFFICE.

DAVID SADLEIR, OF McWILLIAMSTOWN, PENNSYLVANIA.

BOOT-TREE.

Specification of Letters Patent No. 9,425, dated November 23, 1852.

To all whom it may concern:

Be it known that I, DAVID SADLEIR, of McWilliamstown, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Boot-Trees; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to letters of reference marked thereon, in which—

Figure 1, is an elevation; Fig. 2, a vertical section showing the levers partly depressed and the tree extended; Fig. 3, an inner face view of the hinder part.

The same letters of reference occurring in the several figures designate corresponding parts.

The nature of my invention consists in forming cavities in the hinder part of a boot tree and inserting therein a series of levers and friction rollers which being operated by a screw, are made to expand the tree while in the boot by bearing against the shin piece.

To enable others to make and use my invention I will proceed to describe its construction and operation.

A is the foot, B the shin, and C the back part, forming the tree, all of which are of the ordinary external form; in the inner side of the back part I form two cavities a, a' at convenient distances from the top and bottom of the tree, and a groove b, b' straight down the center from the top crossing said cavities and extending as far downward as need be, to admit of the screw c , levers d, d' and friction rollers e, e' , all folding within the hinder part C; these levers have their fulcra in the lower end of the two cavities at f, f' , two levers in each, one on either side of the screw c . The upper end of the levers are attached to said screw by swivel collars g, g' with a gudgeon on either side which serve as connections for the levers and axis for the friction rollers e, e' , said swivels are secured at any desired point on the screw by set nuts n, n' above and below each, which, when set, are keyed on the screw to prevent them from turning; across the upper end of this back part C, is formed a groove in the direction from the inner side to the back, which is lined with metal and covered by the plate j secured on

the top of the tree in which groove is fitted a slide k , graduated on its edge, and has a female screw vertically through its inner end, through which the screw c , works; the shin part B, has fitted on its inner side a metal plate l , for the friction rollers e to work against, also a metal shield m , from top to bottom, on each side, to give a bearing to the leather between the shin and back when extended by the levers; the foot A, is connected with the shin B, in the usual manner, therefore any description of it here is deemed unnecessary.

In using this boot tree the several parts A, B, and C, being put into the boot in their respective positions, are held by the left hand on the top of the parts B and C, the thumb lightly bearing against the outer end of the slide k , (the levers and screw being previously folded closely within the cavities in the hinder part,) the screw c is then turned down by the lever i , on its upper end, which extends the levers d, d' , their friction wheels bearing against the shin part force it and the hinder part asunder and thus stretch the leg of the boot to any desired size. If it is desired to stretch the lower part of the leg more than the upper part it can be accomplished by running the upper set nut n higher on the screw c , and keying it in that position, which makes the levers d' act against the shin part sooner than the upper levers do. If the upper part of the leg requires the most stretching, the upper set nut n' , is run up on the screw in like manner, which makes the upper levers d press against the shin part first. By this arrangement, the center wedge or key commonly used in boot trees is dispensed with, and the leg can be stretched most at the upper or lower end as desired, which could not be accomplished by the wedge without danger of bursting; and the leather is not apt to wrinkle down as is commonly the case in pressing the wedge in; it is also adjustable to suit the smallest as well as the largest sized boots by the greater or less extension of the levers d, d' .

Having thus described my invention what I claim herein as new and desire to secure by Letters Patent is:—

The arrangement and combination of the

levers *d*, friction rollers *e*, screw *c*, and slide
k, or their equivalents, with the back part
of the tree which when contracted all bed
closely therein as and for the purposes here-
5 in described.

In testimony whereof I hereunto sign my
name before two subscribing witnesses this

17th day of September, eighteen hundred
and fifty-two.

DAVID SADLEIR.

Witnesses:

W. M. SMITH,
H. T. L. WILSON.