

ELLEN B. VIETS.
Pantaloons Trees.

No. 139,283.

Patented May 27, 1873.

Fig. 1.

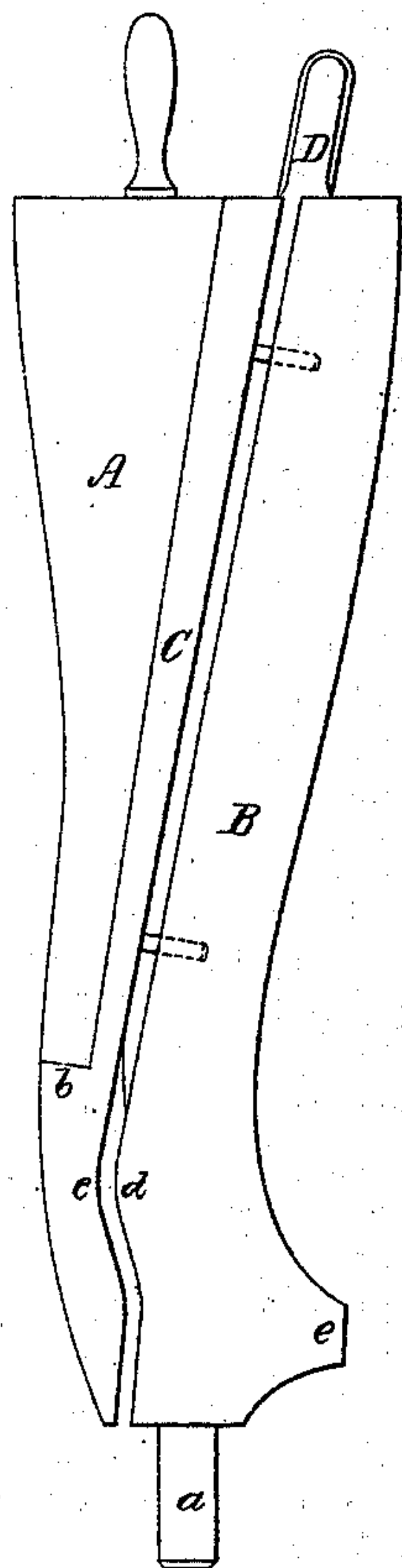


Fig. 2.

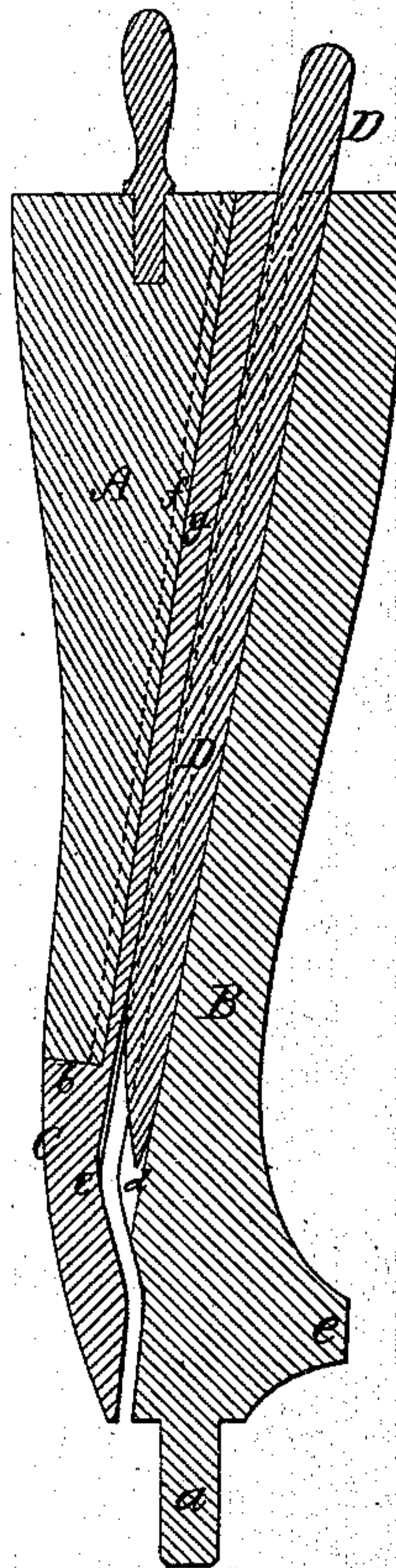


Fig. 3.

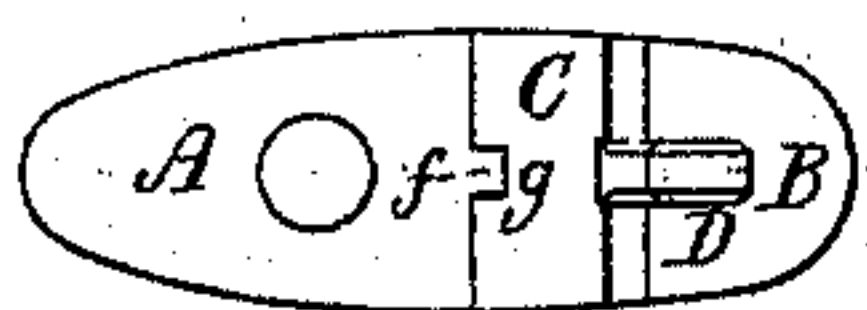
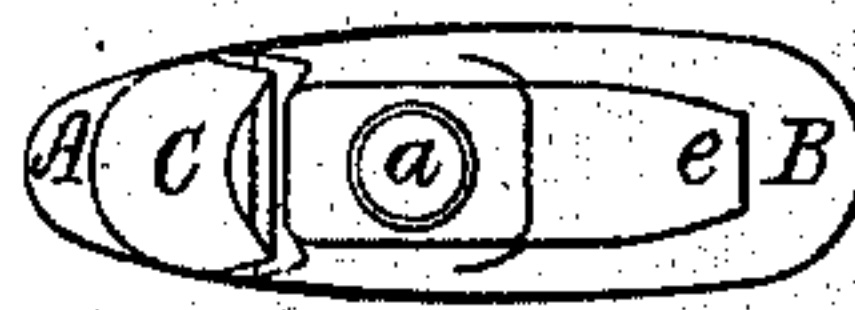


Fig. 4.



Witnesses.
S. W. Piper.
L. N. Möller.

Ellen B. Viets.
by her attorney.
R. H. Eddy

UNITED STATES PATENT OFFICE.

ELLEN B. VIETS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PANTALOO-TREES.

Specification forming part of Letters Patent No. **139,283**, dated May 27, 1873; application filed March 15, 1873.

To all whom it may concern:

Be it known that I, ELLEN B. VIETS, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Pantaloon-Tree, or apparatus for shaping the legs of trousers; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation; Fig. 2, a longitudinal section; Fig. 3, a top view; and Fig. 4, a bottom view of it.

The said pantaloon-tree is composed of four separate parts, viz: the thigh-shaping part A, the front and rear ankle and leg-shapers B C, and the extender D, formed and arranged as represented, the portion B being provided with a journal, *a*, extending from its lower end. The rear ankle and leg-shaper C for a part of its length extends between the parts A and B, and has a shoulder, *b*, to abut against, and correspond in shape with, the inferior end of the thigh-shaper A. The front edge of the ankle-stretching part of the portion C is concave, as shown at *a* and *c*, to receive a corresponding convexity, *d*, of the part B. These not only enable the part B to be made stronger at the ankle than it would be were the joint between the parts B and C a straight one, but enables the expander, while being driven downward, to force the parts B and C asunder, at the ankle especially. The portion A is made separate from the portion C in order to allow a pantaloon-leg to be drawn lower and foremost down over the parts B and C, as well as to be pulled off the same, after the said leg may have been stretched and ironed. Were the thigh part A not separate from the part C this could not be effected. The tree is curved on its opposite sides and edges, a transverse section of the parts C and B above the ankle portion thereof being of equal or less area than such a section at the ankle, such being so as to admit of the pantaloon-leg being drawn down upon or upward off the two parts B C. After the said leg may have been so applied to the parts B C the thigh portion A is to be inserted in place in the leg and against the part C, which having been accomplished, the expander or extender D is to be introduced and forced down between the parts

B and C, so as to crowd them asunder, and thereby stretch the leg upon the tree in a manner to enable such leg to be ironed by a heated smoothing-goose or sad-iron, the tree being supported in the meanwhile by its journal, introduced into a suitable bearing, such as will admit of the tree being revolved laterally as may be required for the ironer to press upon all parts of the outer surface of the pantaloon-leg. The portion B near its lower or pivotal end is formed or provided with a swell or extension, *e*, arranged as shown, whose purpose is to give due form to the instep portion of the pantaloon-leg. This causes a transverse section of the parts B and C at the apex of the swell to have a larger area than a section of them at their ankle portions, and consequently prevents the pantaloon-leg from being drawn downward over the swell and off the tree, and necessitates the employment of the movable or separate thigh-piece A, arranged with the parts B and C, as explained.

I sometimes make the part A to extend to the part B without the part C being arranged between the two, but disposed only below the part A, in which case, however, the introduction of the part C into the pantaloon-leg is attended with much inconvenience, in comparison to what results when such part C is extended between the parts A and B, in manner as represented.

The part A I provide on its inner edge with a tongue, *f*, to enter a corresponding groove, *g*, in the part C; and furthermore, either or both of the parts B C may be grooved to receive the expander. In order to hold the two parts B C in connection I usually provide them with dowels or pins, to project from one into corresponding holes in the other.

I claim—

1. In a pantaloon-tree the separate thigh-part A, the rear leg and ankle part *c*, and front leg and ankle portion B, all arranged to operate together substantially as described.

2. The parts B and C, provided respectively with the swell *d*, and corresponding concavity, *c*, in combination with the expander *d*, substantially as and for the purpose described.

3. In combination with the thigh-part A,

and leg-part B, the part c, constructed and arranged to extend up between the parts A and B, and below and against the portion A, all essentially as shown.

4. The pantaloons-tree composed of the separate thigh-part A, the ankle and leg parts B C, and the expander D, constructed and ar-

ranged substantially in the manner and for the purpose as specified.

ELLEN B. VIETS.

Witnesses:

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J. R. SNOW.