

E. Shoybell.
Root Pattern.

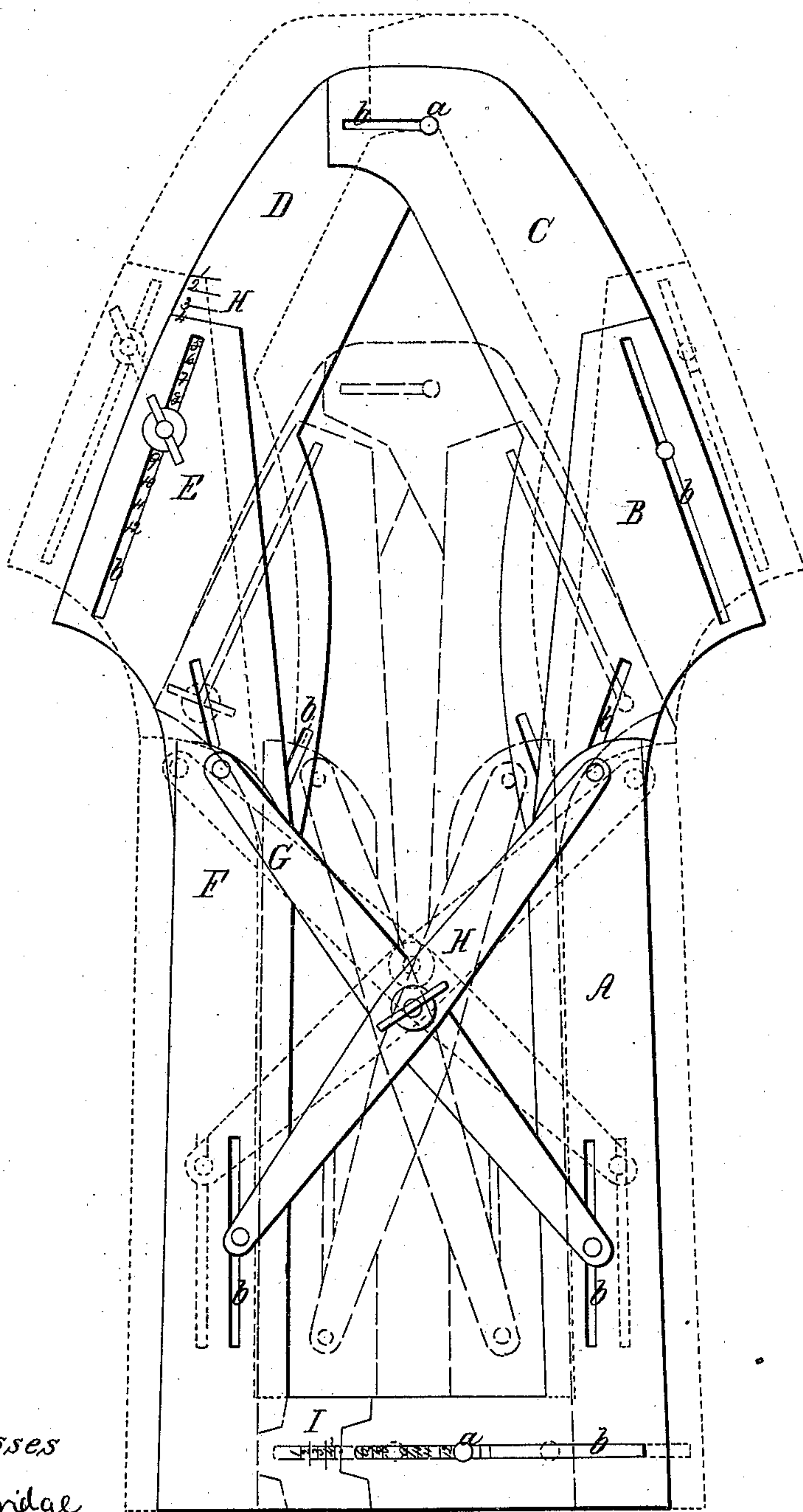
Root Pattern.

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N^o 99,604.

Patented Feb. 8, 1870.

Fig. 1



Witnesses

J. H. Burnidge
20.20. Humphreys

Inventor

E. Shoppell

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Boot Pattern.

N^o 99,604.

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Fig. 2

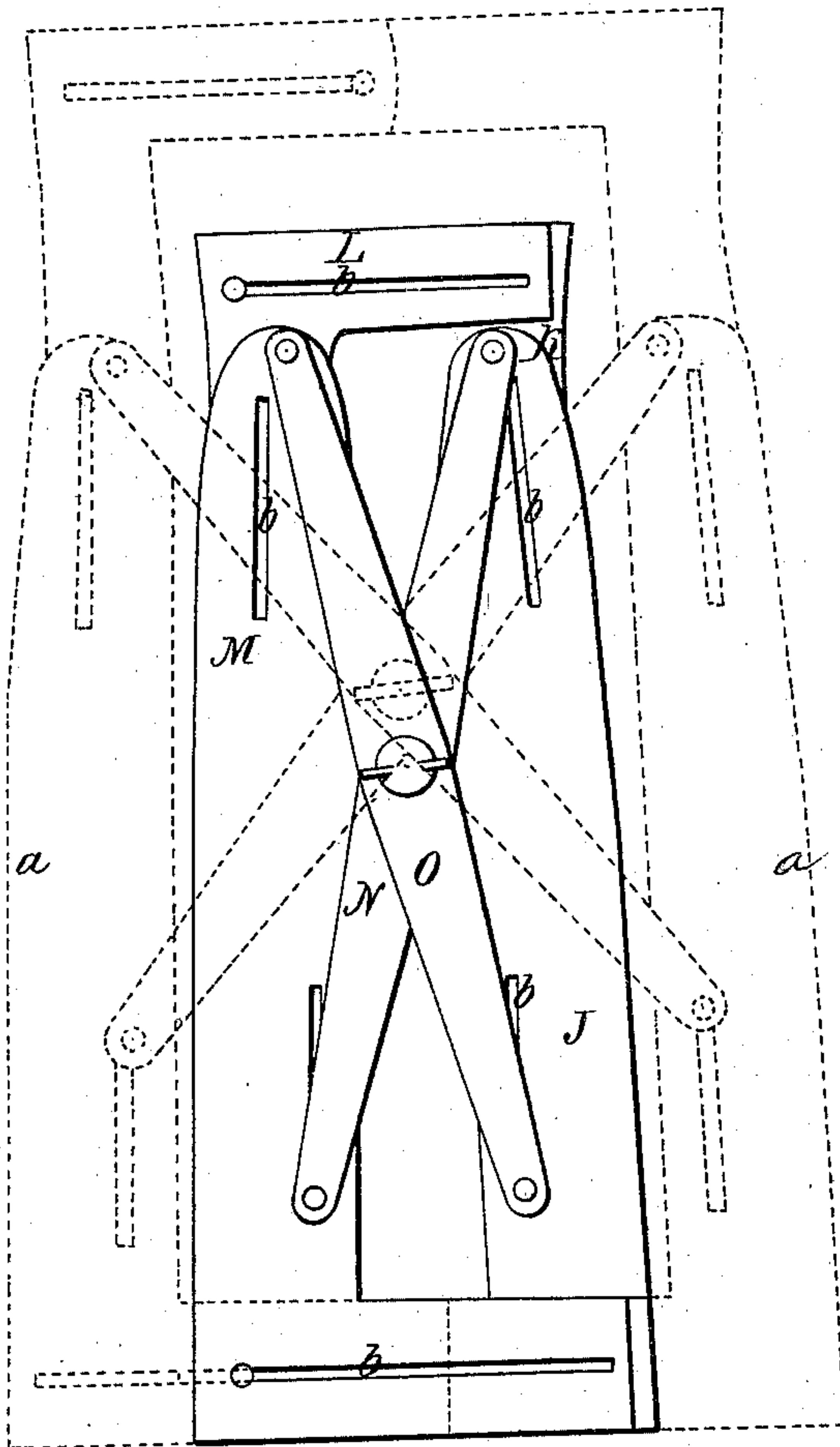
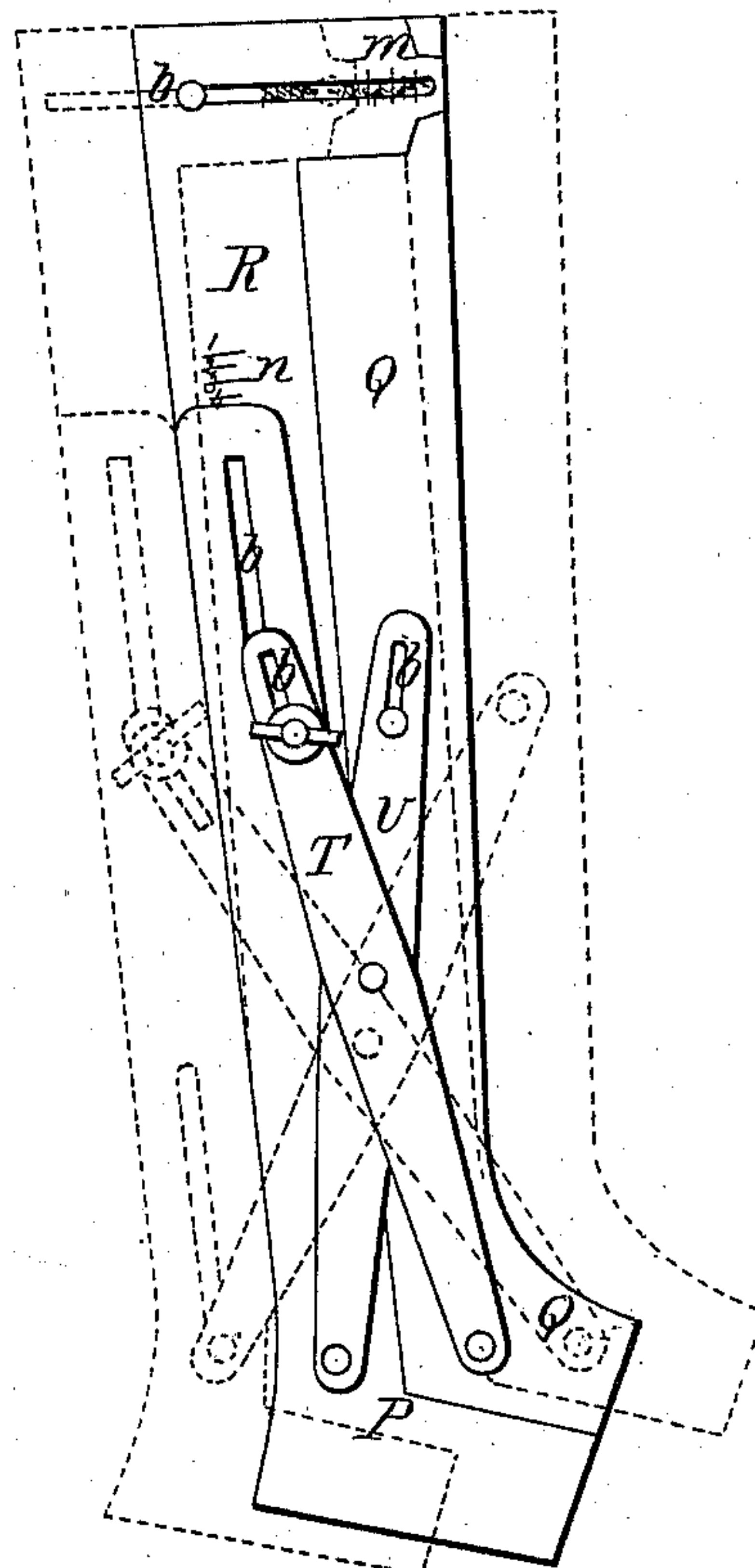


Fig. 3



Witnesses

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United States Patent Office.

ELIAS SHOPBELL, OF ASHLAND, OHIO.

Letters Patent No. 99,604, dated February 8, 1870.

IMPROVED BOOT-PATTERN.

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, ELIAS SHOPBELL, of Ashland, in the county of Ashland, and State of Ohio, have invented certain new and useful Improvements in Boot-Patterns; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view of a pattern for boot-fronts.

Figure 2, a view of a pattern for the backs.

Figure 3, a view of a pattern for obtaining the depth of the heel.

Like letters of reference refer to like parts in the several views presented.

This invention has for its object a single pattern for cutting the fronts of boots; also, a single pattern for cutting the backs thereof, and for obtaining the depth of the heel; the arrangement of said patterns being such that they can be adjusted for cutting all sizes, from the smallest to the largest usually worn by men and boys, thereby dispensing with the use of several patterns for different sizes, as is now in ordinary use.

Fig. 1 represents a pattern for blocking out the fronts of boots, and is constructed of two sets of plates, A B C being one set, and D E F the other, the second being the duplicate of the first, and which are constructed, arranged, and connected to each other substantially in the same way, and co-operate expansively and contractively for the same purpose.

The two sets of plates are connected to each other by means of the transverse extension-links G H and studs *a* working in slots *b*, whereby they are operated simultaneously and equally in the same direction.

The peculiar and certain direction given to the several slots in which the studs *a* move, and whereby the plates are attached to each other, is such as to cause the plates A B and D E to move laterally, whereas the plates C and F are moved nearly at a right angle thereto, all of which, however, move proportionately, thereby preserving the relative proportion of the pattern, whatever the size of the boot may be.

By the use of this pattern, all the sizes usually worn by men and boys, ranging from size one and upward, can be easily and readily obtained by adjusting the pattern according to the scale of sizes, the scale H giving the proportional width for the foot, and the scale I the proper size for the leg.

It will be observed that the graduation of the scales vary in degree, that for the leg being less than that for the foot, the same size leg answering to more than one size foot; hence, in changing the pattern from one size to another, it is necessary to extend or contract only the foot part of the pattern, leaving the leg intact, unless the difference in the change made is great, in which case the leg will require to be changed also.

Thus, eleven for the leg will be the proper size for eleven, twelve, and thirteen, of the foot, and one, two, and three, for a small-size foot.

Fig. 2 represents a pattern for cutting the back part of the boot, corresponding to the front, above described. This pattern is made up of four plates, J K and L M, the second pair being a duplicate of the first.

These pairs of plates are connected to each other by extension-links N O, attached to the plates by studs working in slots, the peculiar direction of which being such as to cause the plates to expand or contract equally and simultaneously, as indicated by the dotted lines. A scale of sizes corresponding to that on the above-described pattern determines the relative sizes to cut the back, so as to correspond with or match the fronts.

Fig. 3 represents a pattern for cutting out the heel, whereby the relative proportional depth of the heel of the boot is obtained. This pattern represents one-half of fig. 1, or that figure doubled longitudinally upon itself, to which is added a supplementary heel-plate, P, for obtaining the depth of the heel. The leather, when cut to the pattern, fig. 1, and has been shaped by the tree, the proper depth of the heel is obtained by the pattern, fig. 3, which, as will be seen, consists of three plates, P, Q, and R.

P Q are connected to each other by the extension-links T U, and studs, working in slots, whereby the plates are expanded and contracted according to the size of the boot required, whereas the plate P is moved independently thereof, so that it may be adjusted to the required depth of the heel, as some boots may have the same size leg, but differ in the depth of the heel.

Thus, the plates Q R, provided with a scale, *m*, and which corresponds to the scales in fig. 1, determine the size of the leg, and the plate P, governed by the corresponding scale *n*, determines the depth of the heel that may be required for each size boot.

The three patterns thus described constitute a set, and are used, in connection with each other, in the work of cutting. The first for blocking out the work for the front, the second for cutting out the backs, and the third for obtaining the depth of the heel after the crimping or treeing has been done. I am aware that boot-patterns constructed of several plates, and extended or contracted simultaneously, as the size of the boot may require, have been used, but which I do not claim; but that which distinguishes my invention from others is, so constructing a set of patterns that one set only shall be applicable to all sizes of boots usually worn by men and boys, thereby avoiding the use and expense of several patterns for cutting out work, and thus facilitating the labor.

Patterns as usually made are provided with a fixed

back-plate, to which the movable plates are attached, and from and to which they are expanded and contracted.

In order to cut all the sizes of men's and boys' wear, several such patterns are required, as one set only cannot be used for the whole range of sizes; whereas in my patterns, by their being constructed without a back-plate, and also having the arrangement of plates and the angles of the slots directed, and in such relation to each other as described, one set of patterns will cut the whole range of sizes, from one to twelve, thereby saving in the expense of patterns and the constant care and management of them.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A pattern for cutting the fronts of boots, constructed with diagonal extension-links or plates H G, plates A B C and D E F, and slots *b*, all combined

and arranged to operate in the manner substantially as described, and for the purpose set forth.

2. A pattern for obtaining and cutting the depth of the heel of boot-backs, when constructed with diagonal extension-plates or links T U, in combination with the plates R Q, adjustable heel-plate P, and slots *b*, all arranged to operate in the manner as described, and for the purpose set forth.

3. A pattern for cutting the backs of boots, constructed with diagonal extension-links N O, plates J K and L M, and slots *b*, combined and arranged to operate substantially in the manner as described, and for the purpose specified.

E. SHOPBELL.

Witnesses:

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