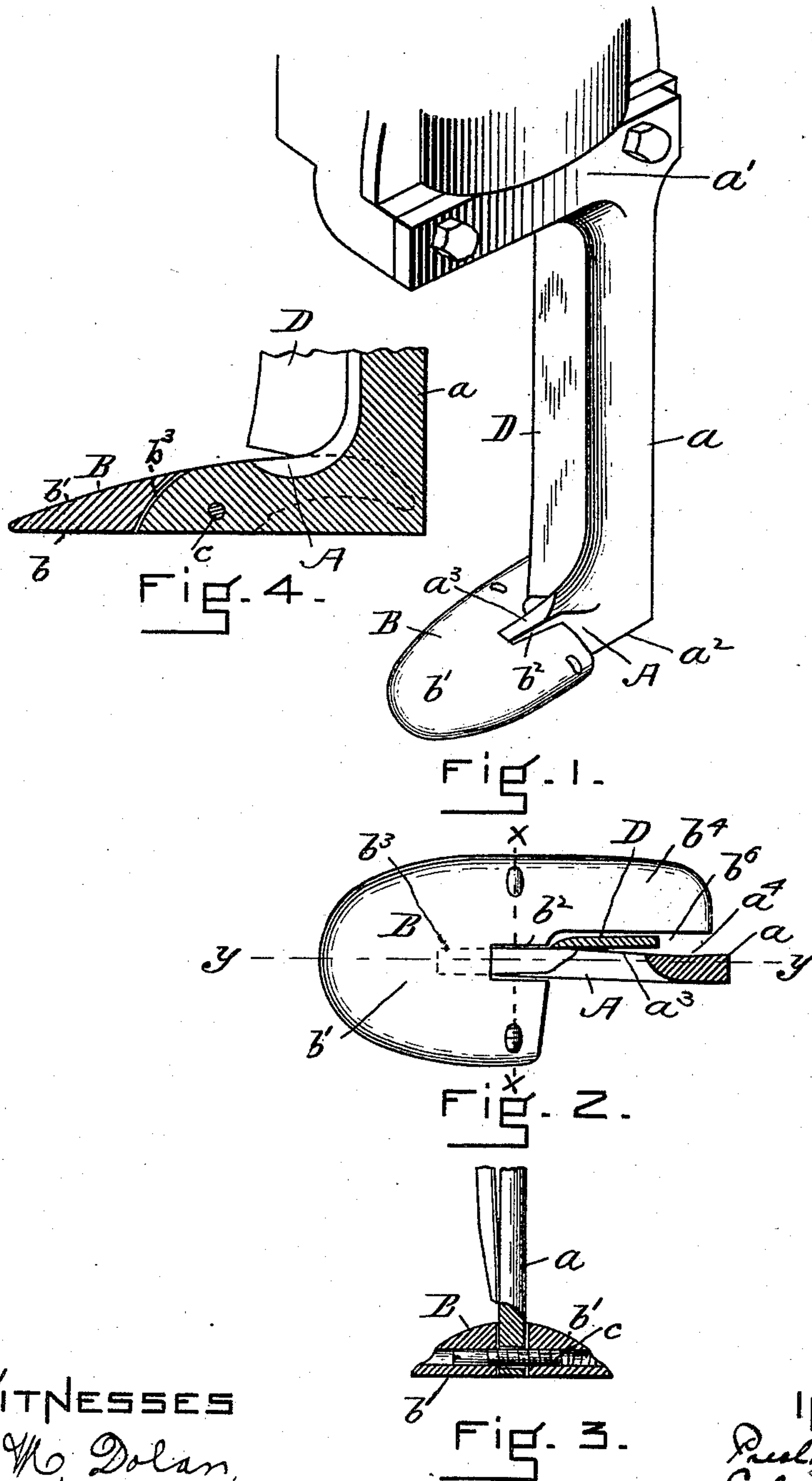


(No Model.)

P. C. MORSE & C. E. RANDALL.
CLOTH CUTTER.

No. 584,390.

Patented June 15, 1897.



WITNESSES
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UNITED STATES PATENT OFFICE.

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MAINE.

CLOTH-CUTTER.

SPECIFICATION forming part of Letters Patent No. 584,390, dated June 15, 1897.

Application filed August 1, 1896. Serial No. 601,342. (No model.)

To all whom it may concern:

Be it known that we, PRESTON C. MORSE and CALVIN E. RANDALL, residing at Natick, in the county of Middlesex and State of Massachusetts, citizens of the United States, have invented a new and useful Improvement in Cloth-Cutters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention is an improvement upon that described in the application for Letters Patent of the United States of the said Preston C. Morse, filed March 4, 1896, Serial No. 581,750; and it relates especially to the part therein called the "foot" of the cutting-machine. The said foot is attached to the remainder of the machine by a cross-bar and a vertical arm of peculiar structure, from the lower end of which the foot extends. The foot is narrow, has a straight under surface or rest, an inclined upper surface, and a section of a shear-cutter. It has been found in practice that in turning the cutting-machine upon the bed which supports it and the cloth to be cut the foot of the machine when so constructed cannot always be turned under the cloth without rumpling the under layers thereof, and also that on account of inequalities of the surface of the said supporting-bed, upon which the foot rests, the forward end of the foot may be lifted slightly from the surface of the bed, and when it does not ride upon said surface it is liable to work into the under layer of the cloth and disarrange it or injure it; and the present invention consists in a foot somewhat shorter than that of said Morse's construction and a supplemental foot or toe which is pivoted or hinged to the main foot to permit its forward end to always conform to the surface of the bed and which is rounded from the upper surface of the main foot downwardly and extends laterally, so that it is wider than the main foot, and thus provides for the gradual lifting of the cloth without disturbing it as it is moved in a curved or lateral direction under it. There is thus provided a structure which overcomes the difficulty above mentioned in that the supplemental section shields the foot proper and

prevents rumpling of the lower layers as the foot is turned or advanced and in that the front end of the supplemental foot yieldingly conforms or adjusts itself to the surface of the bed upon which it is being moved, the said supplemental foot being attached to the foot proper to permit it to thus adapt itself to the said surface.

We will now describe the invention in connection with the drawings, wherein—

Figure 1 is a view in perspective of the lower part of a cloth-cutting machine provided with our invention. Fig. 2 is a view in horizontal section, taken through the lower part of the arm supporting the foot, and in plan of parts below the same. Fig. 3 is a view in cross vertical section upon the dotted line xx of Fig. 2. Fig. 4 is a view in longitudinal vertical section upon the dotted line yy of Fig. 2.

We have shown in the drawings only enough of the machine to identify the structure herein described therewith.

A represents the foot. It extends forward from the lower end of the vertical support a , the vertical support extending from the end of a cross-bar a' , by which it is attached to the frame of the machine. The foot has the lower bearing-surface a^2 , which is adapted to rest upon the bed or table holding the cloth, and over which the cutter is adapted to move. It also has the section a^3 of the shear-cutter. The vertical support a has a back face a^4 , which extends upwardly from the end of this cutter. To the forward end of the foot A is attached a supplemental foot B. This has a flat under surface b , a rounded upper surface b' , and a recess b^2 , which receives the end of the foot and which ends in the undercut section b^3 , the end of the foot preferably extending into the undercut section. The supplemental foot is secured to the foot proper by a horizontal pivot c , passing through both, (see Fig. 3,) and the supplemental foot may also have extending backward the section b^4 , the said section preferably being rounded on its upper surface, and being above the bottom of the foot b^5 and separated from the side of the foot by a space b^6 , which space is in line with the reciprocating cutter D.

The supplemental foot bears such relation to the main foot that it is free, when resting upon the surface of a bed or support, to conform to said surface at its front edge, and it is so balanced in respect to the pivotal point that the front section is heavier than the rear. This always maintains its under surface at its front in contact with the surface of the bed upon which it is moved.

The supplemental foot, it will be observed, is cut away in front of the main part of the foot A. This permits the operator to ascertain by his fingers the position of the foot A when under the assembled layers of cloth.

It will be seen that the extension b^4 acts to support the material back of the foot and back of the line of reciprocation of the plunger-cutter. It will also be seen that the supplemental foot upon the front side is cut away to expose the front side of the main foot below the shear-cutter.

Having thus fully described our invention, we claim and desire to secure by Letters Patent of the United States—

1. The combination of the arm or support

a having the back face a^4 and the foot A having a shear-cutting edge a^3 with the plunger-cutter D and the supplemental foot B pivoted to the foot A as described, as and for the purposes set forth.

2. The combination in a cloth-cutting machine of the foot A having the shear-cutting edge a^3 with the supplemental foot B pivoted to the said foot A and having the backward extension b^4 separated from the foot by a recess b^6 , as and for the purposes described.

3. The combination in a cloth-cutting machine of the narrow foot A, with the foot B having the extension b^4 shaped to provide a recess b^6 between it and the foot, and also having a recess in its under side to receive the forward end of the said foot A and a pivot c extending laterally through the supplemental foot B and the forward end of the foot A, as and for the purposes set forth.

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Witnesses:

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