

W. MARTIN.

Devices for Holding Knit Goods While Being Cut.

No. 154,694.

Patented Sept. 1, 1874.

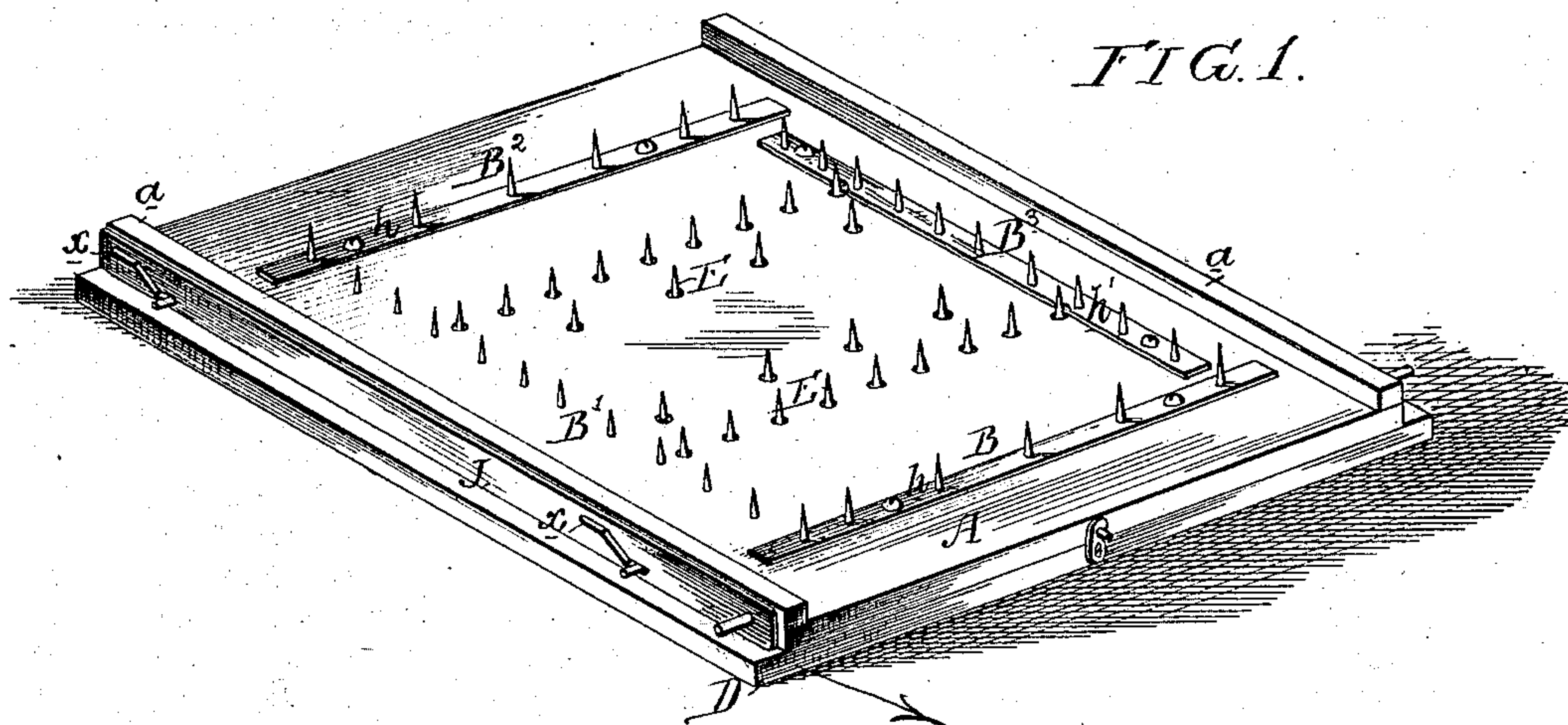


FIG. 1.

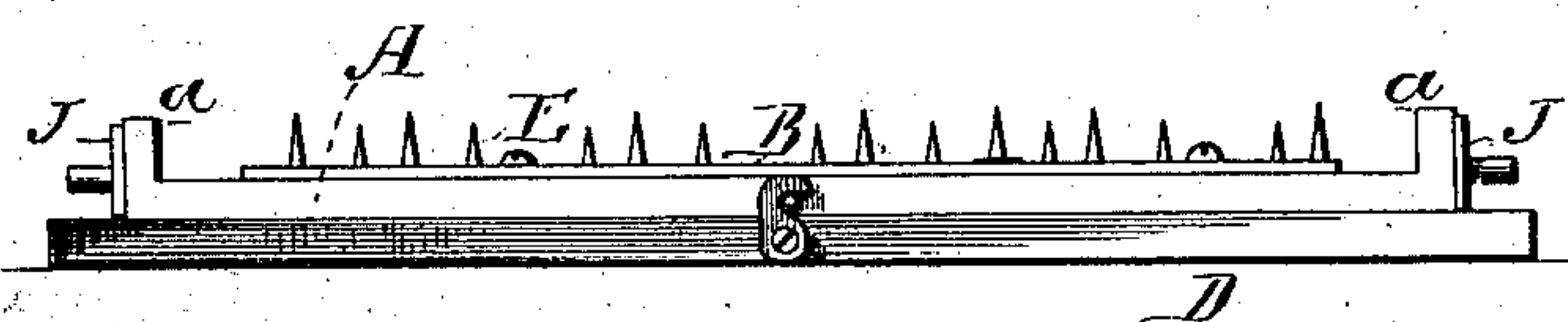


FIG. 2.

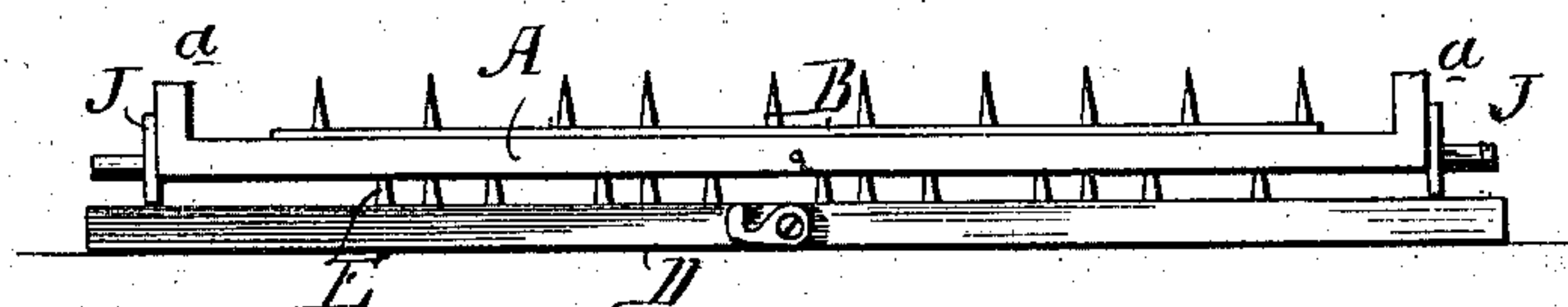


FIG. 3.

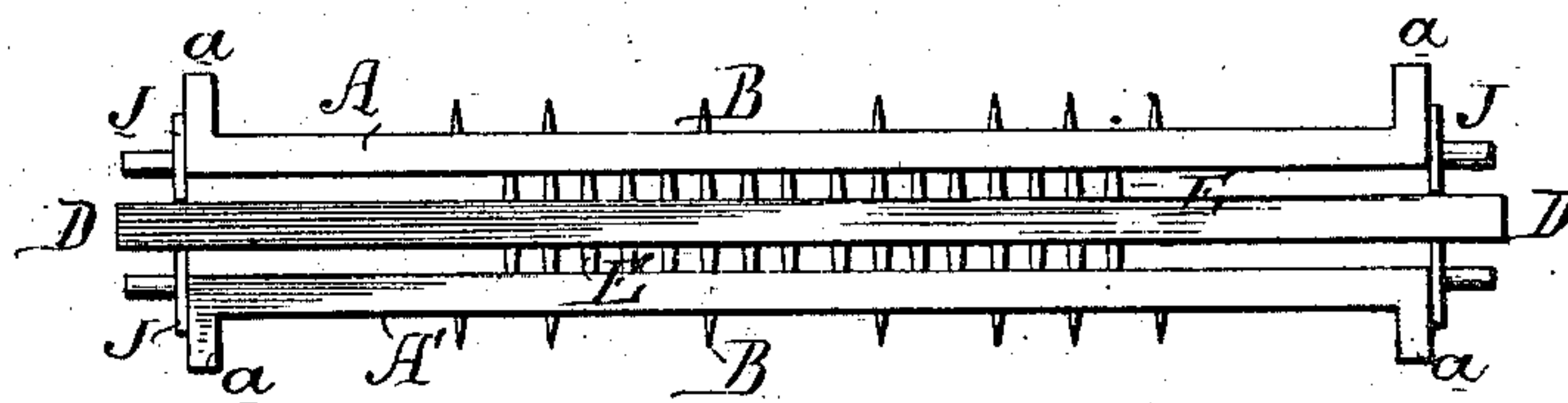


FIG. 4.

Witnesses, Harry Smith
Thomas M. Elwin

William Martin
by his Attyys.
Houson and Son.

UNITED STATES PATENT OFFICE.

WILLIAM MARTIN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DEVICES FOR HOLDING KNIT GOODS WHILE BEING CUT.

Specification forming part of Letters Patent No. 154,694, dated September 1, 1874; application filed May 14, 1874.

To all whom it may concern:

Be it known that I, WILLIAM MARTIN, of Philadelphia, Pennsylvania, have invented an Apparatus for Facilitating the Cutting Out of Hosiery, of which the following is a specification:

My invention relates to an improvement in the cutting-out boards employed in stocking-factories for stretching the knitted fabric and guiding the cutters out of the same; and the object of my invention is to insure a more uniform stretching of the said fabric and greater exactitude in cutting out the stocking-blanks. The old-fashioned device for this purpose consisted of a simple board, in which four rows of pins were arranged in a quadrangle, the space within which was studded with additional pins to serve as guides for the operators in cutting out the fabric, which was laid on the pins in two folds. Difficulty has always been experienced in stretching the fabric uniformly on these permanent pins, the loose and elastic character of the fabric being such that some of the pins penetrated the fabric before others interfered with its proper stretching over and onto the other pins—a difficulty which resulted in the puckering of the fabric, and which I overcome in the following manner, reference being had to the accompanying drawing, in which—

Figure 1 represents a perspective view of my improved cutting-out board; Figs. 2 and 3, side views, showing the parts of the apparatus in different positions; and Fig. 4, a side view of a modification.

On the upper board A are four rows, B, B', B'', and B''', of pins, forming a quadrangle, within which the board has a number of holes for admitting a system of pins on a board, D. Before the fabric is applied the upper board is elevated so that none of the pins within the quadrangle project above the surface of this upper board. A portion of the knitted fabric, which may be in the condition of single or double web, is now placed on the board between the guiding-flanges *a a*, and forced down on the fixed pins B, B', B'', and B''', which, in absence of the pins E, can be readily accomplished without any puckering. The upper board is now lowered, so that the pins E attached to the same will pass through the fabric without in any way displacing or puckering the same.

After the operators, guided by the projecting pins, have cut up the fabric into stocking-blanks, the board A is elevated, and another portion of the continuous web of fabric is placed on the board and stretched on the pins, as before, and this is continued until the whole of the web has been cut up. When the web is of uniform width, and when the stockings are all to be cut of the same length, the four rows of pins B, B', B'', and B''' may be secured permanently to the board A; but I prefer to make the said rows of pins adjustable upon the board toward and from each other, so as to render one apparatus available for different widths of web and different lengths of stockings.

The position of the rows of pins B B'' in respect to each other determines the length of the stockings, and the distance between the rows B' B''' depends upon the width of the fabric.

Different devices may be employed for raising and lowering the board A. In the present instance there is on each edge of the said board a metal strip, J, the lower edge of which rests on the lower board, the strip having two slots, *x x*, each of which is partly inclined and partly straight, and receives a pin projecting from the edge of the board A, which will be elevated on pulling both strips outward in the direction of the arrow, but lowered when the strips are pushed inward.

The apparatus may consist simply of the two boards A and D, or it may be furnished with an additional board, A', Fig. 4, precisely like the board A, excepting that the pins are differently arranged for guiding the operator in cutting out stocking-blanks of a different size.

I claim as my invention—

The board A, with its rows of pins B B' B'' B''', in combination with the board D, having pins E projecting through orifices in the said board A, which can be raised and lowered, all substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM MARTIN.

Witnesses:

WM. A. STEEL,
HARRY SMITH.