

(No Model.)

J. H. LAVANCE.  
Quilting Gages for Sewing Machines.

No. 234,485.

Patented Nov. 16, 1880.

Fig. 1.

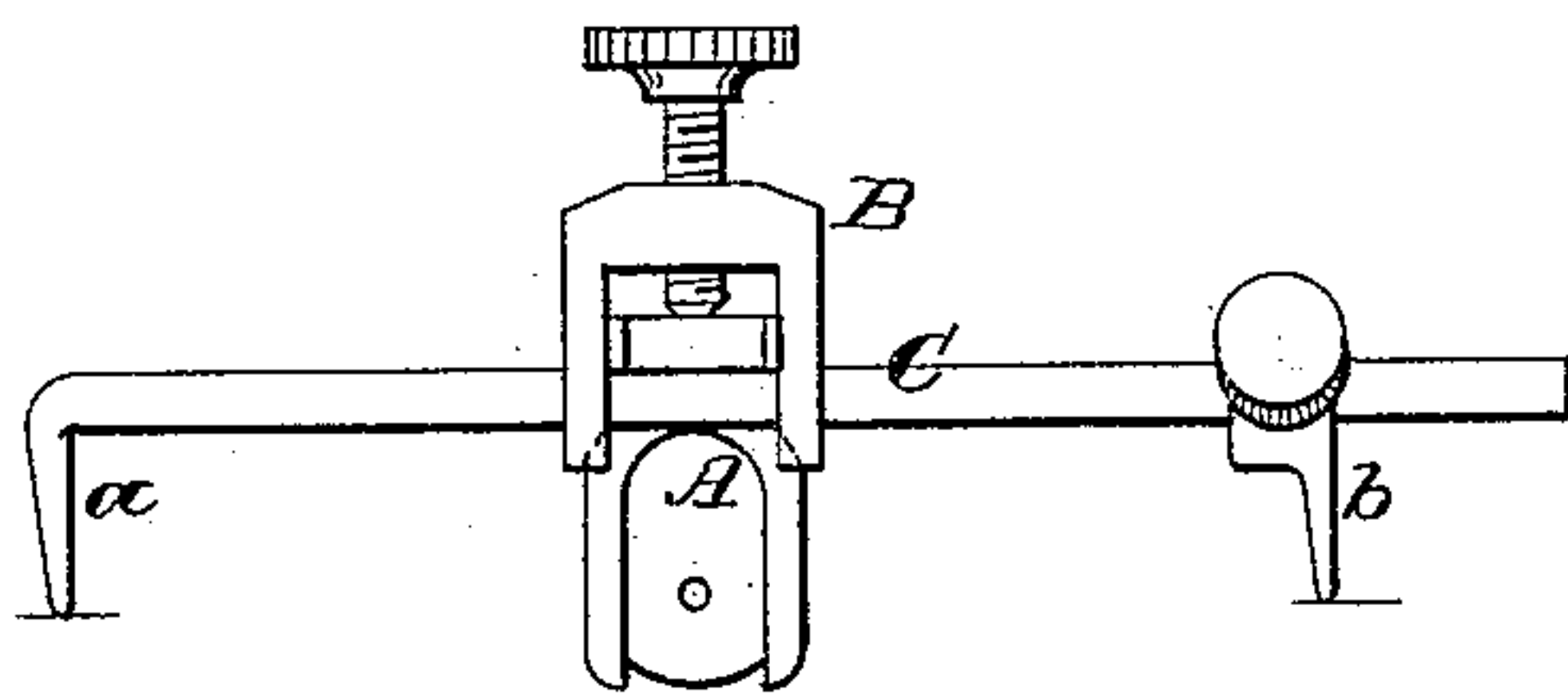


Fig. 2.

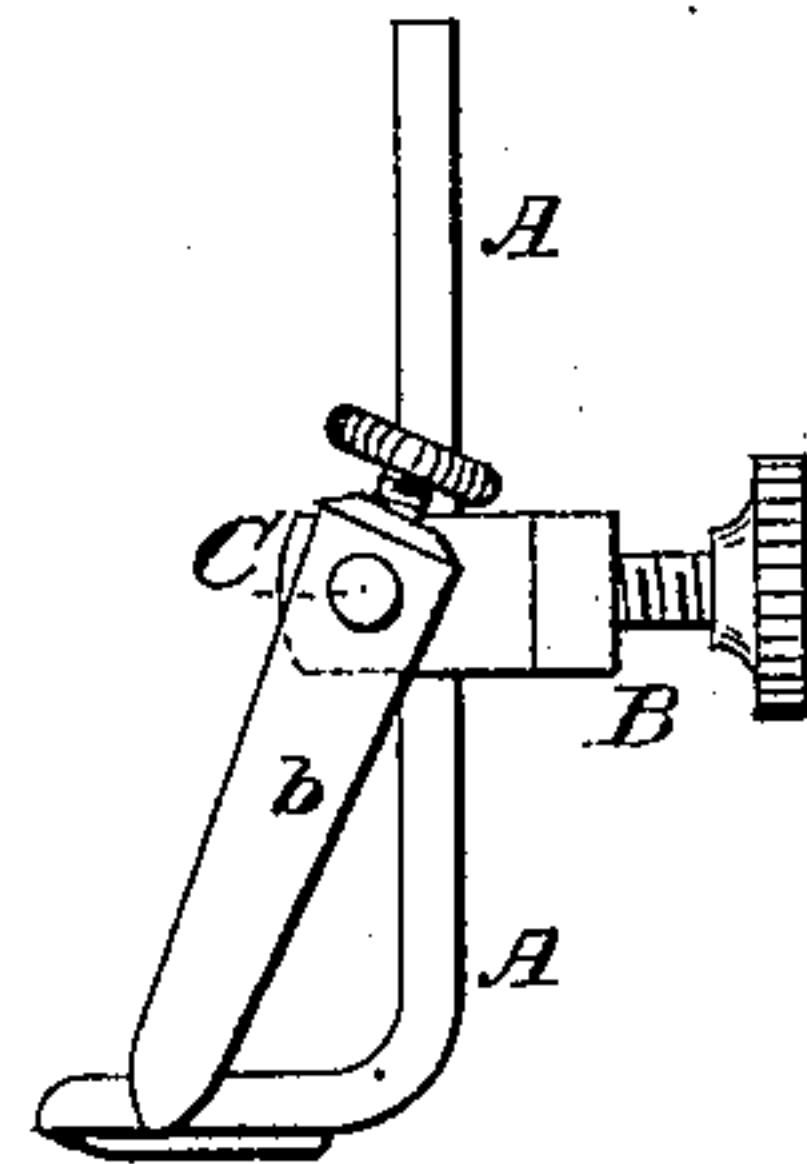


Fig. 3.

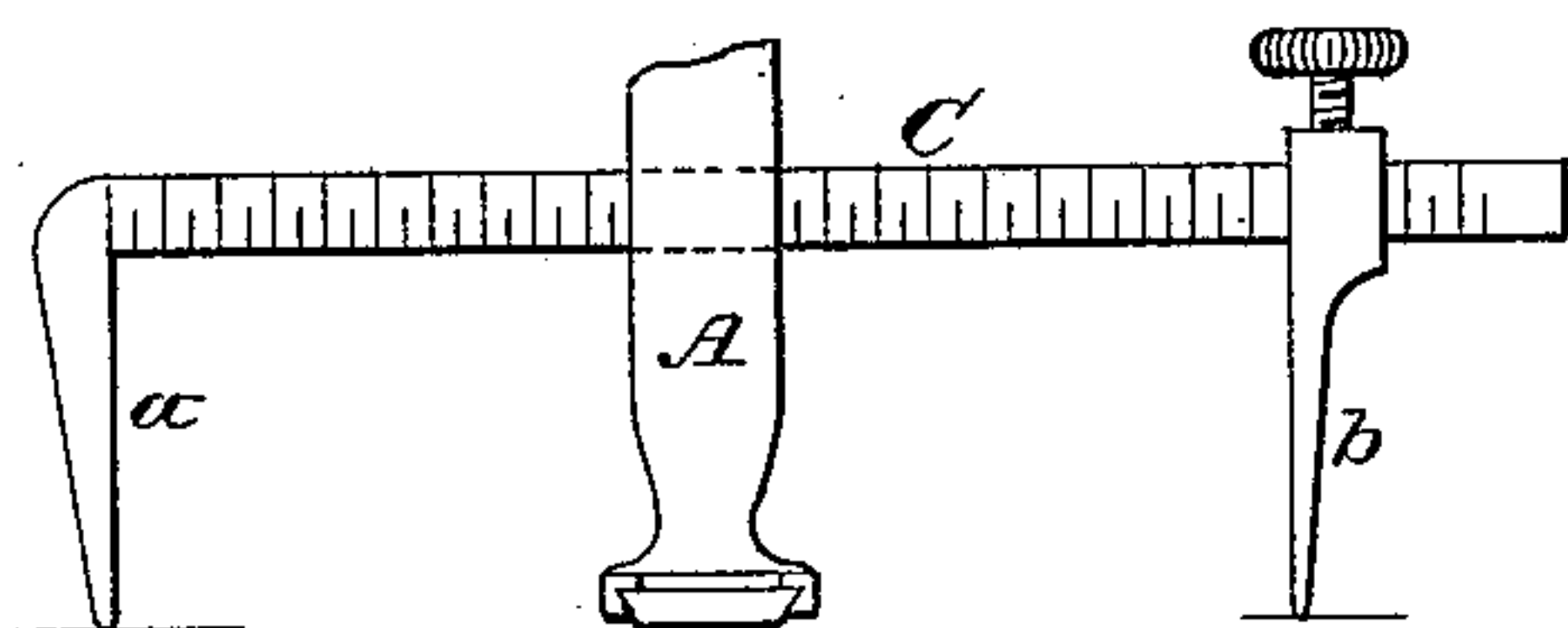


Fig. 4.

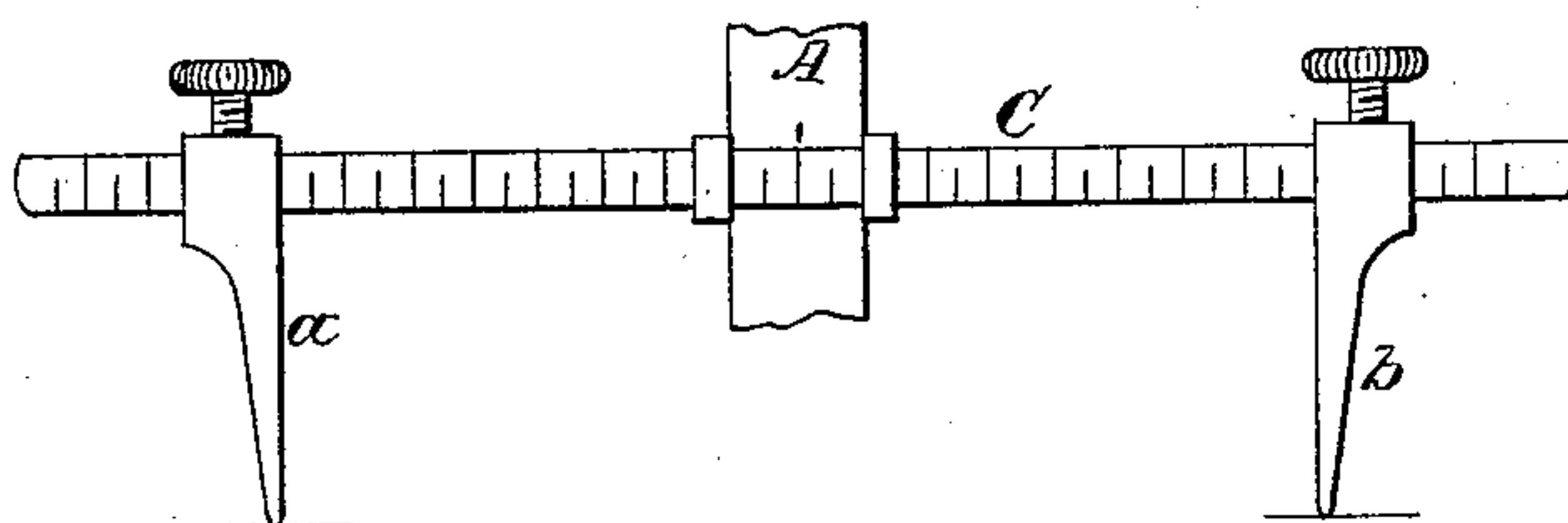


Fig. 5.

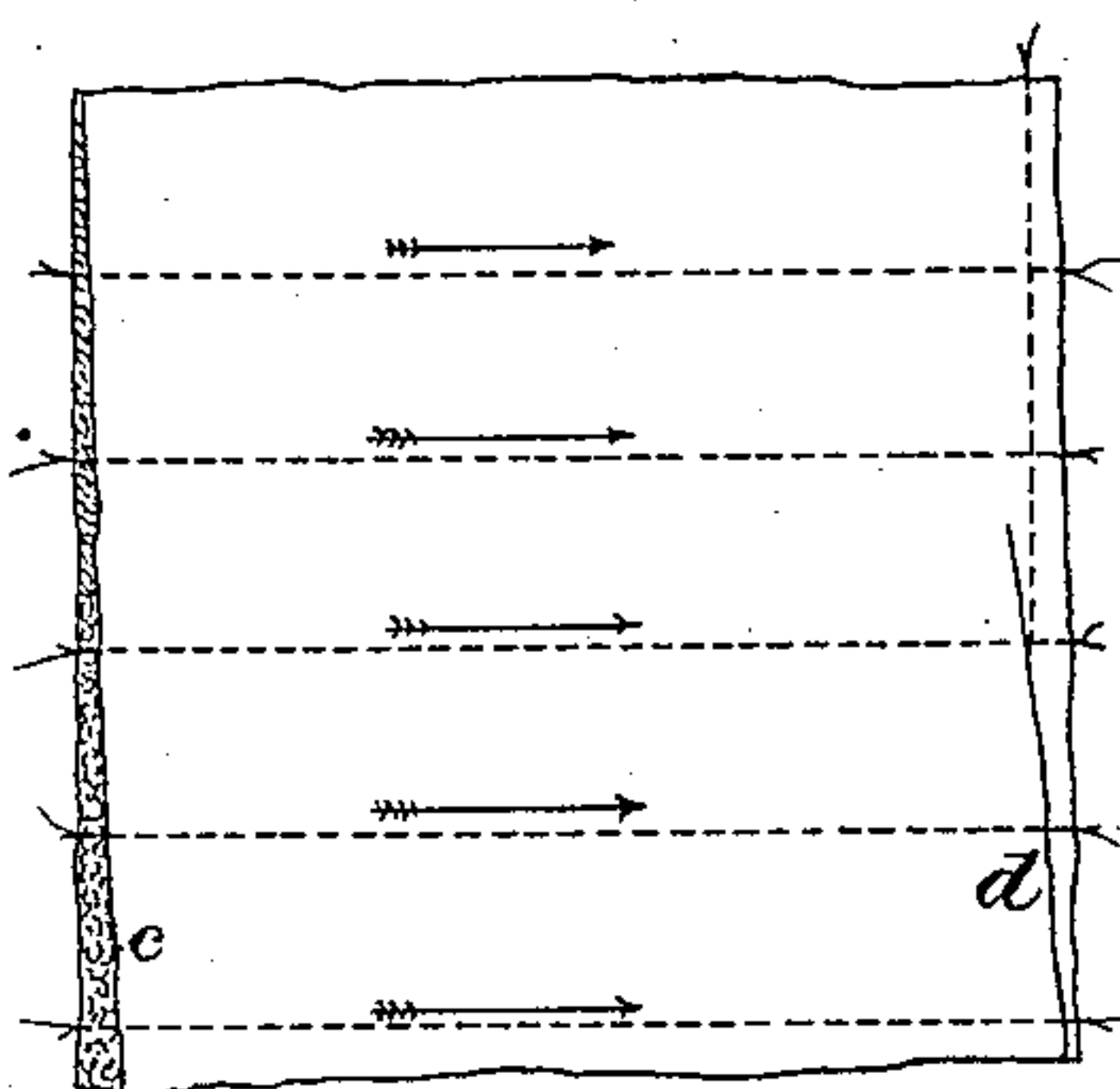
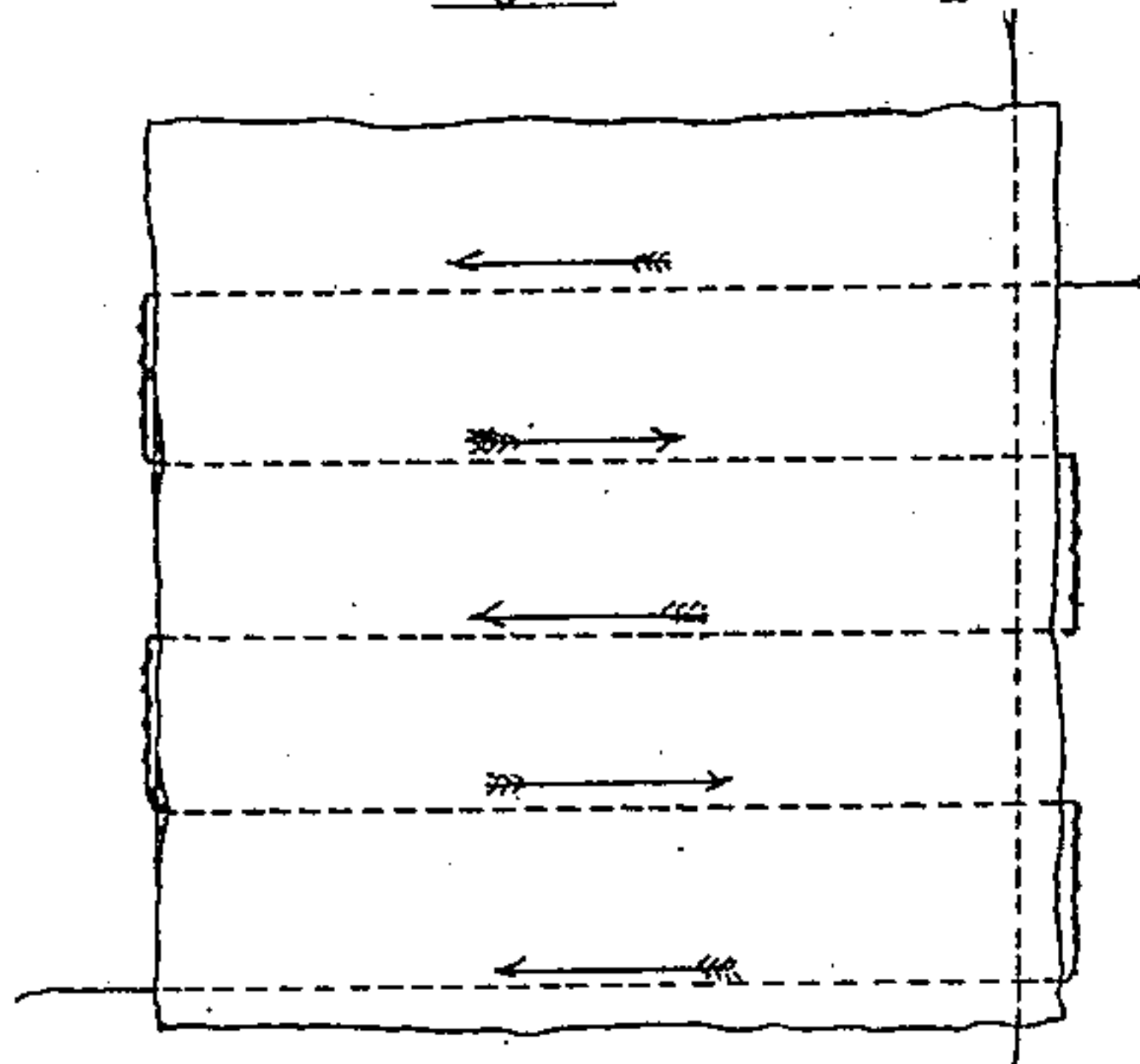


Fig. 6.



ATTEST:

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# UNITED STATES PATENT OFFICE.

JAMES H. LAVANCE, OF NEW YORK, N. Y.

## QUILTING-GAGE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 234,485, dated November 16, 1886.

Application filed May 31, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. LAVANCE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain Improvements in Quilting-Gages for Sewing-Machines, of which the following is a specification.

Heretofore the ordinary quilting-gages for sewing-machines have been made with but one finger, and this has been fixed to the bar. This construction compels the operator, after finishing a row of stitching, to cut off the threads and begin the next row at the same end of the goods, and by so doing thread and time are both wasted or used in excess. Moreover, in quilting, several thicknesses of material are always stitched through, and the feed, acting with greatest force upon the under layer, tends to crowd it forward, while the presser-foot tends, by frictional contact, to retard the upper layer. Thus they do not come out quite even at the end of the stitching, and at each time the goods is passed through this difference is added to by gradual accretions until on a broad piece of goods it may amount to two inches or more. A quilting-gage has also been proposed for the purpose of obviating this difficulty, in which a bar mounted on the presser, arranged to rotate in bearings, and having right and left screw-threads cut on its ends, has been provided with screw-threaded fingers or guides at opposite sides of the needle arranged to travel toward or from each other simultaneously by the rotation of the bar. By means of this gage parallel rows may be stitched back and forth across the goods, but only at equal distances apart, unless the guides be set originally at unequal distances from the needle, in which case the same inequality will always be maintained.

In my gage I provide two fingers or guides, one of which is adjustable on the bar independently of the other, so that they may be set at equal or unequal distances from the needle at will, or, if desired, both on one side of the needle. As my bar is adjustable in or on the presser transversely to the line of stitching, it is not necessary to make both of the guides adjustable on the bar, and I prefer to fix one thereon so that it may be adjusted with the bar.

In the drawings which serve to illustrate my invention, Figure 1 is a plan of the gage in its simplest form, shown as attached to the presser-foot of a machine, and Fig. 2 is an end or side view of the same. The other figures will be referred to hereinafter.

Let A represent an ordinary presser-foot of a sewing-machine, and B a clamp whereby the gage is attached thereto. C represents the bar of a quilting-gage, and *a* the finger ordinarily found on the same. On the bar C is arranged an adjustable finger, *b*, adapted to be fixed to the bar at any desired point by means of a set-screw or other clamping device, as shown. These parts constitute my improved gage, which may be operated as follows: The width of the space between the rows of stitching being settled upon—say one inch—the clamp B is loosened sufficiently to allow the bar C to be adjusted, when the finger *a* is set just an inch from the needle on one side, and the clamp B tightened. The finger *b* is now set just an inch from the needle on the other side of the foot and clamped fast, and the gage is ready for use.

The first row of stitching, next the edge of the piece, may be made by using the edge of the piece as a guide, if parallel thereto, or it may be indicated by a chalk-line, and in stitching the next row the piece is turned round and the third row stitched back, the finger adjacent to the last row stitched serving to guide the operator in preserving their parallelism. Thus with two fingers, one on each side of the needle or foot, the operator is enabled to stitch back and forth, changing the direction with each row, without cutting the thread, the fingers being brought into play alternately. This method of stitching is illustrated by the arrows in the diagrams Figs. 5 and 6. In Fig. 5 the stitching is all in one direction, and is done with the ordinary gage, while in Fig. 6 alternate rows are stitched in the same direction, my improved gage being employed. These diagrams also illustrate the difficulty before mentioned of keeping the layers of the goods even when the stitching is all in one direction. Both diagrams illustrate the under side of the piece, and in Fig. 5 *c* shows how the under layer is drawn, while *d* shows how it is gathered at the other end of the piece. In the



other figure it will be seen that the slight unevenness produced by one row of stitching is counterbalanced by the next.

5 In Figs. 3 and 4 I have illustrated modified forms of my gage, both of which show the bar graduated for convenience in adjusting the fingers to the needle. In Fig. 4 both fingers are shown as adjustable on the bar, which construction enables the operator to adjust the  
10 fingers properly without disturbing the clamp B. In Fig. 3 the bar is shown as passing through the shank of the presser-foot, as it may do. Indeed in some machines the gage may not or need not be attached to the presser-  
15 foot at all, but to some fixed part of the machine. Therefore I wish to be understood as claiming the gage shown and described independent of any special means or point of attachment.

20 Where the rows to be stitched are to be of unequal distances apart the fingers are set at unequal distances from the needle, which may be done in precisely the same way as that for

lines at equal distances apart. This adjustment is rendered practicable only by making 25 the fingers or guides independently adjustable on or with the bar.

Having thus described my invention, I claim—

1. A quilting-gage consisting of a bar and 30 two fingers or guides, the fingers or guides being adjustable toward or from the needle independently of each other, substantially as and for the purposes set forth.

2. The combination, to form a quilting-gage, 35 of the bar C, the finger *a*, fixed to the bar, and the finger *b*, arranged to be adjusted on the bar, substantially as and for the purposes set forth.

In witness whereof I have hereunto signed 40 my name in the presence of two subscribing witnesses.

JAMES H. LAVANCE.

Witnesses:

HENRY CONNETT,  
SUSIE A. BROWN.