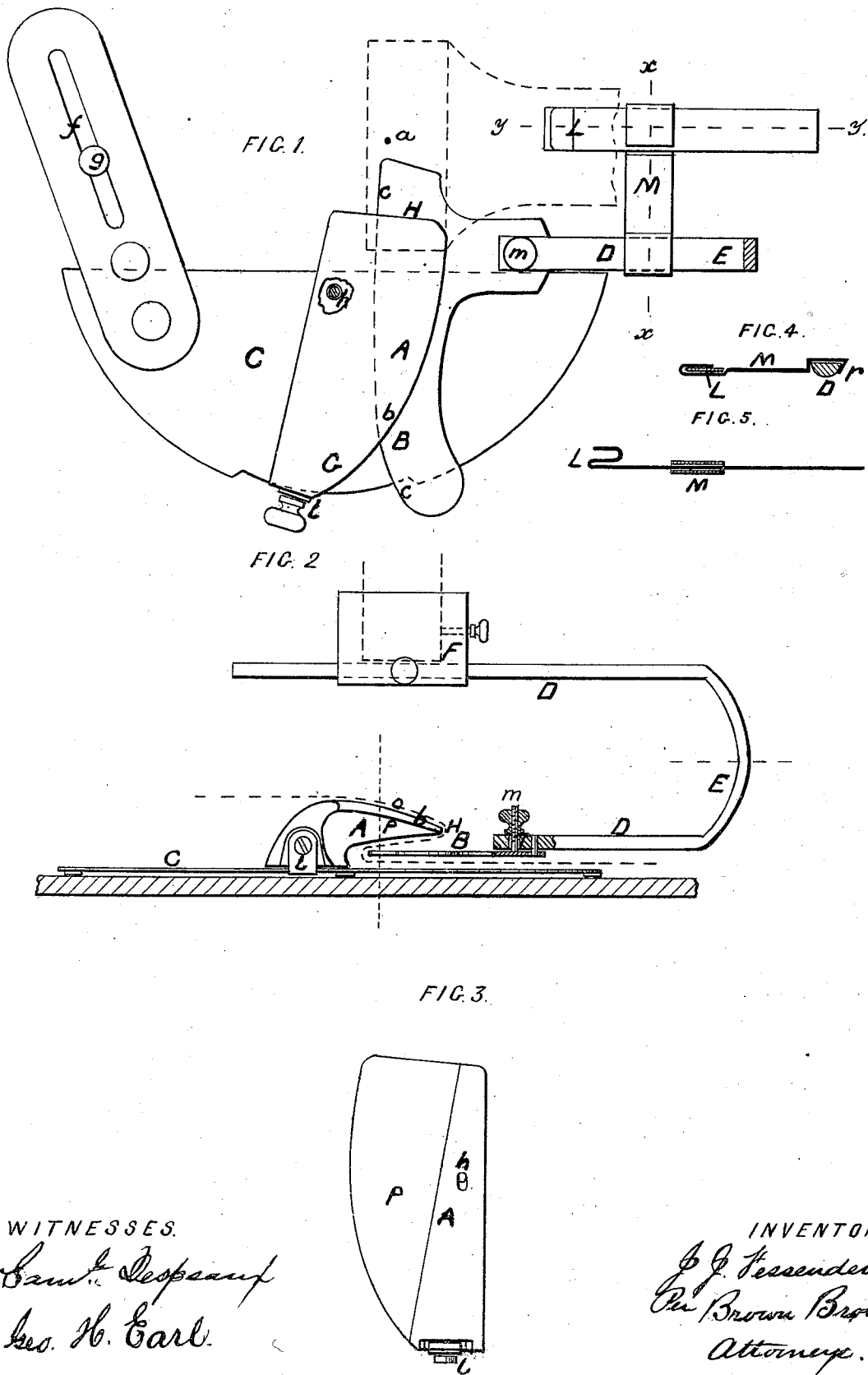


J. J. FESSENDEN.

PLAITER AND TUCKER ATTACHMENT FOR SEWING-MACHINE.

No. 170,541.

Patented Nov. 30, 1875.



WITNESSES.

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JOHN J. FESSENDEN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PLAITER AND TUCKER ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **170,541**, dated November 30, 1875; application filed May 7, 1875.

To all whom it may concern:

Be it known that I, J. J. FESSENDEN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improved Plaiter and Tucker Attachment for Sewing-Machines, of which the following is a specification:

My invention relates to a peculiar construction and combination of parts for producing a plaiter or tucker for sewing-machines; and the improvements are fully hereinafter described and specifically pointed out in the claim, a preliminary description, therefore, being deemed unnecessary.

In the accompanying plate of drawings, my improved sewing-machine attachment for plaiting and tucking is illustrated, Figure 1 being a plan view of the same as disposed upon the cloth-plate of a sewing-machine, with the needle-arm in dotted lines, showing, by a black dot, *a*, the plane of operation of the needle; Fig. 2, a view in elevation from the entering side of the attachment for the goods; Fig. 3, a view of the under side of one of the guiding-edges.

In the drawing, A represents one and B the other of the guiding and folding edges of the attachment. These edges A and B are curved along their length, as shown at *b* and *c* respectively, and such curved edges are of considerable length, and they are disposed so as to be the one A above the other B, and the edge B to be above the cloth-plate of the sewing-machine. In this disposition of the edges A and B the upper edge A is carried by a plate, C, secured by slot *f* and set-screw *g* to the bed-plate of the machine, and the lower edge B is carried by an arm, D, which, being curved, as at *E*, then passes forward and is fastened through a clutch, F, to the needle-arm of the machine. The slot and set-screw fastening of the plate C allows the folding edge A, which it carries, to be adjusted relatively to the stitching-line of the needle, and the adaptation of the clutch F for the arm D to slide through it, allows the folding edge, which such arm D carries, to be also adjusted relatively to the stitching-line of the needle.

Besides the above arrangement of the folding edges A and B, the folding edge A is swiveled as at *h* to its carrying-plate C, so that

it can be swung thereon, and thus be made to have its curved edge stand at a greater or lesser angle of inclination relatively to the curve of the other folding edge B, a clutch, *L*, fastening it in position. And also the folding edge B is swiveled, as at *m*, to its carrying-arm, enabling it also to have its curved edge adjusted as desired, these adjustments of the two folding edges being important, as they are susceptible of being disposed relatively to each other to adapt them for the varying qualities of goods which it may be desired to run through the attachment, to be thereby folded or plaited before being sewed.

The arrangement for adjustment of the two folding edges A and B by and through their respective carriers themselves, as above described, enables them to be set for varying widths of folds, as by such means they may be made to project more or less over each other, and according as they so project the width of fold is indicated. This adjusting feature of the folding edge B enables the attachment to be adjusted to bring the line of stitches nearer to or farther from the folded edge of the goods, as is obvious by an inspection of Fig. 1. The upper folding edge A, at its receiving end G, is somewhat above the plane of the folding edge B, and at its delivering end H it is close to the plane of the folding edge B, and from the first to the latter it is on a gradual descent or inclination both as to the upper and lower faces O and P thereof. This is important, as it allows the goods to freely enter, and causes them to be gradually disposed or folded down.

Obviously there are many ways, different from those herein particularly described, for attaching the folding edges A and B to their respective carriers, and for attaching their carriers to the machine with which substantially the same adjustments could be obtained, and therefore it is not intended to limit the invention to the precise forms described and shown herein.

Furthermore, as my attachment is constructed by reversing the carrier of the folding edge B in its clutch F and removing the folding edge A, and using one the reverse thereof, placing it where the folding edge B is now located in the drawing, the attachment

obviously would work substantially the same as in the present illustrated location of the folding edges.

The folding edges A B may be made in one piece with their carriers, but it is preferred to arrange and construct them as herein described.

L, a guide for guiding the edge of the goods as they move through the folding edges A and B. This guide is, at one end of a bar, adapted to be adjusted lengthwise on a bar, M, which, in its turn, is adapted to be slid along the bar D, which carries the folding edge B. This adaptation of the guide-carrying bar M for adjustment on the bar-carrying folding edge B consists in springing the loop end *r* over the bar, which enables it to be removed at pleasure.

Although I have herein particularly described the folding edges as made on a curve from end to end, they obviously, in lieu thereof, could be made straight, which would se-

cure in a similar manner, although not so desirable a one, the opening of each from the other at the receiving end of the attachment.

Figs. 4 and 5 represent sectional views of the guide in lines *x x* and *y y*, respectively, Fig. 1.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

The curved arm D, provided with the adjustable pivoted guide B, and adjustable clutch F, in combination with the pivoted guide A and plate C, substantially as and for the purpose described.

The above specification of my invention signed by me this 29th day of March, A. D. 1875.

JOHN J. FESSENDEN.

Witnesses:

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GEO. H. EARL.