C. CARLETON.

Hemmer and Feller for Sewing Machines.

No. 109,585. Patented Nov. 29, 1870.

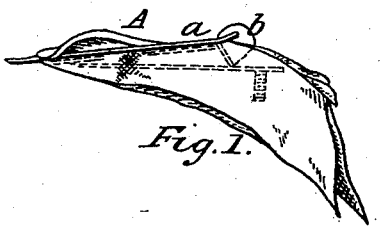

Fig. 1.

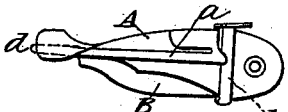

Fig. 2.

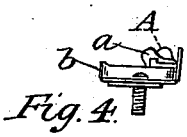

Fig. 4.

Fig. 3.

Fig. 5.


Witnesses:

Robert H. Mannes.

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Inventor:

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# UNITED STATES PATENT OFFICE.

CYRUS CARLETON, OF BROOKLYN, NEW YORK, ASSIGNOR TO WILLCOX & GIBBS SEWING MACHINE COMPANY, OF NEW YORK CITY.

## IMPROVEMENT IN HEMMERS AND FELLERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **109,585**, dated November 29, 1870.

*To all whom it may concern:*

Be it known that I, CYRUS CARLETON, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hemming and Felling Guides for Sewing-Machines, of which the following is a specification.

My invention relates to guides used to fold and present material to be hemmed or felled in a proper condition to be acted upon by the sewing mechanism; and it consists in certain combinations and arrangements of parts having for their object to guide, fold, and present the material to the action of the machine, as will be fully set forth and described.

In the drawings, Figure 1 is a side elevation of my invention, showing its mode of action upon the fabric passing through it. Fig. 2 is a top view of the same. Fig. 3 is a front end view, and Fig. 4 a rear end view.

The guide is composed chiefly of a metallic scroll, A, secured to the plate B, and provided with a metallic tongue, *a*, and an adjustable gage, *b*. Beneath the end *c* of the scroll-plate, and in line with the metallic tongue, there is a stop or guide piece, *d*, against which the edge of the fold in the fabric is pressed, so that it emerges from the end of the guide in proper relation to the line of sewing. The scroll-plate is bent of such form that it operates to turn the edge of the fabric gradually over the tongue *a* as it is drawn through the guide by the operation of the feeding mechanism. The elastic tongue *a* is so secured to the side of the scroll-plate that a sufficient space is left between it and the scroll at the upper end to allow fabrics of different thicknesses to be readily introduced, while the lower end of the tongue is held against the side of the scroll and the guide-piece *d* in such position that the fabric is always retained in place by it to be properly acted upon by the scroll, the tongue readily yielding, by virtue of its elasticity, to allow any variation in the thickness of the fabric to pass through and be acted upon by the scroll. The guide-piece *d* beneath the end of the scroll serves to keep the edge of the fold in line with the side of the tongue, as the fold would be otherwise liable to become drawn out of place with relation to the line of stitching to be made in it.

The adjustable gage *b* is formed of a piece of tempered steel doubled over upon itself and arranged to embrace the scroll-plate at the part where it is bent down to be connected with the plate B. It presses against the plate A sufficiently hard to be retained in the desired position, and it serves to regulate the depth of the fold in the fabric. The edge of the fabric is held by the operator against the lip *e* upon the gage, and the distance of this lip from the line of the inner edge of the tongue *a* regulates the amount of fabric to be folded over the tongue, and consequently the width of fold. This arrangement of parts produces a guide that is peculiarly adapted for folding the pieces composing an umbrella-cover together to be united by the sewing-machine, forming what is termed a "pudding-bag seam." These pieces are of triangular shape, the seams of the cover running to the center, where the stick of the umbrella projects, and are very difficult to sew together with a hemming-guide of ordinary construction. The edges of the fabric at the point where they are first introduced into the guide being very narrow, and the fabric itself being mostly of a loose texture, it has been found very difficult to fold the edges by the use of a guide so as to form a seam of the nature described above, and as shown in the accompanying drawings, so that seams of this nature have been generally formed in umbrella-covers by hand instead of machine labor.

The elastic character of this guide will readily allow any unevenness or variation in the thickness of the fabric to pass through it and become properly folded.

The importance of the guide-piece *d* upon the under side of the scroll will be evident from the nature of its office with relation to the tongue *a*.

What I claim as my invention is—

The folding-guide herein described, consisting of the elastic tongue *a* upon the plate A, the guiding-surface *d*, and the gage *b*, constructed and operating substantially in the manner and for the purposes described.

CYRUS CARLETON.

Witnesses:

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