(No Model.)

H. C. CURTIS.

SEWING MACHINE GAGE.

No. 334,218 Patented Jan. 12, 1886.

Fig. 1.

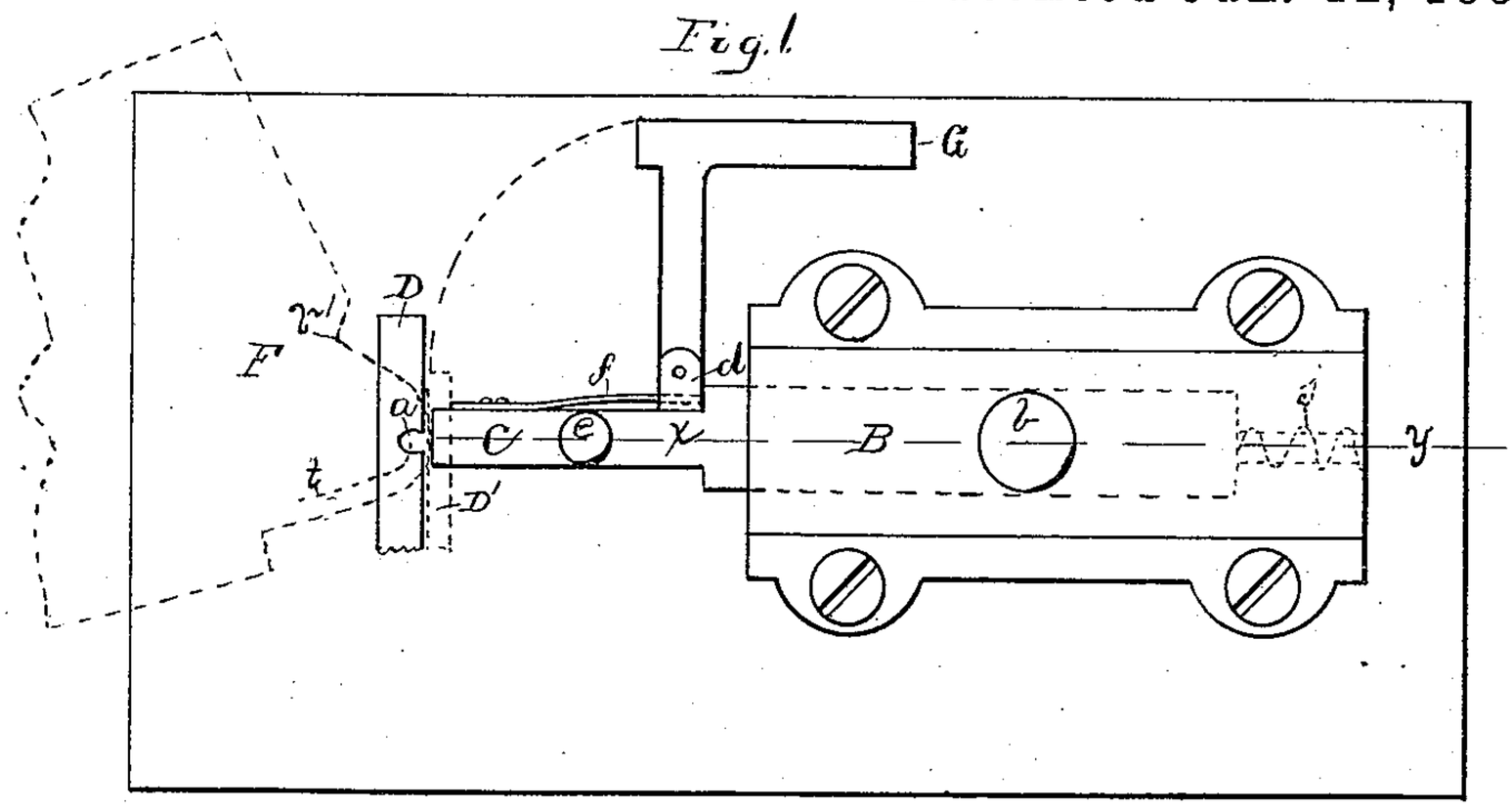


Fig. 2.

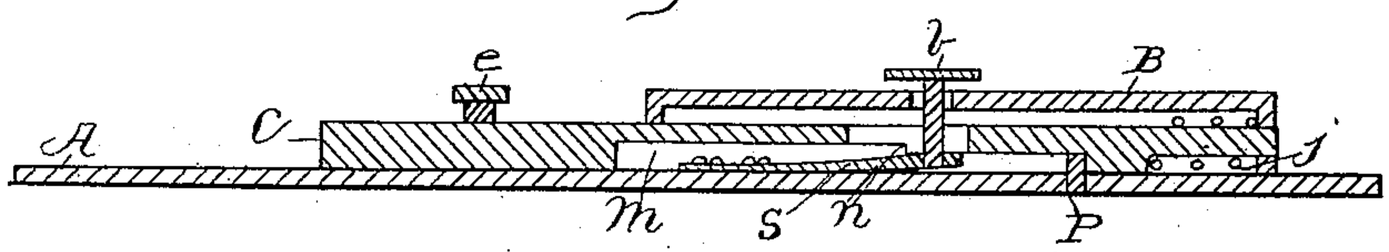
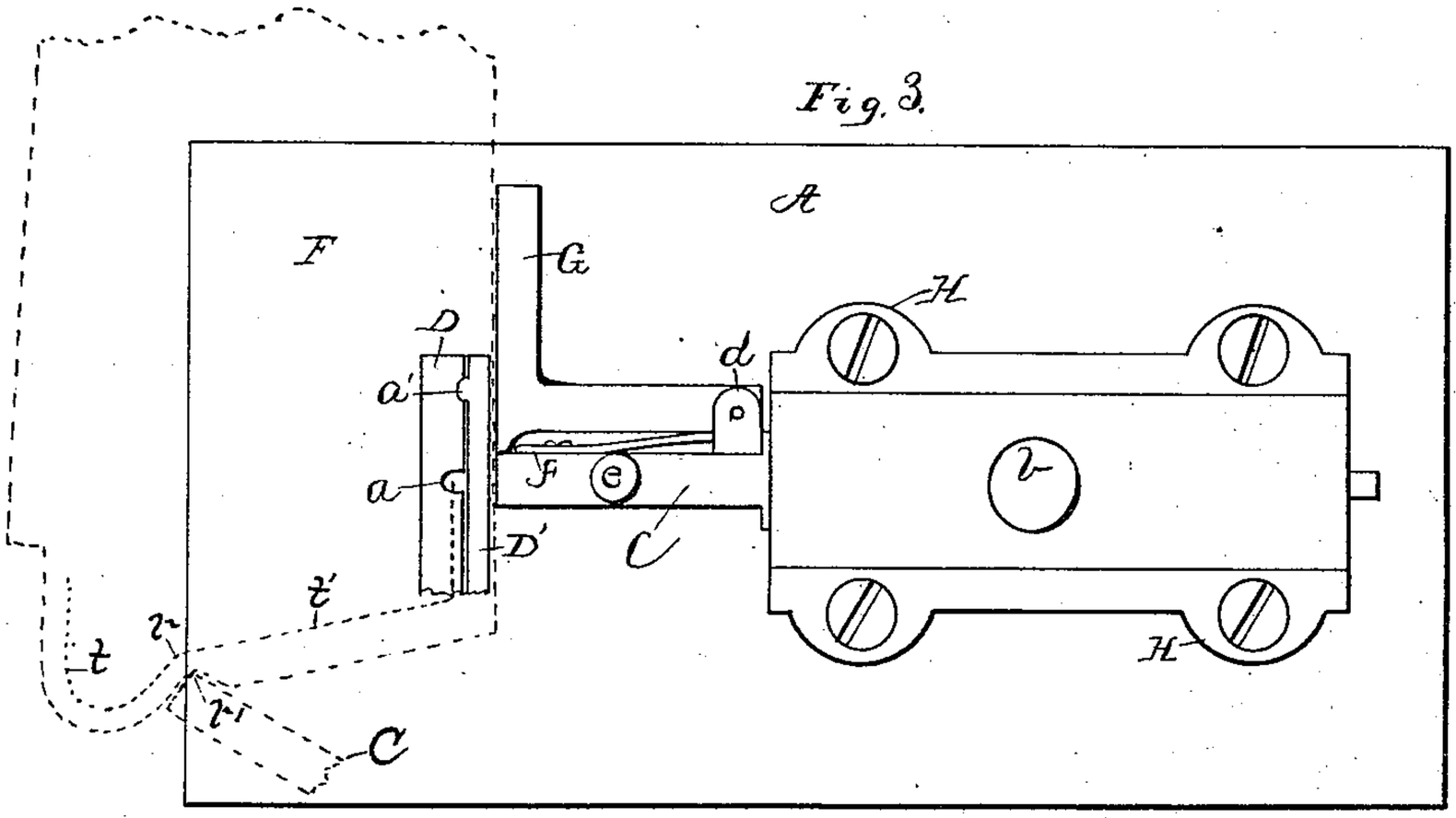


Fig. 3.



WITNESSES:

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HENRY C. CURTIS, OF TROY, NEW YORK.

SEWING-MACHINE GAGE.

SPECIFICATION forming part of Letters Patent No. 334,218, dated January 12, 1886.

Application filed September 17, 1885. Serial No. 177,353. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. CURTIS, a resident of the city of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Sewing-Machine Gages; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

My invention relates to improvements in sewing-machine gages.

The objects of my invention are, first, to provide a simple and convenient means for adjusting the gage for different widths of seam; second, to provide a gage adjustable in face-width.

My invention consists, first, in providing a movable gage with an actuating-spring, and with a spring-actuated stop, as hereinafter more fully described and claimed; second, in providing a movable gage with a spring-controlled arm hinged thereto and adapted to swing to and from the gage, to form, when desired, an extension of its face.

Figure 1 of the drawings is a plan view of my improved gage in position for running a narrow seam, with the hinged arm swung back out of position. Fig. 2 is a longitudinal vertical section of same on line *x y* in Fig. 1. Fig. 3 is a plan view of same in position for running a wider seam, showing the hinged arm in position to form an extension of the face of the gage.

In the manufacture of collars, cuffs, and other articles formed of two or more plies run together wrong side out and afterward turned right side out, it frequently happens that a narrow seam is desirable at one point and a wider seam at another, though forming one continuous seam. The line of direction of the seam is also changed to form angles obtuse as well as acute. The formation of an angle on the side of the seam adjacent to the gage necessitates a narrow-faced gage to permit of turning the goods, while a straight-line seam can be more accurately run with a wide-faced straight gage.

My narrow gage consists of a movable bar, C, adapted to slide in the support or box B, attached to the plate A of the sewing-machine. The box is provided with actuating-spring *j*, coiled upon a spindle at one end, as shown in Fig. 2, and acting upon the support to force the bar out therefrom against the stop P, projecting up into a groove, *m*, in the bottom of the bar, when the bar is released from spring-stop S. The bar is provided with thumb-piece or handle *e*, by which it is pushed into the box until the end of spring S enters notch *n*, where the bar is held against the force of spring *j*. The spring-stop is provided with a stem, which passes up through slot *i* in the bar and an aperture in the box and terminates in a thumb-piece, *b*, above the box.

It is only necessary to press down upon *b* to disengage stop S from notch *n* and permit spring *j* to force the bar outward.

The arm G is hinged to ears *d* upon the bar, and adapted to swing back and forth to and from the position shown in Figs. 1 and 3.

The spring *f*, secured to the bar, acts upon the plane side and end of the arm to hold it in the position shown, in the same manner that the spring acts to hold the blade of a common pocket-knife open or closed.

To illustrate the method of operation, I have shown in Fig. 1, by dotted lines, a collar, F, being stitched by a row of stitching, *t*, to form a narrow-run seam. D is the common presser-foot of a sewing-machine, with needle-hole at *a*. By pressing upon *b* the bar forming the gage is forced outward from its box against stop P, which is so adjusted as to hold the face of the gage at the proper distance from the needle to form the narrow seam of the required width, the arm G being turned back to the position shown. The edge of the goods is then placed against the face of the gage and held in position to stitch around the curved end of the goods to the point *r*, Fig. 3, the corner of the narrow gage or bar entering the notch *r'* of the goods, as shown by dotted lines. Then the bar is pushed back, until caught by spring-stop S, to the position shown in Fig. 3, and the arm G swung into line with the end of the bar, forming an ordinary straight-faced gage, along

which the edge of the goods is carried, to form the wide seam *t'* in the usual manner. D' is a cow-catcher which drops down between the presser-foot and gage, to hold the edge of the goods down to the gage.

The part D', called by all shirt and collar manufacturers a "cow-catcher," being an old and well-known device, I have only shown that portion which is contiguous to the presser-foot.

When the presser-foot is raised to change the goods or the line of direction of the seam, the cow-catcher is raised also by lug *a'*, which projects out over the foot, as shown in Fig. 3.

In changing back from the wider to the narrow seam it is only necessary to press upon *b* and throw stop S out of engagement, while the presser-foot and cow-catcher are raised.

The arm G may be swung back any time before the projection at *r'* of the wider seam reaches the gage, to permit the corner of the narrow gage or bar to enter notch *r'* in the goods.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a sewing-machine gage, the combination of a spring-actuated movable bar provided with a guiding-face, a stop, P, a spring-stop, S, having a handle or thumb-piece, *b*, and a bar-support, B, substantially as described, and for the purposes set forth.

2. In a sewing-machine gage having two sections hinged one upon the other and adapted to slide to and from the sewing-machine needle, the combination, with said sections, of an actuating-spring, stop P, and handle *e*, substantially as described, and for the purposes set forth.

In testimony whereof I have hereunto set my hand this 16th day of September, 1885.

HENRY C. CURTIS.

Witnesses:
GEO. A. MOSHER,
CHAS. L. ALDEN.