(No Model.)

G. H. CURTIS.

SEWING MACHINE GUIDE.

No. 488,187. Patented Dec. 20, 1892.

Fig. 1.

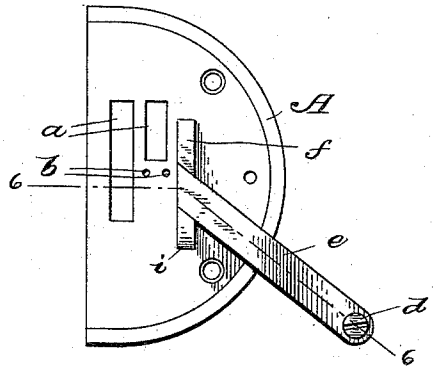


Fig. 2.

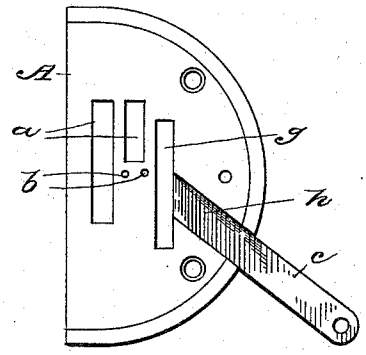


Fig. 3.

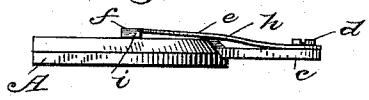


Fig. 4.

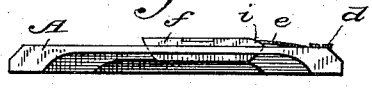
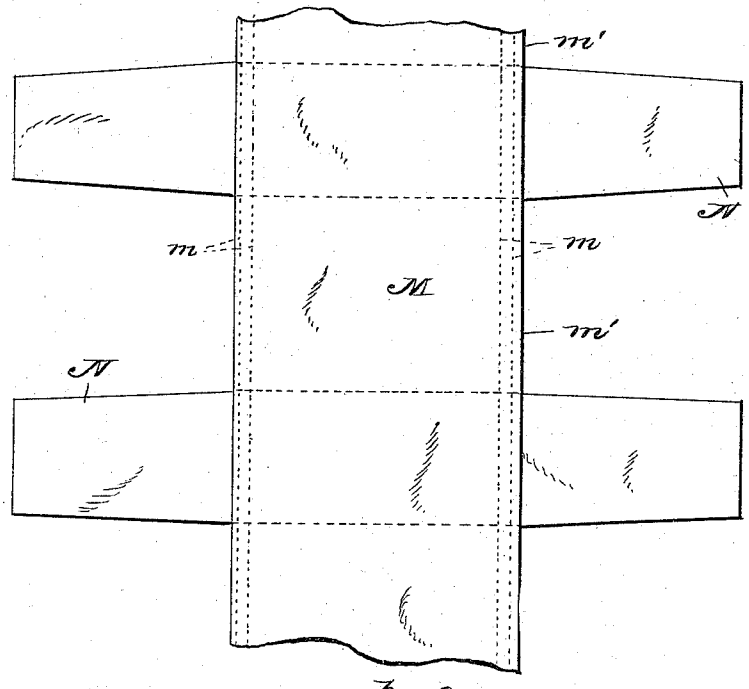


Fig. 5.



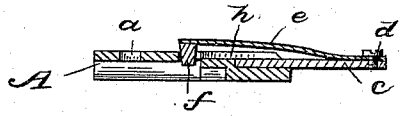


Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE H. CURTIS, OF NEW YORK, N. Y., ASSIGNOR TO THE SINGER MANUFACTURING COMPANY OF NEW JERSEY.

SEWING-MACHINE GUIDE.

SPECIFICATION forming part of Letters Patent No. 488,187, dated December 20, 1892.

Application filed July 9, 1892. Serial No. 439,449. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CURTIS, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Sewing-Machine Guides, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of sewing machine guides which serve as gages against which the edge of the work will pass in being directed to the needles of sewing machines to cause the work to be guided in a straight line, and my invention has for its object to provide a guide, of the class referred to, which at times may be depressed so as to be flush with the throat or work plate of the machine to permit certain parts of the work to pass over the same without obstruction.

My invention is more particularly designed for use in stitching a piece of work or material having cross pieces attached to the underside thereof and which extend beyond the edges of the same so that the said cross pieces may depress the guide when they come to the same and thus pass over the said guide without obstruction; this class of work occurring in connection with the stitching of material for gaiters for shoes.

In carrying my invention into effect I provide the throat or work plate of a sewing machine with an opening or recess into which the edge guide extends, a portion of the said edge guide being normally above the upper surface of the throat or work plate. The guide is preferably carried by a spring or spring arm which will easily yield when any portion of the work presses upon the upper portion of the said guide and said spring or spring arm and will thus permit the said guide to be depressed to a level with the upper surface of the work plate. The said spring arm is preferably received in a recess in the throat or work plate so that it, as well as the guide carried thereby, may be depressed flush with the said plate so as to offer no obstruction to the passage of the work. This spring arm is preferably attached at its outer end to a rigid arm extending from the throat or work plate.

In the drawings Figure 1 is a plan view of a sewing machine throat plate with my invention applied thereto. Fig. 2 is a similar view with the guide and spring arm removed. Fig. 3 is a front view of the throat plate with the guide attached thereto, and Fig. 4 is a side view of the same. Fig. 5 illustrates a strip of work of the character in connection with which my improved guide is intended to be used. Fig. 6 is a section on line 6 6, Fig. 1.

A denotes a sewing machine throat plate of well known form provided with the usual feed openings *a* and needle openings *b*.

Attached to the plate A is a rigid arm *c* to the outer end of which is secured, by a screw *d*, a spring arm *e* provided at its inner end with the edge guide *f* which extends in to an opening or slot *g* in the throat plate A, said throat plate also being provided with a recess or groove *h* in which a portion of the spring arm *e* may lie, flush with the upper surface of the plate, when the guide *f* is entirely depressed into the slot or opening *g*. The spring arm *e* is so formed as normally to hold the guide above the work plate, as shown in Figs. 3 and 4, but when any pressure is applied to the upper surface of the guide or spring arm the latter will yield to permit the guide to be entirely depressed within the opening or slot *g* so that the upper surface of the said guide will be flush with the upper surface of the throat or work plate. The forward end of the guide *f* is chamfered or rounded off at *i* so that that portion of the work which is to ride over the said guide and depress the same into the opening *g* will not catch on the said guide.

In practice it is usual to provide the presser foot which is to be used in connection with my improved guide with a slight recess on its underside into which the guide *f* is partly received so that the said presser foot serves to limit the upward movement of the guide under the stress of the spring arm *e*.

In the use of my improved guide a strip of work M is to be presented to the stitch forming mechanism of sewing machines in such a manner as to form one or more seams *m* along the edge thereof. This strip of material is provided with cross pieces N which have previously been attached thereto and which are

on the underside thereof as the work is presented to the needles of the machine. The edge *m'* of the strip M is pressed against the guide *f* as the work is moved forward with the needles, but when one of the cross pieces N on the underside of the strip M reaches the said guide *f* the said cross piece will ride up the inclined forward edge of the said guide, and, as the said cross piece passes beneath the presser foot, will depress the guide into the recess or opening *g* of the work plate, thereby permitting the cross-piece to pass unobstructedly; and when the strip M has been fed forward so that said cross-piece is beyond the rear edge of the guide the latter, being released therefrom, will instantly assume its normal position partially above the work plate under the stress of the spring arm *e* ready to perform its usual function to direct the edge of the strip M.

Having thus described my invention, I claim and desire to secure by Letters Patent:—

1. The combination with a sewing machine throat plate provided with an opening or recess, and with a groove extending therefrom, of a guide extending into the said opening or recess, a spring arm by which the said guide is carried and which is arranged above the said groove so that it will be depressed therein when pressure is applied to the upper surface of the guide or to the said spring arm.

2. A sewing machine throat or work plate A provided with the rigid arm *c* and with the opening *g* and the recess or groove *h* extending from the said recess or opening *g*, combined with the spring-arm *e* attached at its outer end to the said arm *c* and extending partly above said groove *h*, and the guide *f* carried by the said arm and extending into the said recess or opening *g*.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. CURTIS.

Witnesses:
JOHN A. REID,
JOHN J. SHAW.