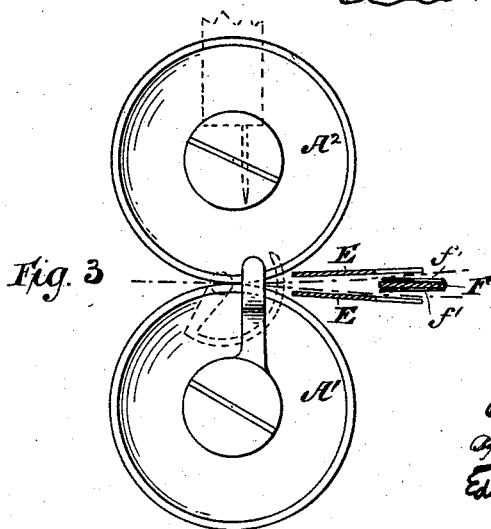
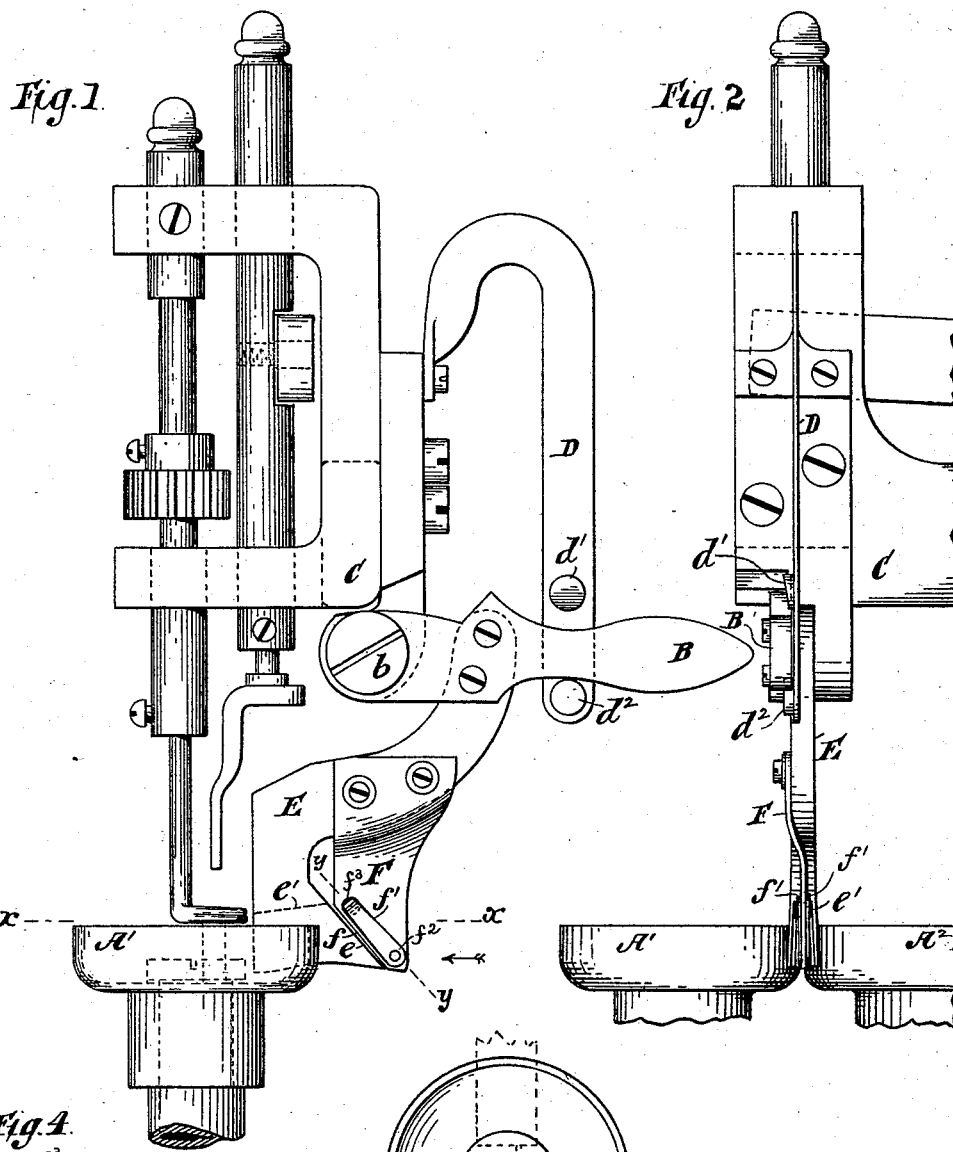


(No Model.)

E. WOOD.  
GUIDE FOR SEWING MACHINES.

No. 455,378.

Patented July 7, 1891.



Witnesses  
C. R. Thompson  
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# UNITED STATES PATENT OFFICE.

EDWIN WOOD, OF JOHNSTON, ASSIGNOR TO THE BRITISH HOSIERY COMPANY, OF THORNTON, RHODE ISLAND.

## GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 455,378, dated July 7, 1891.

Application filed July 21, 1890. Serial No. 359,409. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN WOOD, of Johnston, in the county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Guides for Sewing-Machines, of which the following is a specification.

My improvement is particularly applicable to machines which sew two edges of fabric together—as, for instance, the two edges of a stocking.

The object of the improvement is to provide a simple and efficient means whereby the two edges may be straightened or smoothed out if curled or wrinkled, and may be evened, or, in other words, may have their edges brought into line.

I will describe a machine embodying my improvement, and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is an elevation of a portion of a machine embodying my improvement. Fig. 2 is another elevation of the same, but taken in a plane at right angles to Fig. 1. Fig. 3 is a horizontal section taken at the plane of the dotted line  $x x$ , Fig. 1. Fig. 4 is a section at the line  $y y$ , Fig. 1.

Similar letters of reference designate corresponding parts in all the figures.

It is not necessary to describe the sewing mechanism, as it may be of the ordinary or any other suitable form.

$A' A^2$  designate two feed-wheels, by which the fabric may be automatically fed in the direction indicated by the arrow marked adjacent to Fig. 1. They may be rotated by any suitable means.

$B$  designates an arm which is pivoted by a screw  $b$  to the frame  $C$  of the machine, so that it may be rocked up and down.

$D$  designates a resilient metal strip fastened at one end to the machine-frame and capable of bending laterally. It has two horizontal projections  $d' d^2$ . When the arm  $B$  is swung into its lowest position, it will rest upon the projection  $d^2$ . When swung upward, it will pass the projection  $d'$ , and when released will rest on the upper portion of the same. Preferably the surface of the projection  $d'$

will be inclined, so that it will have a greater projection at the top than at the bottom, as in this way the arm will be enabled to deflect the strip  $D$  laterally and to pass the projection. When the arm is to be disengaged from the projection  $d'$ , the strip  $D$  will have to be bent laterally.

To the arm  $B$  an arm  $E$  is rigidly secured. It extends downwardly and toward the feed-wheels  $A' A^2$ . Its lower portion extends down between those portions of the feed-wheels with which the fabric to be sewed first contacts. The lower extremity of the arm  $E$  is bifurcated and inclined forwardly toward the lower end, as at  $e$ . Its bifurcate portion also flares or widens forwardly, as may best be understood by referring to Fig. 3. The top  $e'$  of its bifurcate portion, or, in other words, the portion which bridges over the space between the two bifurcate parts, is inclined downwardly toward the rear.

To the arm  $E$  a plate  $F$  is fastened. This is bent so that its lower portion will extend opposite the center of the bifurcate lower end of the arm  $E$ . At the rear it has an inclined edge  $f$ , which may correspond with the inclined edge  $e$  of the arm  $E$ . It will be seen that this edge  $f$  is slightly forward of the edge  $e$ , so that there is a space between these two edges in the direction of the width of the plate  $F$ .

The lower part of the plate  $F$  is provided with two springs  $f'$ , which are arranged at an incline corresponding to the incline of the edge  $f$ . These springs are fastened to the plate  $F$  at the lower end only and have their outer surfaces within the plane of the inner surfaces of the bifurcate portion. A rivet  $f^2$  serves as a convenient fastening for them. They diverge from each other and from the plate  $F$  toward their upper ends. The upper extremities are, however, bent laterally to extend through a hole  $f^3$ , with which the plate  $F$  is provided. By extending into the hole they are prevented from swinging out of position. The two edge portions of the fabric to be united are placed side by side and passed along in such position that if smoothed out their edges or selvages would extend above the upper extremities of the springs  $f'$ . These

ends of the springs serve to hold them up to their place. The edges or selvages are moved in the direction indicated by the arrow marked adjacent to Fig. 1. The springs *f'* press the  
 5 edges or selvages outwardly, so as to cause them to have a bearing on the edge *e* of the bifurcate parts of the arm E. Owing to the incline of this edge, the two pieces will be smoothed out if curled or wrinkled, and will  
 10 be kept smooth as they pass through the bifurcate portions of said arm E. Their edges will travel along the inclined top *e'* of the bifurcate portion of the arm E and will be forced downward. If one should be higher at any  
 15 portion than the other, it will be lowered more than the other, so as to bring both into line.

By my improvement I produce a simple and efficient device for smoothing and evening two edges of fabric to be united.

20 When it is not desired to use the arm E and plate F, the arm B is swung up onto the projection *d'*. At other times it rests upon the projection *d*<sup>2</sup>.

What I claim as my invention, and desire  
 25 to secure by Letters Patent, is—

1. In a sewing-machine, the combination, with feeding mechanism, of an arm having

a bifurcate lower portion inclined downwardly and rearwardly at the top and inclined downwardly and forwardly at the forward edge, 30 and spring-plates supported adjacent to the forward edge of said bifurcate portion and having their outer surfaces within the plane of the inner surface of said bifurcate portion, substantially as specified. 35

2. In a sewing-machine, the combination, with feeding mechanism, of an arm having a bifurcate lower portion inclined downwardly and rearwardly at the top and inclined downwardly and forwardly at the forward edge, 40 spring-plates supported adjacent to the forward edge of said bifurcate portion and having their outer surfaces within the plane of the inner surfaces of said bifurcate portion, and a rigid plate for supporting said springs, 45 substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN WOOD.

Witnesses:

W. G. CURRIE,  
 WILLIAM BONNELLO.