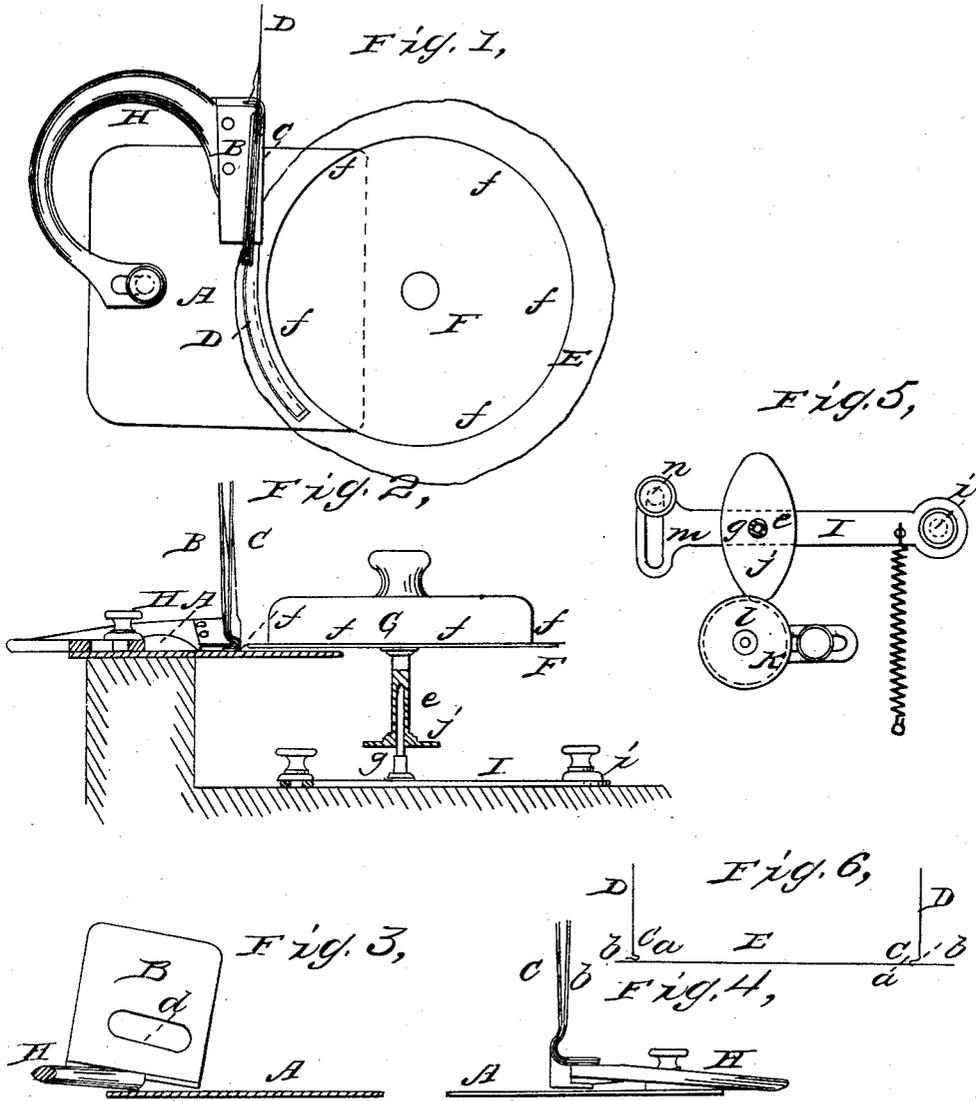


R. EICKEMEYER.  
Sewing Machine Guide.

No. 37,957.

Patented March 24, 1863.



witnesses:  
J. W. Coombs  
L. W. Reed

Inventor:  
R. Eickemeyer  
per Munnell &  
attorneys.

# UNITED STATES PATENT OFFICE.

RUDOLPH EICKEMEYER, OF YONKERS, NEW YORK.

## IMPROVEMENT IN SEWING-MACHINE GUIDES.

Specification forming part of Letters Patent No. 37,957, dated March 24, 1863.

*To all whom it may concern:*

Be it known that I, RUDOLPH EICKEMEYER, of Yonkers, in the county of Westchester and State of New York, have invented a new and useful Improvement in Sewing-Machine Guides; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of my invention is to provide for the folding of the edge of the band and the putting together and sewing in a sewing-machine of the crown-piece and band of a cap or hat lining.

It consists in a guide of novel construction for folding the edge of the band; also, in the combination of such guide and a circular rotating disk carrying the crown-piece with each other and with a sewing-machine for putting the crown-piece and band together and guiding them to the needle of the machine to be sewed.

Figure 1 in the accompanying drawings is a top view of the work-plate or bed of a sewing-machine with my invention applied. Fig. 2 is a back view of the same with the work-plate in section. Fig. 3 is a front view of the band-folding guide. Fig. 4 is a side view of the same. Fig. 5 is a top view of the device for obtaining a vibrating motion of the circular rotating disk for sewing a hat-lining or cap with an elliptical crown. Fig. 6 is a central section of a hat-lining or cap, illustrating the manner in which the crown and band are sewed together.

Similar letters of reference indicate corresponding parts in the several figures.

A is the work-plate or bed of the sewing-machine.

B C is the guide for folding the edge of the band. Before describing the guide, it will be well to explain the character of the fold to be produced.

D (represented in red color in Fig. 6) is the band, and E (represented in blue color) is the crown-piece. One edge of the band is doubled by folding, as shown at *a a* in Fig. 6, and at a short distance from the fold it is turned in at a right angle, as shown at *b b* in the same figure, and it is stitched through the doubled part to the crown-piece, as shown at *c c*. The guide B C is composed of two plates united

and closed at their lower edges, but open at the top, as shown in Fig. 2. The upper portions of the said plates are flat and occupy an upright position; but the lower portions are curved in the manner shown in Figs. 2 and 4, commencing in front with a broad rounded curve, as shown in Fig. 4, and gradually assuming the form shown in Fig. 2, which exhibits the rear end, the last-mentioned form corresponding with that to be given to the lower edge of the band of the hat-lining or cap as described with reference to Fig. 6. The space between the plates B and C is just wide or thick enough to permit the free passage of a single thickness of the material of which the band is composed, except at the top, where it is slightly widened to allow the material to be easily entered between them. The said guide is firmly attached to an arm, H, which is screwed to the bed A in such a manner as to permit the guide to be properly adjusted relatively to the path of the needle of the sewing-machine. The bottom of the said guide is inclined, the rear end being nearly in contact with the bed A and the other end somewhat raised; and in its two plates A and B there are opposite each other elongated holes *d*, wide enough to admit the tips of the thumb and finger of one hand to take hold of the cloth or other material to draw it into the guide, the said holes having an inclination in the same direction as but greater than the bottom of the guide, as shown in Fig. 3.

F is the horizontal rotating disk, which carries the crown-piece of the lining or cap attached to a central sleeve, *e*, which is fitted to turn freely upon an upright spindle, *z*. This disk is smaller than the crown-piece, and is arranged to lap over a portion of the bed A, and the guide B C is so arranged relatively to it that its upright part is tangential, or nearly so, to the said disk, and in such position relatively to the path of the needle that it will guide the double marginal portion of the band to the needle as the band is carried along by the feeding device. The said disk has projecting from its upper surface a circular series of points or pins, *f f*, to penetrate and attach to it the crown-piece of the lining or cap.

G is a weight, made of wood or other not very heavy material, to be placed upon the crown-piece within the circle of the pins *f f*,

for the purpose of confining the crown-piece on the said pins and insuring its attachment to the disk.

To make the lining or cap, the crown-piece N is placed on the disk F with its edges lapping the edges of the disk all around, and the weight G placed upon it, and the band D is inserted singly into the guide B C, and drawn toward the lower end thereof by taking hold of it with the finger and thumb through the elongated holes *d*, and moving the finger and thumb from the higher toward the lower end of the said holes. In this operation the holes *d* serve as guides to the fingers and cause the band to be pulled downward at the same time as it is drawn lengthwise through the guide, and in this way the lower edge of the band is folded as shown in Fig. 6. When the band has been drawn far enough through the guide to come under the pressure pad or foot of the sewing-machine and to be perforated by the needle the machine is started and the crown-piece and the band are together laid hold of and moved by the feeding device, the crown-piece having a rotary motion, which is the only motion permitted to it by the disk F, and the band moving in straight lines until it arrives at the needle and is stitched to the crown-piece, after which it takes the circular form of and moves round with the crown-piece until it forms a complete circle thereon, and so completes the lining or cap, when the machine is stopped and the lining or cap removed.

To provide for sewing a crown of oval form, the spindle *z*, upon which the disk G rotates, is secured to a horizontal arm, I, which is arranged to vibrate upon a fixed pivot, *i*, secured in the stand of the sewing-machine, and upon the sleeve *e*, I secure an oval cam, *j*, which is at such height as to be capable of working in contact with a horizontal roller, *k*, which is fitted to rotate freely upon a stationary but

adjustable pin, *l*. A spring is applied to arm I to draw it toward the roller *k* and bring the cam *j* into contact with the said roller, and there is a slot, *m*, in the said arm, through which passes a set-screw, *n*, which, when screwed down, serves to secure the arm in a fixed position, and when not screwed down serves as a stop to limit the vibration of the arm. When a circular lining or cap is being made the roller *k* is moved out of the way of the cam, and the arm I secured in a fixed position; but for sewing an oval one the set-screw *n* is unscrewed, to leave the arm free to vibrate, and the roller *k* is brought into and secured in a position in which the cam *j* will work in contact with it and so produce an oscillating movement of the arm I and of the disk F. This oscillating movement of the disk combining with its rotary movement makes the marginal portion of the crown-piece E to which the band is sewed describe a somewhat elliptical figure and gives that form to the lining or cap. The form may be varied by setting the roller *k* more or less in or out to produce a greater or less vibration of the arm I.

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

1. The guide B C, constructed with holes *d*, which are arranged in such oblique direction that they not only admit the finger and thumb to draw the band into the guide, but guide the finger and thumb in the proper direction to commence the turning of the fold, substantially as herein specified.

2. The guide B C and rotating disk F, combined with each other and with the sewing-machine, substantially as and for the purpose herein specified.

R. EICKEMEYER.

Witnesses:

JACOB READ,  
LYMAN COBB, Jr.