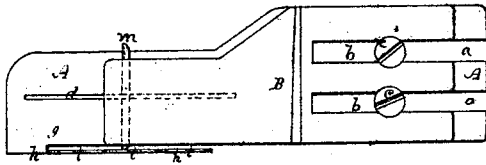


*Boomer & Haskins,  
Guide.*

*No. 102,082.*

*Patented April 19, 1870*

*Fig. 1.*



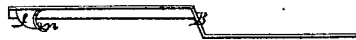
*Fig. 2.*



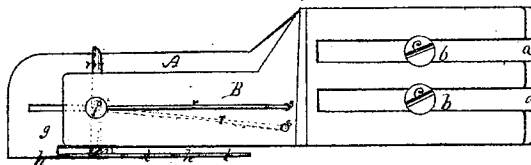
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses,

*D. J. Brown  
W. A. Henderson*

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By their atty.,  
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# UNITED STATES PATENT OFFICE.

ALMON W. BOOMER AND JOHN P. HASKINS, OF POULTNEY, VERMONT.

## IMPROVEMENT IN HEMMERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 102,082, dated April 19, 1870.

To all whom it may concern:

Be it known that we, ALMON W. BOOMER and JOHN P. HASKINS, of Poultney, in the county of Rutland and State of Vermont, have invented an Improved Folding and Hemming Guide for Sewing-Machines; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a top view of the improved guide; Fig. 2, a view of the front edge thereof; Fig. 3, an end view of the same; Fig. 4, a front edge view of one of the parts detached; Fig. 5, a top view, showing an additional feature of the invention.

Like letters designate corresponding parts in all of the figures.

We employ two guide-plates, A and B, the plate A resting upon the cloth-plate of the sewing-machine and the plate B resting on the other plate. The plate A has slots *a a* and the plate B corresponding slots, *b b*, by which both plates may be secured and adjusted by means of screws *c c* upon the sewing-machine, and one plate on the other. A longitudinal slot, *d*, in a branch of the plate A, and a projecting feather, *f*, on the bottom of the plate B, situated so as to slide in the said slot, serve to keep one plate in the proper position over the other.

The under plate, A, has a branch portion, *g*, first projecting in a curved form upward from the main portion, near the middle thereof, to the height of about one-fourth of an inch, more or less, and thence extends parallel with the main portion to the end thereof, its front edge, *h*, turning downward, so as to nearly reach the main plate, but leaving sufficient room, as at *i*, for the cloth to enter between. This space *i* extends upward and over the turned edge *h*, separating it from the branch plate *g* at the top, and terminates in a series of downward curves or notches, *l l*, substantially as shown in Fig. 2, and at uniform distances apart. These curved notches turn the edge of the cloth, so as to produce the folding of the same as it emerges from the guide, after the cloth has once been properly entered

into the space *i*, and the different notches determine the width of the hem. The right-hand notch produces the narrowest hem, the next notch to the left a wider hem, and so on, increasing in width to the last notch at the left hand. These distances of the notches and their number may be such as to fulfill the purpose of varying the width of the hem as required.

The upper guide-plate, B, has a curved folding-plate, *m*, situated under the branch plate *g* of the lower plate, A, the connection with the main plate being made through the slot *d*. This folding-plate corresponds in form, and at the front end in size, with the curved notches *l l* in the edge *h* of the branch plate *g*, and it can be brought exactly opposite to either of the said notches by adjusting the position of the plate B on the plate A. This determines the width of the hem. In the drawings, Figs. 1 and 2, the folding-plate is represented as adjusted to the third notch from the right. The folding-plate thence extends backward across the plate B, and may terminate a little beyond the rear edge thereof. As it extends backward it narrows, as shown in Fig. 3, so as to gradually fold the thicknesses of the cloth close together. The plates A and B are correspondingly closer together at the rear than at the front edges.

In Fig. 5 the folding-plate *m* is shown pivoted at *p*, where it moves in the slot *d* of the plate A. Then a spring or equivalent rod, *r*, extends to the right over the plate B and terminates in a hook or catch which springs down into a hole, *s*, in the plate, as shown. In this position the folding-plate is parallel with the edge of the cloth; but for turning very narrow hems, narrower than the first right-hand notch *l* will make, the rod *r* is moved into another hole *s*, as shown by dotted lines, so as to throw the rear end of the folding-plate to the right. In this position the folding-plate will press against the hem and narrow it down as small as desired.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the guide-plate A, provided with the folding-space *i* and notches *l l*, and the guide-plate B, provided with the

curved folding-plate *m*, the plate B being adjustable on the plate A, all substantially as and for the purpose herein specified.

2. The pivoted folding-plate *m*, with its adjustable guide-rod *r* or its equivalent, substantially as and for the purpose herein set forth.

The specification of this invention signed by us November 6, 1869.

ALMON W. BOOMER.  
JOHN P. HASKINS.

Witnesses:

J. B. BEAMAN,  
B. G. RICE.