GASKILL & KNIGHT.

Hemming Guide.

No. 47,630. Patented May 9, 1865.

FIG. 1

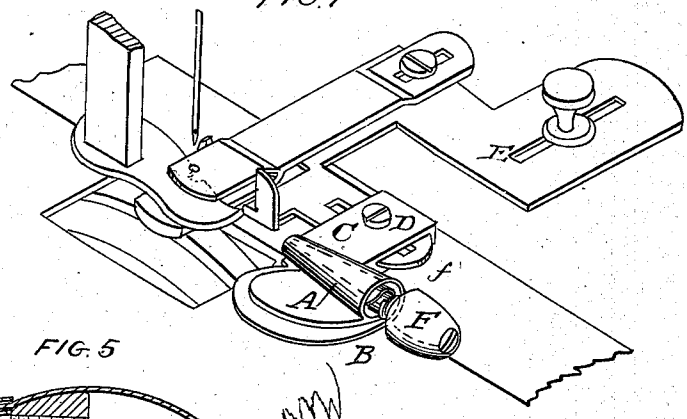


FIG. 5

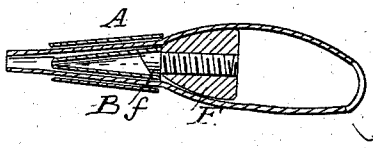


FIG. 4.

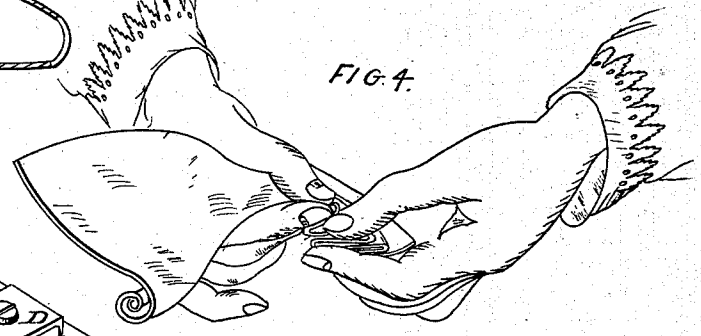


FIG. 2.

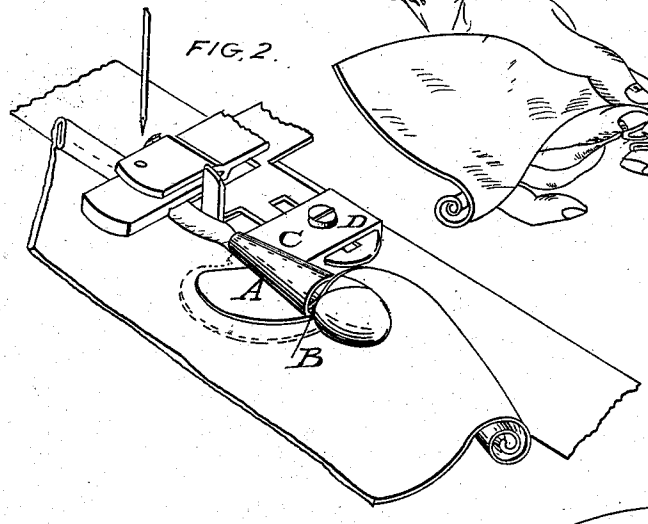
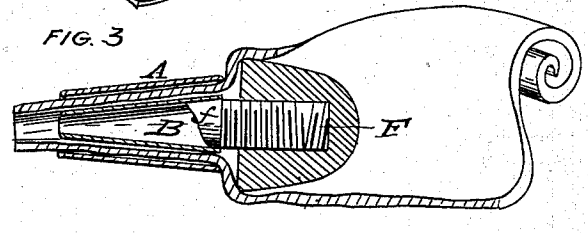


FIG. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

WM. GASKILL AND GEO. H. KNIGHT, OF CINCINNATI, OHIO.

IMPROVEMENT IN HEMMING-GUIDES.

Specification forming part of Letters Patent No. **47,630**, dated May 9, 1865.

To all whom it may concern:

Be it known that we, WILLIAM GASKILL and GEORGE H. KNIGHT, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Hemming Guides or Scrolls for Sewing-Machines; and we do hereby delare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Our invention relates to a provision upon a sewing-machine hemming-guide for the automatic cross or counter crimping and smoothing out of curled, creased, or wrinkled edges of woven fabrics in the act of entering the scroll, so as to enable the hemmer to operate upon the most refractory material without the necessity of previously flattening its edge by a hot iron, or of resorting to the still more tedious expedient, familiar to seamstresses, of cross-crimping by hand.

Figure 1 is a perspective view of a hemming-guide embodying our invention. Fig. 2 represents our guide with a piece of cloth in position. Fig. 3 is an enlarged axial section of the guide, showing its peculiar crimping action on the cloth edge. Fig. 4 is designed to illustrate the process of hand-crimping. Fig. 5 shows a modification of our invention.

Our scroll consists of a double volute or pair of convoluted plates, A and B, united permanently together at their interior convolutions, and converging toward their delivery ends in the manner shown. The said scroll is connected to the cloth-plate of a sewing-machine by means of suitable flange, C, screw D, and plate E, or by any other suitable means that may accord with the style or requirements of any specific machine. We render the scroll available for a large class of refractory goods which are liable to have their edges improperly curled or creased—such as Kentucky jeans, duck, and other like fabrics—by providing the receiving end of the inner convolution, B, of the scroll with an axial stem, *f*, screw-threaded to fit an interiorly screw-threaded head or knob, F, which is abruptly shouldered at its end nearest the scroll, whose outer convolution it slightly exceeds in diameter.

When required for use the head F is adjusted to such a longitudinal distance from the receiving end of the scroll as, without entirely closing the entrance thereof, to sharply crease or crimp the cloth transversely to its edge, as represented in Figs. 2 and 3, thus performing quickly and effectively by an automatic agent work heretofore requiring the fingers or the smoothing-iron of the seamstress. (See Fig. 4.)

By adjusting the head F away from or near to the entrance of the scroll the instrument may be adapted for use with goods of any thickness and condition.

By adjusting the head F in proximity to the mouth of the scroll, suitable to the substance and nature of the goods, a double reverse crimp is imparted thereto in a direction transverse to any curl, crease, or reverted fold of its edge, as shown in Figs. 2 and 3.

In using our scroll with goods of a less refractory texture—such as army-cloth, tweed, &c.—the position of the head with reference to the scroll may be reversed, as shown in Fig. 5, and will then act simply to spread the cloth and to insure its entrance into the scroll in a smooth and unwrinkled condition.

We have selected, to illustrate our invention, a construction which has proved effective in actual use; but we do not desire to restrict the improvement to the precise forms herein represented, as the same results may be attained by means substantially equivalent. For example, the head F may have a screw-threaded stem entering a correspondingly screw-threaded socket in the scroll; or the head may be secured to a smooth axial prolongation by means of a set-screw, and may be of somewhat different form, as globular, egg-formed, or oblong, or for work of uniform substance and quality the head may be permanently united to the stem.

By constructing our head or knob F with an abrupt shoulder of greater diameter than the outer scroll it is adapted to act with better effect in straightening any irregularities in the goods than previous devices in which the head has been made of smaller diameter than the scroll or without the abrupt shoulder.

We claim herein as new and of our invention—

1. The provision at the receiving end of a hemming-scroll of the abruptly-shouldered axial head or knob F, of diameter greater than

that of the outer convolution of the scroll for the automatic cross-crimping of the cloth edge in the act of entering the scroll, substantially as set forth.

2. A hemming-scroll provided at its receiving end with the screw-threaded axial prolongation *f*, having the adjustable head or knob F, as set forth, or its equivalent.

In testimony of which invention we hereunto set our hands.

WILLIAM GASKILL.
GEO. H. KNIGHT.

Witnesses:
JAMES H. LAYMAN,
F. MILLWARD.