

## United States Patent Office.

ELIJAH LEAVITT HOWARD, OF MALDEN, ASSIGNOR TO GEORGE AUGUSTUS WHITING, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 113,669, dated April 11, 1871.

## IMPROVEMENT IN RUFFLE-GUIDES AND BAND-FOLDERS FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, ELIJAH LEAVITT HOWARD, of Malden, of the county of Middlesex and State of Massachusetts, have invented a new and useful Ruffle-Band Folder, for use with a sewing-machine; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view;
Figure 2, a front elevation;
Figure 3, a rear elevation;
Figure 4, a rear end view, and
Figure 5, a front end view of it;
Figure 6 is a top view; and

Figure 7, a rear side elevation of it, with a double-banded ruffle extended through it.

The apparatus or implement constituting my invention is intended to bend over and lay together two bands stitched to a ruffle laid between them.

A transverse section of the two bands and the ruffle as they appear on emanating from a machine for ruffling or corrugating a band, and sewing it to two others, is shown in Figure 8, in which—

A denotes the ruffle, and B C the bands sewed to it.

The hem of the ruffle and the two bands are shown at a.

The folder is designed to receive the two bands B C, the hem a, and the ruffle, and turn the bands from the ruffle, and lay one band on the other with the hem between them, all as shown in Figure 9.

The bands and ruffle as they come from the ruffling and sewing machine are stitched together, as shown at b, (see fig. 8.) They, after passing through the folder, receive another row of stitching, as shown at c in fig. 9.

The folder is formed of a plate, D, of metal, bent

at its middle so as to make thereat a channel, d, for reception of the hem a, after which each of the two halves or parts of the plate is doubled on itself, in manner as shown at ef in figs. 4 and 5, a space, g, being left between the doublings ef to receive a band, B or C.

The doubled parts have their edges brought nearly together in front of the channel d, so as to form between them another channel or space, e', to receive the ruffle near its junction with the two bands B C.

The two band-guides or holders D D, consisting of the parts efef, arranged as described, are curved, and converge toward one another in manner as shown in the drawing, and one of them is to be provided with or be fixed to an ear or plate, E, arranged as shown, the said ear or plate being to enable the folder to be fixed to the bed-plate of a sewing-machine or to a table or bench, as occasion may require.

The application of the ruffle and its bands to the folder for the purpose of having the bands folded upon one another, or one upon the other, is shown in figs. 6 and 7.

As the ruffle and its bands may be drawn through the folder the bands will be turned back from the ruffle and laid together, as shown in fig. 9.

I claim as my invention—

The ruffle-band folder, made substantially as described and represented, viz., of the two band-guides D D, the hem-guide or channel d, and the ruffle-guide or passage e, all arranged and formed substantially as shown and explained.

ELIJAH LEAVITT HOWARD.

Witnesses:

R. H. Eddy,

J. R. Snow.