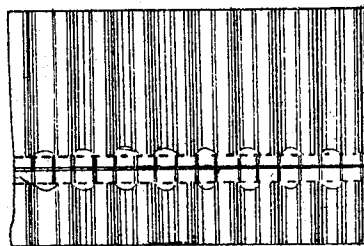
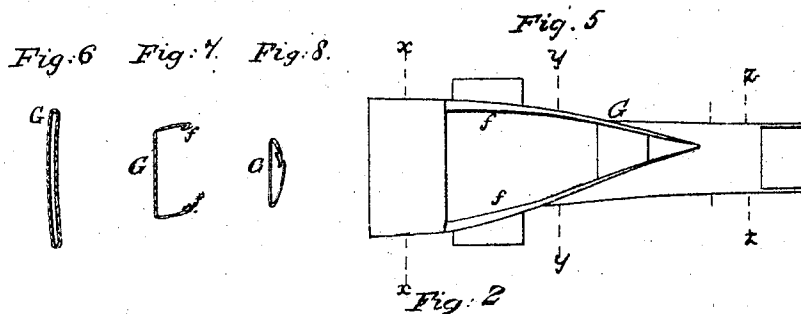
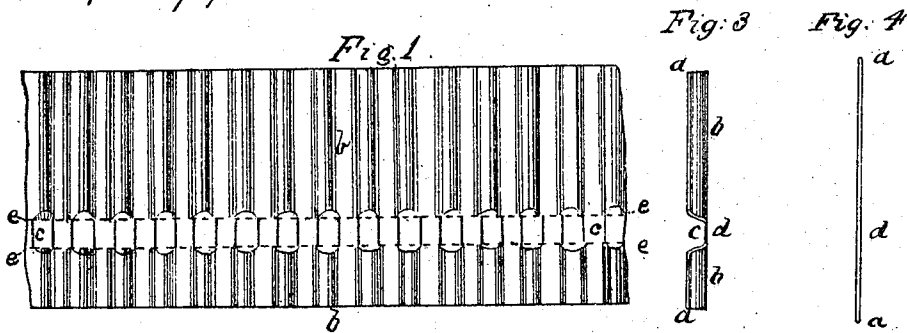


E.C. Wooster

Ruffle.

N^o 40877.

Patented Dec. 8. 1863



Witnesses.

Inventor.

Mr. J. A. Duclao
G. B. Rees

Emma C. Wooster

UNITED STATES PATENT OFFICE.

EMMA C. WOOSTER, OF NEW YORK, N. Y.

IMPROVEMENT IN RUFFLES.

Specification forming part of Letters Patent No. 40,877, dated December 8, 1863.

To all whom it may concern:

Be it known that I, EMMA C. WOOSTER, of the city, county, and State of New York, have invented a new and Improved Ruffle; 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 part of this specification, in which—

Figure 1 is a face view of a piece of the ruffle. Fig. 2 is a back or under side view of the same. Fig. 3 is a transverse section of the same. Fig. 4 is a transverse section of the strip of muslin or other material of which the ruffle is made, representing it as prepared for fluting. Fig. 5 is a back view of the guide by which the strip is prepared for fluting. Figs. 6, 7, and 8 are transverse sections of the guide in the lines *x*, *y*, and *z* of Fig. 5.

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

This invention consists in a two-ply ruffle composed of a single piece of cloth doubled by turning inward and folding both of its edges, having the two edges secured by two lines of sewing or stitching, running lengthwise of the piece, with two frills which extend outward from the said lines of stitching and with a series of flattened plaits between them, the stitching serving the purpose of confining the plaits and frills as well as the edges of the piece.

To enable others skilled in the art to make my ruffle, I will proceed to describe its manufacture with reference to the drawings.

I first take a strip of muslin or other fabric of double the intended width of the ruffle, and then double it by turning both edges inward and folding them down, as shown in Fig. 4, in such lines as to make the two edges meet each other, as shown at *d*, the folds *a a* being at a greater or less distance from the two edges of the strip, according as the two frills *b b* are desired to be the same or of different widths, the meeting of the edges being intended to come in the center of the flattened or band-like portion *c* of the ruffle between the two frills. The strip, having been thus folded, is fluted or crimped transversely and a portion of its width flattened, as shown at *c*, and it is then stitched or sewed longitudinally in the two lines *e e* within the said flattened portion

and on opposite sides of the line *d*, in which the edges meet. The ruffle made in this way requires no hemming when made from a raw-edged strip, as the raw edges are secured by the same two seams or lines of sewing *e e*, which secure the frills and the plaits of the flattened or band-like portion *c* of the ruffle, and the frills are composed of two thicknesses of fabric.

This ruffle may be formed in various ways, but I propose to make it by the machine which constitutes the subject-matter of Letters Patent No. 39,328, granted to me on the 21st day of July, 1863, merely substituting for the common straight guide described in the specification of those Letters Patent a folding guide, *G*, such as is represented in Figs. 5, 6, 7, and 8 of the accompanying drawings. The entrance to this guide, which is at the left-hand end of Fig. 1, is made in the form of a flat tube of a width equal to double the intended width of the ruffle, in order that the strip of which the ruffle is to be composed may enter it without previous folding. At a short distance from the mouth the under side of the tube is open, having only a narrow rim, *f f*, on each side, and the sides of the guide are gradually turned till it assumes at or near the right-hand end, which is close, or nearly so, to the fluting-rollers, the form shown in Fig. 8. The strip, in being drawn through this guide, by and toward the fluting-rollers, is folded in the manner shown in Fig. 3, and in this condition delivered between the rollers to be fluted and flattened. After the ruffle has come from the ruffling or fluting machine it is taken to a sewing-machine and sewed or stitched in the two lines *ee*. This machine should preferably be a double one—that is to say, should have two perforating needles and the necessary appliances for producing both lines of stitching or sewing at once.

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

The two-ply ruffle herein described, composed of a single piece of cloth, folded, fluted, or crimped, and sewed or stitched, substantially as herein specified.

EMMA C. WOOSTER.

Witnesses:

THOS. S. J. DOUGLAS,
GEO. W. REED,