

S. E. BARNEY.

Machines for Making Plaited Puffings.

No. 156,119.

Patented Oct. 20, 1874.

fig. 1

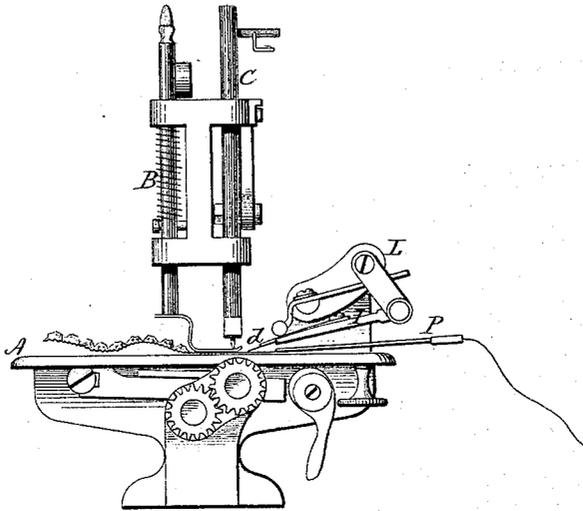


fig. 4

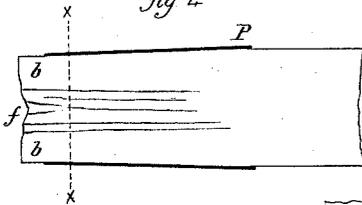


fig. 2.

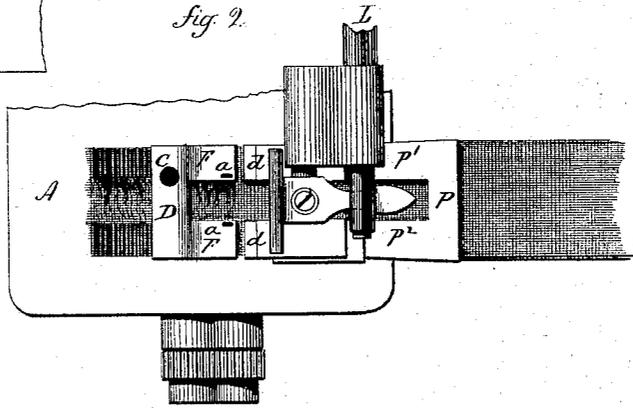


fig. 5



fig. 6



fig. 3.

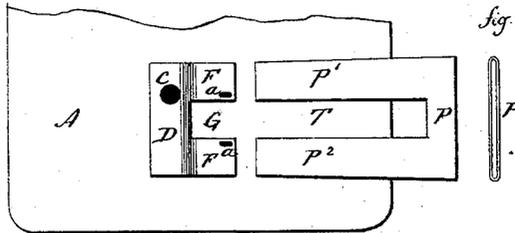


fig. 3<sup>a</sup>

Witnesses.  
*[Signature]*  
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Inventor  
By Atty.  
*[Signature]*

# UNITED STATES PATENT OFFICE.

SAMUEL E. BARNEY, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN MACHINES FOR MAKING PLAITED PUFFING.

Specification forming part of Letters Patent No. **156,119**, dated October 20, 1874; application filed February 5, 1874.

*To all whom it may concern:*

Be it known that I, SAMUEL E. BARNEY, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Machine for Making Plaited Puffing; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification and represent, in—

Figure 1 an end view; Fig. 2, a partial top view; and in Figs. 3, 4, 5, and 6 detached views.

This invention relates to a machine for making that class of plaited trimming known to the trade as "puffing"—that is, a trimming having a line of plaits at each edge, and the fabric between these two lines full or puffed, as seen in Fig. 2, the object of this invention being to raise the center or puffed portion above the plaited edges; and the invention consists in combining with a divided or slotted plaiter or crimper a divided or slotted presser-foot and a stitching mechanism, a guide for the fabric slotted and diminishing in width from the mouth where the fabric is introduced to the plaiting device, so that the fabric passing through said guide will be full up into the slot in the guide, while the edges, as the fabric passes from the guide, will be crimped or plaited, as more fully hereinafter described.

A is the work-plate of the Willeox & Gibbs sewing-machine; B, the presser-foot spindle; C, the needle-bar, the needle-bar carrying two needles, as in the Crosby & Kellogg patent, granted December 2, 1862, the needles arranged to pass through the presser-foot and work-plate at *a a*, and the usual mechanism provided for interlacing the thread and feeding the work. The presser-foot D is attached to the spindle C in the usual manner, and the foot divided into two parts, F F, so as to leave a space, G, between the two parts, as seen in Fig. 3, this space being equal or nearly so to the width of the line of puffing, as seen in Fig. 2. *d d* are the two plaiting or crimping blades distant from each other equal or nearly so to the width of the center line of puffing. These may be separate blades at-

tached to a holder, I, or a single blade slotted, the said blades operated to form the crimps or plaits substantially as in the Crosby & Kellogg machine before referred to—that is, to receive a reciprocating motion from the sewing-machine shaft through a rock-shaft, L, the said blades working to force the fabric into crimps between the work-plate and presser-foot, or other suitable holding mechanism. Back of the crimping-blades the guide P is fixed to the work-plate, the width at the outer end being that of the fabric to be introduced, contracting toward the blades to the extent of the transverse fullness required for the puffing. A slot, T, is formed in the center, or on the line to be transversely full. The two sides P<sup>1</sup> P<sup>2</sup> hold the edges flat, and in that condition (see Fig. 4) the fabric is presented to the blades—that is, a portion, *b*, at each edge flat, the center or intermediate space *f* full. The flat edges are crimped or plaited as the fabric is fed through the machine. The intermediate portion of the fabric passing through the slots or space in the blade and presser-foot is not pressed or laid, but receives the fullness of the crimps, which, combined with the transverse fullness given it by the contracting-guide P, raises the center or that portion between the plaits, as seen in Fig. 6, giving it a puffed appearance, as seen in Fig. 2. In passing through the plaiting or crimping apparatus the stitching mechanism secures the plaits by an independent line of stitches at or near the inner edge of each line of plaits or crimps.

Without the contracting-guide P a very good effect is produced, but the center would not be raised or full to the same extent.

I do not broadly claim a slotted or divided presser-foot.

I claim as my invention—

In combination with a work-plate and stitching mechanism, the slotted or divided presser-foot F F, and the correspondingly slotted or divided plaiting or crimping blades *d d*, the slotted or divided contracting-guide P, substantially as described.

SAMUEL E. BARNEY.

Witnesses:

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