J. L. & G. H. BLISS.

PLAITING-MACHINE.

No. 192,221. Patented June 19, 1877.

Fig. 1

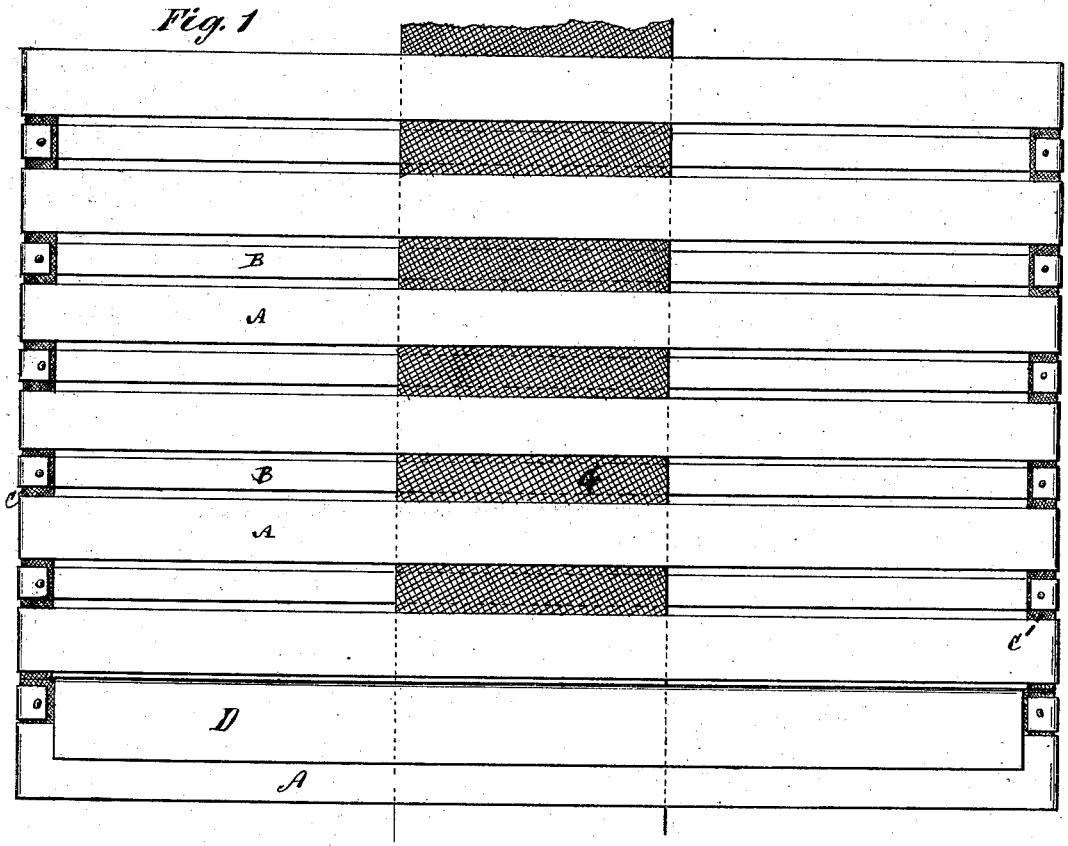


Fig. 2

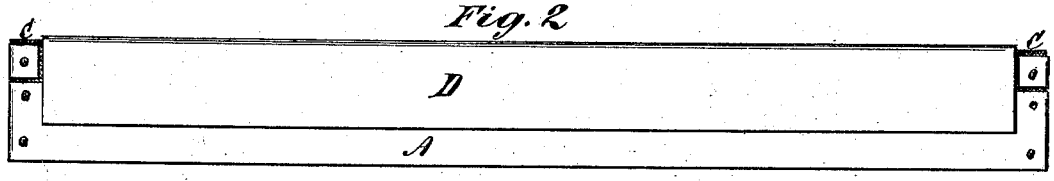
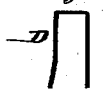


Fig. 3



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JOHN L. BLISS, OF LENOX, AND GEORGE H. BLISS, OF WEST STOCKBRIDGE, MASS.; SAID JOHN L. BLISS ASSIGNOR TO SAID GEORGE H. BLISS.

IMPROVEMENT IN PLAITING-MACHINES.

Specification forming part of Letters Patent No. **192,221**, dated June 19, 1877; application filed March 16, 1877.

To all whom it may concern:

Be it known that we, JOHN L. BLISS, of Lenox, in the county of Berkshire and State of Massachusetts, and GEORGE H. BLISS, of West Stockbridge, in the aforesaid county and State, have invented certain new and useful Improvements in Plaiting Devices, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention consists in a flexible folding-plaiter, composed of a series of slats of different widths, arranged one in advance of the other, and tapes or bands, to which said slats are permanently secured at or near their opposite ends. The material to be plaited is alternately passed above and below the slats throughout the series of slats, and the latter afterward piled by folding one upon the other, and pressure applied to permanently mark the plaits as determined by the slats in their relation with the fabric. After this the plaiting device is spread out again, and the plaited fabric or plaited portion thereof drawn out from between the slats without removing the latter, and, if desired, a fresh portion of the goods adjusted between the slats by such removal of the plaited portion to extend the continuity of the plaited surface.

Figure 1 represents a face view of the flexible slatted plaiter as extended, and with a strip of cloth or fabric as run therethrough for the purpose of being plaited. Fig. 2 is a top view of the plaiter as folded and clasped; and Fig. 3, a transverse section of a clasp used to secure the folded plaiter.

A and B are the slats, arranged parallel with each other, and one in advance of the other, at a slight distance apart, and alternately permanently secured at their ends on reverse sides of the tapes or bands C C, which may be parallel with each other, supposing the slats to be of equal length. The slats A B may be made of any thin elastic metal or material, and are alternately wide and narrow.

D is a grooved or gutter-like clasp, two of which may be used for securing the folded plaiter on opposite sides while being pressed. G is a strip of cloth to be plaited.

To use the invention, place the cloth G, wrong side up, in the plaiter by passing the cloth over certain of the slats and under others, where it is desired to make a fold. This may be done by springing with the thumb and finger the last-mentioned slats sufficiently to slip the cloth under them. When it is required to leave a wider space between the plaits than each succeeding slat affords, then enough of slats should be skipped, as regards the run of the cloth beneath them, to give the required space. The following example will serve to illustrate this variable use of the plaiter: For knife-plaiting, skip every other one of the slats, and fold under the narrow slats for fine plaits, and under the wide slats for wider plaiting. Box or double-box plaiting is made by making one or two folds, then skipping one or two the reverse of the first folds, then skip for the space between about the width of what has already been made, and repeat. Cluster and other kinds of plaiting may also be done.

The cloth G may either be placed straight through the plaiter or diagonally therethrough, accordingly as the plaiting is required to be straight or diagonal.

After the cloth has been properly arranged within the plaiter, the slats of the latter are folded, in reverse directions, one upon the other, where it is desired to make folds in the cloth so as to make up a pile, after which the grooved or gutter-shaped clasps D are inserted on opposite sides of the folded plaiter to hold the latter in place while pressing. A slightly-damp cloth is then placed upon the plaiter, and the whole pressed dry on a smooth board.

The strip of cloth G should not be removed from the plaiter until the whole strip is plaited throughout its length, but the folded portion be simply drawn through the plaiter, and the operation of folding and ironing or pressing be repeated.

We claim—