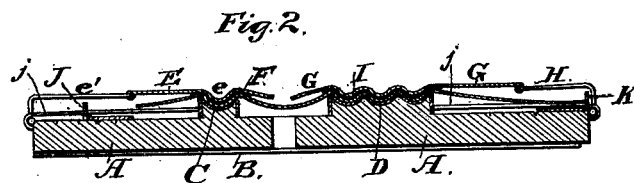
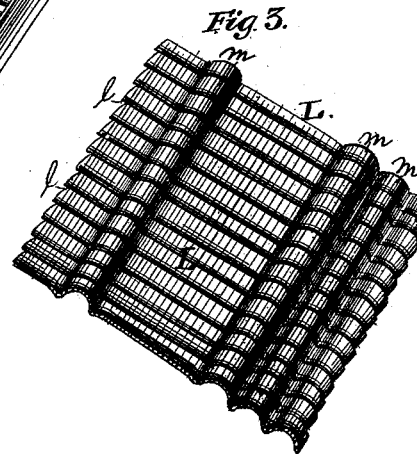
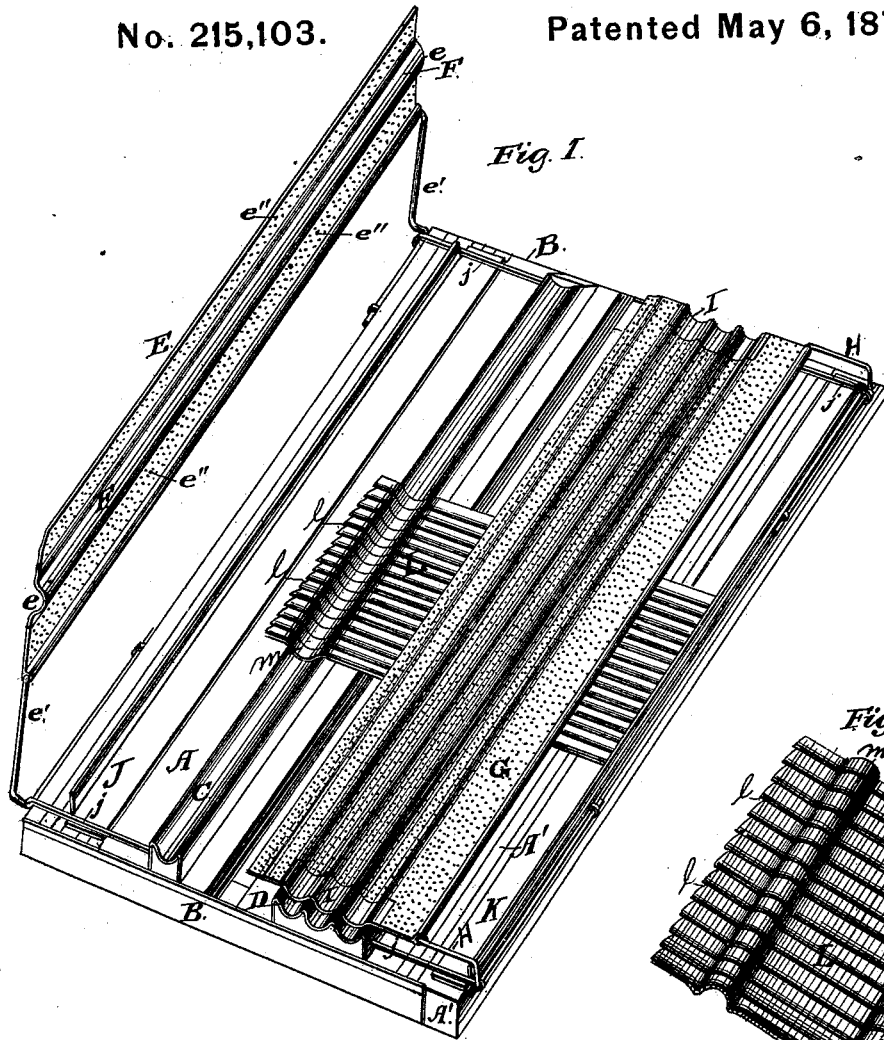


M. W. BOON.
Fluting-Machine.

No. 215,103.

Patented May 6, 1879.



Attest:
F. P. Brock.
D. S. Stuart

Inventor:
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By W. B. Richards,
Atty.

UNITED STATES PATENT OFFICE.

MARTIN W. BOON, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. **215,103**, dated May 6, 1879; application filed February 5, 1879.

To all whom it may concern:

Be it known that I, MARTIN W. BOON, of Galesburg, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Machines for Fluting Plaited Goods; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a perspective view of a construction embodying my invention. Fig. 2 is a transverse vertical sectional view. Fig. 3 is a perspective view of the goods made by this machine.

This invention relates to a press for fluting plaited trimmings of cloth transversely to the plaits; and consists, first, in a die formed of cameo and intaglio parts, having the necessary forms to stamp or press the cloth between them, one of which may be perforate or imperforate, and the other of which is perforated to permit the steam to escape while pressing the goods with a hot iron; second, in the use of a dampening-cloth attached to the perforated part of the die, so that it may be readily wetted and retained in proper position for operation.

The invention further consists in improvements relating to adjustable gages and mounting different dies on blocks, which may be adjusted toward or from each other, as herein-after described, and set forth in the claims hereto annexed.

Referring to the drawings by letters, the same letter indicating the same part in the different views, letters A A' represent two bases or blocks, the one A secured at each end to plates B, and the other, A', adjustably fixed to the plates B, so that it can be slid to or from the block A. The upper side of the block A has a raised portion, in which is a groove, C, and the block A' has a similarly-raised portion with grooves D in its upper surface.

The number of grooves C D may be varied at pleasure, and are preferably covered with

tin or other thin metal, if not constructed of metal.

E is a plate of tin or other suitable metal, with one side having a bead, *e*, which fits the groove or flute C in the block A, and is hinged to wires *e'*, which are, in turn, hinged to the block A, so that the plate E can be turned up, as shown at Fig. 1 of the drawings, or down to seat the bead *e* in the groove C. The plate E is perforated closely with small holes *e''*.

F is a strip of cloth placed on the bead *e*, and its ends turned upward over the plate E and pasted or otherwise secured to hold it in place. G is a perforated plate, fitted to the grooves D, and hinged by wires H to the plate A', and has a strip of cloth, I, on its under side attached same as cloth F, and as shown at Fig. 1 by the cloth I.

J is a gage-plate, its ends seated in ways *j*, so that it can be adjusted at different distances from the groove C. K is a plate similar to J, and similarly adjustable on the base A' and toward and from the grooves D.

L is a piece of plaited dress-trimming, with ordinary plaits *l* in the cloth, formed by any ordinary plaiting-machine, or by hand, and also with flutes *m* transversely to the plaits *l*, and formed by my press, as follows: The plaited strip of cloth to be fluted is placed upon the groove D or C, as desired, or upon both sets of grooves when a wide strip is used, and the block A' may be adjusted to or from the block A to suit different widths of goods.

Either gage J K may be adjusted so that the edge of the cloth L may be placed against it to get it into proper position to produce straight grooves or flutes in the goods. The cloth or cloths F I are then dampened with a sponge or otherwise, and the plate or plates E or G, whichever is being used, turned down upon the cloth L, as shown by Fig. 2 of the drawings, when a hot iron may be passed over the top of the plate E or G, or both of them, and the steam will escape through their perforations, and allow the flutes to be pressed into and fixed in the cloth, as shown at Fig. 3 of the drawings.

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

1. A die for fluting plaited goods, formed

of cameo and intaglio parts, the upper one of which is perforate, to permit the escape of steam while pressing, substantially as described, and for the purpose specified.

2. In combination with two fluting-dies, the upper one of which is perforate, a cloth attached to the perforate die, for supplying moisture, substantially as and for the purpose specified.

3. The combination of two pairs of dies arranged in the same frame, each consisting of a cameo and intaglio part, and adjustable with respect to each other, for the purposes described.

4. The combination of two pairs of dies arranged in the same frame, each pair of which consists of cameo and intaglio parts, and adjustable with respect to each other, with a gage arranged at their side, for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

MARTIN W. BOON.

Witnesses:

H. A. ALLEN,

CHAS. H. SPEED.