H. P. YOUNG & F. CALVERT.

PLAITING BOARD.

No. 188,561. Patented March 20, 1877.

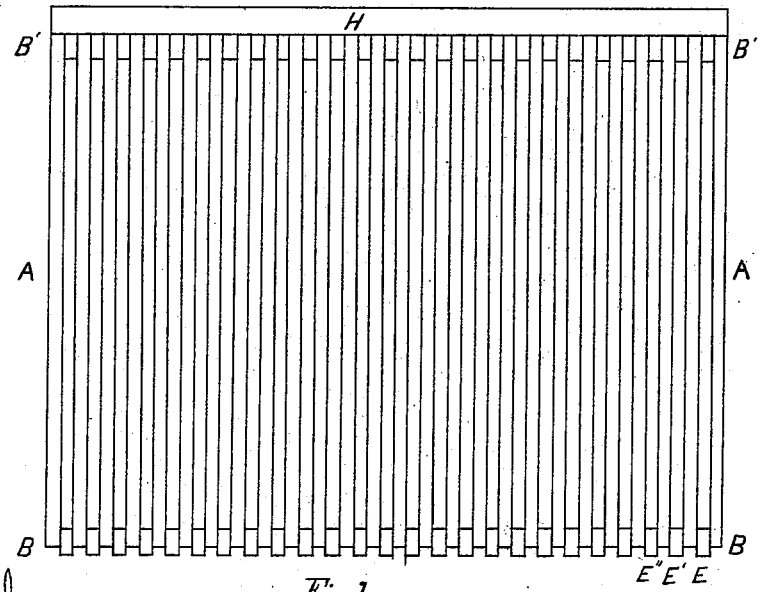

Fig 1

Fig 3

Fig 4

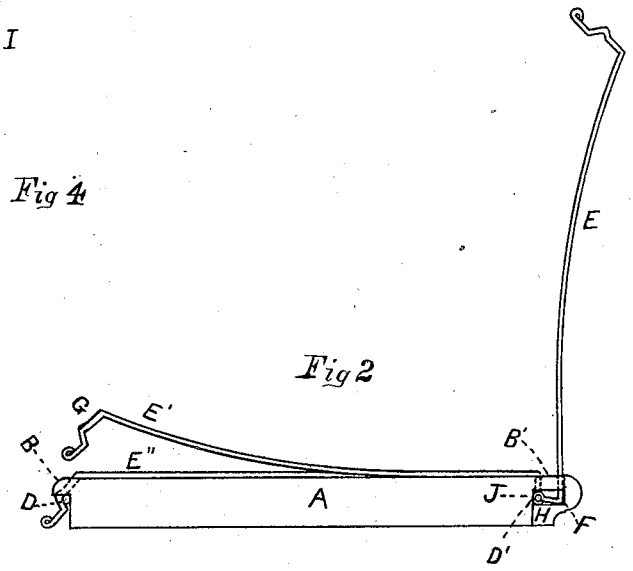

Fig 2

Witnesses.
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UNITED STATES PATENT OFFICE.

HARLAN P. YOUNG AND FRANK CALVERT, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN PLAITING-BOARDS.

Specification forming part of Letters Patent No. **188,561**, dated March 20, 1877; application filed December 7, 1876.

To all whom it may concern:

Be it known that we, HARLAN P. YOUNG and FRANK CALVERT, both of Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Plaiters, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The object of our invention is to hold the cloth to be plaited firmly on a flat board or surface by means of curved blades permanently hinged at one end, and, when in use, locked at the other end, said blades being arranged at equal intervals, and their hinges and locks being below the surface of the board, so that a hot flat-iron may be used over the whole surface of the board.

Figure 1 is a plan, and Fig. 2 an end view, of our plaiter. Fig. 3 is a side view, and Fig. 4 an edge view, of the gage used with said plaiter.

A is a flat board having tongues B B′ at its sides at equal intervals. Below the tongues B B′ are fastened two straight wires, D D′, one at each side of the board, by means of small staples driven into the board immediately below said tongues. Around the wire D′ are bent flat spring-blades E E′ E″, to form hinges J for said blades, the wire D′ being the pintle.

The blades E E′ are bent into the form shown in Fig. 2, the angle at F being a little less than a right angle, so that when the blades are pressed down upon the board they will not touch the side of the board, the rest of the blades being slightly curved upward, so that when said blades are held by their ends down upon the board the middle of the blade will press down firmly upon said board. The other end of said blade E is bent downward to form an obtuse angle, and then to form a notch or lock, G, to be sprung over the wire D. The notch or lock G locks the blade firmly to the board. The projecting left end of the blade E serves as a means for raising it. A stop-molding, H, serves to protect the tongues B′, and to prevent the blades E from being thrown beyond the tongues B′. The gage I is a thin strip of wood of the shape shown in Figs. 3 and 4.

In use the blades E E′ E are thrown up until they are stopped by the molding H. The cloth to be plaited is laid smoothly in one thickness upon the board, and the blade E nearest the end of the board is locked down over the cloth. The gage I, point first, edge up, is then run under the cloth close to said blade E, and the next blade, E′, is brought down over the cloth and locked. The gage I is then withdrawn, again run under the cloth next to the second blade, and the operation is repeated until the end of the cloth or the end of the board is reached. The cloth is then damped by a sponge, and ironed.

By putting down one or more of the blades without using the gage, and then ironing the plaits in opposite directions, box-plaiting or cluster-plaiting, so called, may be produced.

It will be seen that a straight blade would press harder at the ends than in the middle of the board, while a spring-blade, properly curved, will press equally throughout its length; that the locks insure the blades being kept down until the ironing is completed; that the tongues cause the blades to keep at their proper intervals from each other, and that arranging the hinges and locks below the surface of the board allows the flat-iron to pass smoothly over the entire surface of the board and off its edges; also, that the width of the plaits depends on the width of the gage. Instead of the wire D, an inlaid strip of metal or any hard edge may be used.

The board A may most readily be formed from two thinner boards, glued one on the other, tongues being cut on the upper and larger one.

We claim as our invention—

1. In combination with the board A, the curved spring-blades E E′, as and for the purpose described.

2. In combination with the board A, the individually-locked blade E E′, as and for the purpose described.

3. In combination with the tongued-and-grooved board A, a series of blades, E E′ E″, having their ends bent to enter the grooves

in said board, as and for the purpose described.

4. The combination of the lock G on the blade E, and the wire D, as and for the purpose described.

5. The arrangement of the lock G and hinge J below the surface of the board A, as and for the purpose described.

6. The combination of the hinged blades E E′, and the stop-molding H, as and for the purpose herein described.

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