M. NEVILLE.

PLAITING-MACHINE.

No. 185,949. Patented Jan. 2, 1877.

Fig. 1.

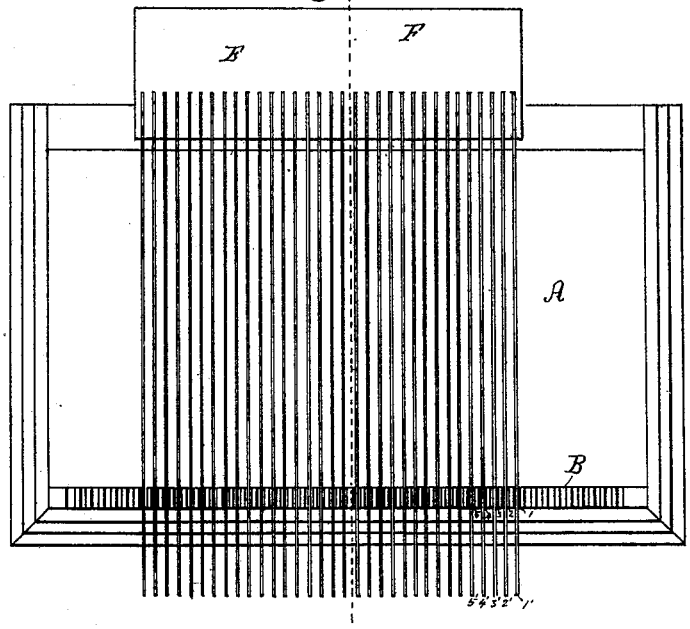

Fig. 2.

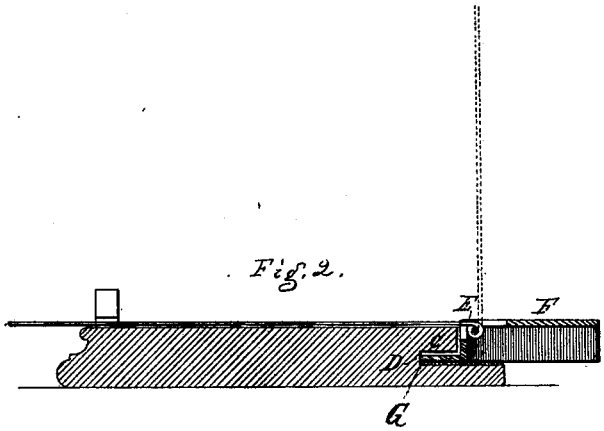

Fig. 3.

Witnesses.

Jas. E. Hanahan

John May

Inventor.

Michael Neville.

UNITED STATES PATENT OFFICE.

MICHAEL NEVILLE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PLAITING-MACHINES.

Specification forming part of Letters Patent No. **185,949**, dated January 2, 1877; application filed May 10, 1876.

To all whom it may concern:

Be it known that I, MICHAEL NEVILLE, of Boston, in the county of Suffolk, in the State of Massachusetts, have invented a new and useful Improvement in Plaiting-Machines, and is designed for plaiting cloth and other fibrous material, of which the following is a specification:

This invention consists in hinging or swinging a series of needles on a pin or fixed shaft passing lengthwise through a stem, said stem being composed of a rectangular strip of hard wood or other suitable material, the needles admitting of being situated and operating in slits cut in the edge of said stem, and are provided with a tongue at the lower corner, and at right angles to the face of said edge, the combination of the tongue, stem, and needles being what is called the "comb," the needles admitting of being turned from the horizontal to the vertical position. The use and operation of this comb E will be described when I refer to the drawing, in which—

Figure 1 is a plan of the machine, showing the position of the comb E after operating. Fig. 2 is a vertical cross-section, the dotted lines showing the position of the comb E before operating. Fig. 3 is a detail of the rack B, said rack being composed of hard wood or other semi-elastic material, and is attached to one edge of the rectangular board A, Fig. 1, and at right angles to the surface thereof, the vertical slits 1 2 3 4 5 in the edge of said rack being spaced equal to corresponding slits in stem F, and terminating in circular holes 0 0 0, forming shoulders at their intersection, the holes being of greater diameter than the needles, and still greater than the width of the slits, said slits and holes being above the surface of the board A. At the opposite side of board A is formed a shoulder, C, as in Fig. 2, having the groove D cut into the angle thereof, parallel with the surface of board A.

To operate the machine, the tongue G of stem F is introduced into the groove D in board A, the needles 1′ 2′ 3′ 4′ 5′ being turned in a vertical position. Then the material to be plaited is laid lengthwise on the board A, and over the material is placed needle No. 2, its end inserted in slit No. 2 in rack B and pressed down into the hole 0, the shoulder thereof preventing the needle, when operating, from slipping up. Then the main portion of the material is brought over said needle. After this operation needle No. 1 is laid over the material inserted in slit No. 1 of said rack, and pressed down into the hole 0, as before. The material is again brought over to its original position, and needle No. 4 is laid over and inserted in its corresponding slit, and so on until the required plaiting is done. The material, if woolen, is pressed with a hot flat-iron, a damp cloth being first placed between the iron and plaiting. Then, by laying one hand on the plaiting, the comb E may be withdrawn.

I claim—

1. The board A, having at one side shoulder C and groove D, and at opposite side rack B, in combination with comb E, as set forth.

2. In a plaiting-machine, the rack B, having the slits 1 2 3 4 5, terminating in holes 0 0, forming shoulders at their intersection, for the purpose of preventing the needles from slipping up, as specified.

3. The comb E, composed of a series of plaiting-needles connected to a removable stem or bar, whereby all the needles may be withdrawn from the bed-plate or board A at once, as in the specification set forth and described.

MICHAEL NEVILLE.

Witnesses:
JAMES F. HARAHAN,
JOHN MAY.