F. M. NIXON
Fluting-Machine

No. 206,685. Patented Aug. 6, 1878.

Fig. 1.

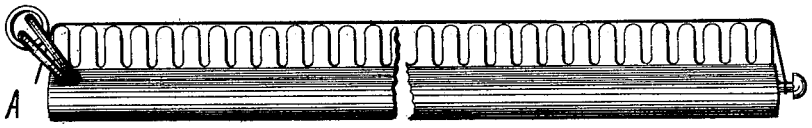


Fig. 2.

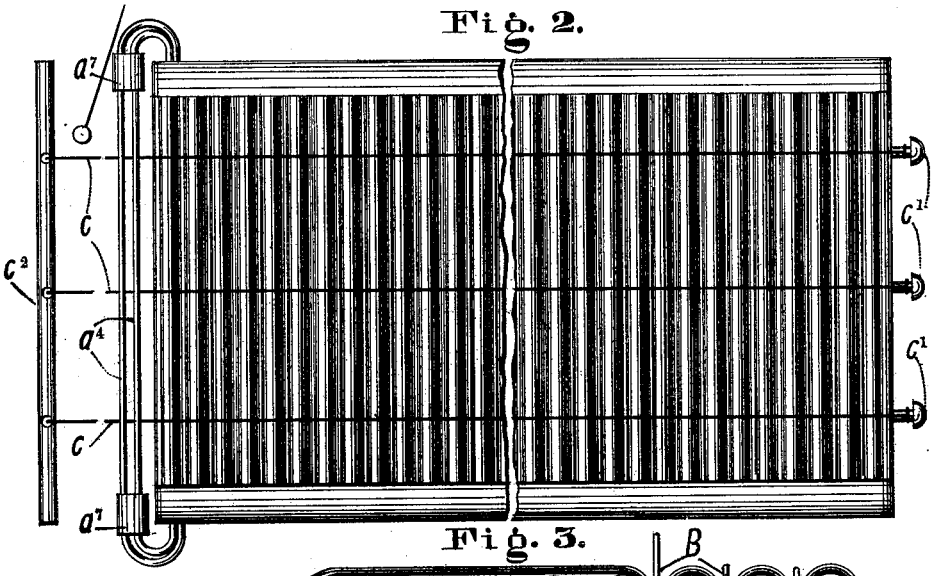


Fig. 3.

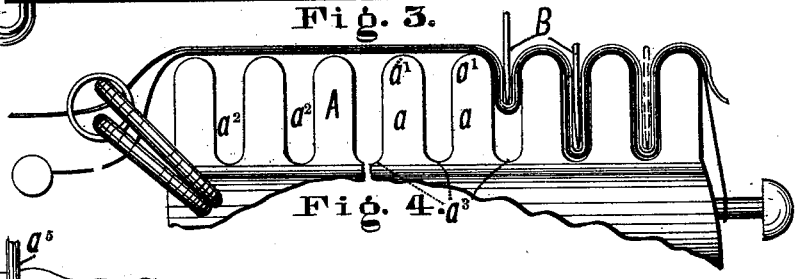
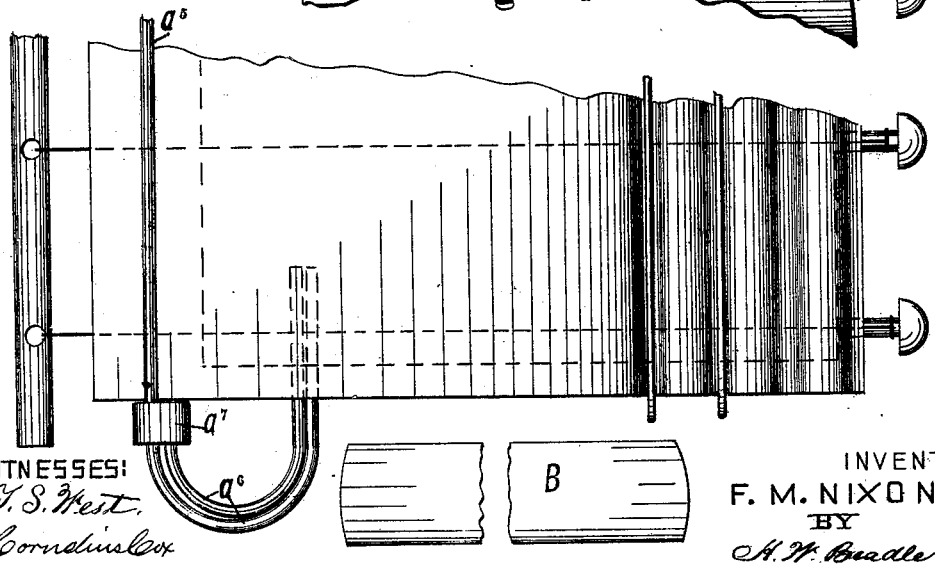


Fig. 4.



WITNESSES:
T. S. West.
Cornelius Cox

INVENTOR:
F. M. NIXON.
BY
A. W. Beadle & Co
ATTYS.

UNITED STATES PATENT OFFICE.

FRANCIS M. NIXON, OF LENA, ILLINOIS, ASSIGNOR TO HIMSELF AND GEORGE BREON, OF SAME PLACE.

IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. **206,685**, dated August 6, 1878; application filed April 16, 1878.

To all whom it may concern:

Be it known that I, FRANCIS M. NIXON, of Lena, county of Stephenson, and State of Illinois, have invented a new and useful Improvement in Fluting-Machines; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists mainly, first, in the combination of certain guide-rods with an adjustable gage; and, second, in the combination, with the fluting-bed, of certain threads adapted for use in removing the material when finally operated upon.

In the drawings, Figure 1 represents a side elevation of my improved fluting-board; Fig. 2, a plan view of the same; Fig. 3, a partial view of the board enlarged, with the removal threads and material properly in place; and Fig. 4, a plan view of the same.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A, Figs. 1 and 3, represents the fluting-board, consisting of a strip of wood of suitable length, width, and thickness, which is provided on its upper surface with a series of tongues or projections, *a a*, Fig. 3, having rounded faces, a^1 as shown, and a series of intermediate grooves, a^2, having rounded faces a^3, as shown.

a^4 a^4, Fig. 2, represent guide-rods, consisting essentially of the long portions a^5, Fig. 5, extending across the board at one end of the same in a line parallel with the line of the projections and grooves, as shown.

a^6, Fig. 4, represents bent ends of the guide-rods, the extremities of which rest in proper openings in the fluting-board, as shown, for the purpose of securing the guide-rods properly in position.

a^7 a^7, Figs. 2 and 4, represent slides or gages located upon the guide-rods in such manner as to move freely thereon, which are adapted to bear against the edges of the cloth and guide it properly in its movement to the fluting-board.

B B, Fig. 3, represent strips of metal, which may be case-knives or any other proper device for forcing the cloth into the grooves, as will be hereinafter described.

The method of using the special means described is substantially as follows: The end of the cloth to be fluted is first put through between the guide-rods and carried to the opposite end of the board. The cloth is then adjusted laterally upon the board, so that one edge of the same will project over one edge of the board, as shown in Fig. 4. The gages or slides on the rods a^4 a^4 are then adjusted to bear against the edges of the cloth for the purpose of guiding the latter properly to the board. The operator then, taking a case-knife or similar device in each hand, presses a portion of the material down into the first groove with one hand and holds it there, and then presses a succeeding portion of the same into the second groove with the other hand. The material in the second groove is then held while the third groove is filled, and the third then held while the fourth is filled, this operation being continued until the board is filled. A damp cloth is then laid upon the board, and a hot iron used to press the same and properly set the material in its new form. That edge of material which projects over the fluting-board is then basted for the purpose of retaining the parts properly in place.

The work may now be removed from the board ready for use. For the purpose of removing the material from the board, when the fluting operation has been entirely performed, without injury, I employ the following means: *c c* represent threads of any proper length and number, which are secured at one end to the pins c^1 c^1, or any other proper means for holding the same, and are carried across the grooves of the board, as shown in Fig. 2, before the material is laid thereon. c^2 represents a stick or bar, by means of which the threads are held at the proper distance apart. When the material is fluted the threads will underlie the same throughout its entire length, the same being depressed, of course, with the material into the grooves.

When it is desired to remove the material the threads are lifted, to raise the same without injury.

By means of the rods a^4 and the adjustable gages the work may be readily guided into proper position without special care on the part of the operator. By means of the threads *c* the work when finally operated upon may be readily removed without injury.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The guide-rods a^6, secured in the end of the board A and provided with the adjustable gage a^7, as described.

2. In combination with the guide-rods holding the cloth against vertical movement, an adjustable gage for determining its lateral position, as described.

3. The combination, with a fluting-bed, of a thread or threads arranged thereon underneath the material to be operated upon, substantially as and for the purpose set forth.

This specification signed and witnessed this 6th day of April, 1878.

FRANCIS M. NIXON.

Witnesses:

W. W. STAHL,

SAML. J. DODDS.