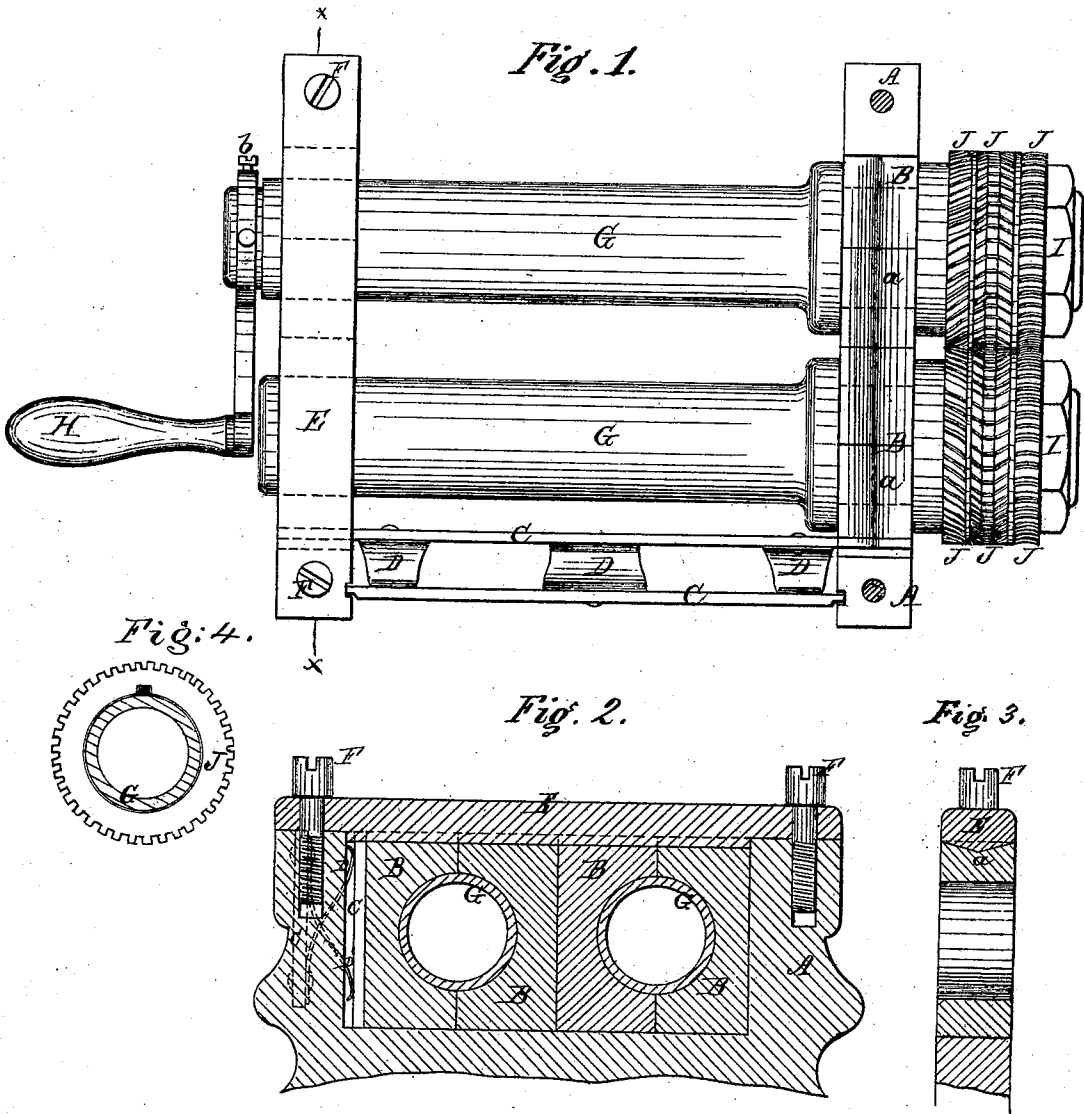


W. WEITLING.

Improvement in Fluting-Machines.

No. 130,962.

Patented Aug. 27, 1872.



*Witnesses.*  
Wm. Howard  
Ed. Lansing

*Inventor.*  
by his Atty. A. D. W. ...  
Wm. Weitling

# UNITED STATES PATENT OFFICE.

WILLIAM WEITLING, DECEASED, OF NEW YORK, N. Y., (CAROLINE WEITLING, ADMINISTRATRIX,) ASSIGNOR OF ONE-HALF OF HIS RIGHT TO WM. C. MCINTIRE, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN FLUTING-MACHINES.

Specification forming part of Letters Patent No. 130,962, dated August 27, 1872.

### SPECIFICATION.

*To all whom it may concern:*

Be it known that I, WILLIAM WEITLING, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Rolls for Fluting-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making a part of this application.

My invention has for its object to produce a roll or rolls for fluting-machines capable of being made to vary the pattern or design of their impress; and consists in forming the roll or rolls of a hollow mandrel and one or more removable sleeves, as will be hereinafter more fully explained.

To enable those skilled in the art to make and use the same I will proceed to describe the construction and operation, referring, by letters, to the accompanying drawing.

Figure 1 is a top view of a fluting-machine embodying my improvement. Fig. 2 is a vertical section at the line *xx* of Fig. 1. Fig. 3 is a transverse detail section, showing a mode of securing the bearings or boxes in place; and Fig. 4 is another detail view, showing a means of securing the sleeves (where two or more are used) in proper relation to each other.

Similar letters denote like parts in the several figures.

A represents the frame, so constructed that bearings B B may be arranged therein and springs or spring-plates C C, giving an opportunity for slight movement to the rolls in order that they may adapt themselves to varying thicknesses of material upon which they may be operating.

I have shown the bearings B B as made in sections and arranged in one manner within the frame. This, of course, may be changed to suit circumstances.

As the main feature of my invention rests in the construction of the roll or rolls, I will describe them accurately, leaving the drawing

alone to explain the other parts. G are hollow mandrels arranged to turn in proper bearings of a fluting-machine, and the projecting or fluting ends are adapted to receive one or more fluting-sleeves, J. The object of making a single sleeve removable is in order that it may be changed and one substituted having the flutings or corrugations finer or coarser, as may be desired; and where two or more are used they may be of the same or varied corrugations, parallel or at different angles and curves to the axis, and arranged upon the hollow heating-mandrel in such way as to produce any regular or varied design—for instance, part coarse and part fine, or all of a size, in straight, serpentine, or zigzag lines. These sleeves may be secured in any desirable manner to the mandrel, though I have shown them secured by being clamped between an annular shoulder near the frame and a nut, I, at the extreme end of the mandrel. Of course washers would be necessary between the last sleeve and the nut where a limited number is used, and in some instances it might be desirable to use them between each or any two of the sleeves to break the continuity of the flutes.

I have shown, as a means of securing the sleeves in proper relative position one with another, a groove on the interior of the sleeve adapted to receive a loose independent feather, so that the grooves, being placed in line and the feather put therein, fix the relation of the sleeves without preventing them, however, as a combined family of sleeves, from being moved or adjusted upon their mandrel.

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

A roll or rolls for fluting-machines composed of a hollow heating-mandrel and one or more removable corrugated sleeves, substantially as and for the purpose set forth.

WILLIAM WEITLING.

In presence of—

WILLIAM VETTER,  
PHILIPP WEBER.