

C. E. L. Holmes,

Plating Machine.

No. 100,405.

Patented Mar. 1, 1870.

Fig. 1.

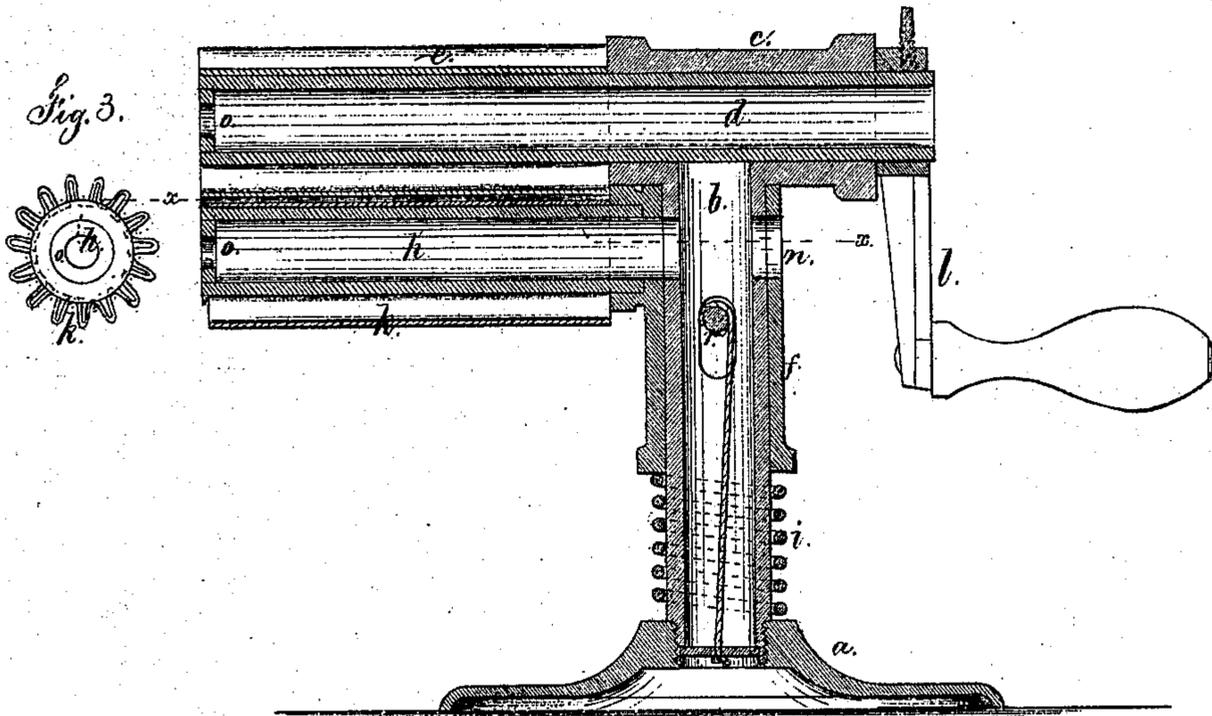
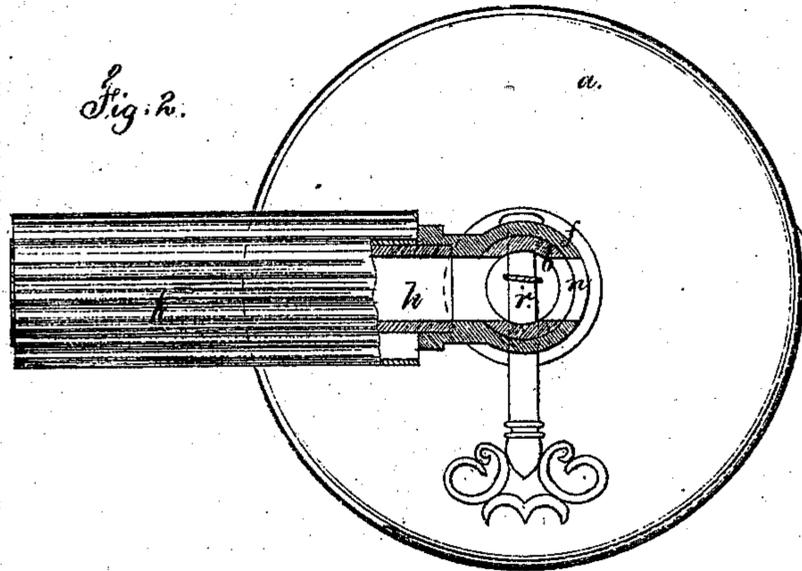


Fig. 2.



WITNESSES

Chas. Smith
Geo. D. Partridge

Chas. E. L. Holmes

United States Patent Office.

CHARLES E. L. HOLMES, OF NEW YORK, N. Y., ASSIGNOR TO GEORGE HOVEY & SON, OF SAME PLACE.

Letters Patent No. 100,405, dated March 1, 1870.

IMPROVEMENT IN FLUTING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES E. L. HOLMES, of the city and State of New York, have invented and made a new and useful Improvement in Fluting-Machines, and the following is declared to be a correct description thereof.

The object of this invention is to lessen the cost of construction, and render the machines lighter and less liable to get out of repair.

I provide a pipe-shaped bearing for the upper roller at the top of the standard, upon which standard is a slide kept up by a spring, and carrying an arm upon which revolves the lower roller.

In the drawing—

Figure 1 is a vertical section of the said machine;

Figure 2 is a horizontal and part sectional plan at the line *x x*; and

Figure 3 is an end view of the fluted sheet-metal roller upon the rigid hollow arm.

The base *a*, of any desired shape, carries the vertical standard *b*, at the upper end of which is a pipe-shaped bearing, *c*, for the hollow shaft *d* of the upper roller *e*.

This roller *e* is made of a sheet-metal tube, corrugated to form the flutes. This, however, does not form my invention.

The sliding-sleeve *f*, around the column or standard *b*, is kept up by a spring, *i*, and carries a hollow rigid arm, *h*, that does not revolve, but the lower roller *k*, made of a fluted tube, as aforesaid, and placed upon the hollow arm, does revolve with the roller *e*, when that is turned by a crank-handle, *l*, applied to said shaft *d* of the roller *e*.

The shaft *d* is open for the introduction of a heater, and the sliding-sleeve *f* and standard *b* are formed with

openings at *n*, on line with the arm *h*, for the purpose of allowing the heating-bolt to be introduced at this end, and the rings *o* or caps of the rollers prevent the bolt passing in too far.

The rollers are opened by pressing down the roller *k*, rigid arm *h*, and sliding-sleeve *f*.

I guide the sliding-sleeve *f* by a pin, *r*, passing through it, and moving in a vertical slot in the standard *b*.

The pin *r* may have a head upon it, so as to be revolved and draw upon a chain or wire cord within the standard *b*, and wind the same up sufficiently to draw down the sliding-sleeve *f*, and thereby separate the rollers; or this revolving-pin *r* might act upon a pinion or a cam for accomplishing the same object.

I claim as my invention—

1. The standard *b*, and pipe-shaped bearing *c* at its upper end, for the shaft *d* of the roller *e*, in combination with the sliding-sleeve *f*, arm *h*, and roller *k*, as and for the purposes specified.

2. The pin *r*, passing through the sliding-sleeve *f*, and a slot in the column *b*, and forming a guide, in combination with the rollers *e k*, and chain, or its equivalent, for drawing the roller *k* down when the pin *r* is turned, as set forth.

3. The arrangement of the rigid arm *h*, made hollow for receiving the heater, with the rotating sleeve or roller *k*, of a pair of fluting-rollers, substantially as specified.

Dated this 28th day of December, 1869.

CHAS. E. L. HOLMES.

Witnesses:

CHAS. H. SMITH,
GEO. T. PINCKNEY.