

J. G. Valentine,
Wood Molding Machine.
N^o 46,763. Patented Mar. 7, 1865.

Fig. 2.

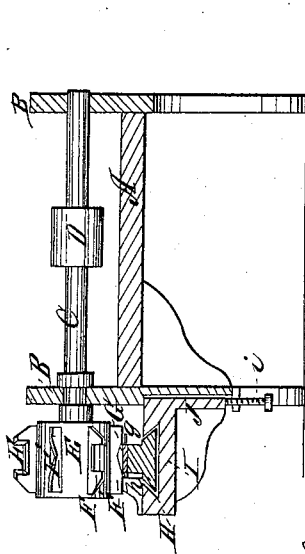


Fig. 3.

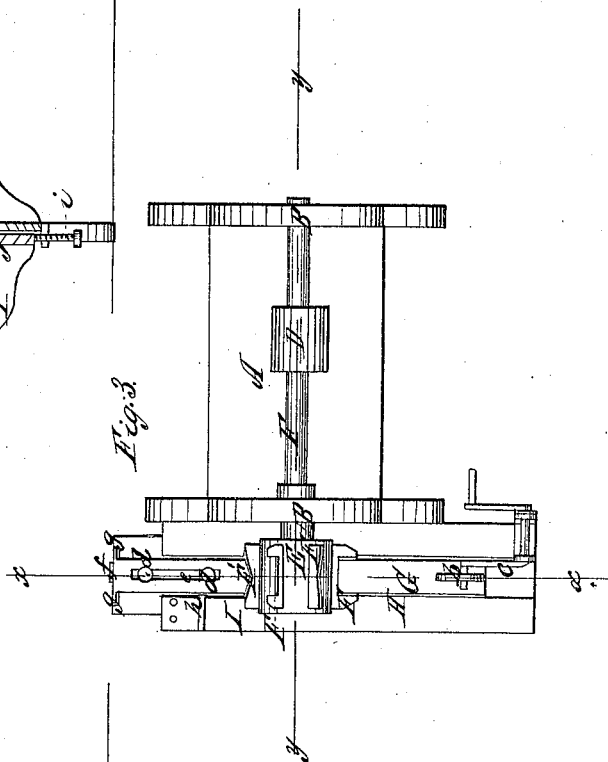
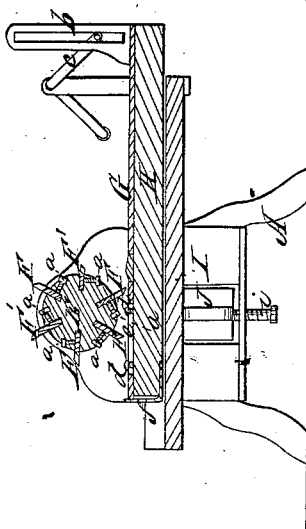


Fig. 1.



Witnesses:

*Wm. P. Curran
 Theo. Lisch*

*Inventor:
 J. G. Valentine
 per Munn & Co
 Attorneys*

UNITED STATES PATENT OFFICE.

JOHN G. VALLENTINE, OF NAUGATUCK, CONNECTICUT, ASSIGNOR TO
HIMSELF AND R. H. ISBELL, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR PLANING BUTTONS.

Specification forming part of Letters Patent No. 46,763, dated March 7, 1895.

To all whom it may concern:

Be it known that I, JOHN G. VALLENTINE, of Naugatuck, in the county of New Haven and State of Connecticut, have invented a new and Improved Machine for Making Buttons; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a transverse vertical section of this invention, the line *x x*, Fig. 3, indicating the plane of section. Fig. 2 is a longitudinal vertical section of the same, taken in the plane indicated by the line *y y*, Fig. 3. Fig. 3 is a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a machine for making square or polygonal buttons of bone, ivory, india-rubber, or other suitable material, and said machine is composed of a revolving cutter-head, carrying a series of cutters, calculated to shape the face or back of the button and its edges, and operating in combination with a sliding clamp, in which the button is fastened in such a manner that by passing said sliding clamp with the button through under the cutter-head its face or back and two of its edges are brought to the proper shape, and a large number of buttons can be made with little trouble or loss of time.

The clamp which holds the buttons is so constructed that the same opens automatically whenever it reaches the rear end of its stroke, and allows of removing the button and turning it round or replacing it by another, and as soon as the forward motion of the clamp begins it closes up and holds the button tight between its jaws while the same is exposed to the action of the cutters. An adjusting-screw serves to accommodate the sliding clamp to thickness of the button to be produced.

A represents a frame made of cast-iron, wood, or other suitable material, and provided with two bearings, B, for the shaft or spindle C. A rotary motion is imparted to this spindle by a belt running over the pulley D, and mounted on one of its ends is the head E, in which the cutters F F' are fastened by means of screws *a*, or in any other suitable manner.

The cutters F are intended to act on the edges of the button, and the cutters F' serve

to give the desired shape to its face or back. It is obvious that by changing the form of these cutters, faces or backs of different shapes may be produced.

The button, which is made of bone, ivory, india-rubber, or any other suitable material or composition, is secured in a clamp, G, which is firmly secured to the slide H. Said clamp consists of a stationary and of a movable jaw, and from said stationary jaw rises a slotted standard, *b*, and a crank, *c*, the eccentric wrist-pin of which catches in the slot of the standard, imparts to the clamp and slide a reciprocating motion. The movable jaw is attached to the slide H by screws *d*, passing through a slot, *e*, and it is pressed toward the stationary jaw by the action of a spring, *f*. Stud *g* project from its ends, and whenever the slide H approaches the forward end of its stroke, these studs or one of them strike an abutment, *h*, rising from the bed I, in which the slide moves, and by this abutment the movable jaw is opened against the action of the spring, so that the button can be taken out and turned or replaced by another.

By these means the operation of my machine is rendered easy and convenient, and a large number of buttons can be finished in a short time and with little trouble or exertion.

The bed I in which the slide H moves is firmly connected to a plate, J, which moves up and down in a dovetailed recess in the front side or face of the frame A. This plate is adjustable by a set-screw, *i*, and by means of this set-screw the slide is raised or lowered to accommodate it to the thickness of different buttons.

I claim as new and desire to secure by Letters Patent—

1. The use of a series of cutters, F F', in a rotary head, E, to operate in combination with a clamp, G, secured to a reciprocating slide, H, in the manner and for the purpose substantially as herein set forth.

2. The spring *f*, studs *g*, and abutment *h*, applied in combination with the movable jaw of the clamp and with the reciprocating slide H, substantially as and for the purpose described.

JOHN G. VALLENTINE.

Witnesses:

NELSON NORTH,
HOMER TWITCHELL.