D. C. ROBIE.

LATHE FOR TURNING BUTTONS.

No. 75,462. Patented Mar. 10, 1868.

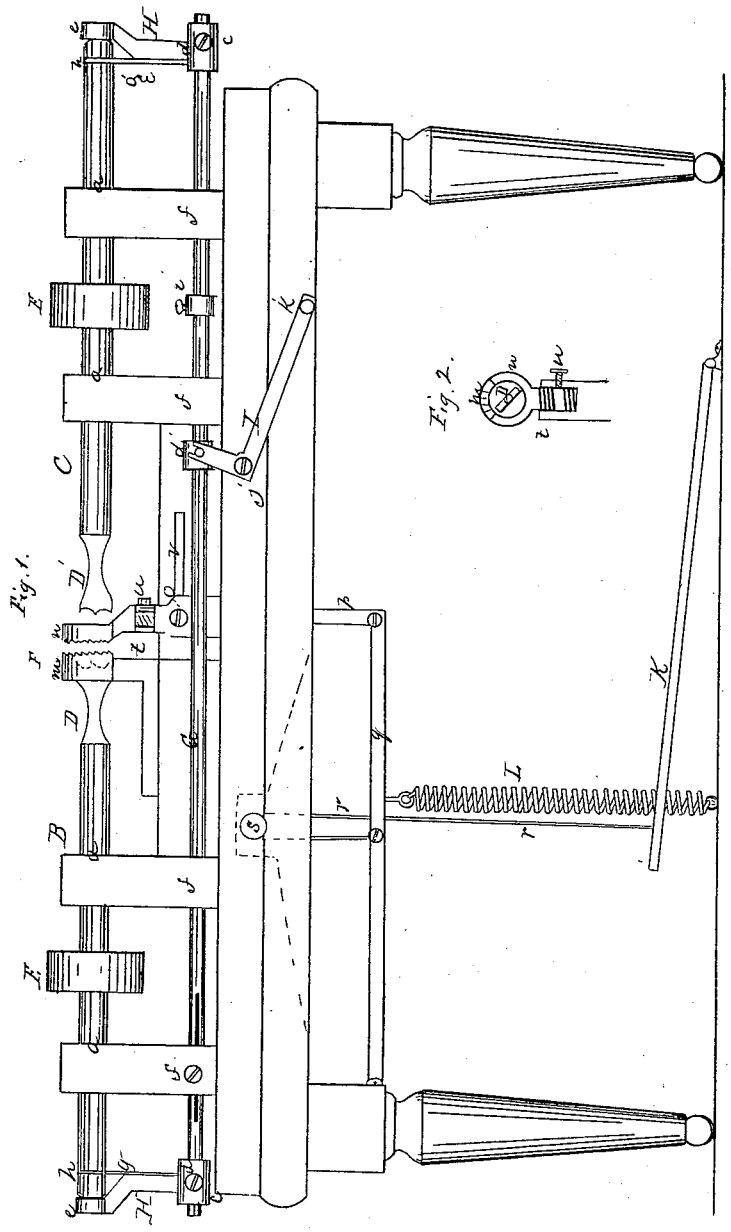

Fig. 1.

Fig. 2.

Witnesses.

Howes Norris

Chas. F. Work

Inventor

D C Robie

by his attys.

Gardiner & Hyde

United States Patent Office.

D. C. ROBIE, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND H. E. BOSTWICK, OF SAME PLACE.

Letters Patent No. 75,462, dated March 10, 1868.

IMPROVEMENT IN LATHE FOR TURNING BUTTONS.

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, D. C. ROBIE, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented a new and useful Press-Button Lathe; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the drawings, the figure represents a side view of my improved machine.

This invention consists of a device for turning buttons in an easy and convenient as well as effective manner. It is formed of a frame, A, having two spindles B and C, with bits D and D′, formed so as to give a proper shape to the button.

In the drawings, the spindles B and C are arranged in the bearings *a a a*, &c., upon the frame A, and have pulleys E and E. The bits D and D′ are set in the two ends of the spindles nearest together, and centre through the two jaws *m* and *n* of a clutch, F, hereafter more fully described. The spindles B and C are also arranged so that they may be shipped together, presenting each bit in turn to the stock which is held between the jaws of the clutch F. The shipping-device consists of a rod, G, parallel to the spindles, and working in the pieces *f f f*, &c., having at each of its ends an arm, H and H, set upon it by means of a collar, *c*, upon each arm. The collar having set-screws *d* and *d*, the other ends of the arms H and H fit against the ends of the spindles at *e* and *e*, and serve to push them along when the rod G is moved, each arm having a tongue, *g*, attached to it, which fits into the grooves *h* and *h*, cut into the ends of the spindles. The rod G has one or more stops *i i i*, &c., which are made adjustable by set-screws in them, and serve to regulate the play of the shipper, which is operated by a lever, P, hinged at its elbow *j* to the frame, and having a handle, *k*, at one end, the other end being pivoted to one of the stops *i* on the rod G. The clutch F has one stationary jaw *m*, and the other, *n*, is pivoted at *o*, and has a lever, *p*, extending downwards from it beneath the table, the end of the same being attached by a pin to a jointed bar, *q*, operated by the treadle K, and keyed down by the spring L, which throws the jaw *n* against the stock when inserted, and holds it for the action of the bits. When it is desired, however, to release the stock or waste, the treadle K is pressed down, and the cord *r* attached to it, and passing over the pulley *s* in the frame, drawing up the joint of the bar *q*, and opens the jaws of the clutch by the under leverage already mentioned. The jaws of the clutch are formed cylindrically, as shown in Figure 2, the inside edges being toothed, so as to gripe the stock. It is seen here also that the movable jaw *n* has a segment of its circle taken out at the top. This jaw is made to turn on its shank at *t*, so that it adjusts itself to stock that may be thicker at one side than the other. It may be constructed with a screw, as shown in the diagram, for the purpose of adjusting it vertically, and in that case a flat place is made in the screw, for the set-screw *u* may act as a stop or prevent its being too far either way.

The operation of this machine is as follows: The stock is placed between the jaws *m n*, and the spindle C brought against it, which, turning rapidly, forms the front of the button. After this has been accomplished, the spindles are shipped, and the other spindle B is brought against the back of the button, forming it, and also cutting it out from the stock, when it falls, and the stock is then released by pressing down the treadle and opening the jaws. The jaw *n* may be adjusted for different thicknesses of stock, by means of the slot *v* in its pivot-rest.

The advantages of my device are in its simplicity and perfect operation, and the ease by which it can be worked.

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

1. The two spindles B and C, operated by a shipper, so as to bring them alternately against the stock at opposite sides, when constructed and arranged substantially as described.

2. The clutch, consisting of the stationary jaw *m*, and pivoted jaw *n*, operated by the treadle K, and spring L, arranged and constructed substantially as shown, when used in connection with my device, in the manner described.

D. C. ROBIE.

Witnesses:

CHAS. T. WORK,

E. H. HYDE.