

(No Model.)

F. K. WINSOR.

MACHINE FOR MANUFACTURING BUTTER MOLDS AND VINEGAR
MEASURES OUT OF WOOD.

No. 455,862.

Patented July 14, 1891.

Fig. 1.

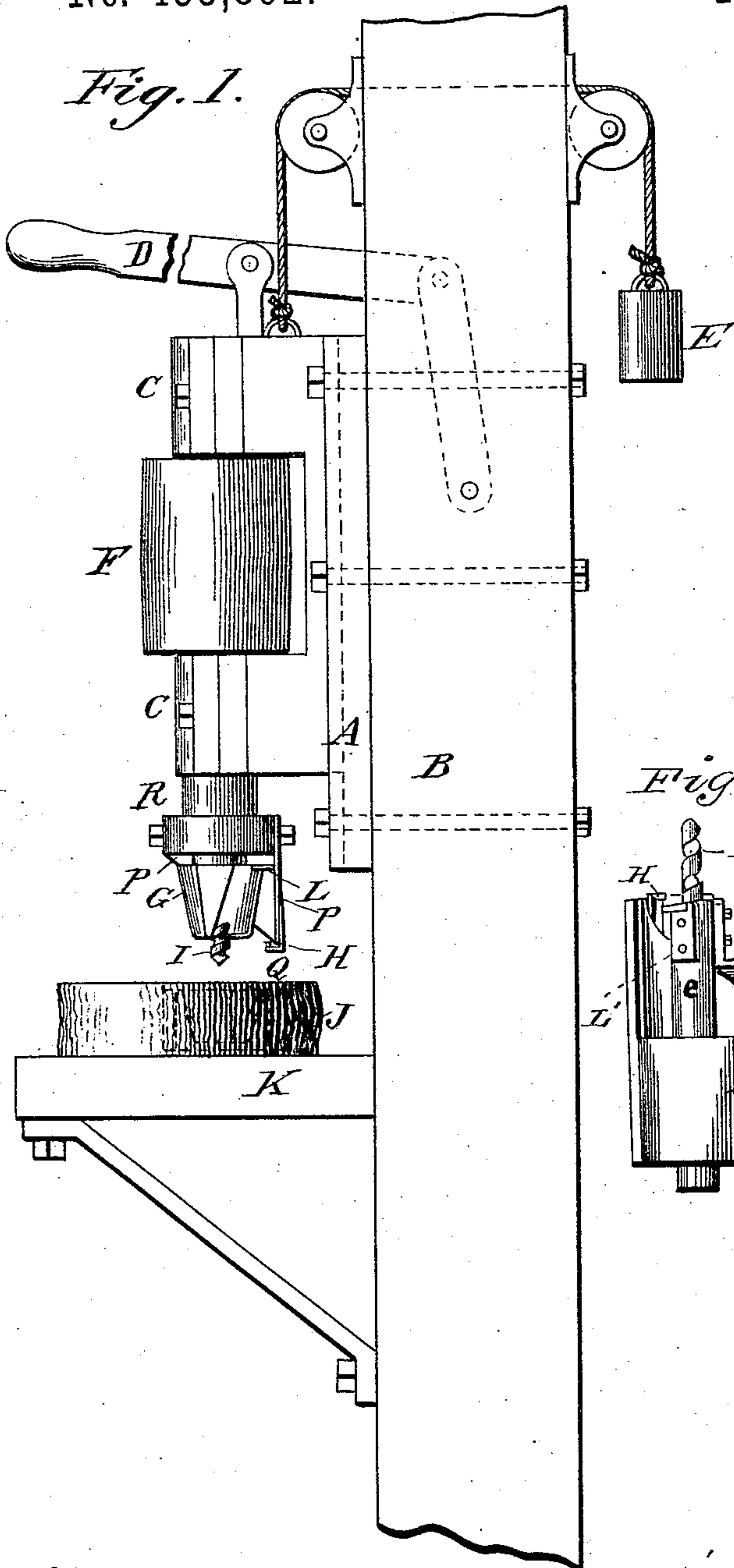


Fig. 2.

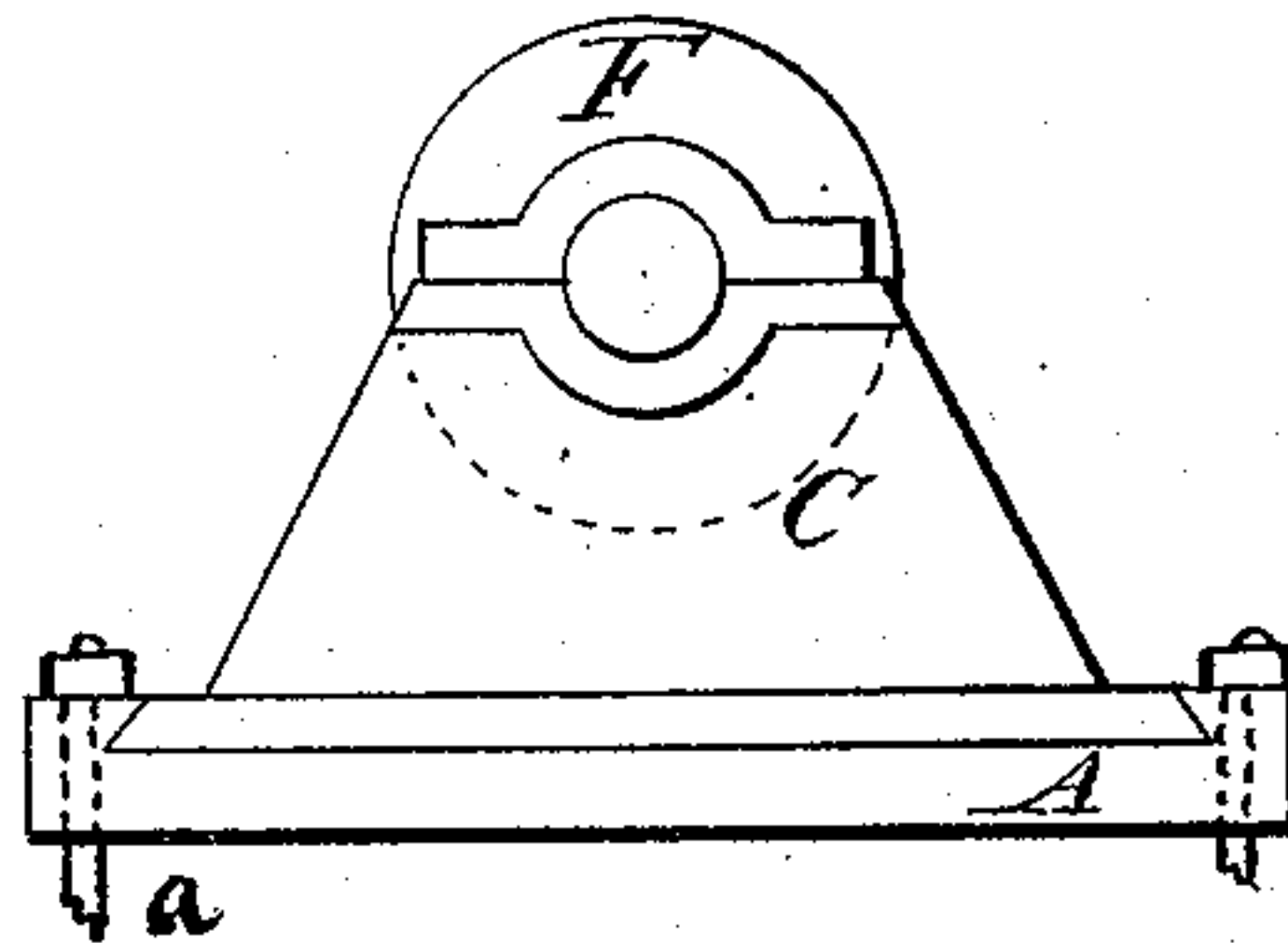


Fig. 3.

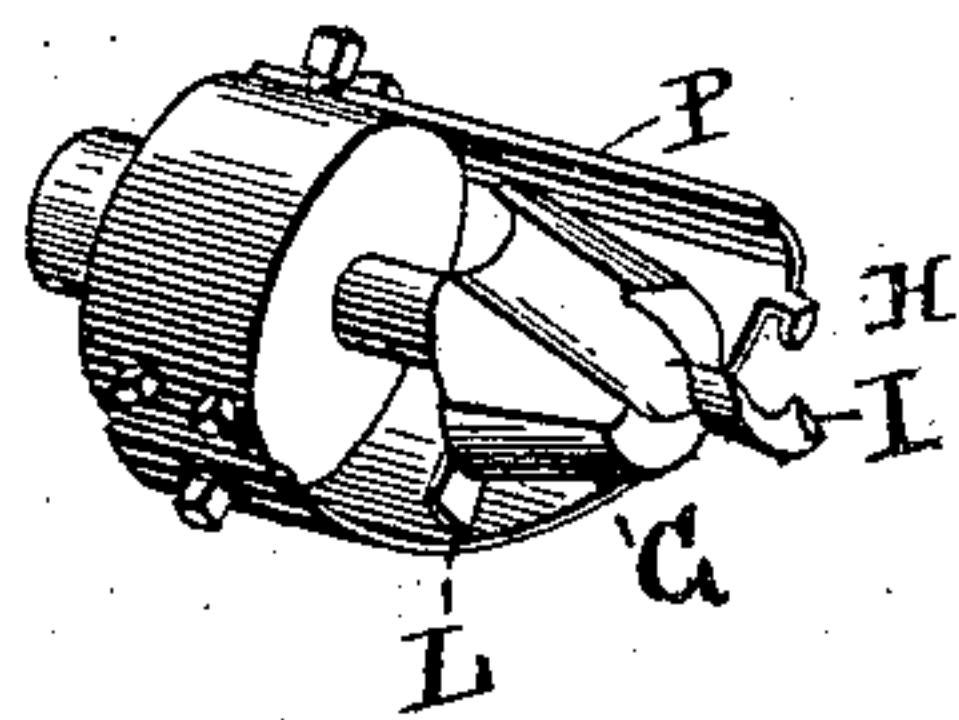


Fig. 5.

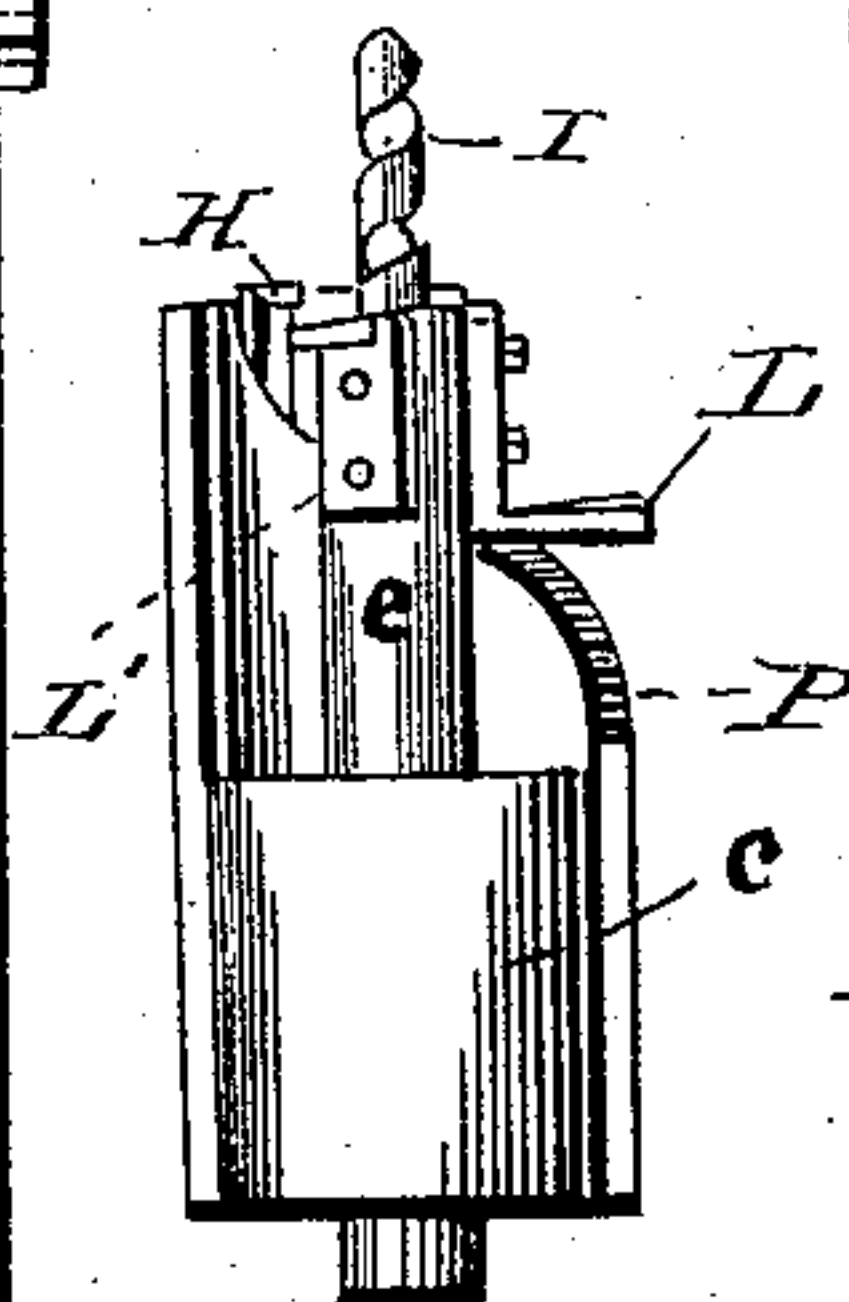
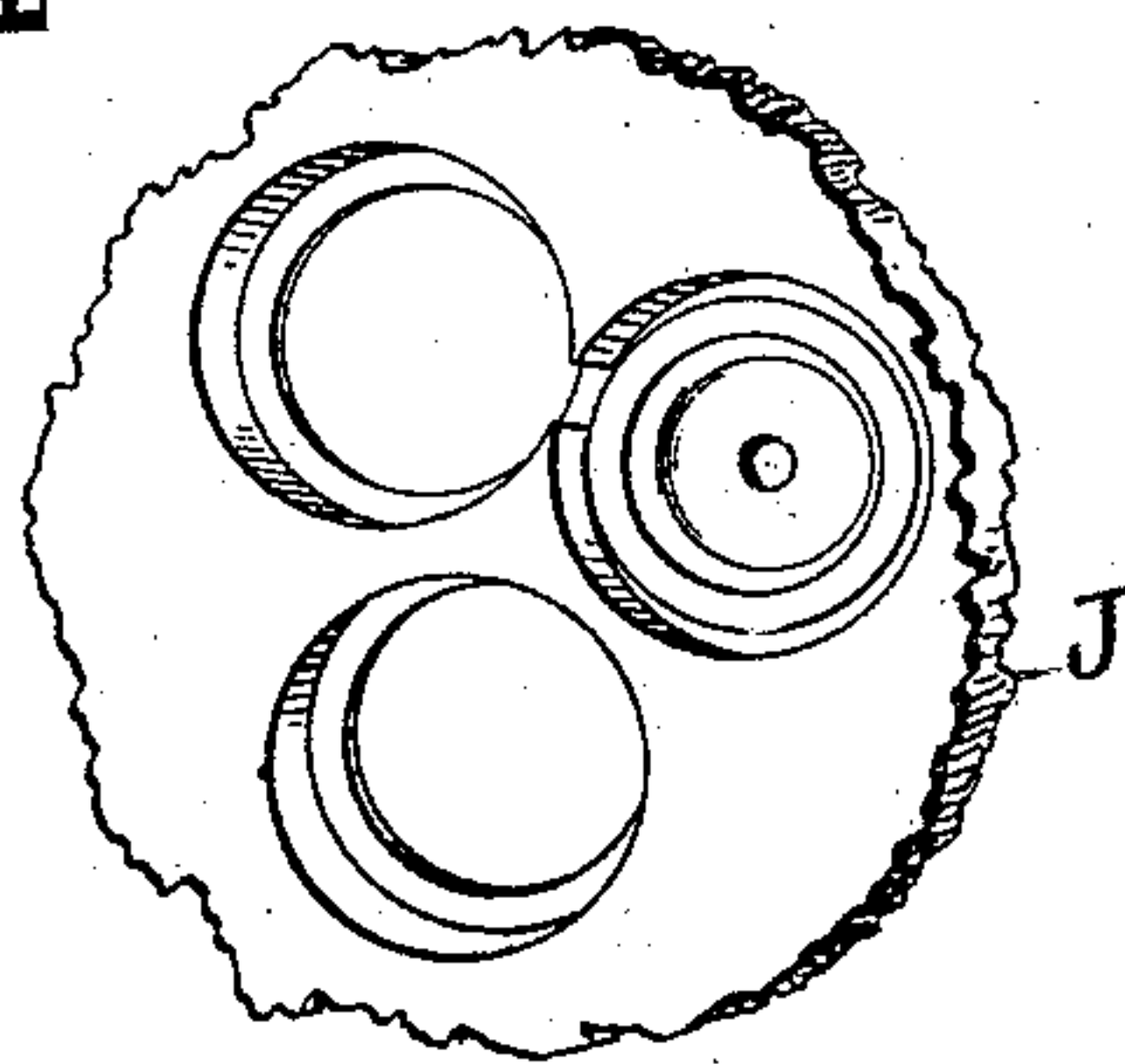


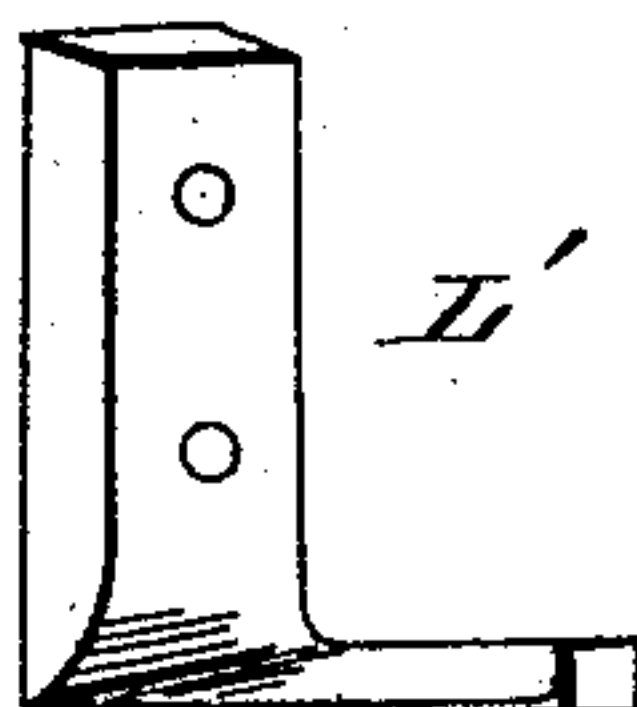
Fig. 4.



Witnesses:

Millon Wherry
M. F. Guinon.

Fig. 6.



Inventor:

Frank K. Winsor

UNITED STATES PATENT OFFICE.

FRANK. K. WINSOR, OF PETOSKEY, MICHIGAN.

MACHINE FOR MANUFACTURING BUTTER-MOLDS AND VINEGAR-MEASURES OUT OF WOOD.

SPECIFICATION forming part of Letters Patent No. 455,862, dated July 14, 1891.

Application filed August 9, 1890. Serial No. 361,588. (No model.)

To all whom it may concern:

Be it known that I, FRANK. K. WINSOR, of the village of Petoskey, in the county of Emmet and State of Michigan, have invented a new and useful Machine for the Purpose of Manufacturing Butter-Molds and Vinegar-Measures out of Wood; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention consists of a machine so arranged, by the combination of peculiarly-constructed knives, saws, and bits that by the simple pressure of a lever the cutter is forced into a solid block of timber, from which it cuts out a mold or measure, the mold or measure being not only cut off the block, but the interior or inside of the mold or measure is rounded or cut out at the same time.

In the accompanying drawings, Figure 1 is a side elevation of my machine; Fig. 2, an end view of bed-plate and attachments; Fig. 3, a detail perspective view of the cutter; Fig. 4, a detail view of a section of log, showing mold and mold-hole; Fig. 5, an inverted side view of the cutter, and Fig. 6 a detail view of the L-shaped knife L'.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, A designates a bed-plate, rigidly secured to an upright B, and is provided in its outer face with vertical ways *a*, in which fits and slides a weight-controlled head-stock C, having formed therein suitable bearings, in which fits and works a vertical shaft R, carrying at its lower end a cutter G, which by preference is constructed as follows:

Fitted to the lower end of the shaft R by means of set-screws is a sleeve *c*, carrying a dependent semicircular piece of metal P, its lower or dependent edge having an ogee curve, as shown, and has secured to it at its lowest point a chisel or knife H of the shape of the letter L, the cutting-edge of said chisel being slightly below the plane of the semicircular piece P.

Removably secured in the lower end of an extension *e* of the sleeve *c*, having its point extending below the chisel H, is an auger-bit I, the twofold object of which is to center the cutter and at the same time bore a suitable

hole for the reception of the handle of the molds.

L and L' are chisels or knives bolted or otherwise secured to the extension *e*, the cutting-edge of the knife or chisel L' being slightly below the lower face of said extension, while the cutting-edge of the knife or chisel L is located upon the extension *e* above the knife L' and upon the opposite side of the extension to that occupied by the knife L', the vertical distance between the knives depending upon the depth of the molds or measures being made.

F designates a pulley secured to the shaft R, around which passes a suitable belt for imparting motion to the cutter.

Rising from the head-stock C is a bifurcated arm, in which is pivoted an operating-lever D, fulcrumed to the upright B, and in order that the cutter after it has been depressed to cut a mold or measure may be returned to its normal position a weight E is employed, having a flexible connection with the head-stock C, passing over suitable grooved pulleys, journaled in brackets, secured to the upright B.

At a suitable distance below the head-stock C is a table or support K, upon which the blocks or pieces J are laid to be operated upon.

The operation of my improved cutter, taken in connection with the above description and accompanying drawings, may be briefly described as follows: When it is desired to cut a butter-mold, motion is given the cutter, and a block of wood placed upon the support K, and then by pulling down on the lever D causing the centering auger-bit I to enter the wood and guide the cutting. As the auger continues to enter the block, the chisel H begins to cut or form the exterior wall of the mold, and after the chisel H has cut a groove in the block the chisel L' takes hold of the wood and simultaneously cuts the interior wall of the mold, the chisels H and L' continue to cut the exterior and interior walls of the mold, and when the block has been cut the required distance to form the mold the knife L shapes the rough edge from the mouth of the mold, caused by the entering of the chisels H and L. The same operation is gone through

when cutting measures, only the centering
auger-bit I is removed from the cutter.

What I claim is—

5 The combination, with the sleeve c, pro-
vided with a central extension, carrying L-
shaped cutting knives or chisels, of the semi-
circular piece P, having a curved lower edge,

and the chisel or knife H near the point of
said piece, all arranged to operate in the
manner described.

FRANK. K. WINSOR.

In presence of—

MATTHEW F. GURNON,

CHAS. L. SMITH.