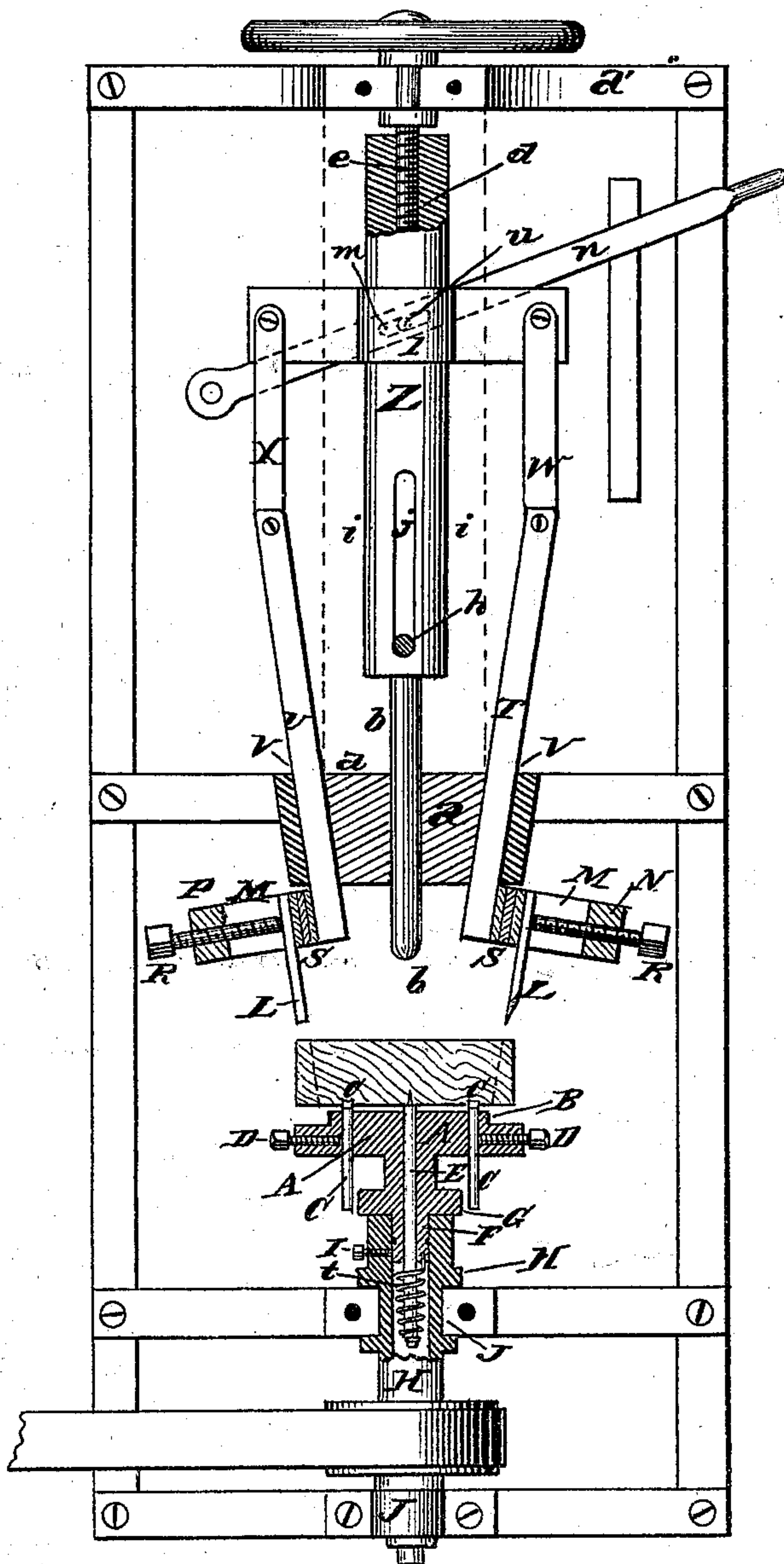


A. GOETZINGER.
Machines for Making Bungs.

No. 150,684.

Patented May 12, 1874.

Fig. 1



Attest

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UNITED STATES PATENT OFFICE.

ANDREW GOETZINGER, OF CINCINNATI, OHIO.

IMPROVEMENT IN MACHINES FOR MAKING BUNGS.

Specification forming part of Letters Patent No. **150,684**, dated May 12, 1874; application filed April 24, 1874.

To all whom it may concern:

Be it known that I, ANDREW GOETZINGER, of the city of Cincinnati, in the State of Ohio, have invented certain new and useful Improvements in Machines for Making Bungs, of which the following is a specification:

My invention consists in the novel construction and configuration of a rotating holder for holding blanks out of which are to be cut bungs for barrels, &c. This holder is especially adapted to be used in connection with non-rotating cutters for cutting the bung from the blank. By means of my invention I am enabled to center the blank with great facility, and without jar or injury to the holder or the mechanism which operates the latter. I am also enabled to cut the rear edge of the bung smoothly, and to repair or replace the bits as often as desired.

In the accompanying drawing, Figure 1 represents a central section of a bung-blank holder embodying my invention, and placed in operative connection with a machine for cutting bungs.

A is the blank-holder, of which B is a raised cheek upon the face of the same. Rods C C pass through the holder and project from the face of the cheek, thereby forming driving-spurs. These rods are adjustable longitudinally by means of set-screws D, whereby the distance the spurs project beyond the face of the cheek may be regulated at will. E is a center-pin extending through the center of the holder, and so fitted as to be capable of sliding therein back and forth. The rear end of this pin projects from the back of the holder, and is inclosed in a spiral spring, *t*, attached to it (said pin) and to the holder, in such a manner that when pressure is applied to the point of the latter it will yield and retreat within the holder, and upon the pressure being withdrawn will, by means of the spring, return to its former position. The holder is cut down to form a shoulder at G and a neck at F, the latter of which is fitted into a chamber in shaft H, this chamber being sufficiently large to receive, also, spring *t* and the projecting rear portion of the center-pin. The hold-

er is held in the shaft H by set-screws I. Shaft H is journaled at J J, and driven by a pulley concentric with it and between said journals.

A brief description of a form of mechanism which may be used in connection with my improved holder to cut bung-blanks is as follows, viz: L are cutters, which are supported in horizontal slots M in the ends of the sliding cutter-holders N P. The cutters have adjustment radially toward or from the holding-spindle *b* by means of set screws R and backing-out blocks S. Holder N is attached to bar T, and holder P to bar U. These bars slide in oblique ways V, made in the forward standard *a* of the frame, and connected by hinges to links W X, which are in turn hinged to a sleeve, *l*, which slides upon the enlarged portion of the spindle Z. The forward and smaller end *b* of the spindle Z slides through the forward standard. In the rear end of the larger spindle is an axial screw-threaded socket, *d*, to receive the end of a tail-screw, *e*, by which latter the spindle is projected toward the blank-holder, or retracted therefrom. The rotation of spindle Z is prevented by a pin, *h*, depending from a curved plate, *i*, (shown by dotted lines in the drawing), by which the standards *a* and *a'* are connected at their upper ends, the said pin *h* entering a longitudinal slot, *j*, in the top of the spindle. A pin, *u*, projecting downward from the bottom of sleeve *l*, traverses a slot, *m*, in the hand-lever *n*, whereby the sleeve and the cutters are moved forward or backward.

The operation and function of my improved holder are as follows, viz: The holder is caused to rotate at the desired speed. A blank of proper thickness is placed against the center-pin. The spindle *b* is then brought against the blank, forcing back the center-pin into the holder, and projecting the blank against the driving-spurs, by which the blank is thereupon rotated. Upon the rotation of the blank, the cutters L are simultaneously moved forward by means of lever *n* and its connections, and a bung is produced of decreasing diameter toward the driving center. By means of

the cheek the cutters are permitted to reach beyond the rear edge of the blank, and to cut said rear edge smooth. The cutters are then withdrawn and the bung removed from the holder. The center-pin will thereupon, being impelled by the spring, return to its normal and first position, in readiness to center another blank.

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

1. A rotating blank-holder composed of

stock A G F, cheek B, adjustable driving-spurs C, and center-pin E, supplemented with spring *t*, as set forth.

2. A rotating blank-holder composed of stock A G F, cheek B, spurs C, center-pin E, and supplemental spring *t*, in combination with a chambered driving-shaft, H, as set forth.

ANDREW GOETZINGER.

Witnesses:

EDWIN CRAWLEY,
H. L. COOPER.