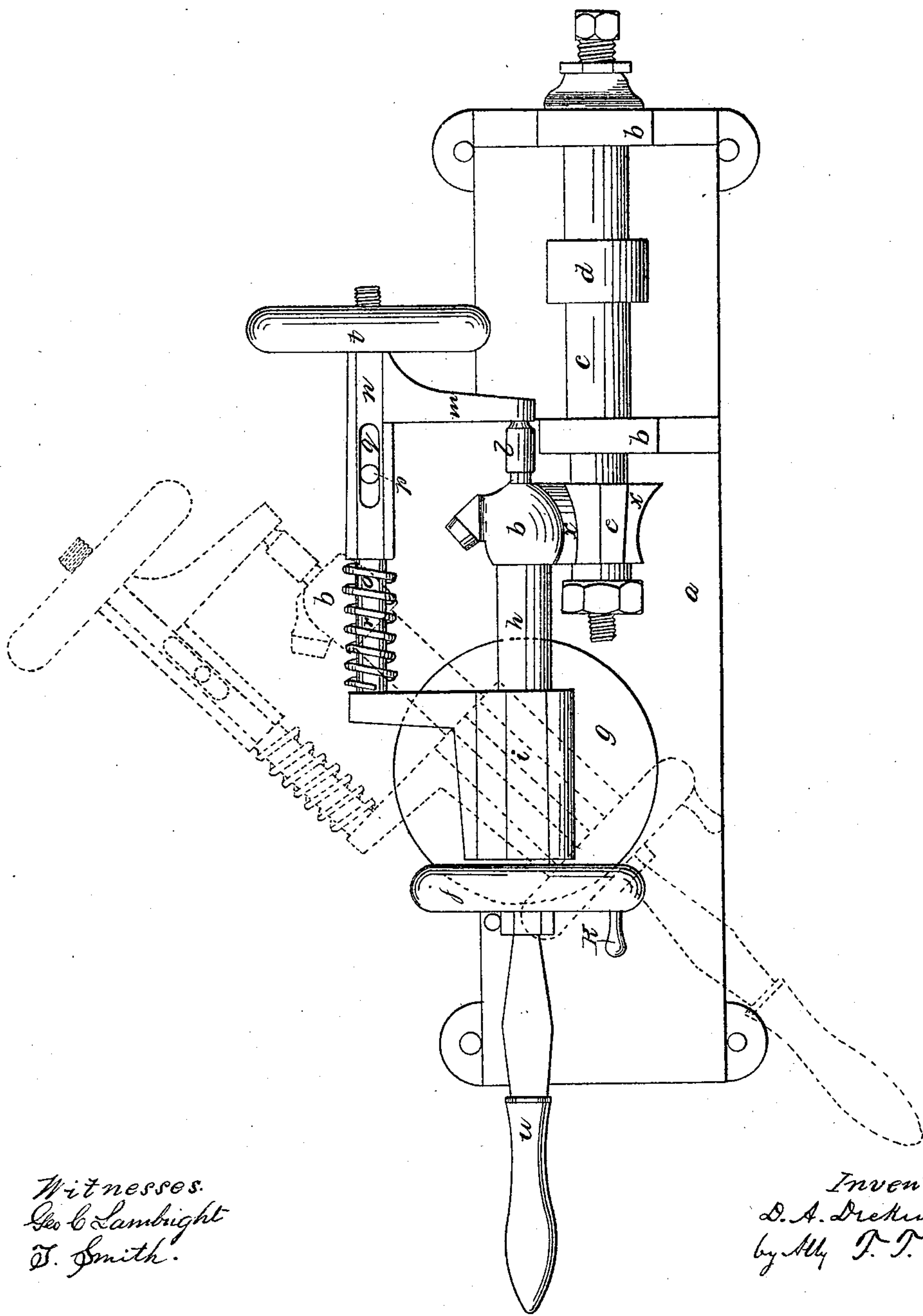


D. A. Dickinson,

Turning Irregular Forms.

N^o 42,990.

Patented May 31, 1864.



Witnesses.
Geo C Lambright
W. Smith.

Inventor.
D. A. Dickinson.
by Atty T. T. Everett.

UNITED STATES PATENT OFFICE.

D. A. DICKINSON, OF BALTIMORE, MARYLAND, ASSIGNOR TO TOBACCO PIPE COMPANY, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR TRIMMING THE BOWLS OF TOBACCO-PIPES.

Specification forming part of Letters Patent No. 42,990, dated May 31, 1864.

To all whom it may concern:

Be it known that I, D. A. DICKINSON, of the city of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement on Machines for Trimming the Bowls of Tobacco-Pipes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and marks thereon.

The machine which is made the subject of this application is intended to operate upon the bowl of the tobacco-pipe after the interior and tube part have been formed by another machine, by which the bowl and tube are bored out from a blank or block.

The drawings forming part of this specification show my machine, by which it will be seen that upon a table or platform, *a*, properly sustained in upright, *b*, in which it has bearings, is a tool-shaft, *c*, having upon it a band-pulley, *d*, for giving rotation to the shaft, the power for which is derived from any suitable source. The tool *e* is suitably affixed to the end of the shaft and susceptible of being removed readily for sharpening its cutting-surfaces, or for other purposes. These cutters *x* are of such form as will give to the exterior of the bowl *f* of the pipe the desired form, acting upon such exterior surface from the edge of the mouth of the bowl to that part of the base or bottom of the bowl which has the projection for the attachment of a cup or chamber, and neatly and smoothly trimming off such surface. The holder for the blank or bowl of the pipe has a base-piece, *g*, turning in the platform or table *a*, the drawing representing the two different positions of the holder, the one in black lines when the bowl is being operated upon, and the other in red lines with the blank in place before being operated upon by the trimming-tool. Instead of this holder being turned as here stated, it may be arranged in guides so as directly in a straight line from and toward the trimming-tool to be moved as may be required. The holder has a shaft, *h*, properly fitted in a sleeve, *i*, in which it has bearings, which shaft may be rotated by a crank-disk, *j*, having a handle, *k*, for the operator, or it may be rotated by a pulley

properly connected to some power-shaft, and with suitable means or devices for controlling and limiting its period of rotation. The holder has also a clamping-head, *l*, so that the blank or bowl will be held between this head *l* and the end of the shaft *h*. The clamping-head *l*, by an arm, *m*, is attached to a sleeve or collar, *n*, moving upon a rod or bar, *o*, the pin *p* acting as a guide in the slot *q* and the spring *r* having the tendency to force the collar *n* outward, while, by a screw, *s*, on the end of the bar *o* and a nut-head, *t*, the collar *n* may be moved inward, so that the head *l* can easily be moved toward or away from the end of the shaft *h* to clamp or unclamp the blank or bowl, and to be adapted to larger or smaller blanks or bowls as may be under the trimming operation, the trimming-tool being larger or smaller to suit the size of the blank or bowl.

The lever *u* is shown by the drawings as the device or mechanical means for moving the holder, but other means may be used if preferred.

From this recital of the construction of this machine it will be readily seen how it operates. If, while the tool-shaft is in motion the holder be moved with the blank in place, the exterior of such blank or bowl will quickly and neatly be trimmed off, it being only necessary to so turn the shaft *h* of the holder as to present the different portions of the surface of the bowl to the action of the tool, and to remove the holder so that the bowl is taken away from it when the trimming is finished.

What I claim as my invention, and desire to secure by Letters Patent as an improvement on machines for trimming the bowls of tobacco-pipes, is—

The combination of the movable adjustable clamp, the rotating feeding crank-disk, and the revolving tool, when constructed and operating substantially as herein set forth.

This specification signed this 8th day of April, 1864.

D. A. DICKINSON.

Witnesses.

THOS. T. EVERETT,
DAN ROWLANCE.