

No. 727,363.

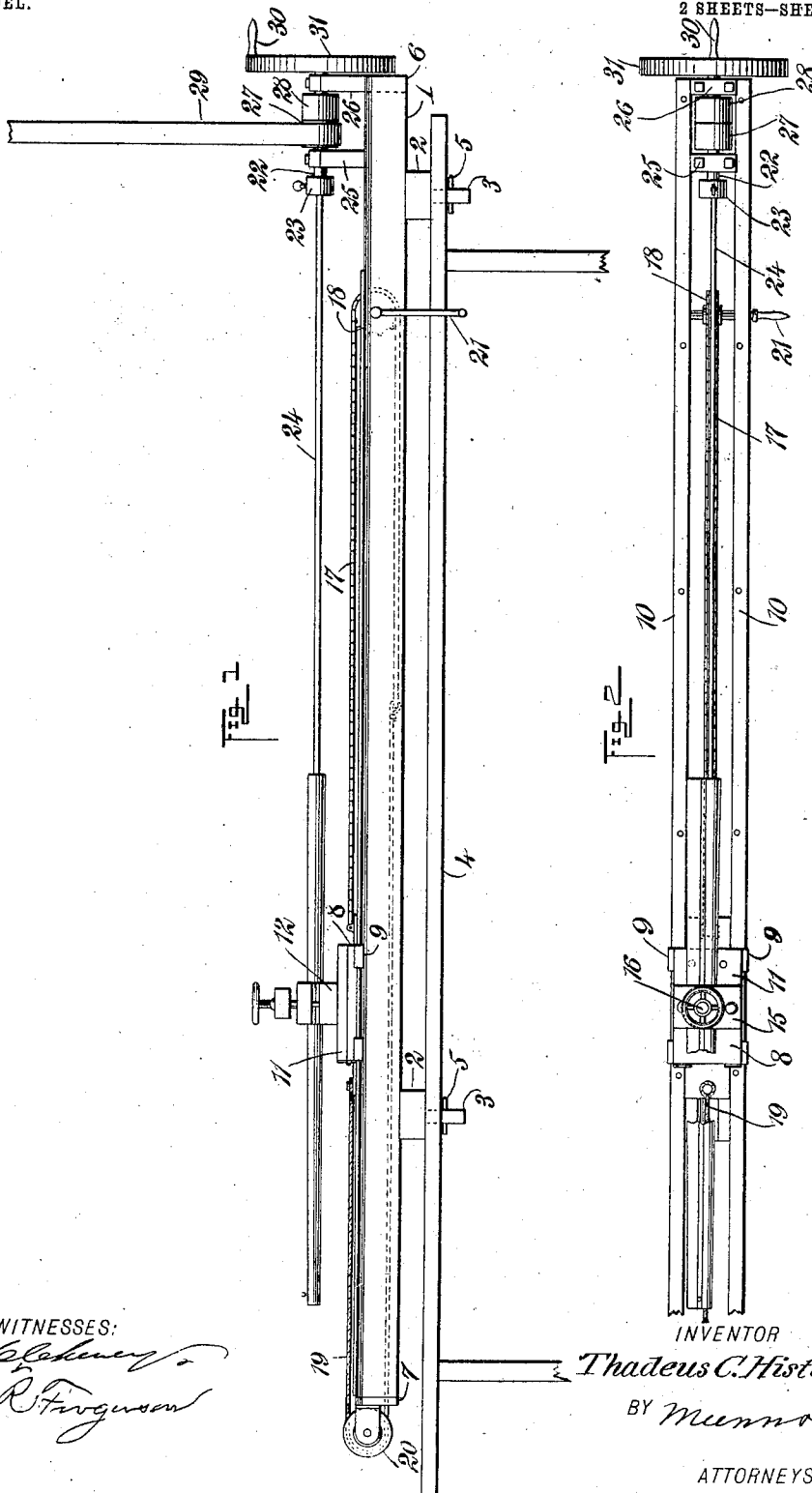
PATENTED MAY 5, 1903.

T. C. HISTED.
GUN BORING AND BURNISHING MACHINE.

APPLICATION FILED AUG. 19, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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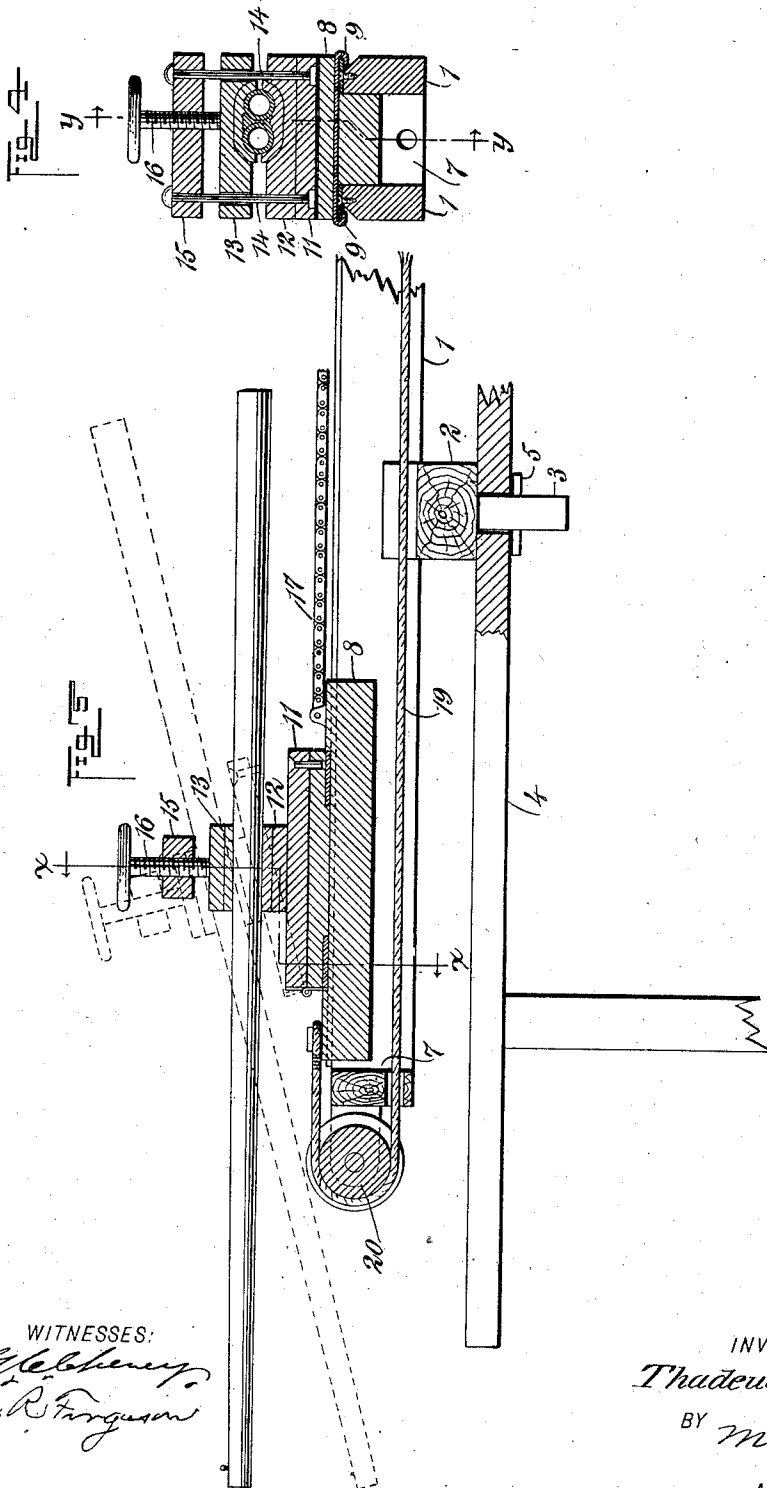
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UNITED STATES PATENT OFFICE.

THADEUS C. HISTED, OF PITTSBURG, KANSAS.

GUN BORING AND BURNISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 727,363, dated May 5, 1903.

Application filed August 19, 1902. Serial No. 120,217. (No model.)

To all whom it may concern:

Be it known that I, THADEUS C. HISTED, a citizen of the United States, and a resident of Pittsburg, in the county of Crawford and State of Kansas, have invented a new and Improved Gun Boring and Burnishing Machine, of which the following is a full, clear, and exact description.

This invention relates to improvements in machines for choke-boring a gun-barrel and burnishing the interior of the barrel, the object being to provide a machine of this character of very simple construction that may be manufactured and sold at a comparatively low cost and that may be readily operated by any person either skilled or a novice in the art of gun making or repairing.

I will describe a gun boring and burnishing machine embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a gun boring and burnishing machine embodying my invention. Fig. 2 is a plan view thereof. Fig. 3 is a longitudinal section of a portion of the machine, the section being on line *y y* of Fig. 4; and Fig. 4 is a section on the line *x x* of Fig. 3.

The machine comprises a frame having side rails 1, that may be attached to a bench or other support by any suitable means. I have here shown the side rails as connected near their ends by cross-rails 2, from which tenons 3 extend, these tenons being designed to pass through openings in a bench 4, and pins 5 are passed through perforations in the tenons at the under side of the bench. The side rails are also connected at the ends by cross-rails 6 7. Movable along the side rails is a carriage comprising a lower member 8, having at its opposite sides clips 9 for engaging guide-plates 10, secured to the tops of the side rails.

Hinged to the plate or member 8 of the carriage is the upper member 11, to which the clamping device for the gun-barrel is attached. This clamping device consists of a

lower block 12 and an upper block 13, these blocks being provided in their adjacent faces with depressions to receive the gun barrel or barrels. It will be noted that the depressions extend from the center toward one side, so that when operating on a double-barrel shotgun the barrel being operated upon will be centered to the tool, and when the other is to be operated upon the barrel is to be turned over, so as to bring said other barrel into alinement with the tool. Bolts 14 pass upward from the carriage-section 8 through openings in the blocks 12 and 13 and connect with a cross-head 15, which has an interiorly-threaded opening for receiving a clamping-screw 16, which bears on the upper block 13. The carriage is moved along the side rails or guides by means of a sprocket-chain 17, attached to one end of the carriage and engaging with a sprocket-wheel 18. From the other end of the sprocket-chain a cord or rope 19 extends around a pulley 20 on the end of the machine and connects with the carriage, as clearly shown in the drawings. The sprocket-wheel is provided with a crank-handle 21.

On a shaft 22 at one end of the machine is mounted a chuck 23 for receiving the spindle 24, which is designed to carry the tool operating in the gun—that is, a boring-tool may be attached to the spindle, or a polishing-tool may be attached thereto. Between the standards 25 26, in which the shaft 22 has its bearings, the said shaft is provided with a fast pulley 27 and a loose pulley 28, designed to be engaged by a driving-belt 29, which may be shifted from one pulley to the other in the usual manner. It is to be clearly understood, however, that in the operation of boring a fast motion of the tool is not particularly desired. In such case the driving-belt will be moved off the fast pulley and the shaft 21 turned manually by means of the crank-handle 30 on the balance-wheel 31, attached to the outer end of the shaft 32, or a belt may be engaged with said wheel. In the operation of boring by choking a barrel the boring-tool is to be entered at the breech of the barrel, and then while it is rotating the carriage is to be moved slowly along until the boring-tool reaches the proper point near the end of the barrel.

The object in providing the carriage with the swinging section is so that the gun barrel or barrels may be swung to the position indicated in Fig. 3, permitting an operator to look through the barrels to observe the result of the work.

It is obvious that a machine embodying my invention may be sold at a comparatively small cost, and therefore will prove of great advantage to gunsmiths at remote or small places and also to dealers in guns.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a machine of the character described, a frame, a tool-operating device on the frame, a carriage movable along the frame and a barrel-clamp on said carriage and consisting of upper and lower blocks, having depressions in their adjacent faces, the said depressions being arranged to hold one barrel of the gun in alinement with the tool-operating device, as and for the purpose specified.

2. In a machine of the character described, a frame, a tool-operating device on the frame, a carriage movable along the frame, a hinged section on said carriage and a barrel-clamp on said hinged section comprising upper and lower blocks, having depressions in their adjacent faces, whereby one of two barrels of a

gun will be held in alinement with the tool-operating device.

3. In a machine of the character described, a frame, a carriage movable along said frame and having a vertically-swinging section, a barrel-clamping device comprising a pair of blocks having depressions on said swinging section, means for moving the carriage along the frame, and means for operating a tool in the barrel.

4. In a machine of the character described, a frame, a carriage movable along said frame and having a vertically-swinging section, a barrel-clamping device on said swinging section, a sprocket-wheel arranged in the frame, a sprocket-chain connected at one end with the carriage and passing around said wheel, a connection between the other end of the chain and the carriage, a pulley on the end of the frame, around which said connection passes, and a tool-operating device mounted on the frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THADEUS C. HISTED.

Witnesses:

L. A. WILSON,
W. J. WATSON.