3 Sheets-Sheet 1.

A. Weikart,

Boring Wood.

No. 4,851. Patented Nov. 1, 1845.

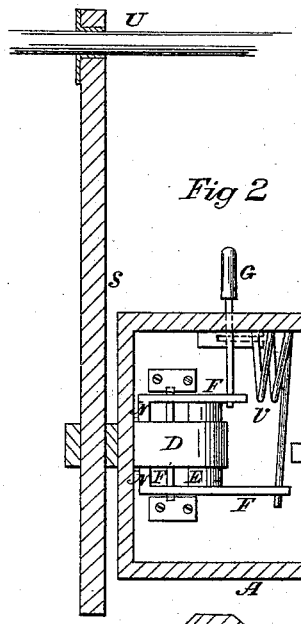


Fig 2

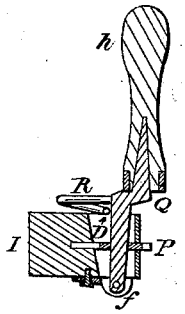


Fig 3

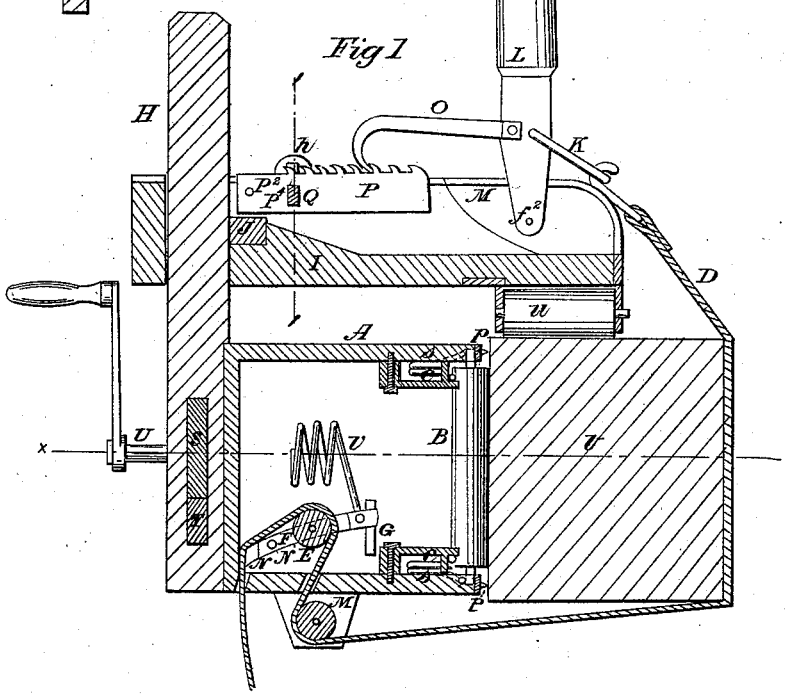


Fig 1

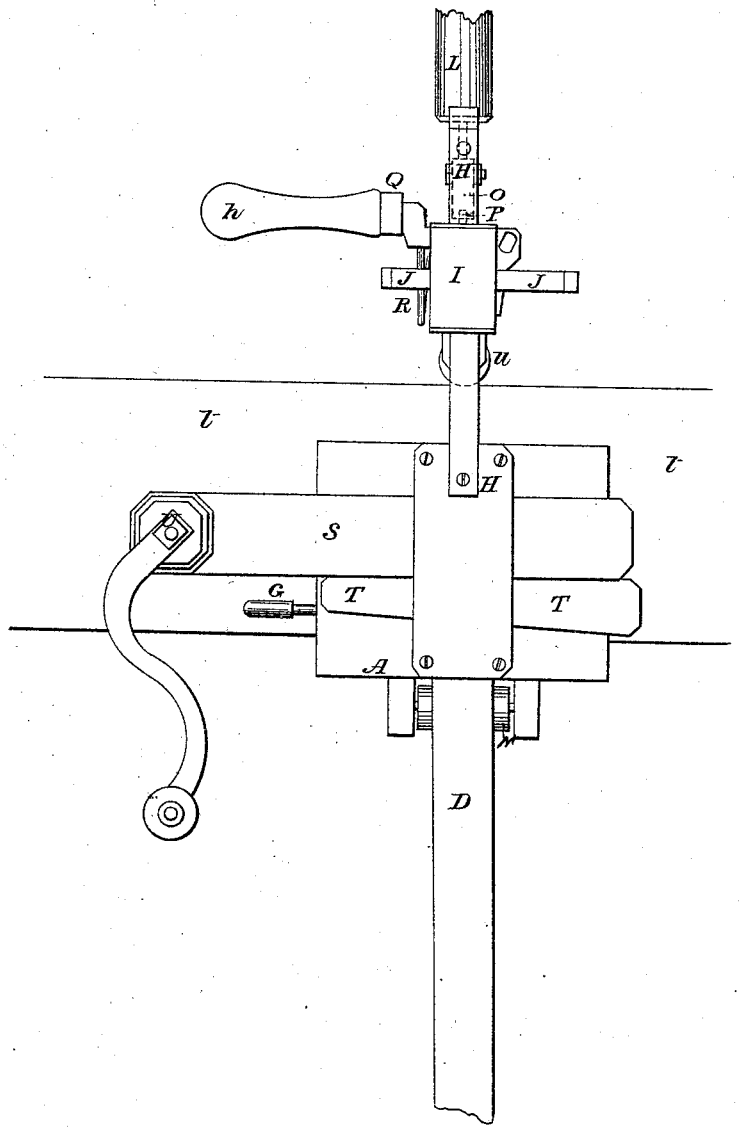
3 Sheets-Sheet 2.

A. Weikart,

Boring Wood.

No. 4,251. Patented Nov. 1, 1845.

Fig 4



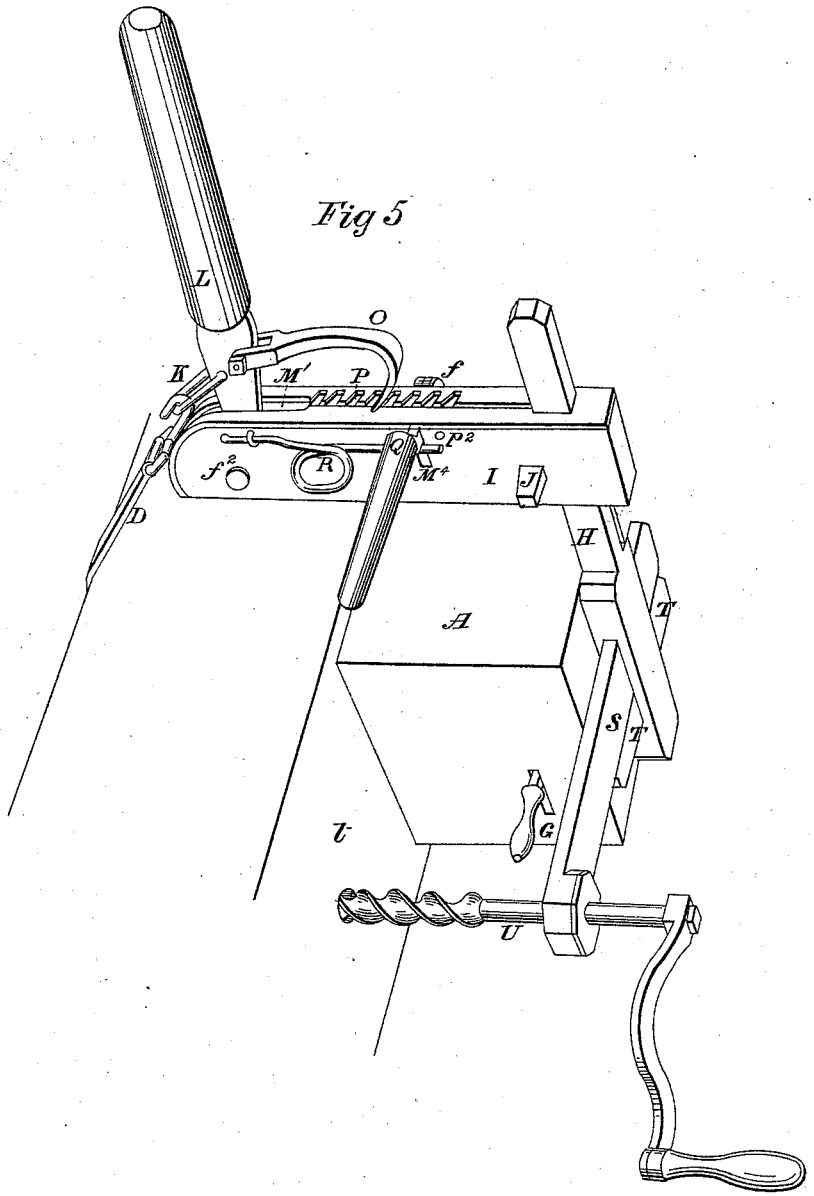
3 Sheets-Sheet 2.

A. Meikart,

Boring Wood.

No. 4,251. Patented Nov. 1, 1845.

Fig 5



UNITED STATES PATENT OFFICE.

ANDREW WEIKART, OF GREEN VILLAGE, OHIO.

BORING-MACHINE.

Specification of Letters Patent No. 4,251, dated November 1, 1845; Antedated May 1, 1845.

To all whom it may concern:

Be it known that I, ANDREW WEIKART, of Green Village, in the county of Columbiana and State of Ohio, have invented a new and useful Improvement in Machines for Boring Timber, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a vertical transverse section of the machine, secured to the side of a piece of timber to be bored by the strap D. Fig. 2 is a horizontal longitudinal section of ditto at the line *x x* of Fig. 1. Fig. 3 is a vertical transverse section of the movable timber I, and a longitudinal section of the lever Q, for depressing the notched plate drawn at the line 1, 1, of Fig. 1. Fig. 4 is a side view of the machine when in operation. Fig. 5 is a perspective view of the machine as in operation.

This machine consists of a rectangular box A, Figs. 1, 2 and 5, open at the side and shod on the edges with sheet iron having points *p*, Figs. 1 and 2, projecting from its surface. In this box and at the open side thereof are arranged parallel vertical rollers B turning on axles, inserted in slits, Fig. 2, formed in plates secured to the top and bottom of the box, said axles resting against the extremities of coiled wire springs C the peripheries of which rollers extend beyond the vertical line of the points *p*, to enable the machine to be moved against the side of the timber *t*, on said rollers when the points *p* are disengaged therefrom. The aforesaid box A also contains a metallic frame F, arranged at the lower part thereof, consisting of two curved bars F connected together at their lower extremities by a cross bar N that turn or vibrate on a shaft or pin F′ inserted in cheek pieces secured to the bottom of the box, one of which curved bars F being extended beyond the other and attached at its end to a coiled wire spring V. In this metallic frame F is placed a roller E turning on axles inserted in said bars F. This vibrating metallic frame F is for the purpose of securing the end of a strap D for securing the machine to the timber to be bored. The said strap D is passed through a slit in the bottom of the box and conveyed to the inside thereof and passed between the bar N, and the back of the box and thence over a roller E and thence through another slit in the bottom of the box to the outside thereof and thence under a roller M arranged beneath the box and under the timber *t* to be bored and around the same being connected at its end by a hook to a link K attached to a lever L inserted into a mortise M′, Figs. 1 and 5, in a horizontal gage timber I. This lever turns in a fulcrum f^2 at its lower end. By means of this lever L and strap D the box A is drawn firmly against the timber *t* causing the springs C (against which the gudgeons or axles of the rollers B revolve) to yield, and the rollers B to recede, and the points *p* to penetrate the side of the timber to be bored, and is held in that position by means of a hook O attached to the lever L hooked to notches formed on the upper edge of a vertical vibrating metallic plate P, suspended by a pin P^2, Fig. 1, in the mortise M′. The strap D is clamped and held firmly between the cross bar N and the back of the box, by the influence of the spring V on the frame F and the pressure exerted on the roller E. When it is required to unclamp the strap from between the bar N and back of box A a lever G, Figs. 1, 2, and 5 and 4, is moved. This lever turns on a fulcrum at or near its center and has a handle G on the outside of the box extending through a mortise in the box to the inside, where it rests against the lower part of one of the bars F and said lever being pressed against the lower part of bar F causes the metallic frame F to move or vibrate on the pin F′ and the cross bar N to recede from the strap D. A vertical timber H is secured to the outside of the box. It projects above the top of the box and passes through a slit or mortise formed in the end of a horizontal movable gage timber I, moving loosely on the timber H, being secured firmly at any desired point by a key or wedge J. To the other end of timber I is attached a horizontal friction roller U, which runs against the top of the timber *t* to be bored and keeps the auger V at a uniform distance from the top of the timber to be bored after the machine is set to that distance by the key J. A slit or mortise M^4 is formed in this gage timber I in which is inserted the end of the lever Q, and the notched plate P is suspended by a pin P^2 at the end next the timber H. It is caused to project upward beyand the face of the gage timber I the depth of the nicks or notches, by means of a coiled wire spring R, Figs. 3 and 5, which raises the lever Q that passes through a mortise P^4 in the plate P. See Figs. 1 and 3. It is de-

pressed below the face of the gage timber I (when required to disengage the hook O) by means of said lever Q, Figs. 1, 3, 5, passing through the aforesaid opening in the plate P having a fulcrum *f* at one end and a handle *h* at the other by which the lever is moved and with it the notched plate P as soon as the pressure is removed from the handle, the plate will be forced to its original position, by the action of the coiled spring R, Fig. 5 on the lower edge of the lever forcing it upward. A horizontal longitudinal timber S is inserted in a mortise made in the timber H and secured at any point desired by means of a key T. At one end of which longitudinal timber S is formed an aperture lined and faced with strap iron, in which the shank V of the auger turns. By means of this longitudinal timber S passing through a mortise in the timber H as described, the auger can be moved longitudinally without unfastening the machine from the timber *t*.

What I claim as my invention and which I desire to secure by Letters Patent is—

The combination of the strap D, metallic plates or bars F, connected by a cross bar N and suspended on pivots, lever L and nicked plate P, as set forth, for securing the machine to the timber to be bored, said strap D, being hooked to the lever L, and passed under the timber, around the rollers M, E, and between the bar N, and the side of the box A as described.

A. WEIKART.

Witnesses:
WILLIAM ROLLER,
U. B. ROLLER.