

(No Model.)

M. SWEET.
WOOD BORING MACHINE.

No. 289,170.

Patented Nov. 27, 1883.

Fig. 1.

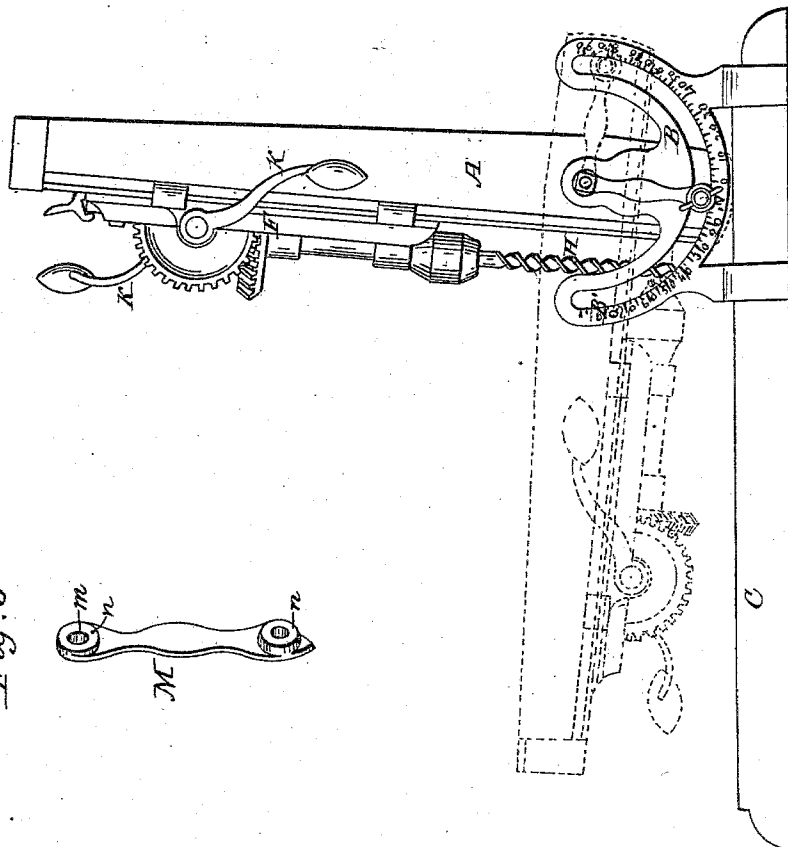


Fig. 3.

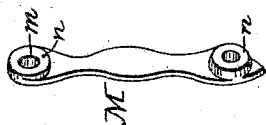
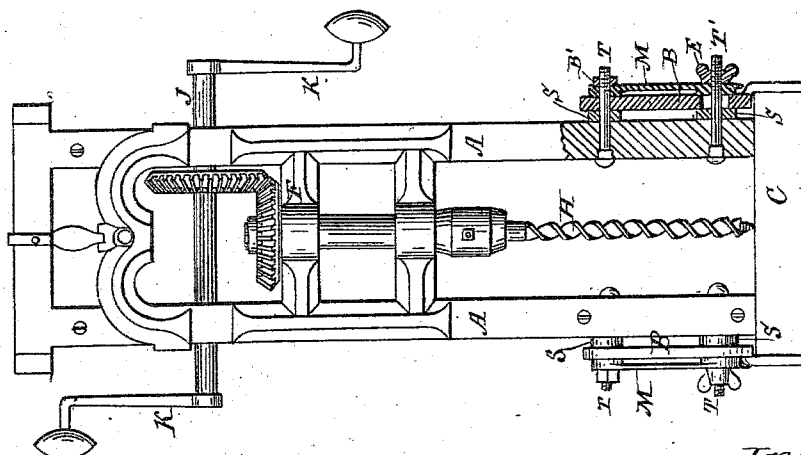


Fig. 2.



Witnesses:
L. L. Hills
Wm. Masson

Inventor:
Miles Sweet
by E. E. Masson
att'y.

UNITED STATES PATENT OFFICE.

MILES SWEET, OF TROY, NEW YORK, ASSIGNOR TO SWEET & CLARK MANUFACTURING COMPANY, OF SAME PLACE.

WOOD-BORING MACHINE.

SPECIFICATION forming part of Letters Patent No. 289,170, dated November 27, 1883.

Application filed September 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, MILES SWEET, a citizen of the United States, residing at Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Boring-Machines, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a side elevation, showing the machine as set at two different angles. Fig. 2 is a front elevation with the frame-retaining devices in section on one side. Fig. 3 is a perspective view, showing the inner side of the pointer.

My invention relates to improvements upon the boring-machine shown in Patent No. 88,821, granted to me April 13, 1869, in which the index or pointer consists of a thin blade clamped at only one end to the frame, and said index has been found liable to be accidentally shifted out of plumb, and thus cause errors to be made while using the machine.

The objects of my improvements are, first, to prevent the accidental displacement of the pointer, and, second, to simplify the construction of the frame-clamping device. I attain these objects by the construction illustrated in the accompanying drawings, in which similar letters refer to similar parts throughout the several views.

In the drawings, C is the base of the machine, which has a flat bottom to rest upon the timber to be bored, and which forms a seat for the operator. B B are two parallel and opposite supports, which are secured to the base C. They are in the form of inverted arches, and have a radial arm extending to the center of the arch. The frame or stock A is secured to the supports B by means of bolts T, passing through the upper end of the radial arm, and said frame has straight ways to guide the auger-carriage F, carrying the boring apparatus. The latter consists of a horizontal rotary shaft, J, having hand-cranks K K fast thereon, and the shaft is geared to a shaft that holds and revolves an auger, H, and moves it endwise with the frame F in a line parallel to that in which the frame F slides on the frame

A. Each inverted arch or frame-support B has a semicircular groove, B', to receive the bolt T', passing through the lower end of the frame and through the pointer M. The outer circle of the supports B is graduated in degrees of an arc of a circle, and indicates, in connection with the pointer, the inclination in degrees made by the boring-tool. To prevent undue friction of the frame A against the supports B, and thus facilitate the adjustment of said frame, plain washers S are placed upon the bolts T and T' between the parts A and B. The pointer M is perforated at its upper end, m, to receive the end of the pivot-bolt T, after it has been introduced through the frame A, upper washer S, and upper end of the central arm in frame B, and a nut placed upon said bolts, retains the parts united at that point. The pointer is provided with a boss, n, upon the inner side thereof at or adjoining each end, to operate as a washer for each retaining-bolt, thus forming an effectually combined pointer and washers. The bolt T' is provided with a thumb-nut, E, to bear against the lower end of the pointer and force the latter against the outer face of the segmental supports B, and thus clamp said supports between the lower washer S and the pointer.

Having now fully described my invention, I claim—

1. In combination with the frame having straight ways to guide the auger-carriage, slotted segmental supports B, and bolts T T', the pointer M, provided with a perforation at each end to receive said bolts, substantially as and for the purpose described.

2. In a wood-boring machine, the combination of the frame carrying the auger-carriage, bolts passing through thereto, and the slotted segmental supports, with the pointer provided with perforations at each end and a washer-like boss around said perforations, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

MILES SWEET.

Witnesses:

CHARLES I. BAKER,
HORTON D. WRIGHT.