B. F. JOSLYN.

WOOD-BORING MACHINE.

No. 187,388. Patented Feb. 13, 1877.

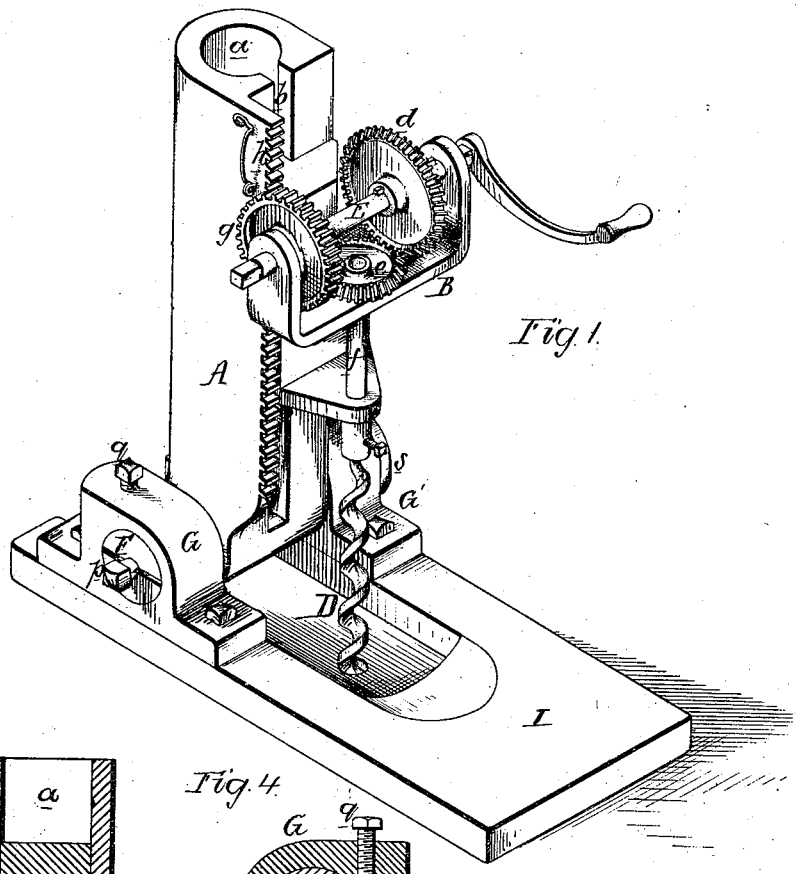

Fig. 1.

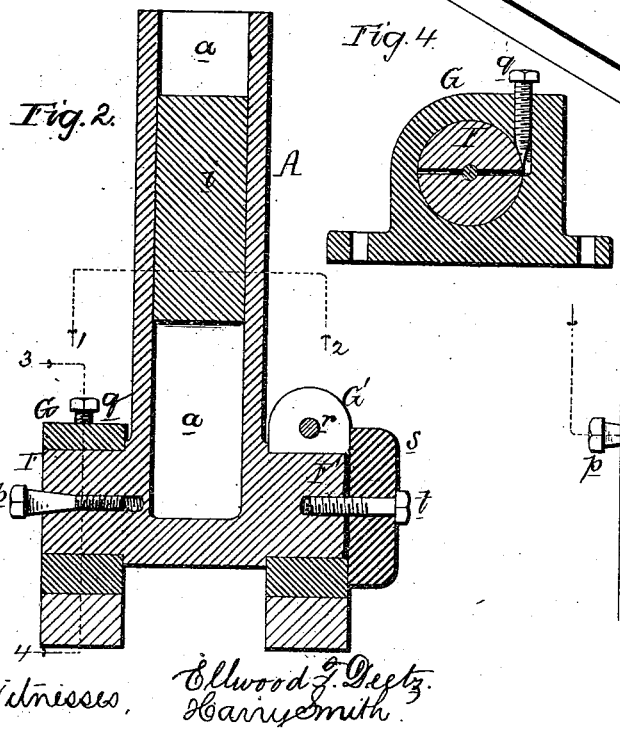

Fig. 2.

Fig. 4.

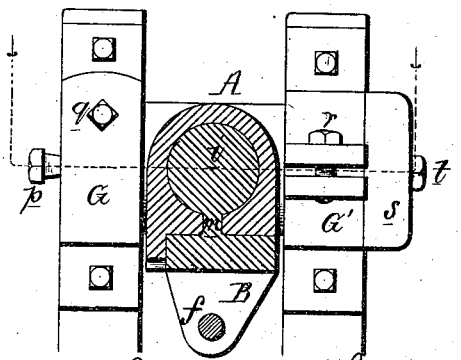

Fig. 3.

Witnesses,
Ellwood Z. Deetz.
Harry Smith.

Benjamin F. Joslyn
by his attorneys.
Howson & Son

UNITED STATES PATENT OFFICE.

BENJAMIN F. JOSLYN, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO RICHARD P. BRUFF, OF NEW YORK CITY.

IMPROVEMENT IN WOOD-BORING MACHINES.

Specification forming part of Letters Patent No. **187,388**, dated February 13, 1877; application filed July 5, 1876.

To all whom it may concern:

Be it known that I, BENJAMIN F. JOSLYN, of Worcester, Massachusetts, have invented certain Improvements in Wood-Boring Machines, of which the following is a specification:

The object of my invention is to simplify the construction and increase the efficiency of portable wood-boring machines, and this object I attain in the following manner:

In the accompanying drawing, Figure 1 is a perspective view of my improved boring machine; Fig. 2, a transverse section through the supporting-standard and its bearings; Fig. 3, a sectional plan on the line 1 2, Fig. 2; and Fig. 4, a longitudinal section on the line 3 4, Fig. 2.

A is a standard, having an opening, *a*, extending from the top nearly to the bottom, and in its front edge a slot, *b*, communicating with this opening. To the front of the standard A is adapted a frame, B, carrying the boring-tool D and mechanism for operating the same, the said mechanism consisting of a shaft, E, carrying a bevel-wheel, *d*, gearing into a pinion, *e*, on the upper end of the tool-spindle *f*. This shaft E also carries a cog-wheel, *g*, which, when the bevel-wheel *d* is in gear with the pinion, is clear of the standard A; but when the shaft is moved laterally, so as to throw the bevel-wheel out of gear with the pinion, the cog-wheel *g* is brought into gear with a rack, *h*, on the standard A, when, by turning the shaft, the frame B may be raised and the tool drawn out of the wood. Adapted to the opening *a*, in the standard A, is a cylindrical block, *i*, connected to the frame B by means of a rib, *m*, adapted to the slot *b* in the standard, the block and its rib thus serving to guide the frame B, and at the same time prevent all lateral or longitudinal twisting of the frame. The bottom of the standard A has trunnions F F′, adapted to bearings G G′ on the base I of the machine, and in order that the standard A may be adjusted to the various angles required, and secured after adjustment, the bearings G G′ are constructed as described hereafter, so that they may be caused to gripe the trunnions and hold the same securely, whatever may be the position of the standard. The trunnion F is slotted, and is provided with a taper screw, *p*, and to a threaded hole in the bearing G is adapted a set-screw, *q*, having a tapering point arranged to bear against the periphery of the trunnion F. The bearing G′ is severed at the top, and has ears, which may be drawn tightly together by means of a screw, *r*. Against the outer edge of this bearing G′ bears a collar, *s*′, through which passes the stem of a screw, *t*, the threaded portion of which is adapted to a threaded hole in the trunnion F′. By turning the screw *t*, the shoulder at the inner end of the trunnion may be caused to bear tightly against the inner edge of the bearing.

It will be evident that by these means ample facilities are afforded for securing the standard A in any position to which it may be adjusted.

I claim as my invention—

1. The combination, in a portable boring-machine, of the standard A having an opening, *a*, and slot *b*, with the frame B, its block *i*, and connecting-rib *m*, as set forth.

2. The combination of the standard A, its trunnion F′, and its recessed trunnion F, and taper screw *p*, with the bearing G and its screw *q*, as set forth.

3. The combination of the standard A and its trunnion F′ and trunnion F, with the bearing G′, screw *r*, collar *s*, and screw *t*, as specified.

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

BENJAMIN F. JOSLYN.

Witnesses:

HARRY SMITH,

HUBERT HOWSON.