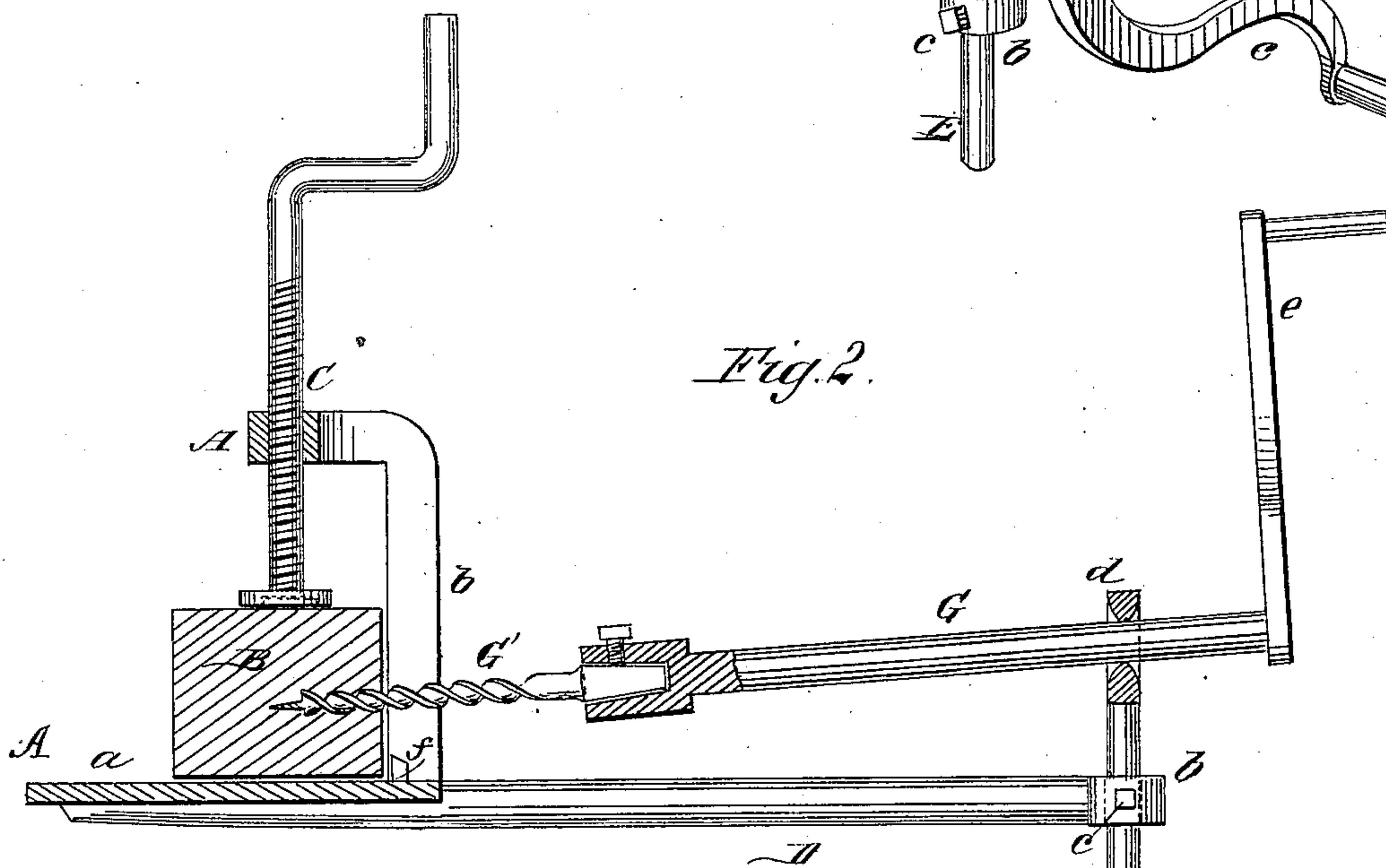
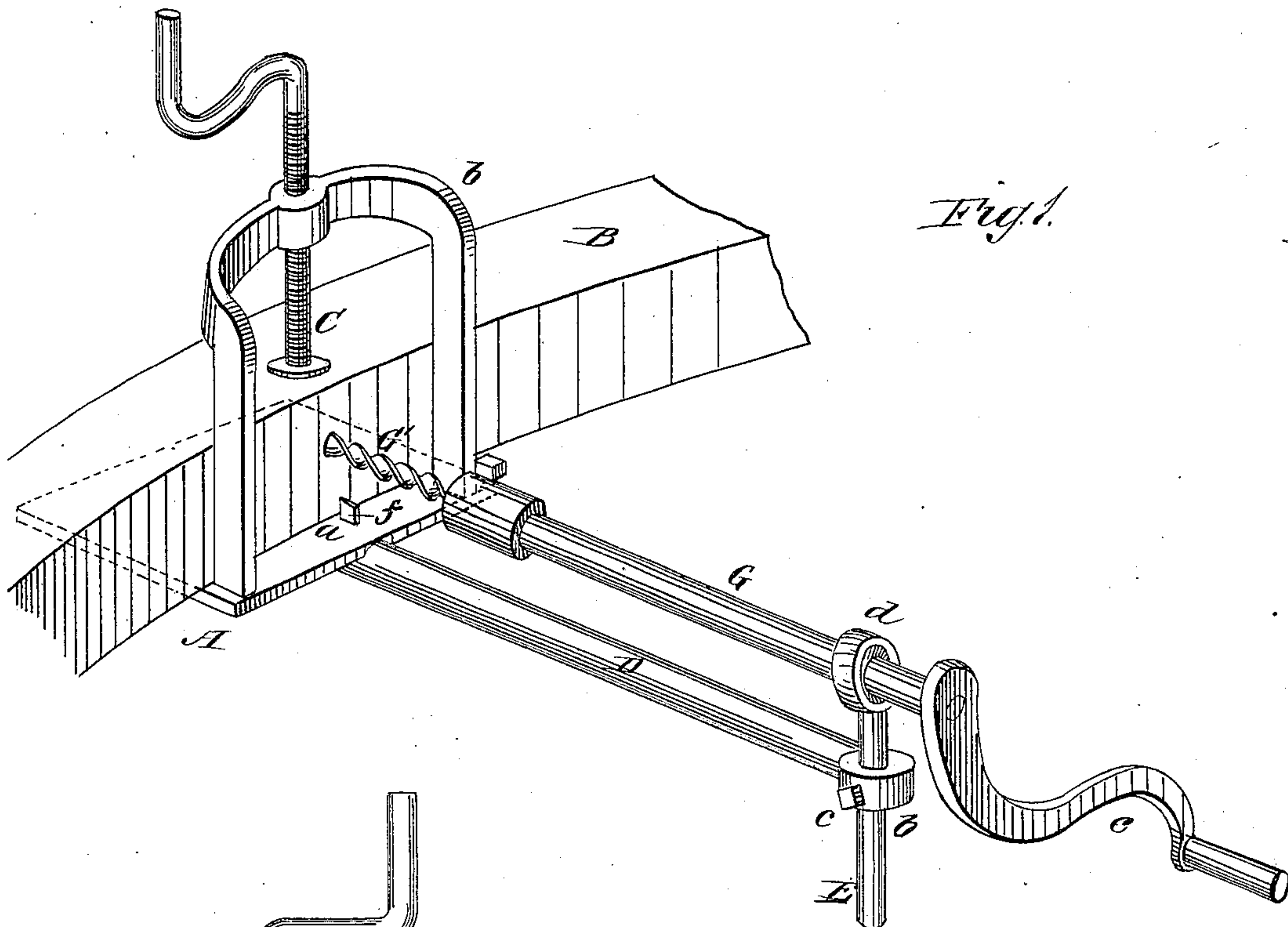


(No Model.)

V. COX.
BORING MACHINE.

No. 258,716.

Patented May 30, 1882.



WITNESSES:
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UNITED STATES PATENT OFFICE.

VINCENT COX, OF NEW VIENNA, OHIO.

BORING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 258,716, dated May 30, 1882.

Application filed March 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, VINCENT COX, of New Vienna, Clinton county, Ohio, have invented new and useful Improvements in Machines for Boring Fellies of Wagon or other Wheels, and for other purposes, of which the following is a full, clear, and exact description.

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

Figure 1 represents a view in perspective of a machine constructed in accordance with the invention and as applied to a felly, and Fig. 2 is a vertical longitudinal section of the same.

This invention consists in a machine or tool of simple construction, whereby every facility is afforded for boring holes in wagon or buggy-fellies and other articles both in straight lines and in various angular directions without shifting the article being bored, substantially as hereinafter described.

A in the drawings indicates the frame or stand of the machine on which the felly B or other article to be bored is placed, and upon which it is secured by a clamping-screw, C. Said frame A is here shown as formed of a table or base, *a*, upon which the felly rests, and an open guard, *b*, projecting upward from the front of said base, and against which the inner side or one edge of the felly bears. Attached to and projecting centrally and horizontally outward from the front of this frame is an arm, D, having an eye, *l*, opening up through its outer end and fitted with a side set-screw, *c*, for holding in place, as adjusted up or down or around within said eye, a circular post, E. This post is also constructed with an eye, *d*, at its upper end, whereby it is made to form the bearing-post for the shaft or rotating holder G, which carries at its inner end the bit or auger G', and which shaft corresponds with the shank of the bit or auger. This shaft G is fitted to work loosely or freely through the eye *d* of the post, and is provided on its outer end with a crank or handle, *e*, for operating the bit or auger.

With the machine or tool thus constructed every facility is afforded for boring either a straight hole through the felly without gaging

or marking—that is, a hole parallel with the arm D or a hole at any desired angle thereto—and inclining up or down or to the right or left, the adjustability of the post E, longitudinally and axially, and free fit of the shaft G through its eye, providing for such varied action of the boring-tool. For ordinary variations in the angular direction of the holes to be bored, and for straight holes, it will not be necessary even to disturb the bearing of the shaft G or move the post E, as the hole in the eye *d* of the post is constructed with a rolling bearing-surface for the shaft G—that is, a bearing-surface in which the shaft G is free to roll in various directions, as shown in Fig. 2.

Upon the base *a* of the frame A is a centering projection, *f*, in line with the arm D, whereby the adjustment of the felly on the frame and proper direction of the bit at starting is facilitated.

The machine, which is simple, cheap, easily adjusted, and not liable to get out of repair, may be used not only for felly-boring or boring holes in curved pieces of timber, but also for boring holes in straight pieces of scantling or timber for making gates or other carpenter work.

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

1. The combination, with the frame A and the clamping-screw C, of the bit or auger holding and operating shaft G, and the supporting-post E, having a rolling bearing-surface, substantially as herein shown and described, whereby the direction of the bit or auger can be varied, as set forth.

2. The combination, with the frame A, provided with a clamping-screw, C, and forwardly-projecting arm D, of the post E, adjustable both longitudinally and axially within and through said arm, and the bit or auger holding and operating shaft G, supported in an eye, *d*, of said post, constructed to form a bearing having a rolling surface, essentially as shown and described.

VINCENT COX.

Witnesses:

J. M. BETTERTON,
W. H. HAGUE.