

N. Woodbury.

Centering Awl.

N^o 91,806.

Patented Jan. 22, 1869.

Fig: 1.

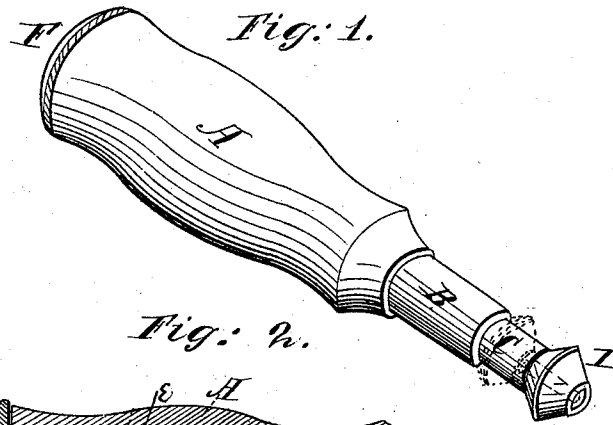


Fig: 2.

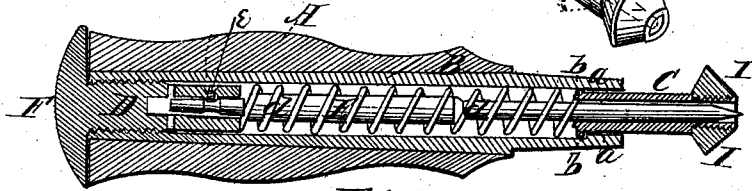


Fig: 3.

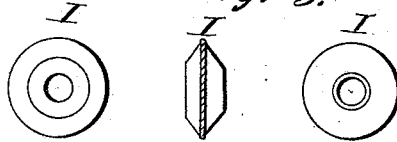
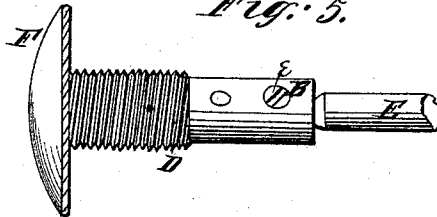


Fig: 4.



Fig: 5.



Witnesses
Harry King
Ed. Curt

Inventor
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United States Patent Office.

NATHAN WOODBURY, OF WOODSTOCK, VERMONT.

Letters Patent No. 91,806, dated June 22, 1869; antedated May 28, 1869.

IMPROVEMENT IN CENTRING-AWL.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, NATHAN WOODBURY, of Woodstock, in the county of Windsor, and in the State of Vermont, have invented certain new and useful Improvements in Centring-Awls; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and general arrangement of an "improved centring-awl."

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a perspective of the awl complete;

Figure 2 is a longitudinal vertical section of the same;

Figure 3 shows the reversible nut in different positions;

Figure 4 is a side view of the awl; and

Figure 5 is a side view of the metal cylinder that holds and regulates the working of the awl.

A represents the wooden handle, in which is inserted and secured a metal tube, B.

The tube B is flush or even with the upper end of the handle, but extends a suitable distance below its lower end, and is, on its inner side, near the lower end, provided with a bearing, *a*, as seen in fig. 2.

Within the fixed tube B is placed a movable tube, C, which, at its inner end, is provided with a collar, *b*, said collar fitting against the bearing *a* of the fixed tube, and thus serving as a stop for the movable tube, preventing it from extending more than a certain distance beyond the lower end of the fixed tube.

In the upper end of the fixed tube B, which is, on the inside, provided with screw-threads, is inserted a metal cylinder, D, having in its inner end a socket to receive the head of the awl E, which is held in place by a small screw, *e*, passing through the side of the socket.

The cylinder D has upon its outer or upper end a metal plate or head, F, serving as the upper end of the handle.

Around the awl, within the fixed tube E, is placed a spiral spring, *d*, one end of which rests against the inner end of the cylinder D, and the other against the inner end of the movable tube C, thus pressing said tube outwards.

The outer end of the movable tube C is provided with screw-threads, on which is placed a reversible nut, I, which is bevelled on both sides, so as to fit countersunk holes of different sizes, which nut can be changed by unscrewing it, and then reversing it and screwing it again in its place.

The movable tube C at all times covers the point of the awl, when not in use, and when the bevelled nut I is placed in the countersink, and a blow struck upon the end of the handle, the movable tube slides back within the fixed tube B, and the awl E, being fixed, becomes uncovered, marks the centre, and penetrates the wood.

By the use of the cylinder D, the depth which the awl shall penetrate into the wood is readily regulated, for it will be seen, that if the cylinder is screwed so far down that the plate F touches the wood, the awl will penetrate the wood the full length of that part of it capable of being exposed, but if screwed only partly down, the depth the awl will penetrate is proportionably less.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The reversible centring and bevelled nut I, when constructed as described, and used upon the extremity of a centring-awl, substantially as set forth.

2. In combination with the nut I, I claim the sliding tube C, with flange *b*, fixed tube B, with shoulder *a*, awl E, spring *d*, flanged screw F D, and handle A, all the parts being constructed, arranged, and operating substantially as specified.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 26th day of May, 1869.

NATHAN WOODBURY. [L. s.]

Witnesses:

CHARLES P. MARSH,
JOHN W. MARSH.