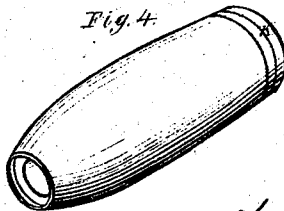
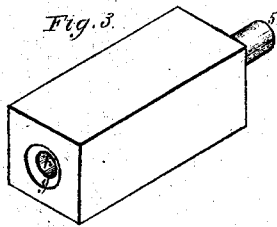
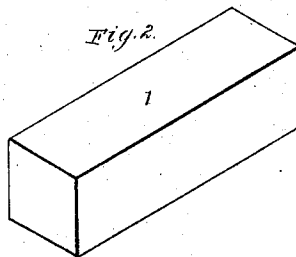
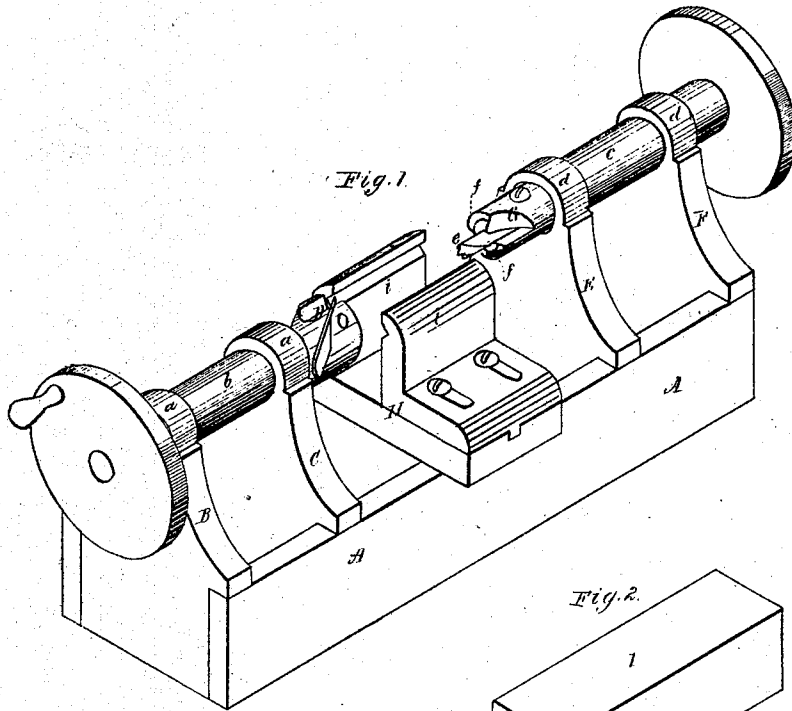


F. Reed,

Wood Lathe.

No. 104,645.

Patented June 21, 1870.



Witnesses
J. W. Stearns
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Inventor
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United States Patent Office.

FRANKLIN REED, OF CANTON, MASSACHUSETTS.

Letters Patent No. 104,645, dated June 21, 1870.

IMPROVEMENT IN LATHES FOR MAKING AWL-HANDLES.

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, FRANKLIN REED, of Canton, in the county of Norfolk and State of Massachusetts, have invented a Machine for Making Awl-Hafts or Handles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of my said machine.

Figure 2 is a view of the blank from which the awl-haft or handle is to be made.

Figure 3 is a view of the handle partially finished.

Figure 4 is a view of the handle completed.

In the ordinary operation for making handles for awls and other similar tools, it has been customary, first, to place the wooden blank in a lathe, and bore out the hole for the reception of the "tang" or "start" of the awl, after which the blank is removed, and placed in a second machine, when the outer end is turned down by hand, for the reception of the leather washers to form the end of the handle, and protect it from spreading when struck by the hammer. After having turned the outer end down by hand, it is removed, to allow of the application of the washers, which several operations are not only inconvenient, but occupy considerable time.

To produce the same results in a more convenient and expeditious manner is the object of my invention, which consists in a machine provided with a boring-bit and tenon-cutter, in combination with a grasping mechanism for holding the blank, by which construction the hole for the reception of the "tang" or "start" of the awl, is bored simultaneously with the operation of turning down the outer portion of the blank for the reception of the washers, which form the outer end of the handle, and by thus performing the two operations at one and the same time, and in one and the same machine, the tenon for the washers and the hole for the "tang" or "start" will be formed truly concentric with the axial line of the handle, and the blank will be required to be removed but once, instead of twice, previous to applying the washers, whereby a saving in time and labor is effected, and the cost of the handle proportionally reduced.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing—

A is the frame-work of the machine, at one end of which, in bearings *a a*, in standards B C, revolves a spindle, *b*, to the inner end of which is secured a tenon-cutter, D.

This spindle is driven by suitable power applied to a pulley, (not shown,) and, by means of a shipper-le-

ver, (not shown,) is made to slide longitudinally in its bearings, so that the "tenon-cutter" can be kept up to its work, to form the tenon 5, as required.

c is a spindle, similar to *b*, which revolves and slides in bearings *d d*, in standards E F, at the opposite end of the machine.

To the inner end of the spindle *c* is secured the holder G of a boring-bit, *e*, the end of the holder being provided with two cutters or knives, *f f*, so as to cut out an annular groove, *g*, centrally around the hole *h*, which is formed by the bit *e*, for the reception of the "start" or tang of the awl, the object of the annular groove *g* being to afford a proper seat for the nut which screws on the outside of the tang or "start" of the awl.

H is the grasping mechanism, between the jaws *i i* of which is placed a rectangular piece of wood or blank, I, fig. 2.

The tenon-cutter D and boring-bit *e* are then simultaneously brought up to the opposite ends of the blank, to form the tenon 5, and bore the hole *h*, with the annular groove *g* around it, (see fig. 3.) The piece of wood I is now removed, and leather washers K are fitted in place over the tenon 5, after which the whole is put into a lathe, and turned down to the shape required for the finished handle, as seen in fig. 4.

By thus performing the two operations at one and the same time, and in one and the same machine, the tenon for the washers and the hole for the "tang" or "start" will be formed truly concentric with the axial line of the handle, and the blank will be required to be removed but once, instead of twice, previous to applying the washers, whereby a saving in time and labor is effected, and the cost of the handle proportionally reduced.

I am aware that tools operating in a somewhat similar manner have been employed in the manufacture of various articles other than awl-handles—for instance, in the construction of spools, buttons, &c. To these, however, I lay no claim; but

What I do claim as of my invention, and desire to secure by Letters Patent, is—

A machine for making awl-handles, consisting of a tenon-cutter, D, and a boring-bit, *e*, with their driving apparatus, in combination with a grasping mechanism, H, for holding the blank, the whole constructed, arranged, and operating substantially as and for the purpose set forth.

Witness my hand this 11th day of May, A. D. 1870.

FRANKLIN REED.

Witnesses:

P. E. TESCHEMACHER,
N. W. STEARNS.