L. L. Gunther.

Carving Tool.

No. 97,910. Patented Dec. 14, 1869.

Fig. 1.

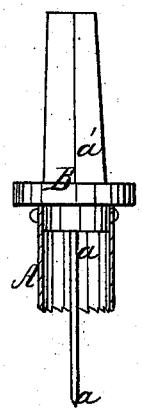


Fig. 2.

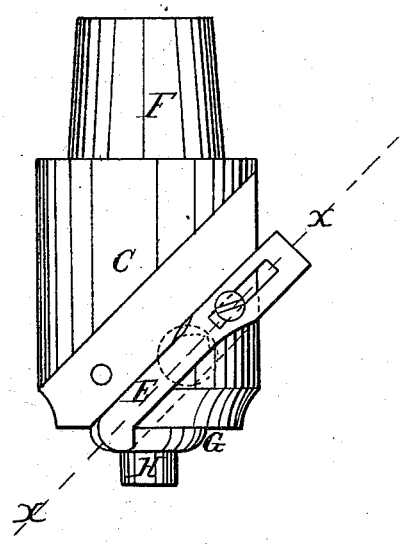


Fig. 3.

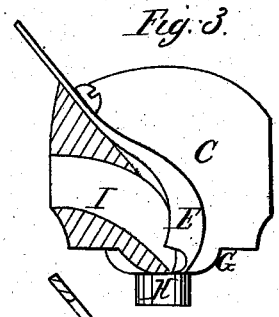


Fig. 4.

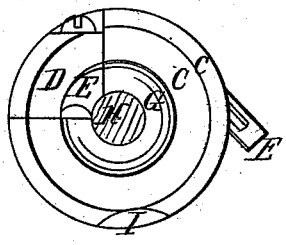
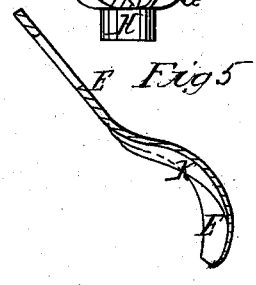


Fig 5



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LOUIS L. GUNTHER, OF CHICAGO, ILLINOIS.

Letters Patent No. 97,910, *dated December* 14, 1869.

IMPROVEMENT IN TOOL FOR CARVING WOOD.

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

To whom it may concern:

Be it known that I, LOUIS L. GUNTHER, of Chicago, Cook county, and State of Illinois, have invented a new and useful Improvement in Tools for Carving the Circular Portions of Ornamental Wood-Work; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

In the drawings—

Figure 1 is a section of a cylindrical saw, having a pin in the centre of the cylinder, to guide it in cutting.

Figure 2 is a cutter-block, having a portion removed from the side, which is occupied by a clamp, showing the position of the knife or cutter in the block.

Figure 3 is a section of the cutter-block, at line *x–x* in fig. 2, and showing the knife in position.

Figure 4 is an end view of the cutter-block, with knife and clamp in position.

Figure 5 is a detached section of knife or cutter.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in tools for carving the circular portions of ornamental wood-work, which improvement consists in a gouge-shaped knife, of peculiar form, provided with a filling on its inner side, which knife is attached to a cutter-head of novel construction.

As a matter of convenience, I make use of a cylindrical saw, for cutting out circular spaces in such ornaments.

Both the saw and knife are intended to be worked by a lathe or turning-machine, and the tools intended to supersede hand-labor in the manufacture of that kind of ornamental wood-work.

In the drawings—

A is a cylindrical saw, with pin *a* through its centre, and fastened upon the block B, which has a stud, *a'*, for attaching it to the lathe or other machine by which it is rotated.

C is the cutter-block, in which the cutter E is placed, having, in fig. 2, the clamp D removed, and showing the cutter or knife E in proper position.

This knife or cutter is placed in the inside of the block, in a space prepared for it, by the withdrawal of the clamp D, shown in fig. 4.

F is a stud, for attaching the cutter-block to the lathe or other machine by which it is rotated.

The cutter-block is provided, also, with a circular hub, G, corresponding in shape with the cutting-edge of the knife or cutter E, and in size exactly with the ornament to be carved.

H is a stud, corresponding in size with the circular hole cut by the saw, and inserted in it when the tool is in operation, to act as a guide.

E is the corrugated cutter or knife, by which the required moulding is carved or turned.

I is an aperture in the cutter-block, leading from the front of the cutter to the outside of the block, prepared for the shavings to be thrown through as they are cut by the knife, and forced through the block.

K is the filling of the under or concave side of the cutter, used to prevent the shavings from clogging the tool, and prepared of some soft metal, so as to be easily removed as the knife is worn away.

The operation of these tools may be described as follows:

A hole is made, by the awl, in the centre of the ornament to be carved. In this hole, the pin of the saw is placed, and the open circular space of the ornament cut out by the saw. In the space thus cut by the saw, the stud H of the cutter-block is placed, and that portion of the ornament is completed by the cutter E. Each portion of the circular parts of the ornaments desired is thus produced.

In ornaments of large size, or when the moulding is less simple in design, the block may be provided with a number of knives, so that too much of the work may not fall on a single one, and also to cut the different mouldings of the same circular ornament.

The teeth of the saws vary in proportion to their size, and the attachment to the lathe or other rotating machine may be made by means of a nut and screw, instead of the stud shown in these drawings.

The advantages of this invention are, the economy of labor, the greater rapidity of production, and accuracy in design of such ornaments.

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

1. The knife E, provided with filling K, when constructed and operating as above described.

2. In combination with the knife E, provided with filling K, the hub G, provided with the studs H and F, and the aperture I, each constructed, and arranged, and operating together as and for the purposes aforesaid.

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