N. T. MELVIN.

Wood-Turning Lathes.

No. 154,183. Patented Aug. 18, 1874.

Fig. 1.

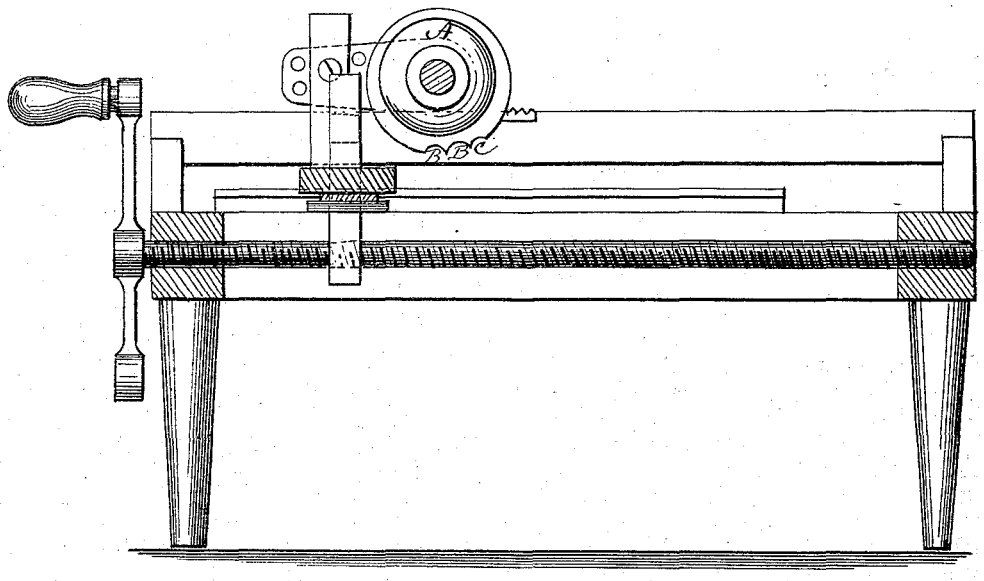


Fig. 2.

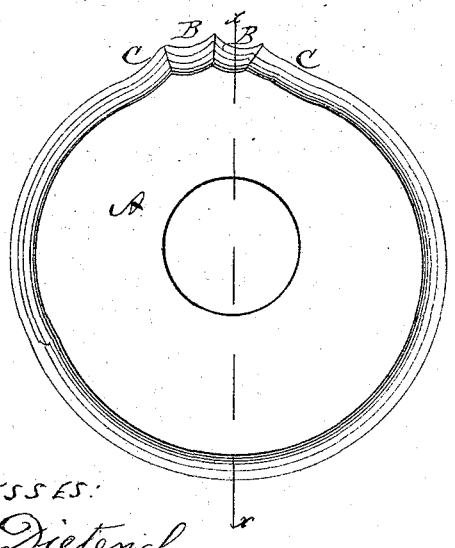
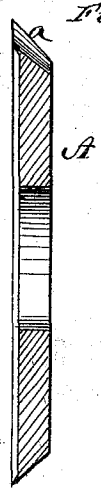


Fig. 3.



WITNESSES:
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UNITED STATES PATENT OFFICE.

NATHAN T. MELVIN, OF WEST SALEM, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO ISAAC HARBAUGH, OF SAME PLACE.

IMPROVEMENT IN WOOD-TURNING LATHES.

Specification forming part of Letters Patent No. **154,183**, dated August 18, 1874; application filed June 10, 1874.

To all whom it may concern:

Be it known that I, NATHAN T. MELVIN, of West Salem, in the county of Wayne and State of Ohio, have invented certain new and useful Improvements in Wood-Turning Lathes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a self-sharpening knife or bit for wood-working machines, as will be hereinafter more fully set forth.

In the accompanying drawing, Fig. 1 is a longitudinal vertical section of a turning-lathe, showing the position of my knife or bit therein. Fig. 2 is a side view of the knife. Fig. 3 is a longitudinal section of the same through the line *x x*, Fig. 2.

A represents the knife or bit made in circular form for the greatest part of its circumference, but on one side it has curves B B and C C, to form beads, &c. These curves may of course be made of any desired form or shape, according to the work to be done. The cutting-edge *a* of this knife is first sharpened in the usual manner for turning-tools, then the edge is set or turned over to one side, as shown in Fig. 3.

The effect of thus turning over the cutting-edge is to make the knife self-sharpening. No matter how long the knife is in use, or how many articles are turned, the last will be just as smooth as the first, and the knife remain sharp till it is worn out.

The knife shown in the drawing is to be used in a turning-lathe, attached in a vertical position to a horizontal shaft, which shaft is retained stationary when any straight part is being turned, but revolves in turning beads or curves, so as to bring the proper portions of the knife to the article being turned.

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

The knife A, made in circular form, provided with curves B C, and having its cutting-edge *a* turned over to one side, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

NATHAN T. MELVIN.

Witnesses:

ISAAC HARBAUGH,

L. A. MARKHAM.