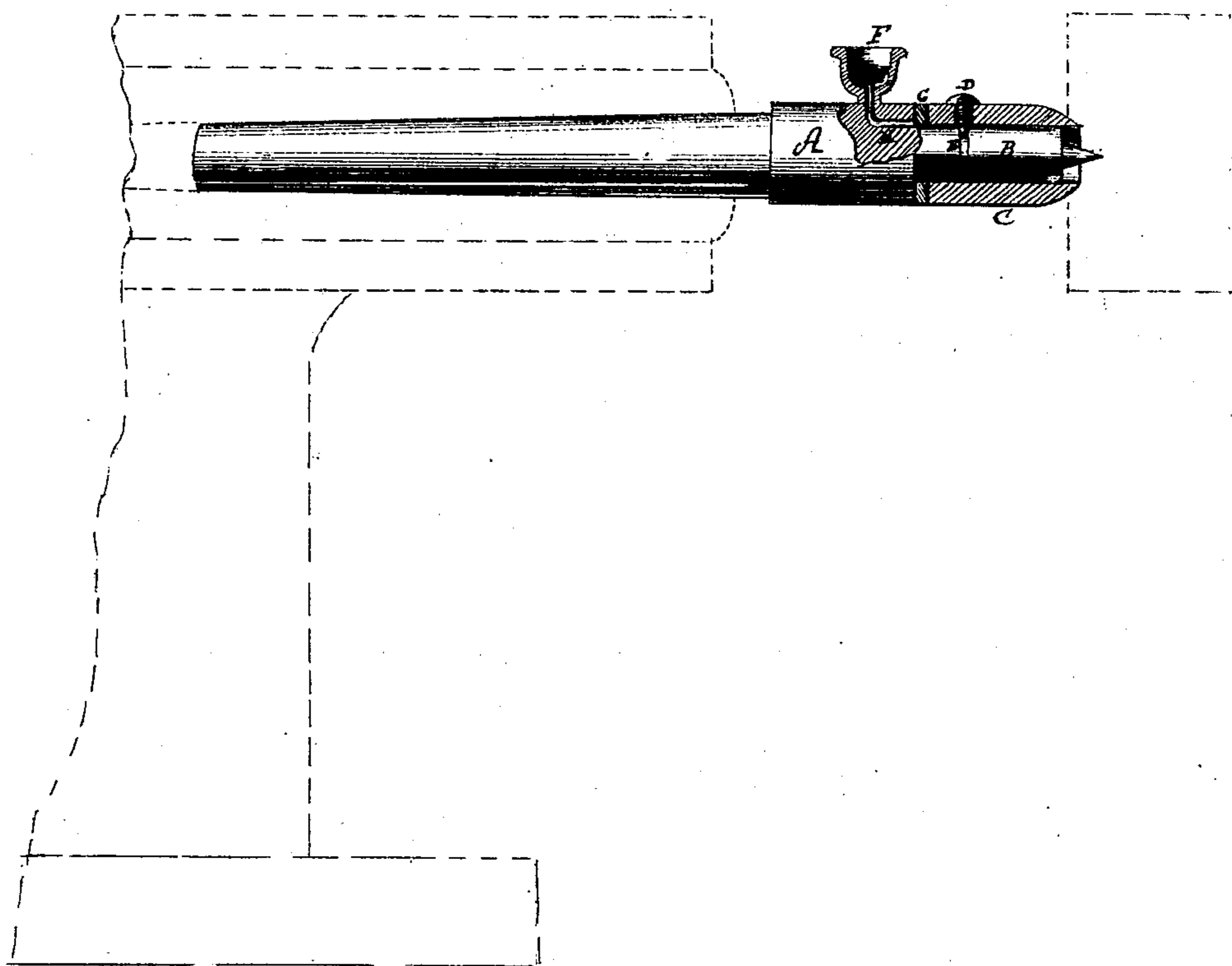


*J. E. Boutelle,*

*Lathe Spindle.*

*No. 101,975.*

*Patented Apr. 19. 1870*



**Witnesses:**

*J. H. Becker,*  
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**Inventor:**

*J. E. Boutelle*  
PER *[Signature]*  
**Attorneys.**

# United States Patent Office.

JAMES E. BOUTELLE, OF FISHERSVILLE, NEW HAMPSHIRE.

*Letters Patent No. 101,975, dated April 19, 1870.*

## IMPROVEMENT IN LATHE-SPINDLE.

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, JAMES E. BOUTELLE, of Fishersville, in the county of Merrimack and State of New Hampshire, have invented a new and useful Improvement in Lathe-Spindle; 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 make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to a new and useful improvement in lathe-spindles for wood turning, whereby heating of the center is prevented, while it is made self-lubricating; and

It consists in a rim-center revolving with the wood to be turned around the stationary center, and in the arrangement for rendering the revolving and the fixed centers self-lubricating, as hereinafter more fully described.

The accompanying drawing represents a view of the invention partly in section.

Similar letters of reference indicate corresponding parts.

The dotted lines represent a section of the lathe.

A is the spindle.

B is the stationary center or point of the spindle.

C is the rim-center, which is tubular in form, and which enters the wood as seen in the drawing, and revolves with the wood around the center B.

D is a screw in the tubular center C, the end of which enters the groove E in the stationary center, by which arrangement the rim-center is kept in place or on the stationary center when the wood is removed from the lathe.

F is a reservoir, for tallow or other suitable lubricating material, attached to the stationary spindle A.

G is a washer of copper or other suitable metal or material between the end of the rim-center and the shoulder of the spindle. The lubricating material is conveyed down through the orifice H to the washer G. It passes through notches or recesses under the edge of this washer, and lubricates the center B and the rim-center C.

If tallow is used in the reservoir or cup F, sufficient heat will be generated to melt it as it is wanted, and the parts will not heat (injuriously) when properly lubricated.

By transferring the point of greatest friction from the wood to the fixed spindle, where lubrication is constant and free, the greatest difficulty experienced by wood-turners is obviated.

It is well known that the heat generated at the tail-center of a rapidly revolving lathe is sufficient to char the wood, by which the center is often varied, and the work spoiled or injured.

By the use of the revolving rim-center the fixed center is relieved. No heating or charring of the wood is possible, while the lubrication throughout is perfect.

Having thus described my invention,

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

In combination with the fixed center of a lathe, the revolving rim-center C, substantially as and for the purposes herein shown and described.

Witnesses: JAMES E. BOUTELLE.

CHARLES D. TITUS,

CHAS. J. ELLSWORTH.