

No. 774,803.

PATENTED NOV. 15, 1904.

G. WEBER.
TURNING CUTTER.
APPLICATION FILED AUG. 10, 1901.

NO MODEL.

Fig: 1.

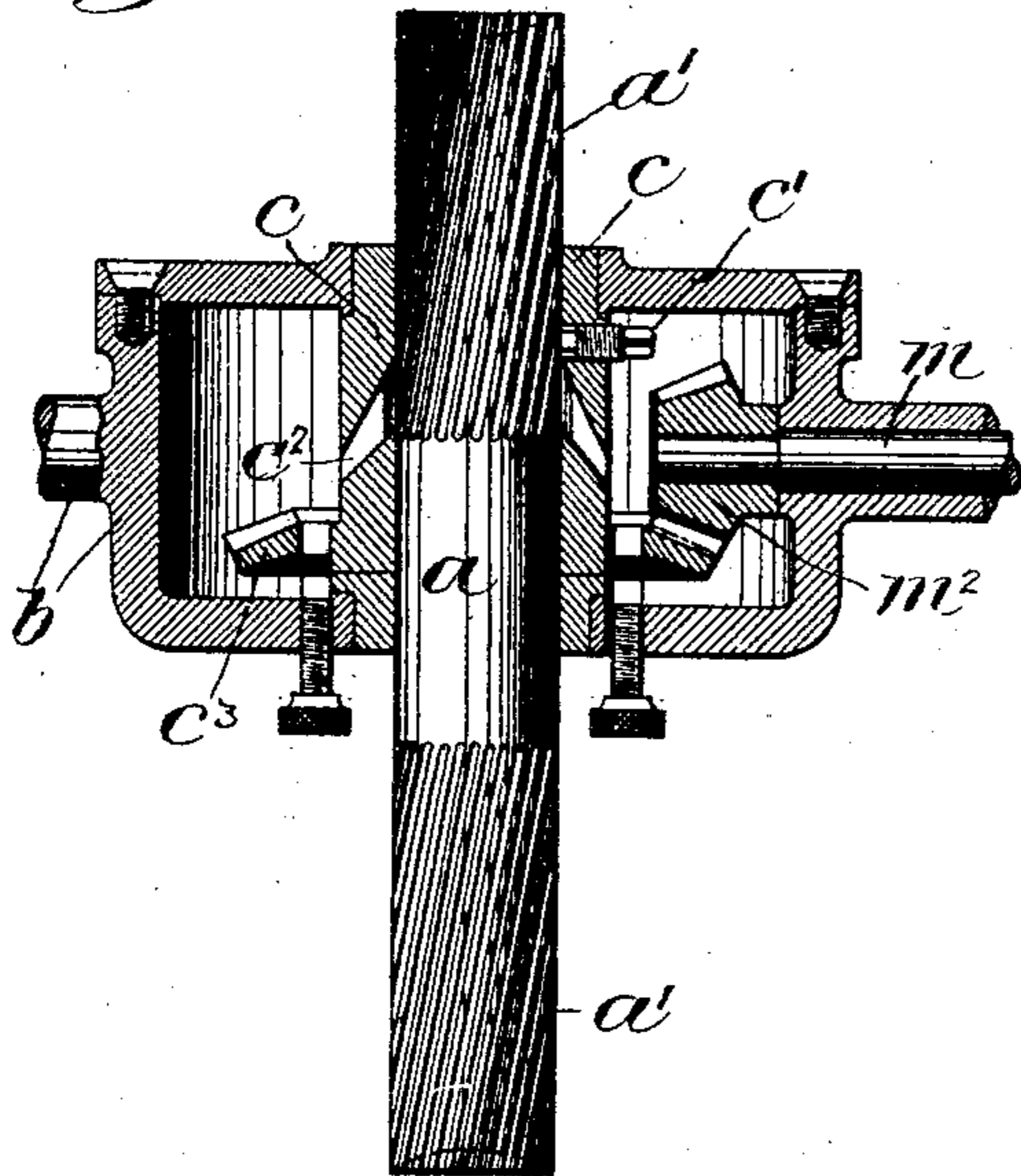


Fig: 2.

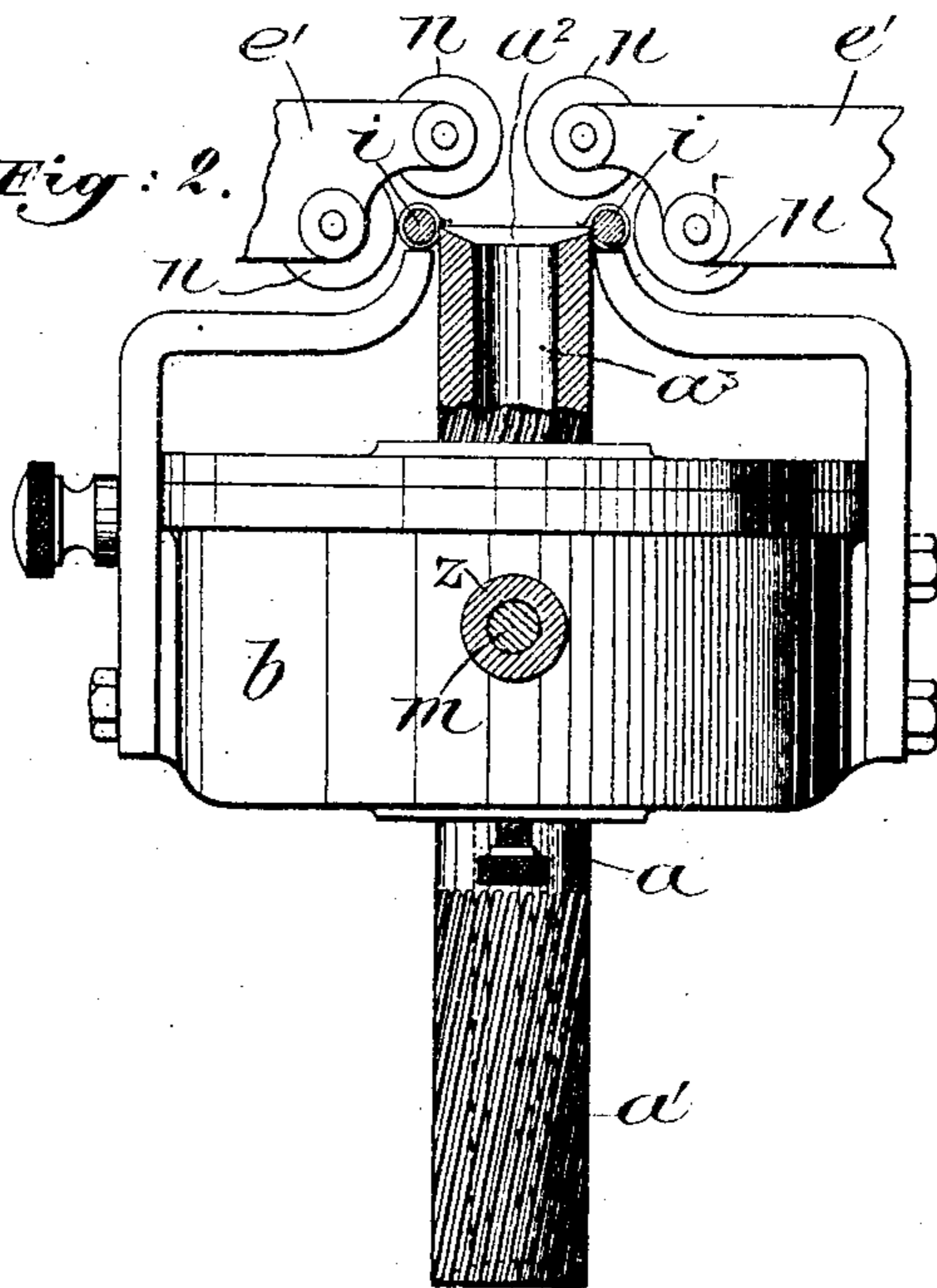
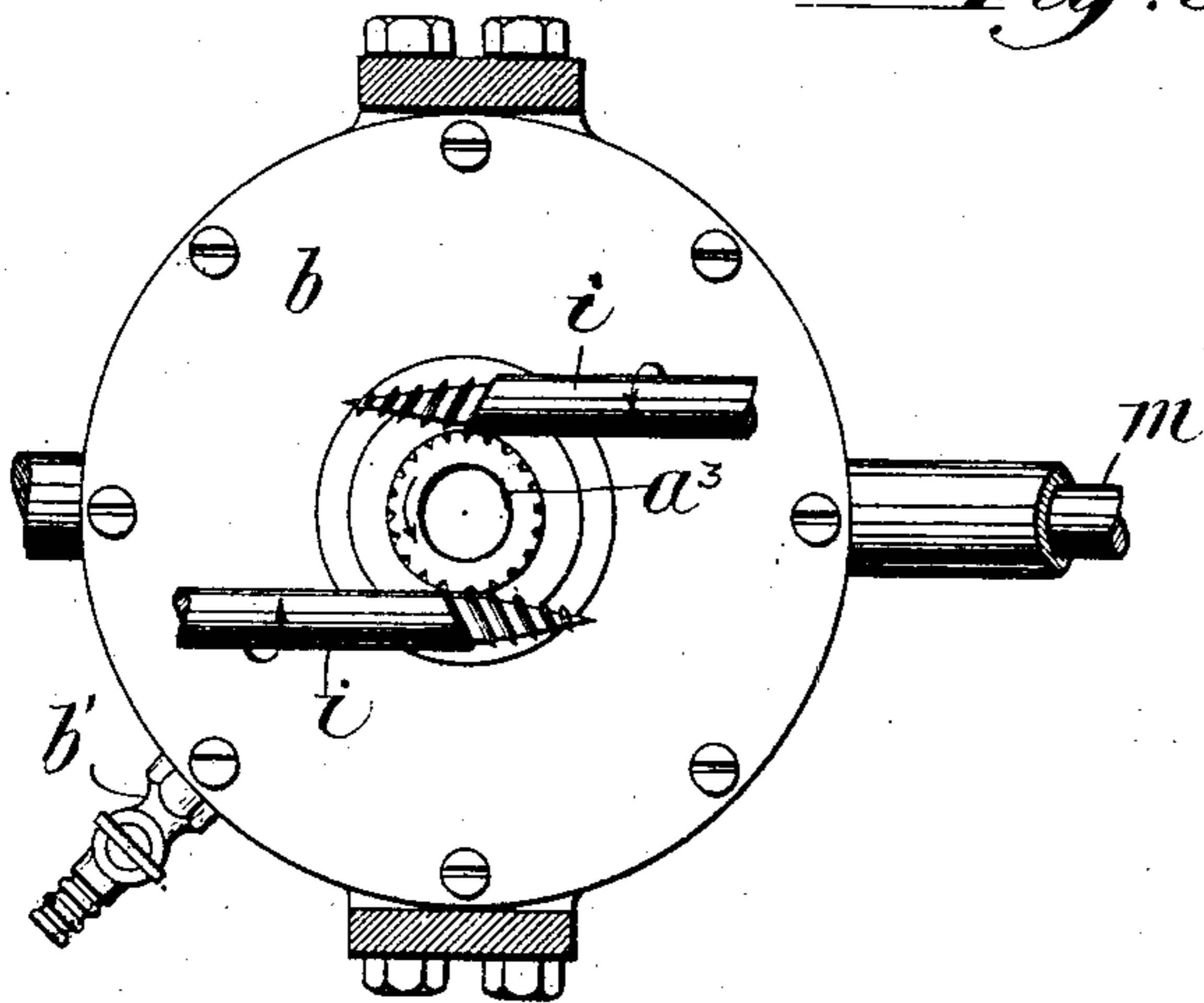


Fig: 3.



Witnesses:
William Schulz
Edward Ray

Inventor:
Gustav Weber
by his attorneys
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UNITED STATES PATENT OFFICE.

GUSTAV WEBER, OF HAGEN, GERMANY.

TURNING CUTTER.

SPECIFICATION forming part of Letters Patent No. 774,803, dated November 15, 1904.

Application filed August 10, 1901. Serial No. 71,590. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV WEBER, a citizen of Germany, residing at Hagen, Westphalia, Germany, have invented new and useful Improvements in Turning Cutters, of which the following is a specification.

This invention relates to an improved turning cutter for cutting the threads into wood-screws and similar articles in a simple, quick, and efficient manner.

In the accompanying drawings, Figure 1 is a longitudinal section of my improved turning cutter, partly broken away; Fig. 2, a side view, partly in section, thereof; and Fig 3, a plan.

The tool consists of a tubular cutter a , provided with outer longitudinal ribs a' , which are slightly inclined to the axis of the cutter, according to the pitch of the threads to be cut.

To cool the cutter, I provide it with a surrounding casing b , adapted to contain a lubricant, such as fatty water. The casing is of annular form and incloses a rotatable bearing or hub c . The tool a is projected through this hub and clamped thereto by a set-screw c' , so as to be rotatable therewith. The hub c is provided with a perforation or duct c^2 , which allows fatty water or other lubricant to pass from casing b into the grooves between the ribs a' and thence to the cutting edges a^2 . The casing b is supplied with the lubricant through inlet-pipe b' . Against the cutting edges a^2 are held one or more work-pieces i , as shown. These work-pieces, as well as the cutter, receive rotary motion in suitable manner.

Into casing b projects a rotatable shaft m , turning in bearing z and carrying a beveled gear-wheel m^2 , that engages a gear-wheel c^3 on hub c . During the cutting operation the

work-pieces i are held against the cutting edge a^2 by guide-rollers n , pivoted opposite the cutter to arms e' of the machine-frame.

In use the work-pieces i are held against the active cutting edge a^2 by the guide-rollers n at right angles to the axis of tool a . The work-pieces and the tool are simultaneously rotated, and the work-pieces are moved endwise, respectively, in opposite directions during the cutting operation in order to cut the thread in the manner desired. During this operation the cutting edge a^2 will be thoroughly lubricated, while the chips may be readily removed by an air-blast injected into the tube a . As this tube is evenly rotated during the cutting operation, it will become evenly worn at its cutting edge, so that a uniform operation of the machine is insured.

What I claim is—

1. In a turning cutter, the combination of an annular casing with an inclosed perforated rotatable hub, a tubular ribbed cutter within the hub, and means for securing the cutter to the hub, substantially as specified.

2. In a turning cutter, the combination of an annular casing with an inclosed rotatable hub, a gear-wheel on the hub, a tubular ribbed cutter rotatable with the hub, guide-rollers opposite the cutter, a shaft journaled in the casing, and a gear-wheel on the shaft which engages the hub-wheel, substantially as specified.

Signed by me at Düsseldorf, Germany, this 17th day of July, 1901.

GUSTAV WEBER.

Witnesses:

WM. ESSENWEIN,
PETER LIEBER.