

John A. Mc Gee

Impt. in Boring Instruments

PATENTED  
DEC 10 1867

72065

Fig. 1.

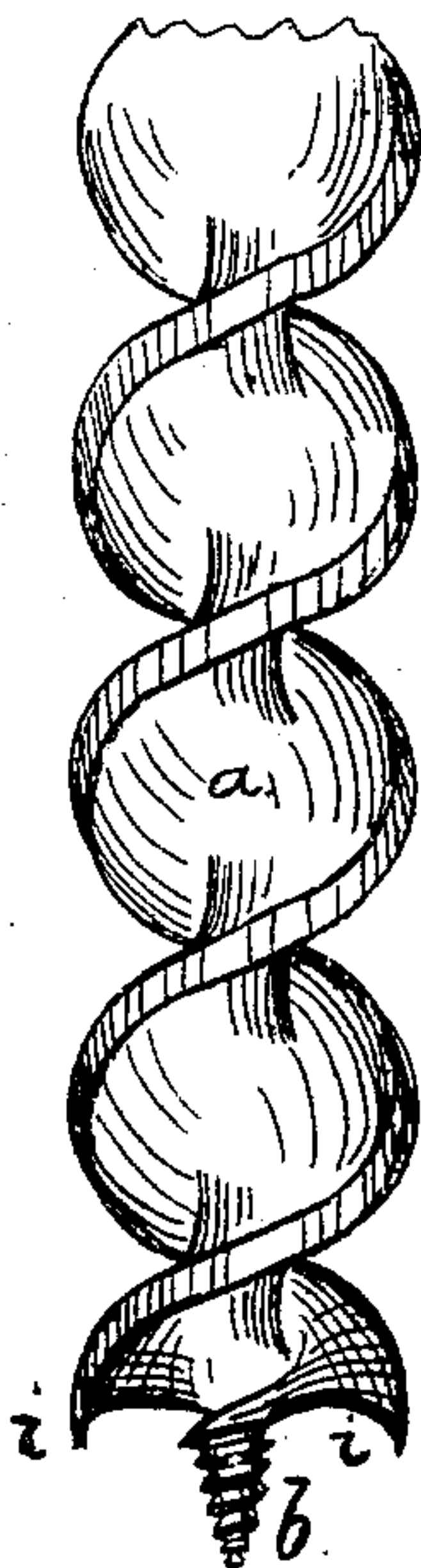


Fig. 3.

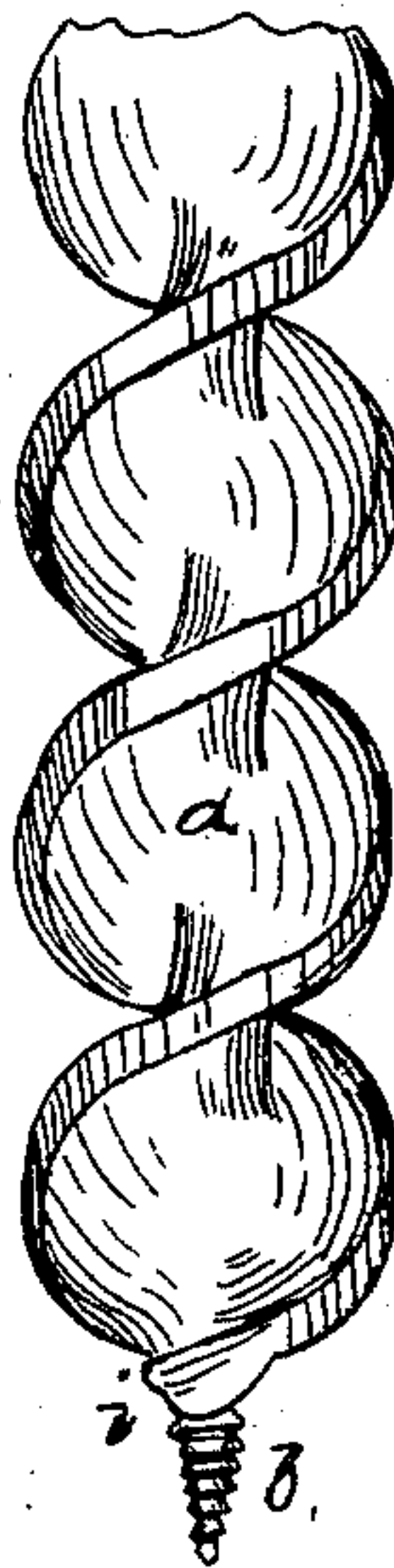
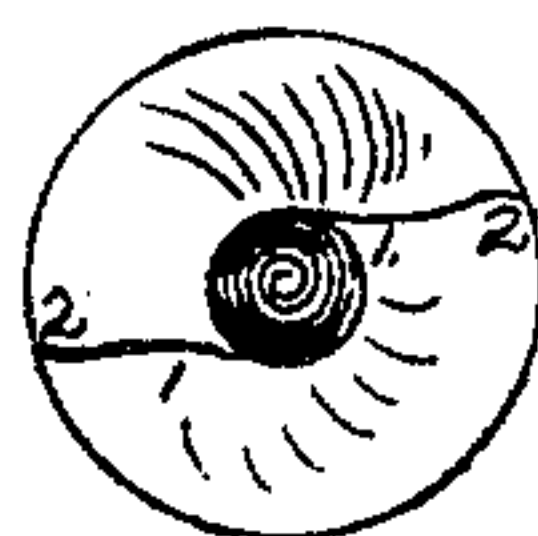


Fig. 2.



John A. Mc Gee

Witnesses

Geo. D. Waesche  
Geo. L. Prickney

# United States Patent Office.

JOHN A. McGEE, OF NEW YORK, N. Y., ASSIGNOR TO THEODORE MACE,  
OF SAME PLACE.

*Letters Patent No. 72,065, dated December 10, 1867.*

## IMPROVEMENT IN AUGERS.

*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, JOHN A. McGEE, of the city and State of New York, have invented and made a certain new and useful Improvement in Boring-Instruments; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a side view of an auger formed with my improved cutting-edge.

Figure 2 is a view endwise of the said auger; and

Figure 3 is an elevation at right angles to fig. 1.

Similar marks of reference denote the same parts.

Boring-tools have heretofore been made, in which the cutting-edges have been made of two parts, the one acting to form a circular incision, the other to clear out the wood. In augers of this kind a difficulty is experienced, in sharpening the cutting-edge, particularly in small augers. Augers have also been made with the cutting-edge curved upwards or towards the handle, but with these the cutting of each shaving of the wood extends entirely across the cutting-edge, and the shaving at the outer edge is very thin, in consequence of the convergence of the arcs described by the cutting-edge, the same as in a "pod-auger," and after the screw-point has passed through the wood, and no longer draws the auger along with regularity, there is a difficulty in finishing the hole with a smooth cut.

The nature of my said invention consists in a boring-tool, in which the cutting-edge is extended outwardly from the base of the tapering screw, and curved backward and downward until it intersects the periphery of the tool; thereby a circular incision is first made by the revolution of the tool, and then a shaving is removed by the other parts of the same cutting-edge. This character of cutting-edge is sharpened almost entirely by filing upon the lower surface, where there is easy access; hence the tool is kept in order with facility.

In the drawing, *a* represents a portion of the twist of the auger, *b* the conical screw-point. The cutting-edges *i* are formed nearly straight, and as tangents to the base of the screw *b*, as at 1; thence the cutting-edges are formed as compound curves, at 2, slanting backwards, so as to separate the grain of the wood by a shearing cut, and curving downwards, or towards the screw-point, so as to separate the wood by a circular incision, in advance of the part 1 of said edge which removes the wood.

The cutting-edge in my said tool being a compound curve backwards and downwards, is a shearing cut throughout its entire length. The shaving that is removed is curled in the act of being cut, so as to easily free itself as the screw portion of the bit passes it along. The bit can be filed and sharpened with ease; and the last portion of the wood removed, when the hole is bored through, is in the form of a disk around the screw-point, and the cut is free and smooth through its entire length.

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

The boring-instrument formed with a cutting-edge extending outwardly from the base of the tapering screw, and curved backwards and downwards until it intersects the periphery of the tool, as and for the purposes set forth.

In witness whereof, I have hereunto set my signature, this 20th day of June, A. D. 1867.

JOHN A. McGEE.

Witnesses:

GEO. D. WALKER,

GEO. T. PINCKNEY.