

(No Model.)

C. BLATCHLEY.
DOUBLE TENON AUGER.

No. 528,527.

Patented Nov. 6, 1894.

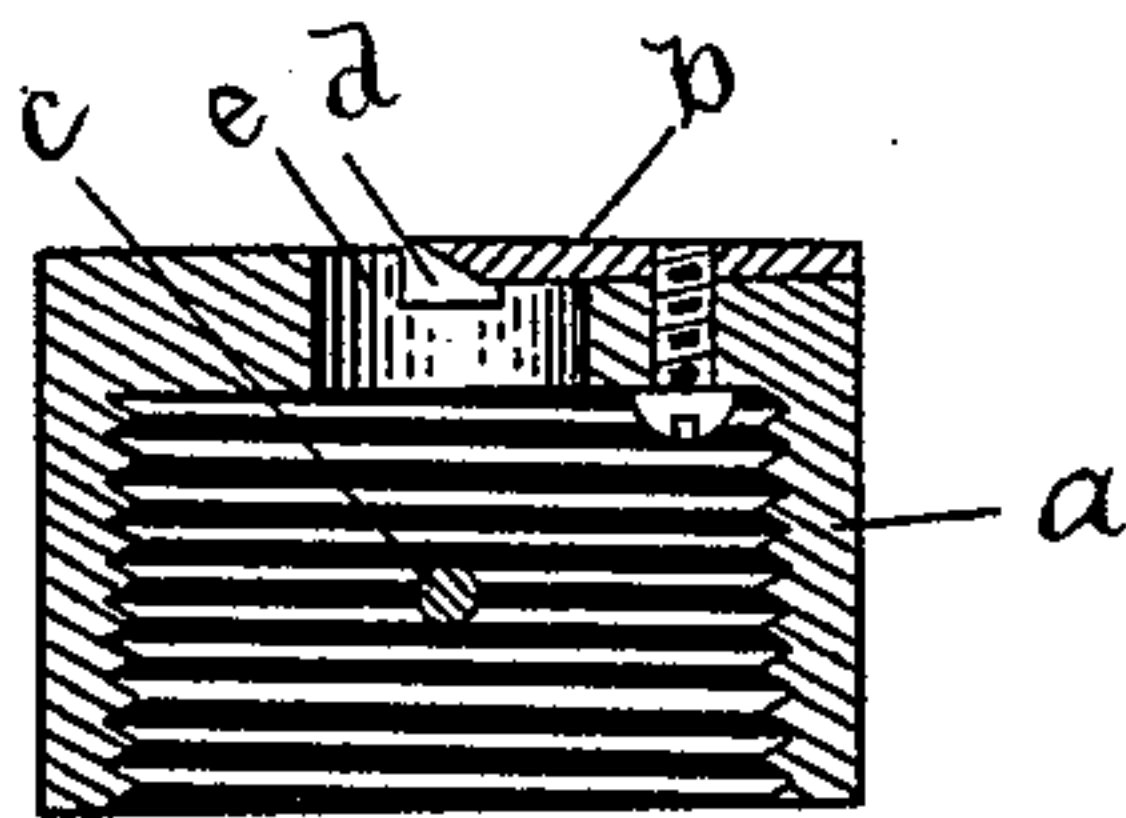


Fig. 2.

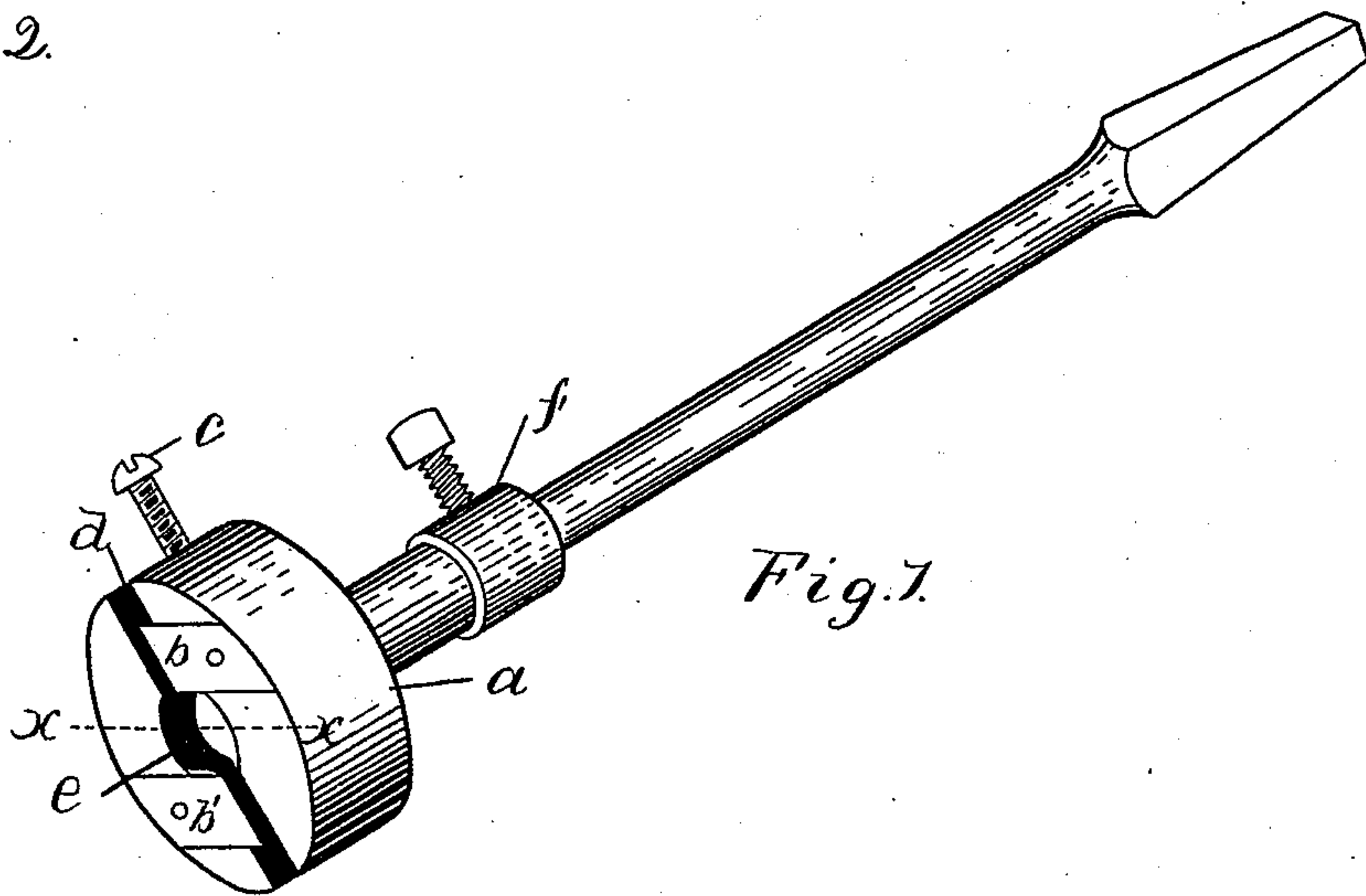


Fig. 1.

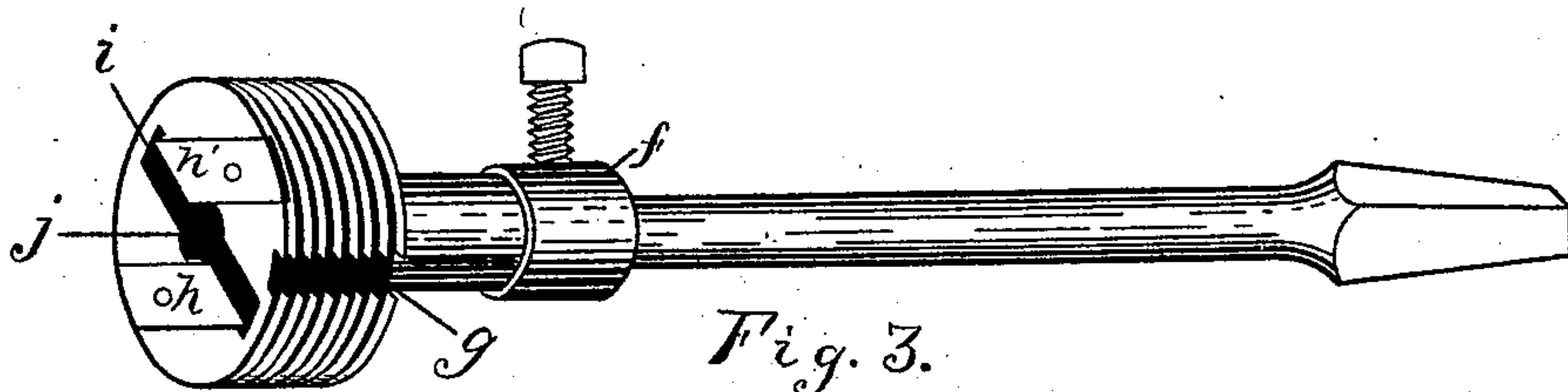


Fig. 3.

WITNESSES:

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CHARLES BLATCHLEY, OF BINGHAMTON, NEW YORK.

DOUBLE-TENON AUGER.

SPECIFICATION forming part of Letters Patent No. 528,527, dated November 6, 1894.

Application filed May 27, 1893. Serial No. 475,677. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BLATCHLEY, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Double-Tenon Augers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains 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.

15 This invention relates to certain improvements in double tenon augers which will be hereinafter more particularly described and pointed out.

20 In the accompanying drawings forming part of this specification, Figure 1, is a perspective view. Fig. 2, is a cross section of the cutter head *a*, on the line *x x*. Fig. 3, is a perspective view of the inner, or smaller cutter head.

25 The advantage of the device exists in combining two cutter heads, the outer cutter head being of a greater diameter than the inner cutter head; thus forming a double tenon having two separate shoulders. The part of the tenon coming to the outer surface of the felly being of smaller diameter than usual, leaves more stock on each side of the hole bored to receive the tenon, thereby lessening the liability of the felly splintering near the spoke 35 when the tenon is of the same diameter, in its whole length. In my invention this difficulty

is overcome by combining, with the cutter head *a*, having knives *b*, *b'* fastened in the usual manner, opening *d*, for the escape of the chips and opening *e*, to secure the tenon, the smaller cutter head *f*, which in this case is provided with threads allowing it to be screwed a greater or less distance, in the cutter head *a*, as desired. The smaller cutter head is provided with one or more grooves, *g*, which receive the screw *c*, in the large head, the object of which will be stated more fully hereinafter.

The knives *h* and *h'* are fastened to the cutter head in the usual manner, and it is also provided with openings *j*, to receive the smaller portion of the tenon, and the opening *i*, for the escape of chips. Now when it is desired to cut a tenon, the distance between the shoulder of the tenons is regulated by loosening the screw *c*, and screwing the cutter head outwardly to increase the distance between shoulders and inwardly to decrease the distance between the shoulders. Then fasten the screw *c*, in the opening *g* to hold the two heads firmly in position.

I claim—

A double tenon auger consisting of a cutter head provided with cutters and a second cutter head within the first having cutters, the said heads being adjustable in relation to each other, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES BLATCHLEY.

Witnesses:

GEORGE W. B. McELHONE,
ROBERT H. RAY.