C. L. Adancourt,

Wood Auger,

No. 7,589, Patented Aug. 27, 1850.

Fig 1.

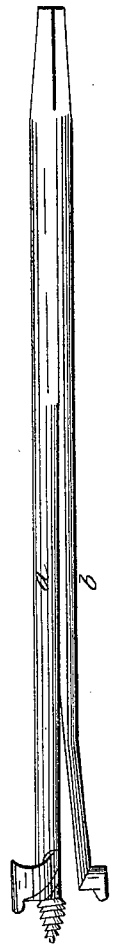


Fig 2.

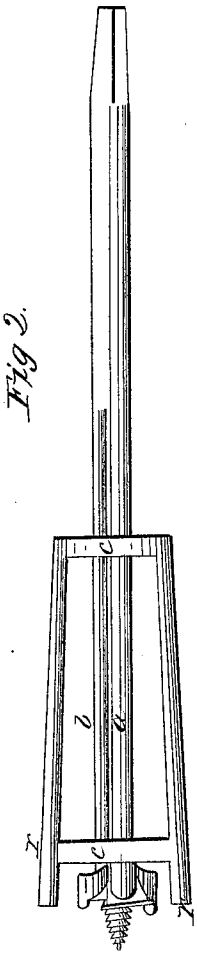


Fig 4.

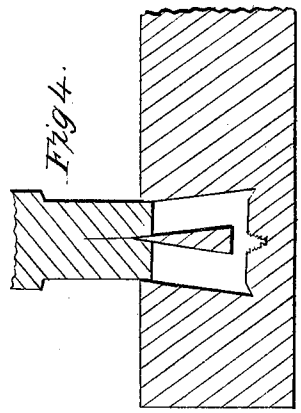
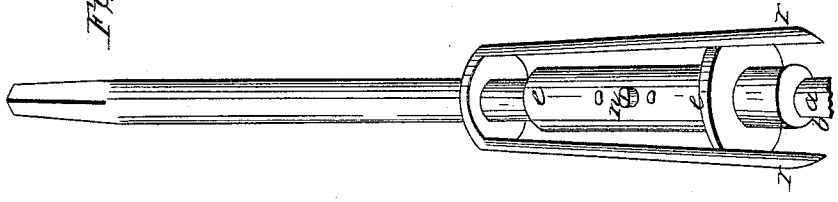


Fig 3.



UNITED STATES PATENT OFFICE.

C. L. ADAMCOURT, OF TROY, NEW YORK.

EXPANSIBLE BIT.

Specification of Letters Patent No. 7,589, dated August 27, 1850.

To all whom it may concern:

Be it known that I, CLINTON L. ADAMCOURT, of Troy, in the county of Rensselaer and State of New York, have invented a new and Improved Construction of Expansible Bit for Boring Conical Holes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings making a part of this specification, in which—

Figure 1 is a view of the bit fully expanded; Fig. 2, a view of the bit closed by a collar, and Fig. 3 the bit closed with a second tubular coller the same letters having reference to like parts in all the figures.

The nature of my invention consists in making expansible bits for boring conical holes any given distance into the material, and chip the core so that it is discharged from the hole without the necessity of boring through the material making it so that tenons may be firmly wedged into mortises and the tenon entirely inclosed.

The description is as follows: I form a bit or auger in the usual manner divided in two unequal parts longitudinally, the larger part *a*, having the center; and the lesser part *b*, operating in the manner of a spring in the shank part; a collar *c c*, is placed upon the shank closing the bit together; the collar has projecting points *r*, *r*, extending down to the line of the points of the cutters of the bit, the said points (*r*, *r*,) when the bit is brought in operation rests upon and is held firmly to the material bored so that as the bit progresses it is freed to expand and increase the diameter of the hole, forming a conical hole. In Fig. 4 I have represented in section the form of the hole and the manner of wedging a tenon into it either square or round, when not bore through the material, forming a most permanent and neat fastening possible by entering the wedge in the tenon as represented, and then driving the tenon in, rendering it impossible to draw out or work loose.

In Fig. 3 I have represented an extra collar or tube *e*, within the collar *c*, which secures the bits boring a straight hole any given depth that it may be set, by the collar *c*, coming in contact with the set screw *n*, thereby sliding the collar *e*, up the shank of the bit and allowing the latter to expand and form any given length of conical hole.

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

The herein described expansible bit, in combination with the single or double collar or tube, constructed and operating in the manner substantially the same as herein set forth.

C. L. ADAMCOURT.

Witnesses:
E. L. BRUNDAGE,
A. SNYDER.