

(No Model.)

J. SWAN.

AUGER BIT.

No. 290,812.

Patented Dec. 25, 1883.

Fig:6.

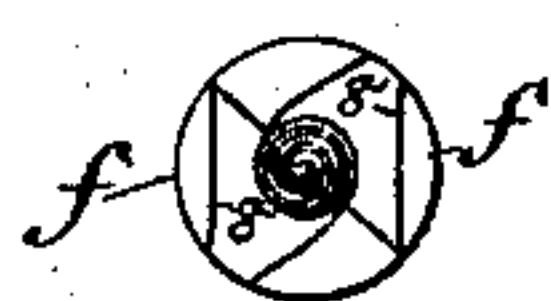


Fig:1.

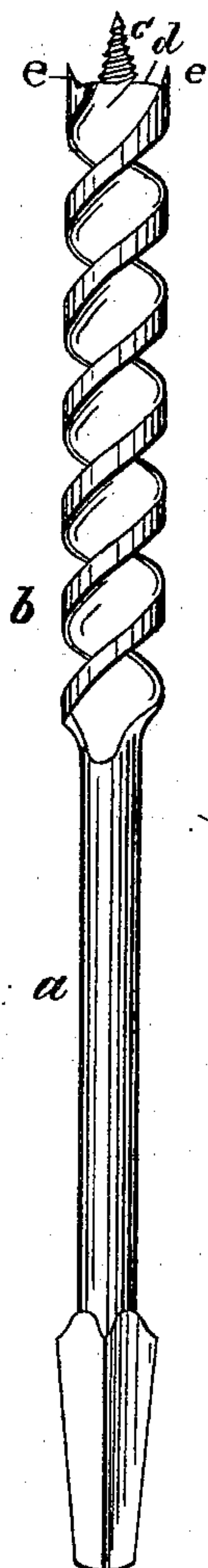


Fig:2.

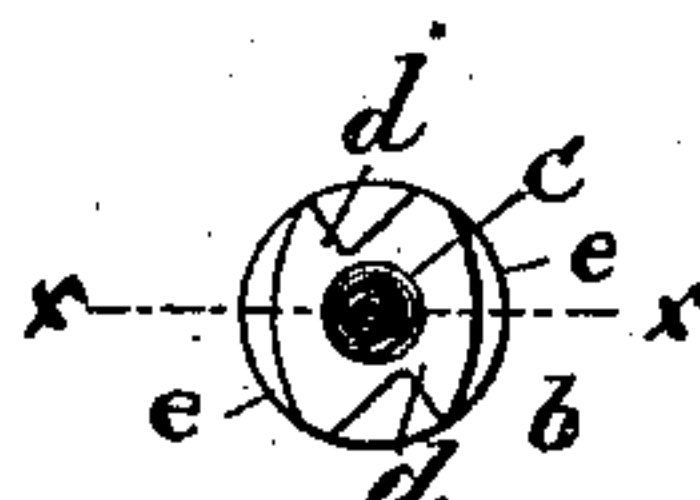


Fig:3.

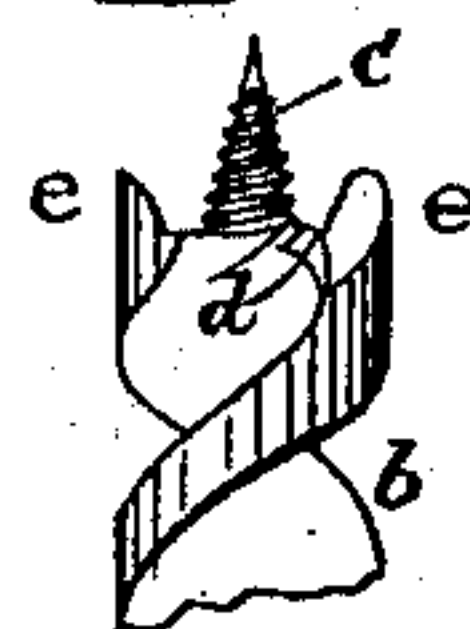


Fig:4.



Fig:5.



Witnesses.

Arthur Lippert.
John F. C. Trunkert.

Inventor.

James Swan.
by Crosby & Gregory attys.

UNITED STATES PATENT OFFICE.

JAMES SWAN, OF SEYMOUR, CONNECTICUT.

AUGER-BIT.

SPECIFICATION forming part of Letters Patent No. 290,812, dated December 25, 1883.

Application filed October 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES SWAN, of Seymour, county of New Haven, State of Connecticut, have invented an Improvement in Spur Augers or Bits, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a novel spur auger or bit, it having a spur which is circular at its inner side and beveled or not toward the floor-lip, as will be described.

In spur augers or bits, as heretofore made, it has always been customary to form the inner side or wall of the spur by means of a disk-cutter and a file, and with such appliances the inner side of the spur has always been left either straight or convexed, and in both cases the spur has been left so thick near its central part as to cause it to act as a blunt wedge and unnecessarily hinder the entrance of the spur into the wood in advance of the floor-lip, consequently requiring the exertion of greater power to turn the bit, and a larger leading-screw. In this my invention the spur is made circular at its inner side, and consequently can be left thinner than in the old plan, which enables the spur to more readily enter and cut into the wood, and, being circular at its inner side, there is less tendency for the spur to break off.

Figure 1, in side view, represents a spur-bit embodying my invention. Fig. 2 is an end view thereof; Fig. 3, a side view of the head

of the bit. Fig. 4 is a like view with the bit turned one-fourth around. Fig. 5 is a section on the line *x x*, Fig. 2; and Fig. 6 is an end view of an ordinary spur-bit.

The shank *a*, pod *b*, and leading-screw *c*, from its point to near its base or junction with the floor-lip *d*, are and may be of usual construction. The spurs *e* at their inner sides are circular, as shown at Fig. 2, and at the same time are beveled toward the floor-lip.

In Fig. 6, which represents the end of a common spur-bit, the spur *f* is straight at its inner side, as represented by the figures 8 therein. A comparison of Figs. 2 and 6 illustrates clearly the difference in the shape or configuration of my improved spur and that common to spur-bits of the present day.

Figs. 3 and 5 show the backward inclination of the floor-lip from its cutting-edge.

A machine by which to make my improved bit is described in an application filed concurrently with this, to which reference may be had.

I claim—

As an improved article of manufacture, an auger-bit having an inclined floor-lip provided with a cutting-edge, and with a cutting-spur concaved at its inner side.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES SWAN.

Witnesses:

G. W. GREGORY,
W. H. SIGSTON.