(No Model.)

R. E. HARDISTY.

Auger.

No. 235,234. Patented Dec. 7, 1880.

Fig. 1.

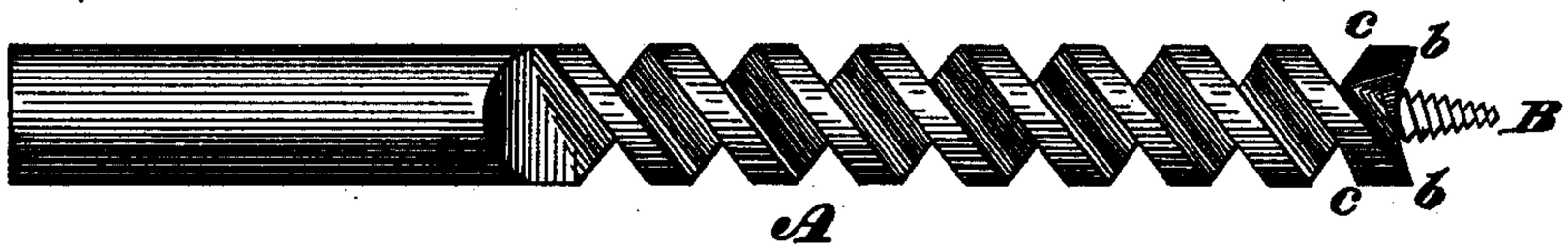


Fig. 2.

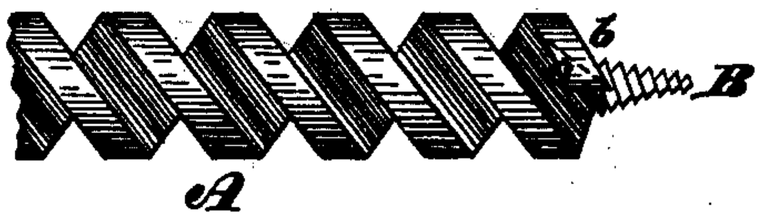
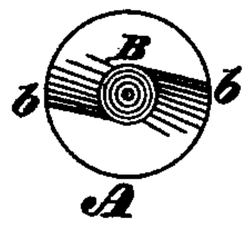


Fig. 3.



Attest

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UNITED STATES PATENT OFFICE.

RICHARD E. HARDISTY, OF CINCINNATI, OHIO.

AUGER.

SPECIFICATION forming part of Letters Patent No. 235,234, dated December 7, 1880.

Application filed May 6, 1880. (No model.)

To all whom it may concern:

Be it known that I, RICHARD E. HARDISTY, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Augers, of which the following is a specification.

My invention relates to the method of making the cutting parts of bits or augers for boring wood; and it consists in projecting the cutting-lips from the base of the center or gimlet screw to the periphery at a slight downward angle to a horizontal plane and joining vertical cutter on the periphery projecting upward, the two cutting-lips forming an acute angle.

The object of this invention is to avoid the use of cutting-spurs usually employed, as they are easily broken off; also, to substitute for the cutting-spurs the cutting-angle of the lips, which cuts the outer circle of the hole first and cuts a shaving always across the grain of the timber.

The object of my invention is also to make a more durable bit and render it easier to sharpen than those in common use.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 shows a different view of the same, and Fig. 3 is an end view of the bit.

A represents the body of the bit or auger; *b*, the lower cutting-lips, which start from the base of gimlet-screw B and project outward and downward to the periphery at an angle to the plane of the vertical cutting-wing *c*, as shown in Fig. 1. The acute angle shown formed by the cutting-lips *b* and the cutting-wings *c* performs in part the function of spurs as well as that of cutting-lips. These extreme corners are much stronger than ordinary spurs, as the other portions of the lips and wings furnish a strong support and prevent the corners from being easily broken off.

The cutting-edges of the parts *b* and *c* are formed by long chisel-like bevels, as shown in Figs. 1 and 2. The cutting-edges being also in straight instead of curved lines forms an important feature, as they preserve a uniform thickness of the bevel edges and allow the use of an ordinary flat-face file. At the same time they can be more easily sharpened and kept true than other kinds of bits now in use.

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

A bit or auger with cutting-lips *b* and cutting-wings *c*, united at acute angles to form cutting-edges for the tool, in the manner and for the purpose substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

RICHARD E. HARDISTY.

Witnesses:
F. W. BROWNE,
JNO. E. JONES.