H. L. SHALER.

Auger.

No. 198,857. Patented Jan. 1, 1878.

Fig. 1.

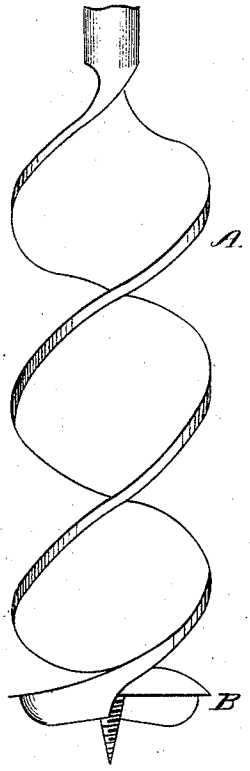


Fig. 2

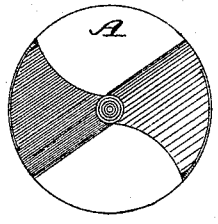
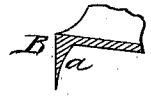


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY L. SHALER, OF DEEP RIVER, CONNECTICUT.

IMPROVEMENT IN AUGERS.

Specification forming part of Letters Patent No. **198,857**, dated January 1, 1878; application filed November 21, 1877.

To all whom it may concern:

Be it known that I, HENRY L. SHALER, of Deep River, in the county of Middlesex and State of Connecticut, have invented a new and valuable Improvement in Spur-Auger Bits; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my invention. Fig. 2 is an end view of the same. Fig. 3 is a broken section of the spur.

This invention has relation to spur-augers; and the object thereof is to make the spur to act more effectually as a guide to the auger and add to its durability without interfering with the usual office as a spur or retarding the auger, and also rendering the same to be more easily sharpened by means of extending it on a helix and giving the inside a concave, as shown in the drawings and hereinafter described in the specification.

In the accompanying drawings, A represents a double-twist auger, and B is a spur made solid with the head thereof, and concave in form, as shown at *a*. The spur is extended to form a bearing and guide to the auger and to increase its durability, and has a pitch about equal to the pitch of the screw, or as nearly to it as will best adapt it for, and make it the most serviceable in, boring, and allow the point or front to act chiefly as the spur or cutter. The spur may be made only the practical height from the floor-lips to secure the best results in boring—that is, little allowance need be made for the reduction of its height by sharpening, as the wear by that process is mostly on the front, and does not reduce its height, as in ordinary cases.

By an auger constructed according to my invention it is obvious that the extension of the spur will act as a guide to the auger without retarding it, and increase its durability, and the spur may be easily sharpened, and without injury thereto.

Having now fully described my invention, I claim as new and desire to secure by Letters Patent—

An auger formed with a concave spur, said spur extended on a helix, or with a backward pitch, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY L. SHALER.

Witnesses:

S. L. SELDEN,

GIDEON PARKER.