

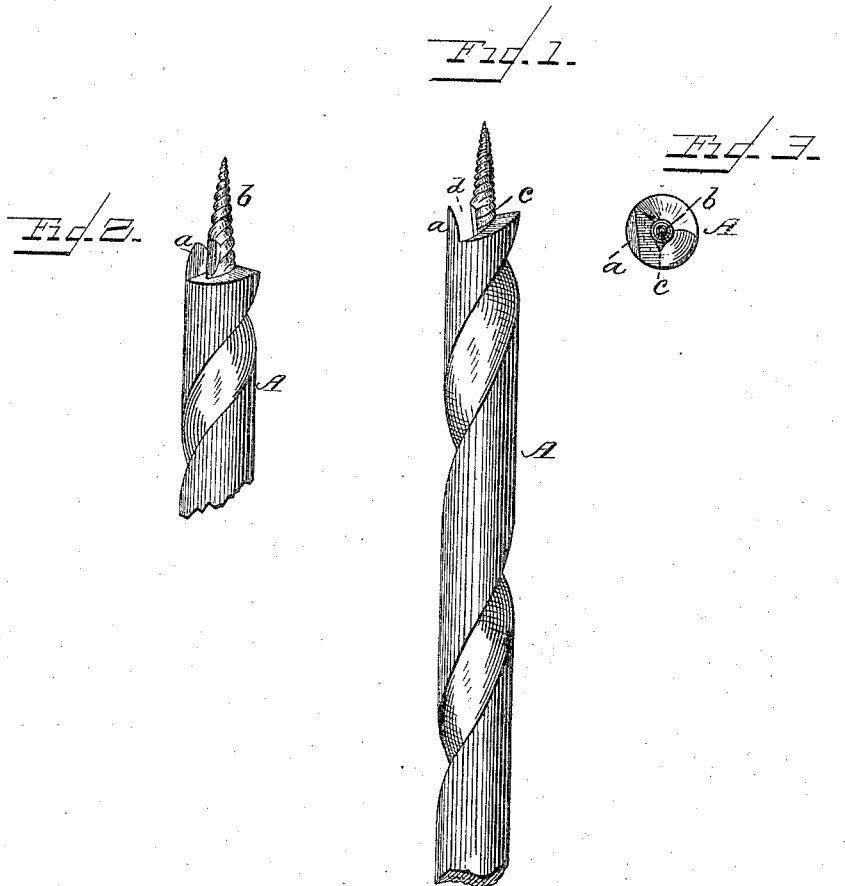
(Model.)

H. L. SHALER.

AUGER BIT.

No. 302,595.

Patented July 29, 1884.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

HENRY L. SHALER, OF DEEP RIVER, CONNECTICUT.

## AUGER-BIT.

SPECIFICATION forming part of Letters Patent No. 302,595, dated July 29, 1884.

Application filed May 29, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, HENRY L. SHALER, a citizen of the United States, residing at Deep River, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Auger-Bits; 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of the cutting end of a single-twist auger-bit; Fig. 2, a similar view taken at a different angle, and Fig. 3 an end view thereof.

The present invention has relation to certain new and useful improvements in auger-bits, as will be hereinafter described and claimed.

In the accompanying drawings, A represents a single-twist bit provided with a single spur, *a*, and point *b*. The point *b* has a cutting-wing, *c*, extending out from the side thereof toward the front of the spur *a*, and of a length or height equal, or nearly so, to that of said spur. The base of the point *b* on the side opposite the spur *a* is cut away, as shown at *d*, to reduce the diameter of the point on the side toward the spur, for the purpose of giving more room for the chip to pass easily between the spur and point, and thereby prevent clogging while in the act of boring, as this clogging with small spur-bits between the spur and point is a great objection, owing to its hinderance to the boring. This wing *c*, as will be seen, extends out from the side of the point *b*, has a double purpose in that it strengthens the point at the base, and also the sharp edge thereof cuts away the wood in boring, so that as the spur marks the circumference of the hole the remaining wood, unmoved by the wing on the side of the point, will easily pass between the spur and point without clogging the bit in boring. The screw-thread on the point *b* extends down to the base

thereof; but, if preferred, the thread may terminate at any distance on a plane below that of the upper portion of the lip, and, if found desirable, the threads may extend out onto the cutting-wing to near its edge; or the thread may extend out to and cut through the edge thereof, in which latter case it would tend to give a better hold on the wood in boring.

I do not, therefore, desire to be understood as confining myself to the length of the screw-threads, or the distance to which they extend along the point, and consequently I reserve the right to make any change in the location of the threads as found most desirable.

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

1. An auger-bit having its point at or near its base provided with a cutting-wing, said wing being integral with the point and extending parallel therewith, substantially as set forth.

2. An auger-bit having its point at its base opposite the spur cut away to increase the space between the point and spur, substantially as and for the purpose specified.

3. An auger-bit provided with a cutting-wing at the base of its point, said point being cut away to increase the space between it and the spur, substantially as and for the purpose described.

4. An auger-bit having its point provided with a cutting-wing extending out from the side thereof, and the screw-threads of the point continuing on one side thereof down to or at any place below the top of the wing, 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:

FISS SHAILER,  
SAMUEL R. SHAILER.