

(Model.)

F. SHAILER.

AUGER BIT.

No. 323,454.

Patented Aug. 4, 1885.

Fig. 1.

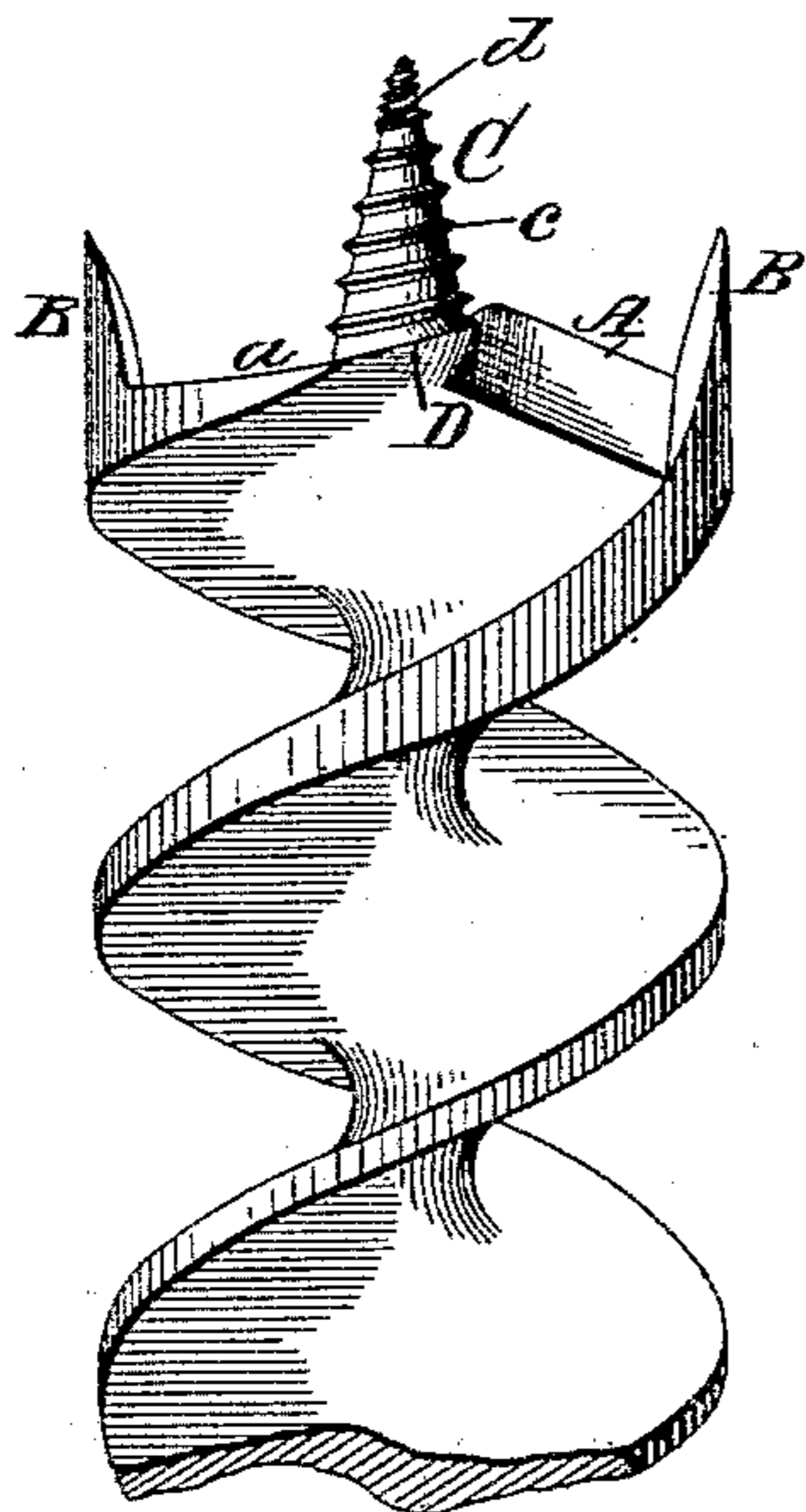
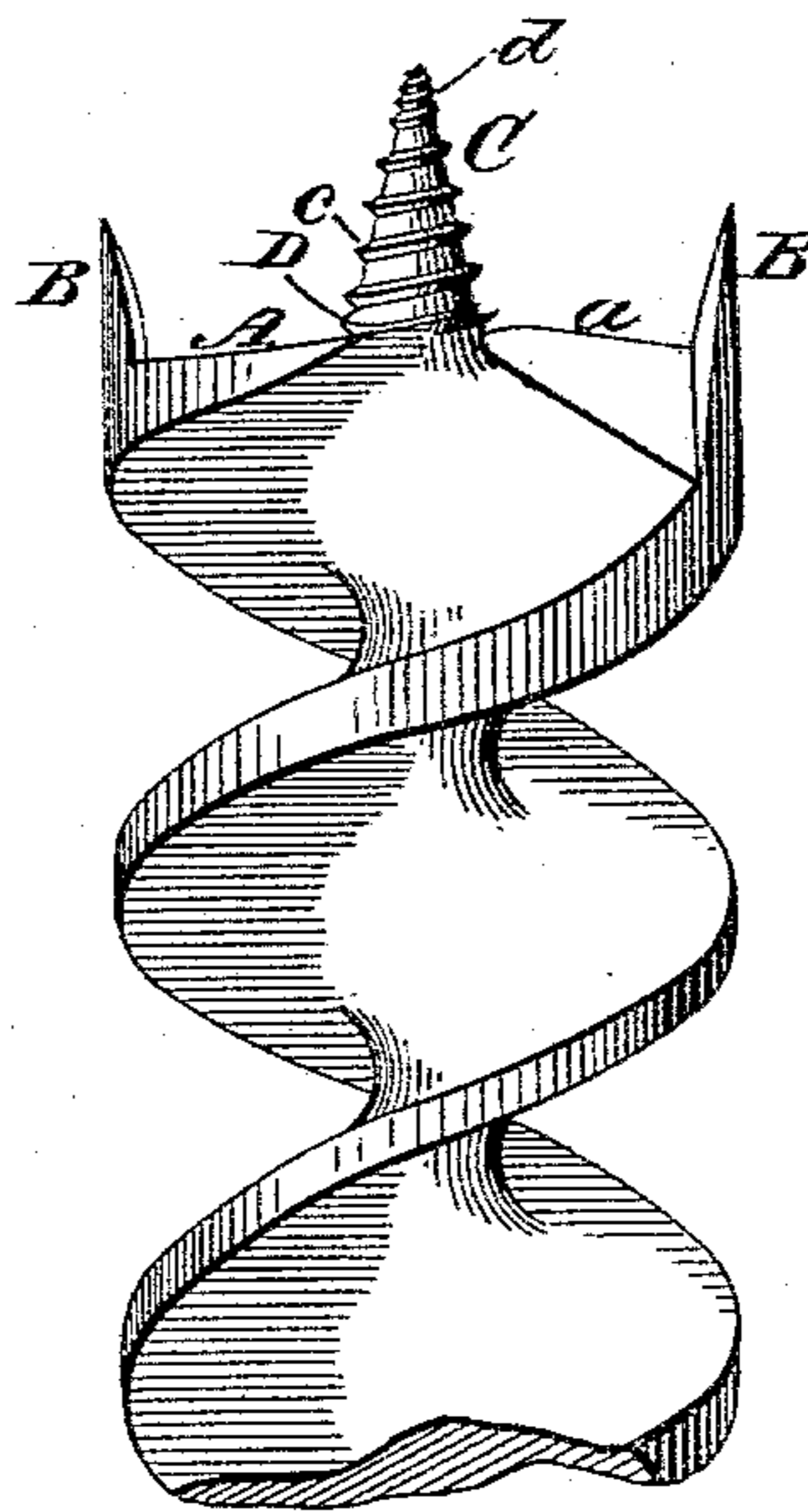


Fig. 2.



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AUGER-BIT.

SPECIFICATION forming part of Letters Patent No. 323,454, dated August 4, 1885.

Application filed May 11, 1885. (Model.)

To all whom it may concern:

Be it known that I, FISK SHAILER, a citizen of the United States, residing at Chester, 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.

This invention is an improvement in auger-bits, and relates particularly to the screw-point and the juncture therewith of the cutting-lips, as will be set forth.

Heretofore in the manufacture of twist-bits it has been customary to employ a single-threaded point on single-twist bits and double-threaded points on double-twist bits, in order to provide a thread to unite with the cutting lip or lips of the bit. Single-thread points have also been used heretofore on double-twist bits; but the fact of such point having only a single thread while a double-twist bit has two cutting-lips has led to difficulty, resulting ordinarily in the formation of the bit with a lump of stock at the juncture with the point of the lip opposite that which unites with the thread of the point.

Inasmuch as a single-threaded point takes a stronger and more effectual hold upon the wood in use than a double thread, a double-twist bit having such a point has been much desired. A common objection to single-threaded points heretofore has been that the extreme end of such point is rarely, if ever, in the true axial center of the bit, owing to the fact that the stock at such end is all cut away at one side, which throws the extreme end to one side of the center. This, while not so radical an objection to such points for single-twist bits, is a material one to its use on a double-twist bit, as unless the end of the point is in exactly the axial center the bit will not run true, and the two spurs will cut unevenly.

With these objections in view, and aiming to overcome the same, I have made my invention, which consists in certain novel con-

structions, as will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figures 1 and 2 are side elevations of my bits, taken from opposite sides. The bit has cutting-lips A *a*, and may have side spurs, B B. The screw-point C extends centrally from the end of the body of the bit, and is formed with a main single thread, *c*, extending from near its outer end to its base. At the base of the screw-point the main thread unites with the cutting-lip A. At and extending a slight distance from its base I provide the screw-point with a second thread, D, which, for convenience of reference, I denominate the "secondary" thread. This thread D unites at the base of the point with the lip *a* of the bit, and such thread D leads at its forward end preferably into the main thread *c*, as will be understood.

Extending for a short distance along the screw-point from its extreme end to where the main or single thread commences, I form a double thread, *d*, which insures the arrangement of the extreme end of the screw-point in the axial center of the bit.

By the construction before described it will be seen I provide a bit having a point which possesses all the desirable features of a single-threaded point, and at the same time is freed from the objections heretofore commonly urged against such points.

The formation of the screw-point before described is especially desirable in bits that have the side spurs, B, as without a true running point such spurs will not track and the operation of boring will be difficult.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A twist-bit having a single-threaded screw-point the extremity of which is formed with a double thread, substantially as set forth.

2. A double-twist bit having a single-threaded screw-point the thread of which unites with one cutting-lip, and having at the base of such point a secondary thread uniting with the other cutting-lip, substantially as set forth.

3. The double-twist bit herein described,
having a screw-point, the body of which has
a single thread and having its extremity formed
with a double thread, and having at its base
5 a secondary thread uniting with one cutting-
lip, the main thread uniting with the other
lip, substantially as set forth.

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

FISS SHAILER.

Witnesses:

WM. H. SULLIVAN,
W. D. LADD.