

A. L. Andrews,

Auger.

No. 104,404.

Patented June 21. 1870.

Fig. 1.

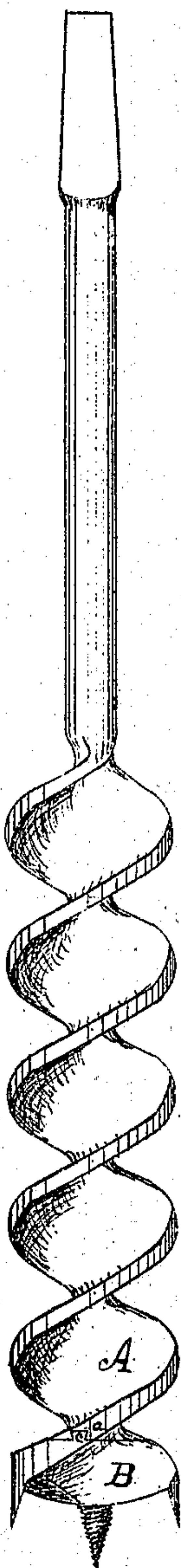


Fig. 2.

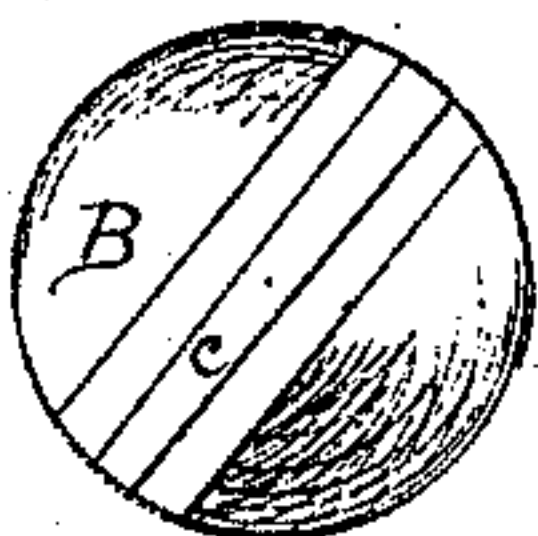
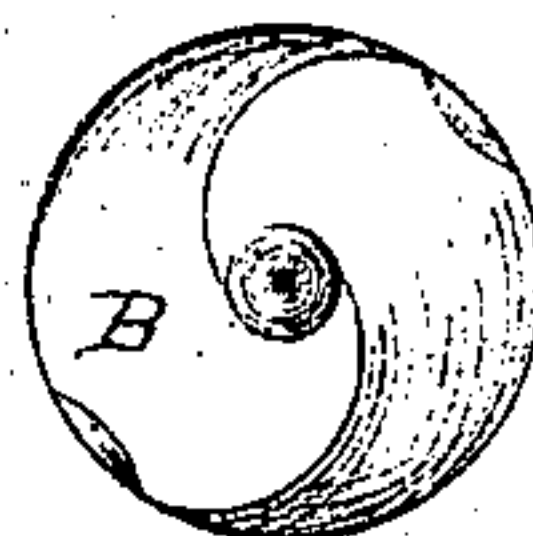


Fig. 3.



Inventor,

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By James Shepard, Atty.

Witnesses,

Wm. C. Richards.

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ALBERT L. ANDREWS, OF BRISTOL, CONNECTICUT.

Letters Patent No. 104,404, dated June 21, 1870; antedated December 21, 1869.

IMPROVEMENT IN AUGER-BITS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALBERT L. ANDREWS, of Bristol, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Augers and Bits; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation of my invention.

Figure 2, a plan or top view of the detachable cutting portion of the same.

Figure 3, an end view of the same.

Similar letters of reference indicate like parts.

My invention relates to that class of augers and bits in which the cutting portion or head can be removed when desired, and a new one substituted in its place; and consists in the use or employment of a dovetailed tenon and slot, running transversely through the axial line of the auger, and near its end.

In the drawings my invention is shown as applied to the auger patented by H. T. Love, November 7, 1865, but is also applicable to other augers or bits.

A designates the twisted or pod portion of the auger, and

B, the cutting-head.

The end of the pod A is cut at right angles with its axis, which leaves a plane surface running transversely with the same. The upper end of the cutting-head B is also formed in like manner.

In one portion I form a dovetail slot, *a*, and in the opposite portion a dovetail tenon, *c*.

This tenon *c* and slot *a* run through the center of

the plane surface on the ends of the pod A and head B, as shown in fig. 2.

The tenon *c* is withdrawn from and inserted in the slot *a* by giving a lateral motion to the head B, while the friction of the parts of the dovetailed joint will be sufficient to keep the pod A and head B on one and the same axial line. If desired, however, a small screw might be inserted through the head B, so as to press against the pod A at the dovetail joint, and thus further secure the head in place.

By my invention I am enabled to construct an auger or bit with a detachable cutting-head, while I do not change the general form of the auger, so as to injure its working qualities, as has been the case with all previously-invented jointed augers.

Heads of different sizes can be adjusted to one pod, thus reducing the cost of a set of bits.

New heads can be attached when the cutting-lips are injured, at a much less cost than new bits can be made.

I do not claim making the cutting-head separate from the pod, but

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

A jointed auger or bit, in which the pod and head are connected to each other by means of a single dovetail tenon and slot running transversely through the axial line of the auger, substantially as described.

ALBERT L. ANDREWS.

Witnesses:

J. W. BURCH,

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