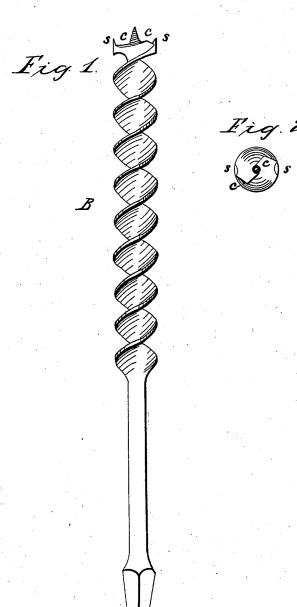
C.L. Griswold, Wood Auger. N<sup>9</sup>47,946. Patented May 30,1865.



Witnesses: annuel C. Gilliman

Inventor: Charles L Griswold

## UNITED STATES PATENT OFFICE.

CHAS. LEE GRISWOLD, OF CHESTER, CONNECTICUT.

## IMPROVEMENT IN AUGERS.

Specification forming part of Letters Patent No. 47,946, dated May 30, 1865.

To all whom it may concern:

Be it known that I, CHARLES LEE GRISWOLD, of Chester, in the county of Middlesex, in the State of Connecticut, have invented an Improvement in Double-Twisted Augers and Auger-Bits; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing double-twisted augers and auger-bits with pointed floor-lips having the spurs and screw for bases, and the points operating on a shorter radius than the spurs.

shorter radius than the spurs.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my augers and bits in any of the known forms. B, Figure 1, represents the usual form, and with spurs on opposite sides, as shown at ss, Figs. 1 and 2, which are extended above the floor-lips for the purpose of

giving them strength; but instead of forming the edges of the floor-lips on a line with the cutting-edges of the spurs or circular, or inadvance of the spurs on an equal radius, I make them pointed or near the form of a right angle, as shown at cc, Fig. 2, with the points or vertices on a lesser radius than the spurs, and sharpen the outer sides to the spurs and the inner to the screw. By this arrangement the wood between the radius of the points of the floor-lips and the circle described by the spurs, or the outer rim of the circle to be removed, which offers the greatest resistance, is cut by a drawing edge and stroke which enable the bit to revolve easier.

I claim—

The pointed floor-lips, substantially as described.

CHARLES L. GRISWOLD.

Witnesses:

Samuel C. Silliman, T. O. Silliman.