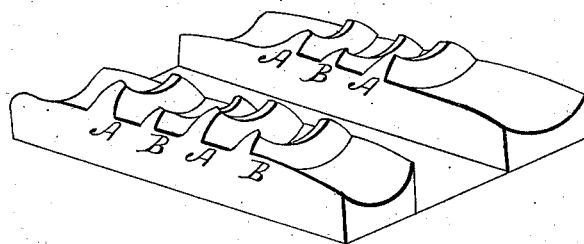


R. French,
Making Augers,
Patented July 20, 1843,

N^o 3,181.



UNITED STATES PATENT OFFICE.

RAYMOND FRENCH, OF DERBY, CONNECTICUT.

AUGER.

Specification of Letters Patent No. 3,181, dated July 20, 1843.

To all whom it may concern:

Be it known that I, RAYMOND FRENCH, of Derby, in the county of New Haven and State of Connecticut, have invented a new and useful improvement in the double-twist auger and in the machinery by which the improvement may be effected.

The improvement consists in forming the double twist auger with a single cutting lip; and this is successfully effected by so twisting the pod of the auger that one of the hollows becomes deeper than the other, and the deepest hollow is connected with the cutting lip. The superiority of the auger thus made consists in this, that it is stronger, less liable to spring or bend, and more durable, than the single twist auger, and also in boring more rapidly, and making a straighter hole, than the common double twist.

To enable others skilled in the art to make and use my invention and improvement, I describe my improved process of twisting the auger, as follows, viz: The auger plate being made in the usual manner of iron, or steel or both, and being either flat, convex or concave, as may be preferred, is first roughly twisted in the usual way by securing one end in a vise and turning the other end by means of a pair of tongs three or four times more or less. It is then while hot put between two dies or swages, drawings of which accompany this specification as part thereof, which dies are so made,

that the alternate teeth marked A, A, of the dies, are raised considerably higher than the intermediate teeth marked B, B, and the teeth of the two dies thus made fit into each other; and as the dies are made to move backward and forward either by hand or by machinery, the auger is turned around and around, so that all parts of the pod are forced between the dies and brought into a regular and perfect twist by them. A cutting lip is then formed in the usual manner at the termination of the deepest hollow, and the end of the shallow hollow is hammered down to the top of the other and may be riveted to it, leaving no appearance of a second lip. This auger may be made with or without a worm to enter the wood. This kind of auger may possibly be twisted in the common manner with tongs and hammer, but the process is difficult, tedious and seldom exact.

I claim as my invention and improvement—

The combination of a double twisted plate or pod auger having its hollows of unequal depths, with a single cutting lip, by whatever process the plate may be twisted.

For these inventions and improvements thus specified and thus claimed, I solicit Letters Patent.

RAYMOND FRENCH.

Witnesses:

HARRISON TOMLINSON,
NATHAN B. CHURCH,