M.A.Mes,

Auger.

10.11,648.

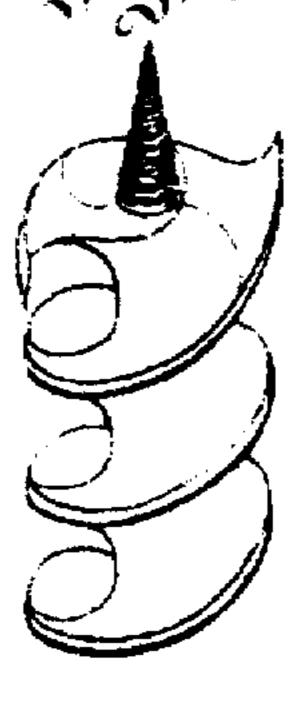
Fatented Feb. 7.1871.

fig.2.

fig. 3.



fig.1,



Witnesses Challe Holls

Inventor

## Anited States Patent Office.

## WILLIAM A. IVES, OF NEW HAVEN. CONNECTICUT.

Letters Patent No. 111,648, dated February 7, 1871.

## IMPROVEMENT IN AUGERS.

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, WILLIAM A. IVES, of New Haven and State of Connecticut, have invented a new Improvement in the Construction of Augers; and I do hereby declare the following, when taken in connection with the accompanying drawing, to be a full and exact description thereof.

Figure 1 represents a side view.
Figure 2 represents the cutting-end.
Figure 3 represents an elevation.

This invention relates to an improvement in double-twist, square-lipped augers, the object being to so construct and shape the head and cutting-edges of the lips b b and a a that the tool will enter the wood without slivering, and with a drawing cut.

To this end my invention consists in bringing, by means of machinery adapted to the purpose, the periphery of the head upon which the side cutters a are to be formed forward of the center of the point instead of leaving them even or at right angles therewith, as in the usual manner, in combination with the two floor-lips b b, which are made to slope upward from the center or screw in a straight line at any de-

sirable angle, but should not be less than twenty degrees.

The advantages of this mode of construction are— First, that by thus bringing forward the side lips or cutters a curved outling-edge is given to the floorlips or cutters, thus securing the drawing cut so desirable in a boring implement, and without cutting back the edge to where the metal is thick.

Second, by sloping upward the floor-lips in connection with their circular cutting-edges, the auger will enter without slivering, and is operated as easily as the gouge-lipped auger, and can be made at much less cost.

What I claim as my invention, and wish to secure by Letters Patent, is—

A double-twist auger, when provided with curved edge, sloping floor-lips b b, and side lips or cutters a a, in the manner shown and described.

W. A. IVES.

Witnesses:

CHARLES HOLT, E. I. HOLT.