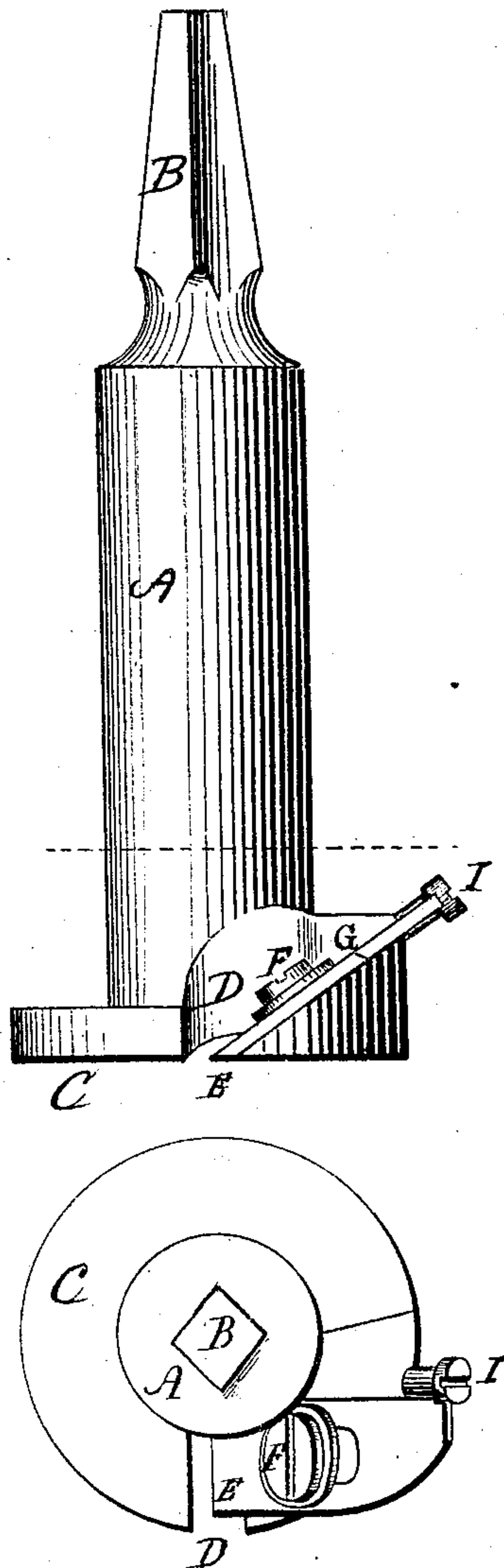


J. BENHAM.  
Hollow Augers.

No. 151,828.

Patented June 9, 1874.

*fig. 1*



Witnesses.  
J. H. Shumway  
A. J. Libbitt

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By atty.  
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# UNITED STATES PATENT OFFICE.

JARED BENHAM, OF HAMDEN, ASSIGNOR TO WILLIAM A. IVES & CO., OF  
NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN HOLLOW AUGERS.

Specification forming part of Letters Patent No. **151,828**, dated June 9, 1874; application filed  
May 25, 1874.

*To all whom it may concern:*

Be it known that I, JARED BENHAM, of Hamden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Hollow Augers; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1 a side view, and in Fig. 2 a top or rear view.

This invention relates to an improvement in the instrument usually employed for making round tenons upon spokes, and for like purposes, and commonly known as hollow augers; the object being to easily adjust the cutter, and at the same time hold the inner cutting-edge up to the work; and it consists in the arrangement of an adjusting-screw in the head upon the inside of the cutter above the set-screw, the said adjusting-screw bearing upon the upper end of the cutter, as more fully hereinafter described.

A is the stock or cylinder, provided with the tang B; C, the head formed on the end of the stock; D, the throat in which the cutter E

is set, and secured by the set-screw F upon its seat G, in substantially the usual manner.

In use the work tends to throw the edge of the cutter outward, thereby enlarging the tenon; and when it is desired to adjust the cut the set-screw must be loosened, which also tends to turn the cutter in its seat.

To overcome these difficulties I place a screw, I, in the head, close to the inner side of the cutter, above the set-screw F, the head of the screw I bearing upon the upper end of the cutter, as seen in Fig. 2. Hence the upper end of the cutter cannot fall back, and the cutting-edge must remain as set; and, if at any time it be desirable to increase the cut, turn the screw I down accordingly, which may be done without loosening the screw F.

I claim as my invention—

In combination with the cutter E of a hollow auger, the adjusting-screw I, arranged in the head above the set-screw F, substantially as described, so as to bear upon the upper end of the cutter.

JARED BENHAM.

Witnesses:

A. J. TIBBITS,  
I. H. SHUMWAY.