

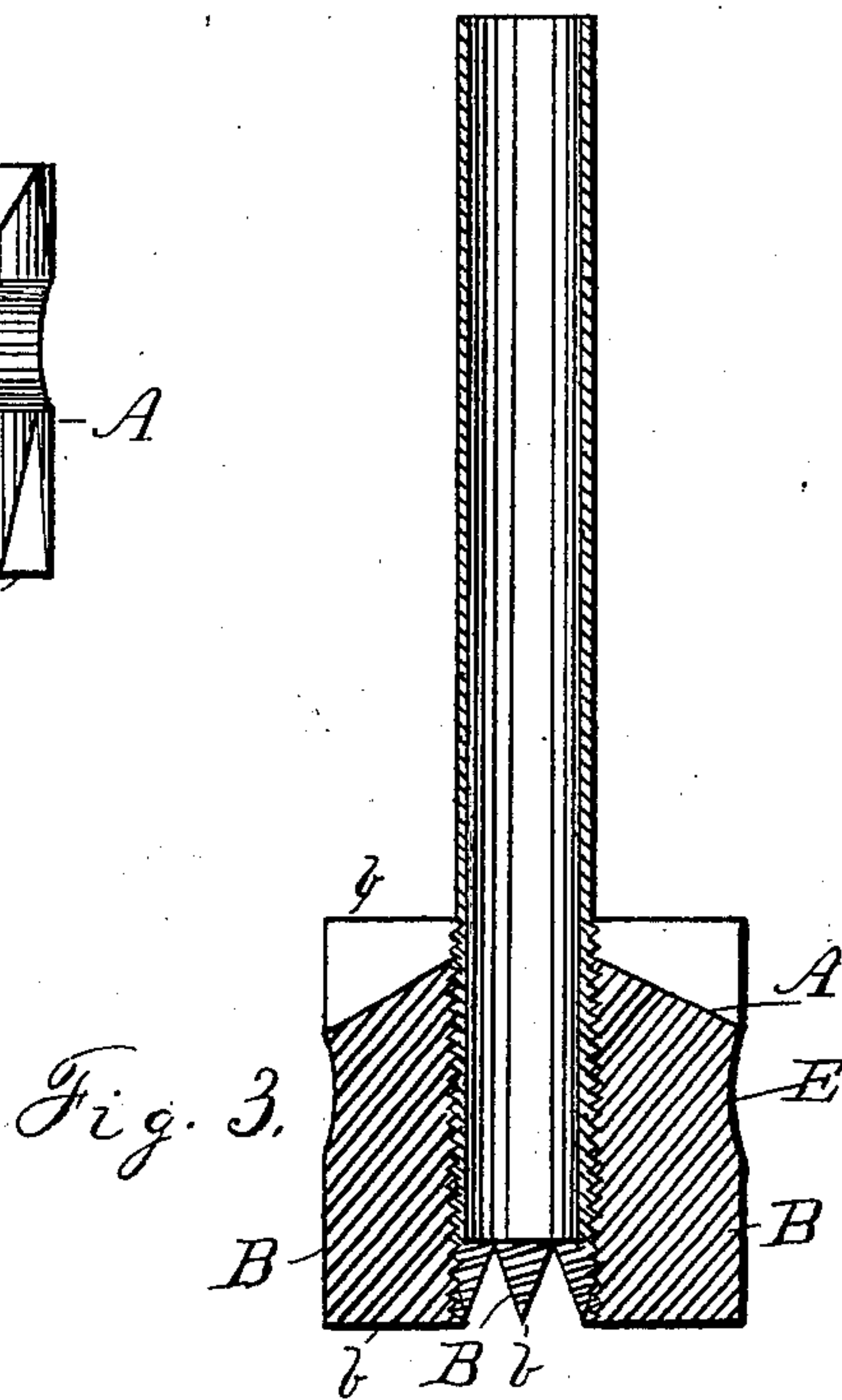
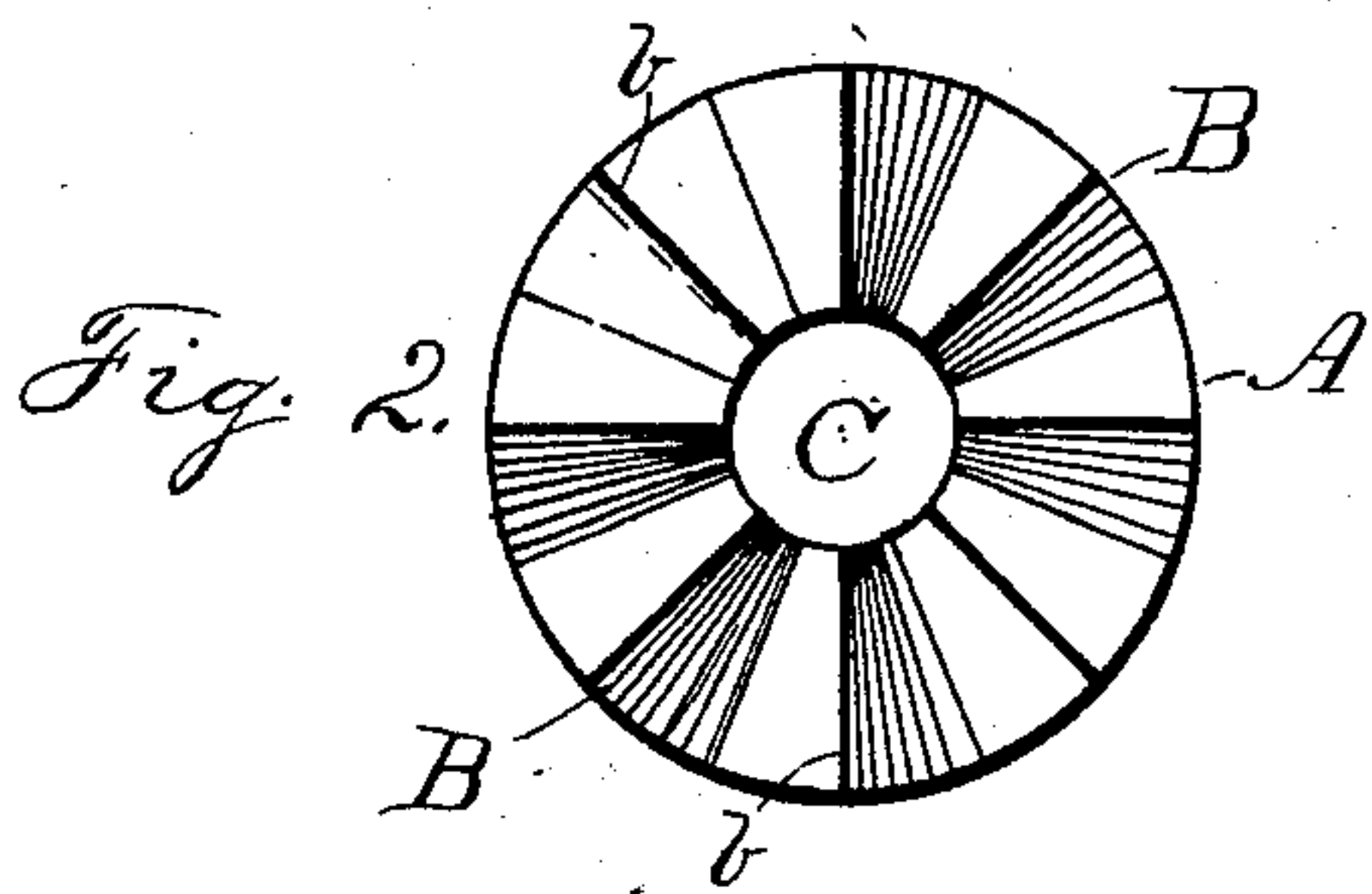
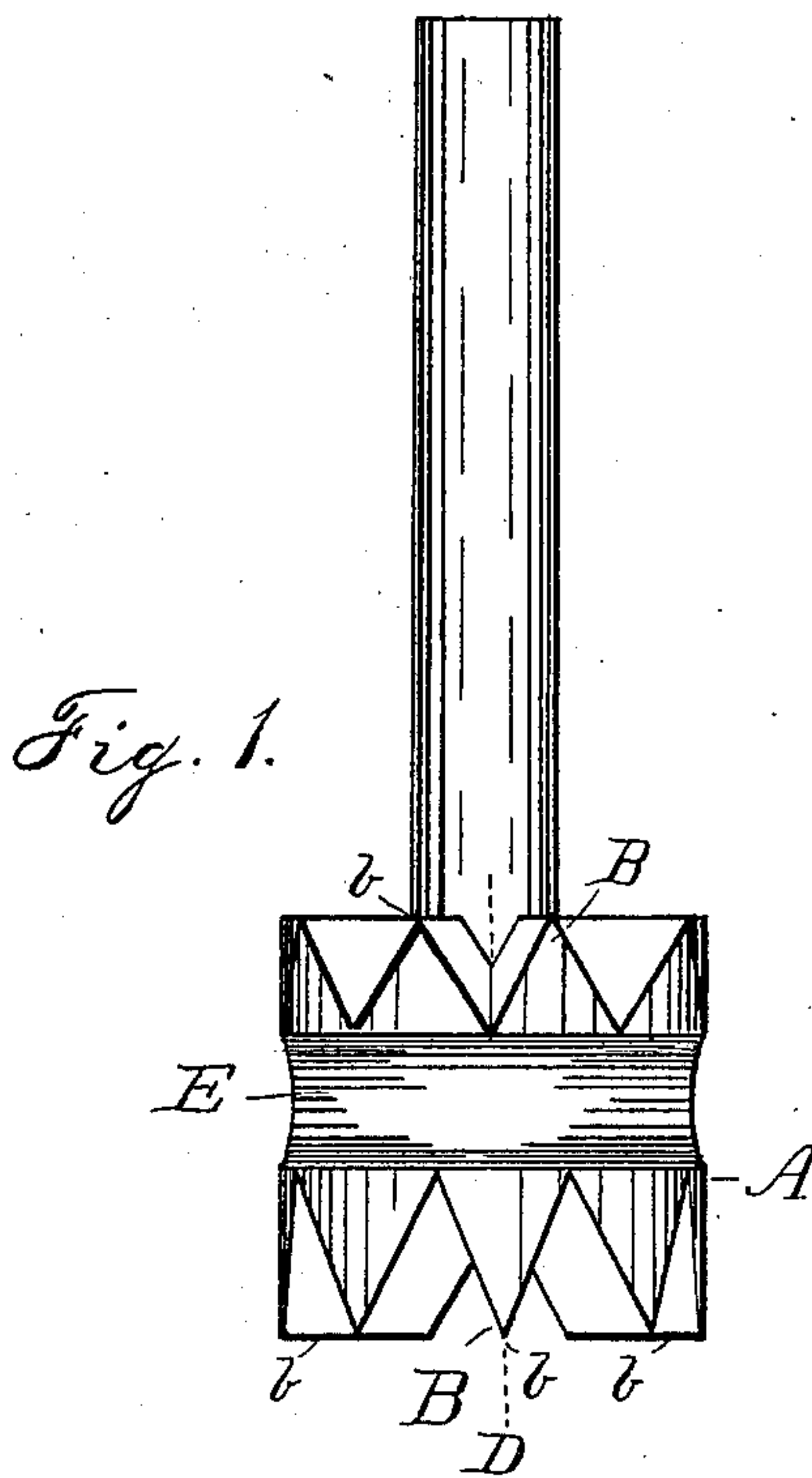
No. 658,060.

Patented Sept. 18, 1900.

W. A. DUDLEY.  
ROCK DRILL HEAD.

(Application filed July 21, 1900.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM ARCHER DUDLEY, OF PETERSBURG, VIRGINIA.

## ROCK-DRILL HEAD.

SPECIFICATION forming part of Letters Patent No. 658,060, dated September 18, 1900.

Application filed July 21, 1900. Serial No. 24,351. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ARCHER DUDLEY, a citizen of the United States, residing at Petersburg, in the county of Dinwiddie and State of Virginia, have invented certain new and useful Improvements in Rock-Drill Heads; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 The invention relates generally to rock-drill heads which are screwed or otherwise secured to the piston-rod or tube and provided with packing around the exterior.

20 The special object of the invention is to make a reversible head which can be used alternately to make a primary cut around the core which is to be subsequently removed by an ordinary core-breaker and then reversed to cut out the projections left between the first set of chisels.

25 Figure 1 of the drawings is a side elevation of my improved reversible drill-head, showing the local relation of the two sets of chisels on the opposite ends. Fig. 2 is a plan view showing clearly the radial position of the cutting edges of the chisels to a common center. Fig. 3 is a vertical section showing how a bisecting line through the convex angle of one

set will also bisect a concave angle of the other set.

35 In the drawings, A represents a centrally-apertured drill-head provided with the V-shaped chisels B integral therewith and arranged in a circle around the central hole C. The cutting edges *b* of the chisels are all radial to a common center and are preferably 40 eight in number, while a line D, bisecting a convex angle in one set of chisels, bisects a concave angle in the other set, thus allowing one set to cut out what has been left by the 45 other.

My double reversible drill-head is made with a slight concavity E around the middle thereof, so that the packing may always be kept exactly in its true position. 50

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

A double, reversible drill-head provided 55 with a circle of chisels on each end, the said chisels being V-shaped, with the cutting edges radial to a common center, substantially as shown and for the purpose set forth.

In testimony whereof I affix my signature 60 in presence of two witnesses.

WM. ARCHER DUDLEY.

Witnesses:

R. J. J. SPRATLEY,  
R. G. SPRATLEY.