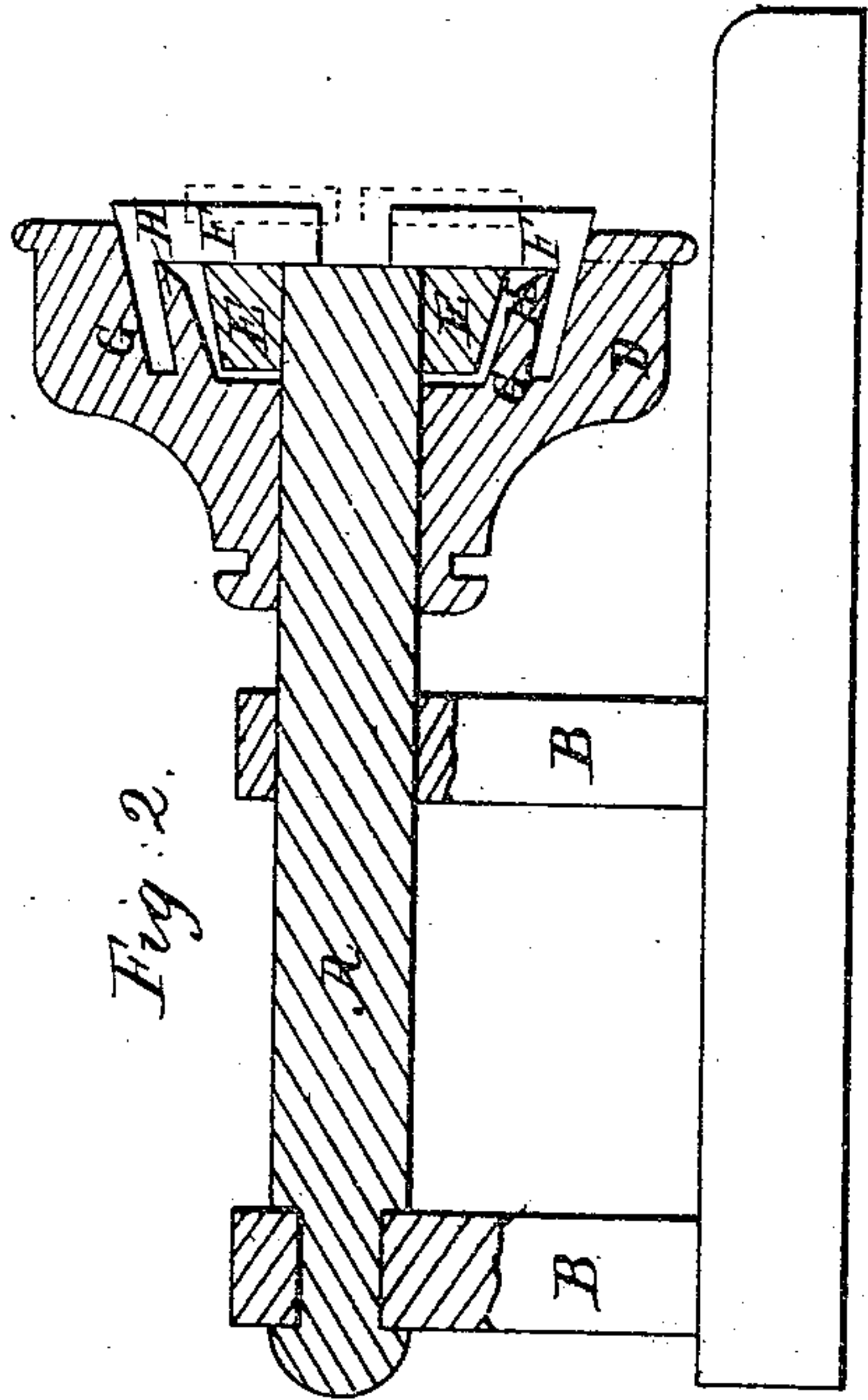


*A. Babbett*

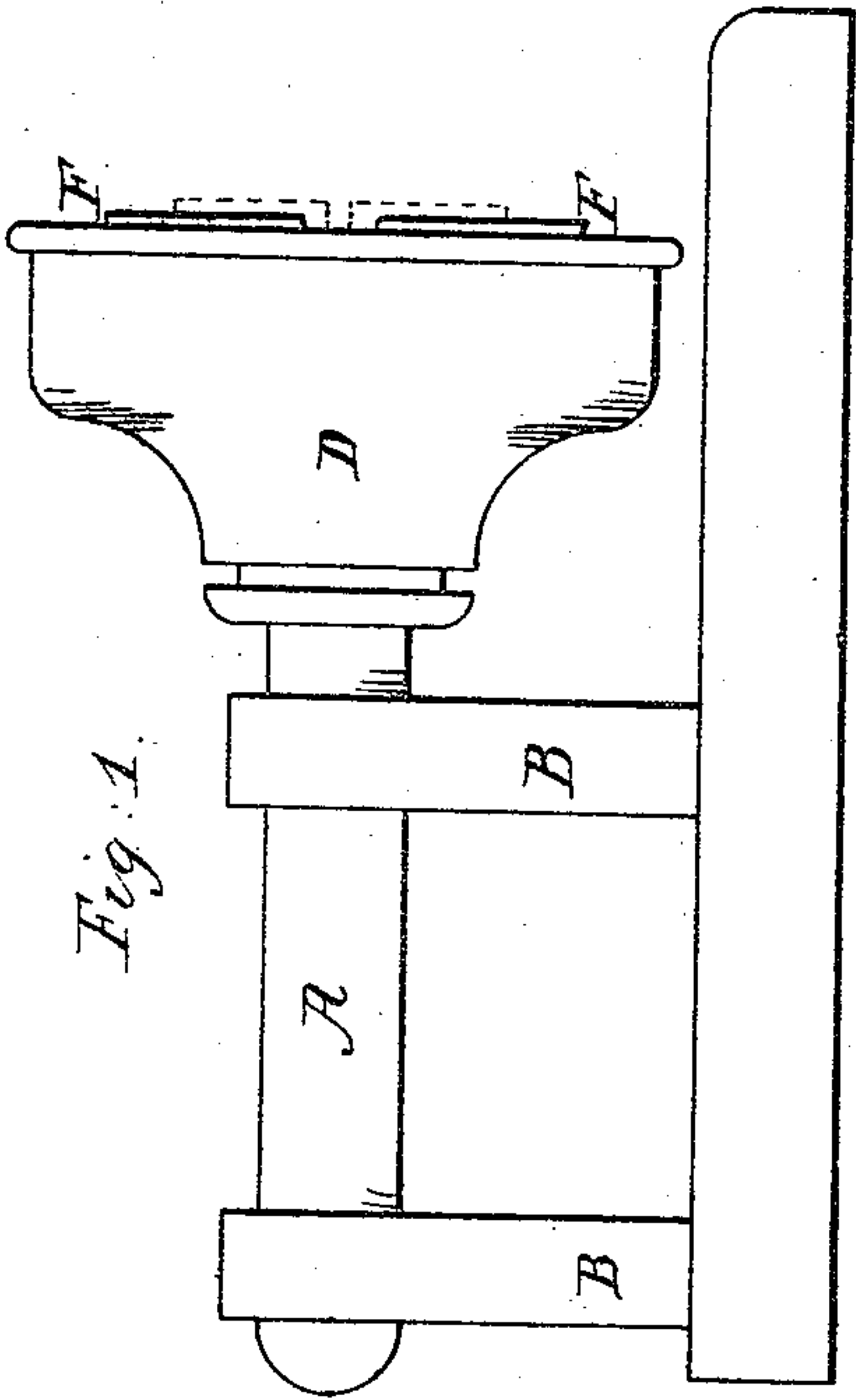
*Cutting Screws*

*N<sup>o</sup> 51,538.*

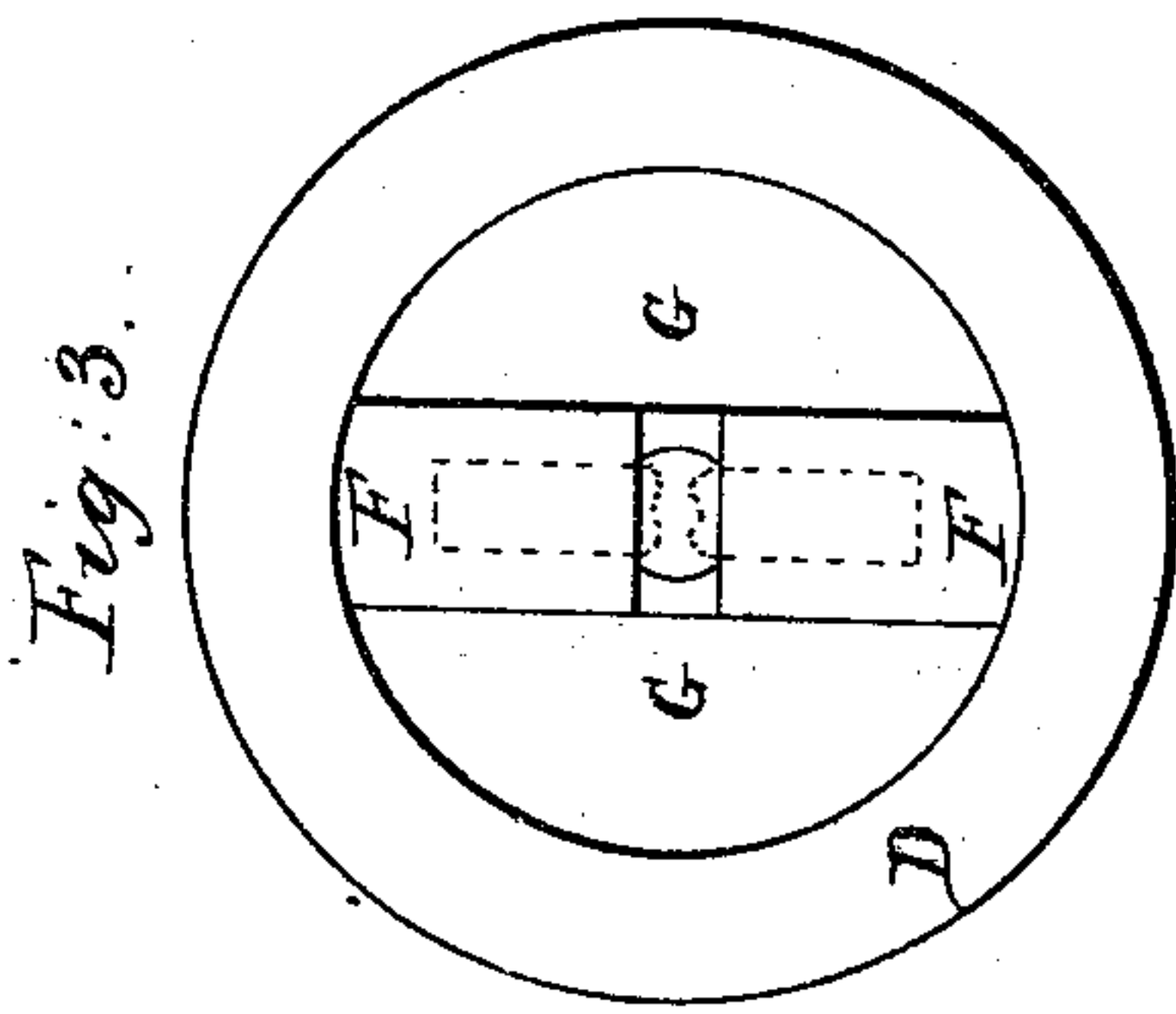
*Patented Dec. 19, 1865.*



*Fig. 2.*



*Fig. 1.*



*Fig. 3.*

*Witnesses;*  
*G. M. Hutchinson*  
*Edwin G. Wood*

*Inventor;*  
*Avery Babbett*

# UNITED STATES PATENT OFFICE.

AVERY BABBETT, OF AUBURN, NEW YORK.

## BOLT-SCREWING MACHINE.

Specification forming part of Letters Patent No. 51,538, dated December 19, 1865.

*To all whom it may concern:*

Be it known that I, AVERY BABBETT, of the city of Auburn, in Cayuga county, and State of New York, have invented a new and useful Improvement in Bolt-Cutters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to encircle the face-plate in which the dies are placed with a ring, for the purpose of holding the dies firmly at the time the bolt is being cut, and of opening the dies after the bolt is cut, so as to let it out without reversing the machine and wasting time in running backward off the bolt by means of inclined planes.

Figure 1 is an elevation of the head-block of a bolt-cutter. Fig. 2 is a sectional elevation of the same. Fig. 3 is a front view of the face-plate, showing the position of the dies and slides to which they are secured.

The letters refer to the same parts in all the figures.

A is the mandrel; B, the stands holding the same. C is the face-plate. D is the sliding ring. E is the hub of the face-plate. F F are the two slides on which the dies are to be secured. The position of the dies is indicated by dotted lines.

The slides F F in Fig. 2 are not shaded.

On the outward end of both the slides F F, and forming part thereof, are flanges G G, inclining toward the shaft as they recede from the face of the face-plate about five-eighths of an inch in two inches.

The sliding ring D fits the outward end of the slides F F; and on the under or in side of

said flanges are lips H H, projecting out from the solid portion of the sliding ring D and fitting close thereto.

Now, it must be noticed that when the sliding ring D is moved toward the bearings B and off from the face-plate C, in which the slides F F are grooved, the slides must recede from each other, and as the ring D is moved in the opposite direction the slides must approach each other. Now, the object of this arrangement must be apparent. The ring D is moved to the position occupied in the drawings, the bolt inserted in the dies and run on as far as required, and the ring D moved off from the face-plate. This opens the dies, and the bolt may be removed without running the dies off by reversing the machine.

This arrangement has all the advantages of the solid dies, in so far as uniformity of size and effectiveness in cutting bolts are concerned. It has the advantage over the solid dies in this: the operator is not required to back off the bolt after it is cut. This saves one-half the time occupied ordinarily in cutting bolts.

Having thus described the construction and mode of operating my invention, what I claim as new, and wish to secure by Letters Patent, is—

1. The sliding ring D for holding the dies, when used as and for the purpose set forth.

2. The inclined planes above described, when used in the manner and for the purpose herein specified.

AVERY BABBETT.

Witnesses:

G. M. HUTCHINTON,  
EDWIN G. WOOD.