

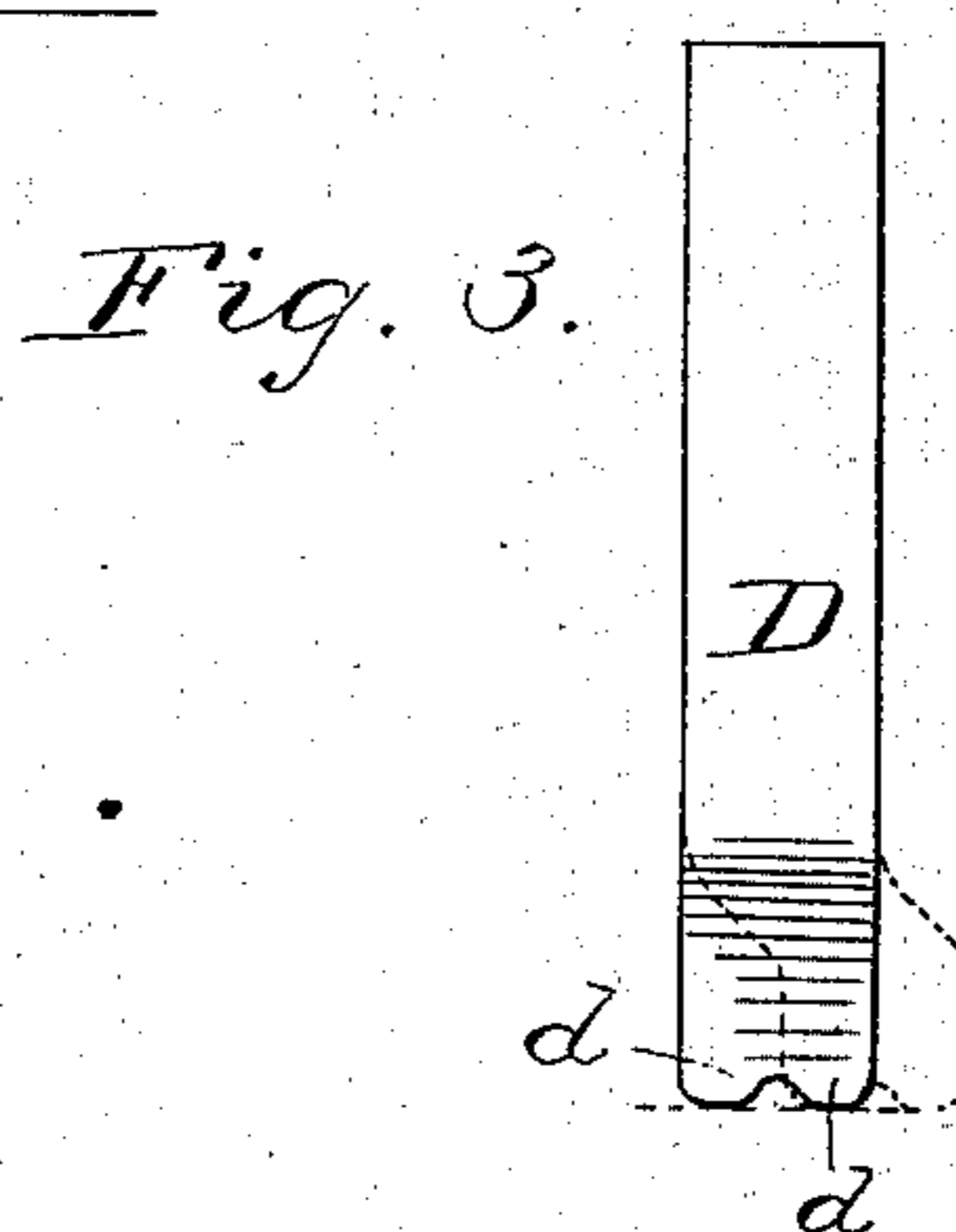
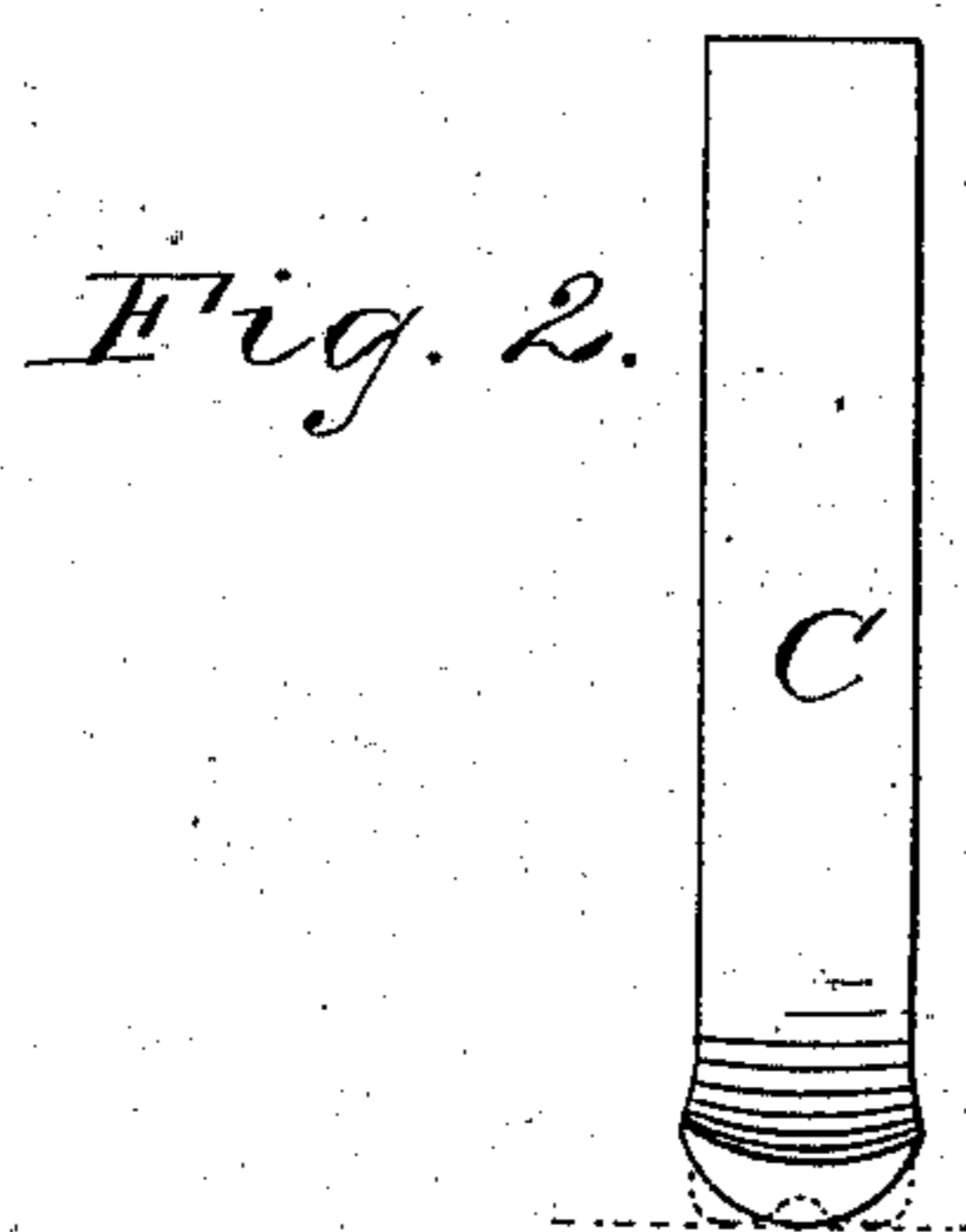
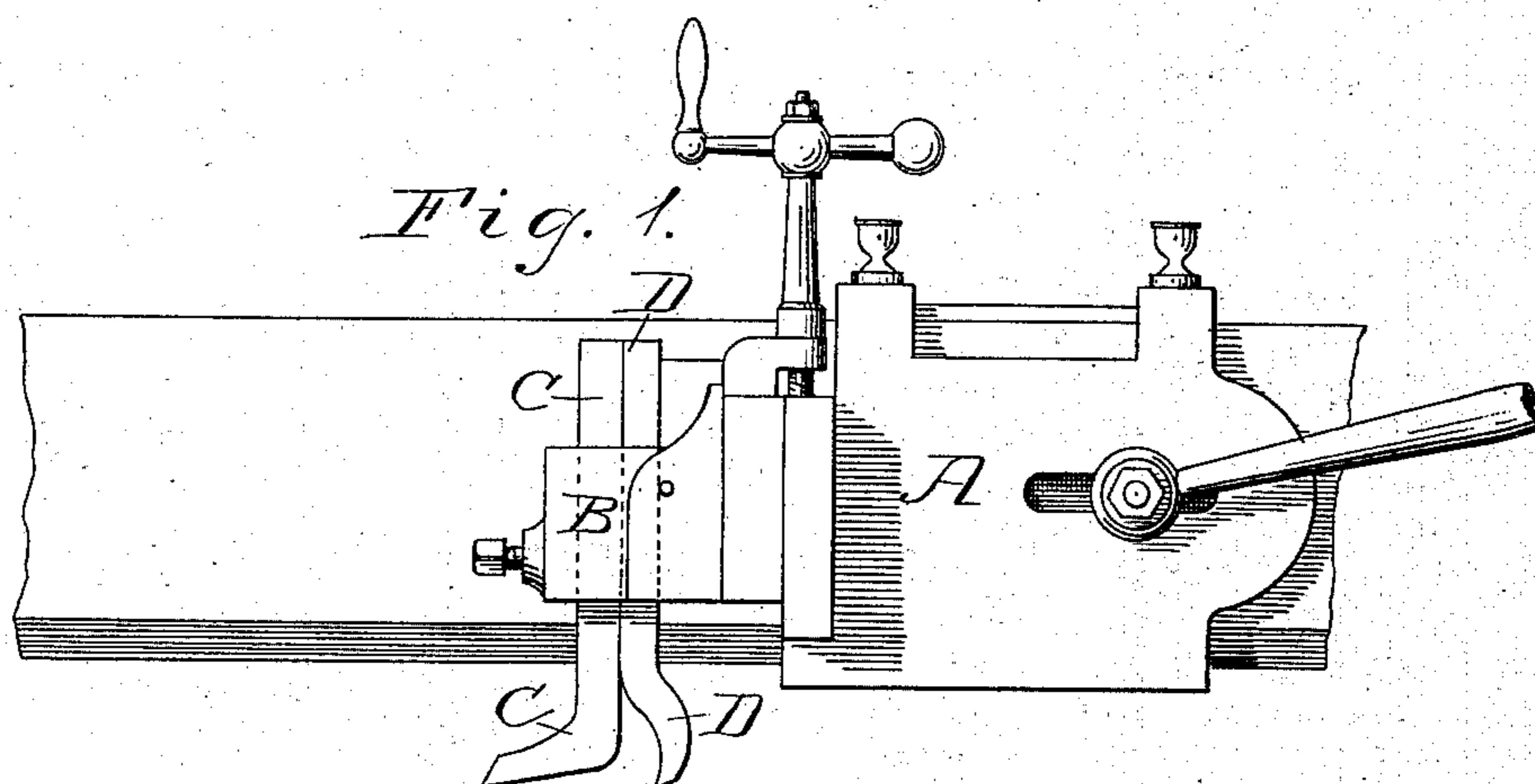
(No Model.)

E. A. BLAKE.

ELECTROTYPE PLATE SHAVING ATTACHMENT FOR ROUGHING MACHINES.

No. 325,781.

Patented Sept. 8, 1885.



WITNESSES

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# UNITED STATES PATENT OFFICE.

EDWARD A. BLAKE, OF CHICAGO, ILLINOIS.

ELECTROTYPE-PLATE-SHAVING ATTACHMENT FOR ROUGHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 325,781, dated September 8, 1885.

Application filed May 12, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD A. BLAKE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Attachments for Roughing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 letters of reference marked thereon, which form a part of this specification.

Heretofore electrotpe-plates, when dressed by a roughing-machine, generally have to be shaved by a stereotype-shaving machine, so as to reduce the ridges and unevenness made by the incisions of the rapidly-reciprocating cutting-tool.

It is the object of my invention to obviate the necessity of shaving the plate after leaving the roughing-machine, and this I accomplish by the use of two chisels, one placed behind the other, and of such shape or form that the last or rear chisel reduces the ridges and unevenness made by the front or leader chisel.

In the drawings, Figure 1 is a side elevation of the carrier of a roughing-machine, showing the position of the chisels. Fig. 2 is a front view of the forward or leader chisel, and Fig. 3 is a front view of the rear or follower chisel.

In the drawings, A represents the carrier of a roughing-machine, which reciprocates transversely over the bed-plate on which the work is placed, and B represents the head, adjustably secured to the carrier, in which the leader-chisel C and the follower-chisel D are securely held by a set-screw, as shown in Fig. 1. The chisels are set so that their cutting-edges are on the same horizontal plane. The cutting-edge of chisel C is convex, and its incisions made in the work are parallel, conterminous, and concave in cross-section, thus forming small ridges, which are objectionable in many instances.

To cut away or reduce these ridges, the chisel D is placed immediately back of chisel

C, so that its cutting-edge will perform that duty.

I prefer that the cutting-edge of chisel D should be shaped as shown in Fig. 3—that is, having the central portion cut away to form projections or lobes *d d*. The central portion of this chisel travels over the basin or concavity of the incision made by the leader-chisel C. While I prefer the cutting-edge of chisel D to be shaped as just above described, yet, if desired, the cutting-edge may be perfectly straight across.

If chisel D is placed immediately back of chisel C, as shown in dotted lines in Fig. 2, the left-hand projection of the chisel will cut farther into the work than chisel C. While this may not be positively objectionable, yet it may be better to bend the chisel D to the right, as shown in dotted lines in Fig. 3, so that the farthest projection, *d*, to the left will strike the work immediately to the right of a line intersecting the vertical center of chisel C.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the carrier of a roughing-machine, of the chisels C and D, the latter designed to follow the former, substantially for the purpose set forth.

2. In a roughing-machine, the combination, with chisel C, having a convex cutting-edge, of the chisel D, having a cutting-edge adapted to reduce the ridges or irregularities left by the concave incisions of chisel C.

3. In a roughing-machine, the combination, with chisel C, of a chisel, D, placed after and following said chisel C, said chisel C having a convex cutting-edge, and chisel D having a cutting-edge which is cut away at its transverse center, so as to travel over the concave incisions made by chisel C, and so as to reduce the ridges made thereby.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

EDWARD A. BLAKE.

Witnesses:

JAMES H. COYNE,  
FRANK D. THOMASON.