(No Model.)

W. BRAH.

ENGRAVER'S TOOL.

No. 271,306. Patented Jan. 30, 1883

Fig. 1.

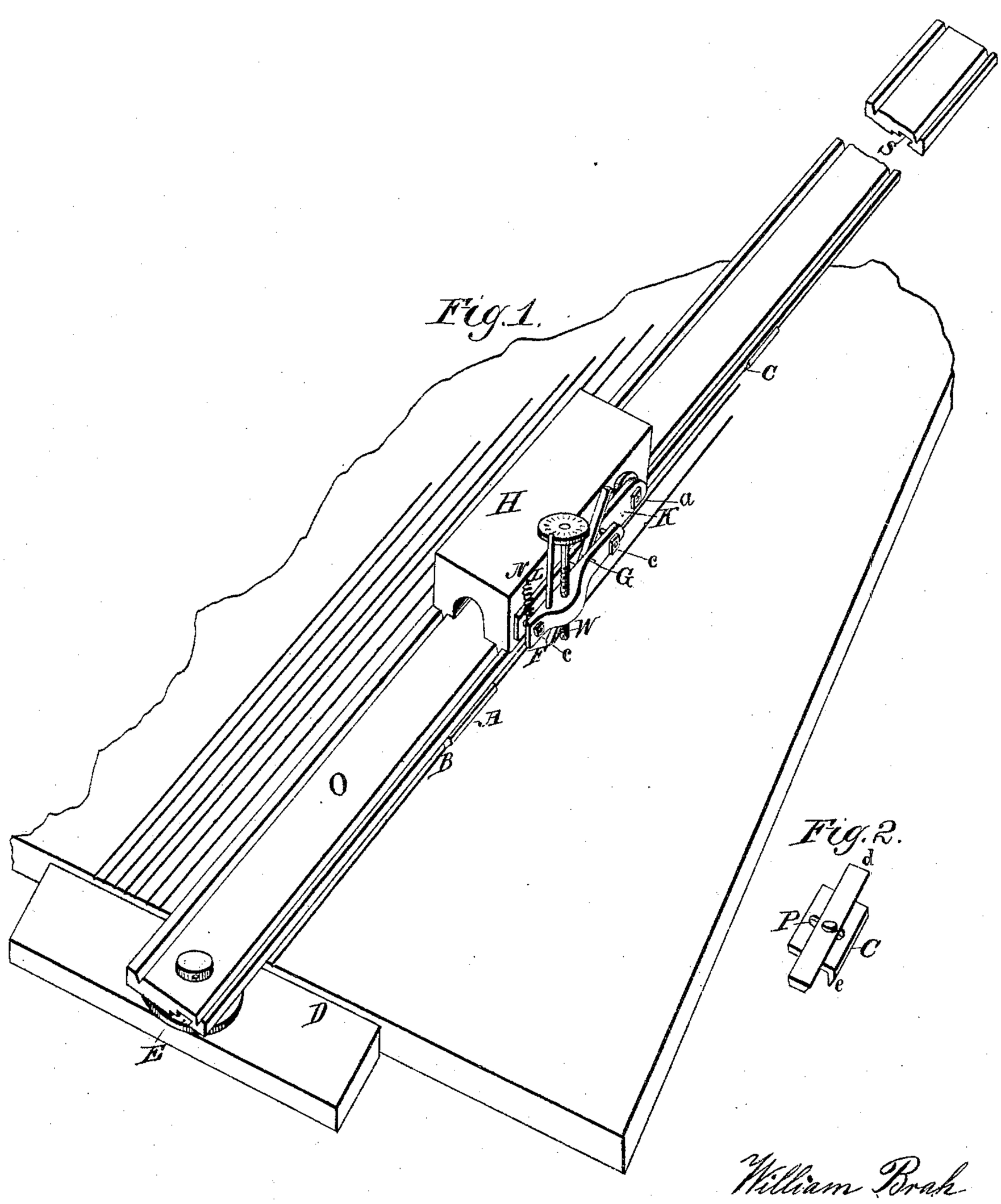

Fig. 2.

Witnesses.

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ENGRAVER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 271,306, dated January 30, 1883.

Application filed May 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BRAH, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Engraving-Tools; 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 pertains 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.

My invention relates to that class of tools which carry a cutting-tool over the surface of a block in right lines, regulated by a mechanical contrivance; and it consists of a rule for guiding the tool, a tool-carriage and cutting-tool, and proper connections and adjustments therefor.

In the accompanying drawings like letters denote similar parts, and in the same Figure 1 is a perspective view of my complete device, broken at S to show the slot underneath the guide. Fig. 2 is a view in detail of a sliding gage attached to the guiding-rule.

O is a straight rule provided with two straight parallel V-shaped grooves, in which the tool-carriage H fits and travels. It is provided at one end with the T-piece D, which enables it to be used as a T-square.

At one side of the tool-carriage H, which is made flush with the edge of the rule O, an arm, K, is pivoted at *a*. To the forward end of arm K a small spiral spring, L, fastened to the upper edge of carriage H, serves to lift it, except when the same is forcibly depressed.

F is a tool clamped to arm K by means of the bar G and bolts *c c*. An upright screw, W, preferably provided with a nutted head, passes through bar G in such manner that its lower end is caused to travel over the work.

Underneath rule O is formed a dovetail longitudinal groove, S, in which a sliding bar, *d*, is fitted, and to it, by means of a transverse slot and screw, a gage, C, is adjustably connected. The front edge of gage C is provided with a downwardly-projecting ledge, *e*, which fits the groove B, formed in the work by the cutting-tool, as at A. The upper surface of piece D is depressed beneath the lower surface of rule O by means of the inserted washer E, in order that piece D may not be touched by the tool when it slides off the end of the work. The gage C is so constructed that it can be reversed and have its under surface plain when so desired, and then forms a carrying-shoe for ruler O.

My improved device is used as follows: The tool F being properly adjusted in its holder, and the rule O placed in position upon the block to be engraved, the carriage H is pushed forward, which causes the tool to grave a single line whose depth is regulated by the protrusion of screw W, the lower end of which rides over the block's surface. When one cut is made the gage C is placed in it and a new cut made in like manner until the work is finished. The distance between the graved lines is varied by means of the slot P in the gage C. When the T-piece D is employed to locate rule O only one gage need be placed in the groove, the other being used simply as a shoe.

I claim—

1. In an engraving-tool, the combination of a guiding-rule, O, with a traveling tool-carriage, H, provided with a pivoted tool-holding arm, K, substantially as and for the purposes set forth.

2. The combination of the guiding-rule O and a gage, C, which serves to anchor or fix the rule O in position by catching in the previously-graved line or groove.

3. The combination of rule O, tool-carriage H, a tool-holder pivoted thereto, and spring L, substantially as and for the purposes set forth.

4. The combination of rule O, tool-carriage H, a tool-holder pivoted thereto, spring L, and screw W, substantially as and for the purposes set forth.

5. The combination of rule O, tool-carriage H, a tool-holder pivoted thereto, and a guiding-gage, C, substantially as and for the purposes set forth.

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Witnesses:
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