

(No Model.)

J. A. FINLEY.

COMBINED SQUARE, LEVEL, AND BEVEL.

No. 339,158.

Patented Apr. 6, 1886.

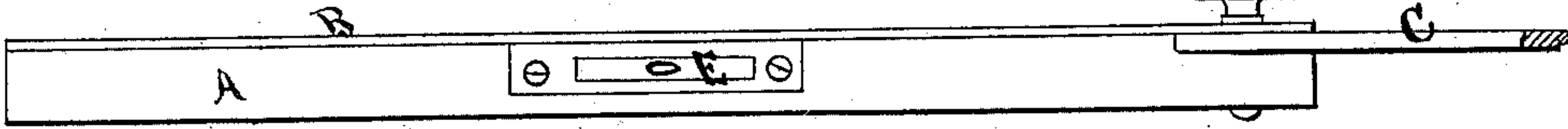


Fig. 5.

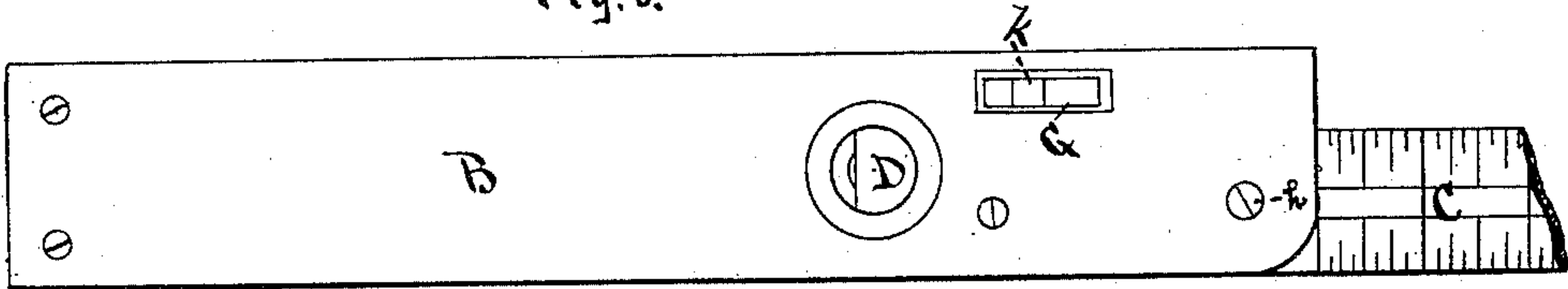


Fig. 1.

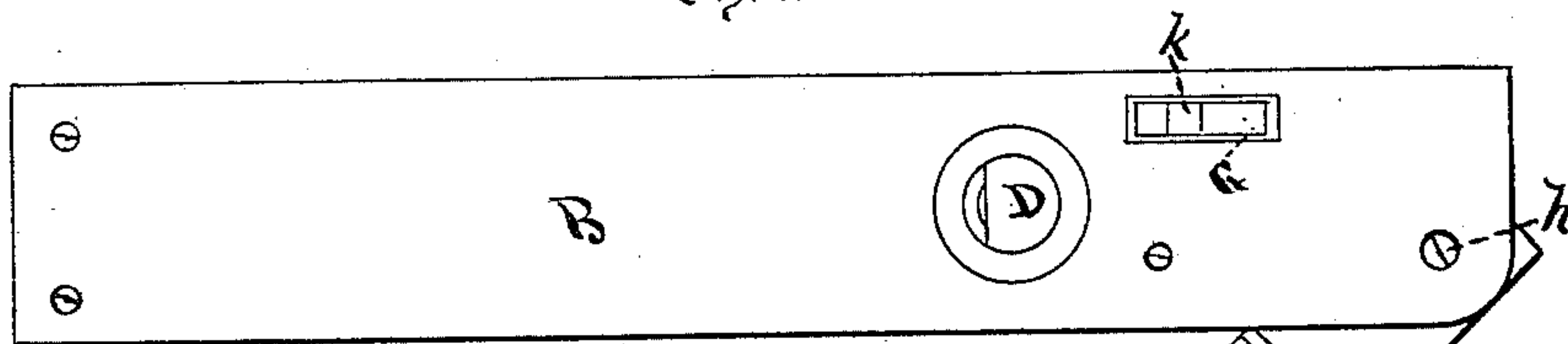


Fig. 2.

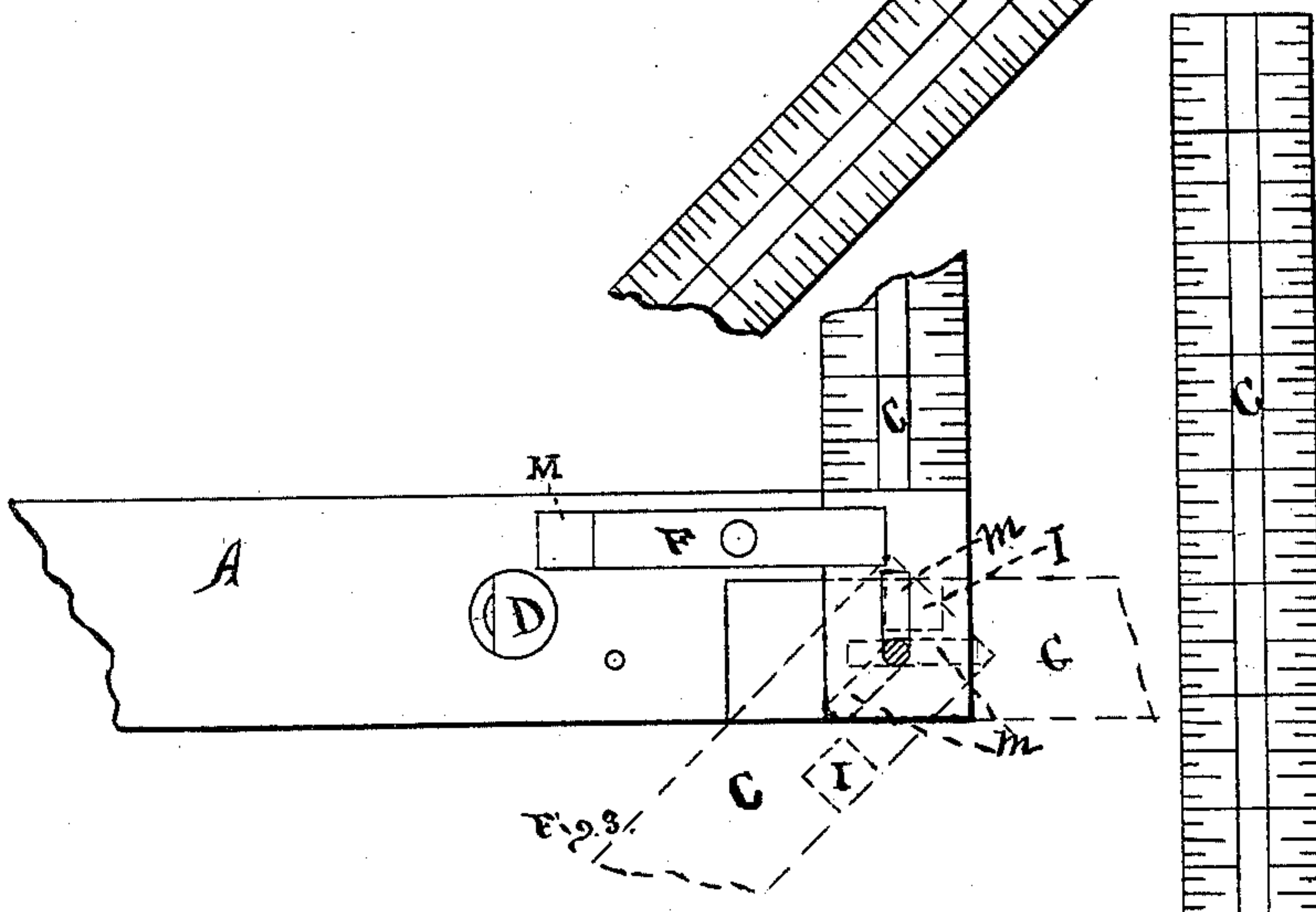


Fig. 3.

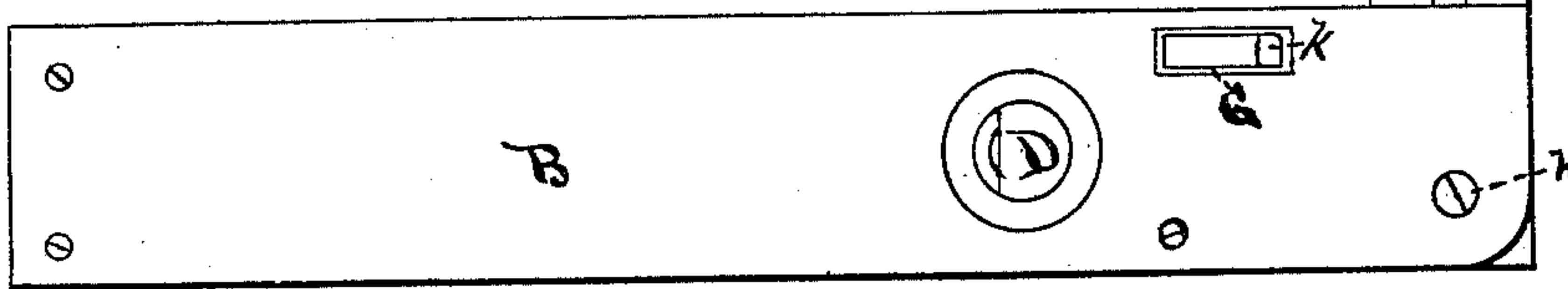


Fig. 4.

Witnesses:

Inventor:

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UNITED STATES PATENT OFFICE.

JOHN A. FINLEY, OF VANCEBOROUGH, MAINE.

COMBINED SQUARE, LEVEL, AND BEVEL.

SPECIFICATION forming part of Letters Patent No. 339,158, dated April 6, 1886.

Application filed June 13, 1885. Serial No. 168,591. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. FINLEY, a citizen of the Dominion of Canada, residing at Vanceborough, in the county of Washington and State of Maine, have invented a new and useful Combination-Tool; 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.

My invention relates to an improvement in a combined square, level, plumb, and bevel, and is illustrated in the accompanying drawings, in which—

Figure 1 is a plan showing the arm C extended to form a level. Fig. 2 is a plan showing the arm C inclined to form a bevel. Fig. 3 is a plan showing the metallic plate B removed; also the application of the slide F and the arm C in different positions. Fig. 4 is a plan showing the tool used as a square. Fig. 5 is a side elevation with the arm C extended to form a level.

The level-bulb E is here shown for convenience, its proper place being on the opposite edge of the part A.

I construct the level arm or handle in two parts, A and B, as shown in Fig. 5. The end of the part A adjoining the bevel-arm C is rabbeted across to receive and adjust the arm C when used as a square, and is also rabbeted upon its outer edge longitudinally, to permit the arm C to be swung into position and adjusted when used as a level or bevel. The width of each rabbet is equal to the width of the arm C, and the depth of each rabbet is equal to the thickness of the arm C, so that when adjusted for use either as a square or level the external edges and the upper surfaces of the two parts A and C shall coincide. When the arm C is connected with the part A as hereinafter described, the plate B, corresponding in shape to the part A, is fitted over the part A and secured in position. The arm C is secured to the arm A B by means of a round bolt, *h*, with screw-point passing through round bolt-holes in A and B and through a longitudinal slot, *m*, near the inner end of the arm C. A winged nut, H, secures the bolt *h*, which con-

nects the arm C to the arm A B, and when tightly screwed down holds the arm C in any position in which it has been adjusted. The head of the bolt *h* is countersunk in the surface of the part A. I also provide upon the part A a groove or channel, M, in which I fit the slide or sliding bolt F, and in the arm C a channel or recess, I, in such position that when the arm C is adjusted for use as a square the sliding bolt F may be moved forward and fit into the recess I and lock the arm C and prevent its swinging. The slide F is worked by means of a knob, K, projecting through a slot, G, in the part B, and flush with its upper surface, or in any convenient manner, as by a key operating against the slide. The slot *m* is so placed in the arm C that when that arm is adjusted for use as a square the outer end of the slot *m* shall bear upon the bolt *h* and leave the inner end of the arm C flush with the outer edge of the arm A B.

For use as a level, the nut H being loosened, the arm C is turned down and pushed back until the inner end of the slot *m* bears upon the bolt *h*, and the inner end and edge of the arm C bear upon the walls formed by the longitudinal rabbeting of the part A. The nut H is then screwed down and the parts are held firmly in position.

For use as a bevel, the nut H being loosened, the arm C is extended as far as permitted by the slot *m*, and is then turned back to any desired angle and secured, as before, by the nut H.

I also provide my tool with the plumb D and level E, and, if desired, I graduate either or both arms as a scale.

I do not claim, broadly, a removable bevel-blade; but

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

1. In a try-square, the combination of the part A of the level-arm A B, rabbeted longitudinally and across the end adjoining the bevel-arm C, as shown, and provided with the groove or channel M, slide F, plate B, having slot G, bevel-arm C, provided with slot *m* and recess I, and bolt *h* with nut H.

2. The herein-described combination-tool,

consisting of the combination of the part A of the level-arm A B, rabbeted longitudinally and across the end adjoining the bevel-arm C, as shown, and provided with the
5 groove or channel M, slide F, plate B, having slot G, bevel-arm C, provided with slot *m* and recess I, bolt *h* with nut H, plumb D, and

level E, all as shown and described, and substantially as and for the purposes specified.

JOHN A. FINLEY.

Witnesses:

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