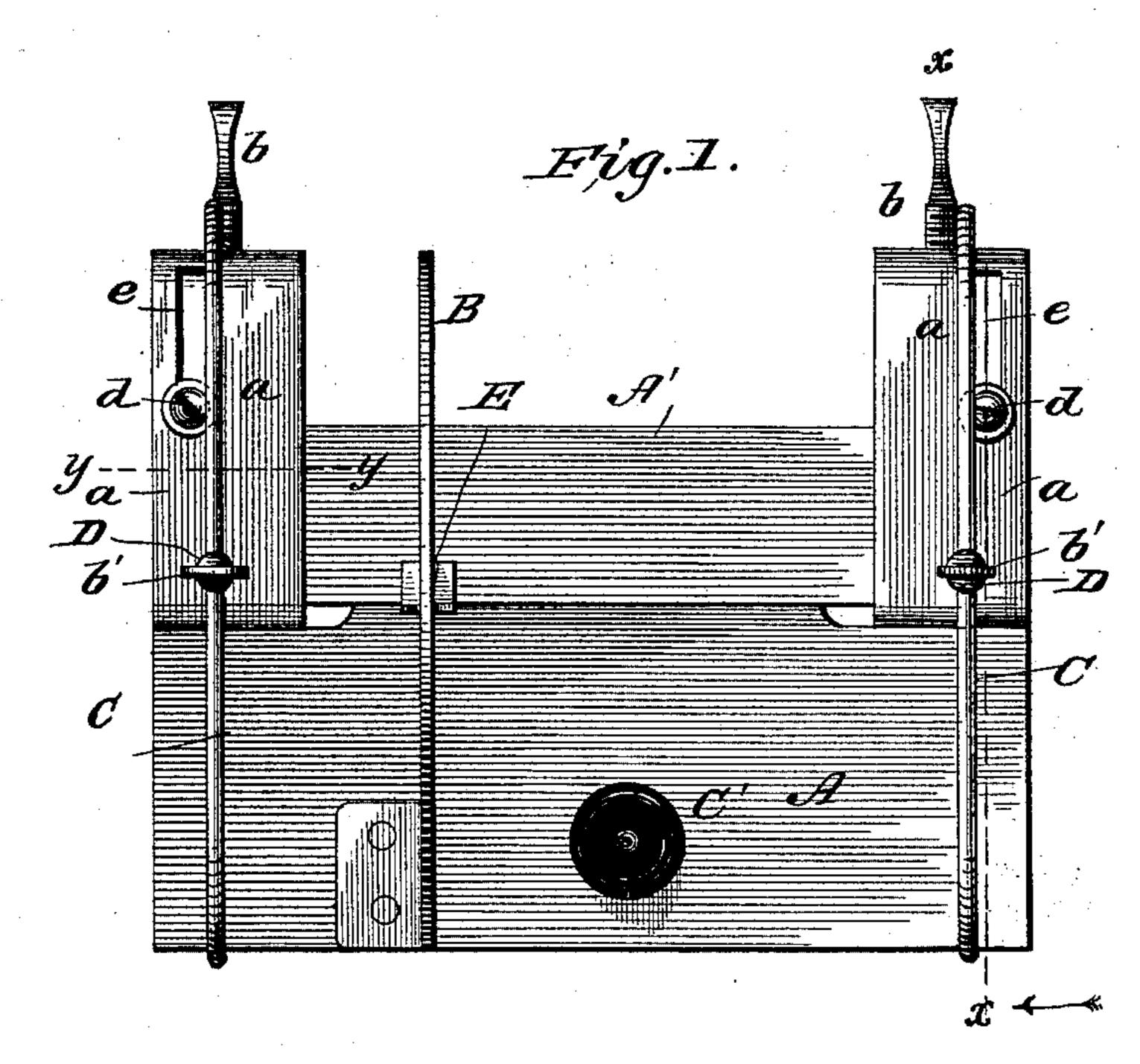
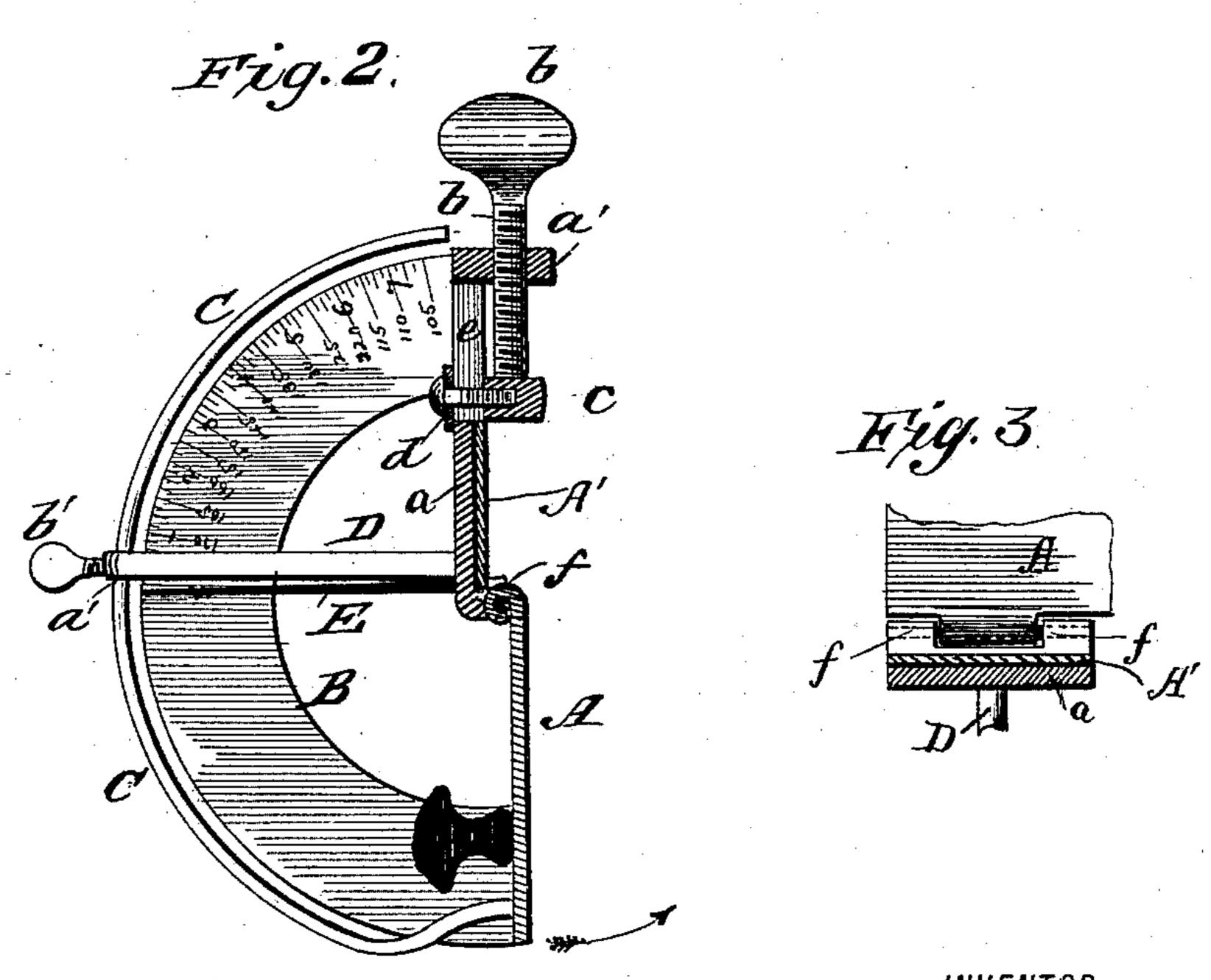
M. O. GODDING.

BEVEL GAGE.

No. 395,433.

Patented Jan. 1, 1889.





WITNESSES: d G. Dieterich

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ATTORNEY,

UNITED STATES PATENT OFFICE.

MILON O. GODDING, OF MONROVIA, CALIFORNIA.

BEVEL-GAGE.

SPECIFICATION forming part of Letters Patent No. 395,433, dated January 1, 1889.

Application filed July 6, 1888. Serial No. 279, 239. (No model.)

To all whom it may concern:

Be it known that I, MILON O. GODDING, of Monrovia, in the county of Los Angeles and State of California, have invented a new and 5 useful Improvement in Bevel-Gages, of which

the following is a specification.

This invention contemplates certain improvements in bevel-gages for bench-planes, mill-saw tables, and planing-machine tables, 10 having for its object to vary the angle of the cut or bevel, the same being determined in inches or degrees, thus obtaining any desired angle of cut or bevel as occasion may require and as is practiced especially in carpentry

15 and joinery.

To these ends the nature of the invention consists of a hinged plate or guide the supporting-plate of which is adapted for application or attachment to the utensil with which 20 it is to be used, while said guide or plate is provided with curved or segmental guide-rods and a graduated segment, which guide-rods pass through and are adjustably held in posts or standards applied to the clamp-plates or 25 directly to the supporting-plate, and with which graduated segment registers a pointer or index also applied to said supporting-plate, substantially as hereinafter more fully set forth and claimed.

30 In the accompanying drawings, Figure 1 is a side elevation of my invention, and Fig. 2 is a sectional elevation on the line xx of Fig. 1. Fig. 3 is a horizontal section on the line y y of Fig. 1, certain portions being broken

35 away.

In carrying out my invention I make use of two plates, A A', one being preferably wider than the other. The narrower plate, A', is riveted or fastened to cross-plate-like bars a a, 40 which are hinged at their inner ends to the wider plate, A. The outer ends of the platelike bars a a are carried inward, or formed with inwardly-projecting lateral flanges a'a', through which pass thumb-screws b b. These screws carry or connect with and effect the adjustment of clamp-plates c c, which are adapted to be moved along the plate-like bars a a, and are guided in their movement by means of screw-like studs or pins dd, screwed 50 into the clamp-plates and passing through slots e e in the plate-like bars a a. The inner

longitudinal edge of the plate A' is provided or formed immediately opposite the hingingpoints between the plate-like bars a a and the plate A with inwardly-projecting flanges ff, 55 which unite with the clamp-plates $c\ c$ in forming the clamps proper.

In order to permit of the compact arrangement or disposition of the parts, the flanges ff are cut away or recessed intermediately of 60 their ends to receive the hinged eye portions

on the plate A.

Applied to the plate A at its outer or rear side are a graduated segmental plate, B, and two segmental rods, C C, the rods being se- 65 cured one near each outer corner edge of said plate, while the graduated segmental plate or are is arranged intermediately of said rods it may be near one of said rods. The plate B is marked off into a scale of degrees, as also 70 of inches.

Posts or supports D' D are planted in the plate-like bars a a near their inner ends, and are provided with apertures a' near their outer ends, through which pass the rods C C, 75 and with thumb-screws b' b', which are inserted into the said ends thereof and engage with said rods. This arrangement effects the holding of the plate A at the required angle of adjustment. The plate A is also provided 80 with a knob, c', for its convenient manipulation or adjustment.

E is a pointer or index, which is fixed to the plate A' at its rear side and slightly bifurcated a suitable distance inward from its 85 outer end to receive the graduated segmental plate B at its inner edge, the tapering or pointed portion or end of the pointer or index registering with the scale or graduations upon

the plate B.

In operation it will be seen, with the gage applied to a bench-plane, for instance, that by properly moving the plate A, by grasping its knob, to the required angle, the thumbscrews b' b' having previously been loosened, 95 the plane, with its bit, is disposed with relation to the work so as to get the required bevel in planing or cutting the material; also, the angle of adjustment of the plate A is obtainable in degrees, as is necessary in making a 100 cut, especially in preparing material to conform to the pitch of roofs, &c.

In applying the instrument for use in connection with a mill-saw table or a planing-machine table the plate carrying the clamps is removed, and in its place is designed to be substituted a plate having holes for bolts which effect the screwing of the instrument in place.

From the foregoing it will be seen that this invention is adapted to aid in producing any required bevel or a cut of any angle of inclination in an expeditious manner, as is required especially in carpentry and joinery

work.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is--

1. The bevel-gage comprising the hinged-together plates, one being provided with a pointer or index and adapted for application to a planing-tool, while the other is provided with a graduated segmental plate and seg-

mental rods passed through apertured posts applied to the aforesaid plate and provided with thumb-screws engaging said rods, sub-

stantially as set forth.

2. The bevel-gage consisting of the hinged-together plates, one plate having plate-like bars provided with clamp - plates, thumb-screws, and slots which receive screw-like studs or pins connecting with said clamp- 30 plates, said latter-referred-to plate also having at its inner edge inwardly-projecting flanges and a pointer or index, while the other plate is provided with segmental rods and a graduated segmental plate, said rods being adjustably held in posts which are secured to the said plate-like bars, substantially as specified.

MILON O. GODDING.

Witnesses:

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