

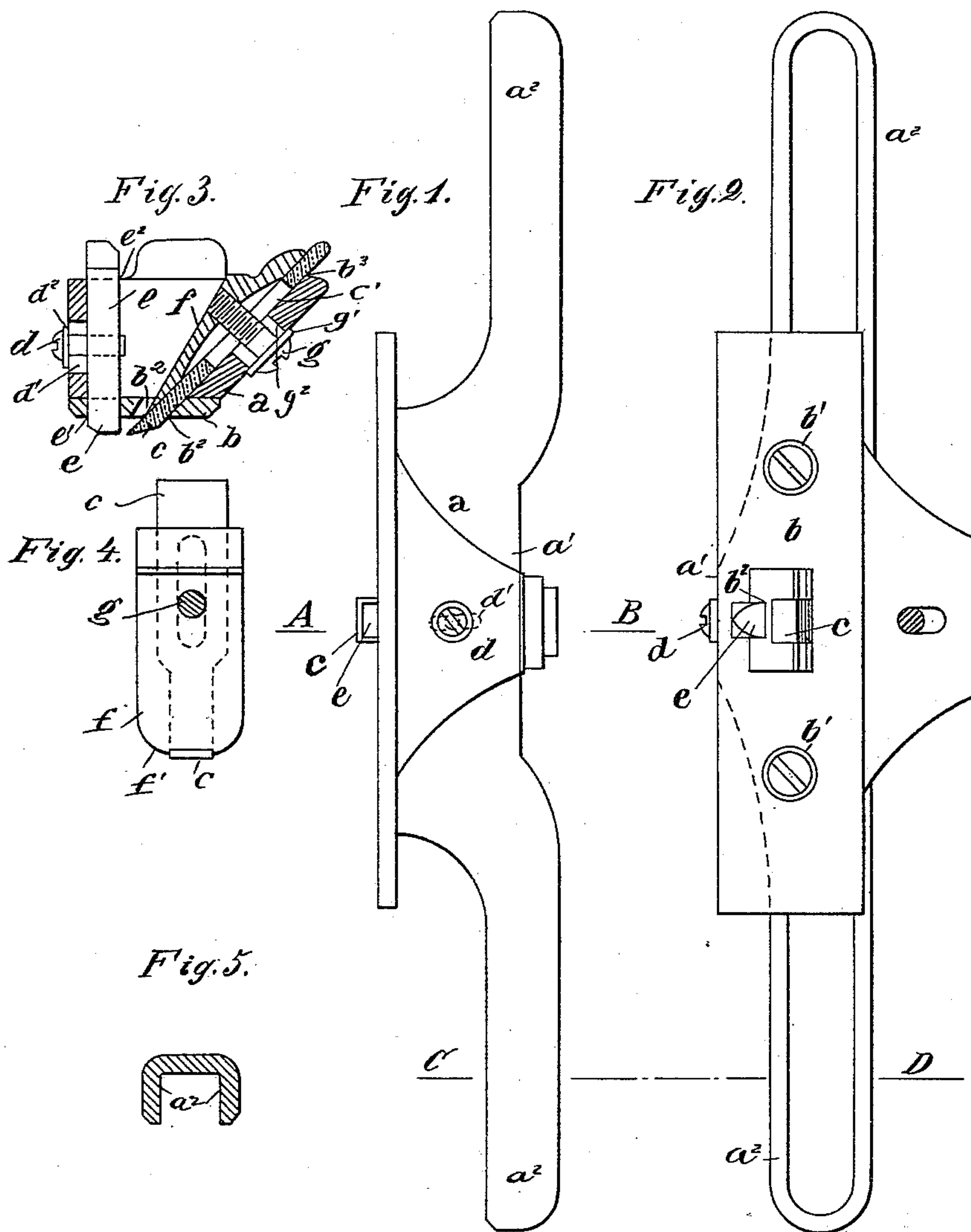
(No Model.)

G. HEYMEIER.

PLANE FOR PLANING THE BOTTOM OF GROOVES IN MOLDINGS AND  
ORNAMENTAL WOOD WORK.

No. 420,232.

Patented Jan. 28, 1890.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

GUSTAV HEYMEIER, OF BREMEN, GERMANY.

PLANE FOR PLANING THE BOTTOMS OF GROOVES IN MOLDINGS AND ORNAMENTAL WOOD-WORK.

SPECIFICATION forming part of Letters Patent No. 420,232, dated January 28, 1890.

Application filed June 1, 1889. Serial No. 312,910. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAV HEYMEIER, sculptor, of Bremen, in the Free State of Bremen and German Empire, have invented  
5 a new and useful Improvement in Planes for Planing the Bottoms of Grooves in Moldings and Ornamental Wood-Work, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to tools for planing the bottoms of grooves in moldings and ornamental wood-work, and has for its object to provide an effective tool for that purpose.

The invention consists in a plane of the  
15 character specified, constructed as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate  
20 corresponding parts in all the figures.

Figure 1 is a front view of the invention. Fig. 2 is a bottom view. Fig. 3 is a cross-section on the line A B of Fig. 1. Fig. 4 is a view of the blade with its guard-plate, and  
25 Fig. 5 is a cross-section of one of the handles of the tool on the line C D of Figs. 1 and 2.

The invention consists of a frame *a*, preferably hollow, as shown, and made of metal, and constituting the central portion *a'* and  
30 the handles *a''*. On the bottom of the frame *a* is centrally located a plate *b*, secured by screws *b'* to the central portion *a'* of frame *a*. The plate *b* is provided with an opening *b''*, through which projects a blade *c* extending  
35 up through an opening *b'''* in the top of frame *a*, the blade *c* being movable through the openings *b''* and *b'''*. The blade *c* is clamped in fixed position by means of a shield-plate *f*, also projecting through openings *b''* and *b'''*,  
40 and a screw *g*, passing through a washer *g'*, a slot *g''* in frame *a*, over which the washer *g'* extends, and a slot *c'* in blade *c*, and engages plate *f*. By means of this construction the plate *f* and blade *c* may be adjustably raised  
45 and lowered and clamped in position. Within the central portion *a'* is also located a verti-

cal guide-piece *e*, projecting through an opening *e'* in the plate *b* and opening *e''* in the top of frame *a*, and vertically adjustable by means of a screw *d* engaging the guide-piece *e* and  
50 extending through a slot *d'* in frame *a*, and a washer *d''* overlapping the slot *d'*. The lower end of piece *e* projects in front of the projecting end of blade *c*, is in the form of a tooth, and is made of bone or other suitable  
55 material.

The piece *e* prevents the blade *c* from cutting too deeply into the wood.

The depth of the cavity to be planed is determined by the length of the blade *c* projected beyond the plate *b*.  
60

The lower end of the plate *f* is formed with the rounded edge *f''*, and when the bottom of a groove is to be planed the plate *f* is adjustably lowered so as to bring its lower end down to  
65 the cutting-edge of the blade *c*, and the shape of the curved bottom of the groove is thereby retained while the tool is planing the bottom of the groove.

Having thus fully described my invention, I  
70 claim as new and desire to secure by Letters Patent—

A tool for planing moldings, consisting of the frame *a*, with handles *a''*, the removable plate *b*, with openings *b''* *e'*, the vertically-adjustable curved shield-plate *f*, and the vertically-adjustable slotted blade *c*, projecting  
75 through opening *b''*, the binding-screw *g*, extending through slotted blade *c* and engaging plate *f*, and the vertically-adjustable tooth  
80 *e*, projecting in front of the edge of blade *c*, and having the adjusting-screw *d* extending through the slot *d'* in frame *a*, and the overlapping washer *d''*, substantially as shown  
85 and described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

GUSTAV HEYMEIER.

Witnesses:

ERNST BIERNRITH,  
HUGO MÜHLENBACH.