

(No Model.)

W. H. STINSON.

PLANE GUIDE.

No. 262,851.

Patented Aug. 15, 1882.

Fig. 1.

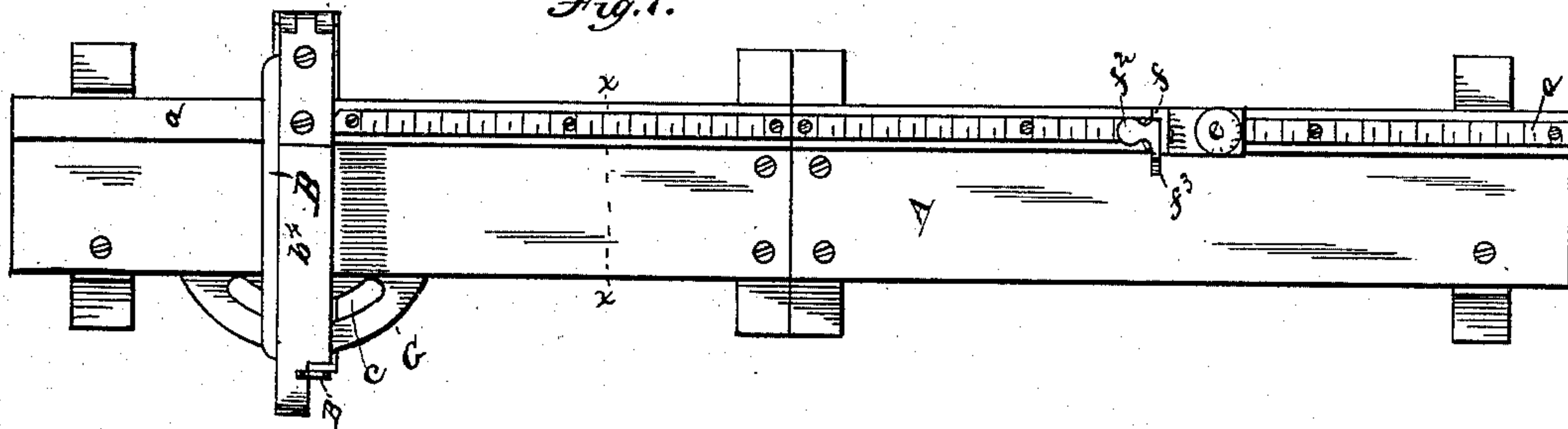


Fig. 2.

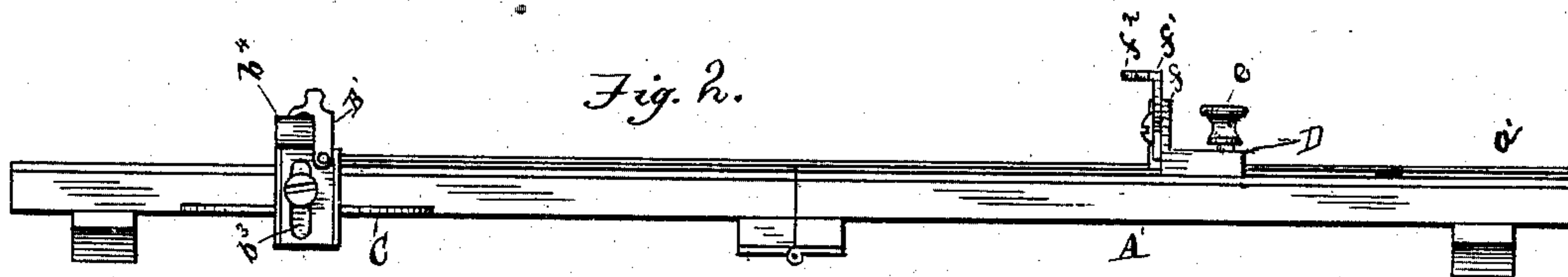


Fig. 3.

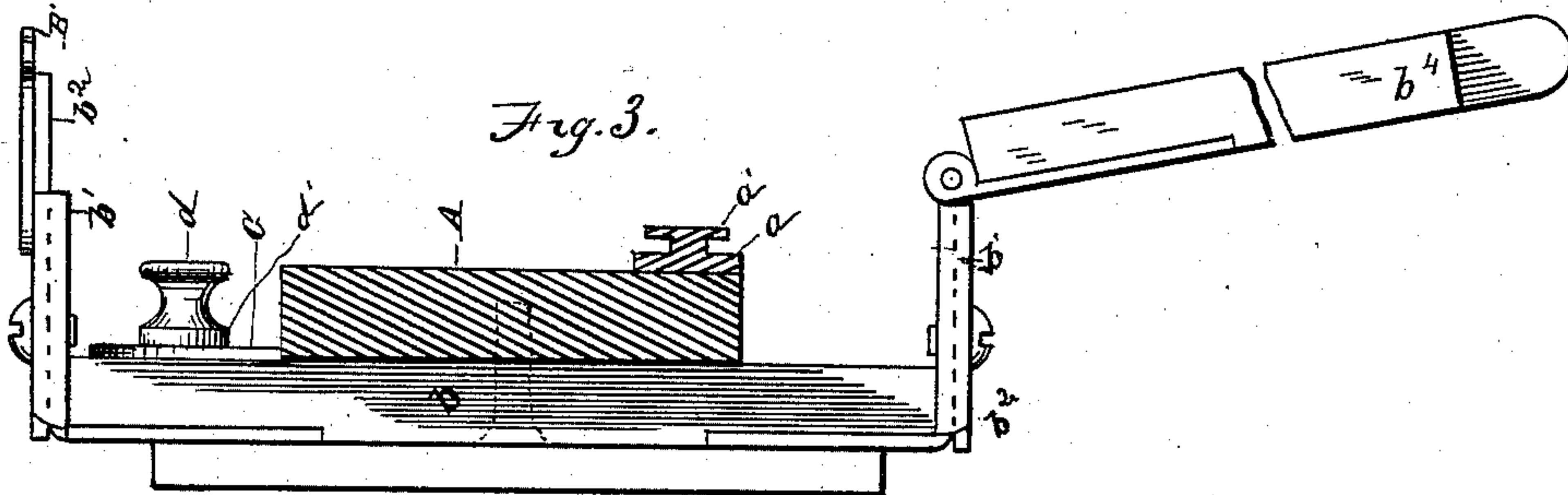


Fig. 4.

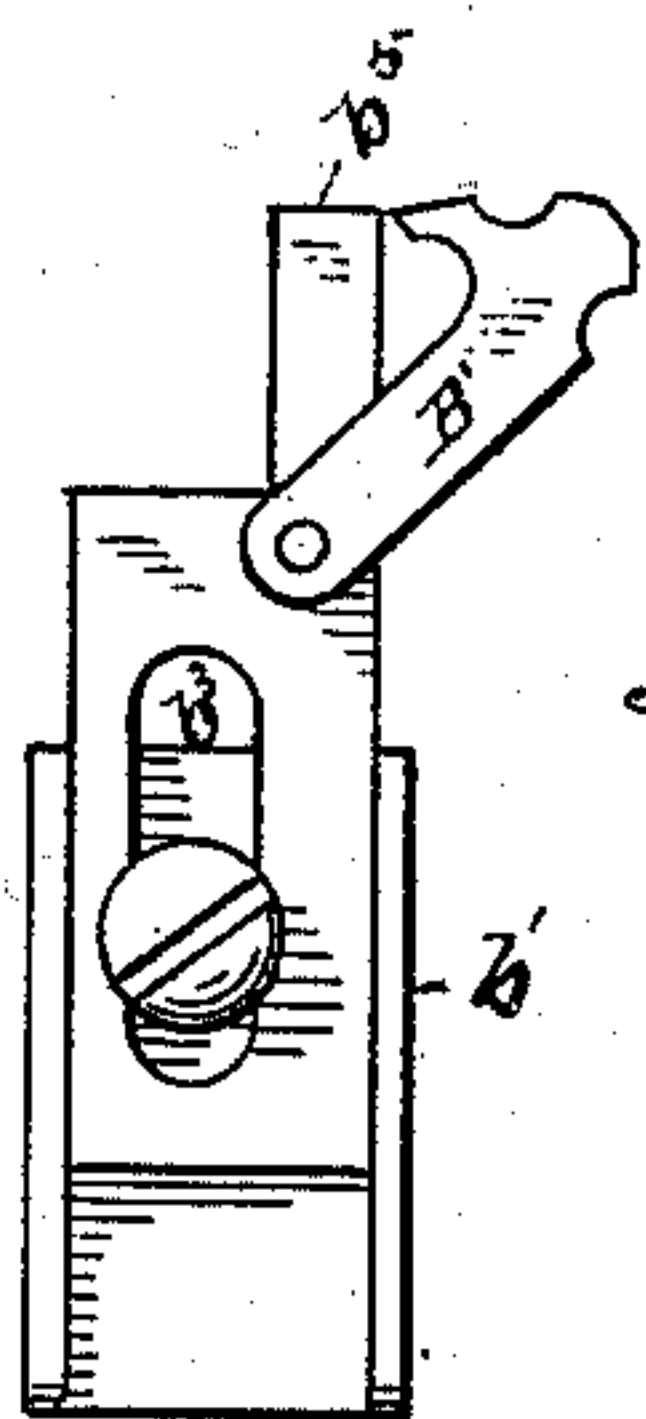
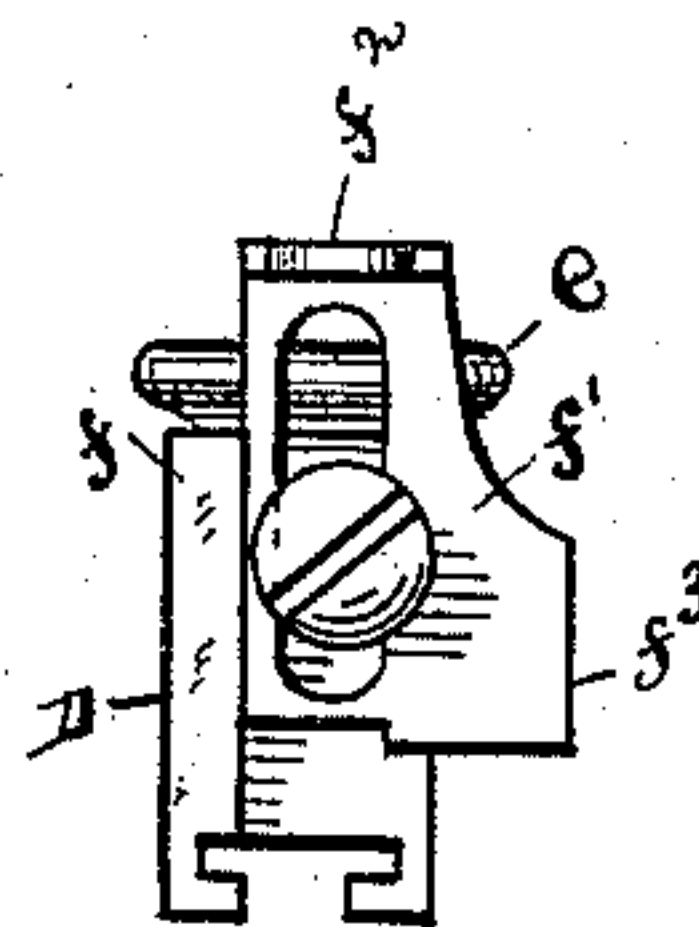


Fig. 5.



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# UNITED STATES PATENT OFFICE.

WILLIAM H. STINSON, OF SCANDIA, KANSAS.

## PLANE-GUIDE.

SPECIFICATION forming part of Letters Patent No. 262,851, dated August 15, 1882.

Application filed May 23, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. STINSON, a citizen of the United States, residing at Scandia, in the county of Republic and State of Kansas, have invented certain new and useful Improvements in Dado-Plane Guides, of which the following is a specification, reference being had therein to the accompanying drawings, and in which—

Figure 1 is a plan view of my improved dado-plane guide. Fig. 2 is a front view. Fig. 3 is an enlarged section on line *xx* of Fig. 1. Fig. 4 is a detail view of standard and dog. Fig. 5 is a front view of the gage.

This invention has relation to an improved dado-plane guide, its object being principally to promote simplicity, facility of operation, and accuracy in laying off the work, as well as to readily obtain the angle of cutting the groove; and it consists in the employment of a guide pivoted to a base or work-support combined with a curved slotted plate and an adjusting-screw working in said guide and the slot of said plate, and of a gage adapted to be adjusted and held on a graduated plate or stop of the work-support or base, and having means to project into the gain already made in one piece of work to enable the corresponding laying off or gaging of a subsequent piece of work, substantially as hereinafter more fully set forth and claimed.

In carrying out my invention I employ a base or work-support, A, which is made in two parts hinged together, to permit the folding together of the same for conveniently transporting or arranging it out of the way when not in use. The base or support may be secured upon cross-pieces or feet. At or along the rear edge of the base A is secured a stop, *a*, for the work to rest against, having a graduated plate, *a'*, secured to its upper surface. The said upper surface of the stop *a* is made narrower than the attached graduated plate *a'*, to enable the latter to serve as a flange to permit the adjustment and sliding thereon of the hereinafter-described gage. The stop, with its plate, is also, of course, made in sections, the same as the work-support or base to which it is attached.

B is the pivoted guide, which is arranged at one end of the base or work-support to enable

the guiding of the dado-plane at the desired angle it is desired to impart to the gain to be cut in the work, from a right angle or straight across the work to an angle of forty-five degrees or less. This guide is provided with a lower bar, *b*, arranged crosswise and underneath of and pivoted to the base or work-support A about its center. At the ends of the bar *b* are upright grooved plates *b'*, having right-angled portions at their lower ends fastened to the lower side of the bar *b*; or, in lieu of such construction, the bar *b* with the right-angled plates *b'* may all be cast in one piece. Within the upright grooved plates *b'* are arranged slides or plates *b<sup>2</sup>*, having slots *b<sup>3</sup>*, through which and the plates *b'* are passed adjusting-screws to effect the vertical adjustment thereof. The guide B has also a bar, *b<sup>4</sup>*, similar to bar *b*, hinged to the rear one of the adjustable plates *b<sup>2</sup>*, and adapted to rest upon the front adjustable plate thereof. The said front plate has an upward projection, *b<sup>5</sup>*, against which a shoulder upon the forward end of the hinged bar *b<sup>4</sup>* rests.

*B'* is a latch or hooked lever pivoted to the front adjustable plate and having its beak fitting upon a forward extension of the bar *b<sup>4</sup>*.

It will be noticed that by means of the foregoing the hinged bar *b<sup>4</sup>* is capable of vertical adjustment to adapt the guide to different thicknesses of stuff.

Affixed to the under side of the base or work-support A is a plate, C, projecting beyond the front of said base or support. In its projecting part is a curved or segmental slot, *c*, through which and the bottom bar, *b*, of the guide B is passed an adjusting-screw, *d*. The latter has a head with a milled circumference to permit its convenient manipulation, and a shoulder, *d'*, resting upon the plate C, to enable the tightening of the guide. By means of the curved slotted plate C and the screw *d* the pivoted guide B is controlled in its movement according to the angle of adjustment it is desired to impart thereto.

D is the gage, which, as before intimated, is adjusted to slide upon the graduated plate *a'*, it having a groove in the under side to receive said plate, and inward-projecting flanges at its lower edges extending under the plate, and an adjusting or set-screw, *e*. By loosen-



ing or tightening the screw *e* the gage D can be moved and held at the desired point. The gage D is right-angular in general construction, and its upright arm or part is provided  
5 with a lateral flange, *f*, and an adjustable plate, *f'*, guided by the flange *f*, and having a flange, *f*<sup>2</sup>, at its upper end, and a projection, *f*<sup>3</sup>, at its front edge. The gage is to enable the corresponding laying off or gaging of a gain in a  
10 subsequent piece of work by a gain already made in a previous piece of work, as after the gain is made in one piece of work the gage is adjusted in position and the projection *f*<sup>3</sup> caused to enter the gain and register with first  
15 one side of the gain and then shoved to register with the other side thereof. The coincident graduations are noted on the graduated plate *a'* and the piece of work is then replaced by another piece. The prospective gain in the  
20 new piece of work is correspondingly pointed off at the aforesaid or noted graduations, when it is ready to be cut by the plane at the opposite or guide end of the instrument. The adjustability of the plate *f'* permits its projection and flange to be set according to the depth  
25 of the gain already made.

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

1. In a dado-plane guide, the combination, with the work-support or base having the 30 curved slotted plate, of the pivoted guide adapted to permit the base to pass through it, and the adjusting-screw passed through the slot of aforesaid plate and into or through the bottom bar of said guide, substantially as and 35 for the purpose set forth.

2. In a dado-plane guide, the combination of the base having the curved slotted plate and flanged graduated plate, the adjustable gage having an adjustable plate provided with a 40 lateral projection, and the pivoted guide adjustable by means of a set-screw passed through the slotted plate and into or through itself, substantially as and for the purpose specified.

In testimony whereof I affix my signature in 45 presence of two witnesses.

WILLIAM H. STINSON.

Witnesses:

W. G. KING,  
A. D. MARBLE.