

(No Model.)

G. M. DRUMMOND.

INSTRUMENT FOR ASCERTAINING THE DRAFT OF MOLDING CUTTERS.

No. 268,201.

Patented Nov. 28, 1882.

Fig: 1.

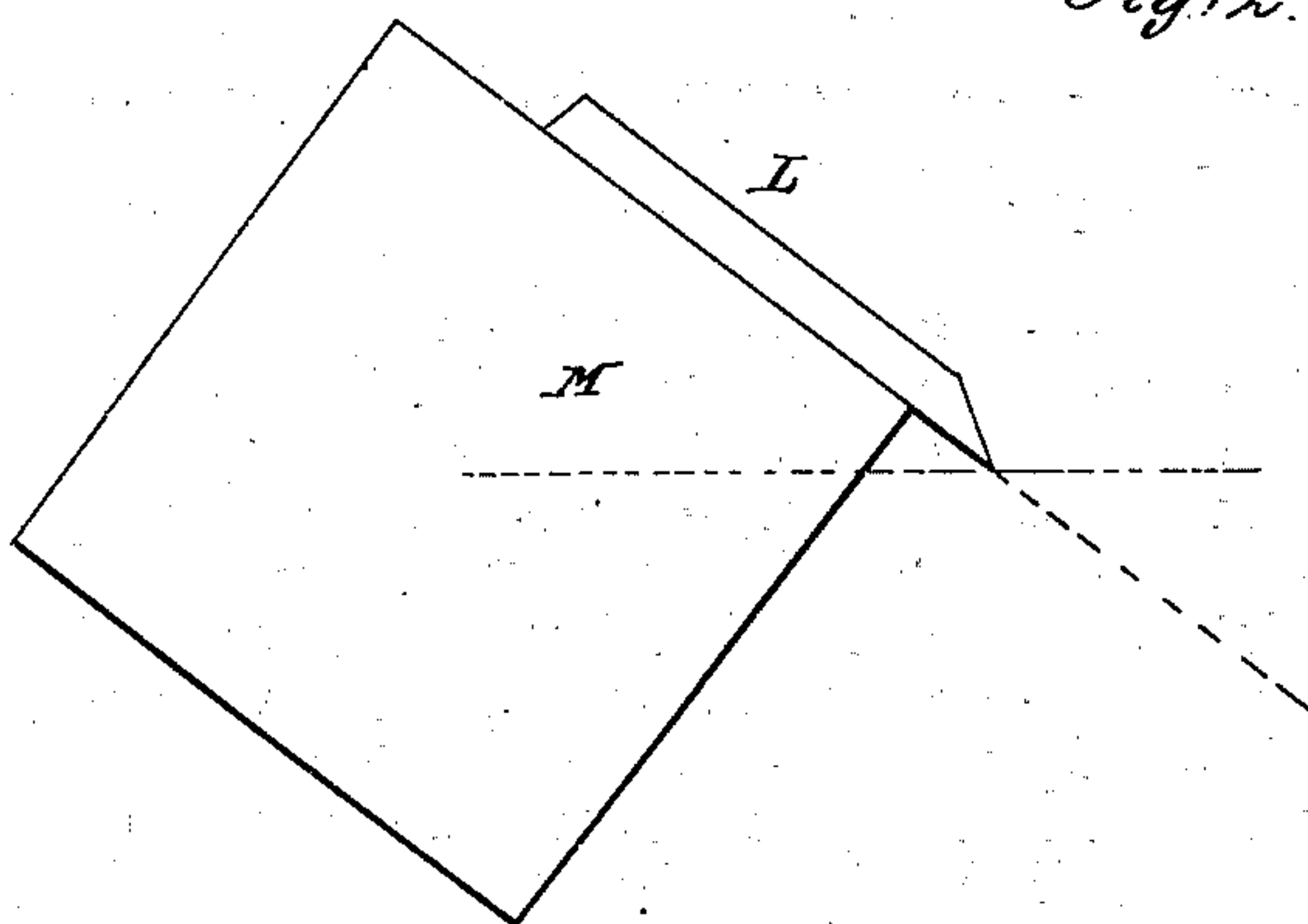


Fig: 2.

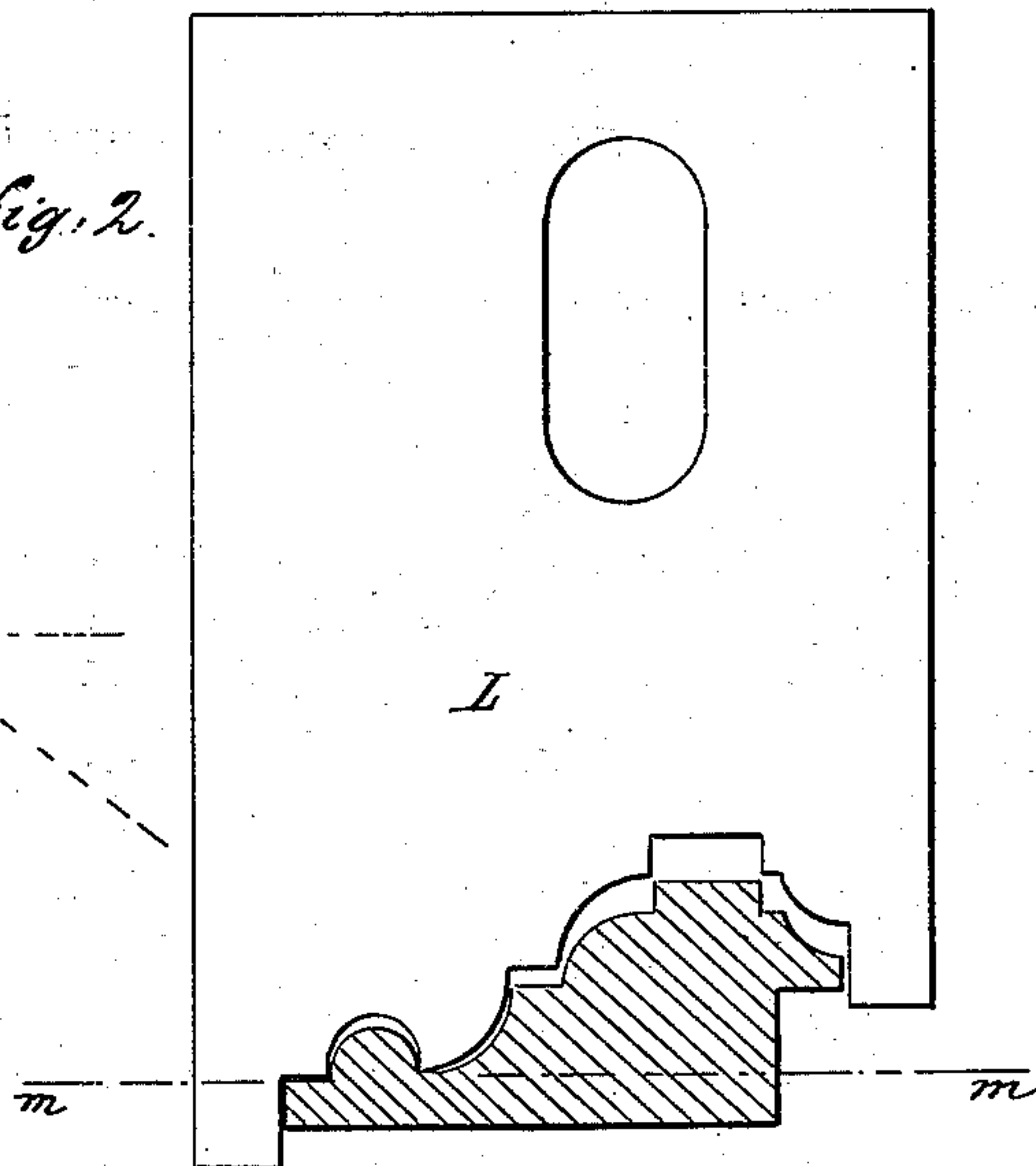


Fig: 3.

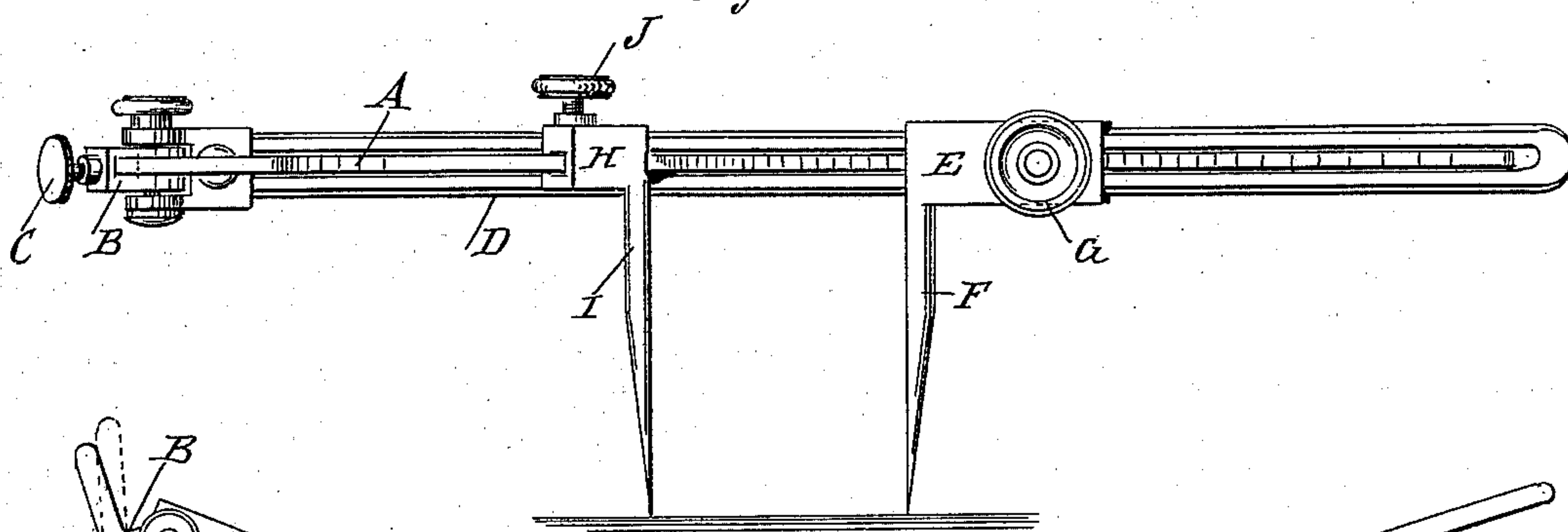
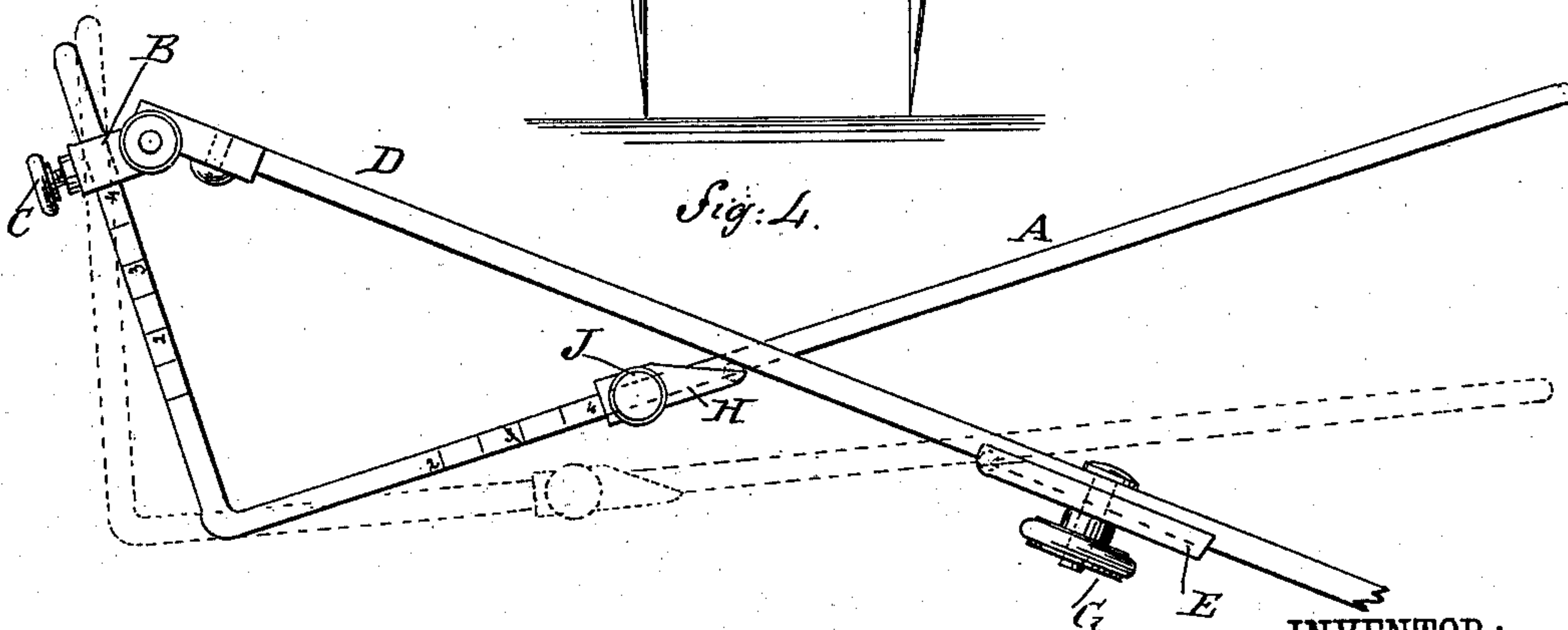


Fig: 4.



WITNESSES:

Chas. H. H. H.
L. Sedgwick

INVENTOR:

G. M. Drummond

BY

Wm. H. H.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GRANVILLE M. DRUMMOND, OF NEW YORK, N. Y.

INSTRUMENT FOR ASCERTAINING THE DRAFT OF MOLDING-CUTTERS.

SPECIFICATION forming part of Letters Patent No. 268,201, dated November 28, 1882.

Application filed August 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, GRANVILLE M. DRUMMOND, of the city, county, and State of New York, have invented a new and Improved Instrument for Ascertaining the Draft of Molding-Cutters, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved instrument for laying out the cutting-edges of molding-cutters, so that the same will cut a molding of the desired pattern.

The invention consists in an angle-bar provided with a slide, to which an arm is pivoted, which is provided with a slide provided with a pointer. The angle-bar is also provided with a slide carrying a pointer, and by means of the two pointers the height of a member of the molding is measured, and then the end of the arm and the end of the bar are separated until the angle-bar rests against the slide of the arm. The distance between the pointers will then be the required draft of the cutter at the points corresponding to the certain member of the molding. The slides are provided with binding-screws.

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

Figure 1 is an end elevation of the cutter-head on which the cutter is mounted. Fig. 2 is a cross-sectional elevation of a molding, and a longitudinal view of the cutter for forming it. Fig. 3 is a longitudinal side elevation of my improved instrument for ascertaining the draft of molding-cutters. Fig. 4 is a plan view of the same.

The cutter-blade L, which is used to cut a molding, does not act on the strip from which the molding is to be made at right angles, but at an angle of about thirty degrees, and consequently the recesses in the cutting-edge must be deeper than the height of the corresponding members, and the said depth of the recesses increases proportionately with the height of the members. If a cutter is placed at right angles with the molding it has cut, spaces will be formed between the surface of the molding and the edge of the cutter, as shown in Fig. 2. It is very difficult to deter-

mine how large the said spaces must be, and to facilitate finding the dimensions of the spaces I have provided my improved instrument. The same consists of a rectangular bar, A, on the short arm of which a sliding block, B, is mounted, which is provided with a binding-screw, C. A longitudinally-slotted arm, D, is pivoted to the block B, through which slotted arm the bar A passes. A slide, E, provided with a downwardly-projecting pointer, F, and a binding-screw, G, is loosely mounted on the arm D. A slide, H, provided with a downwardly-projecting pointer, I, and a binding-screw, J, is mounted on the bar A. Both the long and short shanks of the bar A are provided with graduated scales, as shown. The cutter-blade L is mounted on the cutter-head M in the usual manner.

The instrument is used in the following manner: The same is first adjusted according to the diameter of the cutter-head M. For instance, if the same is four inches in diameter the blocks or slides B and H are adjusted on the subdivisions 4 on their respective scales on the bar A, and are locked in position by means of the binding-screws C and J. The height of a certain member of the molding N is then measured from the line *m m* to the molded surface by means of the pointers I and F, the pointer I being held on the line *m m* and the pointer F being moved on the arm D until it is the desired distance from the pointer I. While the measurements are thus being taken the arm D rests against the slide H, as shown in full lines in Fig. 4. Then the ends of the arm D and of the long shank of the angle-bar A are moved toward each other, so that the long shank of the bar A rests against the slide E on the arm D, as shown in dotted lines in Fig. 4. The distance between the points I F when in this position will be equal to the required draft of the cutter at the point of the corresponding member of the molding.

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

1. An instrument for ascertaining the draft of molding-cutters, made substantially as herein shown and described, and consisting of an angle-bar provided with a pointer, combined with a pivoted arm provided with an adjustable pointer, as set forth.

2. In an instrument for ascertaining the draft of molding-cutters, the combination, with an angle-bar, of a slide on one arm, an arm pivoted to the said slide and provided with a slide having a pointer, and of a slide provided with a pointer, mounted on the other arm of the angle-bar, substantially as herein shown and described, and for the purpose set forth.

3. In an instrument for ascertaining the draft of molding-cutters, the combination, with an angle-bar A, provided with graduated scales

on both arms, of the slide B on the short arm, the slotted arm D, pivoted to the slide B, the slide E, provided with a pointer, F, and mounted on the arm D, and of the slide H, mounted on the bar A, and provided with a pointer, I, substantially as herein shown and described, and for the purpose set forth.

GRANVILLE M. DRUMMOND.

Witnesses:

OSCAR F. GUNZ,
C. SEDGWICK.