

(No Model.)

W. O. BAILEY.
MITER CUTTING AND SHOOTING BLOCK.

No. 604,291.

Patented May 17, 1898.

FIG. 1

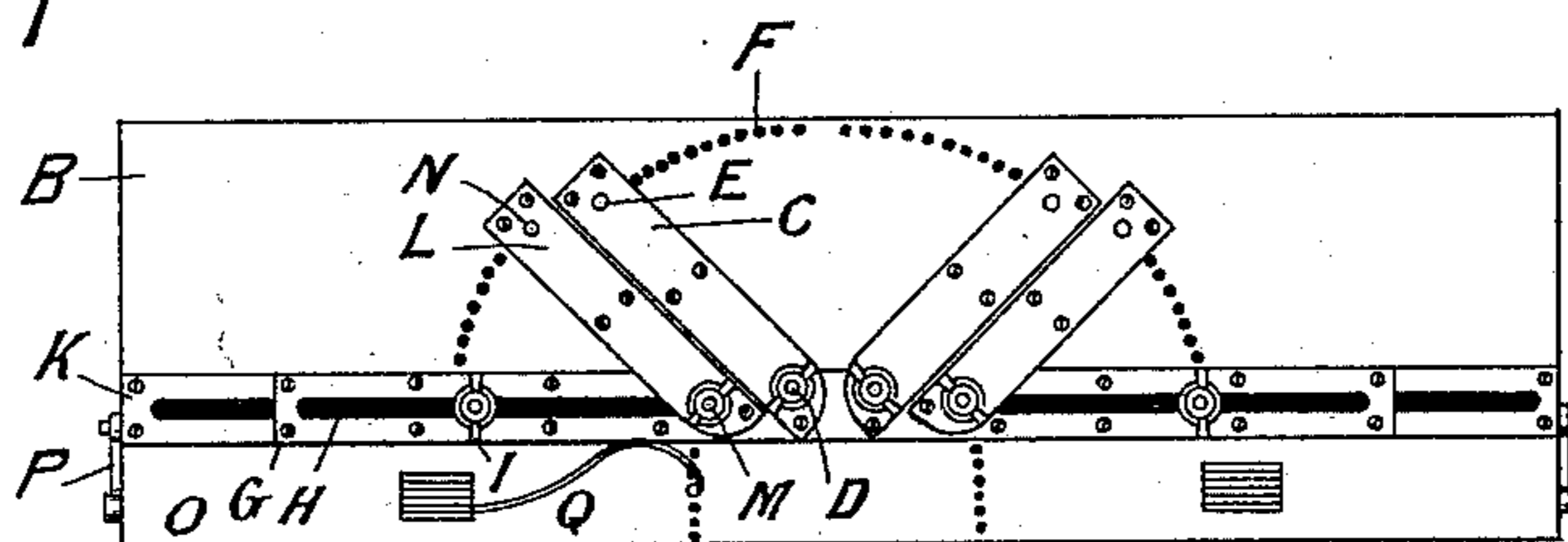


FIG. 2

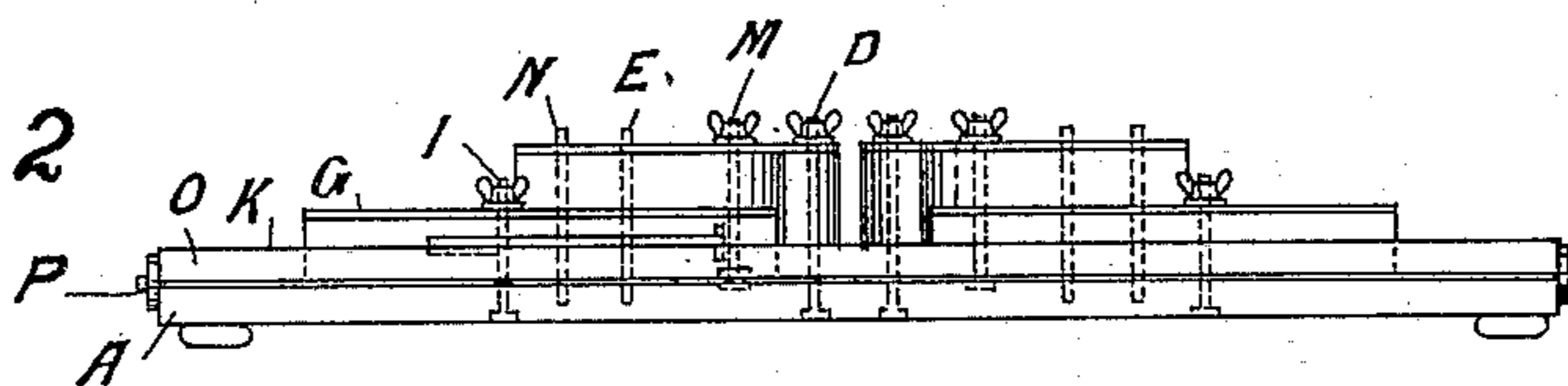


FIG. 3

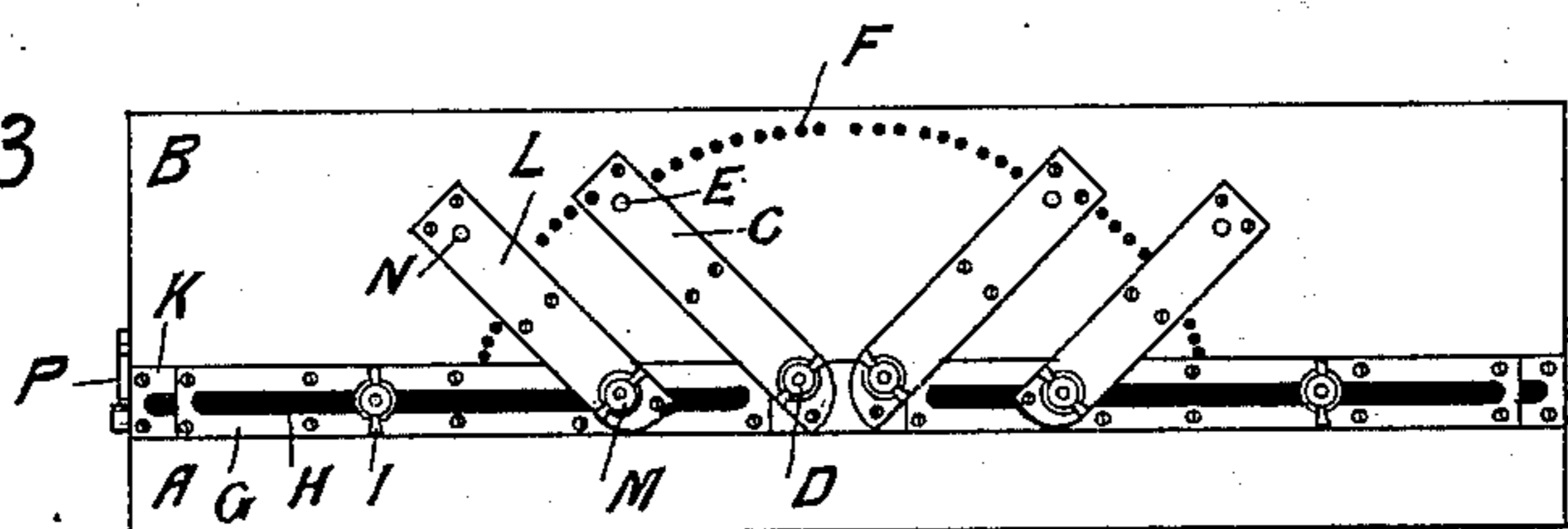
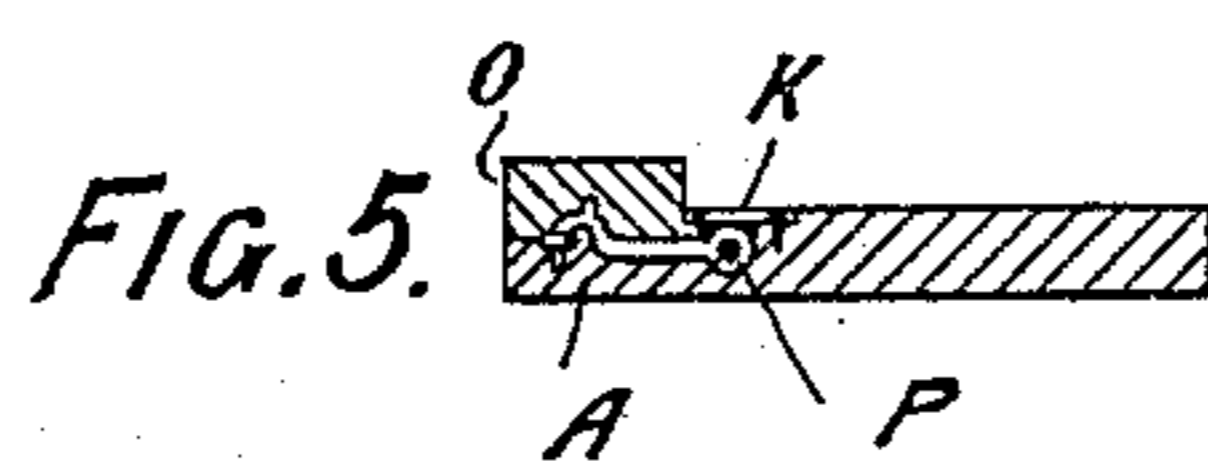
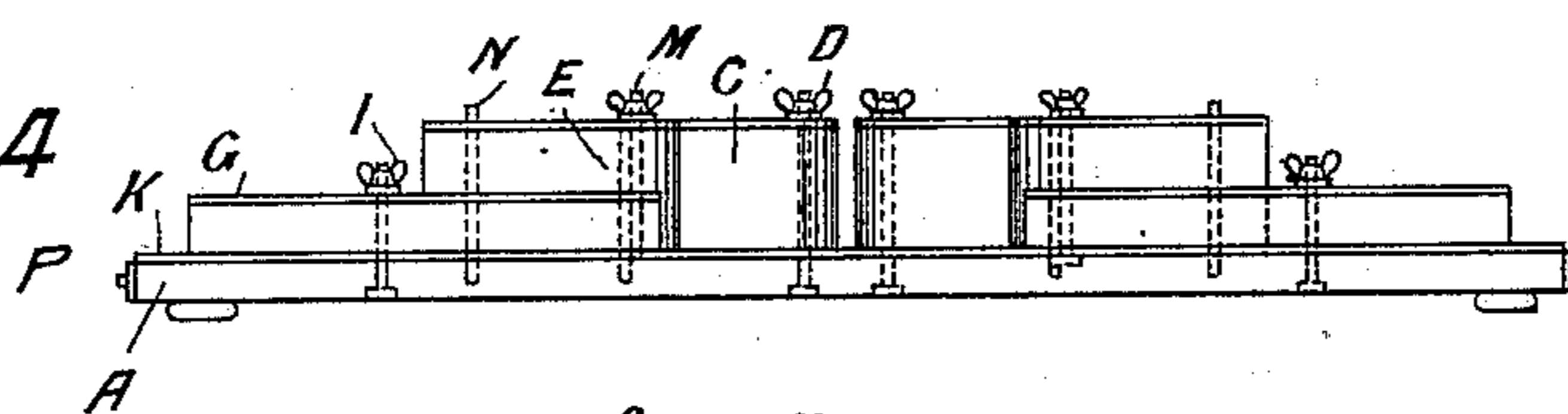


FIG. 4



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM OLIVER BAILEY, OF LONDON, ENGLAND.

MITER CUTTING AND SHOOTING BLOCK.

SPECIFICATION forming part of Letters Patent No. 604,291, dated May 17, 1898.

Application filed December 24, 1897. Serial No. 663,325. (No model.) Patented in England August 11, 1894 No. 15,332.

To all whom it may concern:

Be it known that I, WILLIAM OLIVER BAILEY, glass merchant, silverer, and beveler, a subject of the Queen of Great Britain, residing at the Excelsior Works, Wenlock road, in the city of London, England, have invented a new and useful Improved Miter Cutting and Shooting Block, (for which I have obtained a patent in Great Britain, No. 15,332, dated August 11, 1894,) of which the following is a specification.

This invention relates to an improved miter cutting and shooting block; and its object is to obtain a block which shall be suitable for cutting moldings or the like in such a manner as to produce any miter angle or bevel likely to be required and also for shooting the same, and which shall be provided with suitable means for securing the molding in its place during the cutting or shooting, so as to dispense with any necessity for holding it by the hand, and which shall have its wearable parts made easily and cheaply renewable.

In order that my said invention may be more fully understood, there is annexed hereto a sheet of drawings illustrating the same.

The same letters of reference are used throughout all the figures to indicate the same or corresponding parts of the block; but only the parts on one side of the block are lettered, inasmuch as the parts on both sides of the block exactly correspond.

Figure 1 is a plan view of the improved miter cutting and shooting block. Fig. 2 is an elevation of Fig. 1. Fig. 3 is a plan view of the block adjusted for shooting. Fig. 4 is an elevation of Fig. 3. Fig. 5 is a section of the bed-plate with removable platform attached.

A is the bed-plate.

B is the raised platform.

C is the guide-block.

D is the fly-nut to the bolt, on which the guide-block C is pivoted to the raised platform B.

E is the hole in the outer end of the guide-block C, through which the fastening-pin (if used) passes.

F marks the holes in the raised platform on the bed-plate, into which the fastening-pin (if used) passes.

G is the sliding block.

H is the slot in the sliding block.

I is the fly-nut to the bolt, which passes through the slot H in the sliding block G.

K (when used) is a slotted plate let into the edge of the raised platform B.

L is the auxiliary guide-block.

M is the fly-nut to the bolt, on which the auxiliary guide-block L is pivoted to the sliding block G.

N is the hole in the outer end of the auxiliary guide-block L, through which the fastening-pin (if used) passes.

O is the removable platform.

P is the hook to fasten the removable platform O to the bed-plate A.

Q is the spring for holding the molding during the cutting processes.

In carrying my invention into effect I construct the block as follows: I take a bed-plate A, which is preferably of wood but may be of any other suitable material, and which is preferably about three feet by one foot in dimensions, but which may be of any other required dimensions, and which is provided with a raised platform B, extending throughout its length. If the raised platform is of wood or other soft material, I find it convenient to let into it a metal plate extending throughout its length along its inner edge. Upon and close to the inner edge of this raised platform I mount two movable blocks C, of wood or other suitable material, one immediately to the right and the other immediately to the left of a line drawn transversely across the center of the bed-plate, so as to form right and left side guide-blocks for cutting and shooting miters and bevels. Each of these blocks is mounted by a bolt and fly-nut D at the end nearest to the inner edge of the raised platform and is left free at the outer end, so as to swing on the bolt and be adjustable to any angle likely to be required. When so adjusted, the block can be secured in position by tightening the fly-nut D, or the same can be further secured by means of a pin passing through a hole E, pierced in the outer end of the block and fitting into a corresponding hole F in the bed-plate. Also upon and close to the inner edge of the raised platform I mount two other movable blocks G, of wood or other suitable material, one to the right of the right-side guide-block and the other to

the left of the left-side guide-block. Each of these blocks G is permitted to slide in a direction parallel to the edge of the raised platform and in a line therewith by means of a slot H, cut lengthwise in the block, through which slot passes a bolt which is fixed to the under side of the raised platform by means of a plate, and which secures the movable block by a fly-nut I at the top. A stud or studs on the under side of the block works in a corresponding slot in the raised platform. To each of the two sliding blocks is attached, by means of a bolt and fly-nut M at the end thereof nearest to the center of the bed-plate, an auxiliary guide-block L, which swings on the bolt and is adjustable so as to lie parallel with the right or left side guide-block, as the case may be, and to form with such guide-block a guide for the saw when cutting or for the molding when shooting.

The auxiliary guide-blocks L, when used for cutting, can, when adjusted, be secured in position in the same manner as the guide-blocks.

In order to enable the block constructed as aforesaid to be used for cutting as well as for shooting the joint or bevel, I provide a removable platform O, which corresponds in length and width with the part of the bed-plate A not covered by the raised platform B and which when in position fits thereon and, being slightly greater in depth than the raised platform, raises the surface of the portion of the bed-plate on which it is fitted to a slightly-higher level than that of the raised platform. The removable platform is made detachable from the bed-plate, but it is easily attached thereto by means of a tongue running along the side of the removable platform and made to fit under a rabbet in the raised platform. When in position, it is secured there by hooks P, pivoted to the ends of the bed-plate and engaging eyes on the ends of the removable platform. Obviously, however, other devices can be used for detachably securing the removable platform in position.

The platform O is made higher than the raised platform B to prevent the latter from being damaged by the saw when the raised platform is made of wood or the saw from being damaged by the raised platform if the latter is made of metal.

When the block is intended to be used for shooting the joint or bevel, the removable platform is taken off the bed-plate and removed and the molding is placed between the guide-block E and auxiliary guide-block

L on the right or left side, as required. For the purpose of securing the molding firmly in its place during the cutting process I provide a strong steel spring Q, which holds the same closely against the end of the guide-blocks and one end of which is attached to the removable platform by a pin or other suitable means and the other end of which when in use is held in position by means of a projection fitting into a slot in the removable platform or by any other suitable means. In order to provide for the moldings being of different thicknesses, a series of holes to receive the pin fastening the one end of the spring and of slots to receive the projection on the other end of the spring may be provided in the removable platform.

I claim—

1. In a miter cutting and shooting block, the combination with a bed-plate of a raised platform carrying a pair of adjustable guide-blocks, a pair of auxiliary guide-blocks carried by slotted blocks capable of sliding in slots or guides formed in or upon the raised platform, substantially as specified.

2. In a miter cutting and shooting block, the combination with a bed-plate, of a raised platform carrying a pair of adjustable guide-blocks with the auxiliary means described for securing same in position, a pair of auxiliary guide-blocks carried by slotted blocks capable of sliding in slots or guides in or upon the raised platform, substantially as described.

3. In a miter cutting and shooting block, the combination, with a bed-plate having a raised platform carrying a pair of adjustable guide-blocks adapted to be fixed in position as described, of a pair of auxiliary guide-blocks carried by slotted blocks capable of sliding in slots or guides formed in or upon the edge of the raised platform, and a removable platform adapted and arranged substantially as described.

4. In a miter cutting and shooting block, the combination of a bed-plate with raised platform, a pair of adjustable guide-blocks adapted to be fixed as described, a pair of auxiliary guide-blocks mounted upon a pair of slotted blocks adapted to slide in slots or guides, a removable platform and adjustable springs for securing the material while being cut, substantially as specified.

Dated the 14th day of December, 1897.

WILLIAM OLIVER BAILEY.

Witnesses:

GEORGE C. DOWNING,
FRED C. HARRIS.