

No. 740,713.

PATENTED OCT. 6, 1903.

F. THIRION.
ENGRAVER'S BLOCK.

APPLICATION FILED JUNE 12, 1903.

NO MODEL.

Fig. 1.

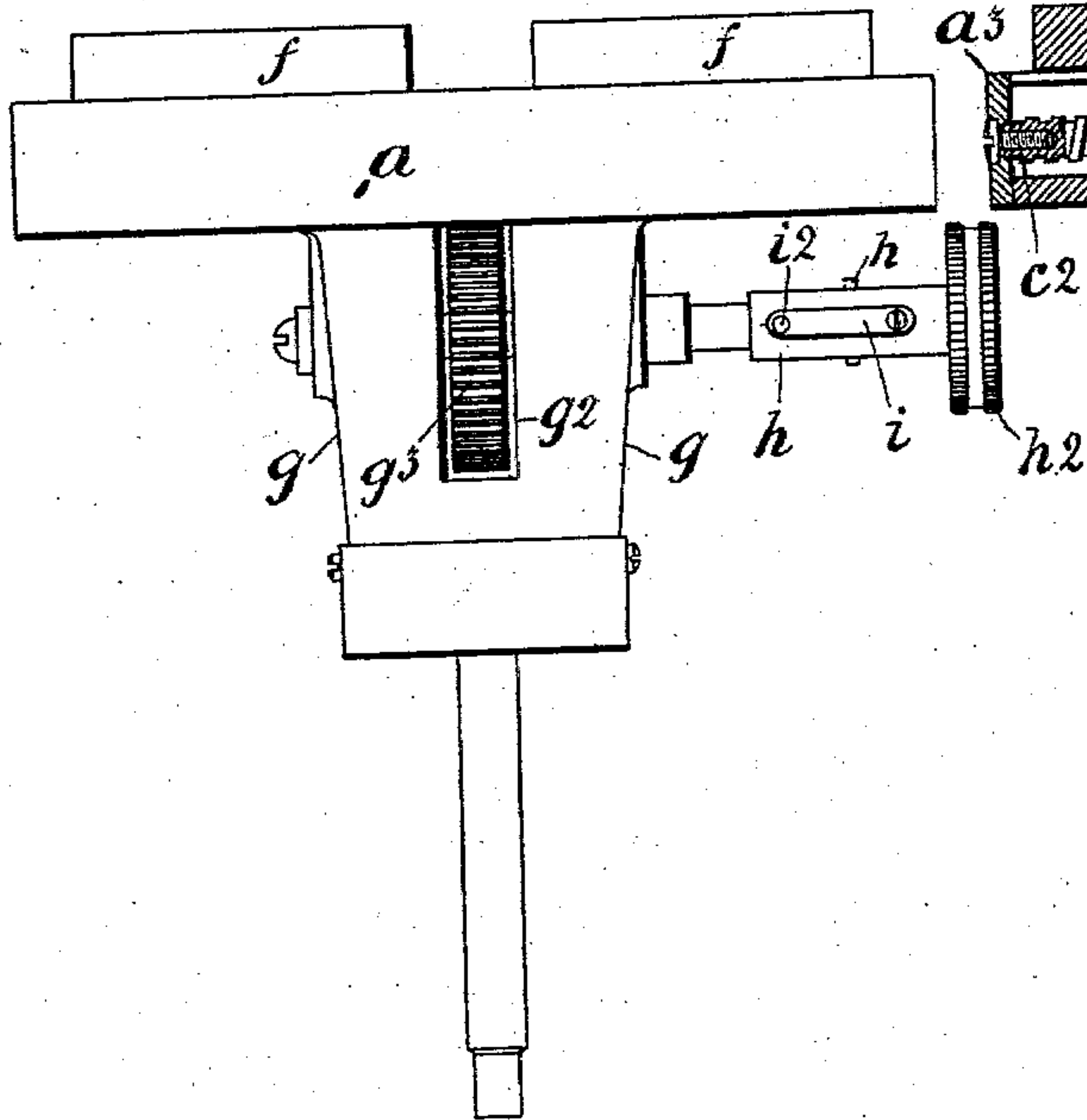


Fig. 2.

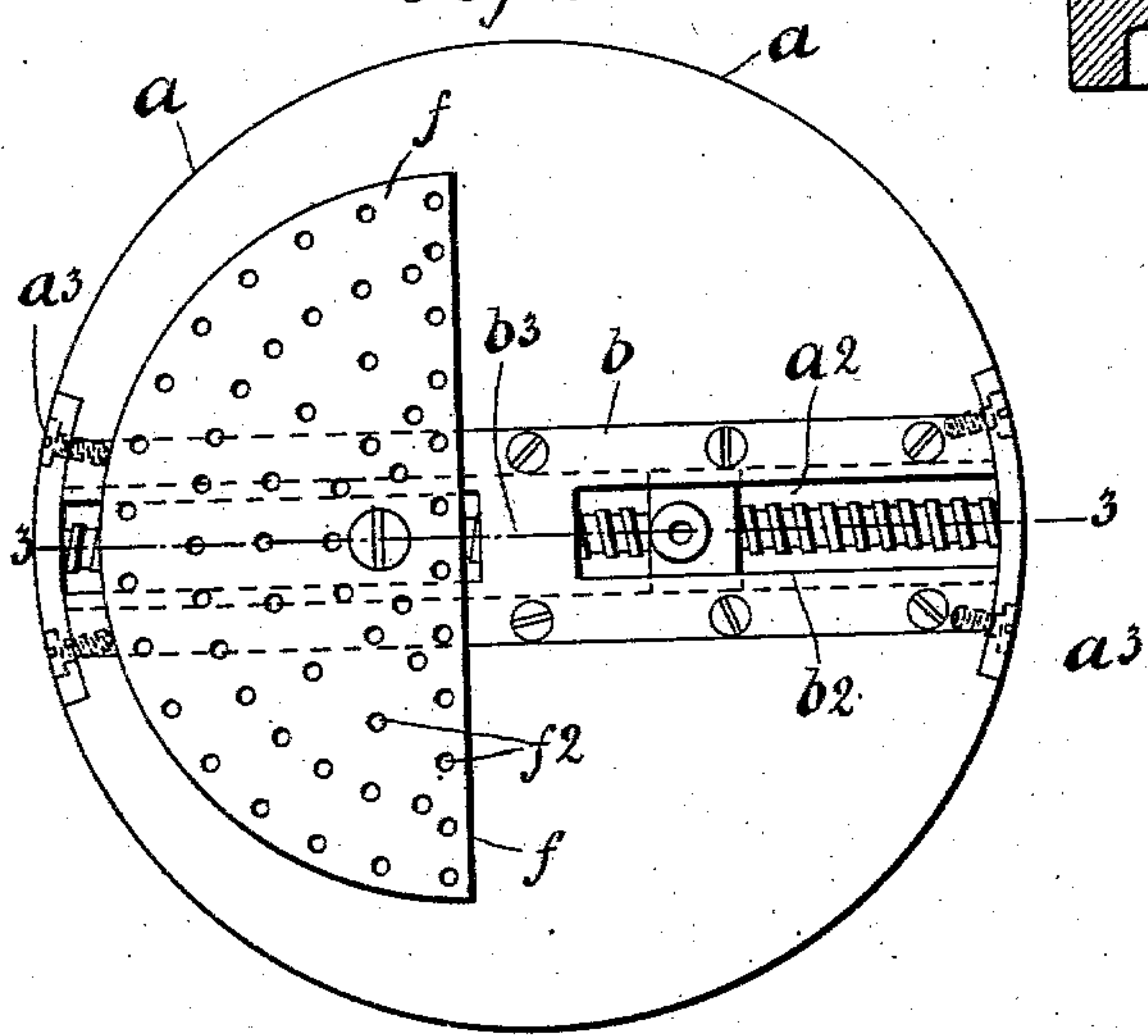


Fig. 3.

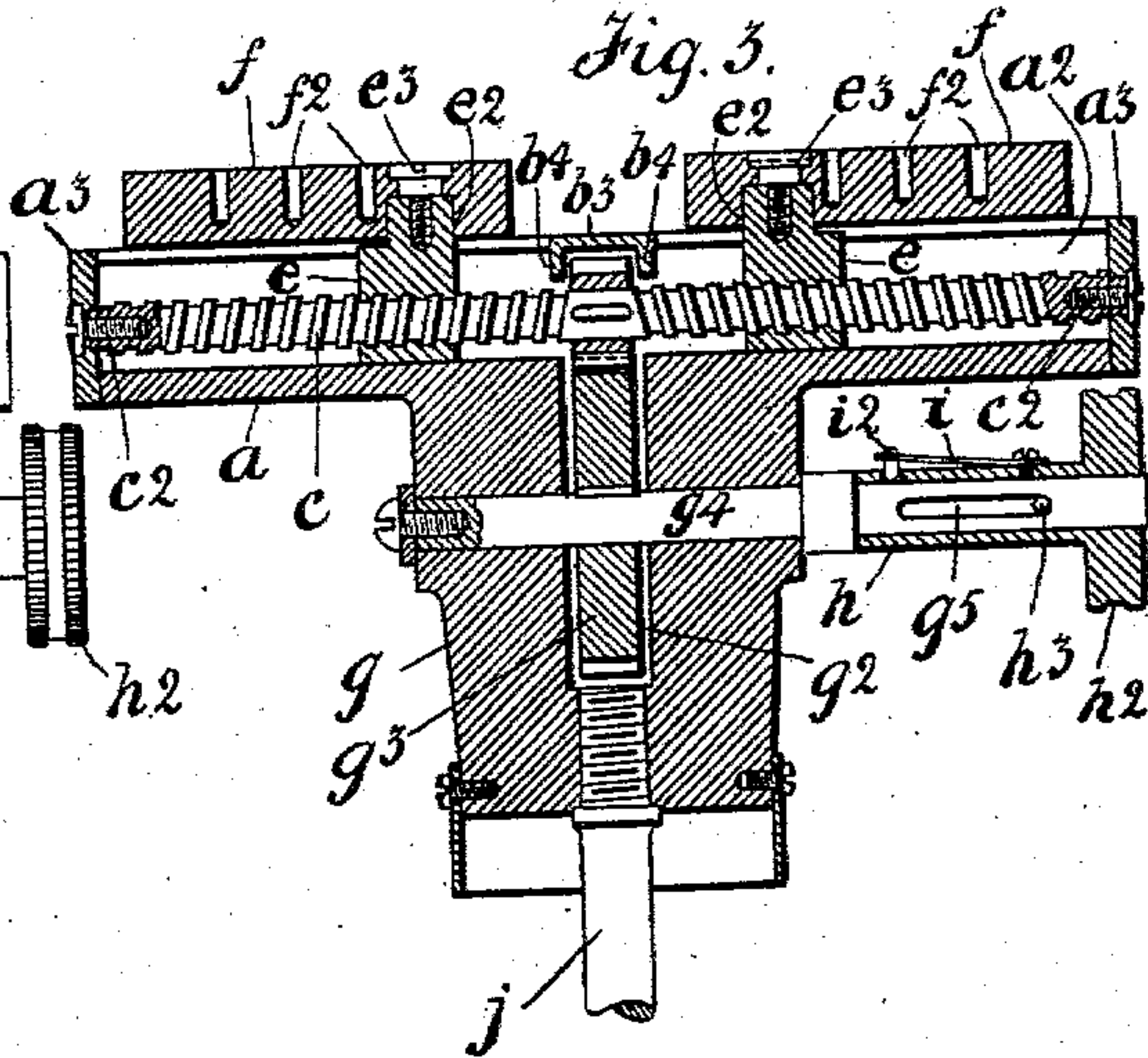
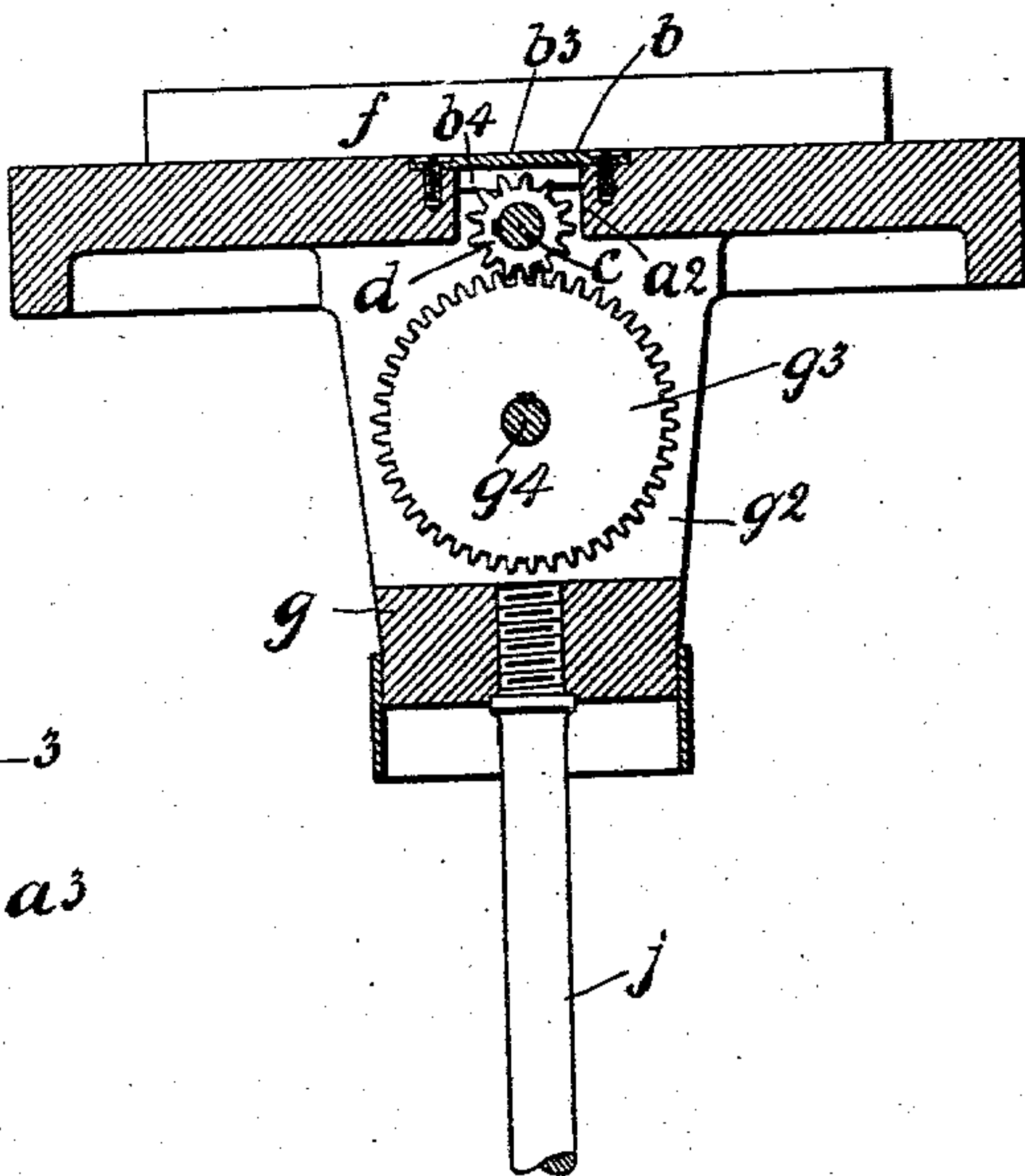


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK THIRION, OF NEW YORK, N. Y.

ENGRAVER'S BLOCK.

SPECIFICATION forming part of Letters Patent No. 740,713, dated October 6, 1903.

Application filed June 12, 1903. Serial No. 161,133. (No model.)

To all whom it may concern:

Be it known that I, FRANK THIRION, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Engravers' Blocks, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved engraver's block which is simple in construction and operation and comparatively inexpensive and which may be quickly and easily manipulated; and with this and other objects in view the invention consists in a device of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of my improved engraver's block; Fig. 2, a plan view thereof; Fig. 3, a central transverse vertical section on the line 3 3 of Fig. 2, and Fig. 4 a central transverse vertical section at right angles to that of Fig. 3.

In the practice of my invention I provide a main block member a , in which is a transverse chamber a^2 , over which is secured a plate b , which has a transverse opening b^2 , which corresponds with the chamber a^2 , and said plate is provided centrally with a transverse member b^3 , which is provided with downwardly-directed guides b^4 , and the ends of the chamber a^2 are closed by plates a^3 , secured to the main block a .

Passing longitudinally through the chamber a^2 and transversely of the main block a is a shaft c , the opposite ends of which are provided with reverse threads and the extreme ends of which are reduced and passed into or through the plates a^3 , and into the ends of said shaft are sunk screws c^2 , the heads of which are countersunk in the plates a^3 , and the ends of said shaft are thus pivoted or provided with bearings in the plates a^3 .

The shaft c is provided centrally with a pinion or similar gear-wheel d , which is rigidly secured thereto in any desired manner

and which turns between the guide members b^4 of the top plate b , and in the opposite ends of the chamber a^2 are placed radially-movable blocks e , having screw-threaded openings through which the shaft c passes, and the threads in these blocks are reversed threads to correspond with the threads on the shaft c . The blocks e are provided with upwardly-directed members e^2 , which pass through the opposite end portions of the slot b^2 in the plate b , and pivoted thereto, as shown at e^3 , are radially movable and turnable clamping-jaws f , having a large number of pin-holes f^2 , which may be arranged in any desired manner, but which are preferably arranged as shown in Fig. 2, and the clamping-jaws f are also of the general form shown in Fig. 2, or straight on their inner faces and segmental on their outer faces.

The block a is provided with a central depending member g , which is preferably cylindrical in cross-section, but which may be of any desired shape and which is provided with a central vertical chamber g^2 , in which is mounted a gear-wheel g^3 , which operates in connection with the pinion or gear-wheel d , and the wheel g^3 is mounted on a shaft g^4 , which passes transversely through the depending member g and on one end of which is mounted a sleeve h , provided with a knob or head h^2 . The shaft g^4 is provided with a longitudinal slot g^5 and the sleeve h with a pin, which passes into said slot and which limits the movement of the sleeve on the shaft; but this construction may be reversed, if desired, and the sleeve h may be provided with a slot and the shaft g^4 with a pin. The sleeve h is also provided with a spring i , which is secured thereto and which is provided at its free end with a pin or plug i^2 , which passes through a hole in the sleeve h and bears on the shaft, and thus causes a friction to prevent the too free movement of the sleeve.

In practice holding pins or plugs are placed in the holes f^2 in the clamping-jaws f , and the article to be engraved is placed between these pins or plugs in the usual manner and rests on the clamping-jaws f , and the said clamping-jaws are drawn together, so as to securely hold the article to be engraved by turning the shaft g^4 , which operates through the wheels g^3 and d to turn the shaft c , which operation

draws the movable blocks *e* and the clamping-jaws *f* together.

When the sleeve *h* is in the position shown in Fig. 3, it does not project beyond the perimeter of the main block *a*, and this is the position of said sleeve when it is not desired to turn the shaft *c*; but when it is desired to turn said shaft the sleeve *h* is drawn out beyond the perimeter of the block *a*, as indicated in Fig. 1, so that the head or handle *h*² thereof may be grasped for the purpose of turning the shaft *g*⁴ and the shaft *c*.

The main block *a* or the part *g* thereof is provided with a depending shaft, rod, or similar device *j*, by which said main block may be secured to any desired support in the usual manner; but this connection or support of the main block *a* forms no part of my improvement and is therefore not shown and described.

My improved engraver's block or the parts thereof may be easily manipulated and is also comparatively inexpensive, and my invention is not limited to the exact shape of the main block *a* nor to the shape of the clamping-jaws *f*, as herein shown and described, and various changes in and modifications of the details of the construction of the various parts of the device may be made without departing from the spirit of my invention or sacrificing its advantages.

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

1. In a device of the class described, a main block provided with a central depending member in which is formed a vertically-arranged chamber or recess, a gear-wheel mounted in said chamber or recess, an operating-shaft passing through said member and to which said gear-wheel is secured, said main block being also provided in the top thereof with a transverse chamber, a shaft mounted in said chamber and provided with a central gear-wheel which operates in connection with the first-named gear-wheel, said shaft being provided at its opposite ends with reverse threads, clamping-blocks mounted on the opposite ends of said shaft and movable longitudinally thereof and provided with pivot members which pass upwardly through the top of the main block, and clamping-jaws pivoted to said pivot members and movable radially of the main block, said clamping-

jaws being provided in the top surface thereof with pin or plug holes, substantially as shown and described.

2. In a device of the class described, a main block provided with a central depending member in which is formed a vertically-arranged chamber or recess, a gear-wheel mounted in said chamber or recess, an operating-shaft passing through said member and to which said gear-wheel is secured, said main block being also provided in the top thereof with a transverse chamber, a shaft mounted in said chamber and provided with a central gear-wheel which operates in connection with the first-named gear-wheel, said shaft being also provided at its opposite ends with reverse threads, clamping-blocks mounted on the opposite ends of said shaft and movable longitudinally thereof and provided with pivot members which pass upwardly through the top of the main block, and clamping-jaws pivoted to said pivot members and movable radially of the main block, said clamping-jaws being provided in the top surface thereof with pin or plug holes and said operating-shaft being provided at one end with a longitudinally-movable sleeve the outer end of which is provided with a knob or handle, substantially as shown and described.

3. In a device of the class described, a main block provided in the top with a transverse chamber, a shaft mounted in said chamber and provided at its opposite ends with reverse threads, radially-movable clamping-blocks mounted on the opposite ends of said shaft and extending upwardly through the top of the main block, clamping-jaws pivoted to said clamping-blocks and adapted to move radially therewith and means for operating said shaft, comprising an operating-shaft geared in connection therewith and provided at one end with a longitudinally-movable sleeve having a knob or handle, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 6th day of June, 1903.

FRANK THIRION.

Witnesses:

F. A. STEWART,
C. E. MULREANY.