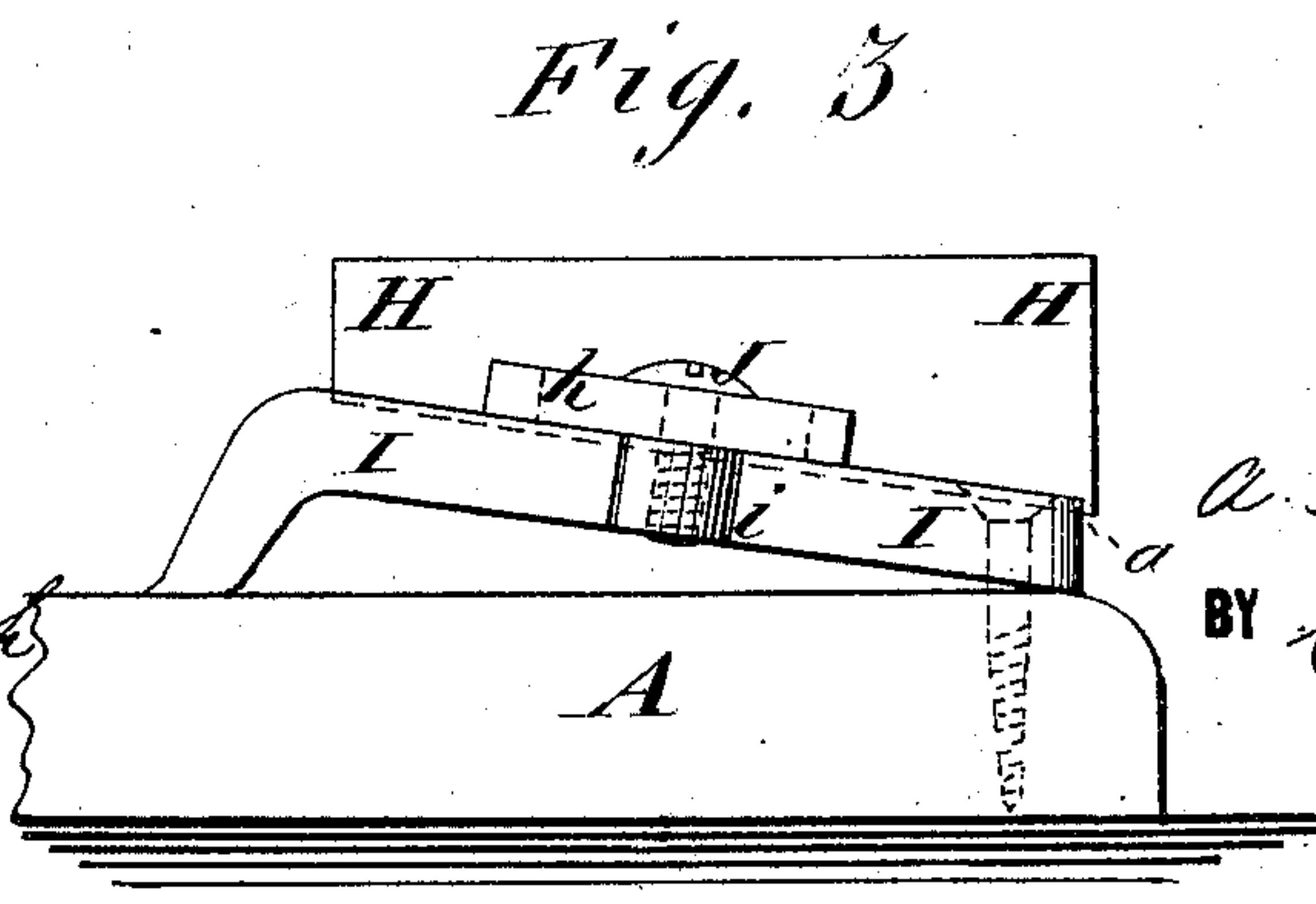
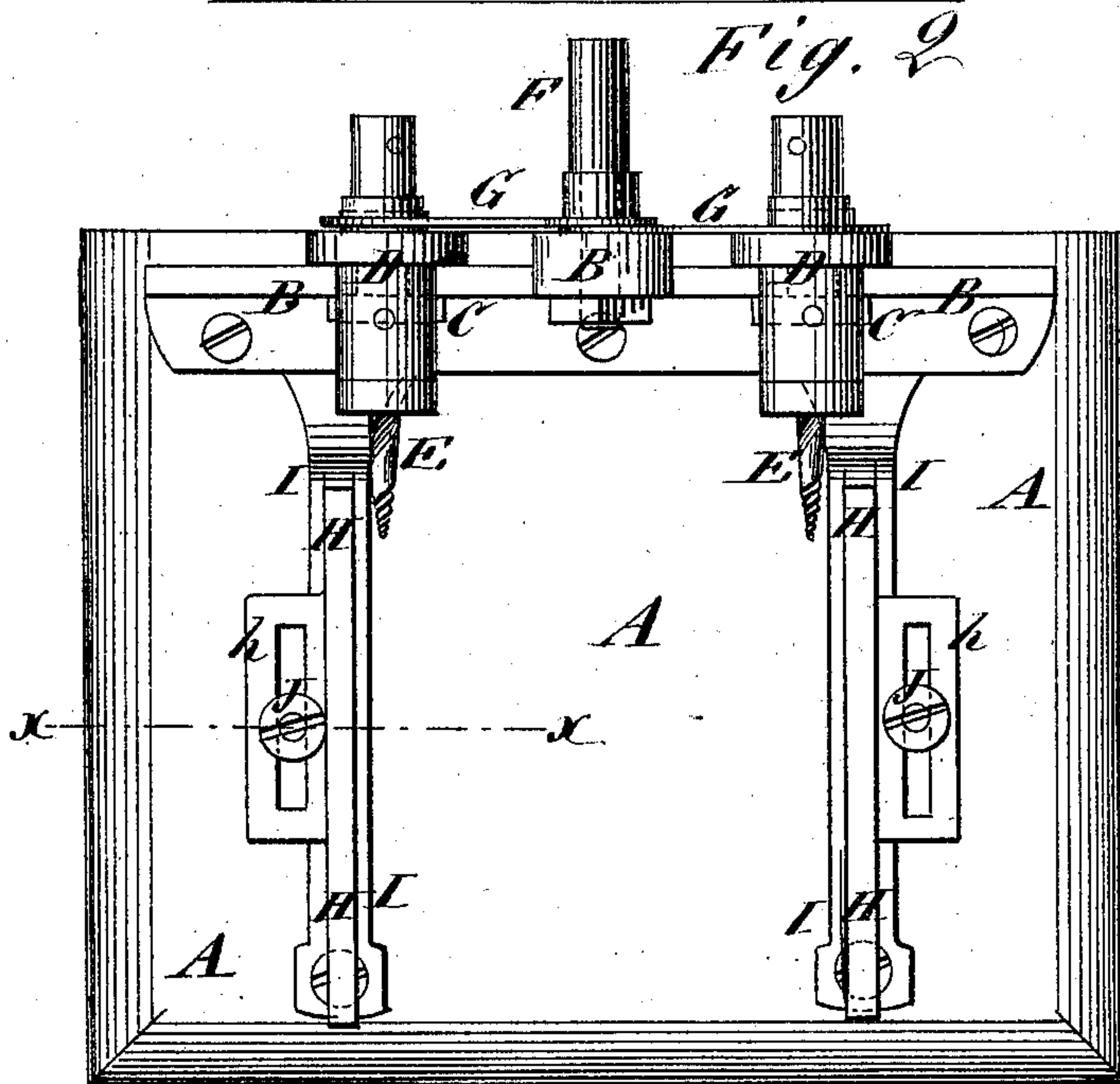
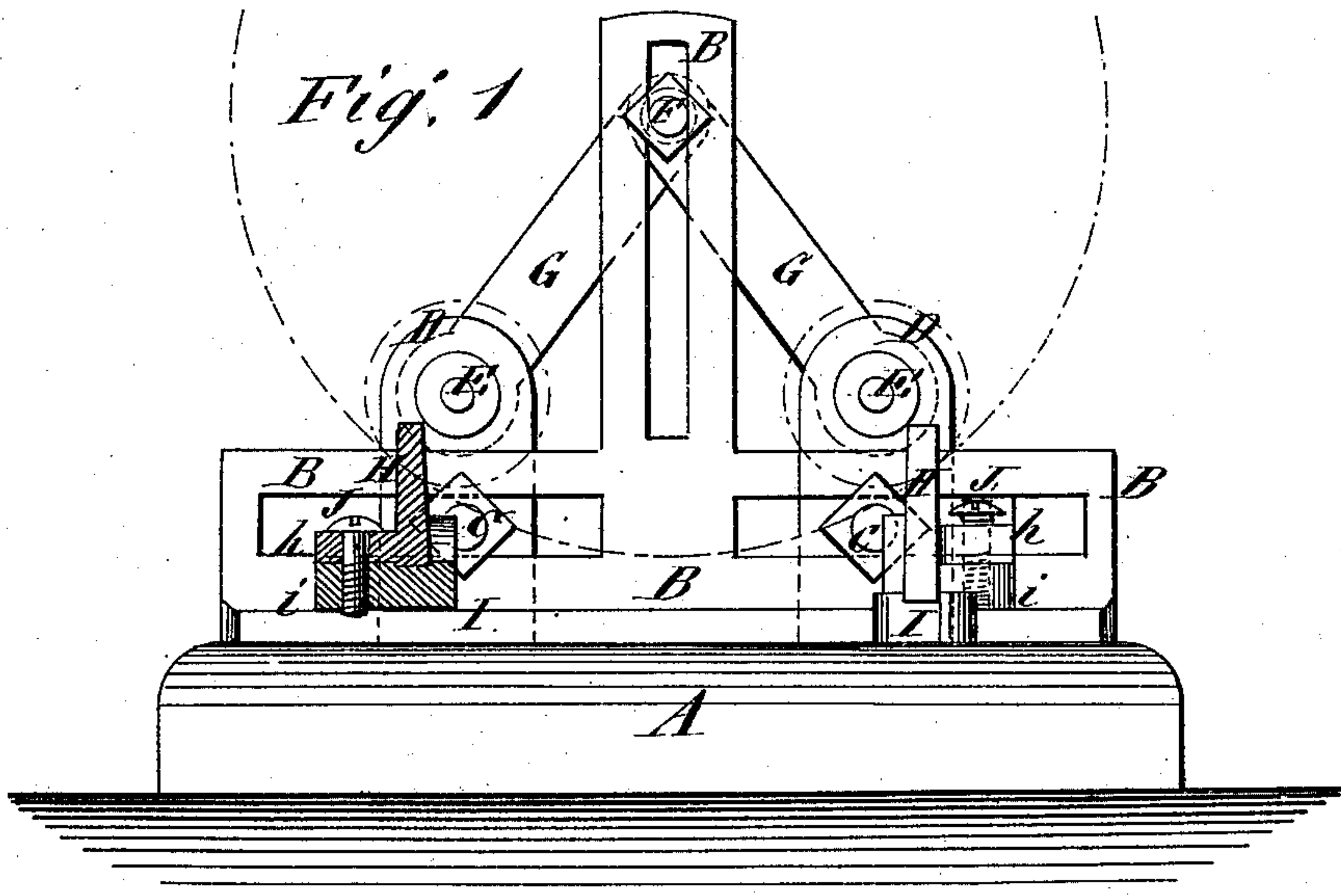


## DOVELING MACHINE.

No. 177,652.

Patented May 23, 1876.



**WITNESSES:**

C. Novell  
Mscabourgh

**INVENTOR:**

A. P. Merchant  
BY *Chas H Fowler.*

**ATTORNEY .**



# UNITED STATES PATENT OFFICE.

ANDREW P. MERCHANT, OF GUILFORD, NEW YORK.

## IMPROVEMENT IN DOWELING-MACHINES.

Specification forming part of Letters Patent No. **177,652**, dated May 23, 1876; application filed March 6, 1875.

*To all whom it may concern:*

Be it known that I, ANDREW P. MERCHANT, of Guilford, in the county of Chenango and State of New York, have invented certain new and useful Improvements in Doweling-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front view of my improved machine, one of the rests being shown in cross-section through the line *x x*, Fig. 2. Fig. 2 is a top or plan view of the same. Fig. 3 is a side view of one of the rests and its way.

Similar letters of reference indicate corresponding parts.

The present invention is designed as an improvement upon my former patent, granted May 28, 1861, No. 32,449, and reissued January 7, 1873, No. 5,222; and its object is to so construct and arrange the supports upon which the material to be bored is placed that they may be raised or lowered to accommodate them to the varying thickness of the material, in order that the holes may be bored in the center of the heading, whether said heading be thick or thin, while such change and construction of the parts so simplifies the operation that the employment of a crank and screw-rod to force inclined plates formed upon a longitudinal bar against the lower ends of the supports or rests is entirely dispensed with, thereby making a very simple, cheap, and perfect operating device, for the purpose intended.

My invention, therefore, consists of stationary inclined ways formed upon its upper face, with grooves, into which fit and slide inclined supports or rests, the same having slotted plates working over and held in position by set-screws within lugs upon the outer sides of the ways.

In the accompanying drawings, A represents the base or bed of the machine, having secured near its rear edge a frame or plate, B, made in the form of an inverted T, the horizontal arms of which are slotted longitudinally to receive the bolts C, by which the sockets or bearings D for the bits E are secured to said frame. The upright arm of the

frame B is slotted vertically to receive the gudgeon F, upon which the internally-toothed drive-wheel works. The shanks or holders of the bits E are connected with the gudgeon F by two pivoted connecting-bars, G, so that the teeth of the gear-wheels attached to said shank or holders may always mesh into the teeth of the drive-wheel, whether the bits be moved closer together to operate upon smaller heading, or moved farther apart to operate upon larger heading. The three gear-wheels are not shown in the drawing, and the several parts already described do not differ materially from those shown and described in my former patent.

The several parts of the machine which constitute my invention will be understood from the following description: Near each end or side of the base or bed A is rigidly secured, by bolts, screws, or other suitable means, an inclined way, I, the same having formed upon its upper face grooves *a*. (Shown in dotted lines, Fig. 3.) These ways have upon their outer sides lugs *i*, into which the lower ends of screws J work. The supports or rests, as represented at H, upon which the heading is laid to be bored, are formed with slotted side plates *h*, the screws J passing down through the slot. The plates *h* are slightly above the inclined edge of the rests H, to allow said edge to fit within the groove *a* of the inclined ways I. By this construction, by moving the rests H toward the bits E, the upper edge of said rest will be raised, and by moving the said rests in a direction away from the said bits their upper edges will be lowered, so that the rests can be readily adjusted to support the heading in such a position that the dowel pin-holes can be bored in the center of said heading, whether it be thin or thick.

The rests, when adjusted to the desired height, are securely held in position by screwing down the screws J until their heads bear upon the upper face of the slotted plates *h*.

It will be seen that as the rests H are adjustable upon the ways I independently of each other they will admit of the machine being used not only on finished lumber, but winding lumber, a great advantage and very important, as in many lots of winding heading the holes must be made a little out of

true—that is, one hole slightly farther from the face than another—which cannot be done where the rests are only capable of simultaneous adjustment.

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

In a doweling-machine, the stationary inclined ways I, having upon their face grooves

*a*, and the lugs *i*, with set-screws J, in combination with the independently-adjustable inclined rests H, formed with slotted plates *h*, substantially as and for the purpose set forth.

ANDREW P. MERCHANT.

Witnesses:

IRVIN T. OGDEN,  
HOBART L. NASH.