

No. 709,693.

Patented Sept. 23, 1902.

J. R. BACK.

TOOL POST.

(Application filed Oct. 13, 1897.)

(No Model.)

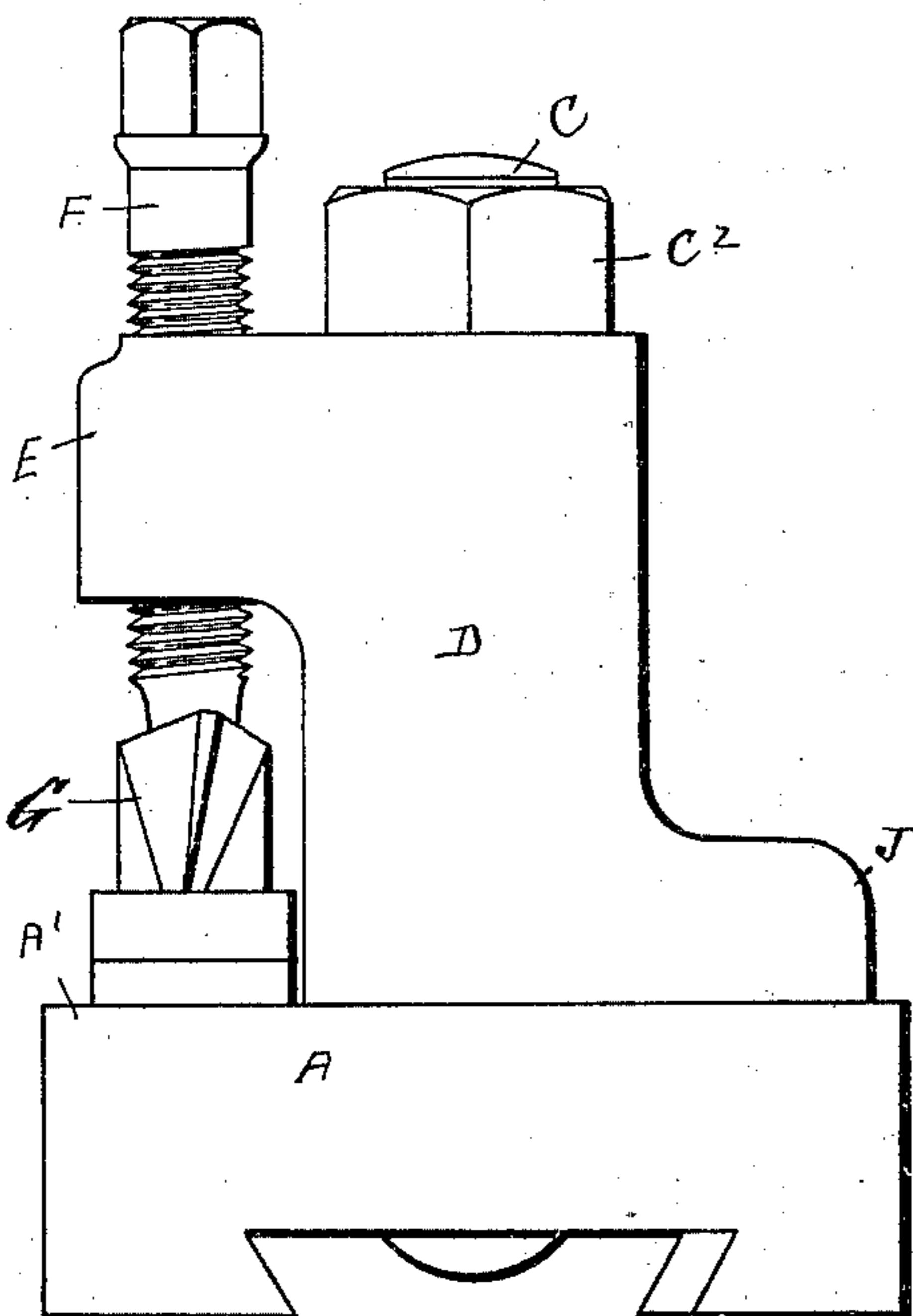


Fig. 1.

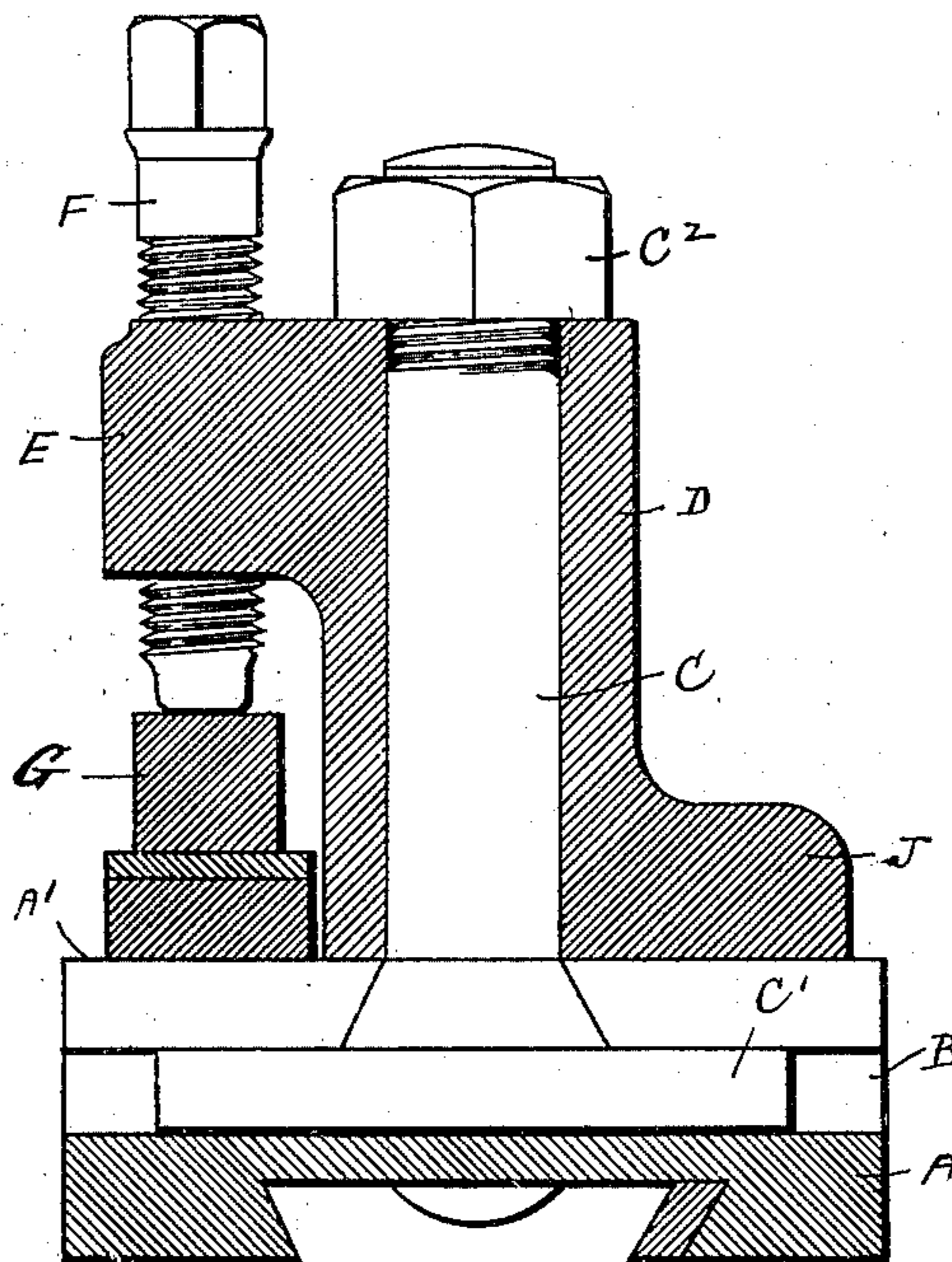


Fig. 2.

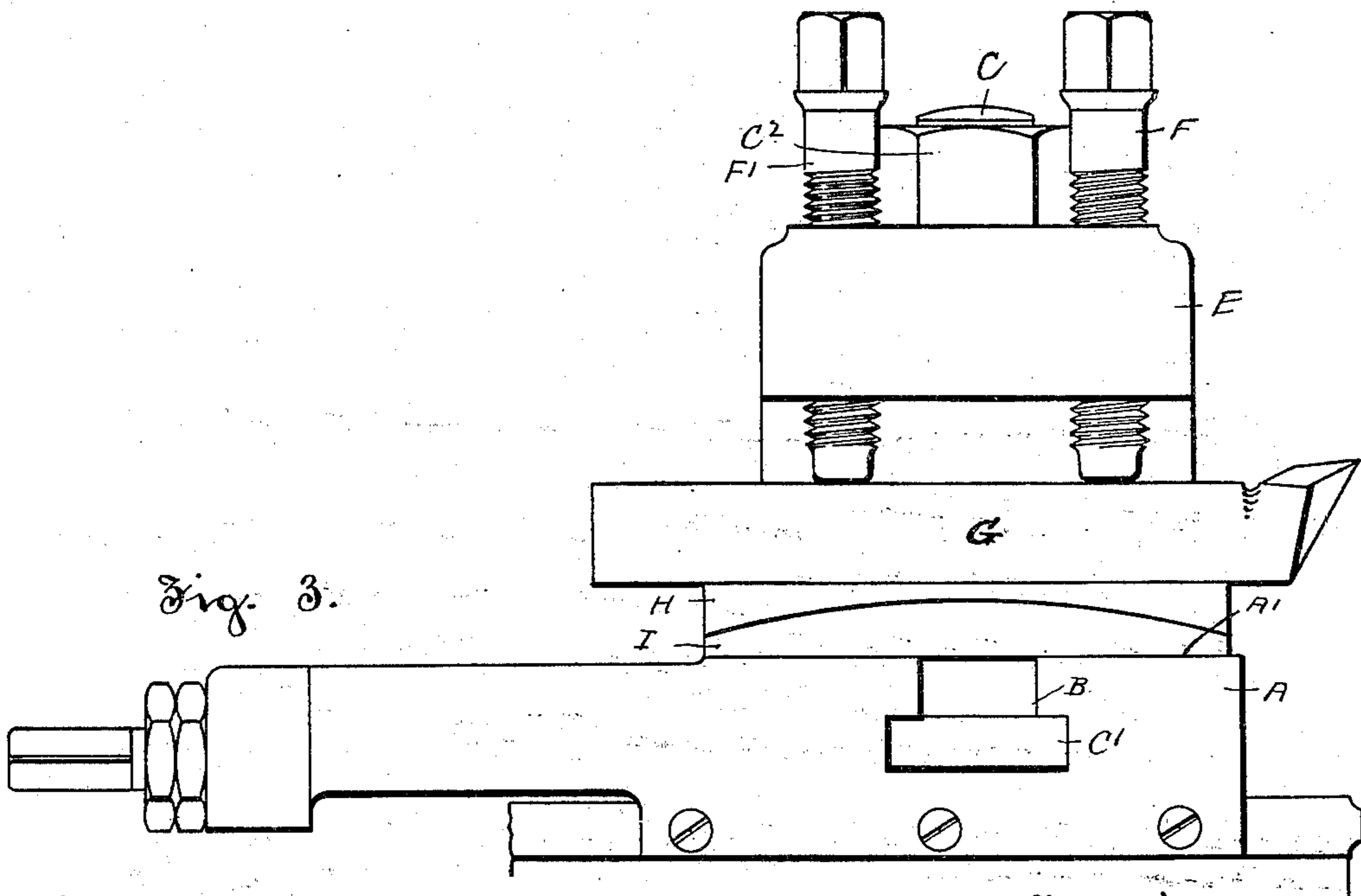


Fig. 3.

Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN R. BACK, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO THE F. E. REED COMPANY, OF WORCESTER, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

## TOOL-POST.

**SPECIFICATION** forming part of Letters Patent No. 709,693, dated September 23, 1902.

Application filed October 13, 1897. Serial No. 655,011. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN R. BACK, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Tool-Posts, of which the following is a specification, reference being made to the accompanying drawings, forming a part of the same, in which—

Figure 1 represents a front elevation of a tool-post embodying my invention. Fig. 2 is a side elevation of the same, and Fig. 3 is a vertical sectional view on line 3 3, Fig. 1.

Similar letters refer to similar parts in the different figures.

Referring to the drawings, A denotes a tool-rest provided with a plane upper surface A' and a T-shaped slot B to receive the head C' of a bolt C. Resting upon the upper plane surface A' of the tool-rest is a post D, having a hole through which the bolt C extends.

The post D is clamped upon the surface A' by means of the bolt C and a nut C<sup>2</sup> and is capable of adjustment along the tool-rest by loosening the nut C<sup>2</sup> and sliding the bolt in the T-shaped slot B and of further adjustment by rotating the tool-post around the bolt.

At the upper end of the post is an overhanging lug E, which carries a pair of binding-screws F F', adapted to be screwed down upon a cutting-tool G. The cutting-tool G rests upon a block H, having its lower surface concave and curved in the arc of a circle and fitting the convex surface of the block I, which rests upon the surface A' of the tool-rest. The tool-rest shown in the drawings consists of the ordinary sliding tool-rest commonly used in lathes, and the T-shaped slot B is arranged, preferably, transversely thereto or parallel with the body of the lathe and allows the tool-post to be shifted on the upper surface of the tool-rest in the line of the slot B.

The blocks H and I are movable and are adjusted on the tool-rest to suit the position of the cutting-tool A. When the block H is

placed directly over the block I, the upper surface of the block H and the lower surface of the block I are parallel and support the tool in a position parallel with the upper face A' of the tool-rest, but by moving the block H endwise upon the block I its upper surface can be inclined, permitting the cutting-tool to be tilted and its cutting edge raised or lowered.

I am aware that tool-holding devices have been employed in which the post was provided with an overhanging lug carrying a binding-screw by which the tool was clamped in position, and I do not claim such broadly.

The post D is provided at its base and on the side opposite the overhanging lug E with a projecting flange J, which rests upon the upper surface A' of the tool-rest, so as to increase the bearing-surface of the tool-post upon the tool-rest upon the side opposite the overhanging lug E in order to resist the strain upon the tool-post caused by clamping the tool G by the screws F F'. The head C' of the bolt C is elongated in the direction of the T-shaped slot, so that the strain exerted by the clamping-screws F F' and tending to tip the post laterally will be received by the walls of the T-shaped slot.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a tool-rest having a plane upper surface and provided with a T-shaped slot, a post resting upon said tool-rest and having on one side a projecting flange resting upon the tool-rest and on its opposite side a lug overhanging said tool-rest, said flange and lug being disposed in the same direction as said tool, a clamping-screw held in said lug, whereby a tool resting upon the tool-rest is held in position, a bolt extending vertically through said post and having an elongated head also in the direction of the T-slot and inclosed in said slot, substantially as described.

2. The combination of a tool-rest having a plane upper surface and provided with a T-shaped slot, a post resting upon said tool-rest

and having on one side a projecting flange resting upon the tool-rest and upon the opposite side a lug overhanging the tool-rest, a clamping-screw held in said lug, blocks having oppositely-curved surfaces in contact and resting upon the upper surface of the tool-rest and beneath the clamping-screw in order to

support the tool and permit the same to be tilted, substantially as described.

Dated this 6th day of October, 1897.

JOHN R. BACK.

Witnesses:

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M. C. PRICE.