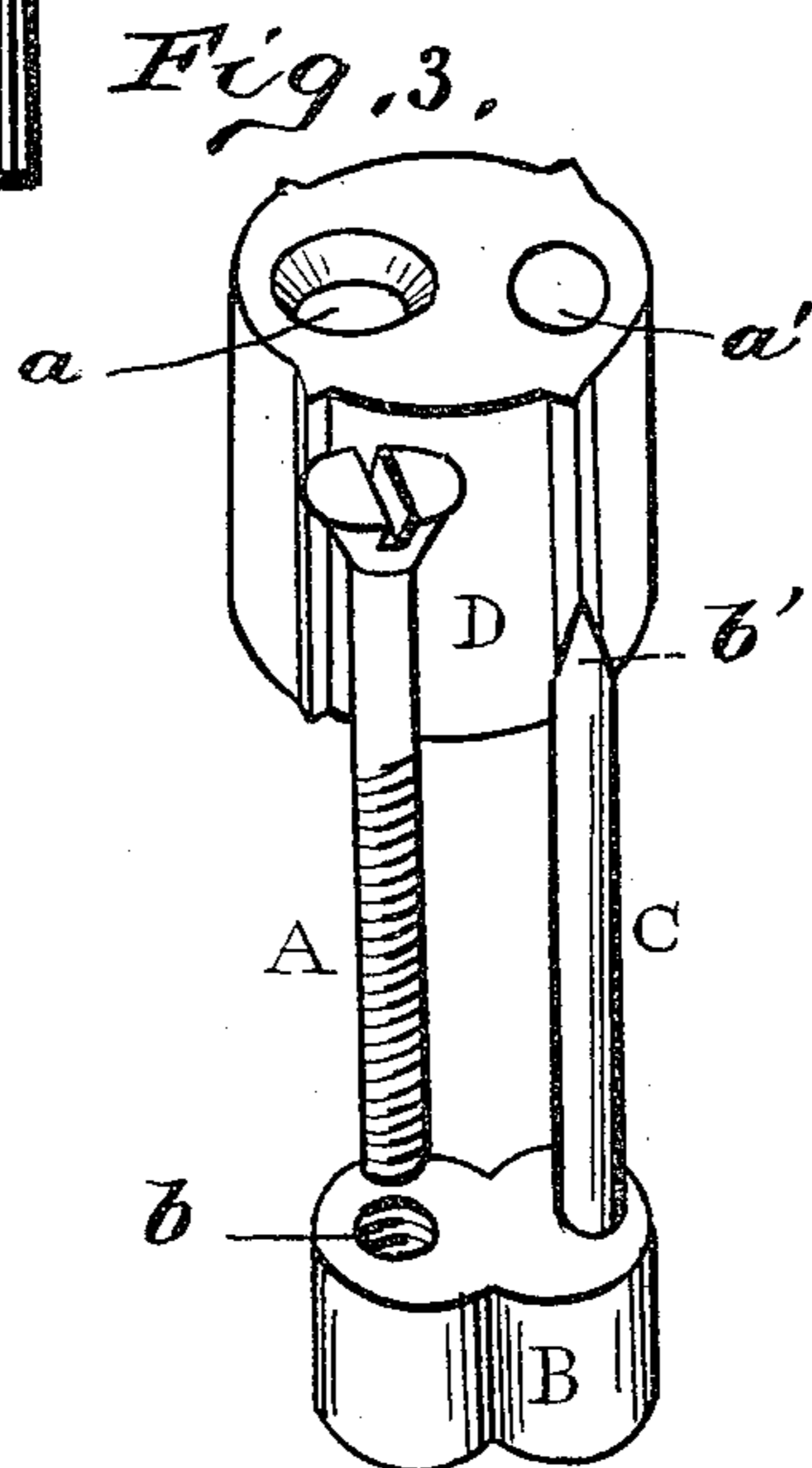
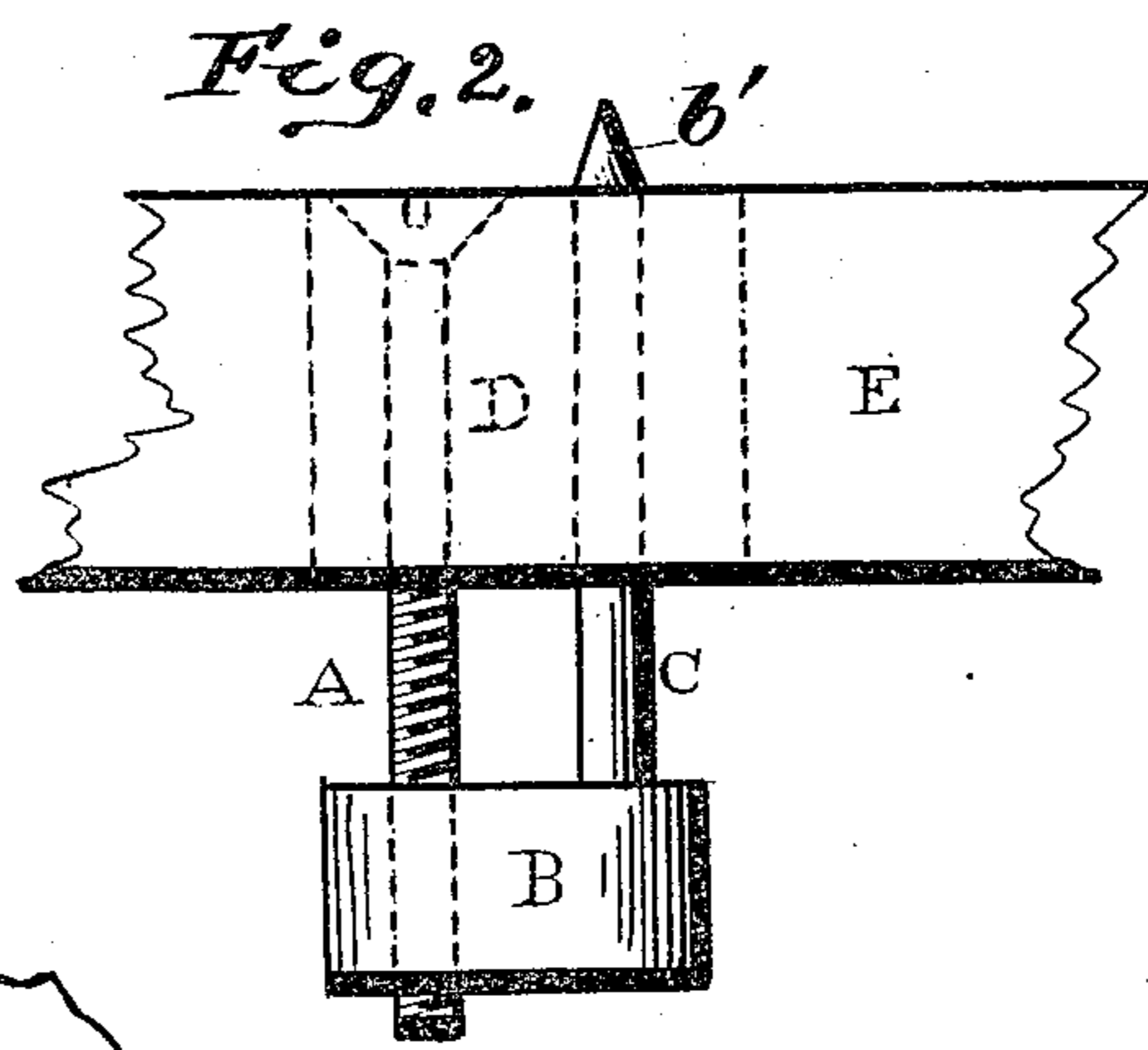
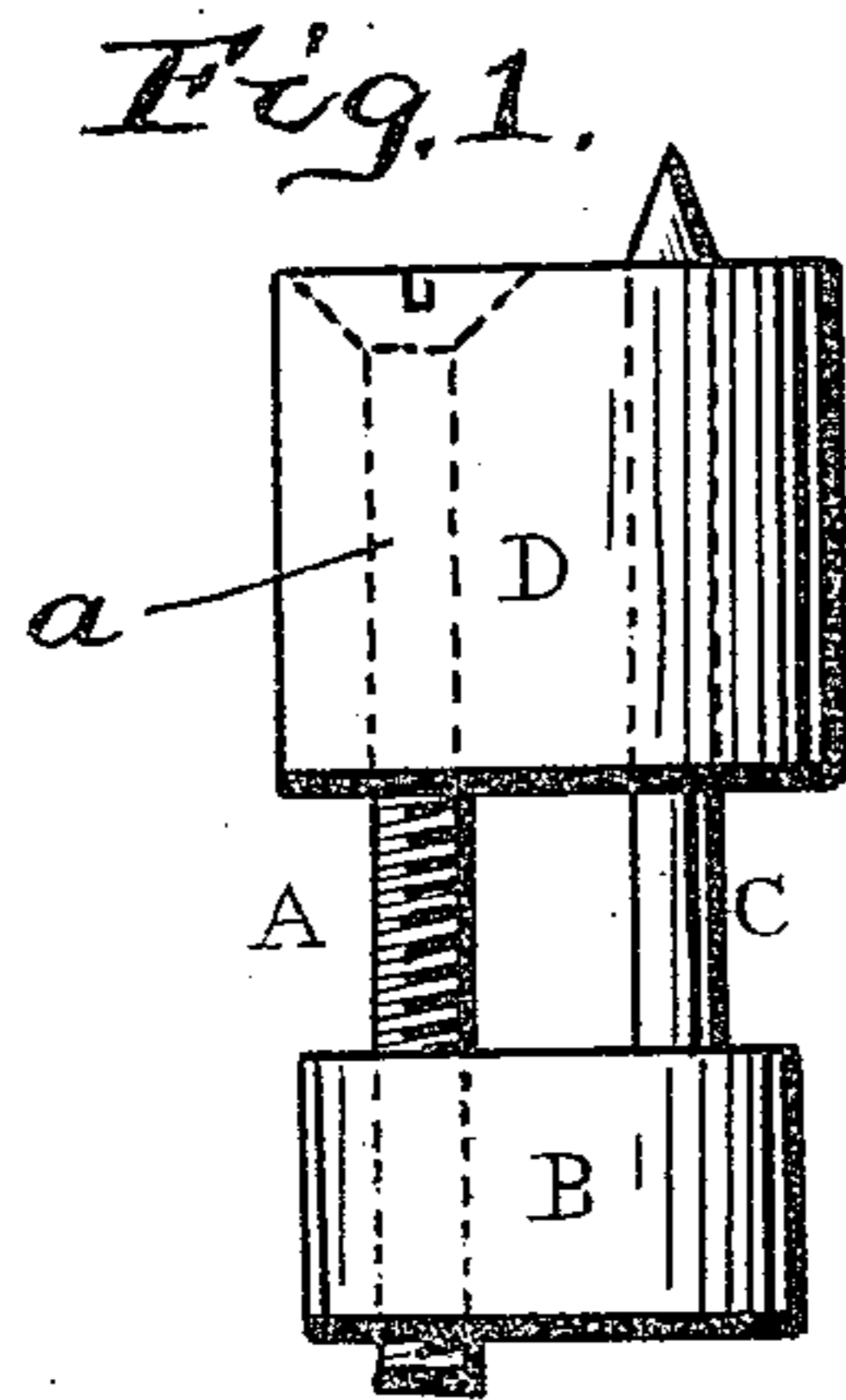


(No Model.)

W. J. STRAIN.  
BENCH SPUR.

No. 447,798.

Patented Mar. 10, 1891.



Witnesses.

Henry F. Yates  
John L. Murray

Inventor.

William James Strain

# UNITED STATES PATENT OFFICE.

WILLIAM JAMES STRAIN, OF JERSEY CITY, NEW JERSEY.

## BENCH-SPUR.

SPECIFICATION forming part of Letters Patent No. 447,798, dated March 10, 1891.

Application filed January 18, 1890. Serial No. 337,399. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM JAMES STRAIN, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a Bench-Spur; and I do hereby declare that the following is a full, clear, and exact description of the invention.

This invention relates to improvements in devices for holding material in position on a carpenter's or other bench while the material is being planed, the same being commonly known as "bench-spurs;" and it consists in the novel construction and arrangement of the same, whereby the spur may be projected sufficiently to bite the material and hold it and also be withdrawn from view at will, leaving the upper surface of the bench clear, all as will be hereinafter fully explained.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a side view of my improved bench-spur. Fig. 2 is a side view of a portion of a bench, showing my spur applied thereto; and Fig. 3 is a perspective view of the spur, the parts being detached from one another.

Referring by letter to the accompanying drawings, D designates a block, preferably of cylindrical form, which is provided with two vertical passages or openings *a a'*, the upper portion of the opening *a* being countersunk, as shown in the drawings.

B represents a second block, which is provided with a vertical opening *b*, having therein screw-threads to receive a screw A, which latter passes downward through the block D

and engages the block B, thus connecting the two blocks.

Secured to the block B is an upwardly-extended rod C, which passes through the passage or opening *a'* and is pointed at its end, forming a spur *b'*, and when the two parts as above described are connected to one another they provide a device whereby the spur can be projected or withdrawn at will into the block D.

It will be seen that my device can be seated in the top of a bench, as shown in Fig. 2 of the drawings, and that when it is desired to raise the spur the operator turns the screw, and by its connection with the block B the latter, with its rod, can be adjusted up or down, thereby projecting the spur above the block D or withdrawing said spur within the block.

The device is simple in operation. The spur is easily and quickly operated. The device is durable, as well as cheap to manufacture.

What I claim is—

The bench-spur consisting of the block D, having the vertical perforations *a* and *a'*, the block B, having the passage *b* screw-threaded, the rod C, having the pointed end and secured to block B, and the screw A, passing through the perforation *a* in block D, the screw end thereof engaging the threads in the block B, whereby said block and pointed rod C can be raised or lowered by manipulating the screw, all substantially as described.

WILLIAM JAMES STRAIN.

Witnesses:

HENRY F. YATES,  
JOHN J. MURRAY.