

(No Model.)

A. S. COOK.

WOOD SCREW MACHINE.

No. 256,127.

Patented Apr. 11, 1882.

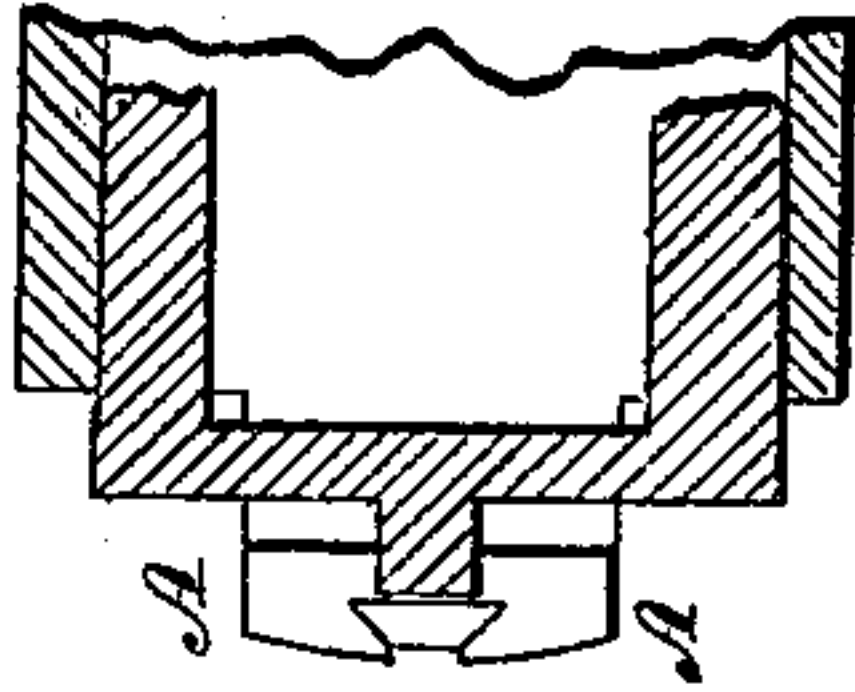
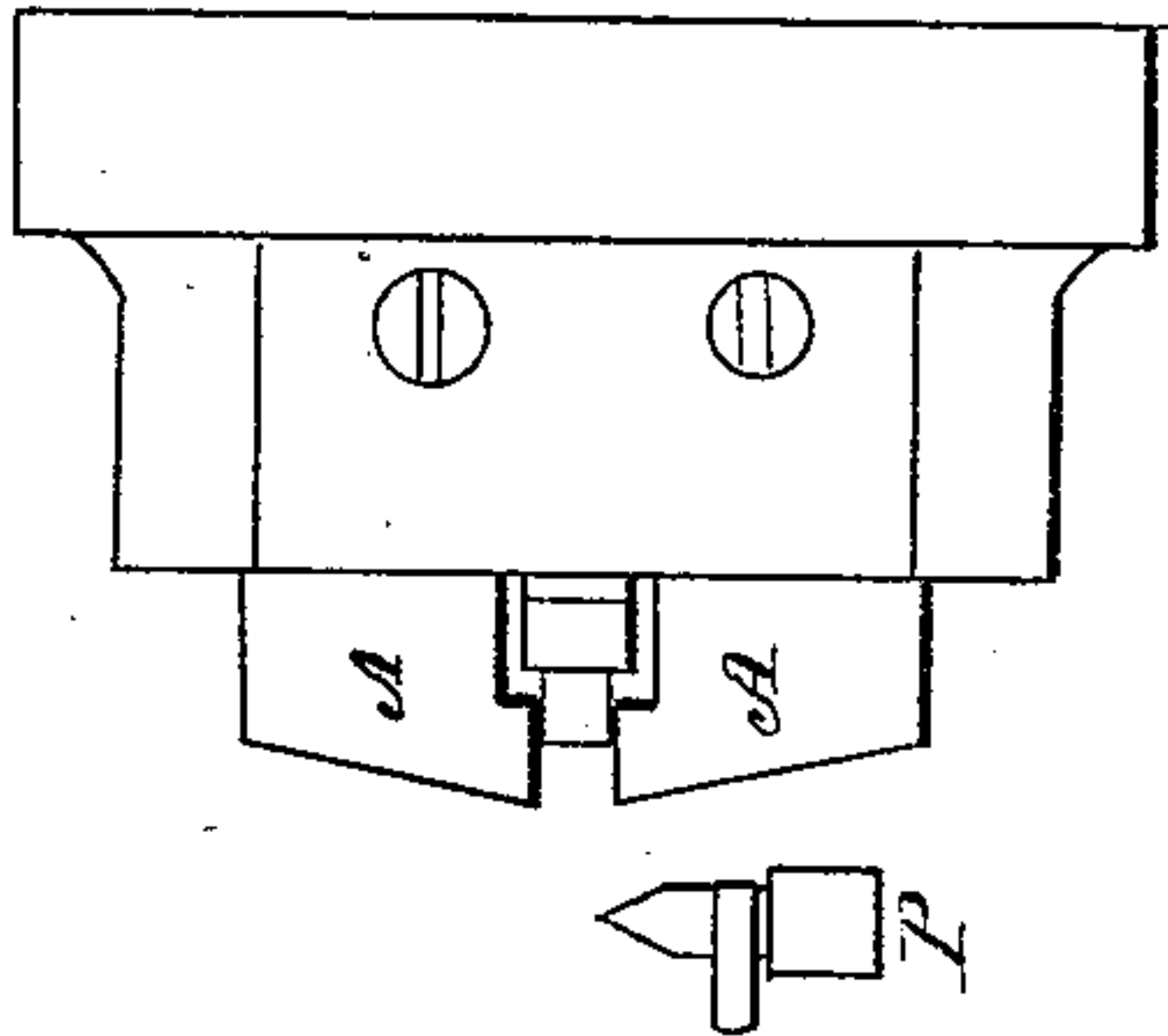


Fig. 3.

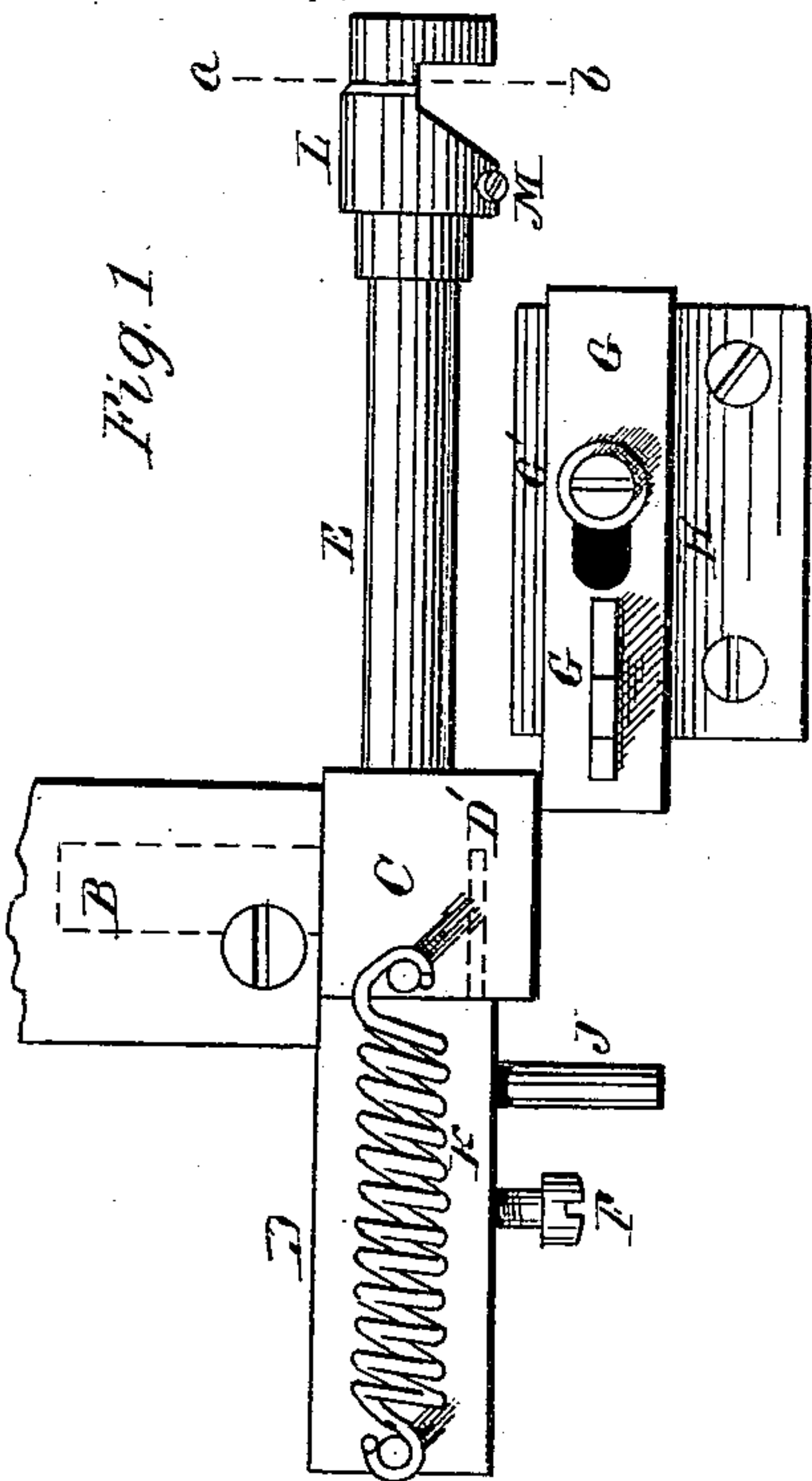


Fig. 2.

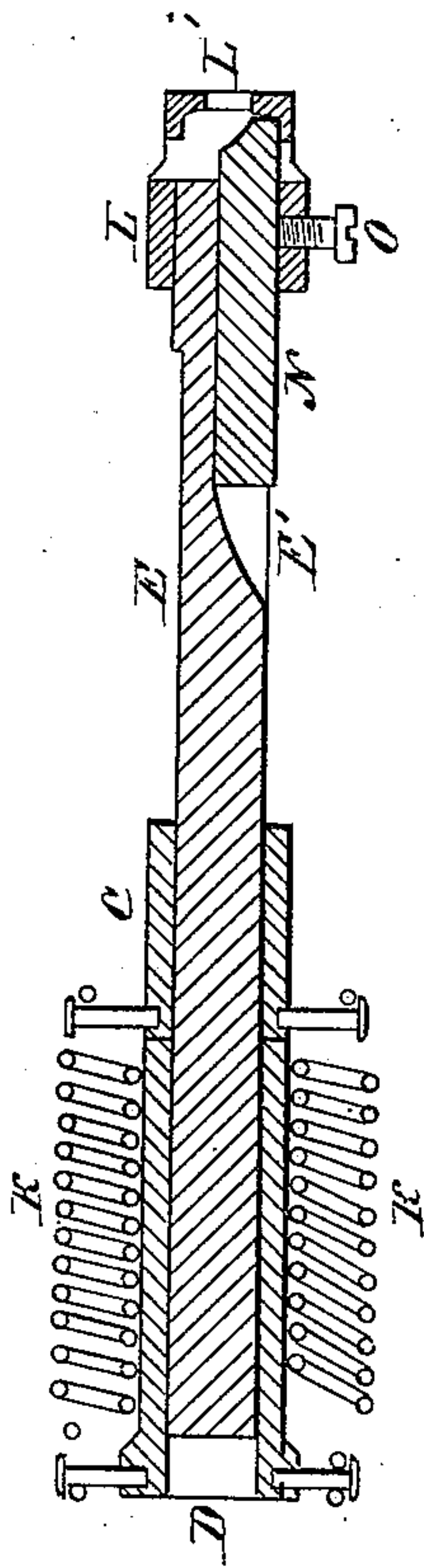
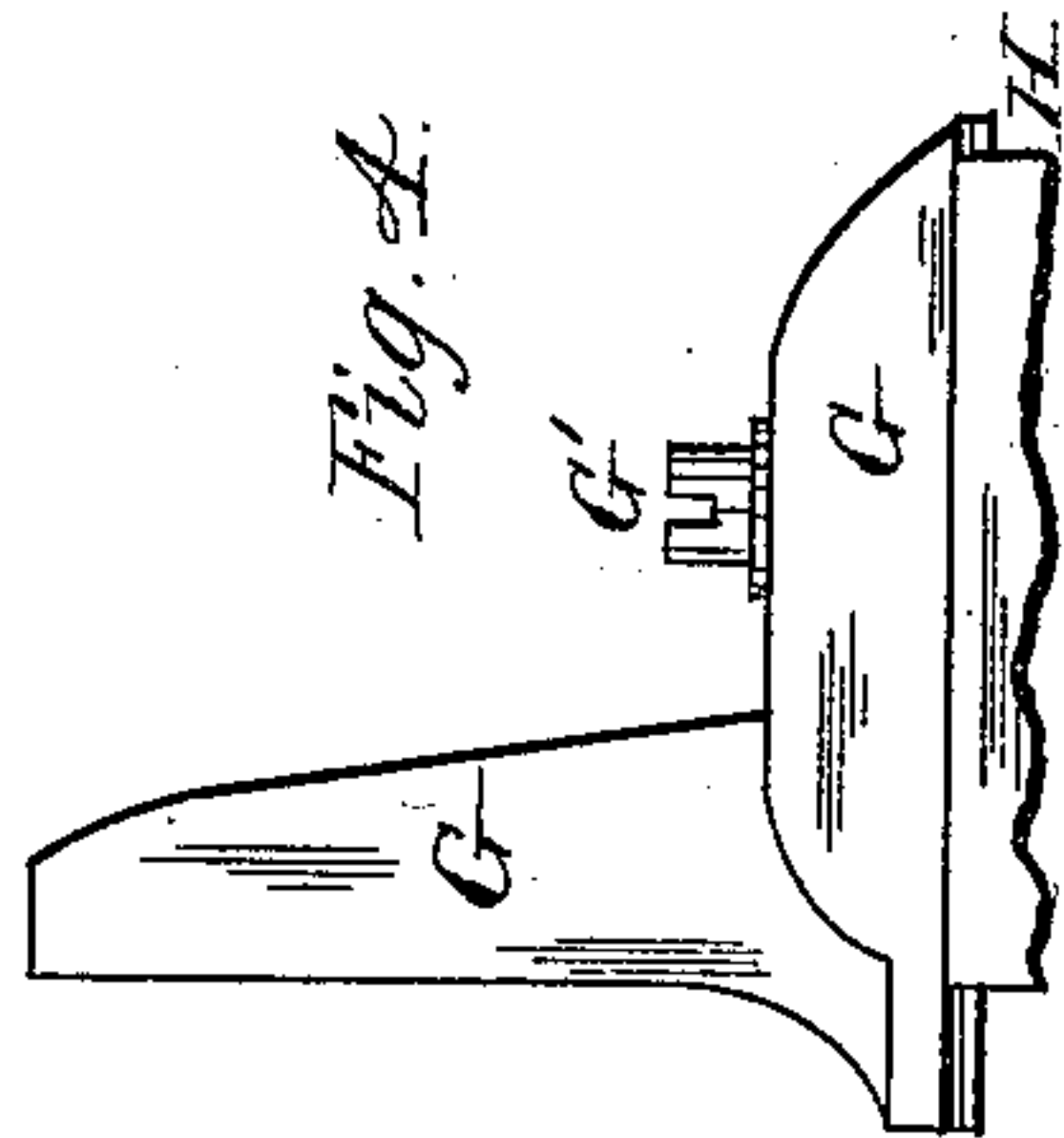


Fig. 4.



Witnesses.

Chas. L. Burdett  
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Inventor.

Asa C. Cook,  
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# UNITED STATES PATENT OFFICE.

ASA S. COOK, OF HARTFORD, CONNECTICUT.

## WOOD-SCREW MACHINE.

SPECIFICATION forming part of Letters Patent No. 256,127, dated April 11, 1882.

Application filed November 25, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ASA S. COOK, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and  
5 useful Improvements in Wood-Screw Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make  
10 and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to machines of the  
15 kind known as "threaders," for the manufacture of wood-screws, and more particularly to those in which the pointing and threading is done in the same machine.

The object of my invention is to provide a  
20 more efficient and simpler pointing mechanism in connection with the parts required for introducing and holding the blank and cutting the thread than has heretofore been in use.

In the accompanying drawings, illustrating  
25 my invention, Figure 1 shows a top view of the jaws for holding the blank while being pointed and threaded and my improved device for pushing the blank into the jaws and forming the point. Fig. 2 is a longitudinal vertical section  
30 of the parts shown in Fig. 1. Fig. 3 is a cross-section of the pointing device on the line *a b*. Fig. 4 is a front view of the adjustable stop for gaging the distance moved forward by the pointing mechanism, and the position of the  
35 point on the blank.

The parts shown and described are supposed to belong to an ordinary threader, which operates automatically to place the blank in the jaws, and to have suitable machinery for cutting  
40 the thread on a wood-screw.

A A are the jaws which hold the blank while being pointed and threaded in the usual manner. They are revolved by a pulley and open  
45 and close to receive or drop the blank.

B is a reciprocating arm, moved by the mechanism of the machine for the pushing in of the blank in the customary manner, so that it can  
50 be gripped by the jaws.

C is a block carried by and attached to arm B, and forming part of my improved feeding  
55 and pointing device.

D is a sliding block connected with block C

by the springs K, and provided with the guide D', entering a socket in block C.

E is a bar which passes through a socket in  
60 block C, into which it fits, and in which it slides and enters a socket in block D, in which it is secured by the set-screw F.

G is an adjustable stop, movable back and forth in a groove in part of the fixed frame H  
65 of the machine, and held in place by the set-screw G'. This stop or gage is for the purpose of arresting the forward movement of the bar E by coming in contact with the pin J, fixed in the block D.

L is the head or pointing device attached to the bar E. It fits onto the end of bar E and is firmly held by the set-screw M. It has an  
70 aperture, L', in the end, which is for the entrance of the blank.

N is the cutting-tool for pointing the blank. It fits into the slot E' in the bar E and extends outward into the head L, and is held firmly in place by the set-screw O. The cutting-edge is  
75 made of suitable shape to turn the point of the blank to the proper form. P shows the position of the tool which cuts the screw-thread upon the blank.

The operation of my improvement is as follows: The blank is brought down by the feed-  
80 ing mechanism and held in front of the jaws A. The bar B then advances and carries with it the bar E. The end of the blank passes into the aperture L' and is pushed into the jaws. As the bar B advances and presses the blank  
85 home the springs K yield, and the block D is retarded in its forward movement by the blank until the revolving jaws turn the blank so as to form the point, and the pin J comes in contact with the gage G. This limits the forward move-  
90 ment of bar E, and allows the cutter N to turn and finish the point without further advance. The head L then withdraws from the blank while the thread is formed in the customary manner by successive cuts of the tool P. Previous  
95 to the commencement of the operation the gage G is set in its proper position to limit the length of the screw when pointed, and to prevent the further advance of the tool beyond that point. It will be observed that the bar E and head L  
100 serve both to push the blank into the jaws and to point it when it is firmly held by them and commences to turn.

What I claim as my invention is—



1. In combination with the revolving jaws  
A and the reciprocating arm B of a screw-  
threading machine, the longitudinally-moving  
bar E, provided with the head L, and the cut-  
5 ter N, constructed and arranged to push the  
blank into the jaws and to turn the point as  
the jaws revolve, substantially as described.

2. The combination of the block C, the yield-  
ing block D, the springs K, the bar E, the  
10 head L, and the cutting-tool N, the whole form-  
ing an inserting and pointing device, substan-  
tially as described.

3. The adjusting-gage G, in combination  
with the yielding block D, having a stop, J,  
the bar E, the head L, carrying the pointing- 15  
tool, and the frame H of the machine, substan-  
tially as described.

ASA S. COOK.

Witnesses:

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