

(No Model.)

A. T. McDONALD.  
SAW GUARD.

No. 287,949.

Patented Nov. 6, 1883.

Fig. 1

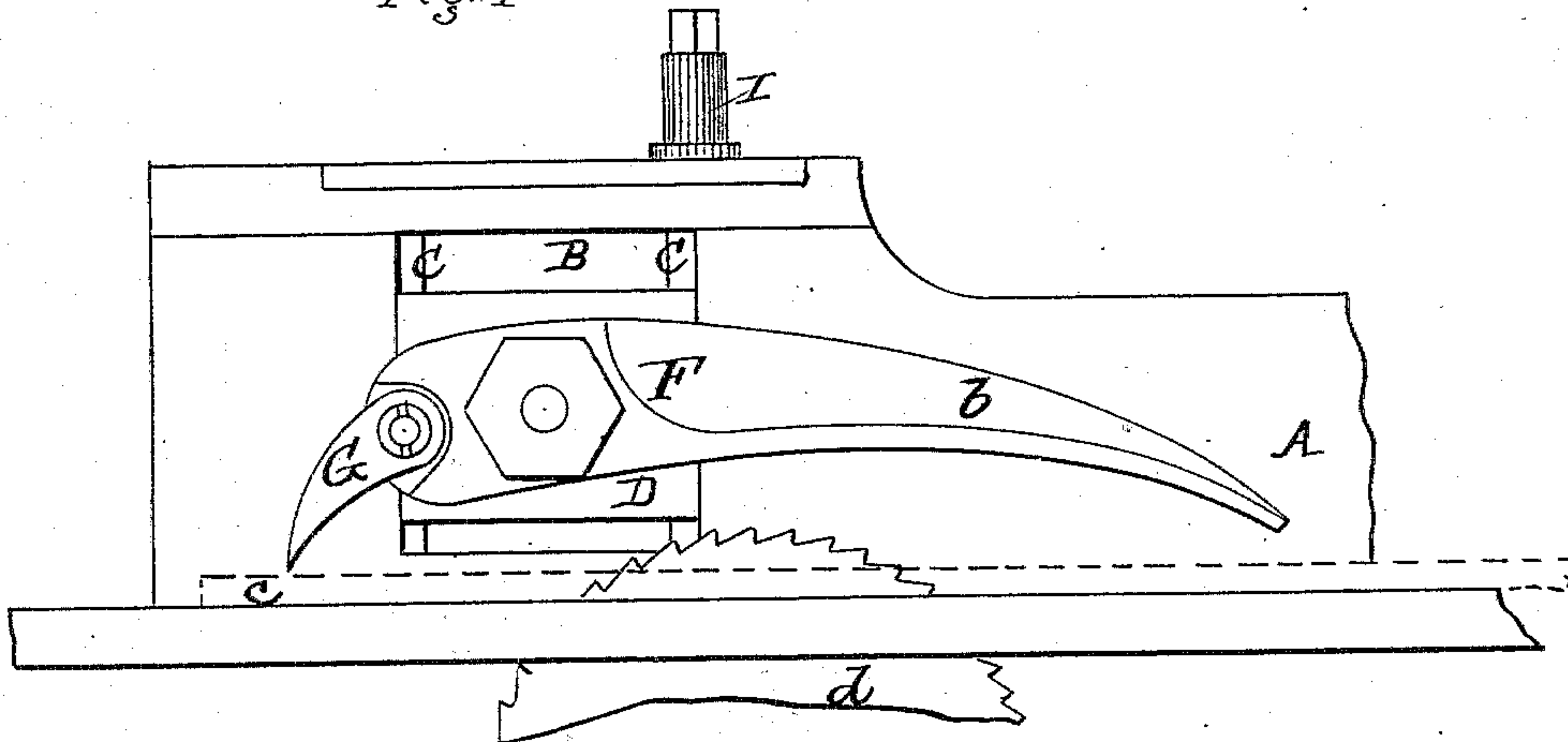


Fig. 2

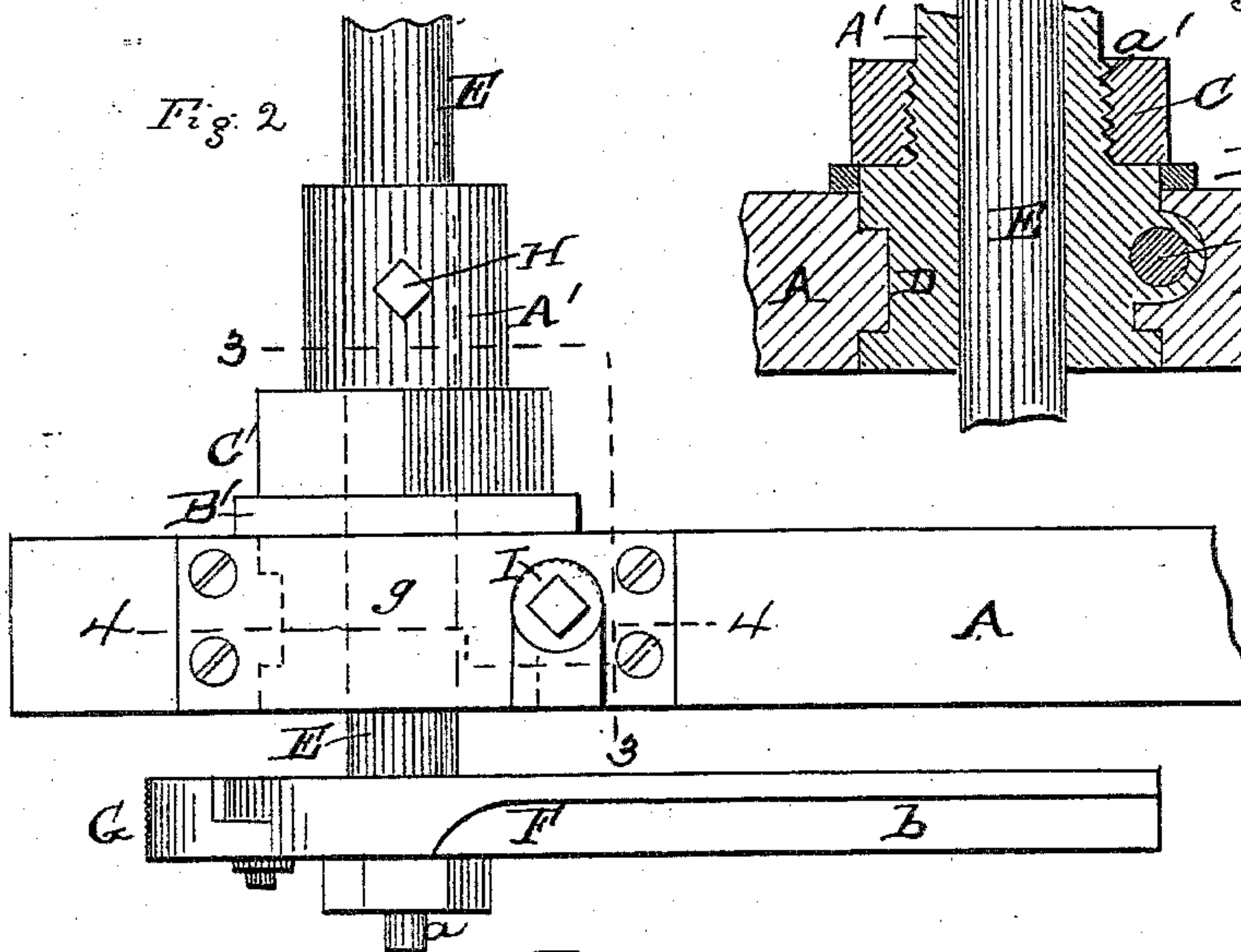


Fig. 3.

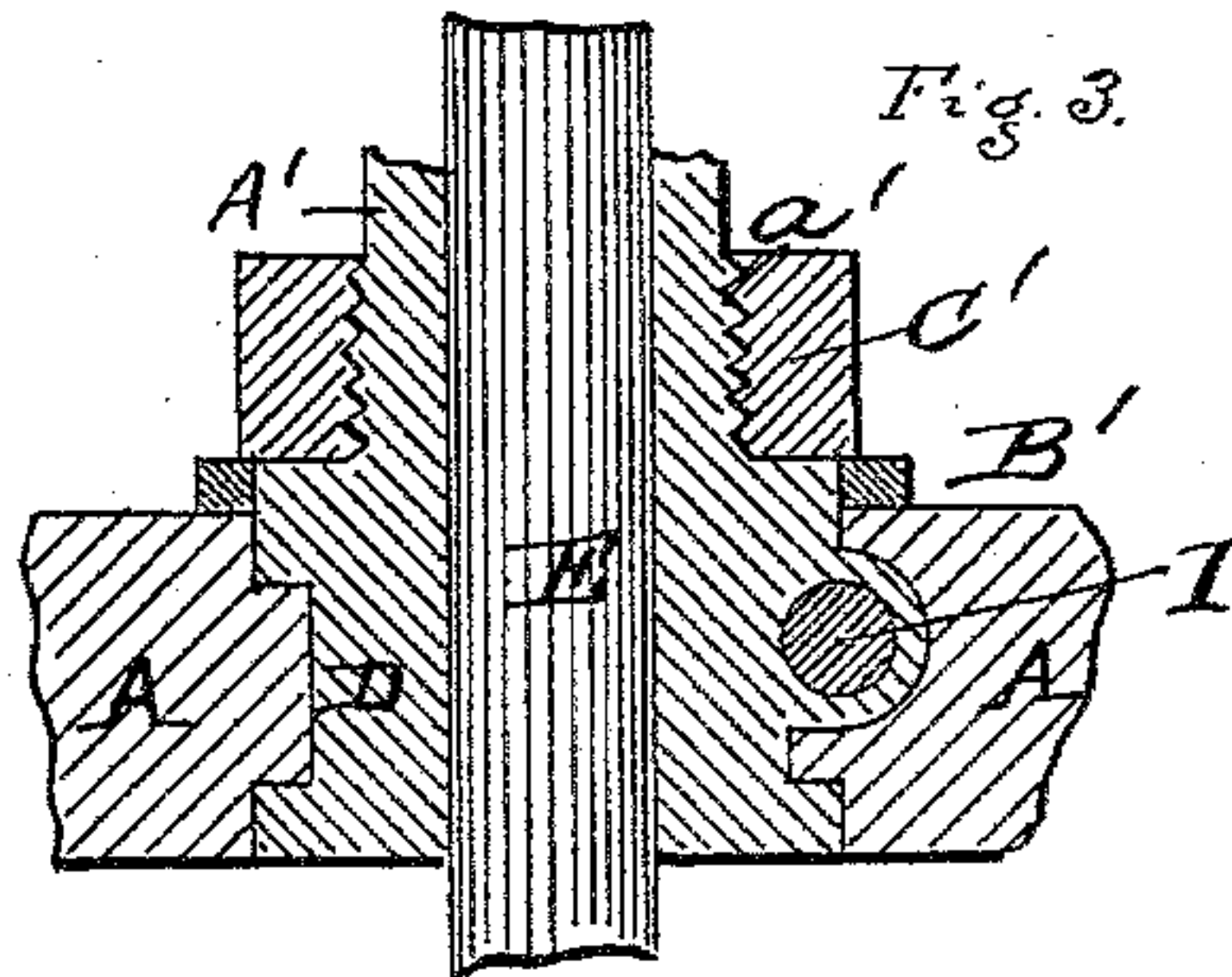
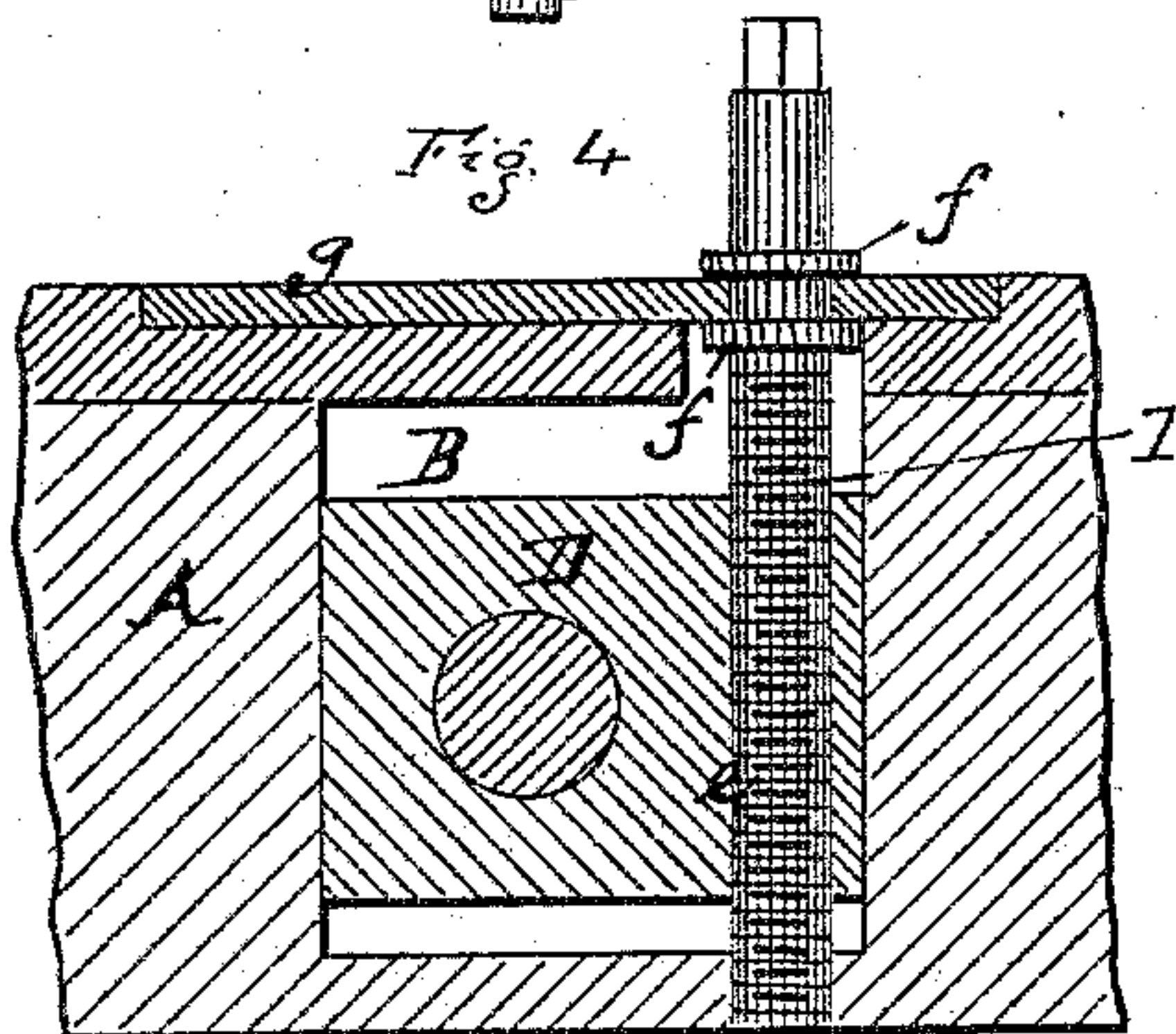


Fig. 4



Witnesses.  
E. P. Stough  
C. E. Jones.

Augustin J. McDonald  
Inventor.  
By A. O'Neill  
and Char. J. Gooch  
Attorneys



# UNITED STATES PATENT OFFICE.

AUGUSTIN T. McDONALD, OF SHELTON, CONNECTICUT.

## SAW-GUARD.

SPECIFICATION forming part of Letters Patent No. 287,949, dated November 6, 1883.

Application filed April 28, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUSTIN T. McDONALD, a citizen of the United States, residing at Shelton, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Saw-Shields for Circular Saws, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention consists in a shield or guard for rotary saws, which is capable of both vertical and transverse adjustment for the purposes hereinafter described, and is provided with a pivoted dog, by means of which the material being sawed is held in proper position, all as will be hereinafter described and claimed.

15 In the drawings, Figure 1 represents in side elevation my improvements as applied to a rotary sawing-machine. Fig. 2 is a top plan view of Fig. 1 minus the saw and the support for the material to be sawed. Fig. 3 is a horizontal section taken on the line 3 3 of Fig. 2. Fig. 4 is a vertical section taken on the line 4 4 of Fig. 2.

20 The object of the present invention is to so construct and arrange a shield or guard for circular saws, by means of which the workman will be fully protected from injury and prevented from coming in contact with saws where the appliance is used; in rendering the shield transversely adjustable, in order that when the saw is adjusted so as to cut either narrow or wide strips the shield may always be placed directly above the saw; in providing the shield at one end with a pivoted dog, by means of which the material being treated is held down and prevented from flying up and injuring the workman; and in rendering the shield vertically adjustable to adapt said dog for operation against stuff of different thicknesses.

25 A represents a block, which is suitably attached to the saw-gage.

30 B represents a transverse slot or opening formed in the block A, and having vertical slots or grooves C at each end, within which slides a block, D, within which a spindle or rod, E, has bearing. This spindle or rod E passes through the block D, its two ends projecting therefrom, as shown.

35 F represents the shield or guard, which is

pivotally mounted upon one end, *a*, of the spindle E, and has a curved forwardly-extending arm, *b*, which, when the shield is in position, will extend over and across the path of the saw and some distance beyond, thereby entirely covering the saw-teeth and effectually guarding against persons coming in contact therewith, and also preventing the flying upward of the sawdust.

40 To the rear end of the shield F is pivotally connected a dog or pawl, G, whose office it is to rest upon the board *c* or other stuff being sawed in the manner shown in Fig. 1, by which means the rear end of the material under treatment is prevented from rising or flying up, which it is apt to do, especially when short lengths are being sawed, and thereby injuring the operative. The dog or pawl can be readily raised when it is desired to place a board, *c*, or other piece of material in position for treatment. On its release it will drop down and rest upon the material with sufficient pressure to keep it down.

45 When the saw *d* is adjusted longitudinally upon its arbor to permit it to saw strips of different widths, the shield can be correspondingly adjusted, so as to keep it vertically above the saw, by simply loosening the clamping-screw H, which passes through the sleeve A' and grips the rod E, and then sliding said rod E, with its thereto attached shield, in the desired direction. When the desired position has been obtained, the screw H is tightened down upon the rod E, and said rod is then held firmly in position.

50 I represents a worm-screw, whose lower end engages with a screw-threaded socket, *e*, in the sliding block D. When it is desired to operate upon stuff of more or less thickness, by turning this screw I in either the one direction or the other the block D, with the rod E and shield F and dog G, will be correspondingly raised or lowered. By this means, whatever the thickness of the material being operated upon, the shield F can always be so adjusted as to be sufficiently close to the saw to cover the same, and the dog G likewise sufficiently close to the board or material being sawed to rest thereon with the desired pressure.

55 The screw I is at its upper end provided



with collars *f*, which have bearing against the upper and undersides, respectively, of a plate, *g*, having slot *h*, and attached to the top of the block A. This screw has bearing at its lower  
 5 end in the lower part of block A and at its upper end in the slotted bearing-plate *g*, and the threads thereon are of a reverse order to the threads in the block D. Therefore, as the screw is turned within its respective bearings,  
 10 the block D will be either raised or lowered, depending upon the direction in which the screw is turned. The impossibility of vertical movement of the screw insures the operation of said block at each movement of the screw.

15 The block D is, as shown in Fig. 3, formed integrally with the sleeve A', which latter is screw-threaded at *a'*.

B' represent a washer, having a square center to adapt the same to fit the block D, and  
 20 C' represents a nut, which clamps the block and sleeve sufficiently to prevent the horizontal movement thereof.

Having thus described my invention, what I claim therein is—

25 1. A saw-guard composed of a block adapted to slide in vertical ways, a spindle or rod

having bearing in and adapted to slide transversely within said vertically-sliding block, a shield mounted upon one end of said spindle, and having a curved end adapted to extend  
 30 over and across the path of the saw, and a pivoted dog adapted to hold down the material being sawed, substantially as set forth.

2. In a saw guard or shield, the combination of a block, A, having a screw-threaded socket,  
 35 and a transverse slot or opening, B, having vertical slots or grooves at each end, a block adapted to rest and slide vertically within said transverse opening, a worm-screw adapted to engage with said screw-threaded socket and  
 40 with the sliding block, a spindle or rod having adjustable bearing transversely within said block, and a saw guard or shield mounted upon the outer end of said spindle to permit of the same moving in both a vertical and a trans  
 45 verse direction, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUSTIN T. McDONALD.

Witnesses:

CHARLES STEWART,  
 CHAS. A. OAKS.