

(Model.)

H. F. KUHLMANN.

SAW GUARD.

No. 264,412.

Patented Sept. 12, 1882.

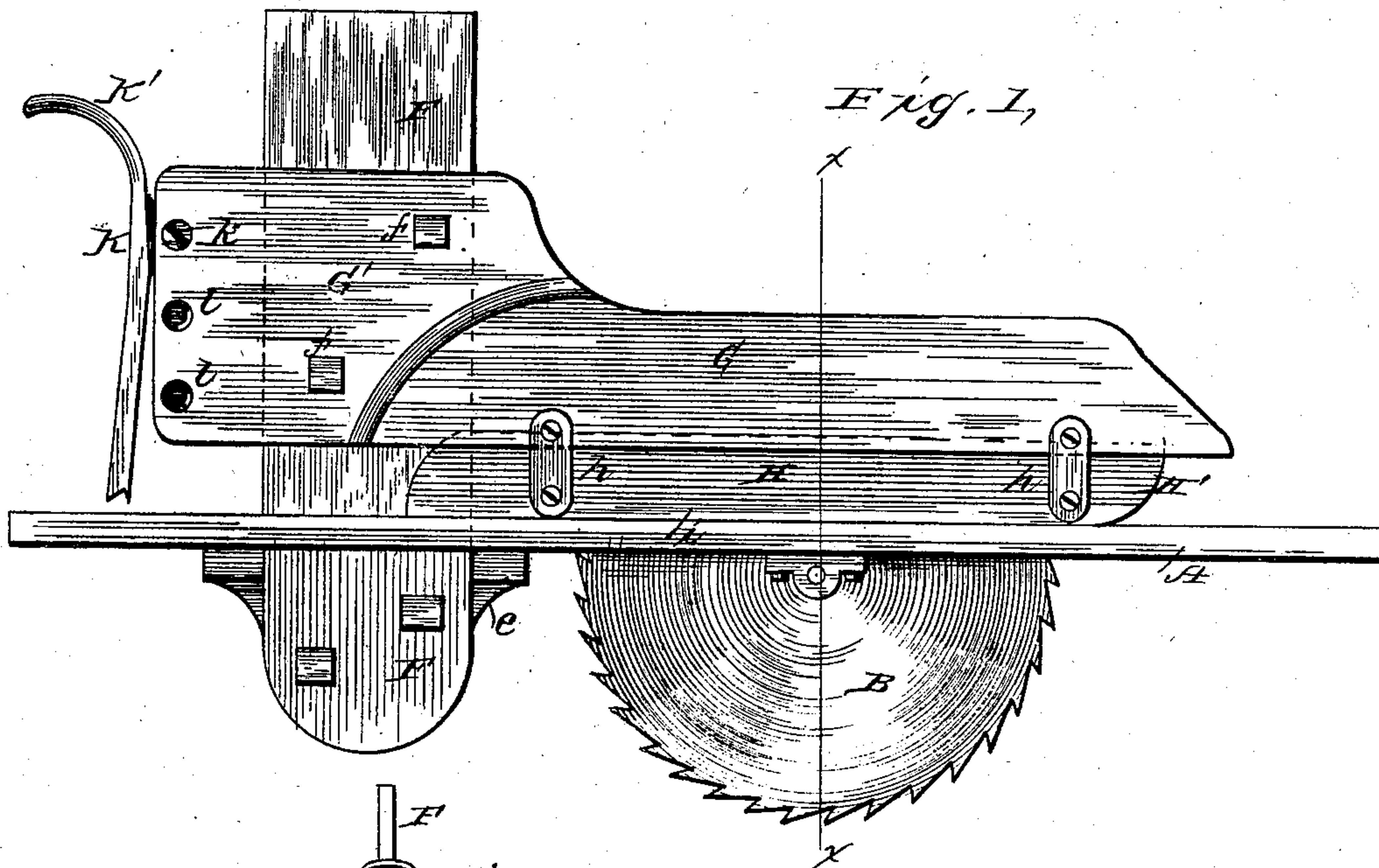


Fig. 2

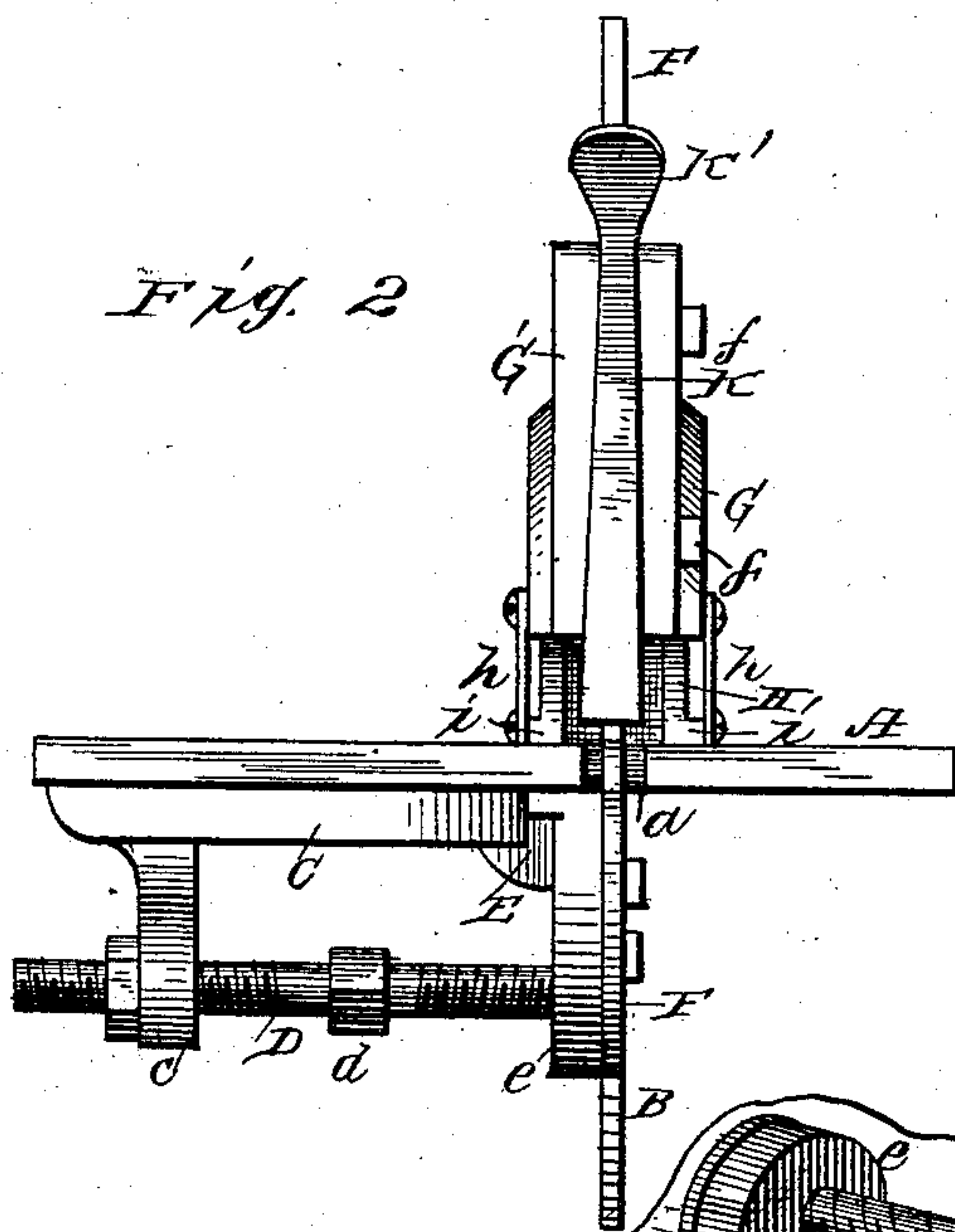


Fig. 3,

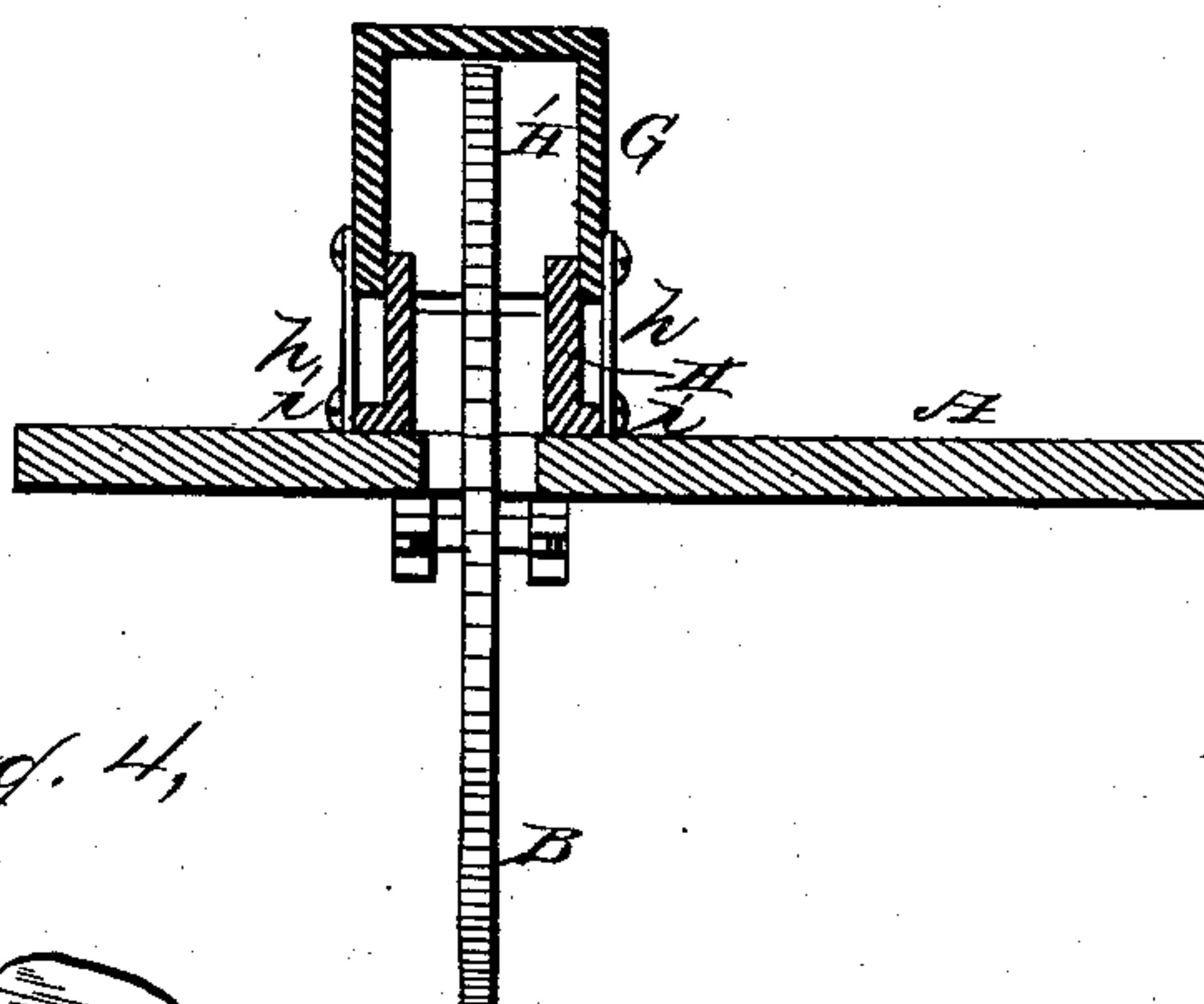
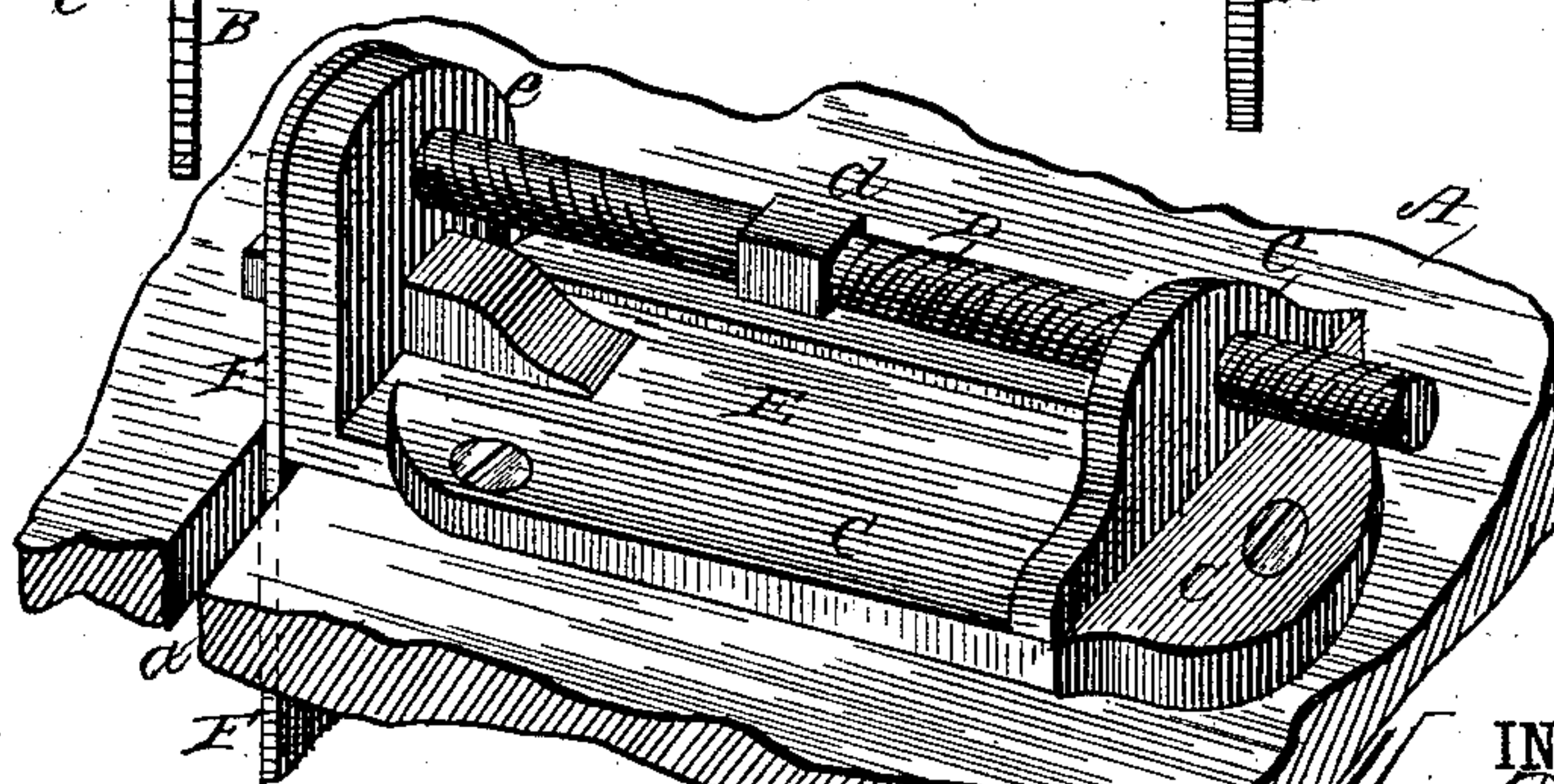


Fig. 4,



WITNESSES:

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HENRY F. KUHLMANN, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO JOHN H. GRUBE, OF SAME PLACE.

SAW-GUARD.

SPECIFICATION forming part of Letters Patent No. 264,412, dated September 12, 1882.

Application filed June 21, 1882. (Model.)

To all whom it may concern:

Be it known that I, HENRY F. KUHLMANN, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Guards or Shields for Circular Saws; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my improved guard or shield for circular saws. Fig. 2 is an end or edge view of the same, showing the slide for properly adjusting the hood in its relation to the saw, and showing also the right-and-left-handed screw for operating the slide. Fig. 3 is a cross-section through the guard, taken through line *x x* in Fig. 1; and Fig. 4 is a perspective view of the under side of the saw-table, showing the device for adjusting the hood-plate or support.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to means or devices for preventing accidents with circular saws; and to this end it consists in the construction and combination of parts of an adjustable and automatically-operating guard, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A represents the saw-table, and B the saw.

To the under side of the table is bolted a plate, C, through the downward-projecting bracket or bearing *c* of which works a right-and-left-handed screw, D, the outer end of which bears against a bracket, *e*, which projects downwardly from and forms part of a plate, E, that slides in ways in plate C.

To the outer face of plate E is bolted an upright plate or bar, F, made of steel of a thickness not exceeding the thickness of the circular saw. This plate projects up through a slot, *a*, in the saw-table in a line with the slot through which the saw works, thus forming an upright or standard for the attachment of the fixed hood G, which extends over and covers the saw. The position of hood G upon its upright F may be adjusted vertically by bolts or set-

screws *f f*, inserted through the slotted head-piece or projection G' of the hood, and bearing with their inner ends against the face of plate F, their bearing-points on the plate being oblique to each other.

To the under side of hood G is hinged, by straps or movable arms *h h*, (two on each side,) the movable guard H, the upper end of which extends into hood G. The sides of this movable guard H are made with bottom flanges, *i*, which, when the guard is thrown up into its overlapping hood G, will strike the lower edges of the same and thus limit its upward motion.

At the outer end of the head-piece G' of the fixed hood is hinged adjustably the back stop, K, which may be thrown out of play by its curved handle K'. By changing the fulcrum-bolt *k* of the back stop from one to another of its apertures *l* in the head-piece G' the hinged back stop may be raised or lowered to conform to the thickness of the plank.

From the foregoing description, taken in connection with the drawings, the operation of my invention will be readily understood. As the plank is fed against the curved or beveled end H' of the hinged or movable guard H this is thrown up into the overlapping hood G a height or distance corresponding to the thickness of the plank. As this is fed through the machine and is cut into by the saw the kerf makes room for the plate or upright F, which, as we have seen, is of a thickness not exceeding that of the saw-blade. The pivoted back stop, K, prevents the return of the plank, except when tilted out of contact with the same; and by adjusting the right-and-left-handed screw D by a key or wrench placed over its square portion *d* the slide E, with its upright plate F, may be so adjusted laterally as to be in an exact line with the saw and with the kerf or cut in the plank made by it.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a shield or protecting device for circular saws, the combination of the fixed hood G, extending over the top of the saw, and the movable guard H, hinged to the sides of the hood by parallel arms *h h*, and having a curved or beveled front, H', to adapt it to be shoved up

into the overlapping hood by contact with and the passage of the plank to be sawed, substantially as set forth.

2. In a shield or protecting device for circular saws, the combination of the slotted saw-table A, having plate C fastened to its under side, right-and-left-handed screw D, sliding plate E, having the upright plate F projecting through the slotted saw-table, and vertically-adjustable hood G, having the movable guard

H, and adjustable pivoted back stop, K, all constructed and combined substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

HENRY F. KUHLMANN.

Witnesses:

CHARLES DREWES,
JABEZ C. BUCK.