

J. A. WILSON & E. D. NOBLE.

Saw-Filing Machine.

No. 163,834.

Patented May 25, 1875.

Fig. 1.

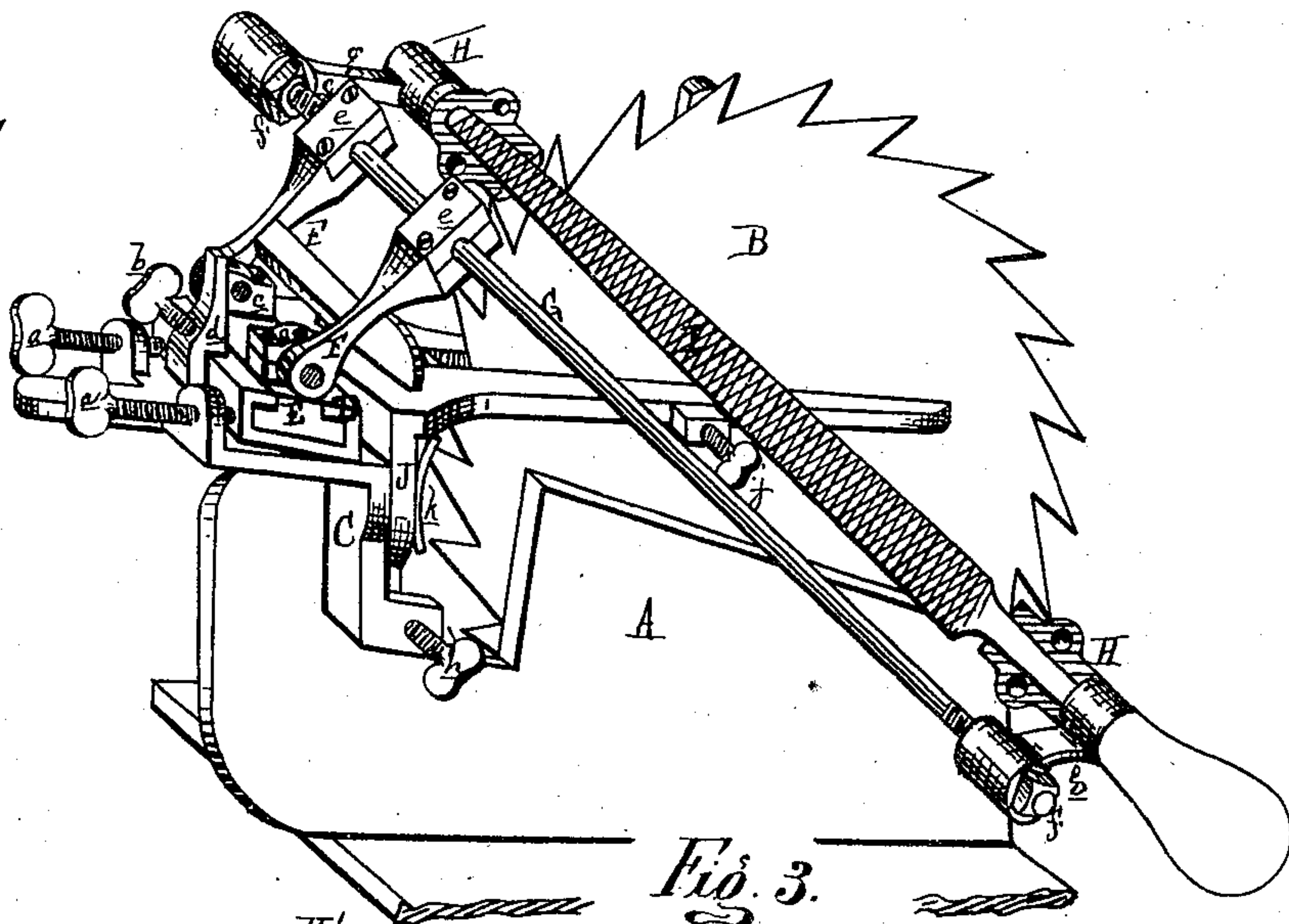


Fig. 3.

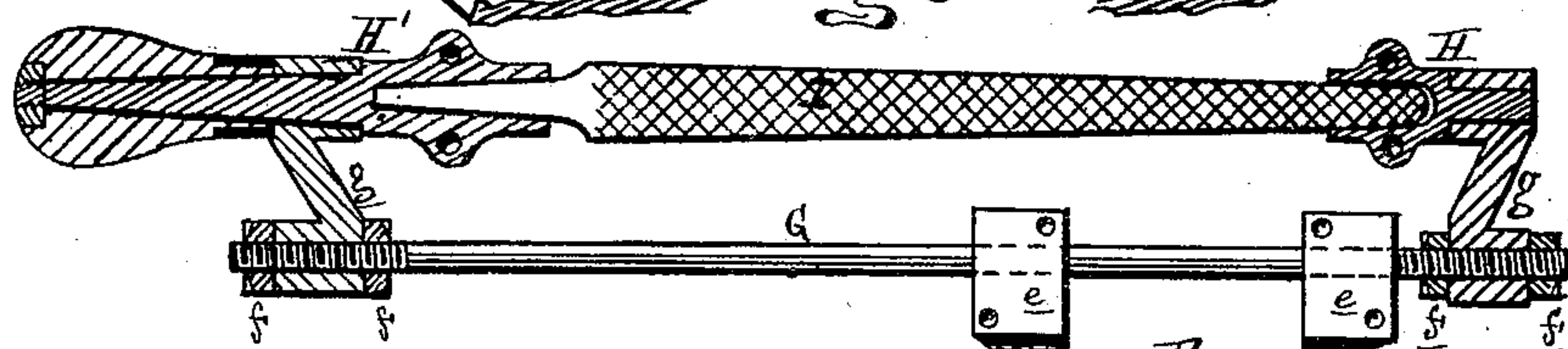
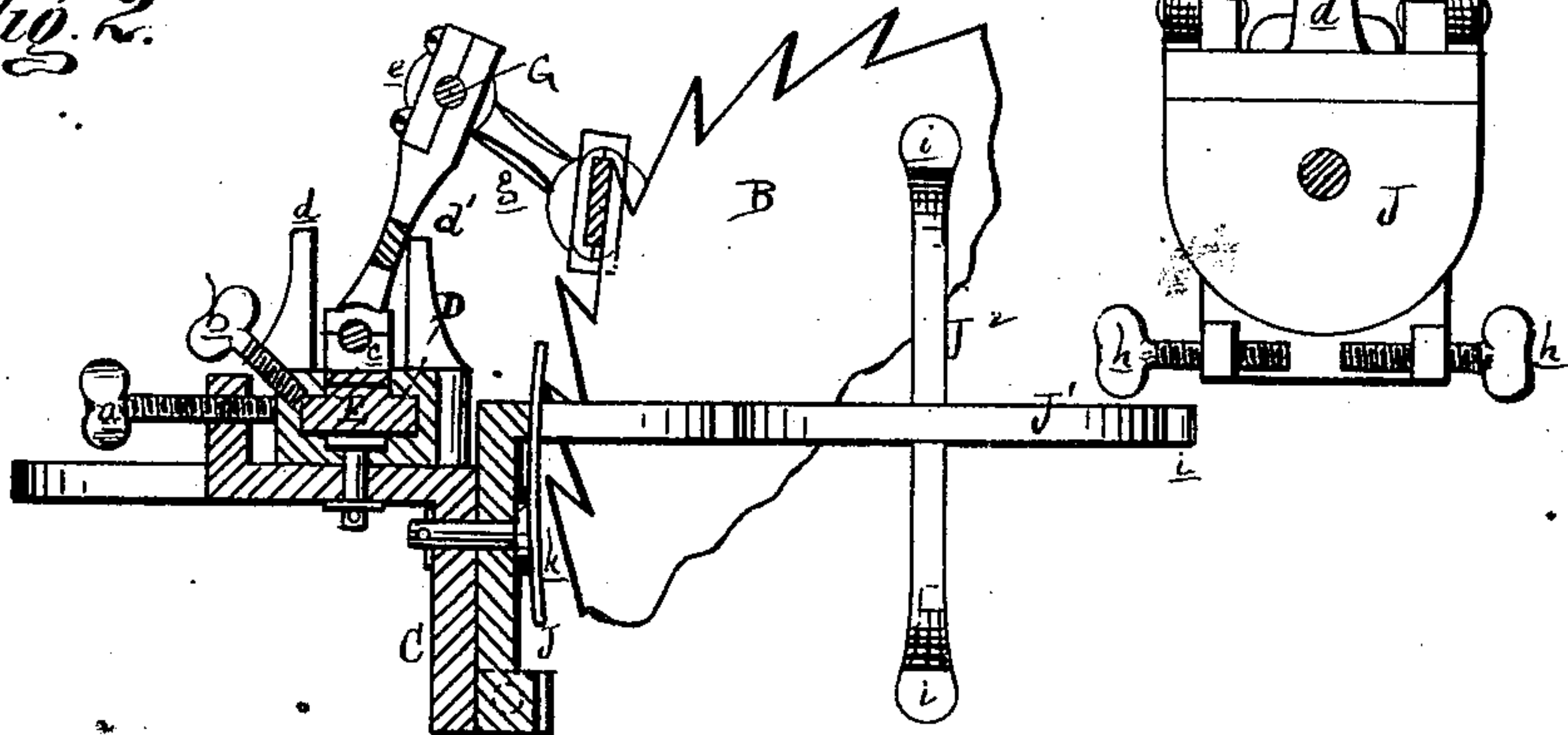


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES A. WILSON AND EDMOND D. NOBLE, OF SPRING LAKE, MICHIGAN.

IMPROVEMENT IN SAW-FILING MACHINES.

Specification forming part of Letters Patent No. **163,834**, dated May 25, 1875; application filed October 21, 1874.

To all whom it may concern:

Be it known that we, JAMES A. WILSON and EDMOND D. NOBLE, of Spring Lake, in the county of Ottawa and State of Michigan, have invented an Improvement in Saw-Filing Machines, of which the following is a specification:

The nature of our invention relates to an improvement in machines for filing saws, more especially circular mill-saws, and is designed and adapted to give the tooth any angle or "flean" on the top, and any bevel on the bottom or face of the tooth; and to this end it consists in the novel and peculiar construction of the various parts, as more fully hereinafter set forth.

Figure 1 is a perspective view of the machine as arranged for filing a circular saw. Fig. 2 is a longitudinal vertical section at *x x*. Fig. 3 is a cross-section at *y y*.

In the drawing, A represents a filing-board, provided with a clamp-screw, on which to hang the saw B. The filing-board is provided with a gap at one end to receive the pendent part of an angle-plate, C, which may be secured thereto in any convenient way, or it may be allowed to rest upon the bottom of the gap. D is a bed-plate, pivoted at its center to the upper limb of the angle-plate, on which it may be adjusted at any angle required by two set-screws, *a a*. E is a tool-carrier, sliding in dovetail ways across the bed-plate, and is secured by a set-screw, *b*, tapped through the back edge of the latter. This carrier is reversible in the ways. *c c* are short posts on the carrier, to which the legs of a frame, F, are pivoted in such a manner as that it can be thrown toward or away from the saw, its movement in either direction being limited by striking its cross-girt upon the top of the standards *d d'*, erected upon the bed-plate at either side of the carrier. G is a round guide-rod sliding in boxes *e e* at the outer ends of the frame F. To each end is secured, by means of jam-nuts

f f, an arm, *g*, in one of which, at the extremity, there is a socket to receive the point-holder H of a file, I, while the other one has sleeved through it a combined tang-holder and file-handle, H'. The holders have each a removable cap for inserting and securing the point and tang of the file, respectively. J is a plate pivoted on the face of the pendent part of the angle-plate C, on which it may be rotated and adjusted by the tangent-screws *h h*. From its upper edge two long arms, J¹, project at right angles with the body and straddle the saw. The back one has a vertical cross-arm, J², which, in connection with two projections on the back arm, (seen at *i i*), gives four points of rest or bearing upon the saw, which is clamped against them by a set-screw, *j*, in the front arm. *k* is a piece of sole-leather secured to the face of the plate J, to protect the teeth of the saw from accident by striking said plate. The "flean" of the teeth is got by adjusting the angle of the bed-plate with relation to the saw, while the bevel of the bottom of the teeth is obtained by inclining the plate J, which tilts the bed-plate and reciprocating parts to a corresponding angle with the saw.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination, with the angle-plate C, of the adjustable plate D, having dovetailed ways, in which the reversible tool-carrier E is secured, said tool-carrier having pivoted to it the frame F, carrying the filing attachment, as and for the purpose set forth.

2. The combination, with the angle-plate C, of the pivoted plate J, having arms J¹ J², bearings *i*, and adjusting-screws *h h*, as and for the purpose set forth.

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EDMOND D. NOBLE.

Witnesses:

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WALLACE GEE.