

H. D. Barnes.

Floor Clamp.

N^o 71440

Patented Nov. 26, 1867.

Fig. 1.

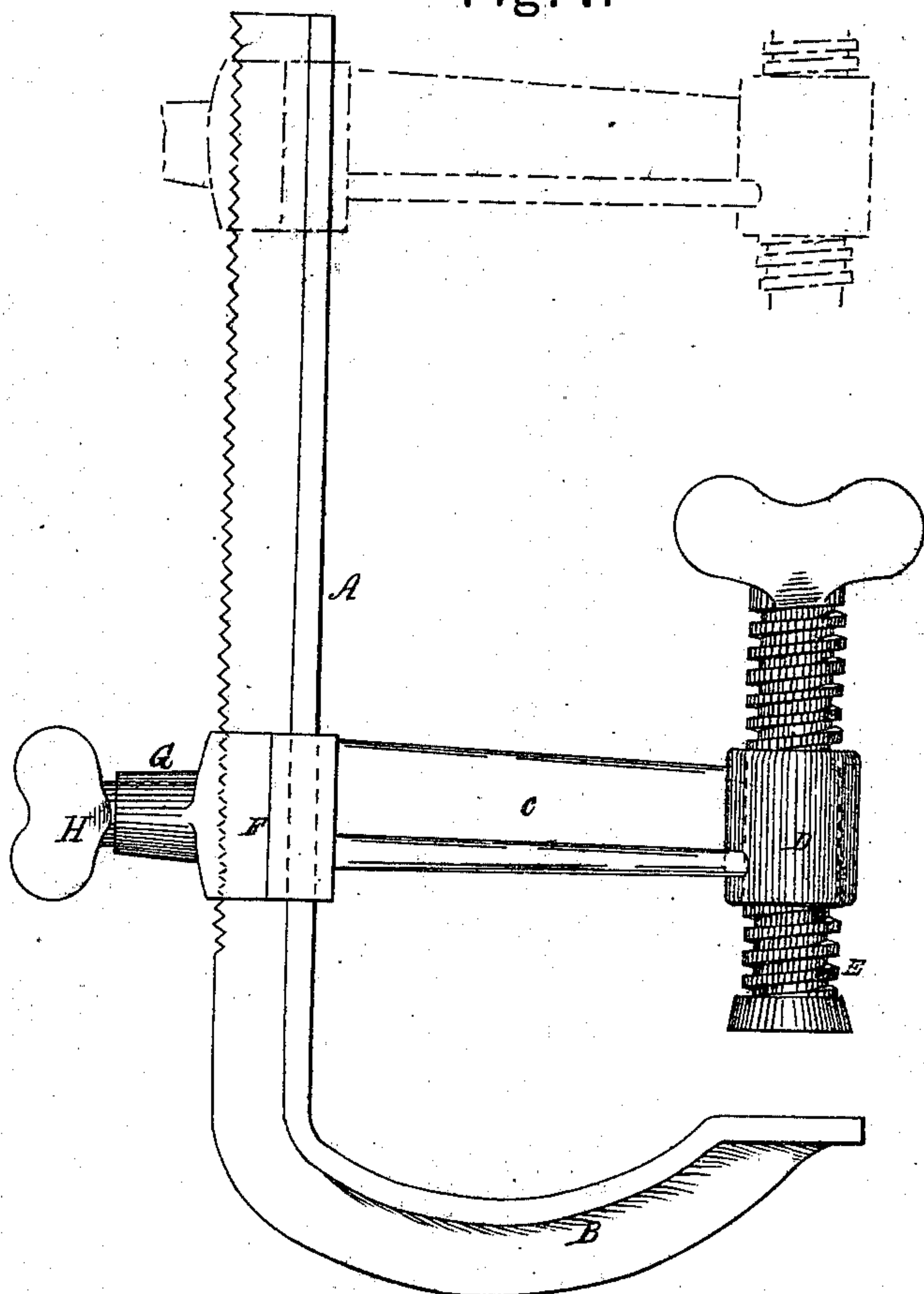


Fig. 2.

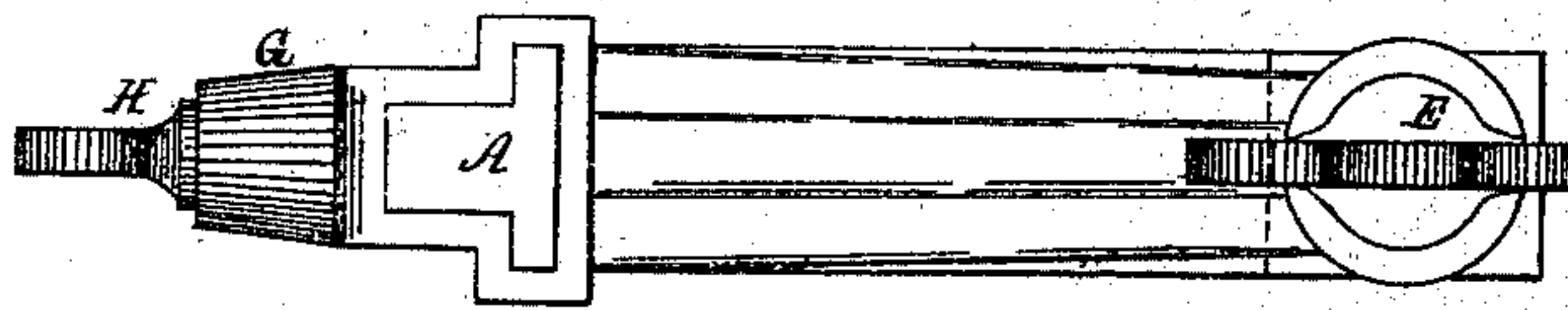
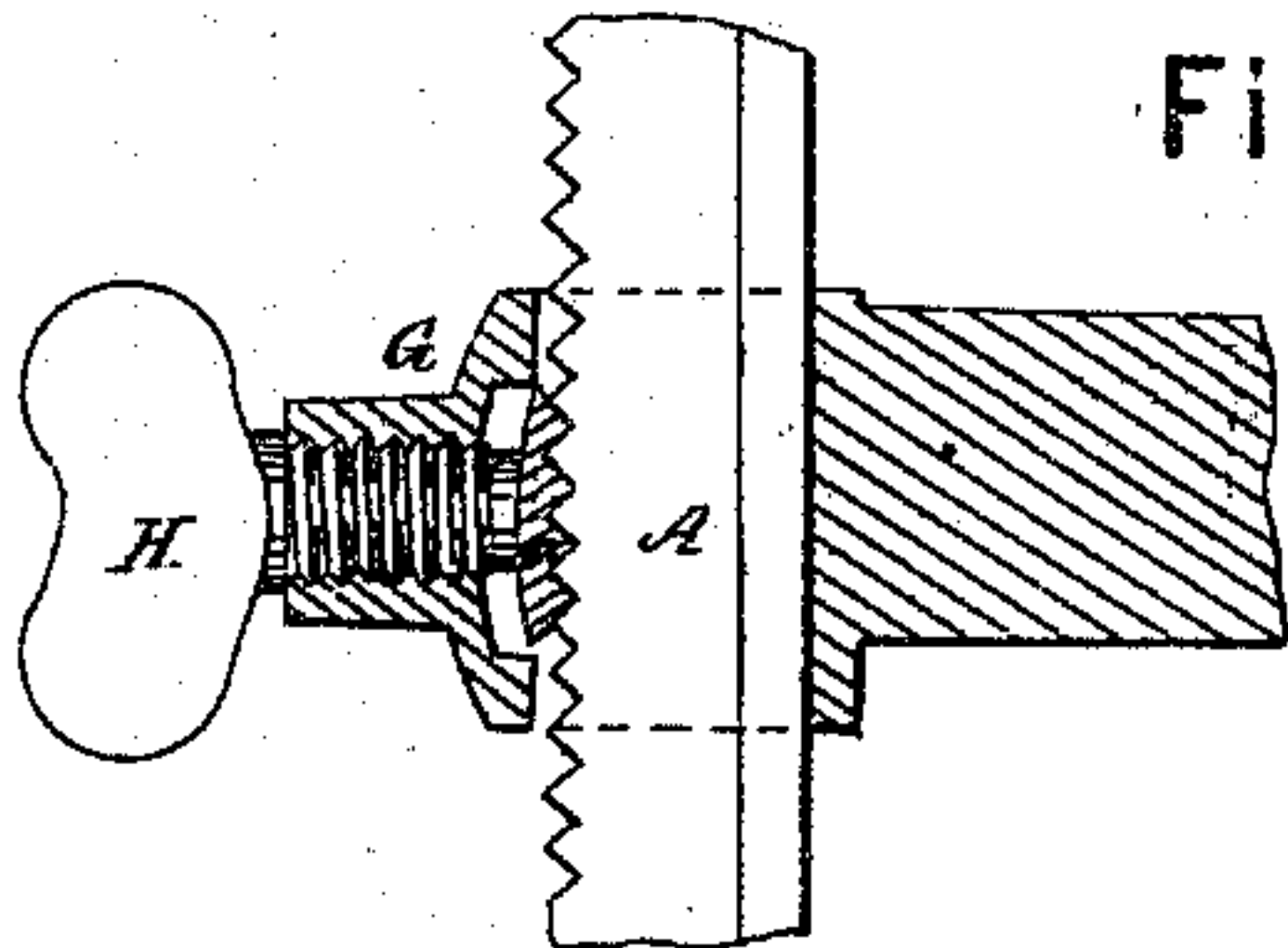


Fig. 3.



Witnesses.

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HENRY D. BARNES, OF FAIR HAVEN, CONNECTICUT.

Letters Patent No. 71,440, dated November 26, 1867

IMPROVEMENT IN FLOOR-CLAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY D. BARNES, of Fair Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Screw-Clamp; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view,

Figure 2 a top view, and in

Figure 3 a partial central section.

This invention relates to an improvement in clamps, such as are used by wood-workers and others for clamping their work, and consists in the peculiar construction whereby the long screw usually employed is reduced in length, and the operation of the clamp very much facilitated.

To enable others to construct my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the beam, and B the jaw formed upon or fixed thereto. I prefer to make the beam A of T-shape, as denoted in fig. 2.

Heretofore the screw has been inserted through a fixed bar or jaw at the other extreme of the beam, so that it is necessary to run the screw from end to end, according to the thickness of the material to be clamped.

To avoid this necessity I arrange an arm, C, upon and so as to move up and down on the beam A, from one extreme to the other, and in the end of the said arm I fix a nut, D, through which a short screw, E, is passed, and I secure the said arm C upon the beam A by forming the edge of the beam serrated, or with teeth, as denoted in figs. 1 and 3, and within that portion F of the arm C which surrounds the beam A, I arrange a plate, *a*, (see fig. 3,) provided with corresponding serrations, and on to the said plate through a nut, G, in the arm, I insert a set-screw, H, which, bearing down on to the said plate, sets the plate into the corresponding serrations on the beam, thus securely holding the arm C in any desired position on the beam, so that if a thin substance is to be clamped, the arm C may be set down accordingly, as denoted in black; or, if for thick, up, as denoted in red; and thus necessitate but a short movement of the screw.

I do not wish to be understood as broadly claiming a clamp-screw constructed with an adjustable arm, as such are common and well known.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The arrangement of the serrated plate *a* within the arm C, combined with a corresponding serrated surface of the beam A and the set-screw H, constructed and arranged so as to secure the arm C upon the beam A, substantially in the manner herein set forth.

HENRY D. BARNES.

Witnesses:

A. J. TIBBITS,

JOHN H. SHUMWAY.