

(No Model.)

A. G. SNELL.
SAW FRAME.

No. 561,353.

Patented June 2, 1896.

Fig. 1.

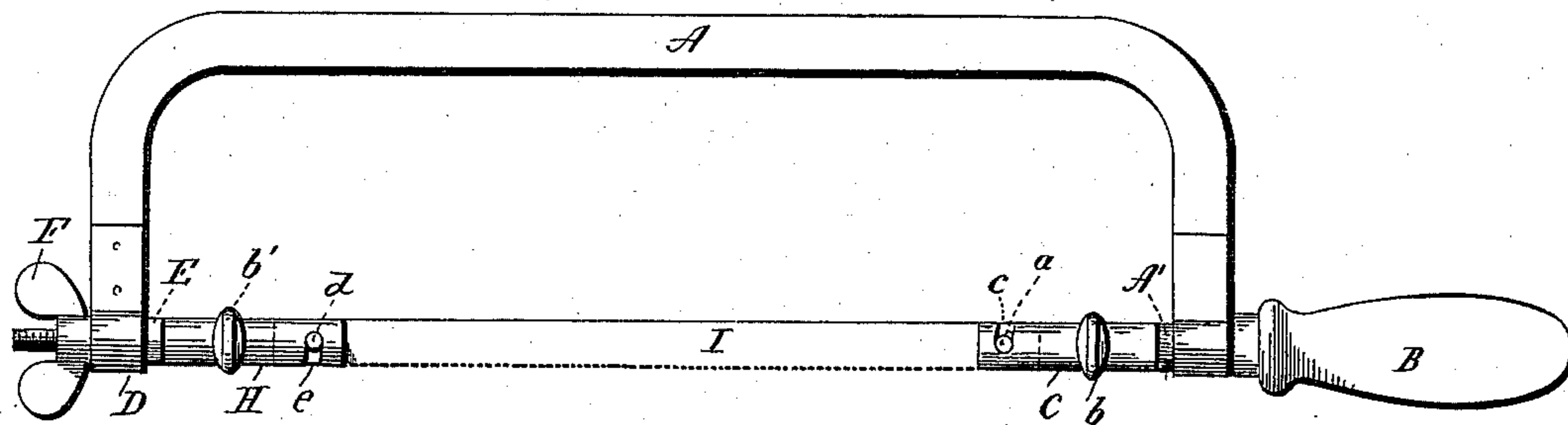


Fig. 2.

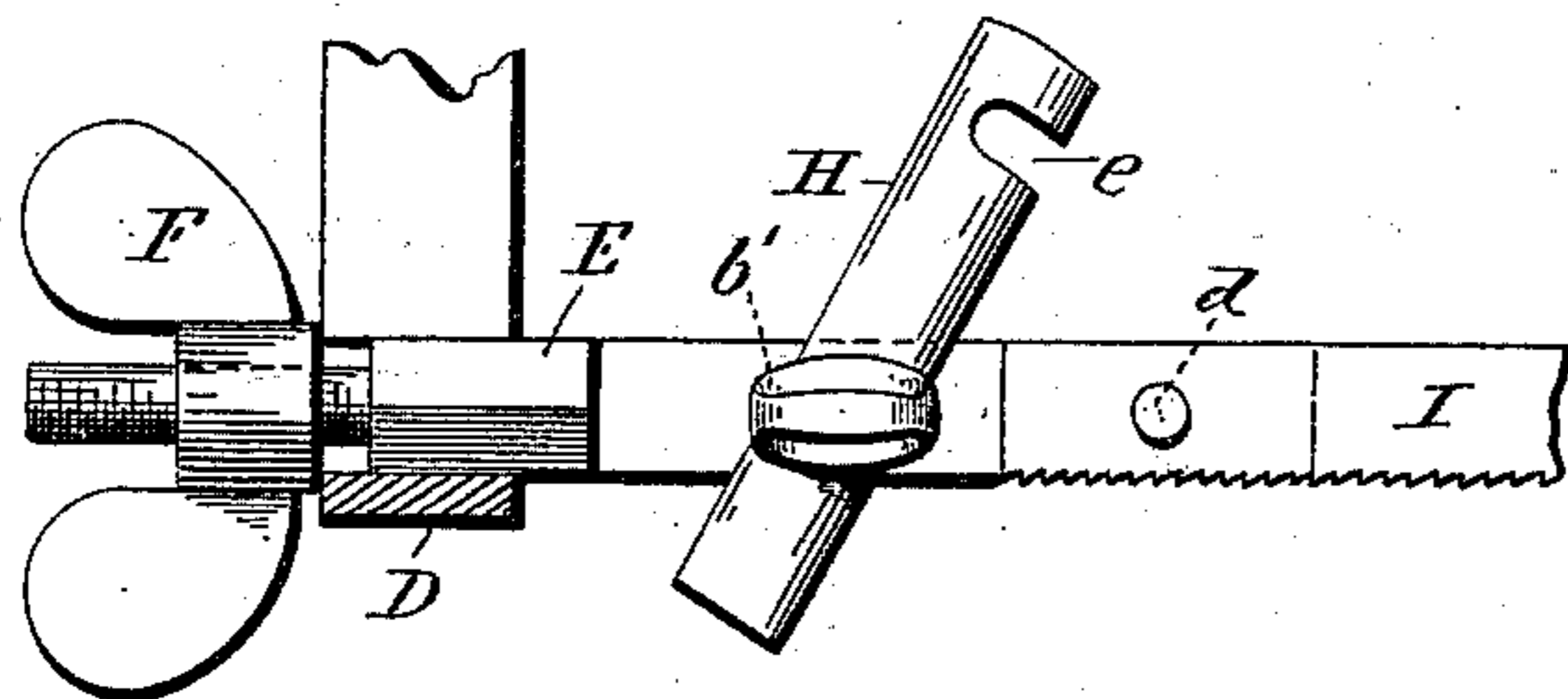
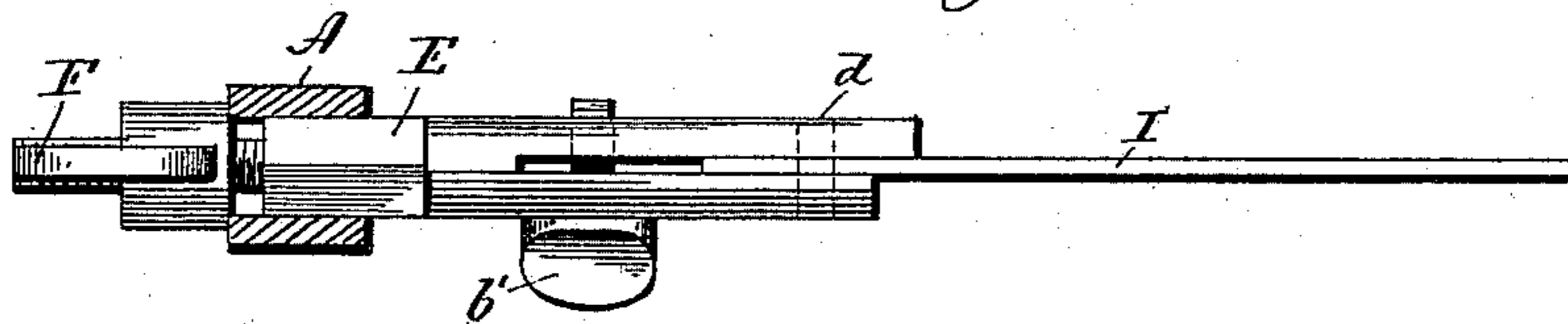


Fig. 3.



Witnesses.

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ADOLPHUS GAYLORD SNELL, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO
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SAW-FRAME.

SPECIFICATION forming part of Letters Patent No. 561,353, dated June 2, 1896.

Application filed April 13, 1896. Serial No. 587,251. (No model.)

To all whom it may concern:

Be it known that I, ADOLPHUS GAYLORD SNELL, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Saw-Frames; 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 of a saw-frame embodying my invention; Fig. 2, an enlarged view of the outer end of the frame with the latch in the open position; Fig. 3, a top view of the same parts, illustrating the latch in a closed position.

This invention relates to an improvement in saw-frames, and particularly to that class which are adapted to hold saw-blades, commonly called "hack-saws;" and while the invention is particularly intended for hack-saw frames it is equally applicable for holding fretwork-saws in saw-frames and blades in power sawing machinery for cutting metals. In the more general construction the saws are formed with a perforation in each end, through which a pin having a bearing in the frame extends, and so that the strain of the saw comes entirely upon the pin, and when "soft-back" saws are employed they are very liable to stretch the opening, thereby diminishing the tension upon the blade, which should be held very firmly. Furthermore, they frequently pull away from the pins, and thus destroy the blade.

The object of this invention is to provide a clamp for the ends of the saw in connection with the usual pins; and it consists in the construction as hereinafter described, and particularly recited in the claims.

A represents the frame, which may be of any approved construction, provided with a handle B. At one end a semicircular shank A' projects through the frame and is formed with a stud *a* near its outer end. To this shank a latch C is pivoted by a thumb-screw *b*. In one edge of the latch, and preferably the upper, is a notch *c*, adapted to receive the stud *a*, and so that the latch may be turned

into line with the shank A'. The opposite end of the frame terminates in an eye D, through which extends a shank E, threaded at its outer end to receive a thumb-nut F, which may have a bearing against the outside of the eye D. The inner end of the shank is formed with a flat side corresponding to the shank A', and carries at its outer end a stud *d*, corresponding to the stud *a*, and has pivoted to it by a set-screw *b'* a latch H, formed with a notch *e*, into which the stud *d* may project. The saw-blade I is formed with a hole at each end adapted to set over the stud *a d*. To place a saw in the frame, the thumb-screw F is turned to permit the shank E to be moved toward the shank A' to a sufficient distance to permit the saw-blade I to be conveniently engaged with the studs *a d*, the latches C H being turned, as shown in Fig. 2, for this purpose. When the saw is thus set over the studs, the latches are turned into line with the shanks and the set-screws *b* and *b'* turned so as to clamp the ends of the saw between the ends of the latches and the shanks and hold the saw rigidly in position. When the saw is thus clamped, the thumb-screw F may be turned to draw the shank E outward, whereby the saw-blade is placed under proper tension, and, being clamped by the latches against the shanks, the strain is partially, if not entirely, removed from the pins, and hence danger of stretching at any one point is avoided.

While I have shown and described the clamps in connection with a hack-saw frame, it is apparent without further description or illustration that the clamps may be employed in connection with any saw-frame; nor do I wish to be understood as limiting the invention to any particular means for adjusting the tension of the blade, as it is obvious that any other well-known tension devices may be employed, or in some cases the natural spring of the metal forming the saw-frame may be sufficient.

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

1. In a saw-frame the combination with a shank projecting inward from one end of the frame, and having a transverse pin project-

ing from one side, and near the outer end thereof, of a latch pivotally connected to said shank by a thumb-screw whereby said latch may be clamped to said shank, substantially
5 as described.

2. In a saw-frame, the combination with the inwardly-projecting shank thereof, of a latch pivotally connected to said shank by a thumb-screw, whereby said latch may be clamped to
10 said shank, said shank provided with a trans-

versely-projecting pin, and the latch with a clearance-notch therefor, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib- 15
ing witnesses.

ADOLPHUS GAYLORD SNELL.

Witnesses:

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GEORGE W. CURTIS.