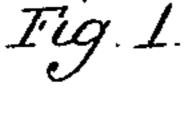
No. 641,826.

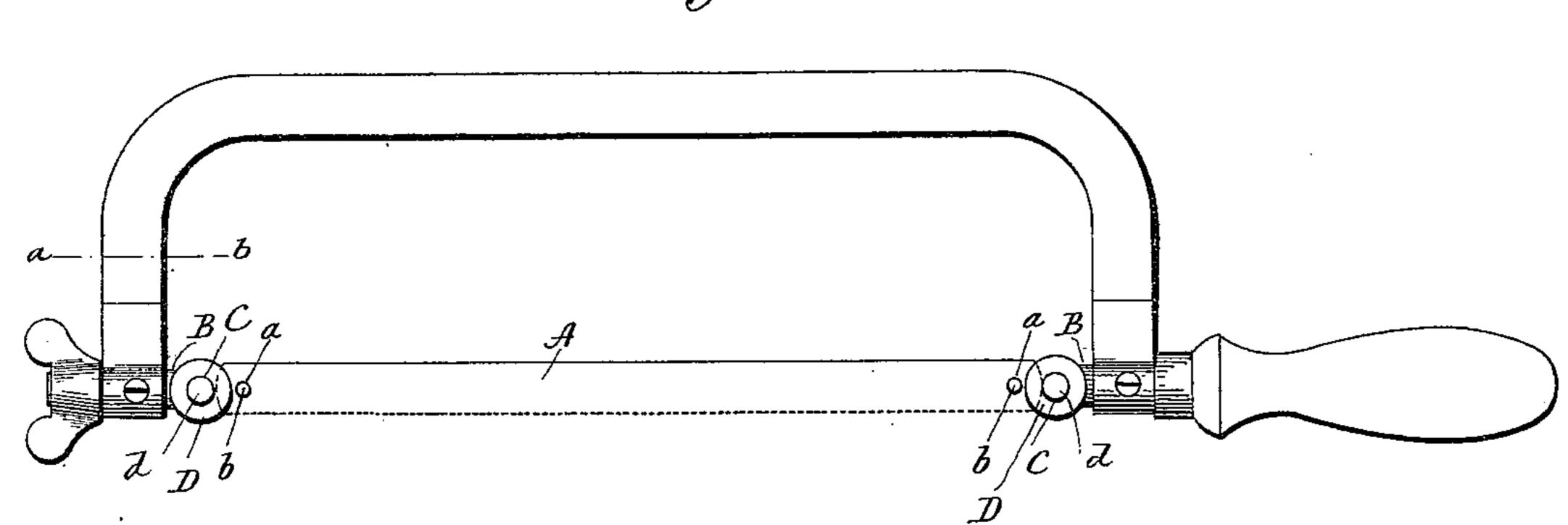
Patented Jan. 23, 1900.

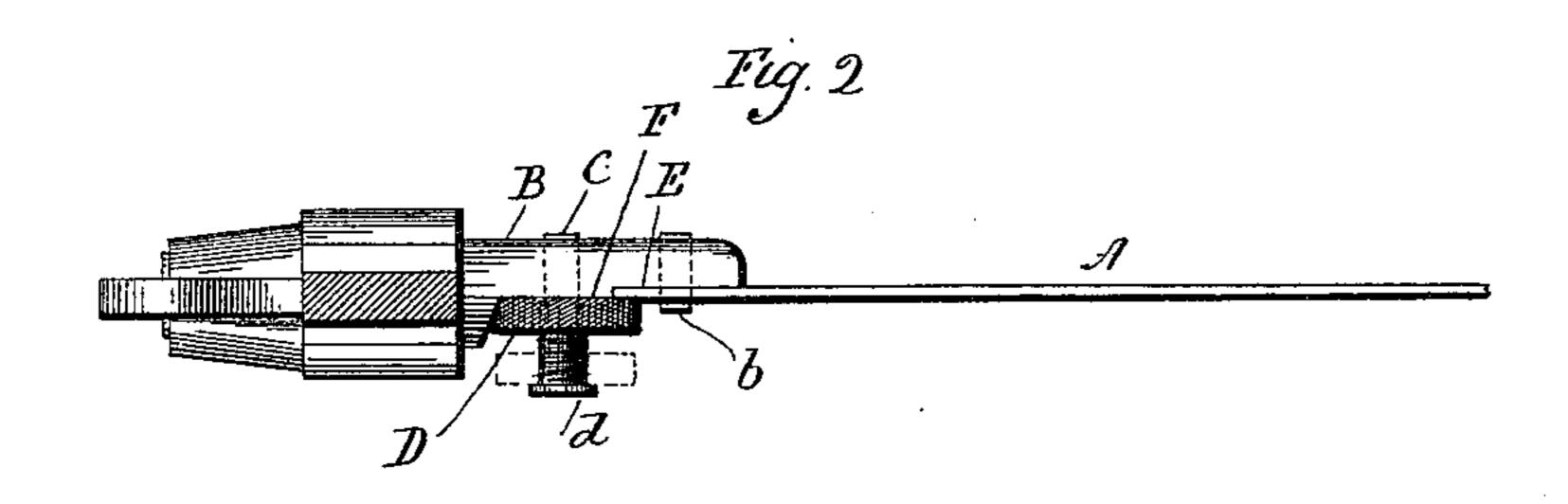
## F. S. BRADLEY. SAW FRAME.

(Application filed Nov. 10, 1899.)

(No Model.)







Witnesses. Soft Shimming Gillian D. Helery Frank S. Bradley By attys Segmon & Care

## United States Patent Office.

FRANK S. BRADLEY, OF WEST HAVEN, CONNECTICUT, ASSIGNOR TO THE WEST HAVEN MANUFACTURING CO., OF SAME PLACE.

## SAW-FRAME.

SPECIFICATION forming part of Letters Patent No. 641,826, dated January 23, 1900.

Application filed November 10, 1899. Serial No. 736,452. (No model.)

To all whom it may concern:

Be it known that I, FRANK S. BRADLEY, of West Haven, in the county of New Haven and State of Connecticut, have invented a new Im-5 provement 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, 10 and which said drawings constitute part of this specification, and represent, in-

Figure 1, a side view of a hack-saw frame constructed in accordance with my invention; Fig. 2, a sectional view on the line a b, en-

15 larged.

This invention relates to an improvement in saw-frames, and while particularly adapted for hack-saws is equally applicable for other saws employing a blade which is fastened to 20 its ends.

The object of this invention is to produce a simple device whereby the ends of the sawblades, which are usually provided with holes adapted to set over studs on the frame, will 25 be held in position, and which devices may be readily adjusted to permit the blades to be conveniently removed and replaced; and the invention consists in the construction, as hereinafter described, and particularly re-

30 cited in the claims.

As is usually the case, the saw-blade A is provided at opposite ends with perforations a, which are adapted to set over studs b, mounted in arms B, which are held at opposite ends of 35 the frame. Beyond the studs b and parallel therewith I provide screw-threaded pins C, which are riveted or otherwise secured in arms B and provided at their outer ends with heads d. On these screw-pins C are mounted 40 flat binding-nuts D, the edges of which are adapted to extend over onto the ends of the saw-blades and clamp them against the arms B. These clamping-nuts are preferably circular and exteriorly knurled, so that they may 45 be readily turned by the fingers. As herein shown, the outer ends of the arms are cut away to form seats E for the ends of the sawblades slightly below the surfaces F, against which the nuts will bear, and the surfaces F 50 of the arms are cut away to form clearance-

space for the said nuts. As usual with these |

frames, means for placing the saw under tension are provided; but as this feature forms no part of my invention it will not be shown nor described in detail.

To apply a saw to the frame, it is only necessary to turn the nut on the screw C, as clearly shown in Fig. 2, so as to permit the saw-blade to be set over the studs b, when the nuts are again turned down and so that their 60 edges overlap and bear on the ends of the sawblade, as clearly shown in Fig. 2, whereby the saw is rigidly held against the arms B and ready to be placed under tension. As also shown, the nuts are slightly greater in diame- 65 ter than the width of the arms, so that their edges project beyond the edges of the arm, whereby they may be conveniently reached with the fingers or readily turned by the thumb.

The object of the heads d is to prevent the removal of the nuts D, but it is evident that these heads may be omitted, if desired.

Having fully described my invention, what I claim as new, and desire to secure by Letters 75 Patent, is—

1. In a saw-frame, the combination with the frame thereof, of arms at the opposite ends of the frame, said arms provided with pins over which the perforated ends of the saw-blades 80 may be passed, screw-pins adjacent to said arms, and nuts on said pins adapted to overlap the ends of the saw-blades, substantially as described.

2. In a saw-frame the combination with the 85 frame, of arms extending inward from opposite ends thereof, said arms formed with sawreceiving seats, studs in said seats over which the perforated ends of the saw-blades may be passed, screw-pins projecting outward from 90 said arms parallel with said studs, and nuts on said screw-pins and adapted to overlap the ends of the saw-blades, substantially as described.

In testimony whereof I have signed this 95 specification in the presence of two subscribing witnesses.

FRANK S. BRADLEY.

Witnesses:

FRED. C. EARLE, LILLIAN D. KELSEY.