

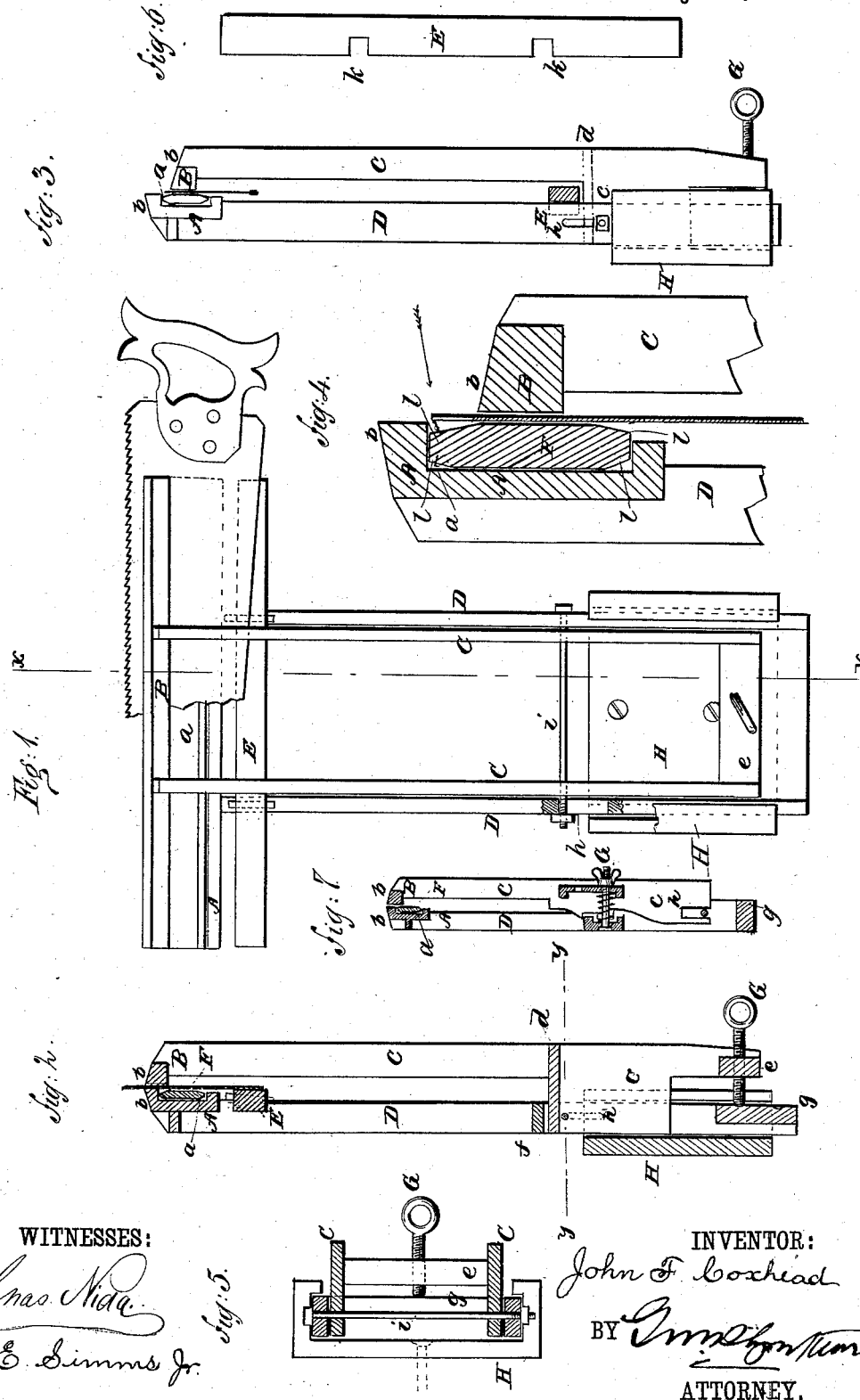
(No Model.)

J. F. COXHEAD.

SAW SET.

No. 261,687.

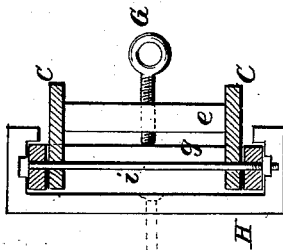
Patented July 25, 1882.



WITNESSES:

Chas. Nida.
W. E. Simms Jr.

Fig. 5.



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SAW-SET.

SPECIFICATION forming part of Letters Patent No. 261,687, dated July 25, 1882.

Application filed March 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. COXHEAD, of Poughkeepsie, Dutchess county, State of New York, have invented a new and Improved Combined Saw-Set and Vise; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, making part of this specification.

This invention is in the nature of an improvement in a combined saw-set and vise; and the invention consists in a combined saw-set and vise, with jaws constructed to have a vertical and horizontal adjustment, in combination with a removable bevel-anvil and an adjustable bolster, all constructed, arranged, and combined in the manner more particularly hereinafter described.

In the accompanying sheet of drawings, Figure 1 represents a front view of my saw-set and vise when employed as a vise; Fig. 2, a longitudinal section of same, taken in line *xx*, Fig. 1; Fig. 3, an edge view of device when employed as a saw-set; Fig. 4, a section of same; Fig. 5, a cross-section taken in line *yy*, Fig. 2; Fig. 6, a side view of bolster. Fig. 7 represents a modification of adjusting-screw with spring.

Similar letters of reference indicate like parts in the several figures.

The purpose of this invention is to combine together in one implement a saw-set and a vise, with which a saw can be filed and set easily and truly. To that end I construct my implement with two jaws, A B, with the jaw A having formed in its inner face a channel, *a*. The jaws A and B have their top surfaces beveled, as at *b*.

To the jaws A and B, on their outer faces, are secured at right angles frames C and D, the frame C having a projection or offset, *c*, formed on its inner edge, and a cross-plate, *d*, fixed between the sides of the frame, the lower end of which frame is united by a cross-bar, *e*. The frame D is likewise provided with a cross-plate, *f*, and at its lower end a plate, *g*. The side bars of the frame D are slotted, as at *h*, and through these slots and through holes formed in the projections or offsets *c* passes a screw-bolt, *i*.

Between the frames C and D is fitted a bolster, E, with notches *k* formed in one side of it, within which notches are received the edges of

the frame D, so that this bolster may slide freely up and down between the frames C and D.

Within the channel *a* is placed a steel anvil, F, with bevels *l* of different angles formed on its four edges. Through the cross-bar *e* of the frame C is fitted a thumb-screw, G.

Now, my combined saw-set and vise, when constructed substantially as above described, is operated, when intended for a vise, by pushing upward the frame C until the cross-plate *d* comes in contact with the cross-plate *f*, which acts as a stop to limit the upward movement of the jaw A, and in this position both jaws are at precisely the same height. The saw-blade is then introduced between the jaws A and B, with its teeth projecting above the top of the jaws. If the saw be a backed saw, it will lie snugly and without vibration between the jaws and their frames C D; but if it be a saw without a back the bolster E is slipped up between the side of the saw and the frame, tightly jamming the blade and keeping it rigidly in place. The thumb-screw G being then adjusted, the two jaws are brought tightly together, and the entire implement may then be placed in an ordinary bench-vise and there held in place while the saw is being filed; or the frame D may be provided with a sliding cleat, H, by which it can be screwed fast to the side of a bench, if desired.

To set a saw with my implement the thumb-screw G is slackened and the jaws somewhat opened, and the frame C, with jaw B, allowed to drop until the projection or offset *c* on the frame C comes in contact with the plate *g* on the frame D, which limits the downward vertical movement of the jaw B. When in this way lowered the saw to be set is inserted so that it will be confined between the inner surface of the jaw B and the face of the anvil F, the teeth of the saw projecting above the upper surface of the jaw B. The bolster E, if the saw be one without a back, being employed as before described, and with a punch and hammer, the saw-teeth are swaged over in the ordinary manner until they lie against the beveled edge *l* of the anvil F. Now, if it be desired to set the saw to a greater or less extent, the anvil F is slipped out of the channel *a*, and by reversing its position a different bevel will be presented, against which the saw-teeth

may be swaged, as before stated, and the degree of set be in this way regulated.

The frames C and D of the jaws are held together by the screw-bolt *i*, which also acts as a pivot, permitting the jaws to be opened to some extent, and by reason of the slots *h* it acts as a guide to the vertical adjustment of the jaw A, and the bolt and the slots also tend to limit the extent of the vertical adjustment of the jaw.

Instead of placing the thumb-screw at or near the ends of the frames C and D, it may be fitted in some other and more convenient position on said frames, and a spiral or other spring may be interposed between these frames, so that when the screw is released this spring will automatically open the jaws for the removal of the saw or otherwise. This modification is shown in Fig. 7.

I am aware that it is not new to make saw-sets with adjustable jaws or jaw-carrying frames, and, as hereinbefore stated, I lay claim to the invention only of certain new constructions in this class of saw-sets.

Having now described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. The frame C, having the jaw B, offset *c*, cross-plate *d*, and cross-bar *e*, and the frame D, having the jaw A, bolster E, slots *h*, and cross-plates *f* and *g*, combined with the connecting-bolt *i* and set-screw G, substantially as and for the purpose described.

2. In a combined saw-set and vise having two jaw-carrying frames, one of such frames, D, having longitudinal slots *h*, combined with a bolt, *i*, connecting the two frames, substantially as shown and described, whereby the frames may have a vertical adjustment, and also be moved toward and from each other.

3. The combination, substantially as shown and described, of jaws A B, jaw-carrying frames D C, bolt *i*, set-screw G, adjustable bolster E, and bevel-anvil F, constructed and arranged to operate as and for the purpose specified.

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Witnesses:

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