

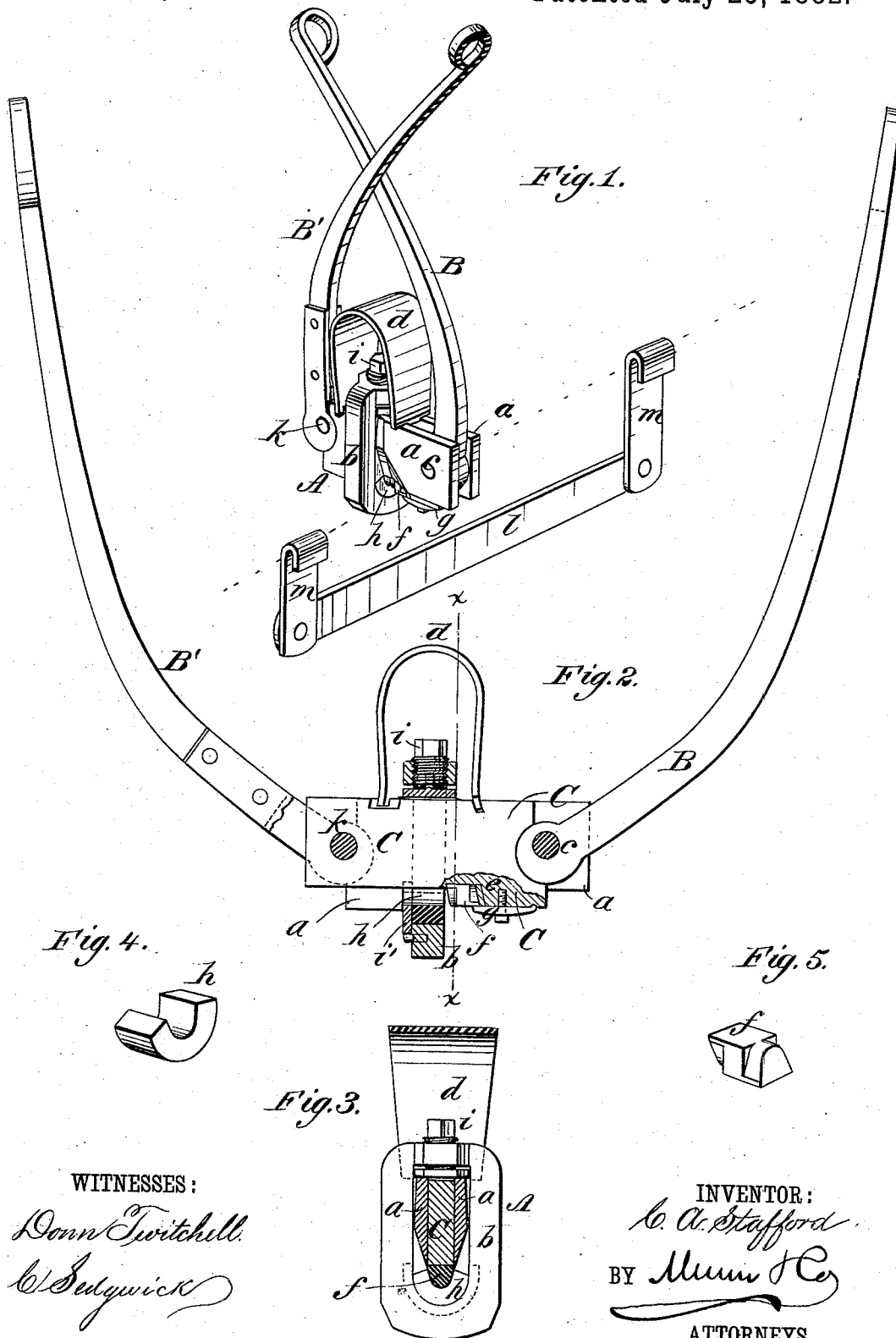
(No Model.)

C. A. STAFFORD.

SAW GUMMER.

No. 261,779.

Patented July 25, 1882.



WITNESSES:

Donn Twitchell.
W. Sedgwick

INVENTOR:

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UNITED STATES PATENT OFFICE.

CLARENCE A. STAFFORD, OF NORWOOD, MICHIGAN.

SAW-GUMMER.

SPECIFICATION forming part of Letters Patent No. 261,779, dated July 25, 1882.

Application filed November 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE A. STAFFORD, of Norwood, in the county of Charlevoix and State of Michigan, have invented a new and useful Improvement in Saw-Gummers, of which the following is a full, clear, and exact description.

The object of my invention is to furnish a light and convenient implement for gumming saws; and it consists in a die-block and cam-levers, combined with a head-piece, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the gummer in position for use. Fig. 2 is a sectional side view, showing the dies in their compressed position. Fig. 3 is a cross-section on line *x x* of Fig. 2. Figs. 4 and 5 are perspective views of the dies detached.

A is the head, consisting of plates *a a*, and a yoke or shackle, *b*, in which the plates are confined.

B B' are the cam-levers; and C is the die-block, moving between the plates *a*. The lever B is hung on a pin or bolt, *c*, between the plates at one end, and engages by its cam end against one end of block C, while the lever B' is forked and hung by a pin, *k*, on one end of block C, and acts by its cam ends against the opposite ends of the plates *a*, so that when the outer ends of the levers are moved apart they act simultaneously to move the die-block. A U-shaped spring, *d*, engaging the plates *a* and block C by its ends, moves the block when the levers are brought together.

The block C is formed, as shown most clearly in Fig. 2, with a shouldered portion, *e*, projecting outside the head A, and against this shoulder the die or cutter *f* is held by a clamping-piece, *g*. The cutting ends are of U form, as shown in Fig. 5, each end being the same, to allow reversal of the die.

The fixed die or cutter *h* (shown separately in Fig. 4) is the segment of a ring fitted between the edges of plates *a* and the outer end of shackle *b*. A screw, *i*, tapped in the op-

posite end of the shackle, and bearing on a washer inserted between the shackle and plates, serves to clamp the die *h* securely. Shoulders on plates *a* and a plate, *i'*, behind the die *h*, sustain the pressure of cutting.

In operation the saw-plate is entered between the dies *h* and *f*, and, the levers being then moved out, the moving die is pressed to the plate. The leverage is very powerful and the cutters act with precision. For a deep cut, two cuts will be made closely together, and the middle portion then removed by a third cut. The plates *a* are beveled next to the die *h*, so that they may enter between the teeth when the cut is to be deepened.

I use the gage shown in Fig. 1 for securing uniform depth. This consists of a bar, *l*, provided at its ends with pivoted hooks *m*, for taking over the saw-plate edge, as shown. One hook *m* is shorter than the other, so as to diminish the depth of gage toward the saw ends. The cut is made down to the upper edge of bar *l*, which thus serves as a guide.

This gummer is light and convenient for use, and at the same time durable and powerful. It is intended for use on crosscut-saws.

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

1. The saw-gummer consisting of plates *a a*, yoke *b*, die-block C, cutters *f h*, spring *d*, and cam-levers B B', substantially as shown and described, combined for operation as set forth.

2. In saw-gummers, the combination of block C, carrying a removable cutter, cam-levers B B', and the head A, provided with a fixed cutter, substantially as shown and described.

3. The yoke *b*, provided with screw *i* and cutter *h*, in combination with the plates *a*, die-block C, and operating-levers B B', substantially as shown and described.

4. The gage consisting of bar *l* and hooks *m*, for use in connection with the gummer, as set forth.

CLARENCE ANGELO STAFFORD.

Witnesses:

ALLEN Z. DELONG,
SAMUEL A. BROWN.