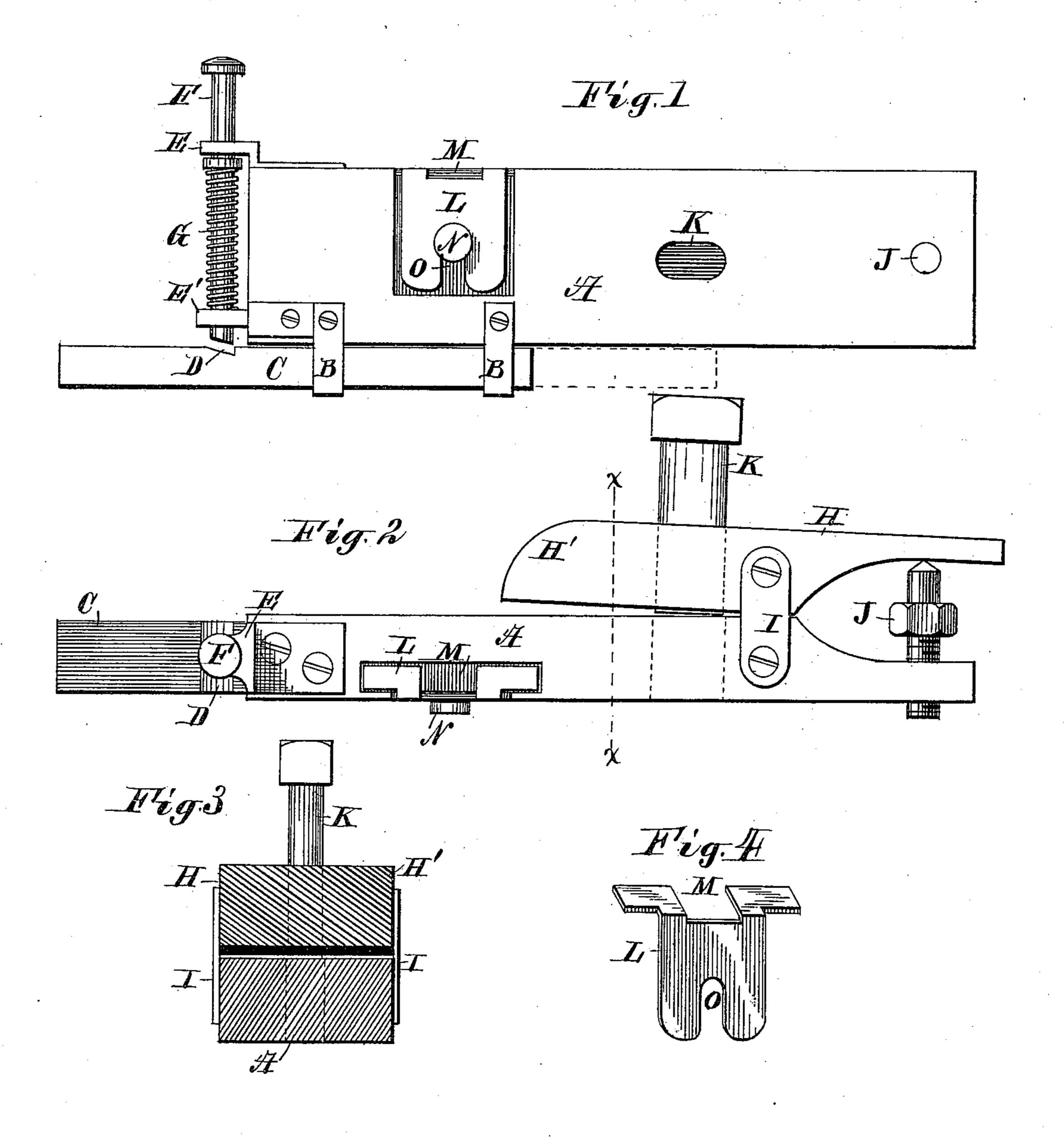
(No Model.)

## D. McDONOUGH.

COMBINED SAW SETTING AND GUMMING TOOL.

No. 336,933.

Patented Mar. 2, 1886.



Witnesses G.M. Gridley M. H. Schinner

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## United States Patent Office.

DANIEL McDONOUGH, OF EAGLE RIVER, WISCONSIN.

## COMBINED SAW SETTING AND GUMMING TOOL.

SPECIFICATION forming part of Letters Patent No. 336,933, dated March 2, 1886.

Application filed August 24, 1885. Serial No. 175, 193. (No model.)

To all whom it may concern:

Be it known that I, Daniel McDonough, of Eagle River, in the county of Lincoln and State of Wisconsin, have invented a new and useful Combined Saw Setting and Gumming Tool; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side view of my combined tool. Fig. 2 is a view of the tool as seen from above when in the position shown in Fig. 1. Fig. 3 is a cross-section of the tool on line xx of Fig. 2. Fig. 4 is the saw-tooth gage removed from the tool.

The same letters refer to like parts in all the views.

In the drawings, A is a solid bar, and is the main or principal piece of the tool, to which all the other parts are attached or on which they are supported. To one edge of this bar, near one end but at a distance from each other, are two stirrups, B B, rigid to the bar A and extending beyond its edge. A bar, C, slides within these stirrups and is provided on its inner or upper side with a downwardly-beveled recess, D, which recess is intended and adapted for a seat into and against the bottom of which the teeth of the saw are severally forced by the punch for setting the teeth.

At the end of the bar A, and rigidly affixed thereto and projecting therefrom, are two lugs, 35 E E', each provided with a vertical aperture intended and adapted for bearings in which the punch F is supported and has a vertical movement. The lower end of the punch F is beveled off at the same angle as the bottom of 40 the recess D, into which recess said punch is adapted, when struck on the top, to force the saw-tooth placed over the recess D. Around the punch F is a coiled wire spring, G, the lower end of which rests upon the lug E' and 45 the upper end rests against a collar rigid on the punch F, which spring is adapted to lift the punch away from the bar C, over which, when extended, as shown in Fig. 1, the punch is located.

Near the other extremity of the bar A a jaw, H, is pivoted thereto by the cross-bars I I.

The inner end, H', of this jaw forms, with the side of the bar A opposite thereto, a clamp adapted to receive and hold the saw for gumming. The jaws of this clamp are forced and 55 held together by means of a set-screw, J, interposed between the outer rear ends of the jaw H and the bar A, which set-screw turns upon a screw-thread in the bar A, its other end being against the jaw H, said set-screw being 60 provided with a milled or nut-faced rigid collar for convenience in turning it up or down. There is an aperture through the jaw H', and concurrent and homogeneous therewith an aperture through the bar A, into which the gum- 65 ming-punch K is fitted and in which it has free movement vertically in position shown in

Fig. 2. The bar A has a T-shaped recess in its top, and continuous therewith a recess in the side, 70 which said top and side recess is adapted to receive and hold the saw-tooth gage L. This saw-tooth gage is adapted for gaging the drag or clearing teeth of the saw, which are a little shorter than the cutting-teeth. This gage con- 75 sists of a piece of sheet metal bent at right angles, forming a top and side, having a slot, M, cut through the top and down so far on the side below the inside of the top as the clearing-teeth should be shorter than the cutting- 80 teeth of the saw, which slot is sufficiently large to permit the saw-file to run freely therein. The recess in the bar A is of a proper size and depth for receiving said gage L therein, wherein it is retained by the large-headed stud N, 85 rigid in bar A, the shank of which is adapted to be received within the socket O in said gage, while the edge of the adjacent parts of the

The various uses of this tool are in part as 90 follows: The tool being in the position shown in Fig. 2, a saw is inserted in the clamp H'A, so that the part to be gummed will be directly across the aperture in which the punch K moves, and is made fast by means of the setserew J, when the punch K is struck on the top with sufficient force to punch out the part, as desired, which process is repeated as many times as is necessary to gum the entire saw. To set the saw, the tool is placed in the position shown in Fig. 1 and the bar C is moved out and adjusted so that the recess D is di-

rectly beneath the punch F, Fig. 1, and a saw lying on its side upon the bar C is so far thrust under the punch that the point of one of the cutting-teeth is over the deepest part of the recess D. The punch F is then struck with sufficient force to set the tooth firmly down upon and against the bottom of the recess D, and the saw-gage L is removed from the bar A and used as hereinbefore indicated.

What I claim as new, and desire to secure

by Letters Patent, is—

The combined tool consisting of the bar A, provided with a recess for the reception of gage L, the sliding bar C, provided with bev-

eled recess D, the movable punch F, having 15 beveled lower end and a lifting-spring, G, the jaw H, pivoted onto bar A and adapted to be clamped thereto by set-screw J, and the punch K, adapted to move freely in apertures through the jaw H and bar A, respectively, all sub- 20 stantially as described.

In testimony whereof I affix my signature

in presence of two witnesses.

DANIEL McDONOUGH.

Witnesses:

B. R. LEWIS, DANIEL GRAHAM.