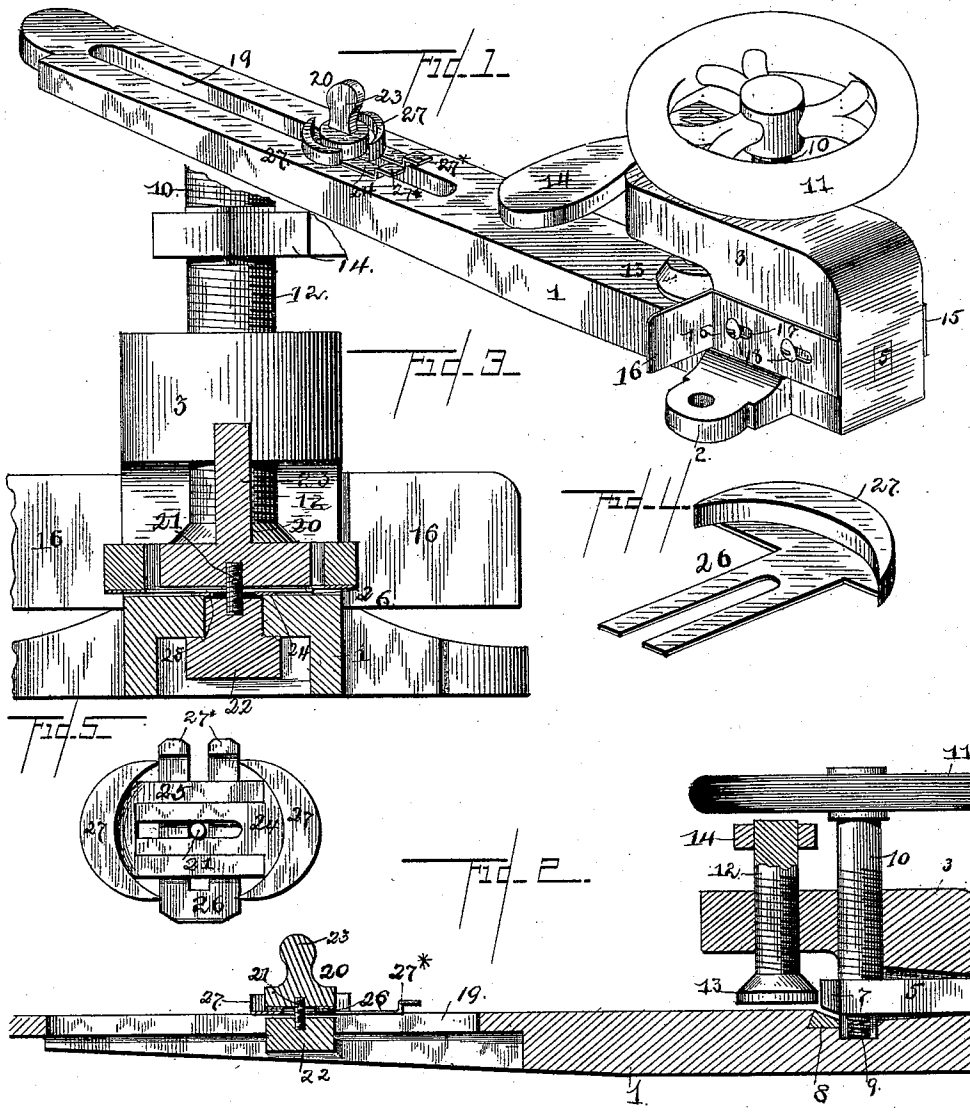
(No Model.)

J. McCARTHY.

SAW SET.

No. 468,889. Patented Feb. 16, 1892.



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UNITED STATES PATENT OFFICE.

JOHN MCCARTHY, OF MANISTIQUE, MICHIGAN.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 468,889, dated February 16, 1892.

Application filed April 9, 1891. Serial No. 388,242. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCCARTHY, a citizen of the United States, residing at Manistique, in the county of Schoolcraft and State of Michigan, have invented a new and useful Saw-Set, of which the following is a specification.

The invention relates to improvements in saw-setting devices.

The object of the present invention is to simplify and improve the construction of saw-setting devices, and enable the same pressure to be exerted on each tooth of a saw, and to prevent a saw slipping during swaging, and to provide means whereby both crosscut and circular saws may be accurately adjusted.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a saw-setting device constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Figs. 4 and 5 are detail views of the means for securing circular saws.

Referring to the accompanying drawings, 1 designates a bed-plate constructed of suitable metal and designed to be secured to a suitable bench or support by screws, which pass through perforated ears 2, formed integral with the bed-plate and arranged on opposite sides of the same, near one end thereof, and rising from one end of the bed-plate is an L-shaped standard or arm 3, formed integral with the bed and provided with an opening 4, extending longitudinally of the bed and adapted for the reception of a press-bar 5. The press-bar has its end 6 pivoted to the standard and arranged in the opening 4 at the end of the bed-plate, and the other end 7 extends beyond the standard and has its lower edge beveled and arranged above a beveled portion 8 of the bed and adapted to press the tooth of a saw against the same. The press-bar 5 is normally held elevated and above the beveled portion or anvil 8 by a spiral spring 9, interposed between the press-bar and the bottom of the opening 4, and the press-bar is forced downward against the action of the spring 9 to give lateral slant or set to the teeth of the saw by a screw 10, which is provided at its upper end with a hand-wheel 11 and is arranged in a vertical threaded opening of the standard 5. By this construction the amount of pressure exerted on the teeth of a saw and the consequent degree of set can be regulated and the same pressure can be given to each tooth.

The saw is clamped by a screw 12, which is arranged in a vertical opening of the arm or standard 3 and is provided at its lower end with a disk or plate 13, which presents a flat face to a saw and prevents the same slipping, thereby obviating any liability of the saw-teeth springing backward, as the blade is securely clamped, and a tooth can be held under a given pressure as long as desired, which is impossible where the force is applied through a hand-lever or by blows from a hammer or other tools. The upper end of the screw 12 is squared and is engaged by a wrench 14, which is provided with a rectangular socket or opening to receive the squared end of the screw.

The saw to be set is gaged by longitudinally-adjustable guide-plates 15, which are arranged on opposite sides of the standards and are provided with laterally-extending arms 16, against which the teeth are arranged. The plates 15 are provided with longitudinal slots 17, in which are arranged set-screws 18, which secure the plates at any desired adjustment, and the laterally-extending arms 16 may be straight, as illustrated in the accompanying drawings, to enable a crosscut-saw to be adjusted, or they may be curved to permit a circular saw to be arranged against them.

The bed is provided with a longitudinal opening 19, in which is arranged a set-screw 20, consisting of a stem 21, provided at its lower end with a T-shaped block 22 and a thumb-nut 23. The lower face of the bed is recessed along the opening 19, and the head of the block 22 fits in the recess, and the neck portion is arranged in the opening. The thumb-nut clamps longitudinal plates 24 and 25 and a transverse plate 26 to the bed, and the longitudinal plates have secured to their outer ends curved pieces 27, and the plate 26 has bent ends 27*, both of which are adapted to be adjusted to fit the eye of a circular saw to enable the latter to be rotated to bring its teeth beneath the press-bar and to

prevent longitudinal or lateral movement of the saw. The curved pieces 27 and the bent ends 27* are adjusted to the eye of a saw, and the latter is moved toward the standard to bring the teeth in proper position for setting. The thumb-nut is then tightened and the saw may be rotated, and it is clamped by the screw 12, similar to a crosscut-saw. Should the circular saw be too large to permit the use of the curved block, it may be adjusted by means of the gage-plates 15, provided with curved arms, as before described.

What I claim is—

1. In a saw-setting device, the combination of the bed having the anvil 8, the standard rising from the bed, the press-bar pivoted in the standard and provided with a beveled end 7, the spring arranged beneath the press-bar, the screw 10, arranged to engage the press-bar and provided with a hand-wheel, the vertical screw 12, arranged in the standard and having its lower end provided with a disk and having its upper end squared and adapted to be engaged by a wrench, and the guide-plates adjustably secured to opposite sides of the standard, substantially as described.

2. In a saw-setting device, the combination of the bed having a longitudinal opening, the set-screw arranged in the opening, the slotted plates 24 and 25, and the curved pieces 27, arranged on the plates 24 and 25 and adapted to be adjusted to suit the eye of a circular saw, substantially as described.

3. In a saw-setting device, the combination of the bed having a longitudinal opening, the set-screw arranged in the opening, the slotted plates 24 and 25, the plate 26, arranged at right angles to the plates 24 and 25 and having the bent ends 27*, and the curved pieces 27, arranged on the plates 24 and 25 and adapted to be adjusted to suit the eye of a circular saw, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN McCARTHY.

Witnesses:

DUNCAN D. STEWART,

LOTTIE BOWEN.