R. HEUNSCH.

MACHINE FOR SETTING SAW-TEETH.

No. 193,512. Patented July 24, 1877.

Fig. 1.

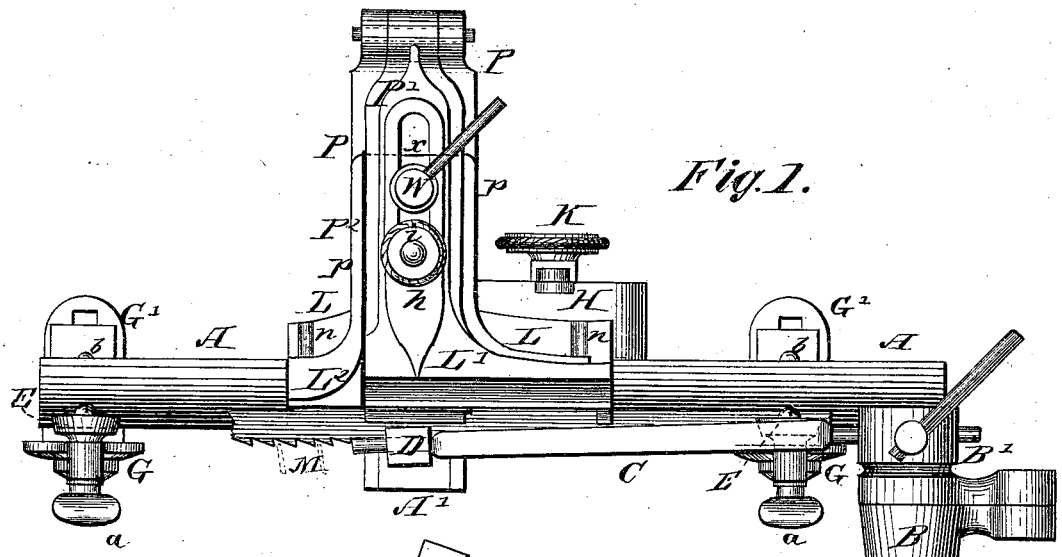


Fig. 2.

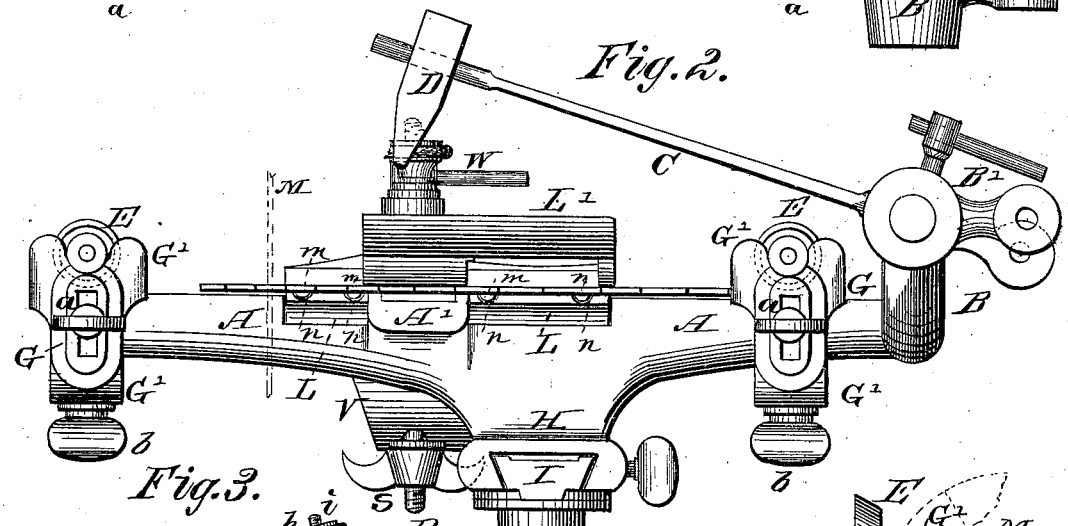


Fig. 3.

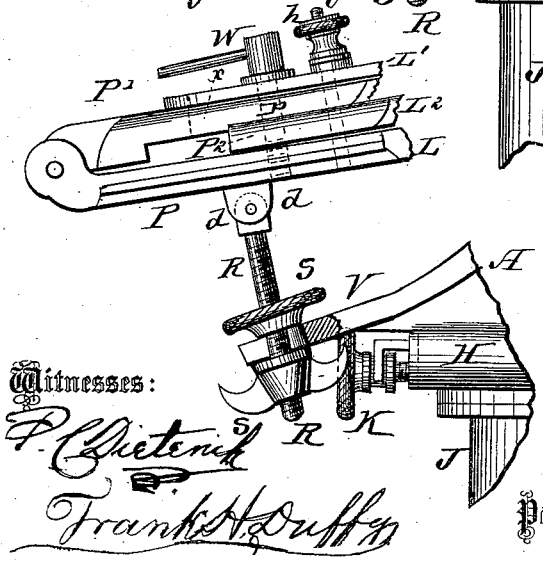
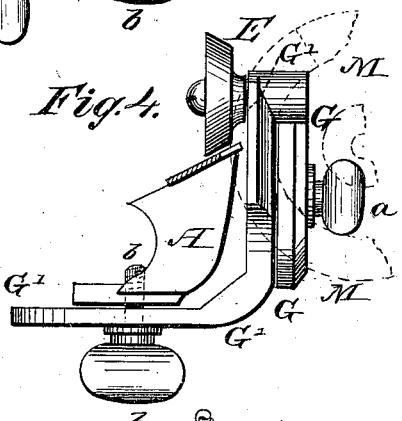


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

RUDOLPH HEUNSCH, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO GEORGE FOLLANSBEE AND R. C. HEWITT, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR SETTING SAW-TEETH.

Specification forming part of Letters Patent No. **193,512**, dated July 24, 1877; application filed May 17, 1877.

To all whom it may concern:

Be it known that I, RUDOLPH HEUNSCH, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Saw-Setting Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for setting saws, as will be hereinafter more fully set forth.

In the annexed drawing, which fully illustrates my invention, Figure 1 is a plan view, Fig. 2 is a front elevation, and Figs. 3 and 4 are details views, of various parts embodying my invention.

A represents the bed of my saw-set, provided at one end with a head, B, to which is pivoted a corresponding head, B′, and this latter head carries an adjustable spring-arm, C, on which the setting-hammer D is placed, the same as described in previous patents for saw-sets granted to me. This hammer works on an anvil, A′, projecting from, and forming part of, the bed A. The face of the bed A is beveled, as shown, and when the saw-blade is laid thereon, and held by the clamp hereinafter described, it is held down to the bed on each side of the clamp by a correspondingly-beveled roller, E, mounted on a stud projecting from a longitudinally-slotted plate, G. This plate is adjusted up and down upon the vertical arm of an L-shaped casting, G′, by means of a thumb-screw, *a*. The horizontal arm of this casting is also slotted, and the casting adjusted back and forth on the under side of the bed, and held in any position required by a thumb-screw, *b*. The rollers E E can thus easily be adjusted according to the width and thickness of the saw-blade. On the under side of the bed A, at or near the center, is formed a dovetailed guide, H, which fits over a bevel-edged plate, I, on top of the post or pivot J, that enters the usual socket for sustaining the saw-set, and on which it can be turned in either direction.

By means of the dovetailed plate I and slide H the entire bed may be adjusted back and forth over the center-pivot J, as may be required, such adjustment being effected by means of a set-screw, K.

The saw is held by means of a clamp, constructed in the following manner: L is the lower jaw of the clamp, fitting in a recess in the bed A, and provided with a rearwardly-extending arm, P. On the under side of this arm, between two ears, *d d*, is hung a screw, R, provided with two thumb-nuts, S S. This screw is turned into a forked arm, V, projecting from the bed A, so that one thumb-nut will be above and the other below said arm.

It will readily be seen that, by means of the two thumb-nuts S S, the jaw L can be adjusted at any angle desired, to give the saw-teeth more or less set, said jaw forming a part of the bed.

To the rear end of the arm P is hinged an arm, P^1, formed at its front end with the upper jaw L^1, which is fastened down on top of the saw by means of a thumb-nut, *h*, on a screw-bolt, *i*, projecting from the lower arm P through a slot, *f*, in the upper arm P^1. The upper jaw L^1 and its arm are so constructed that an auxiliary jaw, L^2, with arm P^2, can move back and forth between the two parts of the clamp even when closed. The auxiliary jaw L^2 has a series of ribs, *m*, on its under side, fitting in transverse grooves *n* in the face of the lower jaw L, whereby the edge of said auxiliary jaw is held always parallel with the edge of the main clamp. Along the edges of the arm P^2 are flanges *p p*, which fit along the sides of the arm P^1, and also aid in keeping the auxiliary jaw in proper position. The auxiliary jaw L^2 is to be moved close up against the back edge of the saw-blade, and thus form a firm support for the same, and said jaw is held, when thus adjusted, by a set or thumb screw, W, as shown. It also serves as a guide for the saw while it is being fed forward by the worm M.

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

1. The combination, in a saw-set, of the beveled bed A, beveled rollers E E, adjustable plates G G, and adjstuable L-shaped arms

G′ G′, substantially as and for the purposes herein set forth.

2. The combination of the clamping-jaws L L^1, with their arms P P^1 hinged together, the screw R, with thumb-nuts S S, and the forked arm V, substantially as and for the purposes herein set forth.

3. The adjustable clamping-jaws L L^1 and arms P P^1, in combination with the auxiliary intermediate jaw L^2, provided with the ribs *m*, substantially as and for the purpose set forth.

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

RUDOLPH HEUNSCH.

Witnesses:
WM. B. UPPERMAN,
WILLIAM L. BRAMHALL.