A. BOISNET.

MACHINE FOR SETTING THE TEETH OF SAWS.

No. 188,848. Patented March 27, 1877.

Fig. 1.

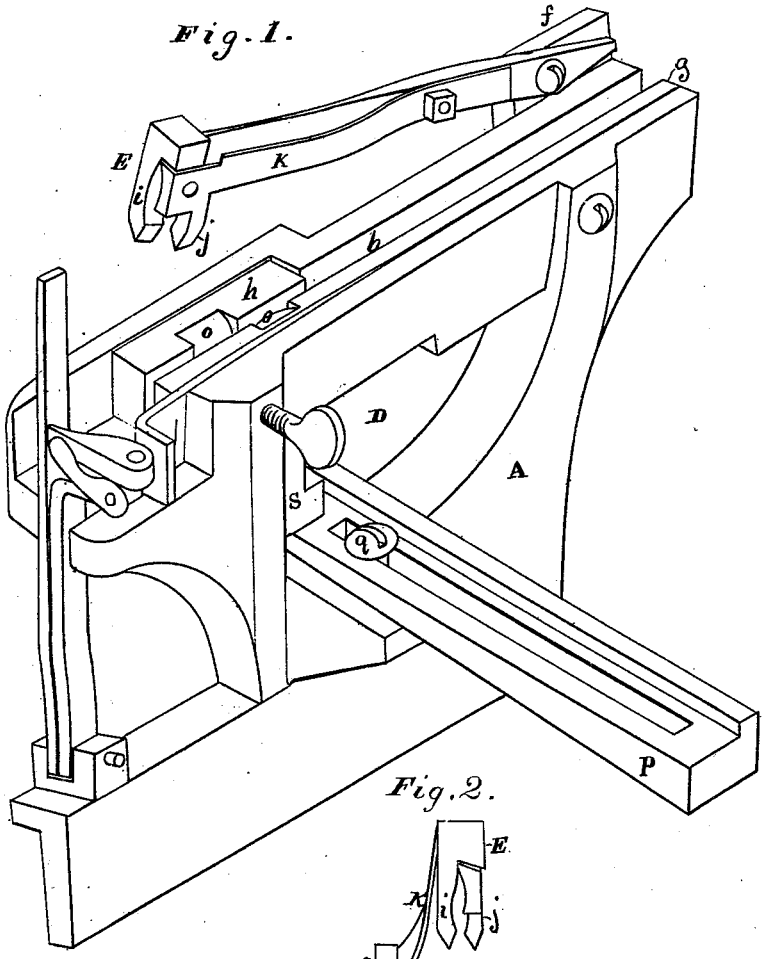
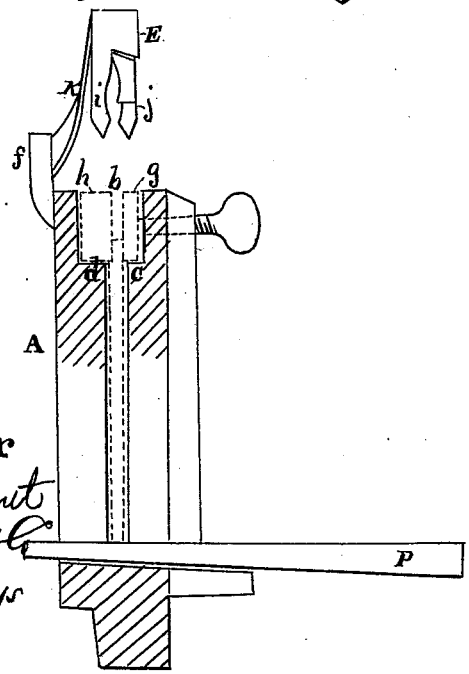


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ALPHONSE BOISNET, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN MACHINES FOR SETTING THE TEETH OF SAWS.

Specification forming part of Letters Patent No. 188,848, dated March 27, 1877; application filed February 16, 1877.

To all whom it may concern:

Be it known that I, ALPHONSE BOISNET, of the city and county of San Francisco and State of California, have invented an Improved Saw-Set; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

My invention relates to a saw-setting device which is especially adapted for setting band-saws, although it can be used for setting other kinds of saws, if desired.

Referring to the accompanying drawings, Figure 1 is a perspective view of my machine. Fig. 2 is a transverse section.

A represents a casting, which is arranged to be secured in a vise or otherwise fixed in an upright position. This casting is several inches in length, and has a longitudinal slot or channel, *b*, extending throughout the length of its upper face and from two to three inches in depth. The bottom of the channel is narrower than the upper part, thus forming a narrow ledge, *c*, on one side of the channel, about one inch below the top of the casting. One end of the channel is again widened from near the middle of the casting by removing a portion of the metal on the side opposite the ledge *c*, and to an equal depth, thus forming a ledge or shoulder, *d*, on the opposite side, as represented. A transverse opening, D, is made through the casting below the middle of the slot or channel with which the slot or channel communicates. E is a spring-hammer, the handle of which is pivoted to a lug, *f*, on the end of the casting opposite the extremity of the narrow channel. The hammer shank or handle is long enough to cause the hammer to strike down into the wide portion of the slot. *g* is a die or narrow strip of metal, which fits in the longitudinal slot or channel *b* edgewise and rests upon the shoulder or ledge *c*, while *h* is a short die or piece of metal which fits into the wide portion of the slot and rests upon the shoulder or edge *d* on the opposite side. These two dies will then fit close together, side by side, as represented. The striking-point of the hammer is formed in two parts, which are placed side by side, one of which, *i*, is fixed, while the other, *j*, is attached to the end of a spring, K, which presses it laterally against the permanent part *i*. The rear half of the point of the permanent hammer is cut away, while the front half of the attached hammer is cut away, so that the remaining point of one overlaps the cut-away portion of the other. These remaining points are beveled or inclined inward, as represented. The dies *g* and *h* have each a correspondingly-inclined recess, O, made in their meeting-edges directly below the points of the hammer, so that when the hammer descends its points will strike into the recesses.

The blade of the saw to be set is drawn in between the two dies *g h*, so that its teeth are brought successively opposite the recesses as the blade is drawn along. As the teeth come opposite the recesses the operator strikes the hammer E and forces it downward, so that the inclined points of the hammers will strike two of the teeth and force them in opposite directions into the recesses upon each side, thus setting them.

P is a slotted tapering or wedge-shaped block, which is secured transversely, by a screw, *q*, to the bottom of the opening. The screw passes through the slot into the block, so that when the screw is loose the block can slide through the opening the length of the slot. A metal bar, S, rests upon this block and passes up through the longitudinal slot in the casting and between the dies *g h*. By sliding the inclined block back or forth the dies will be raised or lowered as desired, so as to adjust them to different-sized teeth of the saws.

This device will be very convenient for setting the teeth of band-saws and other narrow saw-blades, and will set them with great speed and regularity.

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

1. The casting A, with its slot *b* and shoulders *c d*, and provided with the spring-hammer E, with its oppositely-inclined points *i j*, in combination with the dies *g h*, with their oppositely-beveled recesses O, substantially as and for the purpose described.

2. The spring-hammer E, consisting of the

permanent hammer *i*, with its beveled point, and spring-attached hammer *j*, with its oppositely-beveled point, arranged as described, in combination with the dies *g h*, with their oppositely-beveled recesses O, substantially as and for the purpose described.

3. The recessed dies *g h*, in combination with the adjustable wedge-shaped block P and metal bar S, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

A. BOISNET. [L. S]

Witnesses:

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