J. B. SCHMID.

Saw-Setting Devices.

No. 137,150. Patented March 25, 1873.

Fig. 1.

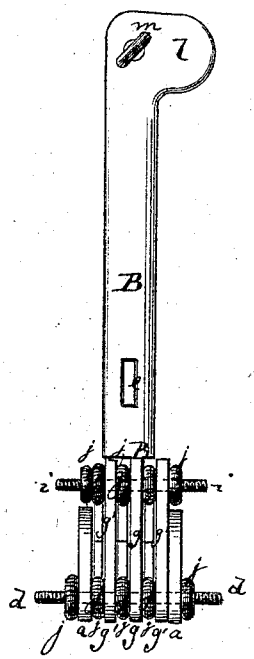


Fig. 2.

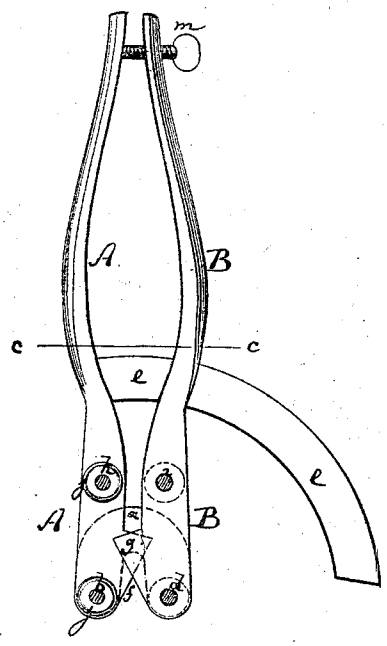
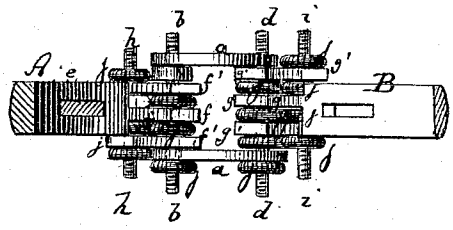


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHAN B. SCHMID, OF SALEM, VIRGINIA.

IMPROVEMENT IN SAW-SETTING DEVICES.

Specification forming part of Letters Patent No. **137,150**, dated March 25, 1873.

To all whom it may concern:

Be it known that I, JOHAN B. SCHMID, of Salem, in the county of Roanoke and State of Virginia, have invented a new and Improved Saw-Set, of which the following is a specification:

Figure 1 is an edge view of my improved saw-set. Fig. 2 is a side view, partly in section, of the same; and Fig. 3, a transverse section on the line *c c*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new instrument for setting, by one motion, two, four, or more saw-teeth, one-half into one side, and the remainder to the other. The invention consists in the application of a series of setting-plates to the jaws of a pair of tongs, the plates being laterally adjustable, to be used on teeth that are more or less far apart from each other. The invention also consists in the combination of a saw-teeth-contracting tool with said tongs, the same being in form of projecting ears on the handles of the tongs, with a screw passing through one of the ears.

A B in the drawing are the handles of a pair of tongs. They are connected at their upper ends by horseshoe-shaped plates *a a* and pivots *b* and *d*, as shown. An arched plate, *e*, projecting from one of the handles through a slot in the other, may be used to steady the motion and position of both. The upper end of the handle A carries a wedge-shaped or inclined edge projection, *f*, on the side of the handle B, while a similar projection, *g*, is formed on B, on the side of A. These two plates, *f* and *g*, are side by side to each other, so that they will, when the blade of a saw is placed between them, and the tongs then are closed, bear against two teeth of the saw from different sides, and "upset" or bend them aside in the desired manner. The effectiveness of the device may be increased by adding one or more plates, *f f'*, parallel to and shaped substantially like *f*, to the handle A, and a similar number of similar additional plates, *g' g'*, to B. The plates *f' f'* are, by the pin *b* and by another pin, *h*, held to the handle A, while the pin *d* and another pin, *i*, serve to fasten the plates *g' g'* to B. The distances between the plates *f'* and *f*, which depend on the distances between the saw-teeth to be set, are regulated by nuts *j j* on the pins *b* and *h*, such nuts intervening between the plates *f'* and *f*, and bearing against them on the outer sides, as shown in Fig. 1. Similar nuts are on the pins *d* and *i*. It is evident that the addition of such plates can be continued indefinitely, though six—*i. e.*, three on each side—is perhaps the most convenient number for actual use. Each plate acts on a saw-tooth and upsets it, so that thus as many as six or even more teeth can be simultaneously set at every contraction of the tongs. The lower ends of the handles A B (being the upper in the drawing) have projecting ears *l l*, and a thumb-screw, *m*, through one of these ears. By means of this screw the tongs can be made to close to a certain distance, to allow the saw-teeth to be raised more or less, and evenly, if they have been set too far aside for any one particular object, or if they were not upset quite regular, the saw-teeth being in that case drawn through between the ears.

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

1. The saw-set composed of the handles A B, the inclined plates *f g* thereon, and curved or bent plates *a a* for upsetting two saw-teeth simultaneously in opposite directions, as set forth.

2. The additional plates *f' g'* applied to the saw-set, having the plates *f g*, substantially as set forth.

3. The ears *l l* formed on the handles A B of a saw-set, and provided with the screw *m*, substantially as specified.

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Witnesses:
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