No. 653,690. Patented July 17, 1900.

C. McDONNER.

SAW SET.

(Application filed Feb. 24, 1900.)

(No Model.)

Fig. 1.

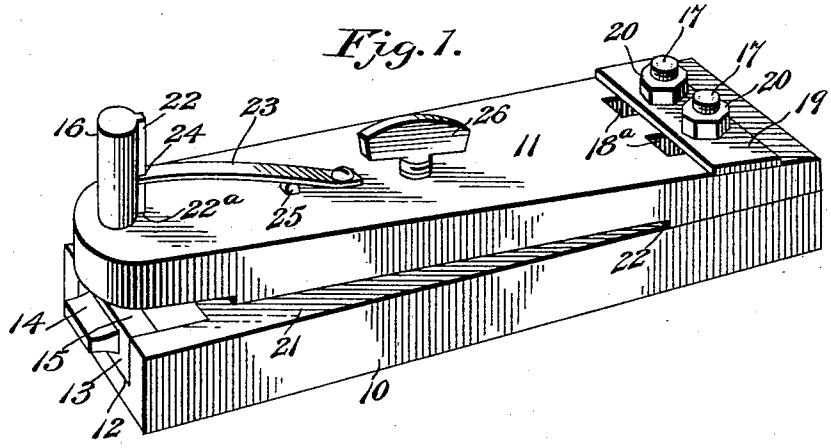


Fig. 2.

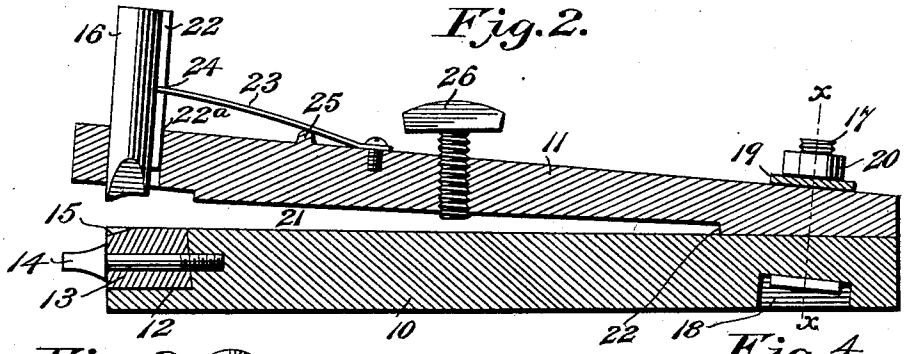


Fig. 3.

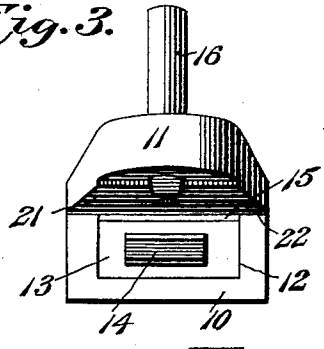


Fig. 4.

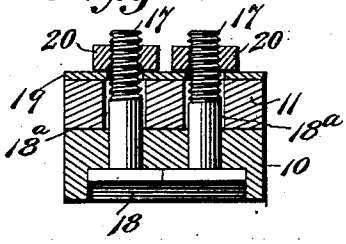


Fig. 6.

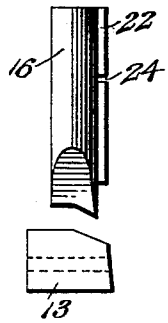
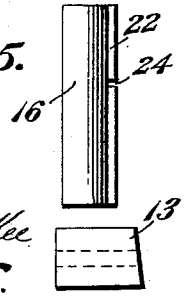


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLEY McDONNER, OF WAUSAUKEE, WISCONSIN.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 653,690, dated July 17, 1900.

Application filed February 24, 1900. Serial No. 6,367. (No model.)

To all whom it may concern:

Be it known that I, CHARLEY McDONNER, a citizen of the United States, residing at Wausaukee, in the county of Marinette and State of Wisconsin, have invented a new and useful Saw-Set, of which the following is a specification.

This invention relates to improvements in saw-sets; and one object is to provide an efficient device of this character by means of which the teeth of a saw may be easily and quickly set with exactness.

A further object is to provide a saw-set which can be used on different styles of saws, provision being made for changing the angle of the set to suit the saw to be operated upon.

Other objects and advantages will appear in the following specification and drawings which accompany the same and forms a part thereof, and in which—

Figure 1 is a perspective view of a saw-set constructed in accordance with the invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is an end view. Fig. 4 is a vertical cross-section on the line X X of Fig. 2. Figs. 5 and 6 are modifications showing different shapes of punches and dies that may be used.

Similar reference-numerals refer to similar parts throughout the several figures of the drawings.

The saw-set frame comprises two members—a base or anvil block 10, to which is secured an overhanging supporting block or bracket 11. The base 10 is a rectangular block, one end of which is provided with a socket 12. An anvil-die 13 is removably fitted in the socket 12 and is held in place by a thumb-screw 14, which passes through an opening in the same and screws into the edge of the base. The upper face 15 of the anvil-die 13 is beveled at the angle at which the teeth of the saw are to be set. The supporting-bracket 11 is arranged directly over the base-block 10 and carries a setting-punch 16. This bracket 11 is adjustably secured to the base 10 at one end by means of two bolts 17. The heads of these bolts are arranged in a recess 18 in the under face of the anvil-block and pass up through the same and through the slots 18^a in the bracket 11. A bearing-plate 19, arranged over the slots, has openings which receive the bolts 17, and the nuts 20 when screwed tightly down upon the plate 19 firmly clamp the two members together. The upper member or bracket 11 has a cut-away portion 21 on its under side which, forms a receiving-slot between the bracket and the flat upper side of the base for the reception of the blade of a saw. The edge 22 of such cut-away portion forms an abutment or stop for the back edge of the saw when in position to be operated upon.

The setting-punch 16 is slidably mounted in a vertical opening in the front end of the overhanging bracket 11, directly over the anvil-die 13. It is cylindrical in form and has a feather 22, which slides in the offset groove 22^a, arranged at one side of the opening, thus forming a guide for the punch and preventing its turning. The lower face of the punch is beveled to coöperate with the beveled face of the anvil-die 13. The punch is normally held in a raised position by means of a flat spring 23, one end of which is removably fastened to the upper face of the bracket 11, the other end fitting in a slot 24 in the punch. A fulcrum 25 is provided upon the face of the bracket between the ends of the spring.

To clamp the saw in position, and thereby prevent any accidental displacement while it is being operated upon, a set-screw 26 is provided in the bracket 11 intermediate its ends. This is arranged in a vertical position and when screwed down securely clamps the base of the saw to the base member 10.

In operation the bracket is suitably adjusted to the base member, and the saw-blade is clamped in the holding-slot by means of the set-screw 26, with the tooth to be operated upon directly between the anvil-die and the setting-die. The setting-die is then struck with a hammer or similar instrument, and the tooth will be bent to conform to the angle of the coacting dies.

When it is desired to take the set out of the saw, a flat punch and die are used, as shown in Fig. 5, or if a greater angle is desired the punch and die shown in Fig. 6 are used, the several dies being easily interchangeable, as it is only necessary to unscrew the thumb-screw 14, whereupon the lower or anvil die may be removed and replaced, and by removing the flat spring the setting-punch may be

removed. Other shaped dies than those shown may be used with equal advantage for other styles of saws, thereby making the device a great improvement in the art.

Another advantage lies in the fact that the supporting-bracket is adjustably mounted upon the base member, so that the setting-punch may be adjusted to the lower die in order that they may be registered perfectly.

It is to be understood that the invention is not to be limited to the exact construction shown, as changes in the form, size, and proportion may be resorted to without departing from or sacrificing any of the advantages of the invention.

Having now fully described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a saw-set, the combination with a base having a die, of an inflexible supporting-bracket rigidly mounted upon the base and having a cut-away portion on its under side which forms a saw-holding slot, a setting-punch coacting with the base-die, and means for clamping a saw in the saw-holding slot, substantially as described.

2. In a saw-set, the combination with a base having a die, of an inflexible supporting-bracket rigidly mounted upon the base and having a cut-away portion on its under side which forms a saw-holding slot, a setting-punch carried by the supporting-bracket and coacting with the base-die, and means also carried by the bracket for clamping a saw in the saw-holding slot, substantially as described.

3. In a saw-set, the combination with a base having a socket, of a die detachably secured in said socket, a supporting-bracket having a cut-away portion on its under side forming a saw-holding slot, said supporting-bracket being adjustably secured to the base, a spring-supported sliding setting-punch carried by the supporting-bracket and coacting with the base-die, and a set-screw arranged upon the supporting-bracket and adapted to clamp a saw-blade placed between the base and the supporting-bracket, substantially as described.

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

CHARLEY McDONNER.

Witnesses:

CECELIA LONDO,

SAMUEL DICKESON.