No. 690,075. Patented Dec. 31, 1901.

J. F. PRIBNOW.

TOOL FOR SHAPING SWAGED SAW TEETH.

(Application filed Apr. 15, 1901.)

(No Model.)

Fig. 1.

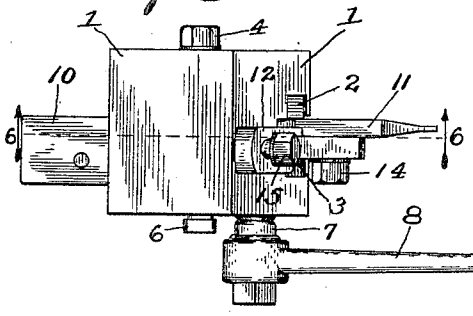


Fig. 2.

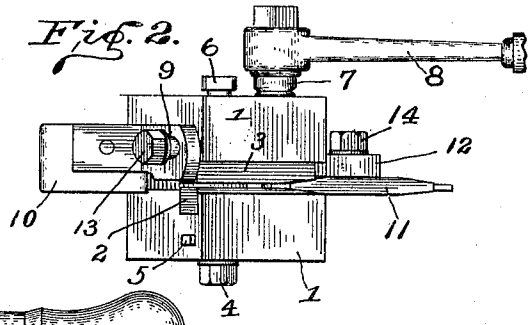


Fig. 3.

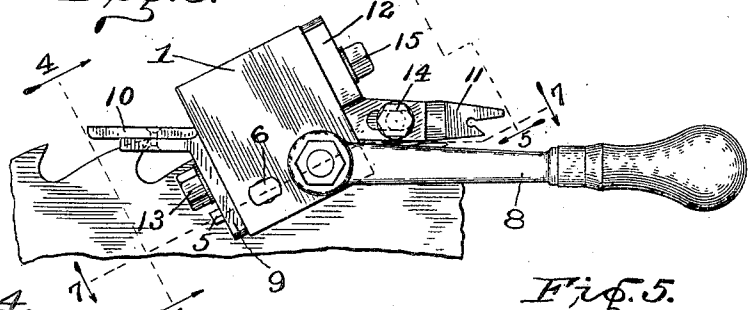


Fig. 4.

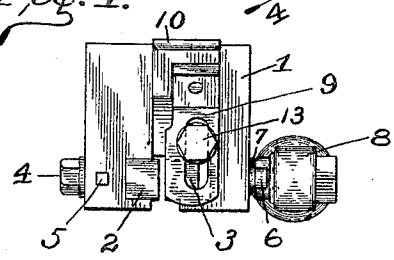


Fig. 5.

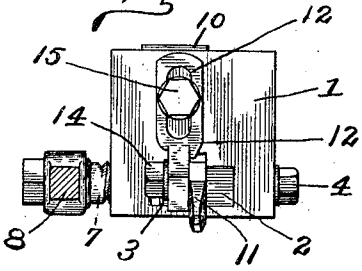


Fig. 6.

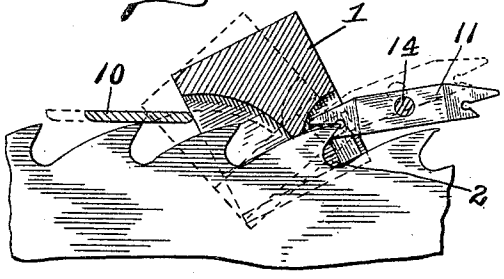
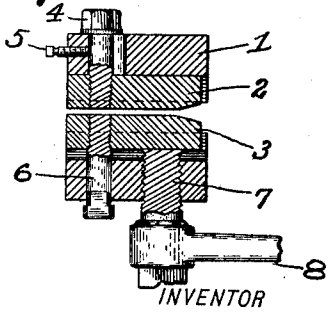


Fig. 7.



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JOHN F. PRIBNOW, OF MELLEN, WISCONSIN.

TOOL FOR SHAPING SWAGED SAW-TEETH.

SPECIFICATION forming part of Letters Patent No. 690,075, dated December 31, 1901.

Application filed April 15, 1901. Serial No. 55,946. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. PRIBNOW, a citizen of the United States, residing at Mellen, in the county of Ashland and State of Wisconsin, have invented certain new and useful Improvements in Tools for Shaping Swaged Saw-Teeth, of which the following is a specification.

My present invention consists in certain improvements upon that forming the subject-matter of my Letters Patent No. 514,963, dated February 20, 1894, whereby said tool is simplified in construction and improved in operation, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a top or plan view of a tooth-shaping tool embodying my present invention; Fig. 2, an under side plan of the same; Fig. 3, a side elevation thereof; Figs. 4 and 5, end elevations as seen when looking in the directions indicated by the arrows from the dotted lines 4 4 and 5 5, respectively, in Fig. 3; Fig. 6, a central vertical sectional view as seen from the dotted line 6 6 in Fig. 1, a fragment of the saw-blade being shown in position therein and a second position of the tool relative to the saw-blade being indicated by means of dotted lines; and Fig. 7, a sectional view as seen when looking downwardly from the dotted line 7 7 in Fig. 3.

The body or base block 1 is formed of metal and contains suitable recesses to receive the jaws 2 and 3, which immediately operate upon the point of the saw-tooth. The jaw 2 when the tool is ready for operation is secured rigidly in place by means of the cap-screw 4, which passes in through a slot in the body-block 1 and enters a screw-threaded perforation in said jaw. This jaw 2 is, however, adjustable longitudinally, and is thus capable of being brought into exact registry with the jaw 3. This adjustment is effected by means of a slot in the body-block 1 through which the screw 4 passes, and the precise position desired is secured by manipulating the said screw 5, which, as best shown in Fig. 7, bears against the shank of the cap-screw 4. By loosening said screw 4 slightly, adjusting the screw 5 as desired, and then retightening the screw 4, taking care that the shank of the latter is in contact with the point of the former, the desired result is attained, as will be readily understood.

The jaw 3, like the jaw 2, is mounted in a recess in the bed 1 and is adapted to be moved toward and from said jaw 2, but is not intended to be otherwise adjustable. It is held to position and guided in this movement by the slide 6, the point of which is screw-threaded and enters a corresponding screw-threaded perforation in said jaw, while its shank is smooth and fits and is adapted to move in a perforation leading out through the side of the block 1, which perforation serves as a guide and slideway thereto. The jaw 3 in operation is driven in toward the jaw 2 by means of the strong screw 7, which is operated by the hand-lever 8. The faces of the jaws 2 and 3 are formed with their ends beveled off, as best shown in Fig. 7, for the purpose of fitting the swaged surfaces of said saw-tooth and bringing said tooth to the exact and uniform shape desired in a manner similar to that described in my said Patent No. 514,963.

The position of the saw-blade in the tool is governed by the back-guide, composed of the parts 9 and 10, and by the tooth-guide 11, carried on the bracket 12. The bracket 9 of the back-guide is secured to the body-block 1 by means of the cap-screw 13, which passes through the slot therein and enters a suitable screw-threaded perforation in said block or bed. Said back-guide is thus rendered adjustable to accommodate itself to the requirements of the saws being operated upon in their various positions and allows the tool to tilt backwardly, so that the angle can be changed to suit different-shaped teeth. The part 10 is a straight hardened piece of steel, which rides on the points of the saw-teeth when the tool is in use and is secured rigidly to the part or bracket 9.

The tooth-guide 11 is secured to the bracket 12 by the bolt or screw 14, which passes through the slot in said bracket and engages with and strongly holds said guide, which (by means of said slot) is adjustable longitudinally on the bracket-arm, to which it is connected, and also is capable of a rotary or swinging adjustment upon said bolt or screw, by

means of which its operative end may be raised or lowered and arranged at any angle desired. The bracket 12 as a whole is also adjustable up and down the face of the body-block on a cap-screw 15, by which it is secured thereto, said cap-screw passing through a slot in the upper portion of said bracket, as best shown in Fig. 5. By this means the tooth-gage can be raised and lowered without changing its angle of inclination. By these various means the tooth-gage can be adjusted up and down, in and out, and pivotally, thus adapting it to all possible conditions and requirements and also permitting of the use of the entire surface of the jaws. When the operative point is a fixed one, the swaged points of the saw-teeth will soon wear cavities or depressions in the face of the jaws, so that the jaws would have to be taken out and reground; but in my present construction by moving the gage up or down a trifle a new wearing-face is provided, and the jaws are thus given a much longer life without grinding or fitting.

The tooth-guide is in itself of a peculiar form, as best shown in Fig. 6. It has a tapering recess to receive the point of the saw-teeth, and this terminates in a round orifice, into which the extreme points of the saw-teeth extend without striking the metal, the point of contact being, as shown, just back of the extreme point of the teeth. The angle of the tooth-receiving end is somewhat greater than the angle of the teeth to permit of the rotary adjustment of this tooth-guide, above described.

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

1. The combination, in a tool for shaping swaged saw-teeth, of a body-block, clamping-jaws mounted thereon, an adjustable back-guide secured thereto and adjustable to rest upon the points of the saw-teeth, and an adjustable tooth-gage also secured thereto and adapted to be pivotally adjusted to determine the position of the points of the teeth being swaged relative to the clamping-jaws.

2. The combination, in a tool for shaping swaged saw-teeth, of the body-block, a pivotally-adjustable back-guide, an adjustable tooth-gage, two clamping-jaws secured in the recesses in the body-block forming ways therefor, one of said clamping-jaws being firmly held to a fixed position but adjustable longitudinally, and the other movable toward and from the first, a screw for moving the latter, and a lever-handle for operating said screw.

3. The combination, in a tool for shaping swaged saw-teeth, of the body-block, clamping-jaws carried thereby, a back-guide, and a tooth-gage, said tooth-gage having a notch to receive the points of the teeth, said notch terminating in the hole into which the extreme points of the teeth extend without coming in contact with the said gage, substantially as shown and described.

4. The combination, in a tool for shaping swaged saw-teeth, of the body-block, clamping-jaws carried thereby, a back-guide, and a tooth-gage, said tooth-gage being slidably and revolubly mounted on an adjustable block substantially as and for the purposes set forth.

5. The combination, in a tool for shaping swaged saw-teeth, of the body-block, clamping-jaws carried thereby, an adjustable tooth-gage secured to said body-block, and a back-guide also secured to said body-block, said back-guide being composed of the adjustable block 9 and the bearing-plate 10 secured thereto and arranged and operating substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Mellen, Wisconsin, this 11th day of April, A. D. 1901.

JOHN F. PRIBNOW. [L. S.]

Witnesses:
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KITTIE L. PETERSEN.