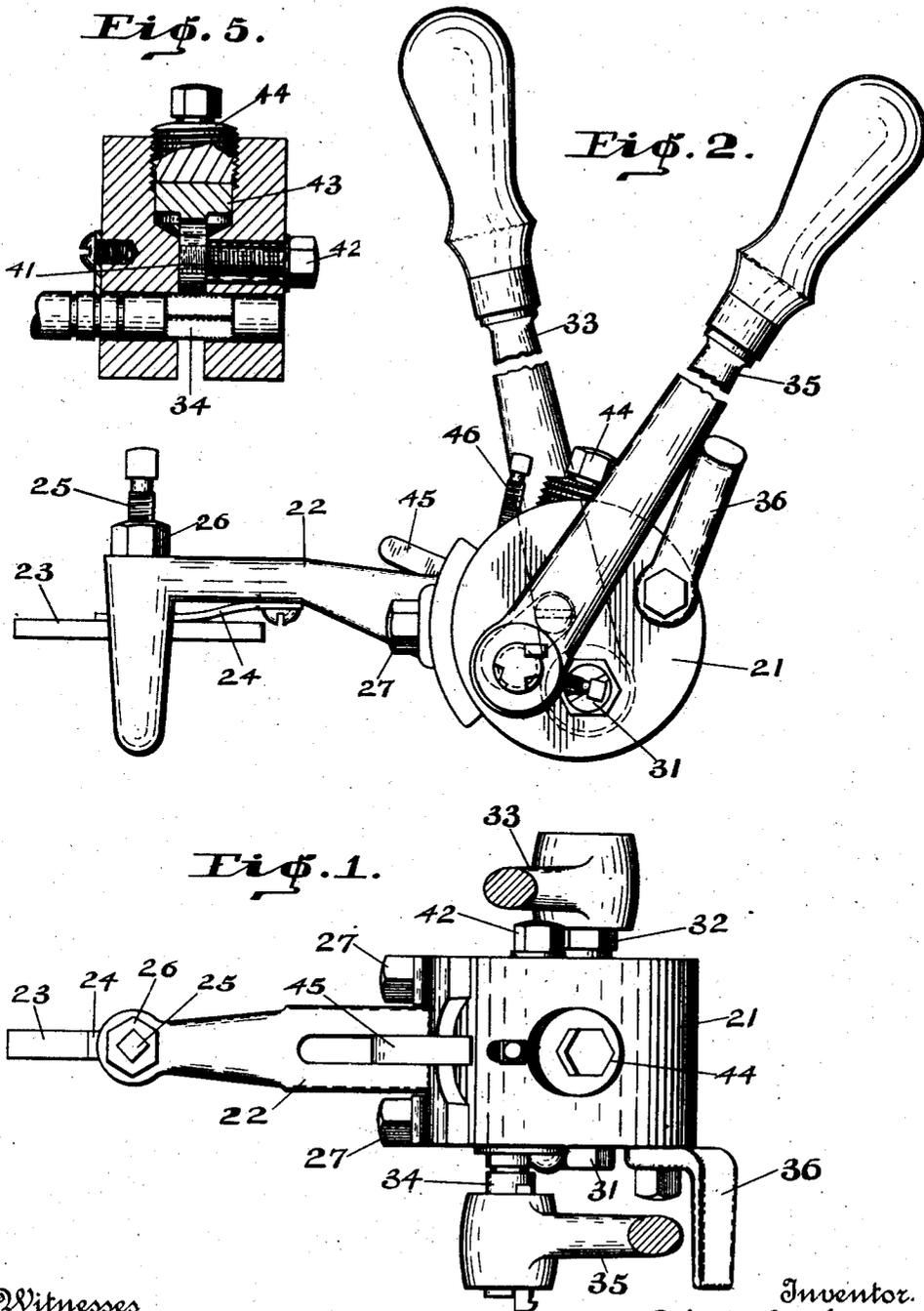


905,989.

Patented Dec. 8, 1908.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

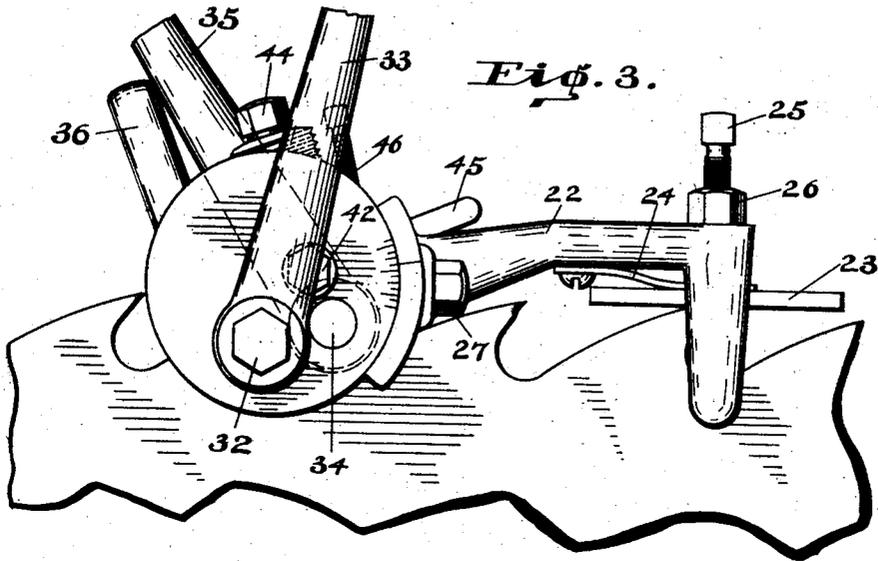


Fig. 3.

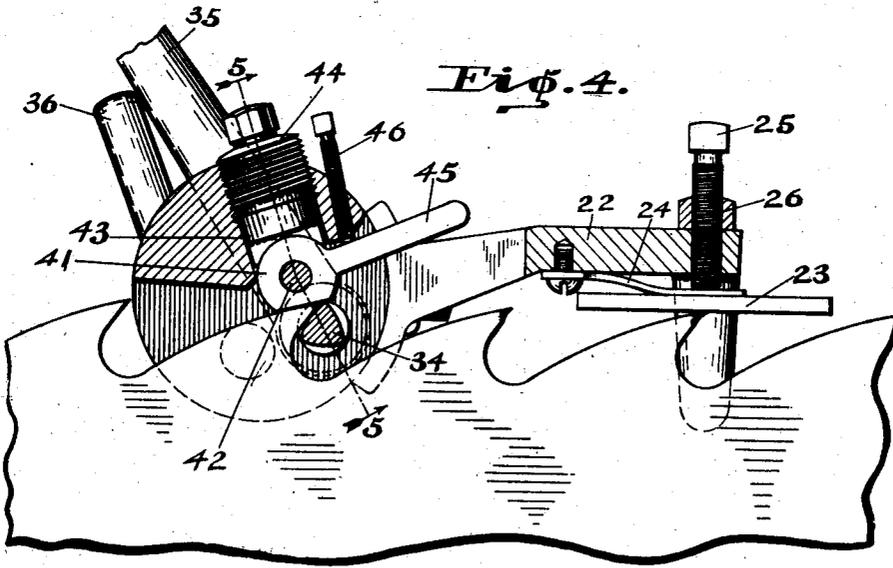
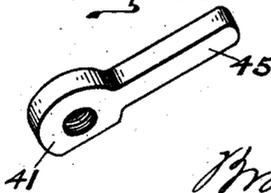


Fig. 4.

Fig. 6.



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UNITED STATES PATENT OFFICE.

ROBERT COYLE, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO E. C. ATKINS & COMPANY, OF INDIANAPOLIS, INDIANA, A CORPORATION OF INDIANA.

SAW-SWAGE.

No. 905,989.

Specification of Letters Patent.

Patented Dec. 8, 1908.

Application filed October 17, 1905. Serial No. 283,122.

To all whom it may concern:

Be it known that I, ROBERT COYLE, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Saw-Swages, of which the following is a specification.

In that class of devices for swaging and shaping the points of saw teeth which are clamped onto the saw in operation, and which embody an anvil and a swaging die, it is necessary that the anvil be adjustable so that its operating face may be adjusted to fit the backs of the points of the teeth in operation, said anvil being shifted from time to time as the tool is used with saws having teeth of different shapes and sizes. This capability has been provided for in some cases by mounting the anvil in a separate structure circumferentially adjustable relatively to the swage block or frame. This has been comparatively expensive, and has added to the size and weight of the tool. It has also proved less stable and satisfactory than where the anvil or its follower can be screwed directly into the swage block.

It is the object of my invention to produce a saw swage wherein the anvil follower may be screwed directly into the swage block, and the anvil itself nevertheless be conveniently and accurately adjusted as required.

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 (the handles being broken away), of a swage of the character in question embodying my invention; Fig. 2 a side elevation of the same; Fig. 3 a side elevation of the opposite side; Fig. 4 a central vertical sectional view; Fig. 5 a transverse vertical sectional view as seen when looking in the direction indicated by the arrows by the dotted line 5 5 in Fig. 4, and Fig. 6 a perspective view of the anvil separately.

The body or swage block 21 has secured thereto a tail piece 22, which extends out and rests upon the points of the teeth, thus serving to guide and hold the tool in proper relation to the saw when in use. It is provided with a contact member 23 carried by spring 24, and which is capable of being adjusted somewhat by means of screw 25, which may be locked in position (when the

adjustment is effected) by jam nut 26. The tail piece is secured to the body, preferably by cap screws 27.

The body 21 is slitted, as usual, to pass astride the saw, and carries the clamping screws 31 and 32, the latter of which is adapted to be operated by lever-handle 33 in an ordinary and well known manner. It also carries the swaging die 34 operated by lever-handle 35. An adjustable stop 36 is also provided for said lever-handle, as is common. The anvil 41 is, however, of a peculiar construction. Essentially, it is a disk having a flattened side. It is preferably supported in place by a screw 42, which passes through a slotted opening in the side of body 21 and enters a screw-threaded perforation in the center of said anvil. This, however, is merely to hold the anvil in place, and is not intended to receive the stress of the work, or to serve as a means to effect exact adjustment. The flattened side of the disk is the operating surface of the anvil, as is clearly indicated in Fig. 4 of the drawing. A concave-surfaced bearing-block 43 rests against the rounded surface of the anvil on the opposite side from the flattened surface. A screw plug 44 is threaded into the swage block or body 21 and comes into contact with the bearing block 43. Therefore, by turning this screw plug the bearing block and the anvil can be accurately adjustably positioned relatively to the swaging die. The anvil is capable of a partial revolution on its own axis (in the concave bearing in the bearing block) so that its operating face can be adjusted as desired. The anvil preferably has an arm 45 extending out therefrom by means of which it can easily be turned to the desired extent, and a movement-limiting adjusting screw 46 is provided against which the arm in question may be moved, thereby limiting its movement as desired.

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 swage, of a body having a receiving and guiding perforation for a bearing block for the anvil and a follower therefor, an anvil having a flattened operating side and a rounded side opposite the operating side, means for rotating said anvil, a concave-faced bearing block resting against the rounded side of said anvil and mounted in the perforation in the body, a 110

screw plug threaded into the upper portion of said perforation in line with said bearing-block and serving as an adjustable follower to said bearing block, and a swaging die adapted to cooperate with said anvil.

2. The combination, in a saw swage, of the body, the swaging die pivotally mounted therein, an anvil cooperating with said swaging die having a flattened operating side and an arm extending out therefrom, a screw follower mounted in the body for adjusting said anvil toward and from the swaging die, and an adjustable limiting screw also mounted in the swaging body and adapted to bear against the handle of the anvil for limiting and adjusting the movement thereof.

3. The combination, in a swage, of a body, clamping devices for securing the swage to the saw, a lever for operating said clamping

devices, a swaging die, a lever for operating the swaging die, an anvil with which said swaging die cooperates having a flattened operating side and a rounded side opposite the operating side, means for adjusting said anvil angularly, a bearing block resting against the rounded side of said anvil, and a screw plug threaded into the body of the swage and serving as an adjustable follower to said bearing block.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, this fourteenth day of October, A. D. one thousand nine hundred and five.

ROBERT COYLE. [L. s.]

Witnesses:

CHESTER BRADFORD,
JAMES A. WALSH.