

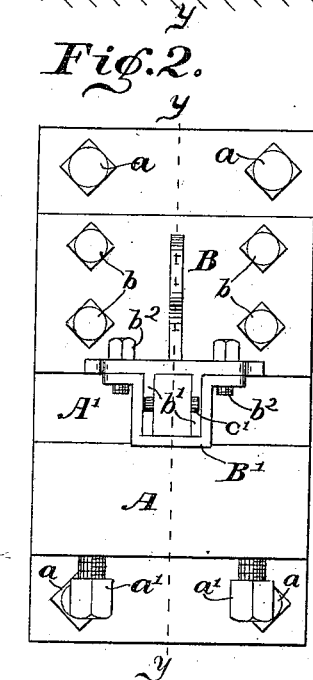
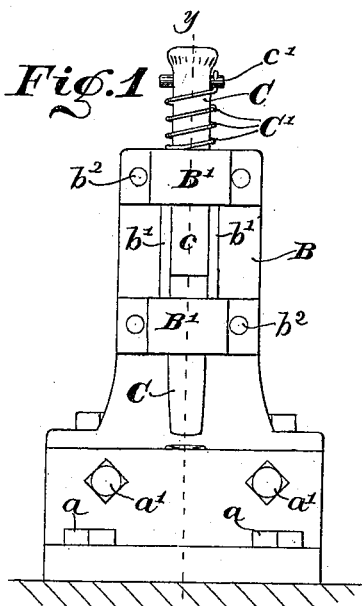
(No Model.)

R. E. POINDEXTER.

DEVICE FOR SETTING AND SHAPING SAW TEETH.

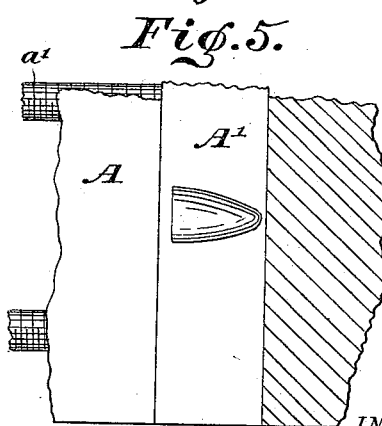
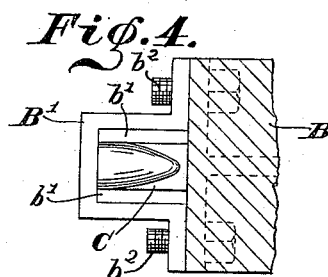
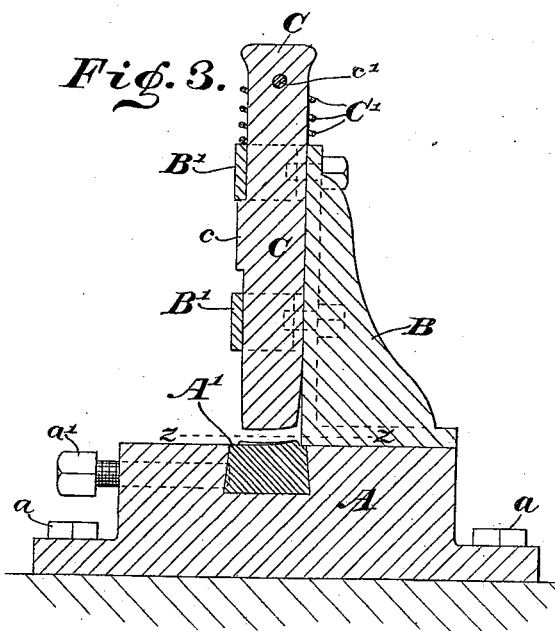
No. 309,875.

Patented Dec. 30, 1884.



WITNESSES.

Chas. Leonard,
E. W. Bradford,



INVENTOR.

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UNITED STATES PATENT OFFICE.

ROBERT E. POINDEXTER, OF INDIANAPOLIS, INDIANA.

DEVICE FOR SETTING AND SHAPING SAW-TEETH.

SPECIFICATION forming part of Letters Patent No. 309,875, dated December 30, 1884.

Application filed March 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. POINDEXTER, of the city of Indianapolis, county of Marion and State of Indiana, have invented certain new and useful Improvements in Devices for Setting and Shaping Saw-Teeth, of which the following is a specification.

The object of my said invention is to provide a device for setting saws which will at the same time give the teeth a concave formation. I accomplish this object by providing a stationary die on which the saw-teeth rest, the top face of which is concaved, and a movable die which operates upon said teeth, the lower end of which is correspondingly convex.

The arrangement and operation of the several parts will be hereinafter more fully set forth.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a front elevation of my improved saw-set; Fig. 2, a top or plan view of the same; Fig. 3, a vertical section through the same on the dotted line *yy*; Fig. 4, a cross-section looking upwardly from the dotted line *zz* in Fig. 3, and Fig. 5 a similar view looking downwardly from said dotted line.

In said drawings, the portions marked A represent the base of the device; B, the upright part on which the movable die is mounted, and C said movable die. The base A is a metallic base, of suitable size to set firmly where it is placed. It may be provided with flanges on its sides, through which bolts *a* may be passed into the bench or block upon which it is mounted, and thus secure it more firmly in position. In its top it is provided with the die A', which is preferably of steel. In the middle is formed the part upon which the saw-teeth are placed. This part should be raised around the edges, and thus form the concave rest for the tooth, as shown. The back part, or that portion with which the point of the tooth will come in contact, is formed narrow to correspond to the shape of the tooth, and is raised somewhat higher than the front part, (see Fig. 3,) so as to form the set in the tooth at the same time it is conformed to the shape of the die by a stroke from the movable die. The die A' is secured in position by the set-

screws *a'*, as shown. The upright B is simply a support for the die C. It is secured to the base A by the screws *b*, or in any other practical manner. It has guides for the movable die C on its front side. These guides are preferably formed by casting lugs or flanges *b'* on the front side of the upright and fitting clips B' over them, and securing the same to the upright by screws *b''*, as shown. The movable die C is spring-mounted in the guides on the upright B. Its lower end is formed convex, and, like the die A', is narrowed toward its rear side, or that part which will operate upon the point of the tooth. It is also sloped upwardly toward this side to correspond to the raised part of said die A'. The spring C' is preferably mounted on the top of the die, between the top guide, B', and a pin, *c'*, in the top of said die. This operates to throw back the die after a stroke from the hammer, as will be readily understood, a stop, *c*, on the face of the die preventing too great a movement. It will be understood, of course, that the dies may be so arranged that the movable die will work horizontally instead of vertically without departing from my invention.

The operation of my invention is as follows: The dies are first adjusted so that they exactly register with each other. The saw-tooth to be operated upon is then placed upon the lower or stationary die, the saw-blade resting upon the front part of the base. A stroke with the hammer upon the die C then operates to drive said die against the tooth and conform said tooth to the shape of said die, which sets said tooth and at the same time gives it the desirable concave shape.

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

1. In a saw-set, the combination, with a base having a die set therein, said die being formed with a concave surface for the saw-teeth, of guides having a movable die mounted therein, the operating end of said die being formed convex to correspond with the formation of the other die, the parts being arranged and operating substantially as described, and for the purposes specified.

2. In a saw-set, the combination of the base A, having a die, A', set therein, said die hav-

ing a concave bearing for the saw-teeth, the
standard B, having guides B', and the mov-
able die C, spring-mounted in said guides, and
having its lower end formed to fit into the con-
cave formation of the die A', said die C being
5 arranged above said die A' and adapted to
be operated by a stroke upon its top end, sub-
stantially as described, and for the purposes
specified.
10 3. A set of dies for devices for setting and
shaping saw-teeth, one of which is formed with
a convex surface, and the other of which is

formed with a corresponding concave surface,
whereby they are adapted to impart a concave
shape to saw-teeth, substantially in the man- 15
ner and for the purposes hereinbefore set forth.

In witness whereof I have hereunto set my
hand and seal at Indianapolis, Indiana, this
25th day of March, A. D. 1884.

ROBERT E. POINDEXTER. [L. S.]

In presence of—

C. BRADFORD,
E. W. BRADFORD.