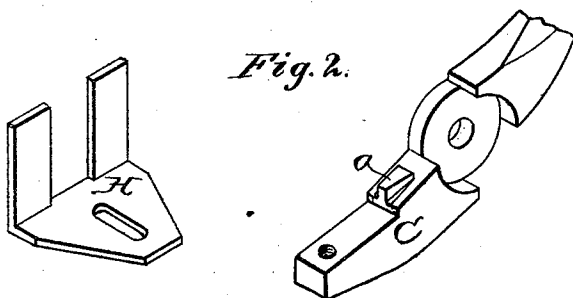
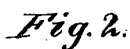


S A W - S E T .

Patented Dec. 7, 1875.



Henry N. Miller
H. A. Degges.

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 By A. W. Mast
 atty

UNITED STATES PATENT OFFICE.

FERNANDO C. BARBER, OF OXFORD, MICHIGAN.

IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. **170,657**, dated December 7, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, FERNANDO C. BARBER, of Oxford, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Saw-Sets; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a saw-set, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a side view of my saw-set, and Fig. 2 is a detached perspective view of the upper jaw.

A and B represent two handles, formed respectively with the upper jaw C and lower jaw D at their front ends, and put together with an ordinary milled joint and rivet.

Between the handles A B is a spring, E, arranged to spread the jaws apart. Through the upper jaw C is passed a set-screw, G, for regulating the pitch of the teeth, and farther inward, in the under side of said jaw C, is inserted a die, *a*, for setting the saw-teeth. In the opposite surface of the lower jaw D is made a recess, *b*, as shown in Fig. 1, so that when the tooth is inserted and the jaws brought together, the tooth will be set into space, or, in other words, there is no bearing for the tooth under that portion thereof operated upon by the die *a*, so that the metal will have room to be bent therein with freedom and ease.

My object in dispensing with a lower die or anvil is, that the tooth, when bent over the sharp angle of wall of recess *b* into space, is less liable to spring back when pressure is removed than if the set were effected upon an anvil, and, also, whatever slight springing back

it may be liable to may be compensated by giving a slightly greater initial bend to the tooth than is actually required for the set desired. The length or distance the saw-tooth is to enter is regulated by means of a gage, H, adjusted on the lower jaw D, and held by a set-screw, *d*.

The inner surface of the lower jaw D, outside of the recess *b*, is made at an incline of about forty-five degrees, more or less, and on this inclined surface the saw-blade is placed, and it forms a firm and solid bearing for the same. When the jaws are closed, or rather when the upper jaw is shut down on the lower jaw, the end of the set-screw G comes against the saw-plate, allowing the die *a* to set the tooth just so far, and no farther. The degree of set is regulated by means of this set-screw, the saw-plate in all cases resting against the inclined surface of the jaw D. This saw-set is simple in construction, easily operated, and not liable to get out of order.

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

1. The jaw D, having the inner surface, on which the saw is placed, inclined, and provided with the recess *b*, into which the tooth is set, substantially as and for the purposes set forth.

2. The combination of the pivoted handles A B, with spring E between them, the jaw C, with die *a*, and set-screw G, and the jaw D, provided with the recess *b*, and having the inner surface inclined, as shown, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

FERNANDO C. BARBER.

Witnesses:

L. W. STANTON,
W. M. TRAVIS.