

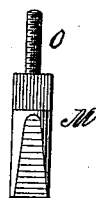
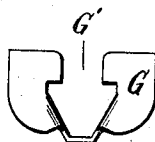
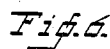
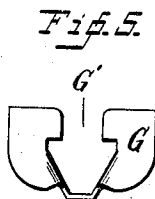
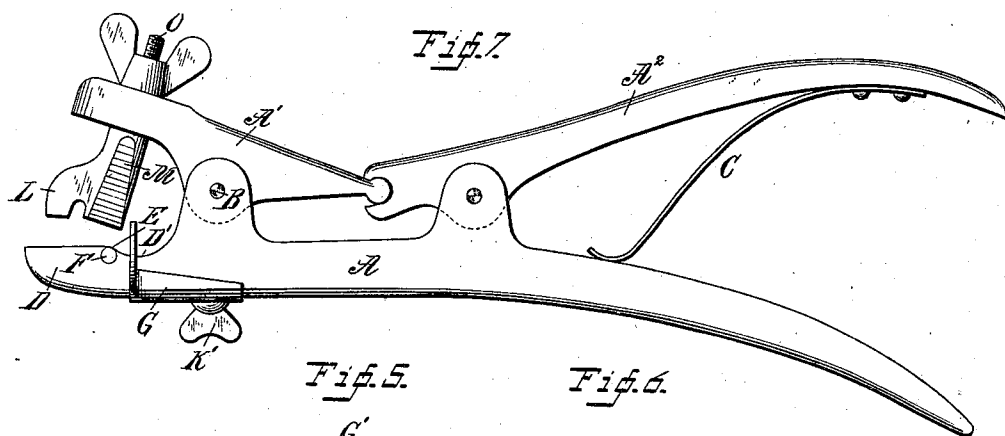
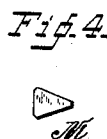
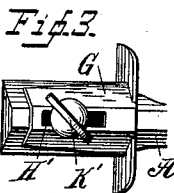
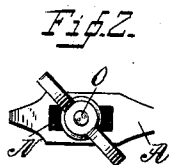
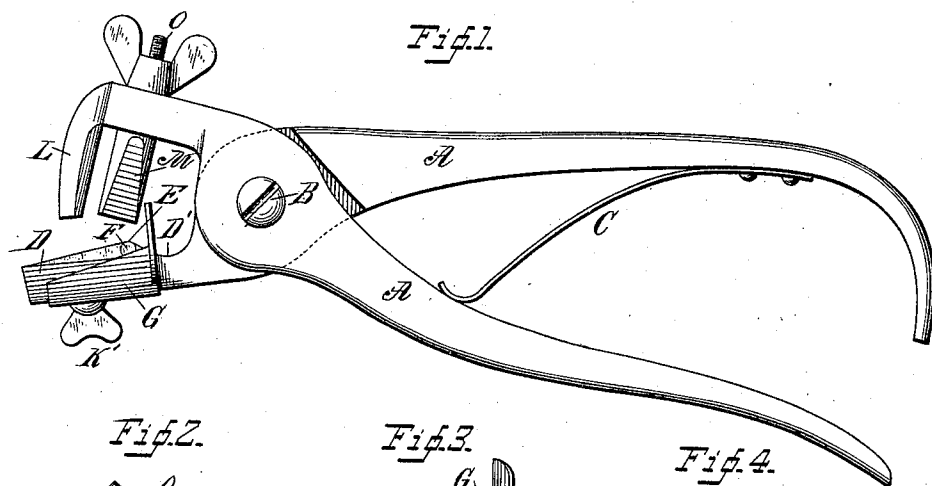
(No Model.)

M. B. W. WHEELER.

SAW SET.

No. 323,005.

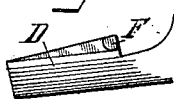
Patented July 28, 1885.



Witnesses:

C. C. Perkins.
J. P. Wooster

Inventor:



Moses B. W. Wheeler
By A. M. Wooster
att'y.

UNITED STATES PATENT OFFICE.

MOSES B. W. WHEELER, OF WESTPORT, CONNECTICUT.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 323,005, dated July 28, 1885.

Application filed April 17, 1885. (No model.)

To all whom it may concern:

Be it known that I, MOSES B. W. WHEELER, a citizen of the United States, residing at Westport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Saw-Sets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the class of saw-sets in which the desired inclination is given to the teeth by an anvil and block carried, respectively, by handles which cross each other and are pivoted together, the device being operated by the compression of the handles.

The general object of my invention is to simplify and improve the construction, to produce a device which shall be easy to operate, impossible to get out of order, and in which the cost of manufacture shall be reduced to the minimum.

With these ends in view I have devised the novel construction which I will now describe, in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of the device complete. Figs. 2 and 3 are respectively top and bottom plan views of the operative parts of the device; Fig. 4, a plan view of the block; Fig. 5, a rear view of the gage detached; Fig. 6, an elevation of the block detached; Fig. 7, a side elevation illustrating certain modifications in construction which may be adopted, if preferred; and Fig. 8, a slight modification in the shape of the anvil.

Similar letters indicate the same parts in all the figures of the drawings.

A A are the handles, B the pivot, and C a spring for holding the device at its opened position, as shown.

D is the anvil, which is formed at the end of one of the handles, and it consists of a flat surface having a rounded edge, E, which is preferably formed by brazing in a piece of chilled iron or steel wire, as indicated at F, which extends across the anvil. Back of the rounded edge the handle is hollowed out, as shown at

D', so as to avoid compressing the teeth of the saw when in use.

In Fig. 8 I have shown an anvil with a square edge, which may be used, if preferred.

G is a gage, against which the ends of the teeth rest when in use, and which thus acts to determine the depth of the set upon the teeth. The exact arrangement of this gage is of course not an essential feature of my invention. I preferably, however, construct it as shown in the drawings—that is, to fit outside of the anvil, and to partially embrace it, so that it will slide freely thereon without displacement.

G' indicates an opening in the gage, which permits the block to pass as far back relatively to the gage as may be necessary to produce any desired effect.

The gage is provided with a slot, H, and is secured at any desired position by means of a set-screw, K, which passes through the slot H and engages the anvil. The other handle has at its end a downwardly-projecting clamp, L, the end of which is preferably made to lie parallel with the surface of the anvil when the parts are in the closed position. Back of this clamp is an adjustable block, M, whose face is inclined downward from front to back relatively to the plane of the anvil, and which compresses the teeth at the edge of the anvil, the action being to "set" the teeth by bending them over the rounded edge of the anvil when the handles are compressed. The shank of this block passes through a slot, N, just back of the lug, the shank being made any suitable shape to prevent it from turning in the slot, as shown in Fig. 6. Projecting upward from the end of the shank is a screw-threaded stud, O, carrying a nut, P, by which the block is secured at any desired position. The adjustment of this block relatively to the gage determines the amount of set given to the teeth. It will of course be apparent that the farther over the rounded edge of the anvil the block is set—that is, toward the pivot—the greater will be the set given to the teeth.

By reference to Figs. 1 and 4 it will be seen that the bearing-surface of the block is made in the form of a triangle, and that it is placed

with the apex toward the point of the teeth. I am thus enabled to use an ordinary-sized device upon very fine saws without danger of the block coming in contact with the teeth upon either side of the one which is being set.

The operation is as follows: Having set the gage at the proper position to give the desired depth of set, and the block at the proper position to give the desired amount of set, the device is ready for use. The blade of the saw is secured in a vise, or in any suitable manner. The blade enters between the block and the clamp and anvil, parallel with the latter. Each alternate tooth is acted upon, and is bent over the edge of the anvil by the block, the blade of the saw being held between the clamp and the anvil. The tooth, however, is not compressed between the block and the anvil, owing to the hollow D', which receives it, this being a very valuable feature in many kinds of saws.

In the modification illustrated in Fig. 7 I have shown the block as operated by a compound lever, the parts A' A² of which are pivoted to the handle carrying the anvil. I have also shown lug L and the block as made in

one piece, which is adjustable in the same manner that the block is in the other form.

It will of course be obvious that the details of construction may be varied within reasonable limits without departing from the spirit of my invention.

I claim—

1. The anvil having a rounded edge formed by brazing in a piece of chilled iron or steel wire and an adjustable gage secured to said anvil, in combination with a clamp and an adjustable block, substantially as described.

2. The anvil having a rounded edge of chilled iron or steel and back of said edge a hollow, D', in combination with a clamp and an adjustable block which acts to bend the teeth of a saw over the edge of the anvil, but without compressing the teeth which lie in said hollow.

In testimony whereof I affix my signature in presence of two witnesses.

MOSES B. W. WHEELER.

Witnesses:

A. M. WOOSTER,
J. T. WOOSTER.