

J. Buser.

Saw Set.

N^o 47, 187.

Patented Apr. 11, 1865.

Fig. 1.

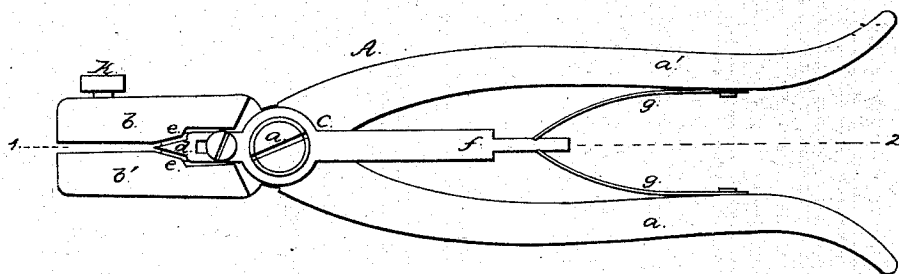


Fig. 3.

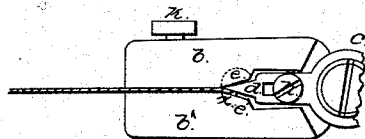


Fig. 2.

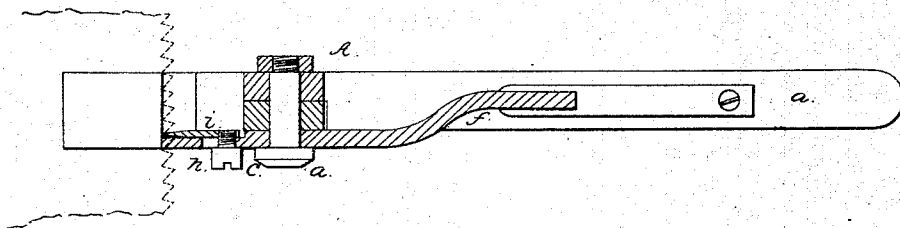
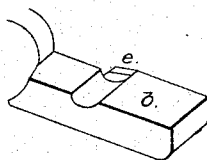


Fig. 4.



Witnesses
Wm. Albert Steel.
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Inventor.
J. Buser.
by his Attorney,
H. Houson.
per C. H. Houson.

UNITED STATES PATENT OFFICE.

JACOB BUSER, OF PHILADELPHIA, PENNSYLVANIA.

SAW-SET.

Specification forming part of Letters Patent No. 47,187, dated April 11, 1865.

To all whom it may concern:

Be it known that I, JACOB BUSER, of Philadelphia, Pennsylvania, have invented an Improved Machine for Setting Saws; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists in a pair of pinchers having cheeks with inclined edges, and combined with certain devices, as described hereinafter, so that on the jaws of the pinchers being brought together one of the teeth of a saw introduced between the same will be bent down against the inclined edge of one of the cheeks.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a side view of my improved saw setting machine; Fig. 2, a section on the line 1 2, Fig. 1; Fig. 3, a detached view, and Fig. 4 a perspective view of part of the machine.

A is a pair of pinchers or forceps, which have the usual handles, *a a*, and the broad, flat jaws *b b'*, the handles being jointed together by the pin *a'*. The face of each of the jaws *b* is so cut away as to leave a cheek, *e*, the edge of which is inclined, as shown in the drawings, and into the recess at the sides of the jaws, between the two cheeks *e*, extends a projection, *d*, on the end of a plate, C, which is hung to the pin *a'*, the edges of the projection being inclined to correspond with the adjacent edges of the cheeks *e*. From the rear side of the plate C an arm, *f*, projects between the handles *a a*, a curved spring, *g*, on each of the latter bearing with one end against the side of the arm. To the inner side of the plate C, next the projection *d*, is secured an adjustable guide-plate, *i*, the edge of which is sharpened, as shown in Fig. 2, and through the jaw *b* passes a set-screw, *k*. The jaws *b b'* of the instrument are opened slightly, as shown in Fig. 1, and the notched edge of a saw the teeth of which are to be set is introduced between the jaws until it bears against the edge of a guide-plate, *i*, as shown in Fig. 2, one of the teeth *x*, Fig. 3, of the saw projecting over the inclined edge of the cheek *e*, between the latter and the projection *d*. The handles *a a* are now brought firmly together,

so as to close the jaws, when the edge of the cheek of the upper jaw, *b*, will be brought against the upper edge of the projection *d*, the latter being forced against the tooth *x* of the saw, so as to bend the latter down onto the inclined edge of the lower cheek, *e*, as shown in Fig. 2. The jaws are now opened, and the instrument is moved laterally, so as to introduce the edge of the plate *i* into the next recess in the edge of the saw, care being taken that the projection *d* shall this time be below the tooth. The jaws are then again brought together, and the tooth of the saw now operated on is bent upward against the inclined edge of the cheek *e*, this operation being repeated (the projection *d* being introduced above one tooth and below the next) until all are set.

This apparatus is simple and effective in its operation, is portable, and can be constructed at a comparatively small expense.

By adjusting the plate *i* the instrument may be adapted to saws of different sizes, and the degree of inclination to be given to the teeth may readily be regulated by means of the set-screw *k*.

It will be seen that by means of the springs *g g* the plate C is maintained in such a position that the projection *d* is removed from contact with the edges of both the cheeks *e*, except where the jaws are compressed, so that the said projection may be readily placed on either side of a tooth.

I claim as my invention and desire to secure by Letters Patent—

1. The pinchers A, with their jaws *b b'* and cheeks *e e*, combined with the within-described devices, or their equivalent, substantially as and for the purpose specified.

2. The plate C, its projection *d*, and arm *f*, in combination with the pinchers A and springs *g g*, or their equivalents, the whole being constructed for joint operation substantially as described.

3. The adjustable plate *i*, combined with the plate C, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

J. BUSER.

Witnesses:

CHARLES E. FOSTER,
JOHN WHITE.