J. A. Hopkins,

Saw-Set,

No. 54,547. Patented May 8, 1866.

Fig 1

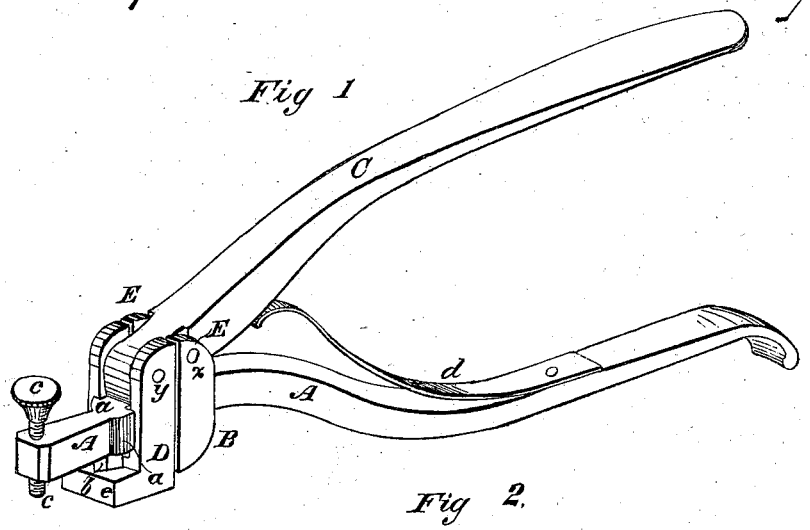


Fig 2.

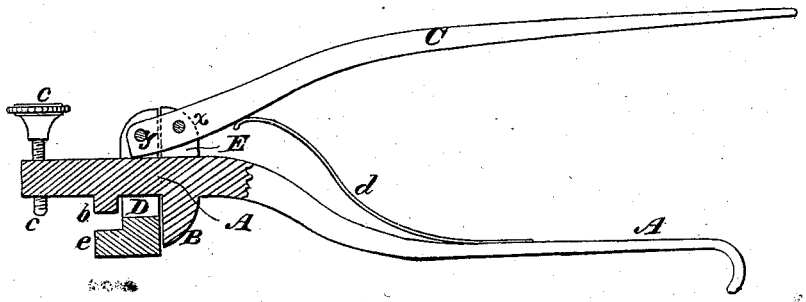
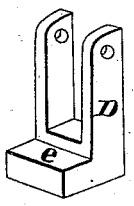


Fig 3



WITNESSES:

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JAMES A. HOPKINS, OF OXFORD, NEW YORK.

IMPROVED SAW-SET.

Specification forming part of Letters Patent No. **54,547**, dated May 8, 1866.

To all whom it may concern:

Be it known that I, JAMES A. HOPKINS, of Oxford, in the county of Chenango and State of New York, 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 thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of my improved saw-set; Fig. 2, a longitudinal vertical section through a portion of the lower handle and the lower part of my improved sliding stirrup, and Fig. 3 a perspective view of the improved sliding stirrup detached.

Similar letters represent like parts in each of the drawings.

The nature of my invention consists in the use of a sliding slotted stirrup arranged to act in a direct line on the teeth of a saw, so that the lower face thereof will bear perfectly flat upon the teeth, and thereby prevent blunting or injuring their points.

By the central circular or curved movement of the stirrup of all saw-sets heretofore used in giving the required set to the teeth of saws the points thereof are more or less injured (according to the thickness of the blade) by reason of the lower part of the stirrup being brought to bear at an angle upon the teeth, which causes their fine points to be bent over and blunted.

It is evident that the movement of my improved sliding stirrup in a direct line will bring the lower face thereof flat upon the tooth, bearing equally on all parts thereof, and by the compression of the handles the bearing-screw on the forward end of the lower handle will determine the angle to which the tooth is set, the stirrup remaining all the while flat upon the tooth.

The lower handle, A, is provided with an upright, B, which may be cast as a part of the handle and formed into two parts on the portion thereof extending above the handle, forming the two side pieces, E E, for the fulcrum *x* of the upper handle, C. The lower part of the upright B is solid and its front face flat, against which the stirrup D slides, as shown in Fig. 2 of the accompanying drawings.

On the sides of the forward end of the handle A, immediately in front of the upright B, is cast two lugs or projections, *a a*, which, together with the upright B, constitute a guide or way for the stirrup D to move in. On the lower face of the handle A is the stop *b*, and on the forward end thereof the bearing-screw *c*.

Attached to the rear part of the handle A is a spring, *d*, for throwing back the upper handle, C. The handle C has its fulcrum at *x*, and is connected to the stirrup D by means of pin *y*.

By depressing the upper handle the stirrup is moved in a direct line upward, causing the projecting ledge *e* to bear flat upon the face of the tooth, which is held between it and the stop *b*. Thus a uniform angle is given to the teeth and the points thereof protected from injury from the fact that both the stop *b* and face *e* of stirrup D rest flat against the face of the tooth, while the required inclination is given to the same by the bearing-screw *c*.

I do not wish to limit myself to the form of stirrup illustrated in the drawings, for I contemplate moving the sliding stirrup by means of a cam on the forward end of the upper handle, arranged to act on a ledge on the rear of the upper part of the sliding slotted stirrup, or providing the upper part of the stirrup with a rack, into which may mesh teeth formed on the forward end of the upper handle, or any equivalent arrangement for sliding the stirrup in a direct line.

By the use of the above-described improvements I am enabled to set the teeth of saws, however thick or thin the saw-blade may be, as the adjustments are readily adapted to either extreme.

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

A sliding stirrup, D, substantially as herein described, when combined with the set-screw *c* and stop *b* of a saw-set, substantially in the manner and for the purpose herein set forth.

The foregoing specification of my improved saw-set signed by me.

JAMES A. HOPKINS.

In presence of—
STEPHEN PUFFER,
GEO. W. LEWIS.