

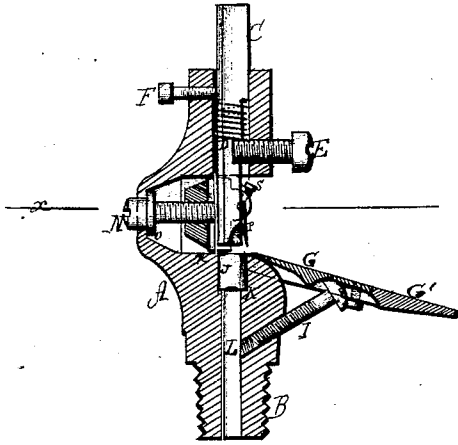
*E. Y. Clark,*

*Sam-Set,*

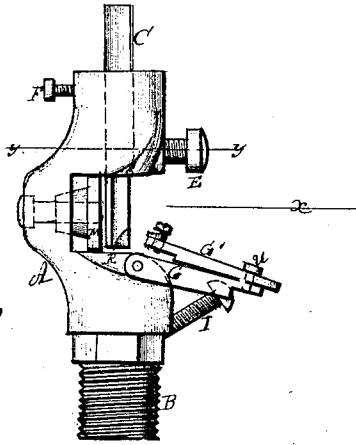
*N<sup>o</sup> 101,982,*

*Patented Apr. 19, 1870.*

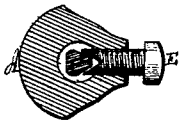
*Fig. 1.*



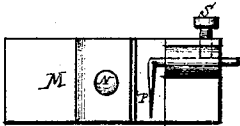
*Fig. 2.*



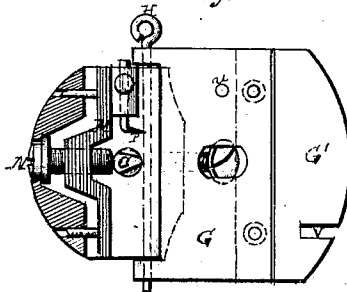
*Fig. 4.*



*Fig. 5.*



*Fig. 3.*



*Fig. 6.*



**Witnesses:**  
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# United States Patent Office.

ERASTUS Y. CLARK, OF NEW YORK, N. Y.

Letters Patent No. 101,982, dated April 19, 1870.

## IMPROVEMENT IN SAW-SETS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, ERASTUS Y. CLARK, of the city of New York, in the county of New York, and State of New York, have invented a new and useful Improvement in Saw-Set; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to new and useful improvements in saw-sets, whereby they are made more perfect, and consequently more useful than they have hitherto been; and

It consists in the construction and arrangements hereinafter described.

In the accompanying drawings—

Figure 1 represents a vertical central section of the saw-set.

Figure 2 is a side view of the same.

Figure 3 is a horizontal section on the plain  $x x$  of figs. 1 and 2.

Figure 4 is a section of fig. 2 on the line  $y y$ .

Figure 5 is a front view, showing the adjustable back and the tooth-guide.

Figure 6 is a detailed view of the punch.

Similar letters of reference indicate corresponding parts.

A is the stock, which is made of any suitable kind of metal, which is removably attached to a bench, table, or other fixture by means of the screw-shank B, or in any other substantial or suitable manner.

C is the punch, which works vertically in a mortise in the stock, as seen in fig. 1. This punch is triangular in form, but I do not confine myself to that form. The mortise in which it works is a hole drilled or otherwise made in the stock.

The punch has shoulders which receive the pressure of a spiral spring, D.

This spring is confined between the guide-screw E (see fig. 4) and the set-screw F.

G G' is the apron upon which the saw is placed in setting the teeth.

This apron is hinged to the stock by the rod H, and is made adjustable (or is raised or lowered) by means of the screw I, so that more or less set may be given to the teeth of the saw.

J is the anvil over which the tooth to be set is laid. This anvil is faced up on both ends, so that they may be reversed if necessary. It rests on a shoulder, as seen at K, and may be removed or reversed or its position changed by raising it, with a rod or punch, through the hole L.

M is an adjustable back, the position of which governs the position of the saw upon the apron or of the tooth upon the anvil.

This back is made to move backward or forward by means of the screw N, the thread of which engages with a thread in the back M, so that, by turning a screw, the back is moved out or in, ascending as the screw is turned, while longitudinal motion of the screw is prevented by the collar O.

The end of this screw acts as a guide and support to the punch C. The back side of the punch works in contact therewith, as seen in the drawing.

Attached to the adjustable back M is an adjustable guide-pin, P, the point of which is intended to just clear the bed R of the stock. This pin is adjusted laterally to or from the center of the anvil, ascending to the coarseness or fineness of the saw, and so that it will enter the angle between the teeth, and thereby adjust the teeth to be set, one after the other, on or above the anvil and directly beneath the punch.

This guide-pin is fastened by the screw S, and, when it is properly adjusted, it is an unerring guide for fixing the true position of the saw-teeth as the saw is fed along under the punch.

For the purpose of adapting the set to very narrow saws, (band-saws for instance,) I form the apron in two parts, G and G'.

The two parts are rebated, and when separated, as seen in fig. 2, the sides of G' are reverse, and the rebated portion with the screw T forms a recess and guide for the saw, as seen.

When G' is thus reversed it is held in position by one or more screws U in a slot or slots V, so that its position may be raised to suit saws of varying widths.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. In combination with a saw-set, the adjustable back M, arranged and operated substantially as and for the purposes described.

2. The adjustable guide-pin P, substantially as and for the purposes described.

3. The arrangement of the screws E F and N with relation to each other, the punch C and stock A, as shown and described, whereby said punch may be adjusted as specified.

The above specification of my invention signed by me this 23d day of February, 1870.

ERASTUS Y. CLARK.

Witnesses:

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