(No Model.)

V. SEILER.

SAW SET.

No. 303,463. Patented Aug. 12, 1884.

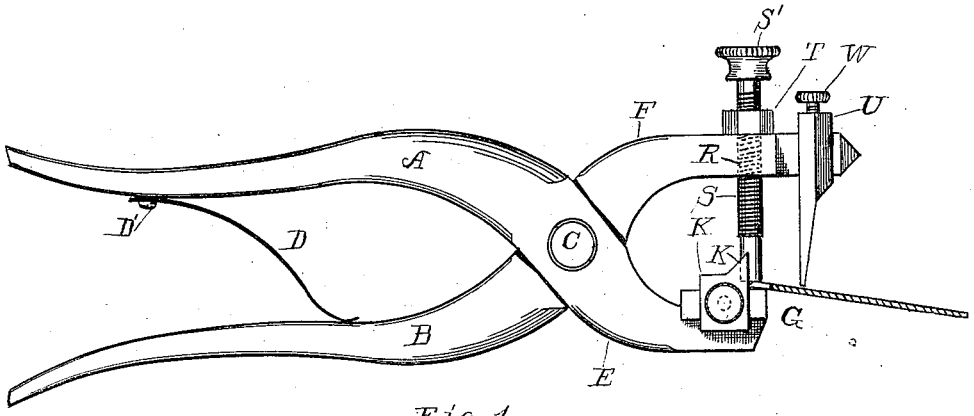

Fig. 1.

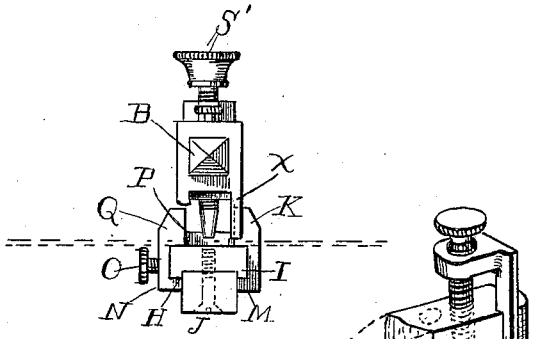

Fig. 2.

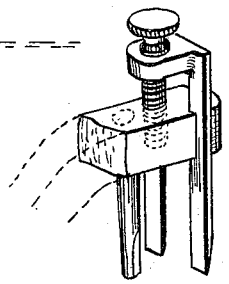

Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

VINCENT SEILER, OF READING, OHIO.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 303,463, dated August 12, 1884.

Application filed December 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, VINCENT SEILER, of Reading, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Saw-Sets, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side view of my improved saw-set. Fig. 2 is an enlarged front view of the same. Fig. 3 is a perspective view of modified form of upper jaw.

The generality of saw-sets in use at present time seem to be lacking in several important features, among which are, first, the guide-pieces on the jaws are of such a cumbersome nature as to require much valuable time for the operator to adjust properly for different grades of saws; second, of a properly-shaped piece for setting the tooth which can be turned in a socket, by means of which teeth of different sizes and thickness can be set with equal facility; and, third, the general arrangement of the parts coming in immediate contact with the saw, so as to obstruct the view of the operator.

In the drawings, A is one of the jaws of a saw-set, and B the other. These jaws are pivoted at C, in the usual manner of this class of tools. Between the outer ends of the handles is placed a curved spring, D, secured to the inner side of one of the handles by means of a screw, D′, and has a bearing against the inner side of the opposite handle. The forward ends of the jaws are curved at E and F, so as to place the jaws at a sufficient distance apart. The upper face of the end of the jaw A is provided with a square plate, G, with the lower side grooved, as at H, so that the edges I will fit down over the sides of the jaw and be secured in position by means of a screw, J, from the lower side. Sliding backward and forward upon this plate G is a gage-piece, K, the ends extending down over the sides of the plate G, with the lower ends, N, turned inwardly, forming lugs M, so as to clasp the under side of the plate, forming ways which permit it to slide backward and forward, but is held in position relative to lateral movements. One of the vertical ends N is provided with a set-screw, O, for securing the gage-piece K in position at any desired place. The central part of the gage-piece has a semicircular recess, P, and laterally from this recess are upwardly-projecting lugs Q, against which the teeth of the saw abut, thus forming a gage.

Through the forward part of the jaw B is a vertical screw-threaded opening, R, within which is placed a threaded bolt, S, the lower end of which is somewhat flattened or oblong in horizontal cross-section to fit the teeth of the saw. The gage-piece K, being adjustable, can be moved backward and forward for the different-sized teeth of saws. A nut, T, is placed on the bolt S, immediately above the jaw B, to screw down against the jaw when the bolt is at the place desired, for the purpose of securing the same in position. Upon the upper end of the bolt S is placed a thumb-nut, S′, to facilitate in raising or lowering the bolt in the opening in adjusting the same. Immediately forward of this bolt the jaw B is formed square, or nearly so, in vertical cross-section, upon which is placed a sliding piece, U. One of the sides of this sliding piece, preferably the upper, has a set-screw, W, for securing said piece in position. From the lower side of this piece extend downwardly two arms, X, a little farther than the upper face of the plate G, or of such a length as to have sufficient bearing upon the upper side of the saw to set the tooth as much as may be desired. The sliding gage-piece has by its peculiar construction a firm hold on the piece G, while the set-screw O gives all needed advantages in fixing it in position along the jaw, as described, to accommodate different-sized teeth. The piece U, with its depending parts X, movable on the end of jaw B and fixed by set-screw W, affords all needed facilities for regulating their bearing on the saw.

In using this instrument the bolt S is first adjusted to permit sufficient play of the jaws after the insertion of the saw. The gage-piece K is then placed in such a position from the end of the jaw as may be found necessary to allow the front part of the bolt S to extend beyond the face of the lugs Q, and thus have a bearing upon the tooth of the saw. After these preliminary arrangements the instrument is ready for use, the operation of which is similar to other tools of this class.

Fig. 3 is a modified form of sliding piece and bolt of upper jaw, the sliding piece ar-

ranged to move vertically for the purpose of adjusting the piece.

What I claim is—

1. In a saw-set, the jaw A, having piece G on its end, the plate G, grooved at H, combined with the sliding gage-piece K, its lower ends forming lugs M, and the set-screw O, whereby the plate K can be readily fixed in any position along the end of A, substantially as described.

2. In a saw-set, the sliding gage K, having its ends bent to form lugs M, to clasp piece G on the outer end of jaw A, and the set-screws O and J, combined with the threaded bolt S and regulating-nut T, substantially as and for the purposes set forth, whereby the gage and bolt can be regulated, as described.

3. In a saw-set, an adjustable gage having upwardly-extending lugs, its downwardly-projecting ends extending around and clasping the plate on the end of one jaw, and provided with a set-screw, all constructed as shown and described, and combined with the vertical bolt S, movable in the opposite jaw, and the horizontally-sliding piece U, substantially as described, provided with depending arms X, and held in position by set-screw W, all as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of December, 1883, in the presence of witnesses.

VINCENT SEILER.

Witnesses:
HENRY J. HARROP,
JOE BAILEY.