E.Y. Clouk. Sow Set.

Fig. 2. No. 120,243. Patented Oct. 24; 1871. WITNESSES. John Becker. Vm. 86. 6. 8 min. Attorneys.

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. 120,243, dated October 24, 1871.

To all whom it may concern:

Be it known that I, ERASTUS Y. CLARK, of New York city, in the county and State of New York, have invented a new and useful Improvement in Saw-Sets; 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 drawing forming a part of this specification.

This invention relates to new and useful improvements in those instruments for setting saws which are constructed upon the "punch" principle, some of the important features of which description of saw-sets are secured to me by Letters Patent of the United States issued April

19, 1870, and numbered 101,982.

My present object is to remedy some defects in the said patented machine and to perfect the same; and the invention consists in the application to the saw-set of a supporting slide, as hereinafter described and subsequently pointed out in the claim.

In the accompanying drawing, Figure 1 is a side view. Fig. 2 represents a vertical section of the saw-set taken on the line x x of Fig. 3. Fig. 3 is a front view. Fig. 4 represents an end view of the punch. Fig. 5 is a detailed view, showing a cross-section of the supporting slide.

Similar letters of reference indicate correspond-

ing parts.

A is the stock, which is made of any suitable kind of metal, and is removably attached to a bench or other fixture by means of the screwshank B, or in any other substantial manner. C is the punch, which is preferably triangular in form to correspond with the shape of a sawtooth. This punch works vertically in a hole in the stock, as seen in Fig. 2. The punch has a shoulder-pin, C', which receives the upward pressure of the spring D for raising it from the tooth. C" is a screw which confines the shoulder piece. The spring is confined between the shoulder piece of the punch and the removable guidepiece E, which latter is fastened by the screw F. G is an adjustable guide, which straddles the stock and governs the distance which the screw is allowed to project onto the anvil. This guide G is supported and adjusted by means of the screw h, which works through the guide as through a nut, bringing the guide forward or carrying it backward, to suit the size of the saw-tooth. When properly adjusted the guide is held in po-

sition by the lever or lock-nut I. The head of the screw h acts as a support to the back of the punch, as seen in Fig. 2. Connected with the face of the adjustable guide G is one or more vertical guide-pins, J, the points of which are intended to just clear the bed of the stock. The pins are adjusted laterally to or from the center of the anvil, according to the coarseness or fineness of the saw, so that the pin will enter the angle between the teeth, and thereby adjust the teeth to be set one after another on the anvil and directly beneath the punch. These pins, one or more, form one unerring guide for moving the saw-teeth over the anvil. K is the anvil, which rests on the bed of the stock. It may be turned round or readjusted, and is readily removed for repair or other purposes with a rod or punch in the hole L. M is the apron upon which the saw is laid. This apron is hinged to the stock so that it can be raised or lowered for giving the saw more or less set. N is a supporting slide, having two parallel sides or rods, O O, one of which rods forms the pin or "pintle" of the apron hinge. This slide is for supporting the saw as the latter is moved across the apron and anvil in being "set." This movable support or rest for the saw obviates a great objection to the "punch saw-set," as the slide may move with the saw, and it keeps it steady and in the proper position. The position of the apron is governed by the adjusting-screw P, which screw is held in position by the levernut R. S is a plate made adjustable on the apron by means of a slot-hole and the screw T. This plate is readily removable, and is secured to the under side of the apron when not in use. The upper edge of this plate is beveled so as to form a V-shaped groove, with the apron, for the back of the saw to slide in. By this arrangement the narrowest saw may be securely held and guided over the anvil.

By the improvements above described the sawset is perfected to an extent which renders it su-

perior to any other in use.

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

In combination with a saw-set, the supporting slide N, substantially as and for the purpose specified.

ERASTUS Y. CLARK.

Witnesses:

GEO. W. MABEE,
ALEX. F. ROBERTS.

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