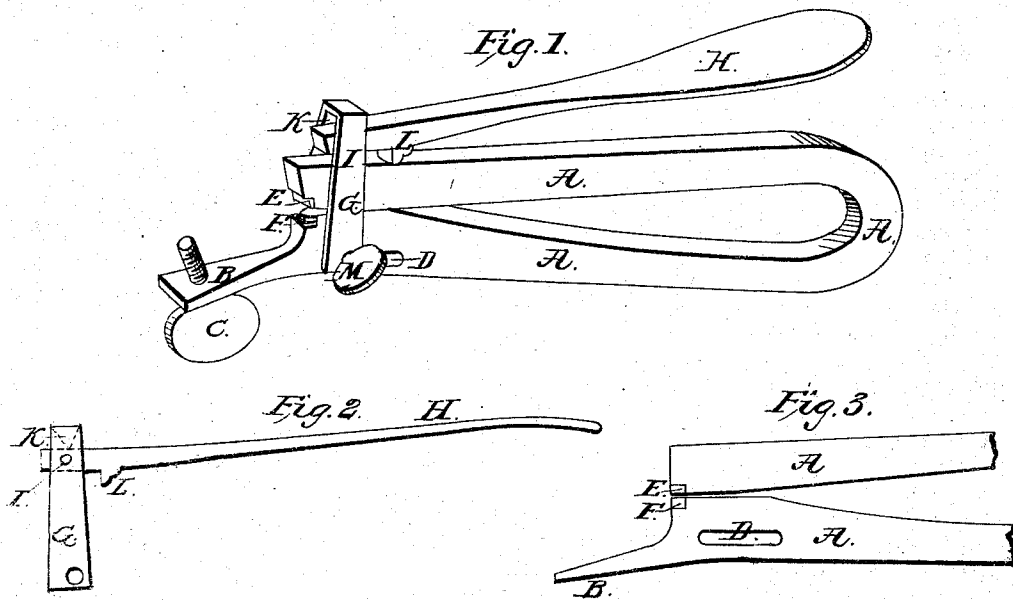


E. S. Holkins.

Saw-Set.

N^o 8,026.

Patented Apr. 8, 1851.



UNITED STATES PATENT OFFICE.

ELIJAH S. HOLKINS, OF PAINESVILLE, OHIO.

IMPROVED SAW-SET.

Specification forming part of Letters Patent No. 8,026, dated April 8, 1851.

To all whom it may concern:

Be it known that I, ELIJAH S. HOLKINS, of Painesville, in the county of Lake and State of Ohio, have invented a new and useful Improvement in Saw-Sets for Setting the Teeth of Saws; and I do hereby declare the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, which form part of this specification, and in which—

Figure 1 is a view in perspective of my improved saw-set, and Figs. 2 and 3 side elevations of the same in detail.

The same letters refer to similar parts in all the figures.

In my improved saw-set the body of the improvement is so constructed as to contain a spring or elastic property in itself—that is to say, in the same piece of metal of which it is composed independent of any additional part. The said form, in connection with an adjustable stirrup operating in a slot therein, enables the machine to be readily adapted to the length and, sometimes, varying thicknesses of the teeth of the saw, and by the lever-purchase, which is combined with the same, the operator can take a firm hold of each tooth in quick succession.

In the accompanying drawings, A A A is the body of the machine, constructed of steel and bent somewhat in the form of an ox-bow. The end of the lower jaw is lengthened out, bent downward, and flattened, as shown at B. This lengthened part receives a setting-screw C, which is inserted through its under surface near its end. G is a stirrup, attached to the lower jaw and operating in the slot D made through it.

M is a thumb-screw, passing through the stirrup and slot aforesaid. The upper part of the said stirrup has a feather-edged friction-bearing K, as indicated by the dotted lines in Fig. 2. Said bearing acts on the end of the lever hereinafter mentioned. The end of the upper jaw on its under side is cut to a tapering form, as shown at E. The corre-

sponding part of the lower jaw F is similarly cut, thus forming a pair of lips, for the purpose hereinafter mentioned. H is the lever before referred to. Said lever is connected to the upper part of the stirrup G by the center-pin I, on which it works. L is a projecting shoulder, acting as a fulcrum of the lever aforesaid.

The above-described saw-set is put into operation by first graduating the stirrup to the length of the teeth of the saw intended to be set by moving the said stirrup along the slot and making it fast at the desired point by the thumb-screw working therein. The set is then adjusted to the required angle by elevating or depressing the setting-screw. The machine being held in the hand of the operator, (the palm resting on the lever,) a tooth is inserted between the lips and pressure applied to the lever. This, acting on the upper jaw, closes the lips firmly on the tooth. The machine is then depressed until the point of the setting-screw comes in contact with the side of the saw-blade which performs the operation. The pressure is then relaxed, when the reaction of the spring parts the lips ready for a similar operation.

Having thus described the construction and operation of my improved saw-set, what I claim therein as new, and desire to secure by Letters Patent, are the following particulars:

1. Supporting the lever by which motion is given to the jaws by means of an adjustable stirrup constructed substantially as described, whereby said stirrup serves as a gage in addition to performing its ordinary duties.
2. The arrangement of the jaws constructed of one bent piece of metal, with the lever and stirrup, the handle of said lever projecting backward toward the rounded part of the jaw, the whole being constructed substantially as herein described.

ELIJAH S. HOLKINS.

Witnesses:

MILO HARRIS,
J. F. SINGLE.