G. S. GRIER.

SAW-SET.

No. 186,127. Patented Jan. 9, 1877.

Fig. 1.

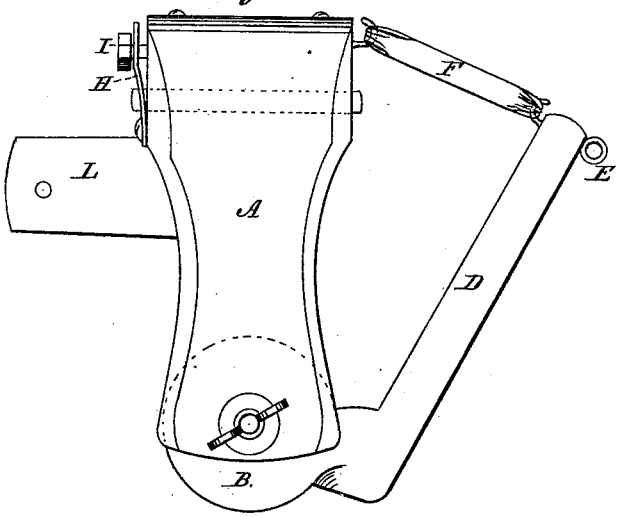


Fig. 2.

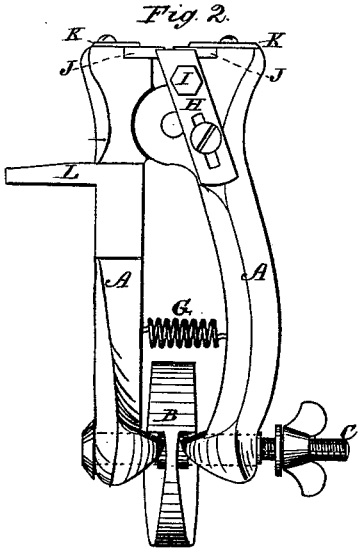


Fig. 3.

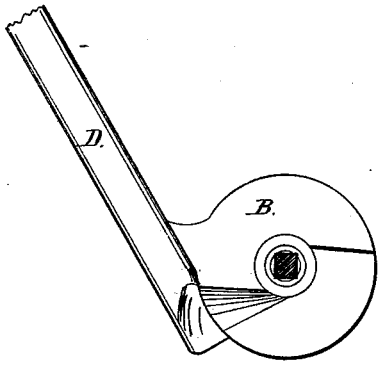
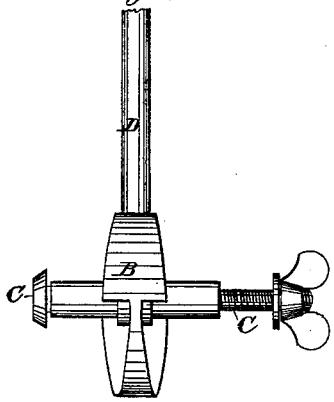


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE S. GRIER, OF MILFORD, DELAWARE.

IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. **186,127**, dated January 9, 1877; application filed December 5, 1876.

To all whom it may concern:

Be it known that I, GEORGE S. GRIER, of Milford, in the county of Kent and State of Delaware, have invented a new and Improved Saw-Set; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view; Fig. 2, an end view. Figs. 3 and 4 are side and edge detail views of the cam-headed lever.

The object of my invention is to furnish a device for setting the teeth of saws of different sizes, and which is capable of being so adjusted as to give much or little set to them, as may be desired.

It consists of two hinged jaws provided with die-plates having teeth, to engage alternately with the teeth of the saw, and between the lower portion of these jaws a double cam is placed for closing or opening them, the said cam being operated by a lever.

In the drawing, A A represent two jaws hinged together, their lower portions being provided with projections. B is a circular double or compound cam, having projections on both its sides, to engage with the projecting ends of the jaws, and it is provided with a tubular shaft, which revolves in holes formed in the lower ends of the jaws A A. C is a check-bolt, which passes through this hollow shaft, and is provided with a thumb-nut, so that it can be readily adjusted to allow the jaws to be opened or closed the required distance to give much or little set to the teeth. D is a lever for operating the cam. E is an eye on the lever, into which is hooked a rod with a foot-loop, to force down the said lever in order to close the jaws. F is a spring, one end of which is attached to the lever, and the other to the jaws, to raise the lever after pressure has been removed. G is a spring placed between the two legs of the jaws to close them, and thereby open the jaws. H is an adjustable slotted spring-gage, attached to one of the jaws by a screw passing through a slot, and provided with a thumb-screw, I, which passes through another slot in the spring into the said jaw, the whole operating for the purpose of holding and adjusting the saw-teeth with the dies. J J are dies on the face of the jaws, which are held in place by plates K K, which are screwed to the face of the jaws. L is a flange provided with screw-holes formed on one of the jaws, for attaching the device to a bench. Different-sized dies are used, and they can be put in or removed by slackening the screws which hold them on the face of the jaws.

When desired for use, the above-described device is secured to a bench, or clamped in a vise, and the jaws regulated to give much or little set to the teeth by the check-bolt; then, by depressing the lever, the jaws are brought together, and the required set given to the teeth.

Having thus described my invention, what I claim as new is—

1. The combination of the hinged jaws A A, the compound cam B, lever D, and the flange-plate L, substantially as shown and described.

2. The combination of the hinged jaws A A, the cam B, the check-bolt C, and die-plates J J, substantially as shown and described.

3. The combination of the hinged jaws A A, the die-plates J J, the cam B, lever D, the springs F and G, and spring-gage H, substantially as shown and described.

GEORGE S. GRIER

Witnesses:

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