R. J. GRANVILLE.

Saw-Set.

No. 161,950. Patented April 13, 1875.

Fig: 1.

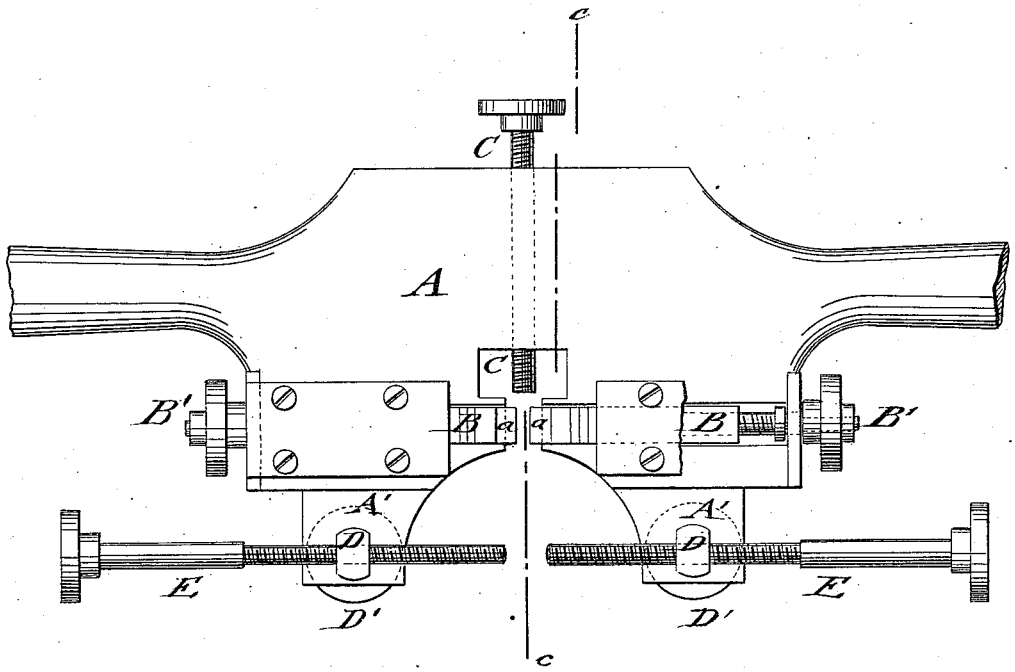
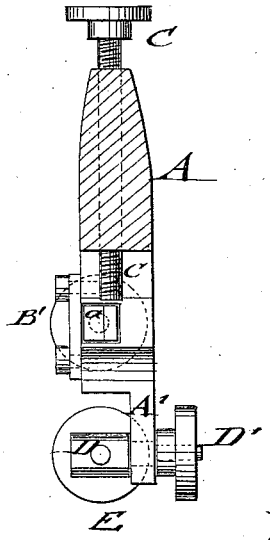


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE

ROBERT J. GRANVILLE, OF ASTORIA, OREGON.

IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. **161,950**, dated April 13, 1875; application filed March 1, 1875.

To all whom it may concern:

Be it known that I, ROBERT J. GRANVILLE, of Astoria, in the county of Clatsop and State of Oregon, have invented a new and Improved Saw-Set, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view, and Fig. 2 a vertical transverse section on the line *c c*, Fig. 1, of my improved saw-set.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish an improved saw-set, by which the teeth may be alternately set in opposite direction, so that the operation may be finished by passing the instrument once along the saw.

The invention consists of an operating main piece, with adjustable clamps and set-screws for giving each tooth the exact degree of set required.

In the drawing, A represents the main piece, with side handles for operating the same. The main piece A is cast in one piece of suitable metal, and provided with the recesses and extensions required for the arrangement of the various parts. The slide-pieces B are arranged in longitudinal recesses symmetrically at both sides of the central axis of main piece A, and provided with case-hardened inner ends *a*, which are set exactly to the thickness of the saw-teeth by means of adjusting-nuts B′, applied to the outer screw ends of the slides B. The slide-pieces B are graduated at their upper parts and set to gage-points equidistant from the central axis, in such a manner that the ends of the slide-pieces B may be readily set to equal distance from the center line, and fitted to the thickness of the saw-teeth. A set-screw, C, passes through main piece A in the direction of the central axis, and defines by its inner end the distance or length to which the saw-teeth may pass into the main piece between the jaws *a*. Set-screw C should be made of brass or other soft metal, so that the saw-teeth may not be injured by the contact with it. At both sides of the central axis of the main piece A are symmetrical extensions A′, which carry pivoted standards D, capable of being firmly attached by tightening back nuts D′. Through the standards D pass set-screws E, which may be set at any angle or distance toward the central axis, for being applied to the body of the saw, and regulate the amount of set to be given to the teeth. By adjusting the ends of set-screws E symmetrically to the central axis the instrument may be worked to either side, setting each alternate tooth in opposite direction as it is passed along the saw, and finishing thereby the whole saw at one continuous operation.

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

A saw-set constructed of main piece A, symmetrically-adjustable tooth-guiding slide-jaws B, end set-screw C, and adjustable set-screws E, defining amount of set of teeth, the whole being arranged and operated substantially in the manner and for the purpose set forth.

ROBERT J. GRANVILLE.

Witnesses:

HENRY JACOBS,

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