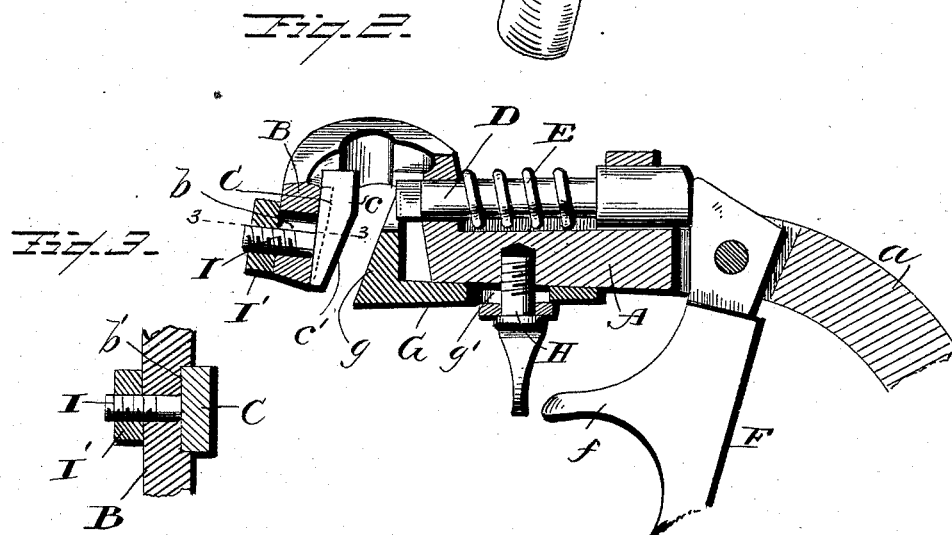
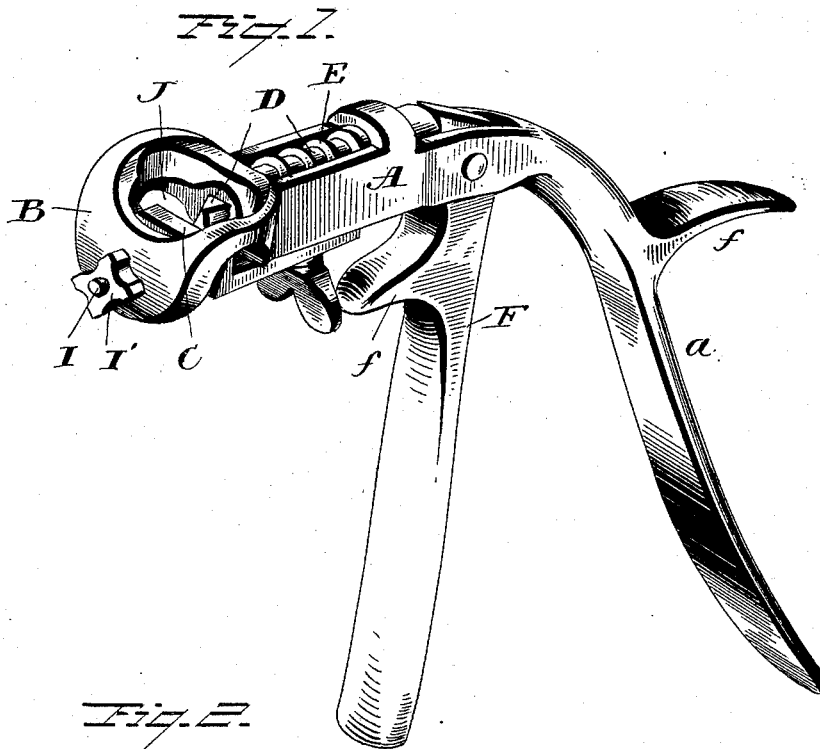


(No Model.)

F. X. ZAHRINGER & J. B. SPAEDY.  
SAW SET.

No. 522,869.

Patented July 10, 1894.



Witnesses  
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# UNITED STATES PATENT OFFICE.

FRANK X. ZHRINGER AND JOHN B. SPAEDY, OF BELL AIR, MISSOURI.

## SAW-SET.

SPECIFICATION forming part of Letters Patent No. 522,869, dated July 10, 1894.

Application filed November 17, 1893. Serial No. 491,203. (No model.)

*To all whom it may concern:*

Be it known that we, FRANK X. ZHRINGER and JOHN B. SPAEDY, citizens of the United States, residing at Bell Air, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Saw-Sets; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention relates to saw sets, and has for its object the provision of a saw set that will be simple and durable, capable of easy and effective operation without fatigue to the operator, and susceptible of ready adjustment for saws of different thicknesses, and to these ends, said invention consists of the saw set having the construction and combination of parts hereinafter specified, and illustrated in the annexed drawings, in which—

Figure 1 is a perspective view of the invention; Fig. 2 a longitudinal section; Fig. 3 a detail horizontal section.

In the drawings A designates the main or body portion of the tool that at one end terminates in a handle *a* and at its other end is arched forward and downward in the form of a curved arm B to provide a space for the insertion of the saw to be acted upon and a support for the anvil C against whose face *c* the saw tooth is to be pressed by the end of the longitudinally movable punch or setting bar D. The punch is pressed normally rearward by a coiled spring E that encircles it and bears at one end against a part of the body A and at its other end against the enlarged rear end of the punch, while to move said punch forward, a lever F pivoted in a slot in the body A is provided whose upper short end engages the rear end of the punch and whose lower and quite long end is adapted to be engaged by the fingers and drawn toward the handle *a*, when the two are grasped by the hand after the manner of holding a pistol grip. By fashioning and arranging the handle and lever as described, the tool is adapted to the natural position of the hand, enables the application

of ample power to the punch, and permits of rapid use without cramping or fatiguing the hand.

To add to the firmness and comfort of the grip upon the handle and lever each is provided near its upper end with a curved lug or spur, *f*, as shown. The saw is held steadily and so that the teeth shall be all set at the proper angle between a face *c'* on the anvil C that is below and forms an obtuse angle with the face *c*, and the end *g* of a plate G that is secured to the under side of the body A, which end *g* has its saw engaging face parallel with the like face *c'* of the anvil C. The plate G is adjustable to move its end toward or from the anvil to accommodate saws of different thicknesses, by being slotted longitudinally at *g'* and held to the body A by a set screw H that passes into the latter through the slot, while to permit vertical adjustment of the anvil, it is provided with a threaded stem or shank I that passes outward through a vertically elongated opening *b* in the arm B and has a nut I' upon it to engage the outer face of the latter. The anvil is held from turning on the stem by being seated in a shallow recess *b'* in the arm B.

A cavity or recess is formed in the upper side of the body A to accommodate the spring E so that the latter is thus housed and protected.

An opening J is made through the top of the arm B to enable the operator to see the punch and anvil and thus observe their effect upon the teeth as they are set.

Our tool is simple, is light in weight, but very strong and enables an easy, powerful and gradual pressure to be applied to the saw tooth.

Having thus described our invention, what we claim is—

In a saw set, the combination of the body portion A having at its rear end the downwardly extending handle *a*, and at its front end the downwardly and forwardly arched arm B, having a recess *b'* in its inner face, the anvil seated in said recess, a threaded shank and a nut holding the anvil in place, the said anvil having two saw engaging faces, the adjustable plate G having a saw engag-

ing end parallel with one of said faces, a sliding punch to cooperate with the other of said faces, the downwardly extending lever F, pivoted in advance of the handle *a* and engaging said punch, and spurs or lugs *f* and *f*  
5 on said handle and lever, substantially as specified.

In testimony that we claim the above we

have hereunto subscribed our names in the presence of two witnesses.

FRANK X. ZHRINGER.  
JOHN B. SPAEDY.

Witnesses:

T. B. COOPER,  
JOHN BABBITT.