(No Model.)

J. M. BASKET.

SAW SET.

No. 471,461. Patented Mar. 22, 1892.

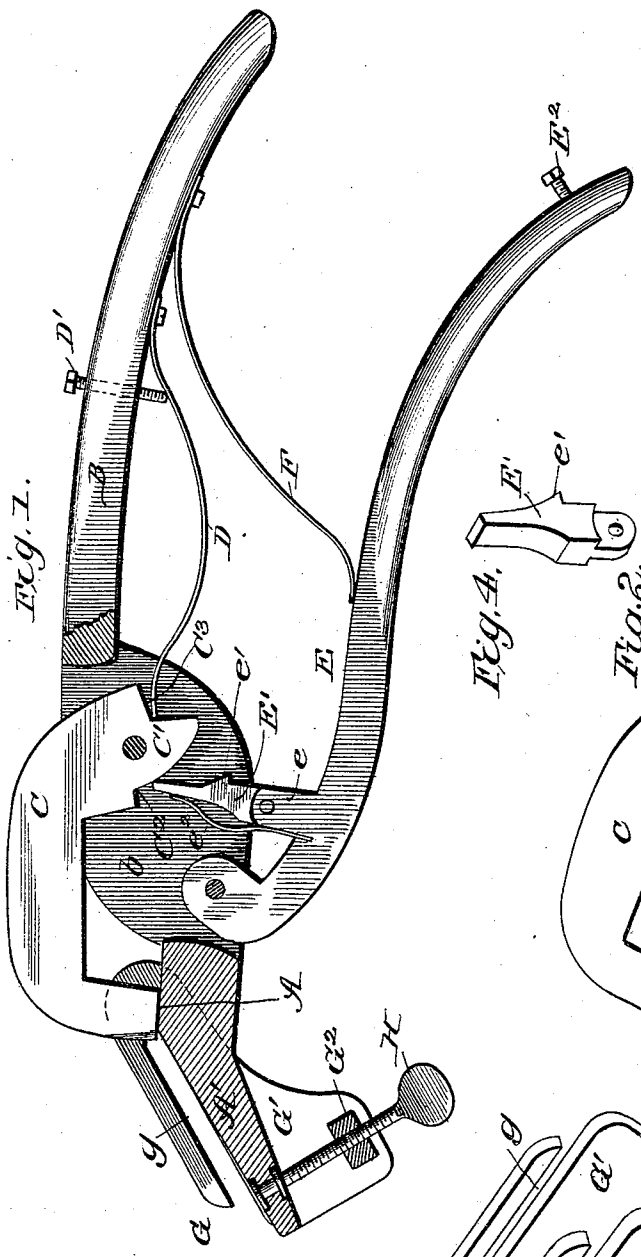

Fig. 1.

Fig. 4.

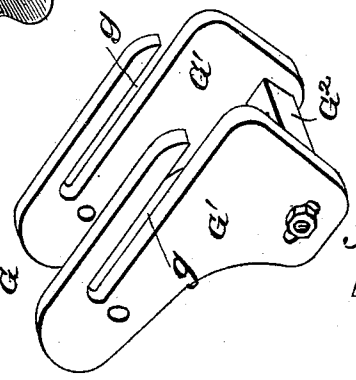

Fig. 3.

Fig. 2.

WITNESSES:

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JAMES M. BASKET, OF LEOTA LANDING, ASSIGNOR OF TWO-THIRDS TO JOHN K. NUTT AND THOMAS WORTHINGTON, OF WASHINGTON COUNTY, MISSISSIPPI.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 471,461, dated March 22, 1892.

Application filed August 24, 1891. Serial No. 403,617. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. BASKET, residing at Leota Landing, Washington county, State of Mississippi, have invented certain new and useful Improvements in Saw-Sets, of which the following is a full, clear, and exact specification, reference being had to the drawings, in which—

Figure 1 is a side elevation partly in section, the parts being in their normal position. Fig. 2 is a similar view, the hammer being raised and in the act of being released. Fig. 3 is a perspective of the gage removed, and Fig. 4 is a detail showing the dog.

The object of the invention is to produce a self-acting saw-set, or one in which the hammer is first raised against the action of its operating-spring by pressing the handles together and then released by a further pressing together of the handles to act on the saw-tooth, and to provide an improved gage by which the angle of the saw and its teeth may be readily adjusted.

The invention consists in the construction and combination of parts hereinafter described and claimed.

A represents the anvil or table at the outer end of a handle B, which latter has a vertical slot *b* at its juncture with the anvil.

A′ is a downwardly-inclined extension of the anvil or table.

C is the hammer, pivoted at its rear end within the rear end of slot *b* and provided with a depending lug C′ at said pivoted end and with front and rear shoulders C^2 C^3 at the base of said lug C′. The forward edge of the lug C′ is curved or inclined for a purpose to be presently set forth.

D is the main spring, secured to the under side of the handle B and bearing at its free end on the shoulder C^3 of the hammer, so as to throw its outer or working end down upon the anvil or table A.

D′ is the tension-screw for spring D.

E is the operating trigger or lever, pivoted at its forward end in the slot *b* in front of the pivotal point of the hammer C and extending rearwardly below the handle B within hand-grasping distance thereof. The trigger or handle in rear of its pivot is provided with two apertured lugs *e*, between which is pivoted the lower end of a dog E′ the upper end of which normally rests under the shoulder C^2, as shown in Fig. 1. On the rear side of the dog E′ is a projection or enlargement *e′* to operate in connection with the curved or inclined surface of lug C′, toward which the dog is pressed by a spring e^2. The screw E^2 forms a stop to limit the approach of the trigger E to the handle A.

F is a plate-spring secured to the handle B and bearing on the trigger or lever E to return it to its normal position.

G is the gage, consisting of two side pieces G′ G′, pivoted at the inner ends to the sides of the implement adjacent to the anvil, and each piece or member has a longitudinal slot *g g* just below its upper edge and extending from its outer end inward to a point adjacent to the working face of the anvil. The two side pieces or members G′ G′ are connected below the extension A′ by a cross-bar G^2, the ends of which pivot in slots *g′*, and an adjusting-screw H passes through a threaded aperture in said cross-bar G^2, and is swiveled at its upper end in said extension A′.

The operation is as follows: The blade of the saw is entered in the slots *g g* of the gage until its teeth strike the bases of said slots, which thus form stops, and the inclination of the tooth is then effected by turning the screw H to raise or lower the gage, as may be required. The gage having been properly adjusted, the operator grasps the handle and trigger, presses the latter toward the handle, which will cause the dog E′ to bear upward on the shoulder C^2, and thereby raise the hammer against the action of the main spring D until the curved surface of the lug C′ approaches the projection *e′* and forces the dog E′ from under the said shoulder C′, whereupon the main spring will throw the working end of the hammer down upon the saw-tooth and impart the proper set thereto. The hand of the operator is then allowed to relax, and the spring F returns the trigger or lever to its proper position and the spring e^2 acts in the same way on the dog E′.

The implement may be moved rapidly along the saw from tooth to tooth and operated by a quick succession of grasps.

If the blow given by the hammer should prove too great, the force of the blow may be lessened by turning the screw D′.

I desire it understood that the quick blow given the tooth will not bend it to any great extent, but will bevel it on one side.

Having described my invention, what I claim is—

1. A saw-set comprising the handle B, having an anvil at its forward end and a vertical slot just in rear of the anvil, a hammer C, having its downward-curved rear end pivoted in said slot and having its lower edge shouldered at C^2 C^3 and formed into a curved or cam surface C′ between the two shoulders, a main spring D, secured to the handle and bearing on shoulder C^3, a screw D′ for adjusting the spring, and a trigger E, pivoted at its forward end in said slot and provided on its upper side near its pivot within the slot with a vertically-extending pivoted dog E′, operating against the shoulder C^2 and having a projection e', acted on by the curved hammer-edge C′, substantially as set forth.

2. In a saw-set, the combination, with the anvil and the hammer, of the vertically-adjustable gage pivoted at its inner end along side of the anvil and having longitudinally-extending slots to receive the saw-blade and limit its inward movement toward the anvil, substantially as set forth.

3. The combination, with the anvil and the hammer, of the gage comprising two vertically-swinging members having longitudinally-extending slots along their upper edges and a screw for adjusting the same vertically, substantially as set forth.

4. The combination, with the anvil having a forward extension inclined downwardly and a hammer, of the gage comprising vertically-swinging members pivoted at their inner ends and extending alongside of said extension, a pivoted cross-piece connecting said members below the extension and having a screw-threaded aperture, and a screw extending through said aperture and swiveled at its upper end in said extension, substantially as set forth.

5. A saw-set consisting in the anvil having a forward projection, downwardly-inclined extension, and a rearwardly-projecting handle having a vertical slot adjacent to the anvil, a vertically-adjustable slotted gage embracing said extension, a hammer pivoted in said slot and having shoulders C^2 C^3 at opposite sides of its pivot and an intermediate depending curved lug, the main spring secured to the handle and bearing on the shoulder C^3, the trigger pivoted at its forward end in the slot and extending rearwardly under the handle, a dog pivoted to the trigger within the slot and resting at its upper end under the shoulder C^2, a projection on the dog to be engaged by the curved lug, a spring pressing the dog toward said curved lug, and a spring pressing the trigger away from the handle, substantially as set forth.

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Witnesses:
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