No. 763,155. PATENTED JUNE 21, 1904.

E. CAYWOOD.

SAW SET.

APPLICATION FILED JUNE 5, 1903.

NO MODEL.

Fig. 1.

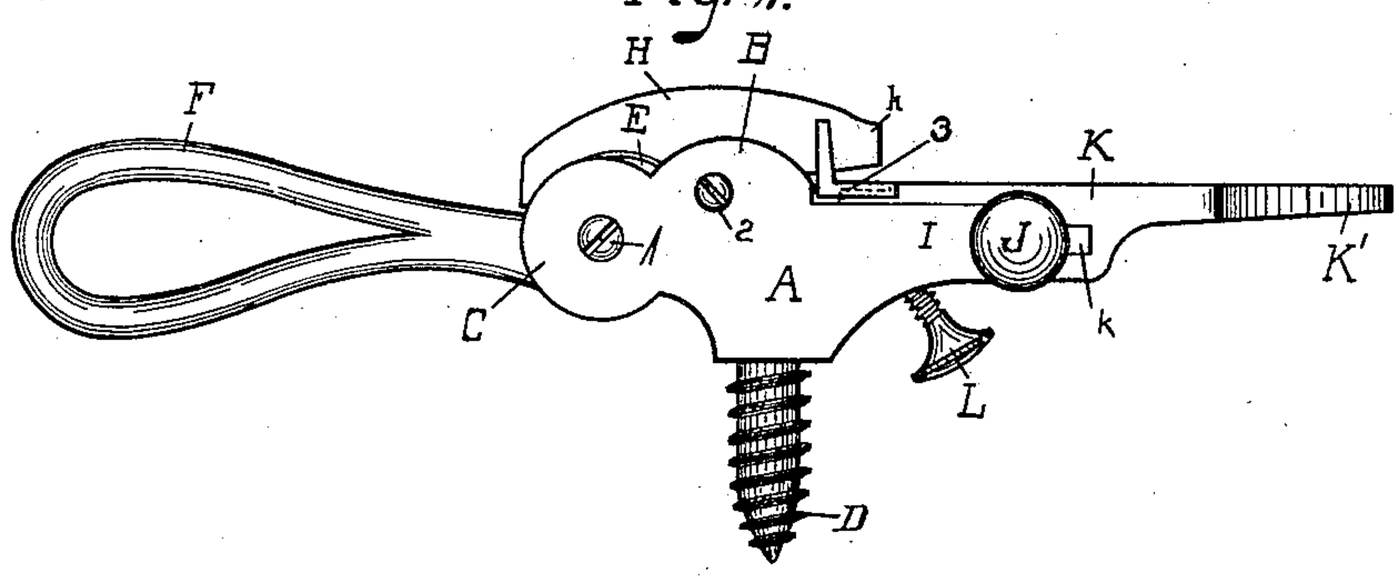


Fig. 2.

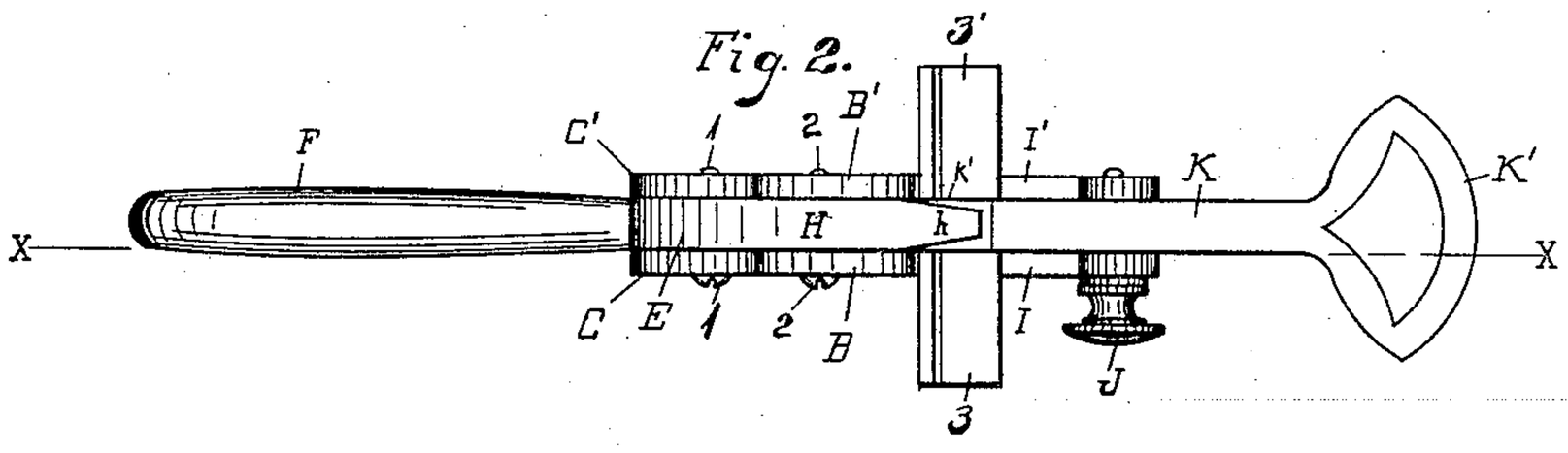
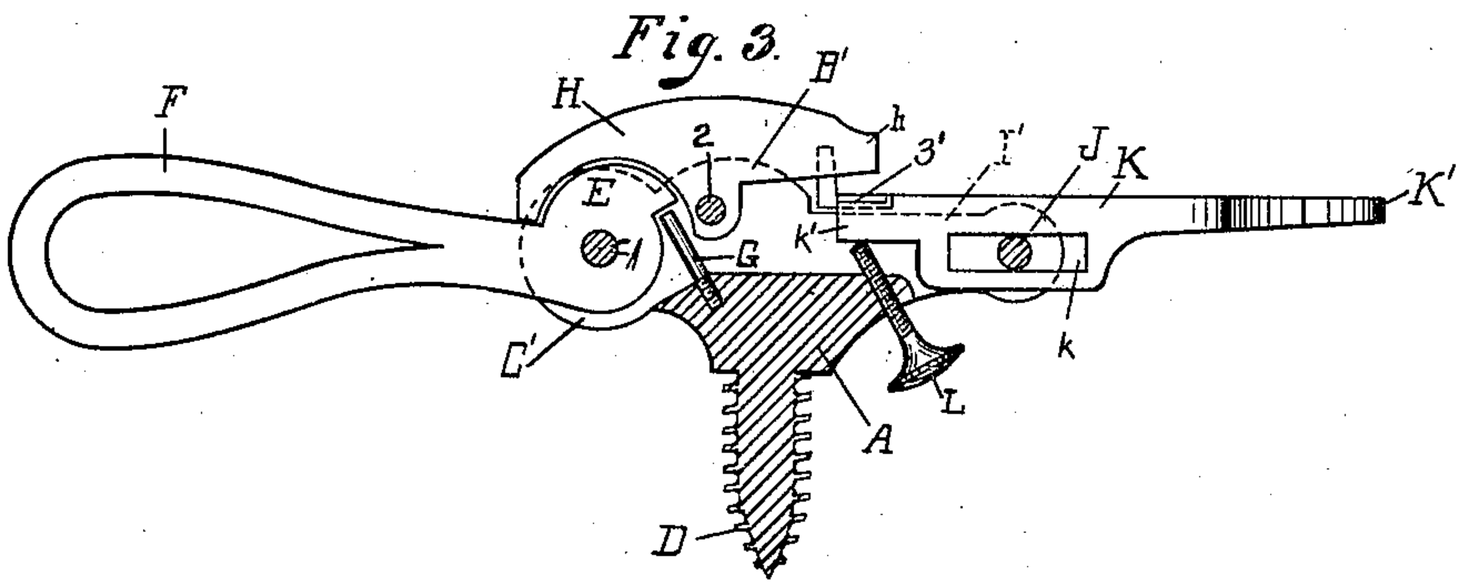


Fig. 3.



WITNESSES:

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No. 763,155. Patented June 21, 1904.

UNITED STATES PATENT OFFICE.

EMMA CAYWOOD, OF PEORIA, ILLINOIS.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 763,155, dated June 21, 1904.

Application filed June 5, 1903. Serial No. 160,212. (No model.)

To all whom it may concern:

Be it known that I, EMMA CAYWOOD, a citizen of the United States, and a resident of Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Saw-Sets, of which the following is a true and accurate specification, which when taken in connection with the accompanying drawings, forming a part thereof, is sufficiently clear and concise as to enable others skilled in the art to which it appertains to make and use the same.

The object of my present invention, broadly speaking, is the provision of an improved saw-set which may be easily and quickly operated and controlled to produce the required results.

Another object is to provide a saw-set which will be strong and durable in construction, positive in action, will be neat and attractive in appearance, and which can be manufactured and sold at a comparatively low price.

Another object is to provide a mechanical tool of new and novel construction operative by manual power and to provide certain improvements in devices of this character which will render the same much more durable and effective in operation.

Another object is to provide a simple and efficient saw-set capable of being readily adjusted to operate on saws of different sizes and adapted to effectually set the teeth thereof without breaking or scarring a tooth and to give a uniform set to the teeth.

Other specific objects and advantages of my invention will appear from the following specification, from the drawings forming a part thereof, and from the claim hereunto appended.

My invention consists in the construction and novel combinations and arrangement of the several parts, substantially as herein shown and described.

Referring now to the drawings, Figure 1 shows a side elevation of my invention. Fig. 2 is a plan view of same; and Fig. 3 is a vertical section of same, taken on the line X X of Fig. 2.

Like reference characters denote like parts throughout the several views.

I will now take up the description of my invention in detail, which I will refer to as briefly and compactly as I may.

A designates the body portion of my device with integral upwardly-extending wings B and B′ and integral forwardly-extending wings C and C′ and with an integral depending screw D. Pivotally mounted by the screw 1, between the wings C and C′, is the cam E, with an integral lever F, extending forward therefrom, by which lever said cam may be operated. Extending up centrally and slightly forward from the body A is an adjusting-screw G, (shown in Fig. 3,) and a shoulder is formed in the rear portion of the periphery of the cam E, against which the head of the screw G is adapted to impinge when the lever F is raised up, thus forming an adjustable stop therefor.

The letter H represents a dog with a central depending portion fitting between the ears B and B′, where it is pivoted by the screw 2. The under edge of the dog H in front of its pivotal connection is curved inward to conform to the curvature of the cam E, with which it contacts, and the rear end of the dog H terminates in the hammer portion *h*.

Extending to the rear from the body A are the arms I and I′. The rear ends of said arms are slightly enlarged and are provided with openings therethrough to receive the knurled head thumb-screw J.

K represents an adjustable arm with a central lower projection, having a lateral slot *k* therethrough, said arm K being of a width to fit between the arms I and I′, between which it is pivotally and laterally slidably mounted by the thumb-screw J. The rear portion of the arm K is expanded fan-like, forming a relatively large flat portion or support K′, and the forward end of the arm K forms the anvil *k*′, which comes immediately below the hammer *h*.

The upper surface of the anvil *k*′ is somewhat lower than is the surface of the horizontal portions of the wings 3 and 3′. Thus as the hammer *h* descends the tooth there-

under will be deflected and pressed down against the anvil *k'* and below the surface of the horizontal portions of the wings 3 and 3'.

Extending outwardly at right angles from the sides of the anvil *k'* are wings 3 and 3', with forward upturned edges, forming guides for the saw-teeth. Said wings are secured at their inner ends to the sides of the anvil *k'* by brazing or otherwise, or they may be integral thereof, the outer ends of the wings being unsupported, as shown. Extending upwardly at an angle from the under side centrally through the rear portion of the body A is a thumb-screw L, whose point is adapted to impinge the under side of the anvil *k'* and by which the height of the anvil *k'* may be adjusted.

In operation the device is secured to a block or the like by inserting the screw D therein. The arm K is then adjusted laterally as desired and secured by tightening the screw J. The height of the anvil *k'* is then adjusted by the screw L, and the upward movement of the lever is adjusted by the screw G, all of said adjustments depending on the kind of saw to be set and the size of the teeth thereof. When properly adjusted, the saw-blade is laid on the surface of the arm K and the support K', with the saw-teeth contacting with the upturned flanges of the wings 3 and 3', bringing the teeth to be set directly between the point of the hammer *h* and the anvil *k'*, and then by pressing down on the lever F the cam E will raise the front portion of the dog, turning it slightly on its screw-pivot 2, thus causing the hammer *h* to descend on the tooth thereunder and pressing the tooth against the anvil *k'* and bending the tooth the exact amount to which the device has been adjusted. In the act of setting the saw-teeth the blade of the saw rests on the table K and also on the expanded portions K' when the blade is of sufficient width, by which the blade may be retained at the proper angle positively.

By the construction shown and described it will be seen that my device is exceedingly simple in construction and operation, that it is adapted to be easily and quickly adjusted to receive different sizes of saws, and that the teeth operated on will be set uniformly and without danger of breaking the teeth by sudden jars.

From the above description, taken in connection with the accompanying drawings, it will be seen that I have produced an improved saw-set embodying the objects elsewhere referred to in this specification.

While I have illustrated and described the best means now known to me for carrying out my invention, I do not wish to be understood as restricting myself to the exact details of construction shown and described, but hold that any slight changes or variations such as might suggest themselves to the ordinary mechanic would properly fall within the limit and scope of my invention.

Having now fully shown and described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a saw-set, the combination with a body portion having wings and a wood-screw extending down therefrom and integral thereof, a cam mounted in one end between two of said wings, a lever extending out from said cam, a screw-stop inserted in the body to engage a shoulder on the cam, an adjustable arm with a central lower projection having a lateral slot therethrough and mounted by a thumb-screw between arms I and I' on the body and terminating in the rear in an expanded portion, an offset anvil formed of the forward end of said adjustable arm, wings formed of angle-pieces extending out at right angles from the sides of the anvil, the thumb-screw L for adjusting the height of the anvil, the dog pivoted in the body with its front end resting on said cam and its rear end forming a hammer above said anvil, and means whereby as the lever is lowered the hammer will impinge the anvil for deflecting the teeth of a saw, all substantially as shown and described.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EMMA CAYWOOD.

Witnesses:

MILDRED ADAMS,

JAMES FITCH.