

No. 736,470.

PATENTED AUG. 18, 1903.

D. WORDEN.
COMBINED SAW SET AND GAGE.
APPLICATION FILED APR. 9, 1903.

NO MODEL.

Fig. 1.

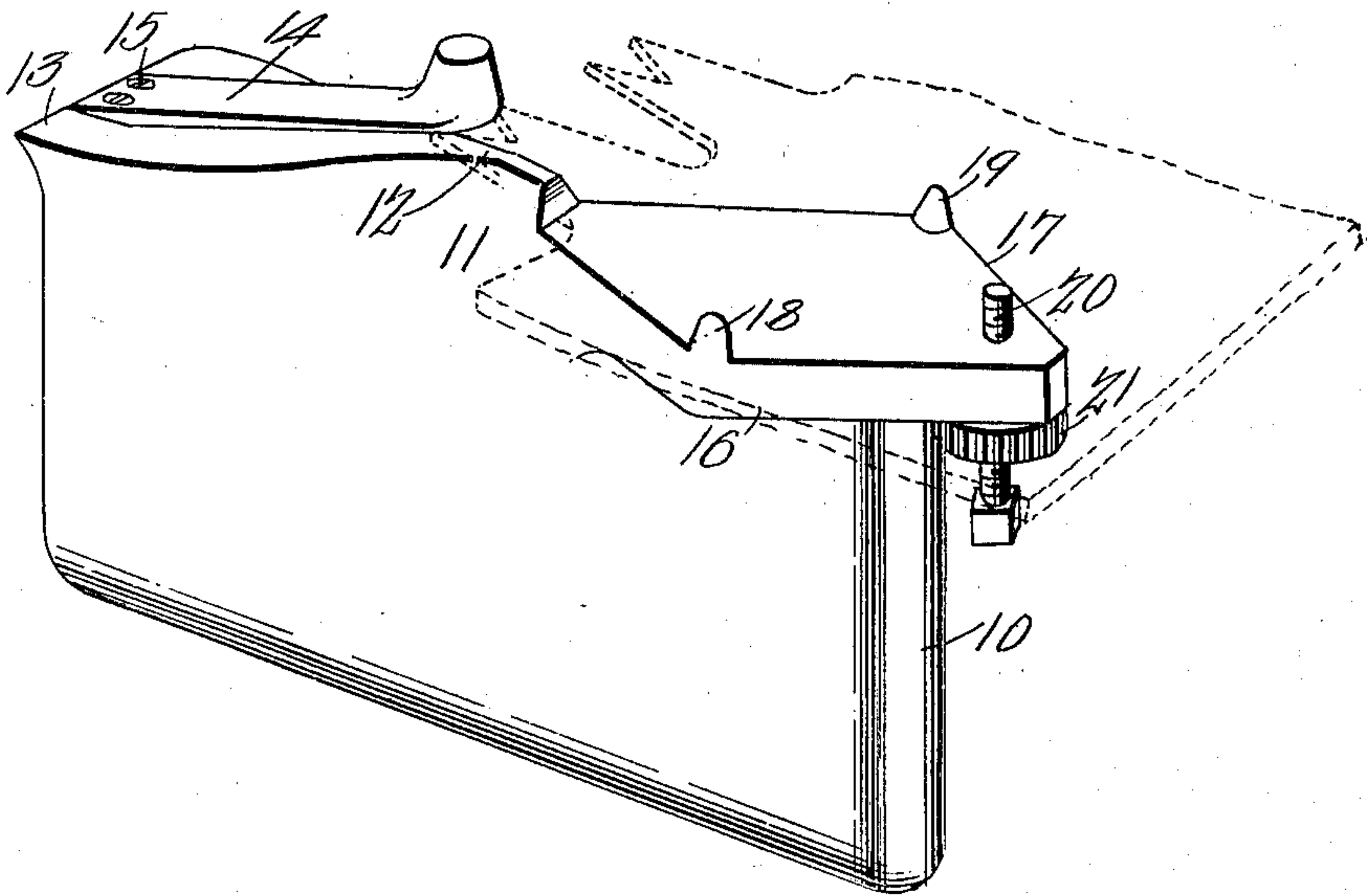
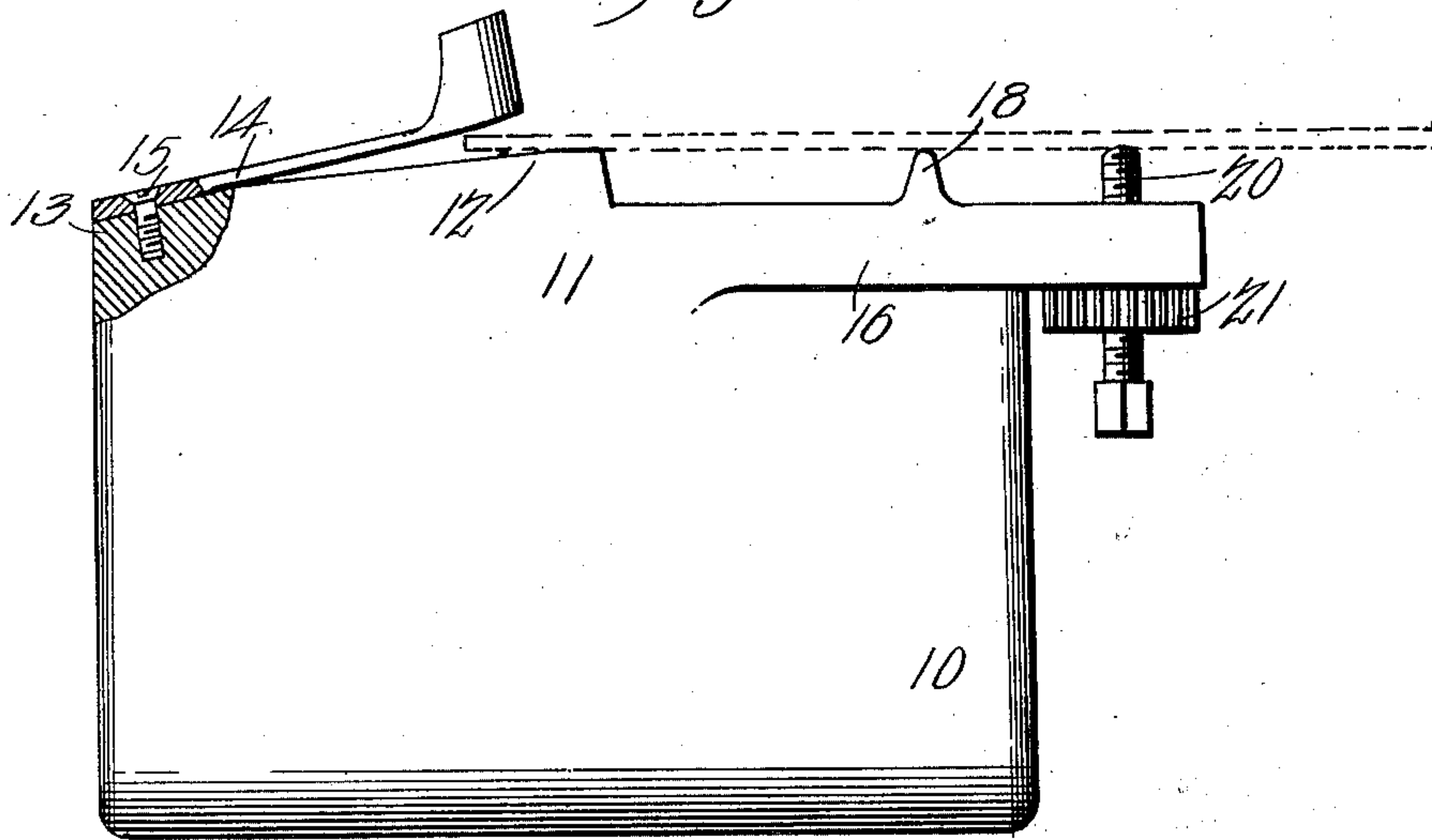


Fig. 2.



Witnesses
E. H. Stewart
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UNITED STATES PATENT OFFICE.

DUDLEY WORDEN, OF WHATCOM, WASHINGTON, ASSIGNOR OF ONE-HALF
TO EDWIN P. PHELPS, OF WHATCOM, WASHINGTON.

COMBINED SAW SET AND GAGE.

SPECIFICATION forming part of Letters Patent No. 736,470, dated August 18, 1903.

Application filed April 9, 1903. Serial No. 151,886. (No model.)

To all whom it may concern:

Be it known that I, DUDLEY WORDEN, a citizen of the United States, residing at Whatcom, in the county of Whatcom and State of Washington, have invented a new and useful Combined Saw Set and Gage, of which the following is a specification.

This invention relates to devices employed in "setting" and gaging saw-teeth, and has for its object to simplify and improve devices of this character and to reduce the expense of construction and increase the efficiency; and the invention consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a perspective view of the device. Fig. 2 is a side elevation.

The improved device consists of a base member 10 of sufficient size to form a convenient hand-grip and contracted centrally at one edge, as at 11, and with a contracted or V-shaped anvil 12 extending from the base at the contracted portion, with the operative surface of the anvil formed with the "point" of the anvil parallel to the plane of the base for a short distance, as at 12, and inclined from the terminal of the flat portion to the end of the base portion, as shown. Beyond the anvil portion the base is widened, as shown at 13, and formed with an inclined recess in which a spring-hammer member 14 is secured, as by screws 15, the operative face of the hammer member being thus supported opposite the inclined portion of the anvil and normally spaced therefrom.

The base member 10 is formed with flanges 16 17, extending laterally therefrom in opposite directions in advance of the anvil portion and provided with studs 18 19, extending therefrom and spaced apart upon opposite sides of the base and of the anvil. The studs 18 19 afford supports to the saw-blade while being operated upon by the hammer 14 and will engage it at two points upon opposite sides of the hammer, and thus support it steadily upon the anvil and prevent any tilting motion thereon. This is a very important

feature of the invention and insures the steadiness of the action and obviates any tendency to irregularity caused by the displacement of the saw-tooth upon the anvil. By supporting the saw at two points, therefore, the tooth to be "set" will lie flat upon the anvil and all danger of a "torsional" blow of the hammer obviated. The inclination of the anvil will be equivalent to the required set of the saw-teeth and will be sufficient for the general run of saws. The adjusting-screw 20 will preferably be provided with a jam-nut 21 to "lock" it in position and prevent accidental displacement when the device is in use.

The distance apart between the anvil and the studs 18 19 and the lateral distance between the studs may be varied to any required extent as circumstances or the size of the saw-teeth may require, and I do not, therefore, desire to be limited to any specific size or dimensions for these parts.

In operating the device a trial-gage will first be made by raising the implement until the point of the tooth rests upon the flat portion of the anvil and the blade of the saw upon the points 18 19 and screw-stud 20. The implement is then moved until the tooth to be set is beneath the hammer 14 and the saw-blade resting upon the rests 18 19, but not on the screw-stud, which should be at this time spaced from the saw-blade a distance equal to the set which it is desired the tooth should have. The hammer 14 is then struck with a hammer to produce the required set of the tooth. The implement is then tilted until the point of the tooth rests on the flat portion of the anvil, and if the set is correct the blade will rest upon the anvil 12, rests 18 19, and screw-stud 20. If the set is not sufficient, then repeat the operation, and if the set is too great a light blow with a properly-formed hammer upon the root of the tooth will be effective to reduce the set, as is well understood. This action secures the proper adjustment for the remainder of the teeth, and thereafter the operation can be very rapidly performed.

By this simple device the teeth of the saw may be very uniformly set and "gaged" and without danger of striking the wrong tooth or

subjecting the teeth to an abnormally severe blow from the hammer or other implement employed. The spring-hammer 14 being the only portion of the device which engages the
5 tooth and being formed to fit the tooth and always striking the tooth at precisely the same point and from the same direction and while the saw is supported in the same position, a very regular and uniform action necessarily
10 results and no opportunity exists for any irregular or uncertain action. The result, therefore, is a very uniform set of the teeth and accomplished with the minimum of labor, time, and wear and tear of the saw and of the
15 implement.

Having thus described the invention, what I claim is—

1. A combined saw set and gage comprising a base member contracted centrally at one edge
20 and provided with a V-shaped anvil inclined toward one end of said base member, a spring-hammer secured to said inclined end, said edge having an offset lateral extension at the other end of said base member projecting on
25 opposite sides and beyond the end of said

base member, and provided with upwardly-extending lugs.

2. A combined saw set and gage comprising a base member forming a hand-grip and contracted centrally at one edge with a V-shaped
30 anvil extending from the base of the contracted portion, the operative surface of the anvil formed with the point thereof parallel to the plane of the base member for a short distance and then inclined to one end of the
35 base member, said edge at the other end being laterally extended on opposite sides of the base member and beyond the end thereof and provided with upwardly-extending spaced
40 lugs at the sides and a set-screw in its end, and a spring-hammer secured to the inclined end of said edge.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DUDLEY WORDEN.

Witnesses:

E. L. FRANKLIN,
A. H. WRIGHT.