

No. 776,562.

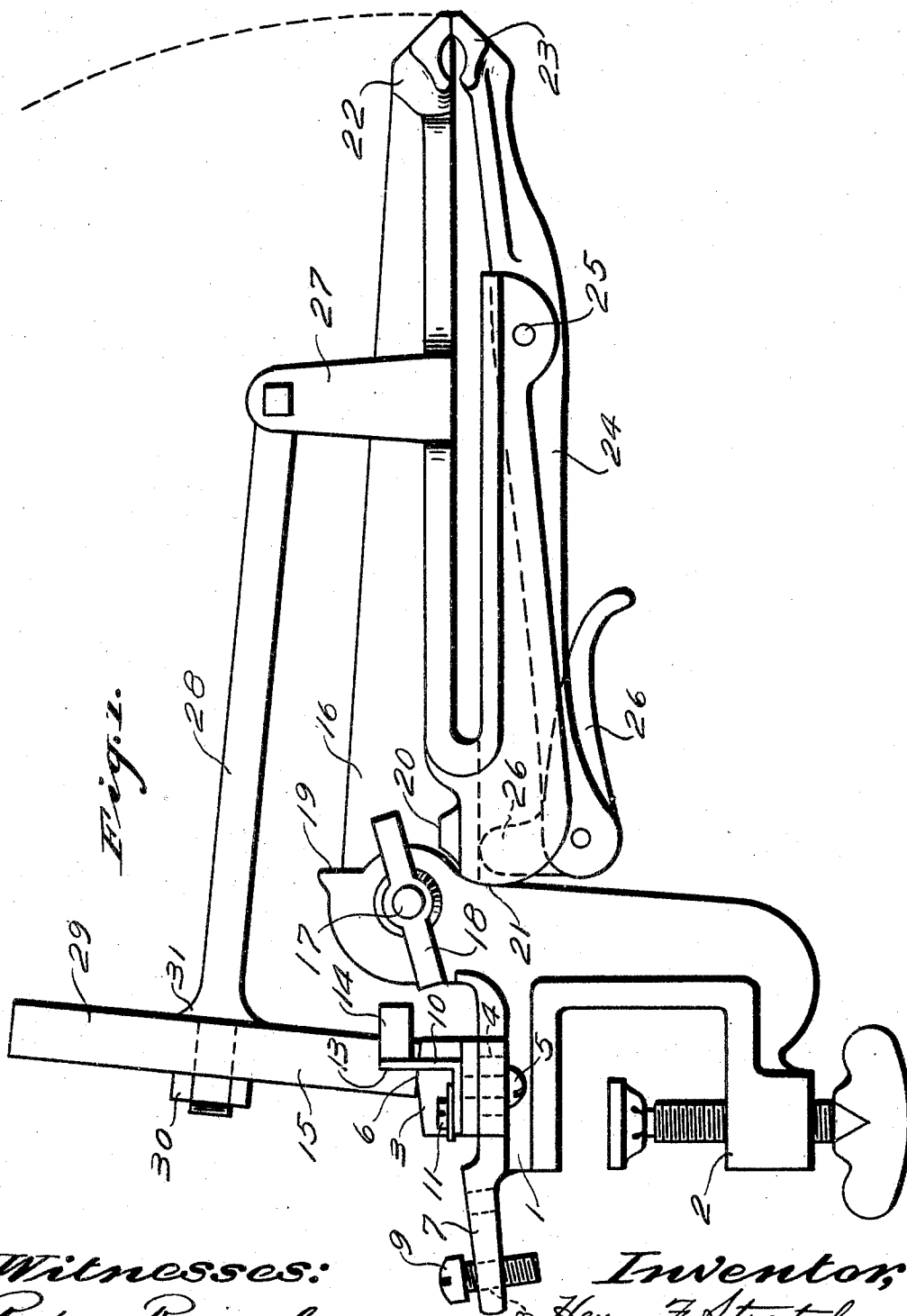
PATENTED DEC. 6, 1904.

H. F. STRETCH.  
SAW SET.

APPLICATION FILED NOV. 4, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

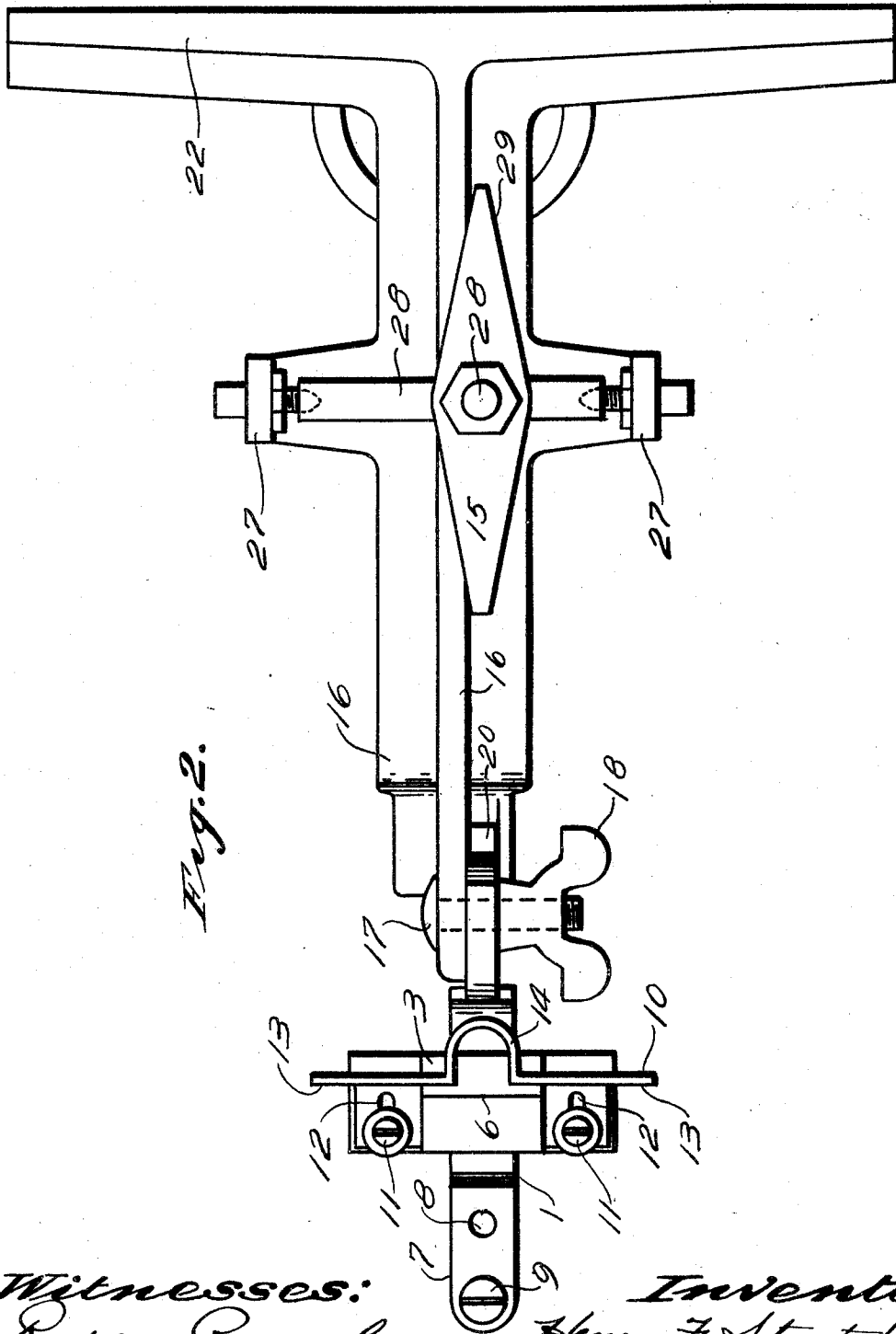


Fig. 2.

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# UNITED STATES PATENT OFFICE.

HENRY F. STRETCH, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-FOURTH  
TO STEPHEN M. PERRIGO, OF CHICAGO, ILLINOIS.

## SAW-SET.

SPECIFICATION forming part of Letters Patent No. 776,562, dated December 6, 1904.

Application filed November 4, 1903. Serial No. 179,792. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY F. STRETCH, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Saw-Sets, of which the following is a specification.

The main objects of my invention are to provide a compact device adapted for the combined purpose of setting the teeth of a saw and gripping the saw for the purpose of filing same; to provide in a saw-set an anvil and hammer suitably arranged for striking direct blows of uniform intensity and thereby avoiding the chance of flattening the edge of the saw, as frequently occurs when a glancing blow is struck; to provide a hammer having reversible striking-surfaces, and to provide an adjustable gage extending each way from the hammer and having its guiding-surfaces arranged so as to be always in alinement with each other.

I accomplish these objects by the device shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a combined saw set and filing device constructed according to my invention. Fig. 2 is a top plan of the same with the hammer disposed in a vertical position for the sake of clearness.

In the construction shown the supporting-frame 1 is provided with a suitable clamp 2 for securing same to a bench or table and has an anvil 3 mounted on the top of same. The anvil 3 is secured to the frame 1 by means of screws 5, which pass through transverse slots, (indicated by the dotted lines 4 in Fig. 1,) the anvil being thus transversely adjustable on the frame. The upper surface of the anvil is preferably in the form of two plates meeting at an angle in a ridge 6, which serves as a supporting edge for a saw. The arm 7, forming part of the frame 1, extends transversely of the supporting edge 6 and is provided with two vertically-disposed threaded apertures 8, each adapted to receive the screw 9, which is adjustable vertically and serves as a second support for the face of the saw, thus regulating the angle at which the teeth of the saw

are to be set. A gage 10 extends in parallel relation with the supporting edge and is secured above the anvil 3 by means of screws 11, seated in adjusting-slots 12. The guide-plate 13 of the gage is vertically disposed and is adjustable transversely of the supporting edge 6. The plate 13 extends each side of the middle of the anvil and has a U-shaped bend 14 at its middle part to permit the hammer 15 to strike the anvil. The U-shaped part 14 rigidly connects the two guiding-faces of the gage and thus insures their perfect alinement after readjustment.

An arm 16 is pivotally connected to the frame 1 by the bolt 17, which is provided with a winged nut 18 for clamping the arm 16 in a fixed position. Stops 19 and 20 limit the rotation of the arm when same is raised to a vertical position and a shoulder 21 on the arm engages a coacting shoulder on the frame and limits the downward rotation of the arm to the horizontal position, as shown in the drawings. The arm 16 is forked at its outer end, one of the parts of the fork having a clamp-jaw 22 at its outer end, while a coacting clamp-jaw 23 is secured at the outer end of a lever 24, fulcrumed at 25 on the other part of the arm 16. The position of the lever 24 is controlled by a cam 26, and the jaws form a vise suitable for clamping the blade of a saw while the teeth of same are being filed.

The arm 16 is provided with two vertically-disposed wings 27, between which the hammer-handle 28 is pivotally mounted. The head 29 of the hammer 15 is mounted on the outer end of the arm 28 and clamped in a fixed position between the nut 30 and the shoulder 31. One of the striking-faces of the hammer is considerably narrower than the other, and the head 29 is reversible on the arm, so that either of the striking-faces may be turned to a position for striking the anvil 3.

The operation of the device shown is as follows: When the filing-face is to be used, the arm 16 is clamped in its vertical position by means of the winged nut 18 and the blade of the saw is clamped between the jaws of the vise. After filing the teeth of the saw the arm 16 is returned to the horizontal position,

as shown in the drawings, thus bringing the hammer into position for striking the anvil. The toothed edge of the saw is not placed in contact with the gage, being supported by the supporting edge 6 of the anvil and the head of the screw 9. Vertical adjustment of the screw 9, regulating the angle of the face of the saw relatively to the anvil and adjustment of the gage 10, is made to suit the length of the saw-teeth. Since the two parts 13 of the gage 10 are secured in alinement through their rigid connection with each other, adjustment of the gage relatively of the supporting-ridge 6 is very simple. The teeth of the saw are now set by bringing the same successively under the hammer 15 and striking same with the hammer. Since the handle of the hammer is pivoted to the frame, the radius at which the hammer acts is always the same. It will be seen that this arrangement regulates the blows of the hammer to great uniformity and also insures a direct blow upon the anvil and prevents flattening of one edge of the teeth. When teeth of different size are to be set, the head of the hammer may be reversed to suit the width of such teeth.

It will be seen that some of the details of the construction shown may be altered without departing from the spirit of my invention. I therefore do not confine myself to such details, except as hereinafter limited in the claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

A saw-set comprising a supporting-frame having, mounted thereon, an anvil with an edge for supporting the saw-teeth; a vise pivoted to the frame to swing transversely of said supporting edge; stops for limiting the movement of the vise, on its pivotal connection, between a position above the anvil and a lower position; and a hammer mounted on the vise with its striking-head in position to act upon said anvil when the vise is in the lower position, substantially as described.

Signed at Chicago this 31st day of October, 1903.

HENRY F. STRETCH.

Witnesses:

STEPHEN M. PERRIGO  
WM. R. RUMMLER.