No. 677,354. Patented July 2, 1901.

J. T. HILDAHL.

SAW SET.

(Application filed Jan. 19, 1901.)

(No Model.)

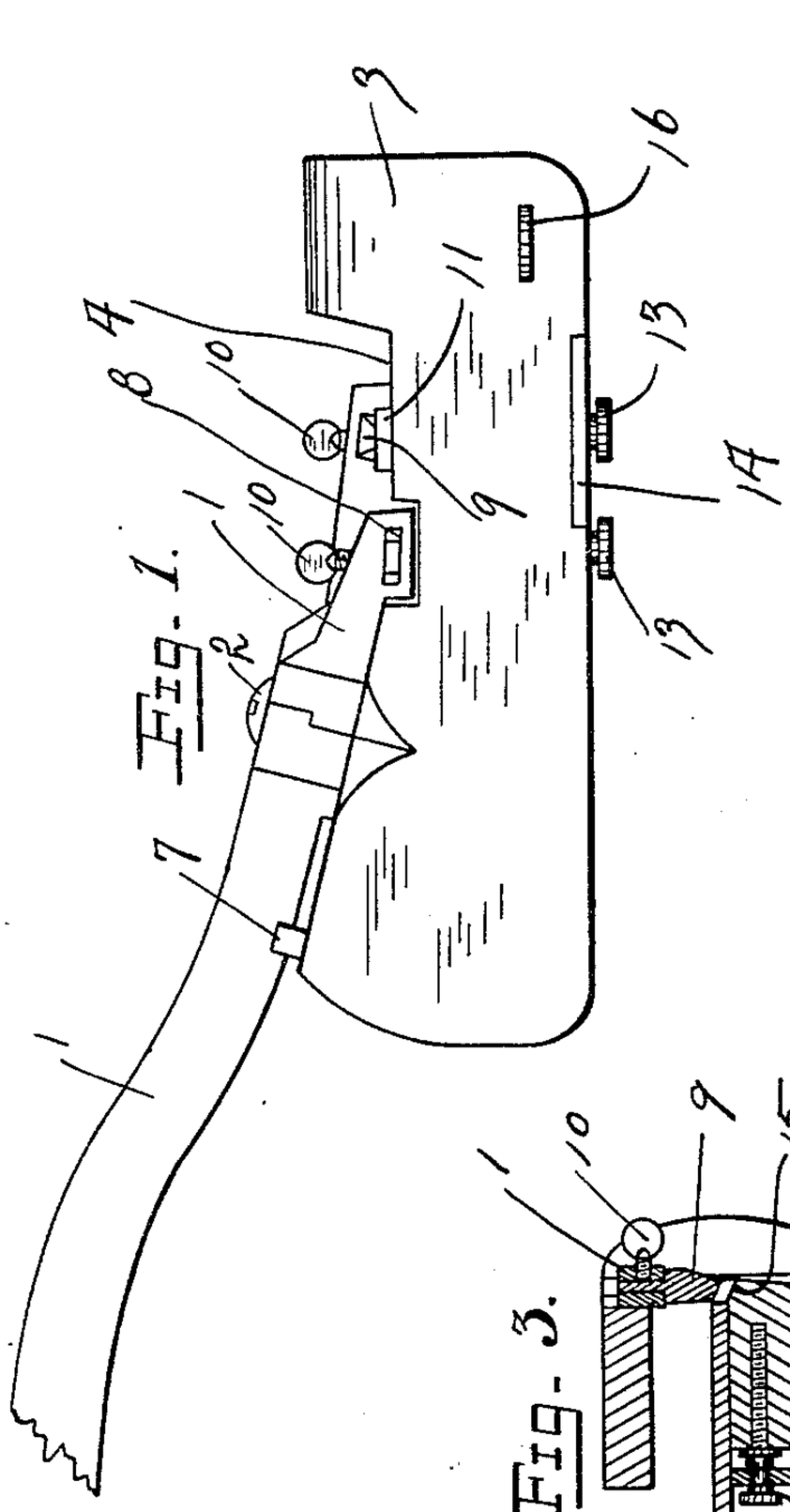

Fig. 1.

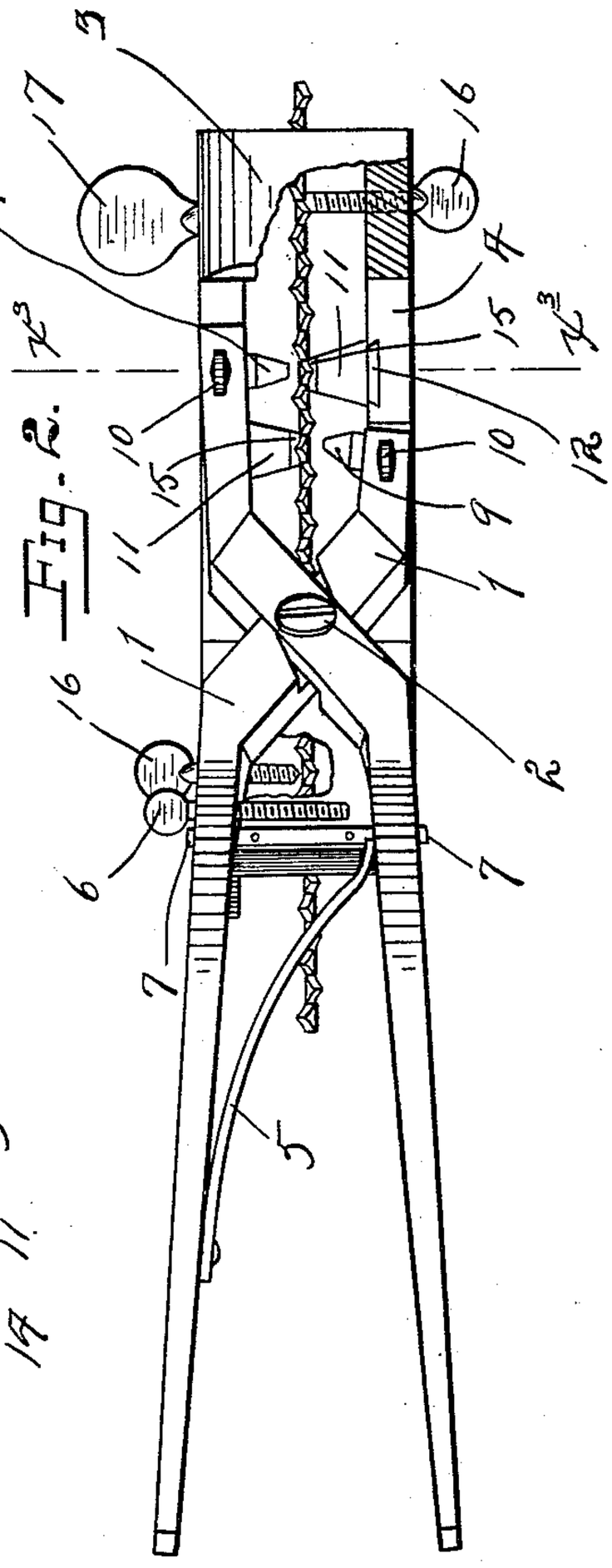

Fig. 2.

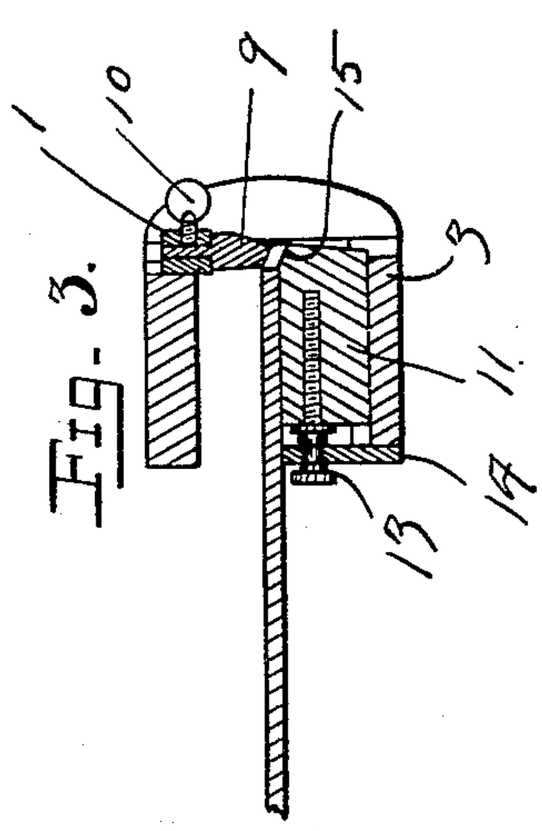

Fig. 3.

Witnesses
C. H. Turner.
Harry Kilgore

Inventor
John T. Hildahl.
By his Attorneys.
Williamson & Merchant

UNITED STATES PATENT OFFICE.

JOHN T. HILDAHL, OF SPARTA TOWNSHIP, MINNESOTA.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 677,354, dated July 2, 1901.

Application filed January 19, 1901. Serial No. 43,846. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. HILDAHL, a citizen of the United States, residing at Sparta township, in the county of Chippewa and State of Minnesota, have invented certain new and useful Improvements in Saw-Sets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention has for its object to provide an improved saw-setting device; and to this end it consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a view in side elevation showing my improved saw-set. Fig. 2 is a plan view of the same, some parts being broken away; and Fig. 3 is a transverse section on the line x^3 x^3 of Fig. 2.

The tool comprises a pair of pinching-levers 1, which are crossed and pivoted by a stud or screw 2 to the top of the channel-like body-section vise 3, which, as shown, is cut away at its central top portion at 4. The outer ends of the levers 1 are yieldingly spread apart by a spring 5, secured to one thereof and pressing against the other. A set-screw 6 serves to variably limit the closing movements of the levers, and the separating movements thereof are, as shown, limited by stops 7, secured on the sides of the channel-body vise 3. The jaws or inner ends of the levers 1 are provided with slots or elongated perforations 8, which afford seats for and permit longitudinal adjustments of setting-dies 9, the stems of which work in the said seats 8 and are rigidly secured in whatever adjustment they may be set by set-screws 10. For coöperation with each die 9 is an anvil-block 11, which is permitted vertical adjustments, as shown, by means of a dovetailed engagement 12 with the adjacent side of the channel-body vise 3. To adjust the anvil-blocks 11, adjusting-screws 13 are provided. These screws 13 are shown as screwed into the blocks 11 and are mounted for rotary movements, but fixed against endwise movements in bearing-plates 14, rigidly secured to the lower edges of the channel-piece vise 3. The upper inner portions of anvil-blocks 11 are beveled, as shown at 15, and the opposing coöperating ends of the dies 9 are correspondingly beveled, as best shown in Fig. 3. The saw is guided and held in close contact with the anvil-blocks 11 by means of a pair of set-screws 16, extended in opposite directions through the opposite flanges of the channel-piece vise 3 at the opposite ends thereof. In Fig. 2 the saw is indicated by the character *z*.

The use of the device in setting the saw-teeth is substantially as follows: The dies 9 are first properly adjusted—that is, spaced apart longitudinally of the channel-piece vise 3—to set the same for the proper action on the teeth of the particular saw which is to be set. The anvil-blocks 11 do not require to be adjusted longitudinally of the channel-piece vise 3 for the reason that they are sufficiently wide to coöperate with the dies 9 under any adjustments which may be required.

The device is applied to the saw, as indicated in Fig. 2, and the points of the saw-teeth engage the horizontal top portion of the channel-piece vise 3 to assist in guiding the device for proper action on the saw-teeth. It is of course evident that when the levers 1 are pressed together the dies 9 act simultaneously in opposite directions to set at one time two teeth of the saw. The amount of set which will be given to the saw-teeth may be varied by adjusting the anvil-blocks 11. More specifically stated, when the anvil-blocks are moved toward the top of the channel-piece vise 3 the saw-teeth will be given less "set," while, on the other hand, when the said anvil-blocks are adjusted away from the top of the channel-piece vise the teeth will be given more set. As is also evident, the larger the saw-teeth the farther down or away from the top of the channel-piece vise 3 the anvil-blocks 11 should be adjusted. The part marked 17 in Fig. 2 is a fixed thumb-piece which assists in holding the device to its work.

The device above described is strong and durable, and its efficiency for the work for which it is designed has been demonstrated by practical usage.

It will of course be understood that the de-

vice above described is capable of considerable modification within the scope of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A saw-set comprising, in combination, a vise for holding the saw, a pair of staggered anvil-blocks adjustable in said vise, crosswise of the saw, and a pair of levers pivoted to said vise and having staggered dies on their jaws mounted for adjustment lengthwise of the saw, for coöperation with the anvil-blocks in the vise, substantially as described.

2. A saw-set comprising in combination with a channel-piece 3, of the adjustable anvil-blocks 11 mounted thereon, the adjusting-screws 13 for adjusting said anvil-blocks, the set-screws 16 for alining the saw, the spring-pressed levers 1 pivoted to said channel-piece 3 at 2 and provided with the seats 8, and the setting-dies 9 the stems of which are adjustably mounted in said seats 8, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN T. HILDAHL.

Witnesses:
MABEL M. MCGRARY,
F. D. MERCHANT.