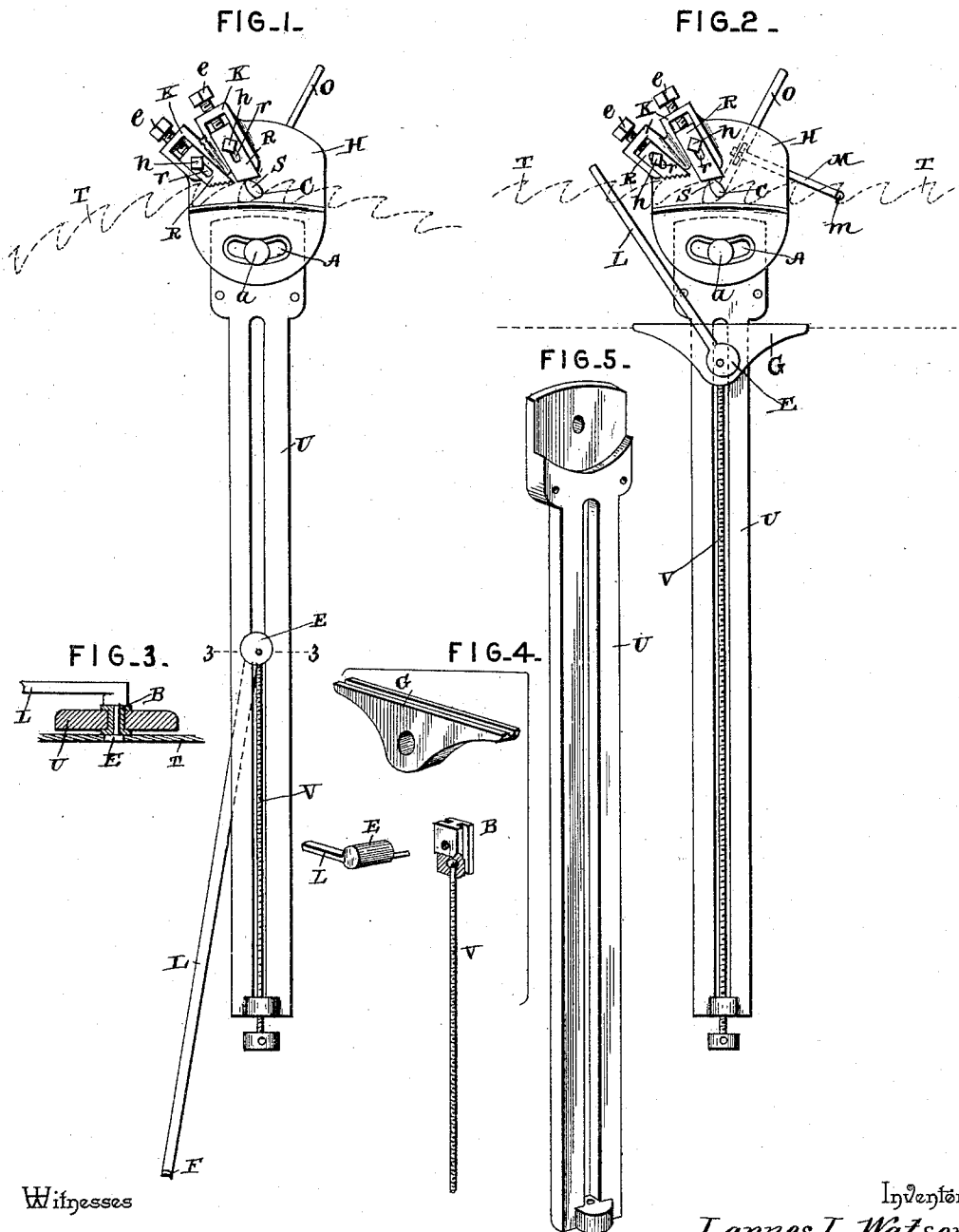


(No Model.)

L. L. WATSON.
SAW SWAGE.

No. 468,470.

Patented Feb. 9, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

LANNES L. WATSON, OF CARBONDALE, ILLINOIS.

SAW-SWAGE.

SPECIFICATION forming part of Letters Patent No. 468,470, dated February 9, 1892.

Application filed April 23, 1891. Serial No. 390,159. (No model.)

To all whom it may concern:

Be it known that I, LANNES L. WATSON, a citizen of the United States, residing at Carbondale, in the county of Jackson and State of Illinois, have invented a new and useful Saw-Swage, of which the following is a specification.

This invention relates to saws, and more especially to the swaging thereof; and the object of the same is to produce an improved machine for doing this work.

To this end the invention consists of the details of construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a front elevation of this device as applied to a circular and Fig. 2 as applied to a band saw. Fig. 3 is a cross-section on the line 3 3 of Fig. 1. Fig. 4 is a perspective detail of the saw-raising devices for Fig. 2. Fig. 5 is a perspective detail of the upright.

Referring to the said drawings, the letter U designates a longitudinally-slotted upright suitably supported by any approved means, and V is a vertical screw in this upright moving a block B in the slot thereof. E is a circular head eccentrically pivoted to said block. L is an operating-lever depending from said head, and F is a foot-piece at the free end of said lever.

H is the improved head of this device, which is connected with the upper end of the upright, and through this head passes a central shaft C, one end of which carries an operating-lever O. A is an arc-shaped slot in this head, through which slot passes a thumb screw or bolt *a* into the upright, whereby the head may be turned to the desired position, and after it has been turned around the set-screw may be locked.

Projecting radially from one side of the front end of the shaft C is the swaging-face S, whose operation will be hereinafter explained.

KK are brackets mounted on or cast integral with the head H, and in these brackets move retaining-fingers R, having slots *r*, which move over headed screws *h*, the fingers being operated by set-screws *e* in a manner which will be well understood. These retaining-fingers are in rear of the teeth T of the saw, as shown, and are adapted to hold the same

against moving when the swaging-face S is moved by the lever O to swage the teeth in a well-known manner.

In operation the saw W is brought into position, and if it be a circular saw, as seen in Fig. 1, the head E is inserted through the eye at the center thereof. The screw V is then turned to move the block B upwardly until the teeth T are nearly in contact with the retaining-fingers R, after which the lever L is operated to further move the saw W into the proper position. In the construction illustrated in Fig. 2 the head E turns in a block G, whose upper edge is grooved to receive the back of a saw-blade, and the operation is practically the same, except of course that the head E is not inserted in the eye of the saw.

In Fig. 2 I have shown the operating-lever O as provided with a moving pawl M, pivoted at one end thereto and having its other end *m* turned forwardly, so as to pass between the teeth T of the saw W. With this construction, after the lever O has been drawn down to swage a tooth and which operation engages the forwardly-bent portion *m* with another tooth, the lever L is operated to drop the saw until its teeth fall below the swaging-face S. The lever O is then returned to its initial position, which moves the saw forwardly in the grooved block G for the space of another tooth, the lever L returned to raise the saw when the swaging-face S passes between the next two teeth, and the operation of swaging repeated on this tooth. Although I have not shown it, it will be understood that by a slight modification in the shape of parts this moving pawl may be used in connection with the device illustrated in Fig. 1. Other changes in the details of construction may be made without departing from the spirit of my invention.

What is claimed as new is—

1. In a saw-swage, the combination, with a longitudinally-slotted upright, a block adjustable in the slot thereof, an eccentric head pivoted in said block, and a lever connected to said head, of a head carried by said upright, retaining-fingers adjustably mounted on said head, a swaging-face, and means for operating it, as and for the purpose set forth.

2. In a saw-swage, the combination, with a longitudinally-slotted upright, a vertical screw

standing within the slot therein, a block moving in said slot on the screw, an eccentric head pivoted in the block and having a handle, and a grooved block carried by said head, 5 of a head carried by said upright, retaining-fingers adjustably mounted on said head, a swaging-face, and means for operating it, as and for the purpose set forth.

3. In a saw-swage, the combination, with an 10 upright and saw-moving devices carried thereby, of an adjusting-bolt in said upright, a head having an arc-shaped slot embracing said bolt, a shaft journaled in the head and carrying an operating-lever, a swaging-face on the front 15 end of said shaft, and retaining-fingers adjustably secured to the head adjacent to said face, as and for the purpose set forth.

4. In a saw-swage, the combination, with an

upright and saw-elevating devices carried thereby, of a head attached to said upright 20 and having retaining-fingers, a shaft journaled in the head and carrying an operating-lever, a moving pawl pivoted at one end to said lever and having its other end bent forwardly, so as to engage the saw-teeth, and a 25 swaging-face mounted on said shaft opposite one of said fingers, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 30 presence of two witnesses.

LANNES L. WATSON.

Witnesses:

CHARLES W. SMART,
GEORGE WYKES.