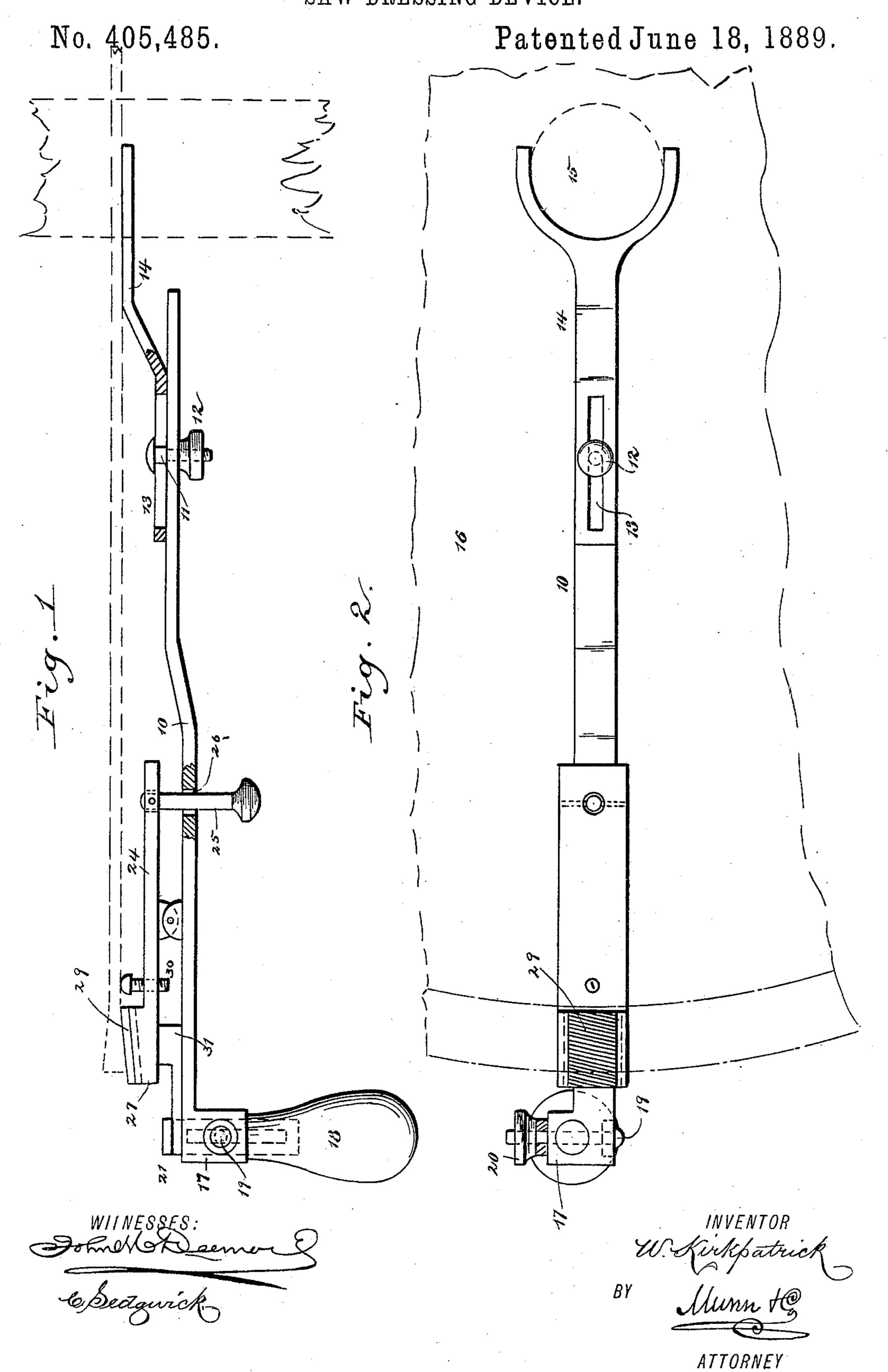
W. KIRKPATRICK. SAW DRESSING DEVICE.



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No. 405,485.

Patented June 18, 1889.

Fig. 3.

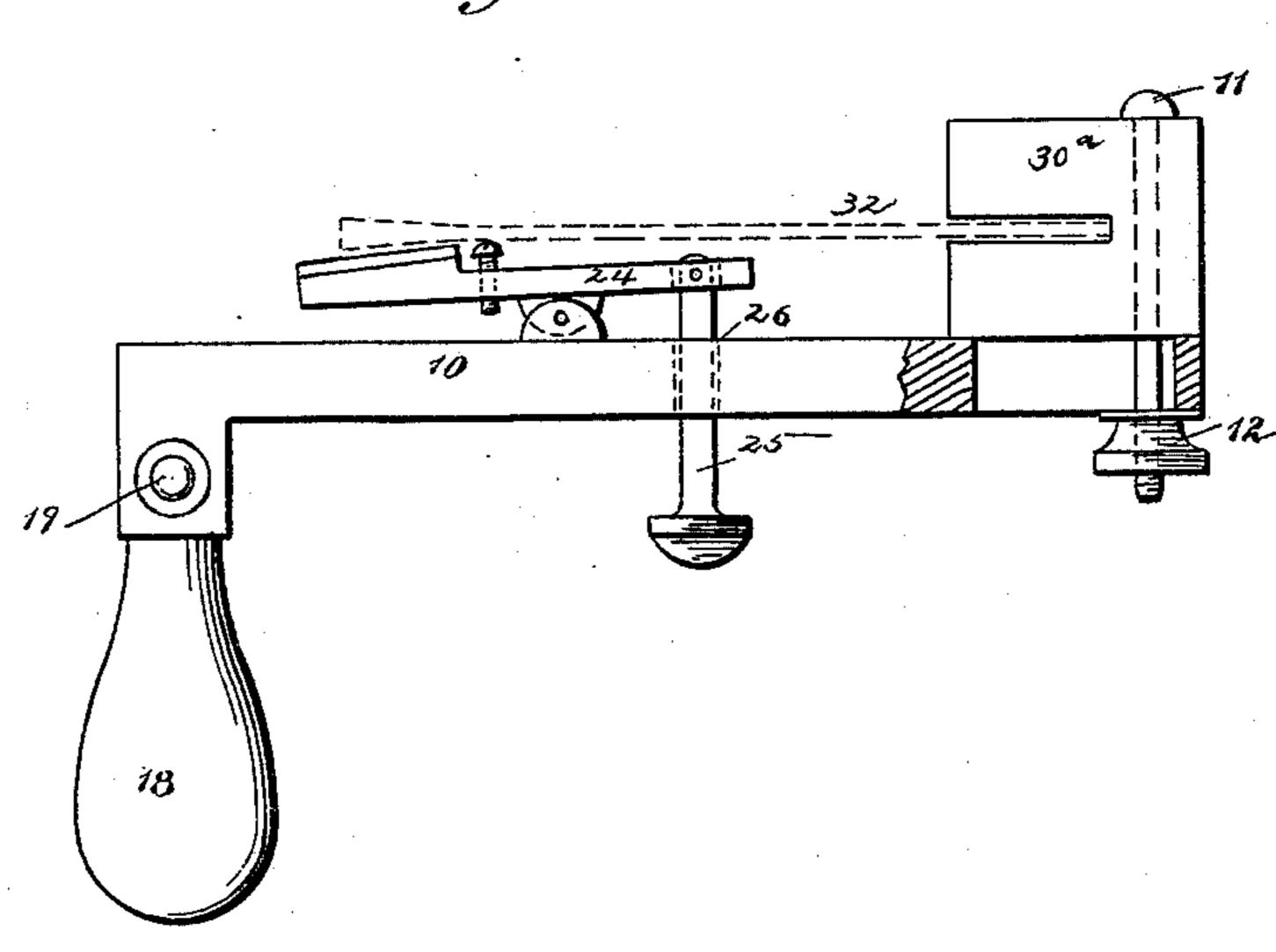
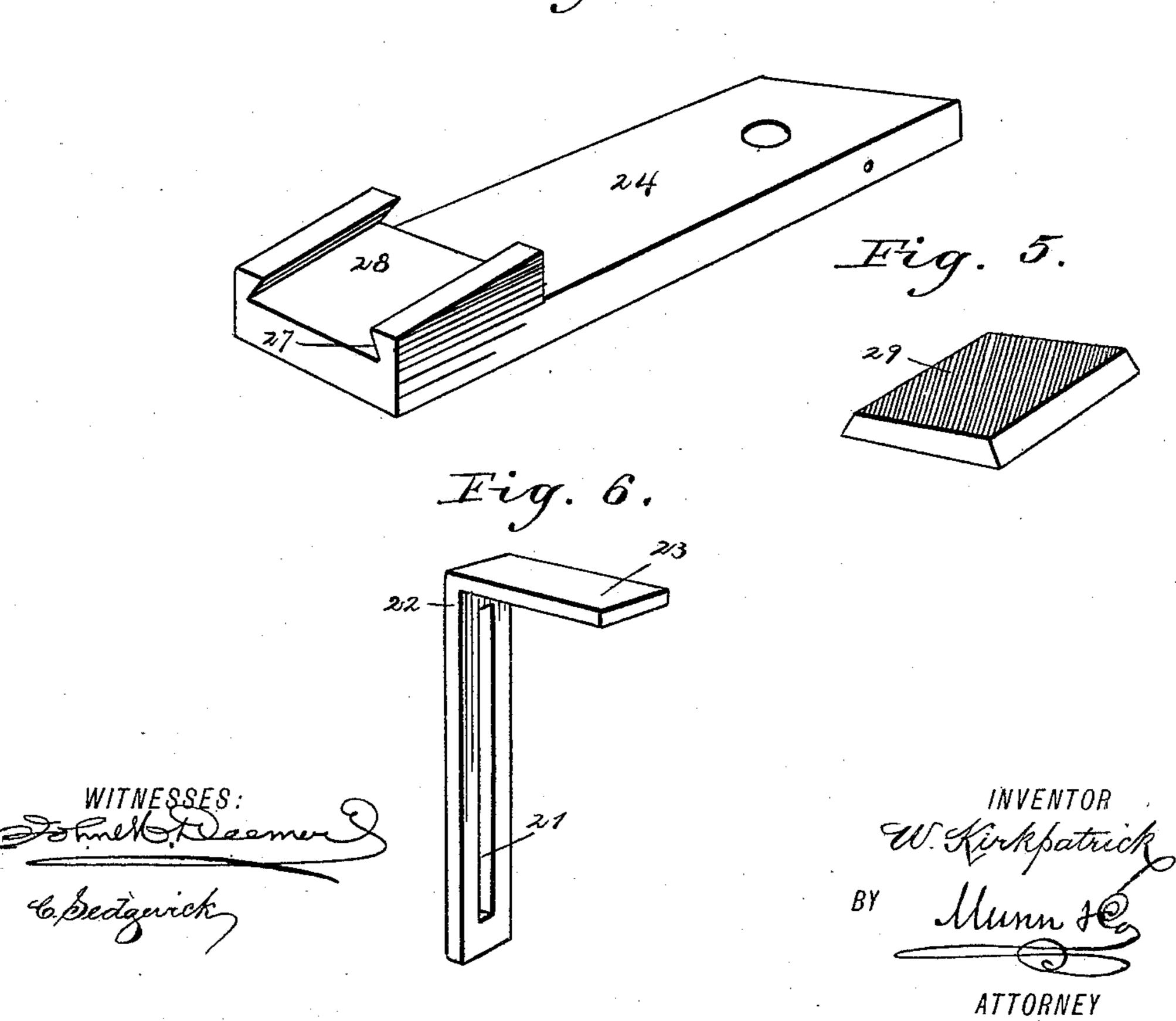


Fig. 4.



United States Patent Office.

WALTER KIRKPATRICK, OF MARINETTE, WISCONSIN.

SAW-DRESSING DEVICE.

SPECIFICATION forming part of Letters Patent No. 405,485, dated June 18, 1889.

Application filed March 21, 1889. Serial No. 304, 108. (No model.)

To all whom it may concern:

Be it known that I, Walter Kirkpatrick, of Marinette, in the county of Marinette and State of Wisconsin, have invented a new and useful Implement for Side-Dressing the Teeth of Saws, of which the following is a full, clear, and exact description.

My invention relates to an improvement in implements for side-dressing the teeth of saws, and has for its object to provide a device of simple and durable construction capable of application to a saw and of side-dressing a circular or band saw while said saws are in motion.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the device as applied to a circular saw. Fig. 2 is a side ele25 vation of the same. Fig. 3 is a plan view of a slightly modified form of the device adapted for use in connection with a band-saw. Fig. 4 is a perspective view of the file-holder or setting-lever. Fig. 5 is a perspective view of a the file, and Fig. 6 is a perspective view of a

guide-clamp.

When the device is used in connection with a circular saw, the body 10 of the device consists of a suitable bar of metal, slightly bent 35 inward at or near the center and provided near the rear end with a bolt 11, provided with a set or thumb nut 12, which bolt passes inward through a slot 13, formed longitudinally in the shank, into what I designate as an 4° "arbor-fork" 14, the said fork being adapted to contact with the arbor 15 of the saw 16. The arbor-fork is made adjustable upon the body 10, in order that the device may be accommodated to saws of various diameters. 45 The outer end of the body is preferably provided with a side projection 17, in the outer side of which projection a handle 18 is detachably secured, the said handle being preferably attached by passing the reduced up-50 per portion of the handle through a suitable aperture in the projection 17, and passing through the said projection and the handle a bolt 19, provided at one end with a suitable nut, preferably a wing-nut 20. The bolt 19 is also made to pass through the slotted hori- 55 zontal member 21 of an angled clamp-plate 22, (illustrated in detail in Fig. 6 and shown in position in Figs. 1 and 2,) the vertical member 23 of which clamp-plate extends upward parallel with the inner face of the 60 body 10.

Upon the inner side face of the body 10, between the center thereof and the outer extremity, a file holder or lever 24 is fulcrumed, manipulated at the inner end through the 65 medium of a pin 25, attached thereto and projecting outward through a suitable aperture 26, formed in the body, as best illustrated in

Figs. 1 and 3.

Upon the inner face of the file-lever 24, at 70 the outer extremity thereof, a beveled projection 27 is produced, having an undercut recess 28 formed therein, as best illustrated in Fig. 4, in which undercut recess a file 29, of suitable shape, (illustrated in Fig. 5,) is inserted for contact with the outer face of the saw-teeth, and in the said file-lever, to the rear of the recess projection 27, a guide-screw 30 is inserted, the head of which screw is adapted for contact with the face of the saw 80 to limit the depth of the cut of the file upon the face of the saw-teeth. This application of the guide-screw is best illustrated in Fig. 1.

In order to keep the file-carrying end of the lever 24 in contact with the teeth of the saw, 85 a gage-plate 31 is made to engage with the outer face of the said lever near the outer extremity, which gage-plate is held fixedly by being clamped between the vertical member of the clamp-plate 22 and the inner face of 90

the body at the handle end.

In Fig. 3 I have illustrated a form of device especially adapted for use in connection with band-saws. The only practical difference between this form of the device and that illus-95 trated in Fig. 1 for use with circular saws consists in the fact that instead of the arborfork 14 being adjustably attached to the body the said fork is substituted by an adjustable block 30°, recessed upon the outer face to 100 permit the passage through the said block of the saw 32.

When the device is used in connection with circular saws, the arbor-fork is made to bear

upon the arbor 15 of the saw, as shown in Figs. 1 and 2, and the said arbor-fork is adjusted upon the body so that the file 29 will come in contact with the faces of the teeth 5 as the saw is revolved. The screw 30 is so manipulated that it will contact with the face of the saw when the file has removed sufficient material from the teeth. The gage 31 is then set beneath the lever 24 in such manner 10 that the frictional contact of the file carried by the lever with the saw cannot force the former too far outward. The device is held by the operator grasping the handle 18, and, if desired, also the outer end of the lever-pin 15 25. When used in connection with bandsaws, the block 30° is adjusted in such manner that the slot therein will just receive and accommodate the heel of the saw.

I desire it to be distinctly understood that while specific construction has been shown and described, other equivalent construction may be employed without departing from the spirit of the invention—as, for instance, the pin 25 may be threaded to screw into the lever 24, or the said lever may be tapered to

pass through the pin.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An implement for side-dressing saw30 teeth, comprising a body having a handle at one end, a guide fork or block detachably secured to the opposite end, and a lever fulcrumed upon the inner face of the body provided with a guide-screw and a detachable
35 file, all combined for operation substantially

as shown and described.

2. In an implement for side-dressing the teeth of saws, the combination, with a body provided with a handle at the outer extremity, of an arbor fork or block adjustably secured to the inner side of the said body near the inner end, a lever fulcrumed upon the said inner side of the body forward of the center,

having an undercut recess in the outer extremity, a file detachably held in the said 45 undercut recess, and a guide-screw adapted for contact with the face of the saw, substan-

tially as shown and described.

3. In an implement for side-dressing the teeth of saws, the combination, with a body 50 provided with a handle at the outer extremity and an arbor-fork or saw-receiving arm adjustably secured to the inner face of the said body near the inner end, of a lever fulcrumed upon the inner face of the said 55 body forward of the center and provided with a manipulating-pin near one extremity, and an offset or projection having an undercut recess in the opposite extremity, a file detachably held in the said recess of the offset or 60 projection, and a guide-screw passing from the said lever capable of contact with the face of the said saw, substantially as shown and described.

4. The combination, with a body provided 65 with a handle at the outer extremity, of an arbor-fork or saw-receiving block detachably secured to the inner end of said body, a lever fulcrumed upon the body forward of the center, a manipulating-pin attached to the inner 70 end of the said lever and passing through the body, a projection formed upon the inner surface of the lever at the outer end having an undercut recess therein, a file detachably held in the said undercut recess, a guide-screw at- 75 tached to the lever and capable of contact with the face of the saw, an adjustable clamp attached to the body at the outer end, and a guide-plate held in the said clamp for contact with the outer end of the said lever, all .80 combined for operation substantially as and for the purpose specified.

WALTER KIRKPATRICK.

Witnesses:

JACOB B. DAVIS, FRED F. MARTIN.

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