(No Model.)

R. J. EDWARDS.

AUTOMATIC LUBRICATOR FOR SAWS.

No. 444,696. Patented Jan. 13, 1891.

Fig. 1.

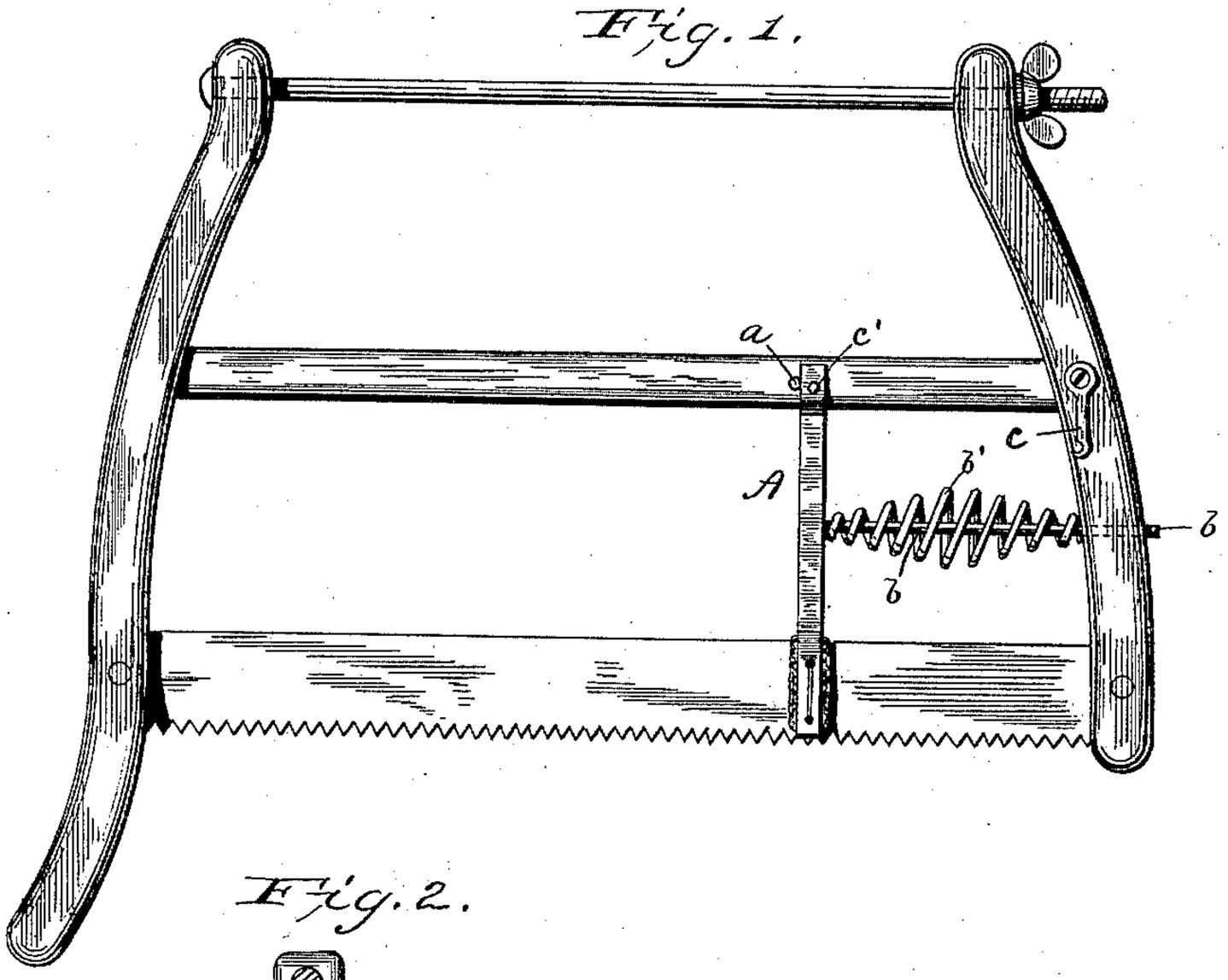

Fig. 2.

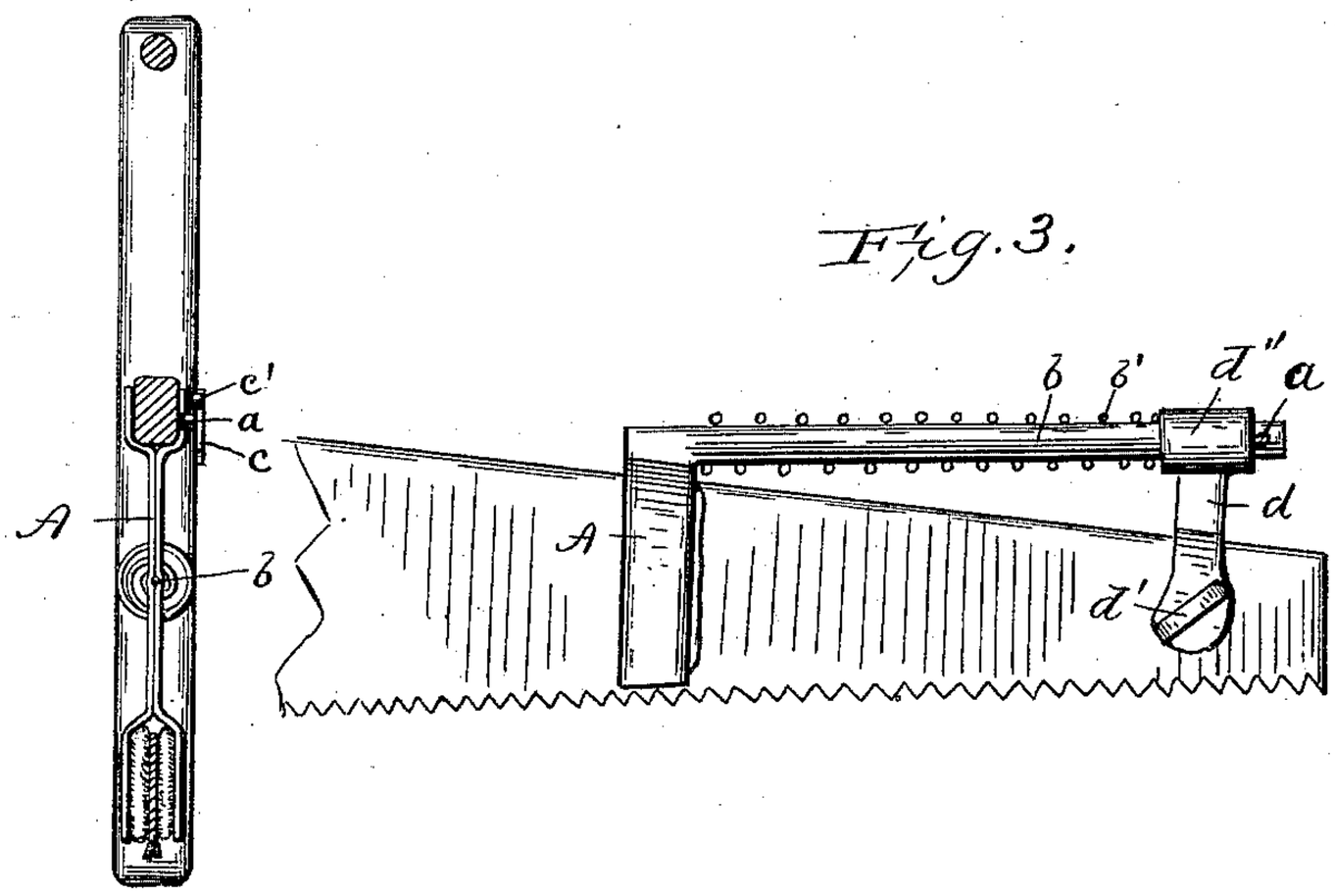

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

RICHARD J. EDWARDS, OF GALENA, ILLINOIS.

AUTOMATIC LUBRICATOR FOR SAWS.

SPECIFICATION forming part of Letters Patent No. 444,696, dated January 13, 1891.

Application filed October 11, 1890. Serial No. 367,781. (No model.)

To all whom it may concern:

Be it known that I, RICHARD J. EDWARDS, a citizen of the United States, residing at Galena, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Automatic Lubricators for Saws, of which the following is a specification, reference being had therein to the accompanying drawings.

Referring to the annexed drawings, Figure 1 represents a side elevation of an ordinary bucksaw having my improvements attached to it; Fig. 2, a vertical sectional view thereof, and Fig. 3 a view of a slight modification showing the device applied to a handsaw.

The invention is designed to produce a simple device for automatically lubricating saws while the same are in operation. The device is particularly adapted for use upon bucksaws; but I do not desire to confine myself in this respect, as it may with slight modification be applied to other varieties of saws.

In the drawings, A designates a vertical reciprocable bar bifurcated at its ends to embrace, respectively, the saw-blade and the brace-bar of the saw-frame, upon which it reciprocates. The lower bifurcated portions of this bar have secured to their inner faces suitable pads adapted to carry the lubricant and apply it to the saw-blade whenever the said bar is reciprocated. A stop *a* upon the longitudinal brace-bar abuts against the upper end of the bar A and prevents it becoming displaced by moving too far along the brace-bar and saw. A rod *b* is attached to the bar A and passed through an aperture in the lower bar of the saw-frame, this rod serving to assist in guiding the oiling-bar in its movements. A conical coiled spring surrounds the rod *a* and serves to keep the oiling-bar normally pressed upward, this spring being made conical in order that it may readily compress into a small space when the oiling-bar is forced down near the lower frame-bar.

Attached to one side of the lower frame-bar is a pivoted hook *c*, adapted to hook under a pin *c'* on the oiling-bar and prevent the same from operating whenever it is desired that it should not operate.

Operation: The operator as usual starts the saw about midway its length into the material to be sawed. Then as soon as the saw has been well started the lower ends of the oiling-bar will come in contact with the under side of the material being sawed and be forced downward every time the saw is drawn upward, the spring serving to restore it after each depression by the material. By thus keeping up a continual reciprocation of the oiling-bar the oiling-pads will be caused to automatically distribute the lubricant along the sides of the saw-blade and keep the same thoroughly oiled throughout the operation of sawing. The object in hooking the hub *c* under the pin on the oiling-bar is to enable the operator to release the hook and free the oiling-bar whenever he desires to start the same by simply raising the saw until the oiling-bar strikes against the under side of the material being sawed, and is thereby forced down far enough to release the hook and permit it to drop out of engagement with its pin by gravity, the hook being loosely pivoted.

The device may be used upon both ends of the saw, if desired. It is also evident that the oiling-pads may be constructed of any suitable material, sponges being, perhaps, preferred.

It will be observed that by the use of this self-oiling device the saw will work not only easier and with less power, but will also require less frequent setting than is ordinarily required. The saw will also last longer and will work without binding with less set than is usually required.

In Fig. 3 I show one way in which the invention may be applied to an ordinary handsaw. In this view *d* designates an upright clamped removably upon the saw by means of a set-screw *d'* and provided with a tube *d''* at its upper end, through which the guiding-rod *b* passes. Of course in this form the upper portion of the bar A is omitted.

Having thus fully described my invention, what I claim is—

1. The combination of a saw, a reciprocating bar carried by the saw and provided with lubricating-pads, these pads being adapted to bear upon the sides of the saw-blade while the same is in operation and automatically lubricate it, as and for the purposes described.

2. The combination of a saw, a recipro-

cating bar carried by the saw and provided with lubricating-pads adapted to bear upon the sides of the saw-blade and automatically lubricate it while in operation, and a spring for actuating the said bar, substantially as described.

3. The combination of a saw, a reciprocating bar applied thereto and carrying oiling-pads bearing upon the saw, a coiled spring attached to the said bar, a bar against which the spring presses, and means for guiding the said reciprocable bar, substantially as described.

4. The combination of a saw-frame carrying a saw-blade, a reciprocating bar carrying oiling-pads adapted to bear upon opposite sides of the saw, means for guiding this bar, a spring for actuating the said bar, and a hook adapted to engage the said bar and hold it out of operation, substantially as described.

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

RICHARD J. EDWARDS.

Witnesses:

WYNNE G. AVERY,

JOHN J. JONES.