J. LITTLE.

Saw-Mill Dog.

No. 221,176. Patented Nov. 4, 1879.

Fig. 1.

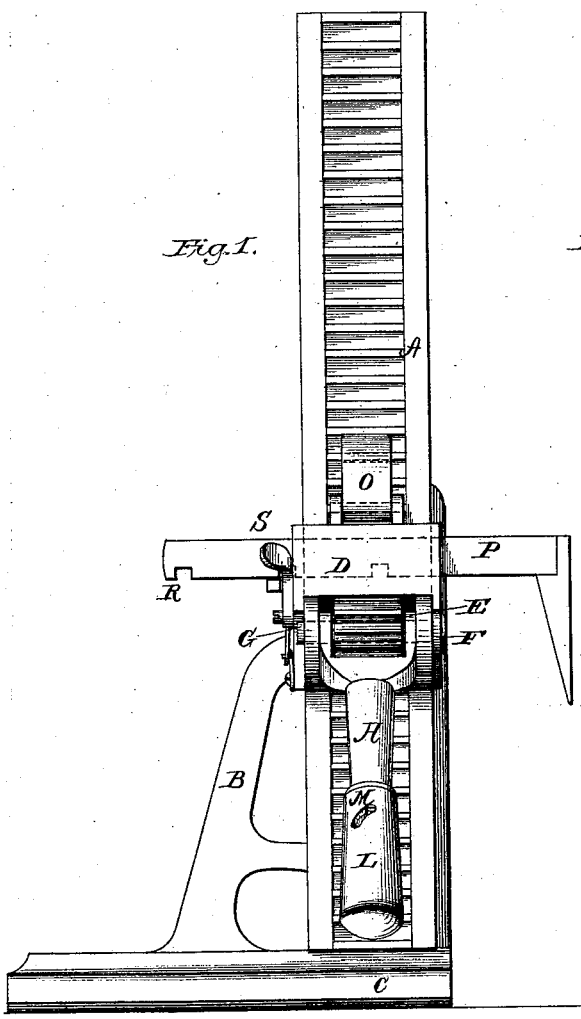


Fig. 2.

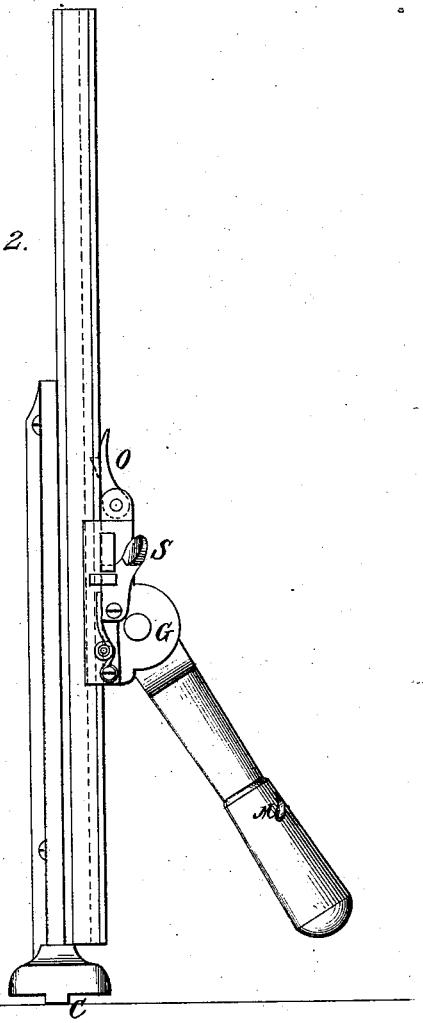
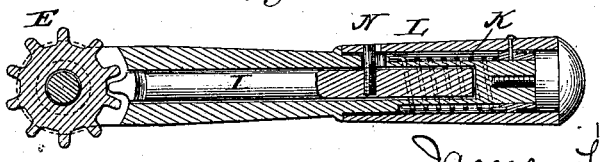


Fig. 3.



WITNESSES

John A. Lewis.

John O'Donoghue.

INVENTOR

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UNITED STATES PATENT OFFICE.

JAMES LITTLE, OF EVANSVILLE, INDIANA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO SAMUEL W. LITTLE, OF SAME PLACE.

IMPROVEMENT IN SAW-MILL DOGS.

Specification forming part of Letters Patent No. **221,176**, dated November 4, 1879; application filed July 2, 1879.

To all whom it may concern:

Be it known that I, JAMES LITTLE, of Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Saw-Mill Dogs; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved device for securing logs or lumber to the traveling carriage usually employed in lumber-sawing machinery to carry the log forward to the saw; and it consists in a rack mounted upon a standard, adapted to be secured in any convenient manner to the traveling carriage of a sawing-machine, and provided with a sliding frame having a gear-wheel adapted to work in said rack, and operated by means of a lever, provided with a pawl, by means of which said ratchet-wheel may be held or released at will, the said sliding frame carrying an adjustable sliding rod, having at one end a spike, which is forced into the wood or log by depressing the sliding frame by means of the ratchet-wheel and lever, as more fully hereinafter specified.

In the drawings, Figure 1 represents a front elevation of my improved device, Fig. 2, a side elevation of the same, and Fig. 3 a detached sectional view of the gear-wheel and lever for operating the sliding frame.

The letter A indicates a rack mounted upon a standard, B, which is provided with a tongue, C, on its bottom, which may be secured in a groove in the traveling carriage of a sawing-machine, so as to support the rack in a vertical position. The letter D indicates a sliding frame secured upon the rack and adapted to travel back and forth thereon. E indicates a gear-wheel, the teeth of which intermesh with the teeth of the rack A. Said wheel is mounted on a shaft, F, journaled in standards G formed on the sliding frame D.

The letter H indicates a lever pivoted to the shaft F, upon which the gear-wheel E is mounted. Said lever is hollow, and contains a pawl, I, which is kept forward in a normal position by means of a spiral spring, K, so as to engage the teeth of the gear-wheel and hold it in such manner that when the lever is operated it will carry the wheel with it and depress the sliding frame, as more fully hereinafter explained.

The letter L indicates a sleeve surrounding the lever at one end, and provided with an inclined slot, M, in which sets a stud or pin, N, secured to the pawl I, said pin projecting through a longitudinal slot in the lever in such manner that, when the sleeve is turned in the proper direction, the pawl will be withdrawn from the gear-wheel, permitting the lever to be elevated without elevating the sliding frame.

The letter O indicates a pawl or dog pivoted to the upper edge of the sliding frame, and adapted to engage the rack-teeth and hold the frame in position as it is depressed.

The letter P indicates a sliding beam or bar, adapted to be advanced or drawn back horizontally, and provided with a series of slots, R, at its lower edge. Said bar is secured in a transverse recess in the sliding frame, which has secured to it, at one side, a spring-pawl, S, which is adapted to set in one of the slots R and secure the beam or bar in any position to which it may be adjusted. The forward end of said bar or beam is provided with a wedge-shaped spike, which is forced into the log or lumber on the traveling carriage, to which the device is attached, by depressing the lever, which in turn depresses the traveling carriage, with the bar or beam, and its spike, with great force.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described saw-mill dog, consisting of the rack A, a sliding frame mounted on said rack and carrying an adjustable bar and spike, the gear-wheel E, and the slotted lever H, provided with an interior spring-pawl for engaging with said gear-wheel, substantially in the manner herein shown and described.

2. In combination with the rack and gear-wheel, and the sliding frame, a hollow lever carrying a pawl, held in a normal position by means of a spring, and the hollow sleeve provided with an inclined slot for receiving a projection on the pawl extending through a slot in the hollow lever, whereby the pawl may be operated to release the ratchet-wheel, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of June, 1879.

JAMES LITTLE.

Witnesses:
T. McTERNAN,
JAMES PALMER.