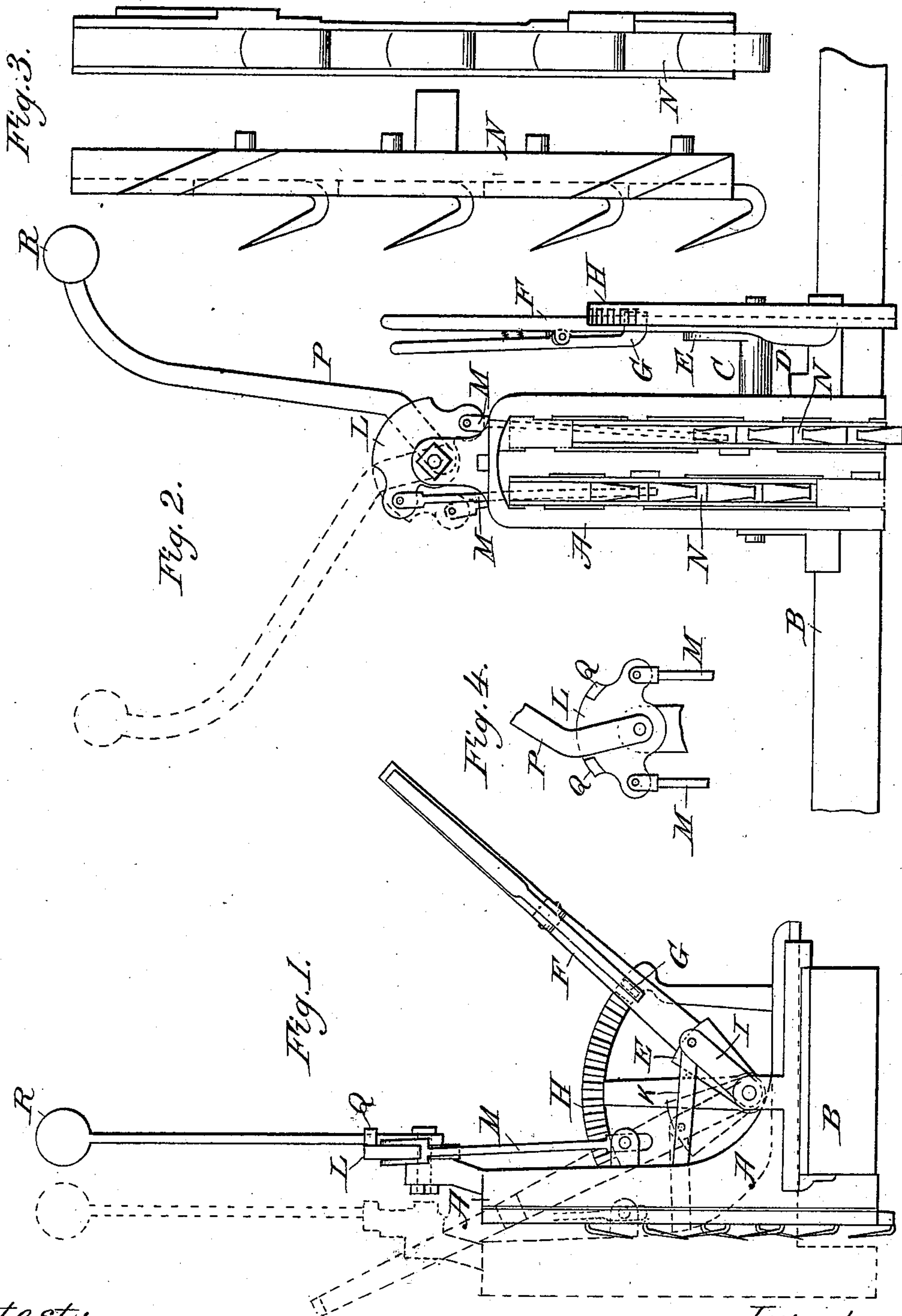


(No Model.)

D. LANE.  
SAW MILL DOG.

No. 316,273.

Patented Apr. 21, 1885.



Attest:

J. H. Schott  
A. R. Brown.

Inventor:

Dennis Lane,  
Per J. C. Parker, atty



# UNITED STATES PATENT OFFICE.

DENNIS LANE, OF MONTPELIER, VERMONT, ASSIGNOR TO THE LANE MANUFACTURING COMPANY, OF SAME PLACE.

## SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 316,273, dated April 21, 1885.

Application filed February 27, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, DENNIS LANE, a citizen of the United States, residing at Montpelier, in the county of Washington and State of Vermont, have invented certain new and useful  
5 Improvements in Saw-Mill Dogs; and I do 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 ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specifica-  
15 tion.

This invention relates to an improved dogging device for saw-mill set-works; and it consists in the construction and combination of parts, as hereinafter more fully set forth.

In the annexed drawings, illustrating the  
20 invention, Figure 1 is a side elevation of my improved saw-mill dog. Fig. 2 is a front view of the same. Fig. 3 represents a side and front view of one of the vertically-moving slides, with attached dogs; and Fig. 4 is a de-  
25 tail view.

Like letters of reference designate like parts in the several views.

The slotted knee or upright A is placed in suitable guides on the set-beam B or other con-  
30 venient support.

C is a rock-shaft that is journaled in the guide-frame D, and carries at one end a socket, E, for a lever, F, having a spring-pawl, G, for engaging a ratchet, H. On the other end of  
35 the rock-shaft C is cast an arm, I, for attachment of a rod or bar, K, that connects with the upright or knee A. By moving the lever F the upright A, with attached dogs, can be adjusted forward or back to correspond with  
40 the crook or taper of the log.

To the upper end of the knee A is pivoted an oscillatory plate, L, to which are attached the connecting-rods M M, that actuate the dog-  
45 ging-slides N N in opposite directions. These dogging-slides are supported in the slotted knee A by means of diagonal guides, as usual, so as to have a slight forward and back move-  
50 ment when reciprocated vertically. One of the slides N carries upwardly-projecting teeth, and the other is provided with teeth that point downward, said upper and under teeth being

set at an angle and arranged to bite hard when moved toward the log.

A curved lever, P, is pivoted to the upper part of the knee A coincidently with the rack-  
55 ing plate L, which it actuates by coming forcibly in contact with a shoulder, Q, at either end of said plate on its rear side. Additional force is given to the blow of the lever P by means of a weighty knob or ball, R, on its up-  
60 per end.

By reference to Fig. 4 it will be seen that there is sufficient space between the shoulders Q Q for play of the lever P without actuating the plate L or rods M M, so that in dogging  
65 the lever is enabled to gain some impetus before striking the shoulder Q or starting the teeth. It will also be seen that if the teeth are not sufficiently projected into the log by one blow of the lever it may be moved back  
70 without loosening or withdrawing the teeth and repeated blows given until the log is secure.

When either end of the shouldered plate L is forced down in dogging or undogging, the  
75 opposite end is carried up, thus moving the rods M M and dogging-slides N N in opposite directions.

The knob or ball R not only adds force to the blow of the lever P, but also by weight  
80 holds it in position when thrown to either end of the rocking plate.

This dog can be readily operated either from the back or front by adjusting the teeth to the log with one hand on the lever F, while with  
85 the other hand the weighted lever P can be made to give one or more blows of sufficient force to drive the teeth in and hold them. By reversing the action of the lever P and causing it to strike against the shoulder at the op-  
90 posite end of the plate L the teeth of the dog will be withdrawn from the log.

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

1. In a saw-mill dog, the combination of an adjustable upright, a pair of vertically-moving slides supported in said upright, and pro-  
100 vided with dogging-teeth projecting in opposite directions, a weighted lever and an oscillatory plate pivoted coincidently to the upper part of the upright, said plate having a shoul-

der at each end to receive the blows of said weighted lever, and rods for connecting one of the dogging-slides to each end of said oscillatory plate, substantially as described.

5 2. In a saw-mill dog, the combination, with the upright A, carrying oppositely-moving dogging-slides N N, of the rock-shaft C, having arm I and socket E, the rod or bar K, for connecting said arm and upright, the pawl-lever  
10 F, inserted in said socket, and the ratchet H, for locking the pawl, substantially as described.

3. In a saw-mill dog, the combination, with the upright A and a pair of oppositely-mova-

ble dogging-slides, N N, supported therein, of 15 the weighted lever P and oscillatory plate L, pivoted coincidently at the upper part of the upright, said plate having shoulders Q Q, to receive the blows of said lever, and the rods M M, for connecting one of the dogging-slides 20 to each end of said plate, substantially as described.

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

DENNIS LANE.

Witnesses:

LILLIAN D. SLACK,  
GEO. W. WING.