

(No Model.)

2 Sheets—Sheet 1.

P. PAYETTE.
SAW MILL DOG.

No. 428,518.

Patented May 20, 1890.

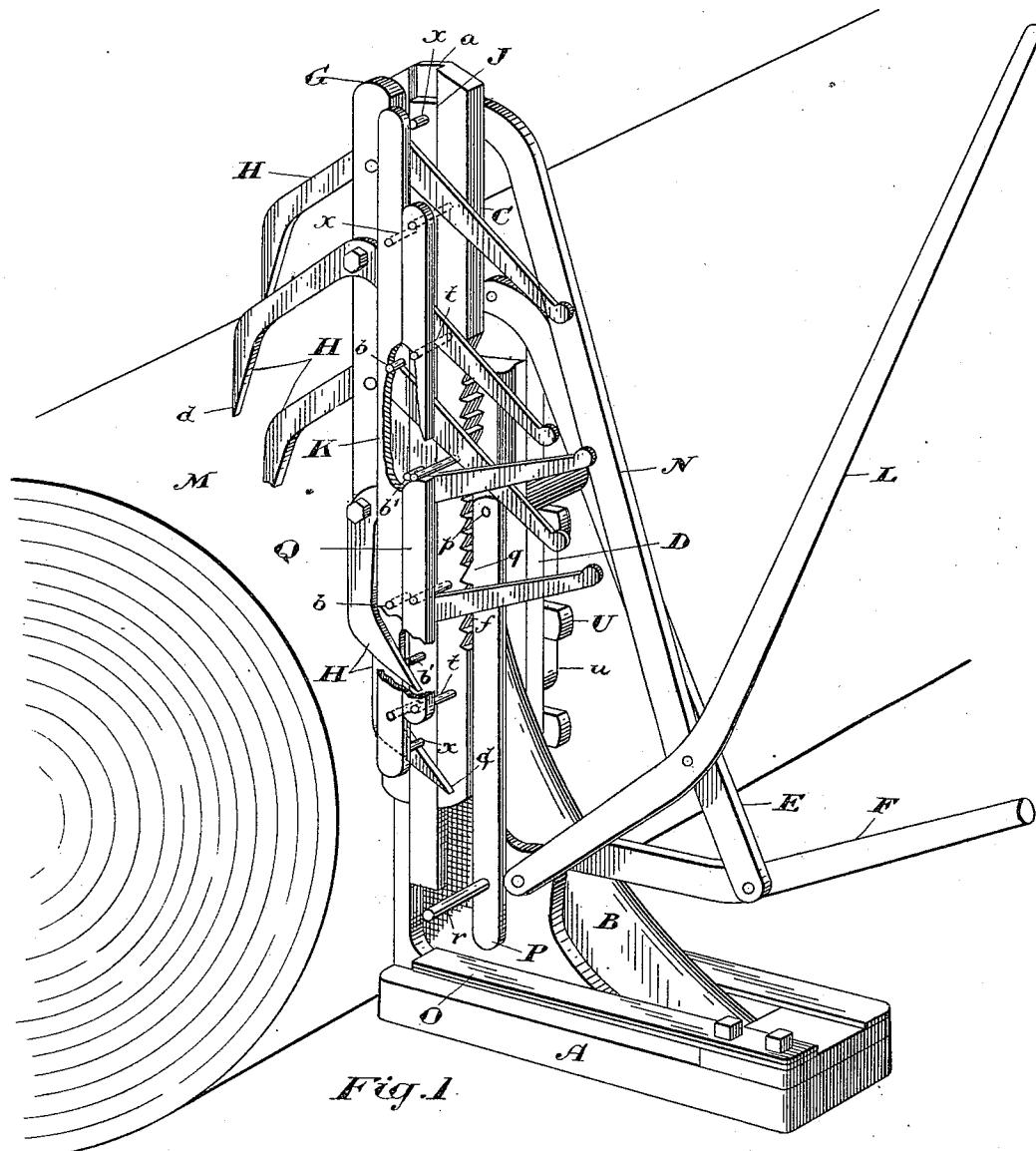


Fig. 1

Witnesses

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W. G. McMillan

Inventor

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by
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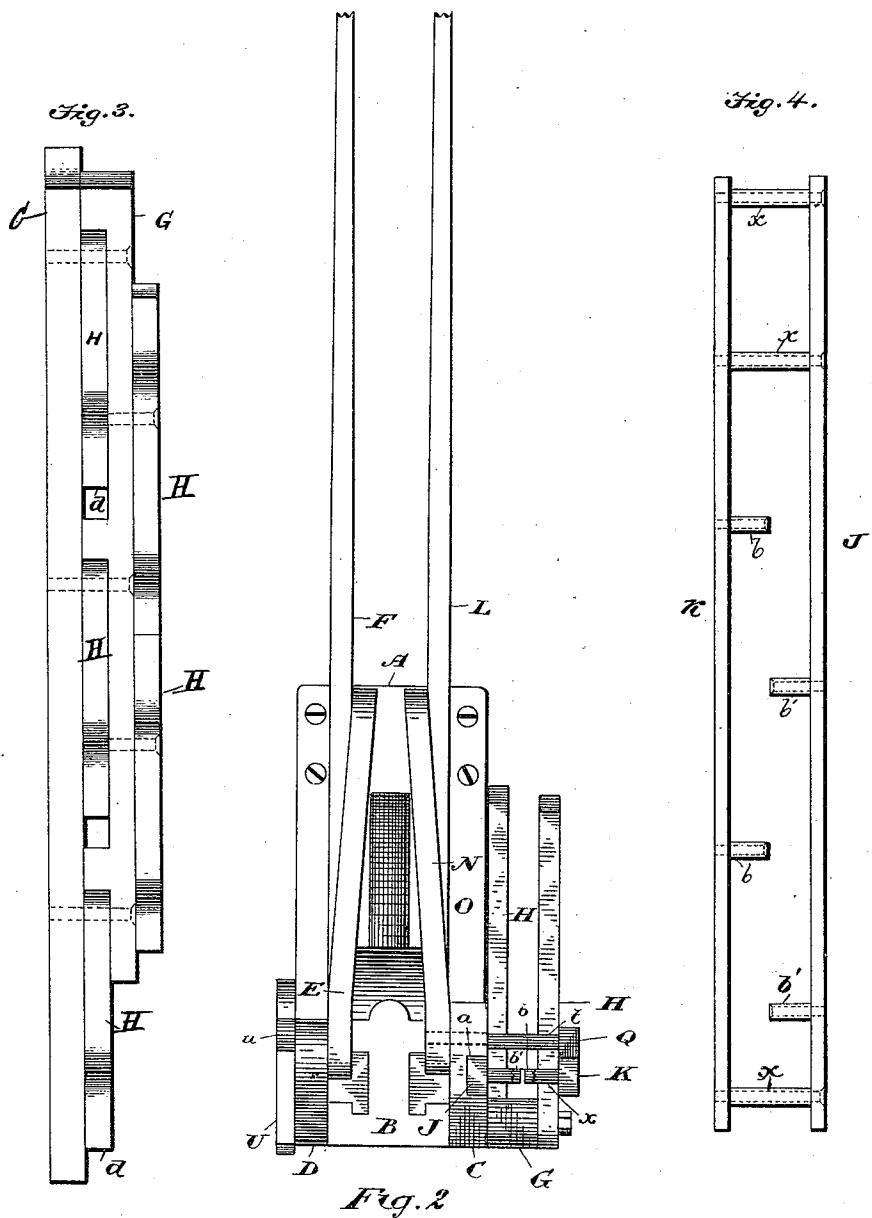
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Witnesses

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J. B. Fethertonhaugh.

Inventor

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UNITED STATES PATENT OFFICE.

PETER PAYETTE, OF PENETANGUISHENE, ONTARIO, CANADA.

SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 428,518, dated May 20, 1890.

Application filed July 31, 1889. Serial No. 319,272. (No model.)

To all whom it may concern:

Be it known that I, PETER PAYETTE, manufacturer, of the town of Penetanguishene, in the county of Simcoe, in the Province of Ontario, Canada, have invented a certain new and useful Improvement in Saw-Mill Dogs, of which the following is a specification.

The object of the invention is to provide a mill-dog for either logs or boards, and so arranged as to permit the log-dogs to be folded up when not in use, so as not to interfere with one another, and means for keeping the log-dog frame in position after it has been raised by the lever, the frames to which the log-dogs and board-dogs are respectively attached being adapted to move up and down in T-shaped grooves cut in the same standard and on opposite sides thereof.

Figure 1 is a perspective view of my improved mill-dog, in which one of the log-dogs is shown spiked into a log, and bar K partially broken away to show pins b b'. Fig. 2 is a plan view of the same. Figs. 3 and 4 are elevations of parts detached, which will be more fully described hereinafter.

In the drawings, A is a base-piece, which may be rigidly attached to the flooring or otherwise, and B is a standard formed thereon, having T-shaped grooves cut therein throughout its length and on each side thereof, so as to receive a flanged projection formed on the back of the sliding frame C for the log-dogs, and the sliding frame D for the board-dogs. U is adapted to slide up and down in T-shaped grooves formed on the far side of the standard, and is raised and lowered by means of the pivoted arm E, attached to the pivoted lever F. On the sliding frame C is rigidly attached the bearing-piece G, which is of such shape as to afford spaces within which alternate log-dogs H are pivoted, as shown in Fig. 3, the other log-dogs H being pivoted on the outside of the bearing-piece, so that when the log-dogs are not in use they may assume the position shown in that of the two lower ones in the drawings, the spike ends of the dogs, owing to the manner in which these log-dogs H are pivoted on the bearing-piece, being enabled to pass one another without interfering, as shown in Fig. 1. In said figure the two lower dogs are shown as forced

inward by the log, while the others rest on and hold the same.

J is a sliding bar adapted to move vertically in the groove a of the sliding frame C. 55 This bar J is connected with the bar K by the metal rundles x, as shown in Fig. 4, the intermediate pins b b' projecting alternately from the bar K and sliding bar J, respectively, and reaching only about half-way between the bars K and J, so as to permit the points d of the respective log-dogs H to pass without catching or interfering with the pins b b' when a piece of square timber is on the carriage and close up against the standard B. The 60 pins b project from the bar K and the pins b' from the bar J alternately. When the bent lever L is lowered from the position shown in the drawings, there being no log M in place to be gripped, the bar J is also lowered, along 70 with the sliding frame C, by means of the arm N, which is pivoted to the sliding frame C, as well as to the bent lever L, and the bottom of the bar J coming down on the spring-bearing O brings the bar K and the rundles x and pins 75 b b' between bars J and K to rest, and as the sliding frame C continues to descend, carrying with it the log-dogs H, the long arms of these dogs H come in contact with the rundles x and the pins b b' and the dogs become 80 folded up into the position of the two lower ones in the drawings. These log-dogs H are shaped as shown. The shorter arm is bent at the end, forming a spike d, designed to grip the log, while the longer arm forms with the 85 shorter an obtuse angle, the dog being pivoted near the apex to its bearing-piece G, which is bolted to or forms part of the sliding frame C. The spring-bearing O is made of one or more flat bars of steel bolted at one end to a block 90 e on the base-piece A, the free end being designed to receive the jar of the descending bar J.

P is a lever-pawl pivoted at p to the frame of the standard B, and has a tooth at q, designed to engage with the ratchet-teeth f, formed on the side of the sliding frame C, so as to hold the sliding frame in any required position of elevation without the assistance of the lever L. The lower end of the pivoted 95 pawl P is provided with a pin r, and the pawl 100 may be swung back so as to free the tooth q

from the ratchet-teeth *f*, and may be held away by means of the pin *r*, engaging with a spring or other projection from the base-piece A. This pawl *P* prevents the log-dog *H* from 5 rising out of the log after having gripped it.

Q is a bar adjacent to the sliding bar K, and is rigidly attached to the sliding frame C by the metal rungs *t*, forming a ladder-like frame. These rungs *t* are designed to form 10 bearings for the long arm of the pivoted log-dogs *H*, when they engage with a log, as shown in the case of the third log-dog from the top.

On the far side of the standard B the upper part of the sliding frame D is pivotally connected to the arm E, which is pivotally attached to the lever F. By means of this lever F the sliding frame D may be raised or lowered, carrying with it the pivoted board-dogs U, which are of ordinary construction 20 and have bearing-pieces *u* to bear against when the bent spike ends of the board-dogs U engage with a board; but as no claim is here made to these dogs a further description of the same is unnecessary.

25 What I claim as my invention is—

1. In a mill-dog, the combination of the base A, standard B, having a groove formed therein, the sliding frame C, moving in said groove and having groove *a*, the piece G, attached to frame C, log-dogs *H*, pivoted in said piece G, sliding bars K J, connected by rungs *x* and having pins *b b'* and the rungs *t*,

mounted in the frame C, and means, as the lever L and arm N, for raising and lowering said frame C, substantially as described. 35

2. In a mill-dog, the combination of the base A, standard B, having a groove formed therein, the sliding frame C moving in said groove and having ratchet-teeth *f* and groove *a*, the bearing-piece G, attached to frame C, 40 log-dogs *H*, pivoted in the piece G, the bars J K, the former sliding in groove *a* and connected to bar K by rungs *x* and having pins *b b'*, bar Q, attached to sliding frame C by the rungs *t*, pawl *P*, pivoted to the standard and 45 engaging ratchet-teeth *f*, means for holding its toothed projection *q* away from said ratchet-teeth *f*, arm N, pivoted to frame C, and the lever L, substantially as described and specified. 50

3. In a mill-dog, the log-dogs *H*, shaped as shown and pivoted alternately on the opposite sides of a bearing-piece G, in combination with a grooved sliding frame C, vertically adjustable in the standard B, the sliding bars 55 K J, connected by rungs *x*, pins *b b'* on the bars K J, and rungs *t* in the frame C, substantially as described and specified.

Penetanguishene, June 12. 1889.

PETER PAYETTE.

In presence of—

W. J. KEATING,
W. H. HEWSON.