





# UNITED STATES PATENT OFFICE.

JOHN FLESHER, OF EDGINGTON, ONTARIO, CANADA.

## SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 397,636, dated February 12, 1889.

Application filed August 4, 1888. Serial No. 281,968. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN FLESHER, of Edgington, Province of Ontario, and Dominion of Canada, have invented a new and Improved Saw-Mill Dog, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved saw-mill dog which is easily and quickly adjustable to small or large logs on the carriage-frame.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

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

Figure 1 is a side elevation of the improvement with parts broken out. Fig. 2 is an end elevation of the same. Fig. 3 is a sectional plan view of the same on the line *x x* of Fig. 2, and Fig. 4 is an end elevation of the upper part of the improvement in a different position.

The standard A is secured in the usual manner to the head-block of the carriage-frame, and is provided at its upper and lower ends with the arms A' and A<sup>2</sup>, supporting the vertical guide-post B, on which is held to slide vertically a bar, C, provided at its lower end with a point, C', adapted to engage the log on its under side. In the bar C is formed a slot, C<sup>2</sup>, through which passes the set-screw C<sup>3</sup>, screwing in the post B, and permitting an up and down sliding motion of the said bar on the post B. The upper reduced and pointed end C<sup>4</sup> of the said bar C is guided in the arm A' of the standard A.

On the inside of the bar C are formed the notches or teeth C<sup>5</sup>, adapted to be engaged by a spring-pawl, D, pivoted in a lever, E, fulcrumed on a sleeve, F, held to slide vertically on both the post B and the bar C. The lever E is L-shaped, and is provided near its outer end with a handle, E', and also with a catch, E<sup>2</sup>, adapted to engage the pointed end C<sup>4</sup> of the bar C, as is plainly shown in Fig. 4.

On the inside of the sleeve F is formed a notch, F', into which can swing the spring-

pawl D, so as to throw the latter out of contact with the notches or teeth C<sup>5</sup> of the bar C. In the sleeve F is held to slide transversely a bar, G, provided on one outer end with a downwardly-extending point, G', adapted to engage the top of the log. In one side of the bar G are formed notches or teeth G<sup>2</sup>, engaged by a spring-pawl, H, fulcrumed on the sleeve F.

The operation is as follows: When the device is in the position shown in Figs. 1, 2, and 3, the log is engaged at the bottom by the pointed end C' of the bar C. The horizontal bar G is then moved downward, so that its point G' engages the top of the log by operating on the handle E' of the lever E, so that its spring-pawl D engages the notches C<sup>5</sup> of the bar C. A downward pressure on the handle E' causes a downward sliding of the sleeve F, carrying the said bar G, so that the point G' of the latter is driven into the top of the log. The log is thus held firmly in position on the saw-mill frame. The bar G' is moved forward or backward horizontally by disengaging the spring-pawl H from its notches G<sup>2</sup> and then moving the bar G longitudinally by taking hold of its handle G<sup>3</sup>. As soon as the desired position is reached, the operator releases his pressure on the spring-pawl H, which then engages one of the notches G<sup>2</sup> of the bar G.

When the operator desires to release the saw-mill dog from the log, he swings the outer part of the lever E inward, so that the pawl D swings downward into the recess F' of the sleeve F, as is plainly shown in Fig. 4, whereby the said pawl is disengaged, and is held disengaged from the notches C<sup>5</sup> in the bar C. The operator can then take hold of the sleeve F and slide it upward on the post B and the bar C until the catch E<sup>2</sup> is engaged by the top pointed end, C<sup>4</sup>, of the said bar C, as is plainly shown in Fig. 4. The weight of the sleeve F and its connections now rests on the top end of the bar C, so that the latter is moved downward and its point C' is disengaged from the log or from the last board. As the sleeve F can be moved up and down to any desired position the point G' is adapted to engage a log of any size.

Having thus described my invention, what



I claim as new, and desire to secure by Letters Patent, is—

1. In a saw-mill dog, the combination, with a vertical guide-post, of a bar held to slide vertically on the said guide-post and carrying a hook on its lower end, a sleeve held to slide vertically on both the post and the said bar, and a second bar having a hook and held to slide transversely in the said sleeve, substantially as shown and described.

2. In a saw-mill dog, the combination, with a vertical guide-post, of a bar held to slide vertically on the said guide-post and carrying a hook on its lower end, a sleeve held to slide vertically on both the post and the said bar, a second bar having a hook and held to slide transversely in the said sleeve, and a spring-pawl fulcrumed on the said sleeve and adapted to engage the said second bar to lock it in place, substantially as shown and described.

3. In a saw-mill dog, the combination, with a vertical guide-post, of a toothed or notched bar held to slide on the said post, and provided with a hook at one end, a sleeve fitted to slide on the said bar and guide-post, a lever pivoted to the sleeve, a spring-pawl car-

ried by the lever and engaging the teeth or notches of the bar, a toothed or notched bar sliding transversely in the sleeve, and provided with a hook at one end, and a spring-pawl pivoted to the sleeve and engaging the teeth or notches of the transversely-sliding bar, substantially as herein shown and described.

4. In a saw-mill dog, the combination, with a vertical guide-post, of a bar held to slide thereon and carrying a hook at its lower end, being also provided with a pointed top end, a sleeve held to slide on both the said bar and the said post, a second bar having a hook held to slide transversely on the said sleeve, a lever fulcrumed on the said sleeve, and a spring-pawl adapted to engage notches in the first-named bar, and a catch formed on the said lever and adapted to engage the upper pointed end of the said first-named bar, substantially as shown and described.

JOHN FLESHER.

Witnesses:

JOHN GALNA,  
JOSEPH FARRER.