



# UNITED STATES PATENT OFFICE.

STEPHEN S. THEREAU, OF BANGOR, MAINE.

SAWMILL-DOG.

985,752.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed August 9, 1910. Serial No. 576,317.

*To all whom it may concern:*

Be it known that I, STEPHEN S. THEREAU, a citizen of the United States, and resident of Bangor, in the State of Maine, have invented certain new and useful Improvements in Sawmill-Dogs, of which the following is a full, clear, and exact specification.

The dog forming the object of this invention is operated by suitable levers actuating a knuckle-jointed shaft so that all gears upon said shaft and the gear plates with their dogs are operated simultaneously.

It is the primary object of my invention to provide means for positively and effectively dogging logs of any dimension and length or form by the least possible labor, thus saving a great deal of time and labor.

A further object of my invention is to provide means for moving the knees forward or backward and locking the same in their adjusted position.

In the accompanying drawing forming part of this specification, Figure 1 shows as an example two connected knees in perspective view, Fig. 2 is an interior view of one of my improved knees showing the dogs in position to operate upon a log, and Fig. 3 is a similar view of the other part of said knee.

The knees A, two of which are shown in Fig. 1, are supported by the timber of a car or by a suitable frame  $a'$ ,  $a'$  and consist each of two cheek-plates  $A'$ ,  $A'$  separated by a centrally arranged thin steel or metal plate P connected to both cheek-plates by suitable studs T, T as shown in Figs. 2 and 3, so as to leave sufficient space between each cheek-plate and the separating wall for the reception of the dog-plates and gears.

Upon a shaft  $o$ , as shown in Figs. 1 and 2 a gear wheel B is arranged, the teeth of which engage with the teeth upon the upper edge of a dog-plate  $b$  connected to the inside of one of the cheek-plates  $A'$  and carrying the dogs R fastened to the plates in any well known manner. The lugs  $t$  and  $t$  are molded to the cheek-plate A, and allow the dog plates  $b$  and  $d$  to work in slot  $f$  and  $f$  in Figs. 2 and 3.

A gear wheel  $e'$ , the teeth of which mesh with the teeth of the gear wheel B, is secured to a shaft C extending through the knees A and a second gear wheel  $e$  is secured to said shaft upon the inside of the

opposite cheek-plate  $A'$ , the teeth of said gear wheel meshing with the teeth upon the lower end of a dog-plate  $d$  being similarly equipped with adjustable dogs R as the dog-plate B described above. The shaft C preferably consisting of a number of parts individually connected by universal joints as shown at  $n$  is adapted to be actuated by a hand-lever D for the simultaneous operation of the dogs  $b$  and  $d$  so that the dogs or plate  $b$  are thrown downwardly, and the dogs of plate  $d$  are thrown upwardly and forwardly to engage a log.

Hand-levers E, G or F are provided to adjust the knees for the dogging of a log on the carriage, so as to slide the same forward or backward as the case may require, and to lock the same in position. If for instance, a log is much smaller at one end than at the other, or it is crooked, each lever may be worked separately as in Fig. 1, the righthand knee being worked forward and backward by the lever E connected to a shaft J which operates the knee by means of a bar H having one of its ends pivotally secured between the upper jaws of the upright flange of a sleeve I, fixedly secured upon said shaft J while its other end is pivoted to the knee A. Levers F and G work in a similar way, lever F on shaft L operating the knee adjacent thereto and the lever G through shaft  $m$  operates another knee (not shown) farther to the left on the carriage.

K are locking arcs to lock the knees in place so as to allow the operation of the levers D.

It is evident that according to requirement and location, any suitable number of knees and a corresponding number of levers may be provided. Each of these levers is adapted to actuate its corresponding knee forward or backward and locking the same in position as occasion demands. From the foregoing it will be clear that a man standing between levers E and G or F may simultaneously operate both levers.

It is to be understood that changes may be made in the form or in the proportions of the parts forming my device, without departing from the scope and purpose of my invention, therefore, I do not wish to be limited to the particular form herein described and shown.

Having thus described my invention what I claim is:—

1. A device of the character described, comprising a knee composed of three plates, a shaft extending through the lower part of said plates, a pair of gear wheels upon said shaft, a pair of dog-plates having toothed edges, one of said gear wheels and one of said dog-plates having a toothed upper edge arranged upon the inside of one of the outer plates of said knee, and the other gear wheel and dog-plate, having a toothed lower edge adapted to be engaged by the teeth of the corresponding gear wheel being arranged upon the opposite inside of the other outer plate of said knee, a gear wheel upon the inside of one of said outer plates meshing with the teeth of the upper edge of the corresponding dog-plate and simultaneously meshing with the teeth of the lower gear wheel upon the same plate, and adjustable dogs upon both of said

dog-plates adapted to simultaneously engage a log, substantially as described and for the purpose set forth.

2. A device of the character described, comprising a plurality of knees, each composed of three plates, a common shaft connecting said knees, dog-plates upon the inside of the outer plates of said knees, a gear wheel upon the inside of one of said plates meshing with one of said dog-plates, gear wheels upon said shaft one engaging said first gear wheel and the other engaging the teeth of the other dog-plate, and means for operating said shaft, gear wheels and dog-plates, substantially as described and for the purpose set forth.

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

STEPHEN S. THEBEAU.

Witnesses:

WILLIAM M. WARREN,  
EFFIE M. WILLIAMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."