

(No Model.)

W. H. SANDERS & H. H. TALLEY.

SAW MILL DOG.

No. 261,387.

Patented July 18, 1882.

Fig. 1.

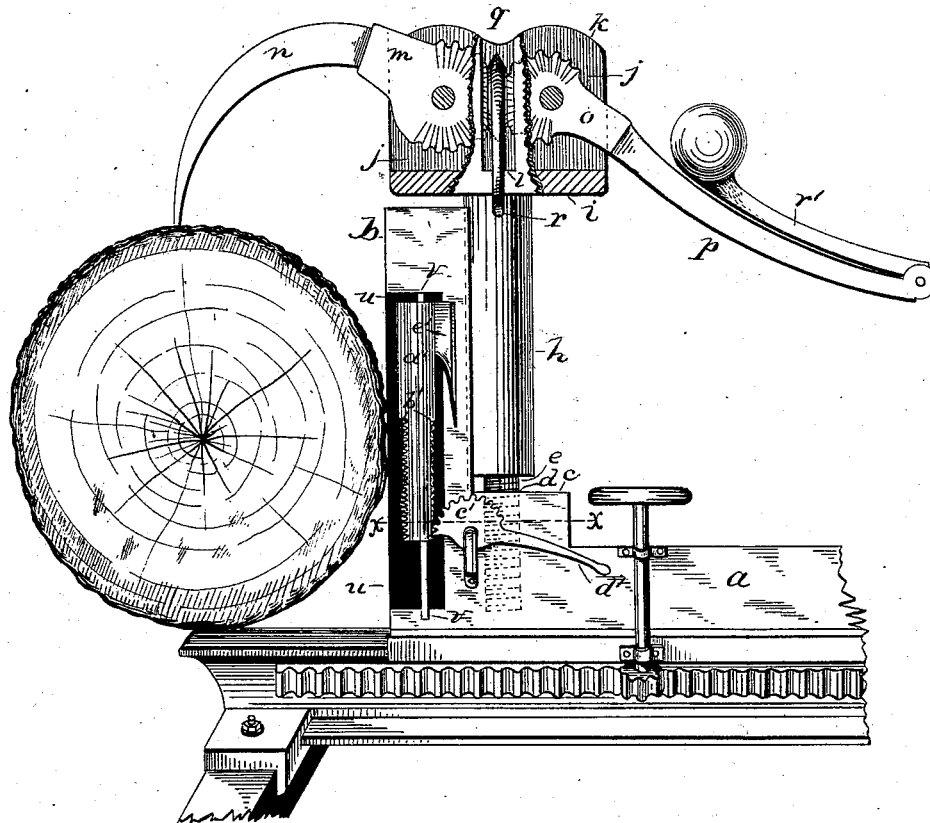
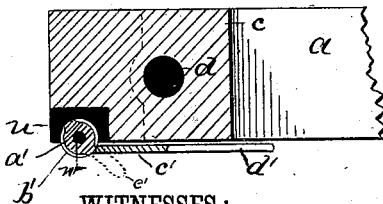


Fig. 2.

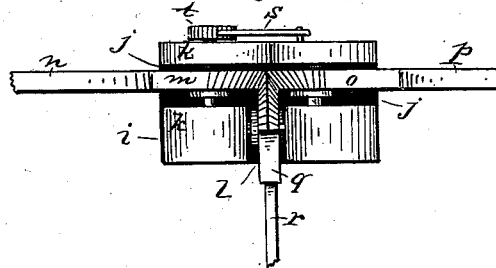


WITNESSES:

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Fig. 3.



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SAW-MILL DOG.

SPECIFICATION forming part of Letters Patent No. 261,387, dated July 18, 1882.

Application filed May 1, 1882. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. SANDERS and H. H. TALLEY, of Petersburg, in the county of Lincoln and State of Tennessee, have invented a new and useful Improvement in Saw-Mill Dogs; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of a saw-mill carriage with our improved dog applied thereto. Fig. 2 is a cross section in the line *x x*, Fig. 1; and Fig. 3 is a detail view.

Our invention relates to improvements in saw-mill dogs; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth.

In the accompanying drawings, *a* represents a head-block of a saw-mill, transversely adjustable on the carriage which carries the log to be sawed. To one end of the head-block, and flush with its end, is secured the knee *b*, provided with the step or offset *c*, having the threaded hole *d*, adapted to receive the reduced threaded end *e* of a standard, *h*, carrying at its upper end the block *i*, provided with a longitudinal slot, *j*, thus forming jaws *k*, in which are journaled the segmental head *m* of the curved dog *n* and the segmental head *o* of the lever *p*. One of the jaws *k* is provided with a vertical slot, *l*, in which is journaled the segmental head *q* of a second lever, *r*, at right angles to the other levers, the segmental head *q* being provided with beveled gears on each of its faces, adapted to engage with the beveled gear on the segmental heads *m* and *o*, which also engage with each other. The segmental heads of the levers *p* and *q*, or of the former if the latter is not used, are made smaller than that of the segmental head *m* of the dog *n*, whereby greater power is obtained to force the dog into the log in contact with the end of the knee, and a better bite of the dog on the log is obtained.

r' represents an arm hinged to the end of the lever *p*, so as to form a folding lever and increase the power when desired. When not in use the arm can be folded over the lever *p*, so as to be out of the way.

s represents a pawl pivoted to the outer face of one of the jaws *k*, and adapted to engage with a ratchet-wheel, *t*, on the end of the journal of the segmental head *m* to hold the dog in place. By this construction, after the head-block has been adjusted so that its end and the knee are in contact with the log on the saw-mill carriage, the dog can be raised or lowered to suit the diameter of the log by adjusting the screw *e* on the standard *h* up or down in the threaded hole *d*, and the dog can be turned out of the way of the log by the same means when placing the log against the knee, and the block may be also partially revolved, so as to change the position, if desirable, of the dog and the levers, so that the latter will be in a more convenient position to be operated. Power is then applied to either lever and the dog is forced into the log. The log may then be sawed into boards of any desired thickness; or, after having been squared by removing the slabs and reducing its dimensions, if necessary, the log may be dogged by the following devices:

u represents a recess in the rear outer corner of the knee *b*, and *v* represents a vertical rod passing from top to bottom of the outer ends of the recess *u*, and through a vertical hole, *w*, in a standard, *a'*, provided with parallel semicircular gear *b'*, extending half-way around the standard *a'*, and adjusted to engage with a segmental geared head, *c'*, on the end of a lever, *d'*, pivoted to the knee.

To the upper end of the standard *a'* is secured or made integral with the standard the vertical dog *e'*, projecting beyond the head-block and knee, and adapted to partially revolve on the rod *v*. By this construction the dog can be turned aside to adjust the log in place against the knee, and the gear *b'* still remain in engagement with head *c'*, and the dog *e'* can be raised or lowered as desired.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with the head-block *a* and knee *b*, provided with the threaded hole *d*, of the standard *h*, threaded at its lower end and carrying at its upper end the jaws *k*, and curved dog *n*, pivoted between said jaws,

whereby the dog can be raised and lowered to accommodate logs of different diameters, substantially as described.

2. The combination, with the head-block *a*, knee *b*, provided with the threaded hole *d*, and standard *h*, threaded at its lower end and carrying at its upper end the jaws *k*, of the dog *n*, provided with the pivoted segmental head *m*, having beveled gear, and lever *p*, having pivoted segmental head *o*, with beveled gear, the diameter of the segmental head *o* being less than that of the segmental head *m*, substantially as described.

3. The combination, with the revolving jaws *k*, of the dog *n*, provided with the pivoted segmental head *m*, having beveled gear, folding lever *p* *r'*, having pivoted segmental head *o*,

provided with bevel-gear, and lever *r*, at right angles to the other levers, and provided with beveled gear on each of its faces, adapted to engage with the heads *m* *o*, the heads *o* and *q* being of less diameter than the head *m* of the dog, substantially as described.

4. The combination, with the knee *b*, provided with the recess *u*, and rod *v*, of the stand *a'*, sliding on said rod, and provided with the semicircular gear *b'* and dog *e'*, and lever *d'*, provided with a pivoted segmental geared head, *c'*, substantially as described.

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Witnesses:

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