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Fig 1.

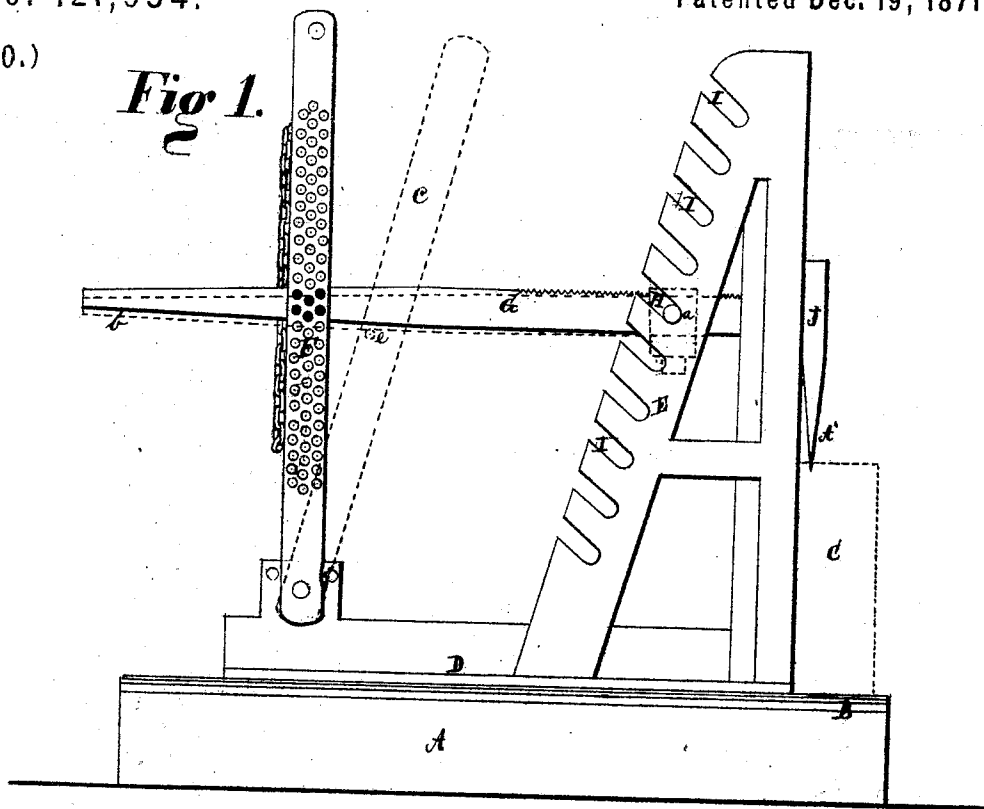


Fig 2.

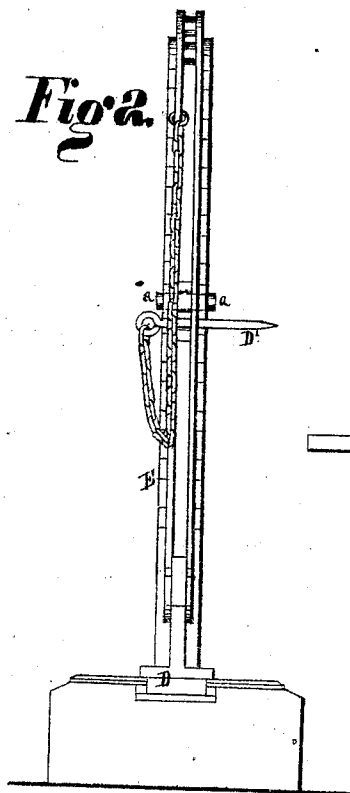
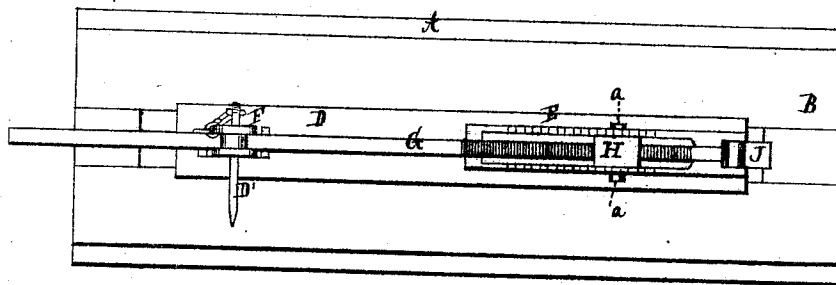


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

THOMAS DOUGLASS, OF WARREN, OHIO.

IMPROVEMENT IN HEAD-BLOCKS.

Specification forming part of Letters Patent No. 121,934, dated December 19, 1871.

To all whom it may concern:

Be it known that I, THOMAS DOUGLASS, of Warren, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Machines for Dogging Logs, of which the following is a description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side view of the dogging-machine. Fig. 2 is an edge view. Fig. 3 is a plan view.

Like letters of reference refer to like parts in the several views.

The nature of this invention relates to a device for dogging or holding logs while being sawed by a circular saw; and which device consists of an adjustable frame, having in one side a series of deep notches, in which the fulcrum of a lever has its bearings. One end of said lever is projected through the frame, and the projecting end thereof is provided with a long sharp-pointed head or dog, which is forced into the side of the log for holding it by the opposite end of the lever, which is elevated for that purpose by means of a movable standard, as hereinafter more fully described.

This dogging device is applied to that class of saw-mills using a circular saw, against the side of which the log is dogged for being sawed; and, therefore, it differs materially from the dogging apparatus used in mills having saws of a vertical action.

In Fig. 1, A represents a section of a sill, and which may be of any desirable length, and is so arranged in its relation to the saw as to be at a right angle to the face thereof. The end B of the sill forms a pillow-block, on which one end of the log to be sawn lies. Said sill is adjustable in its relation of distance to the edge of the saw as the length of the log may require, and which log is indicated by the block C, Fig. 1. In the sill A referred to is cut a groove, in which is fitted the base D of the triangular frame E and standard F, so as to slide backward and forward therein for a purpose presently shown. The triangular frame E consists of two parallel sides, as shown in Fig. 2, between which is inserted a lever, G, which is supported therein by means of a sleeve, H, through which the lever passes. Said sleeve is supported in the frame on trunnions *a*, projecting from each side and lodged in one of the pair of notches, I, as shown in Fig. 1, thereby suspending the lever in the frame, and at the

same time allowing to it a rocking movement, and which sleeve also forms the fulcrum of the lever. To the front end of the lever is secured a head or dog, J, Fig. 1, having a wedge-shape lower end, A'. It will be observed that the face B' of the frame stands perpendicular to the base and sill A; whereas the side of the frame having therein the notches, stands obliquely therewith, so that the sides of the series of notches have an inclination upward, as shown in Fig. 1, thereby giving a downward tendency to the sleeve. C is a standard or lever, the lower end of which is pivoted to the base D. Said lever also consists of two parallel sides, between which the outer end of the lever passes, and is guided in its vertical movement. Said standard is perforated with holes for the insertion of the pin D'.

The above-described device is arranged in front of the saw at one side thereof. On the opposite side and corresponding therewith in position is arranged a similar device, both of which have the perpendicular side of the frame facing the saw, and in such relation to it that the ends of the sills A are in line with the face of the saw, or a little back therefrom, and which constitute the pillow-blocks on which the ends of the log rest, and the carriage on which the log is moved along or fed to the saw. The log is held in place on the blocks and close to the perpendicular side of the frame by the dog or head J. Thus, when the log is rolled into place on the blocks B the lever G is then so adjusted in some one of the notches I as to bring the lower end A' of the dog J upon it. For this purpose the outer end of the lever G is allowed to be depressed, more or less, as indicated by the dotted lines *b*, Fig. 1, in which position of the lever the standard is pushed forward to an oblique position, as indicated by the dotted lines *c*. The pin D' is then inserted in some one of the holes immediately under the lever, as indicated by the point *e*. Now, on pulling the standard back to a vertical position, as shown in Fig. 1, the end of the lever will thereby be carried upward, and thus force the end A' of the dog J into the log C, and hold it hard down upon the pillow-block, and at the same time draw it close against the side of the frame, in which position it is held while being sawn.

This dogging apparatus is easily and readily adapted to any-size log by shifting the sleeve H and lever into either of the notches I, as the size of

the log may demand; and the log is moved along toward the saw for each successive cut by a log set so arranged in its relation to the dogging device and connected therewith as to move the base D along in the grooves of the sills A, in which they are fitted, as above said. The two dogging devices, being operated simultaneously by the log-set, move each end of the log at the same time and at the same distance.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The lever G, dog or head J, as arranged, in

combination with the adjustable triangular frame E having notches I therein, and sleeve H, in the manner substantially as described, and for the purpose set forth.

2. The movable standard F, pivoted to the base A, and arranged in relation to and in combination with the frame E and lever G, in the manner substantially as and for the purpose specified.

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Witnesses:

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