

W. H. DALBY.

SAW GUARD.

No. 298,293.

Patented May 6, 1884.

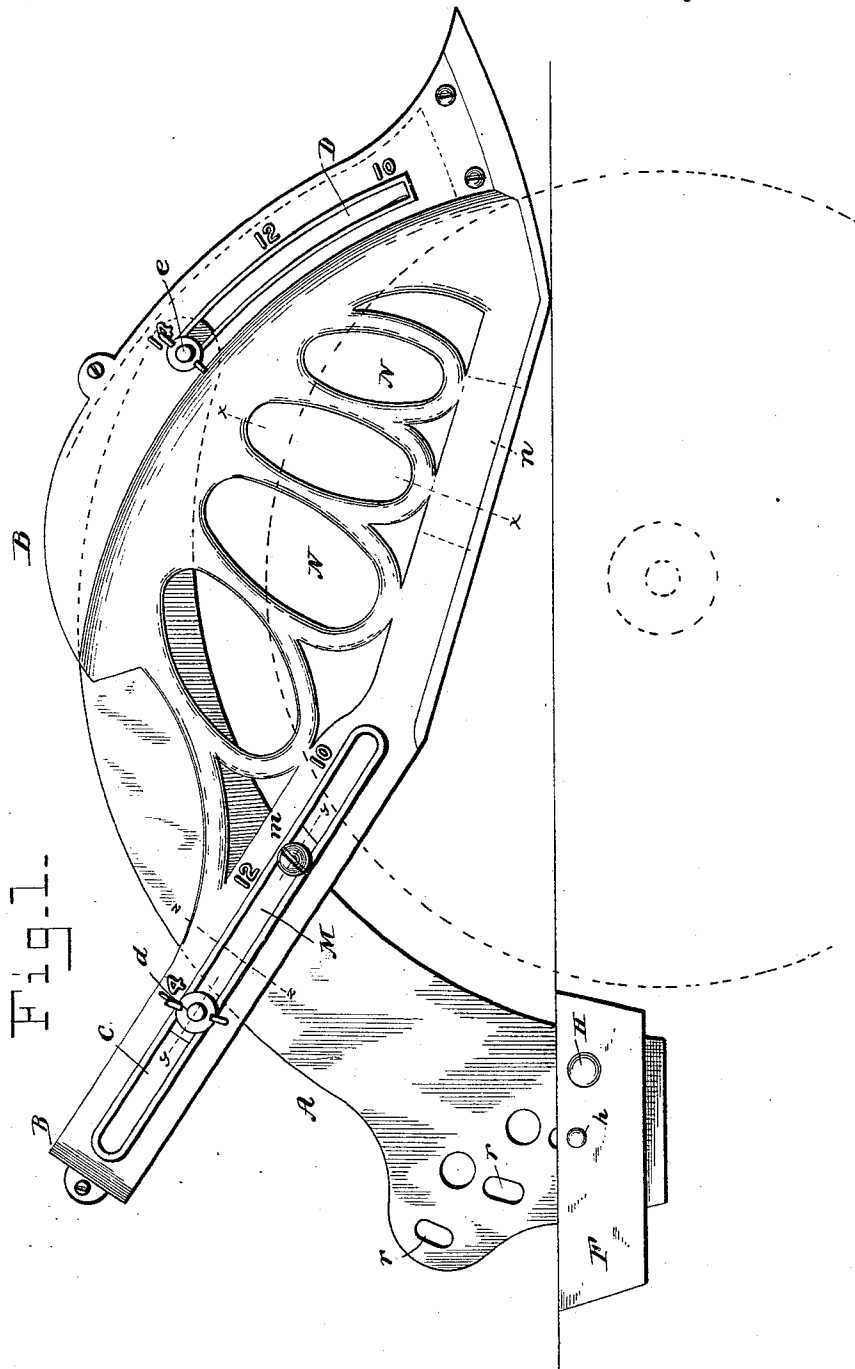


Fig. 1.

WITNESSES

Edwin L. Jewell.
 J. J. McCarthy.

INVENTOR

William H. Dalby.
 By C. M. Alexander
 Attorney.

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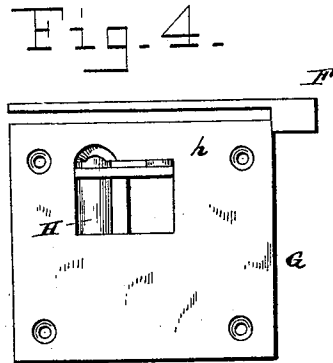
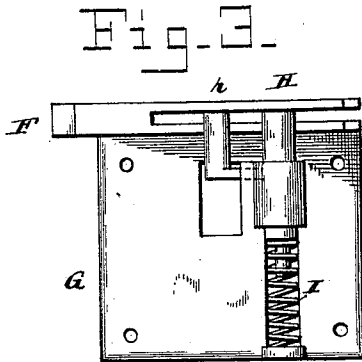
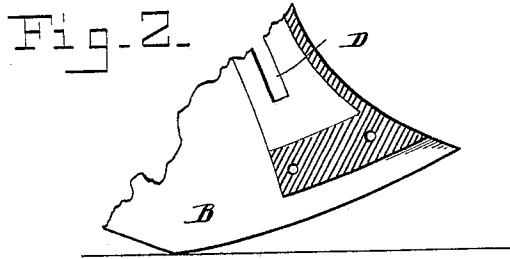


Fig. 5.

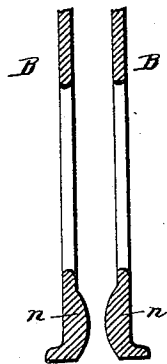


Fig. 6.

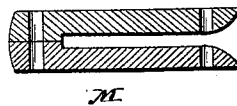
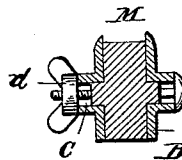


Fig. 7.



WITNESSES

Edwin L. Yewell.
J. J. McCarthy.

INVENTOR

William H. Dalby
By C. M. Alexander

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM H. DALBY, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF THREE-FOURTHS TO ALPHA MEDSKER AND CHARLES E. CLARK, BOTH OF SAME PLACE.

SAW-GUARD.

SPECIFICATION forming part of Letters Patent No. 298,293, dated May 6, 1884.

Application filed February 23, 1884. (No model.)

To all whom it may concern.

Be it known that I, WILLIAM H. DALBY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Saw-Guards, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to guards for circular saws; and the object I have in view is to form a guard over the saw which can readily be adjusted to different-sized saws, and which will adjust itself to the thickness of lumber to be cut, the peculiarities of the construction of which will be hereinafter more particularly set forth.

In the accompanying drawings, making part of this specification, Figure 1 represents a side view of the guard with the saw in dotted line. Fig. 2 is a side view of a portion of one side of the front end of the guard. Fig. 3 is a bottom view of the plate which connects the guard-arm to the saw-table, and Fig. 4 a top view of same. Figs. 5, 6, 7 are sections of the guard, Fig. 5 being on the line $x x$, Fig. 6 on line $y y$, and Fig. 7 on line $z z$.

In the figures, A represents a flat metallic curved arm which is intended to carry the guard or hood. One end of this arm is provided with a series of holes, through which it is connected to the plate which secures it to the table, and by means of which it can be adjusted to suit different-sized saws.

F represents a metallic box, which forms a part of a plate, G. The plate is firmly secured upon the saw-table at the back of the saw and a little to one side of its line of motion. The box F, having one end open, fronts this line. The perforated end of the arm A enters the cavity of the box, which is made to fit it snugly, and is there retained by suitable bolts, H and h . Secured to the under side of the plate G, in suitable bearings, is the bolt H, having connected to it, but a little removed and parallel with it, the bolt h . The bolt H is surrounded with a coiled-wire spring, I. The ends of these bolts are pressed through holes in the box F and through the openings in the end of arm A, and serve to hold the said arm securely within the box. B represents the hood or

guard, which is formed of two metal plates, which are bolted together a portion of the way at their upper edges and at their ends. The plates set out from each other from near the points where they are bolted together, and the saw plays in the opening thus formed between the plates.

D represents a curved slot in the guard, near its forward end. e represents a set-screw which passes through the two plates and through a hole in the forward end of the arm A. The set-screw plays in the curved slot D, to assist in giving the guard an endwise adjustment and raising same.

C represents a slot in the guard at its rear end, and a sliding bar, M, is placed between the two plates of the guard at this point. A set-screw, d , passes through the slot C and through the bar M near one end. m represents headed guiding-screws which pass through the slots and into the bar M, to assist in guiding said bar in the endwise adjustment of the guard. The forward ends of the plates are curved somewhat upward and flare from each other. The curve upward is to allow the boards to lift it of themselves as they pass under it to the saw. The flare in the end is to enable the operator to see the saw, and thus regulate his work to it. Enlargements $n n$ may be made upon the plates of the guard, or pads of leather or rubber may be secured to them upon their insides to fit nearly against the saw, to prevent it from catching against either of the plates of the guard in case of any undue sidewise movement of the said guard in adjusting or handling it while the saw is in motion. The two plates have open-work on their sides, as seen at N N, for the purpose of allowing a ready discharge of the sawdust, and at the same time to allow the operator to pass his rule in to enable him to measure the distance in setting his gage to the width of the lumber to be sawed.

It will be seen that the holes $r r$ in the arm A, into which the bolt h passes, are elongated somewhat. The arm A is allowed play at its outer or forward end up and down, working upon the bolt H as a pivotal point. This enables the guard to rise and fall to accommodate itself to different thicknesses of lumber

passed beneath it. The lumber, as it is being sawed, passes back over the table, the arm A passing in the channel or kerf of the saw.

By the use of the set-screws and the slots in the guard it may be readily and quickly adjusted longitudinally to adapt it to different-sized saws. The vertical adjustment of the arm is effected, as before stated, by the bolt H and the graduated holes in the end of the arm, together with the slots D and C and the set-screws *d* and *e*.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The arm curved as represented, and provided at its rear end with round and elongated graduated openings, in combination with the box and the plate carrying the sliding bolts, which are adapted to enter the graduated openings in the arm. the whole operating to support the hood and allow a restricted vertical movement of the same, for the purpose specified.

2. The guard B, formed in two parts, and having open-work upon its sides, in combination with the curved arm A, to which it is adjustably connected through slots and by means of set-screws.

3. The guard B, having its forward end curved upward and the two sides or edges of the plates forming it flared outward, substantially as and for the purpose set forth.

4. The enlargements or buffers formed integral with the hood or secured to the same, for the purpose of preventing the wobbling of the saw from interfering with the sides of the said hood, the relative arrangement of the parts being substantially as described.

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

WILLIAM H. DALBY.

Witnesses:

D. C. MINICK,
AMOS GREDGEL.