

UNITED STATES PATENT OFFICE.

THOMAS JACK, OF AUBURN, NEW YORK.

GUARD FOR CIRCULAR SAWS.

SPECIFICATION forming part of Letters Patent No. 261,928, dated August 1, 1882.

Application filed May 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JACK, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Safety-Guards; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical sectional view, and Fig. 3 is a top plan.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to guards for circular saws and shapers; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the frame, bed, or table, having a slot, B, to accommodate the circular saw C, which is journaled in suitable bearings under said table. D D represent the shaper-knives.

E is the saw shield or guard, the sides of which are constructed each of two pieces, F F, having slots G, adapted to register with each other, so as to receive a bolt, H, having a nut, I, by tightening which the said pieces may be securely connected after being extended so as to fit over the saw to which the shield is to be applied. The ends of the pieces F have laterally-projecting end pieces, J, which are likewise provided with slots K, to receive bolts and nuts L M, by which the parts may be secured together after being adjusted as desired.

N N are brackets secured to an upright, O, or to the wall of the work-shop, or to a hanger pendent from the ceiling, or in any other position which may be found suitable and convenient. Journaled in the said brackets is a shaft, P, having a pinion, Q, engaging a vertically-sliding rack, R, which may be adjusted to any desired position by turning shaft P by means of its crank S. The shaft P is also provided with a pinion or ratchet-wheel, T, to

engage a stop-pawl, U, by which it may be retained in any position to which it is adjusted.

The lower end of the rack R has a forwardly-extending bracket, V, provided with a slot, W, to receive a bolt, X, having a nut, Y. Z is an angular plate or bracket, having at one end a slot, A', by which it is adjustable upon the bolt X. At its other end the said plate has a slot, B', to receive a bolt, C', having nut D'.

E' E' are angle-plates slotted at both ends, so as to be adjustable upon the bolts H and C', respectively, thus connecting the saw-guard with the adjustable bracket or plate.

F' is an arm having a slot, G', so as to be adjustable upon the bolt X, and provided at its front end with another slot, H', to receive a bolt, I', by which slotted angle-plates J', carrying curved guards K' for the shaper-knives, may be properly adjusted.

Secured upon the bolts L, at the rear end of the saw-guard, is a plate, L', having a narrow curved guard, M', extending down through the slot B in the frame, so as to guard the saw under said frame.

The operation and advantages of my invention will be readily understood.

When, as is frequently the case, the shapers and circular saw are used together in the same frame the entire set of guards may be used. When the shapers or circular saw are used by themselves the guards not needed may be dispensed with.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The herein-described adjustable guard for circular saws, consisting of the side pieces, F, having slots G, and laterally-projecting ends J, having slots K, the angle-plates E' E', slotted at both ends, the plate L', having narrow curved guard M', and the connecting bolts and nuts, as set forth.

2. The combination, with the herein-described circular-saw guard, of the bracket Z, slotted at both ends, the rack R, having slotted bracket V, suitable connecting-bolts, and mechanism for adjusting the rack R, as set forth.

3. The combination of the rack R, having
slotted rack V, mechanism for adjusting said
rack, the slotted plate or bracket Z, the slot-
ted arm F', the slotted angle-plates J', having
5 curved guards K', and the adjustable circular-
saw guard, all arranged and operating substan-
tially as set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
presence of two witnesses.

THOMAS JACK.

Witnesses:

GEORGE O. PROPER,

JOHN WILLIAM HUTCHINSON.