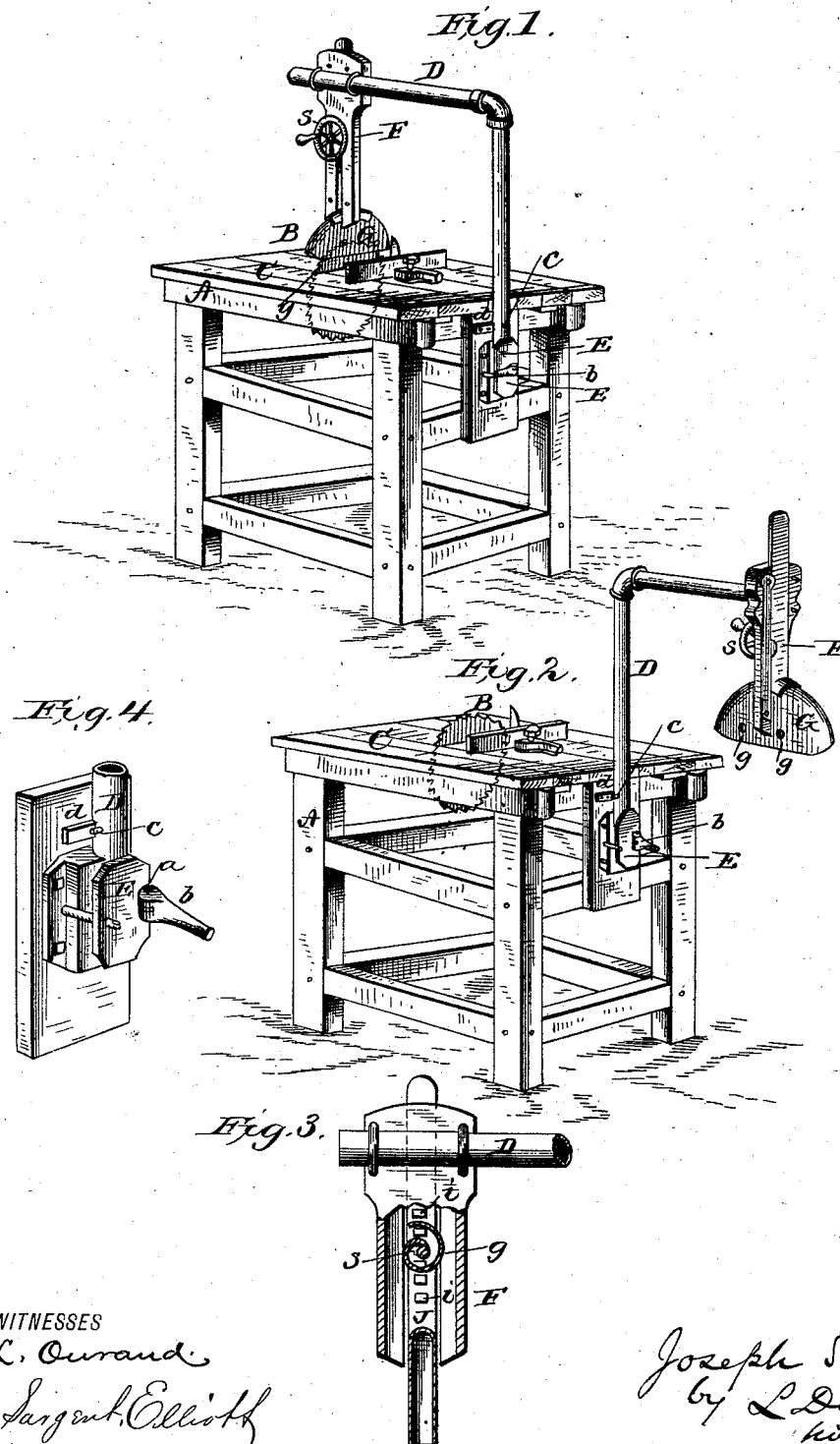


(No Model.)

J. SILL.
SAW GUARD.

No. 302,041.

Patented July 15, 1884



WITNESSES
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JOSEPH SILL, OF PICTURE ROCKS, PENNSYLVANIA.

SAW-GUARD.

SPECIFICATION forming part of Letters Patent No. 302,041, dated July 15, 1884.

Application filed August 21, 1883. Renewed June 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SILL, a citizen of the United States, residing at Picture Rocks, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Saw-Guards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of a circular sawing machine and saw-guard adjusted over the circular saw by my improved attachment. Fig. 2 is a view of the same parts, showing the saw-guide adjusted from over the top of the table. Fig. 3 is a view in detail and section showing the saw-guard, its head, and the means for adjusting it vertically. Fig. 4 is an enlarged view of the clamp-box, the eccentric clamping-lever, and the stop applied on the upright portion of the swinging arm.

My object is to combine, with a horizontally-swinging arm bearing a circular saw-guard or sheath of segmental form, certain novel devices for adjusting said guard or sheath vertically and horizontally, as will be fully understood from the following description, when taken in connection with the annexed drawings.

A designates the saw-frame, in which is suitably mounted an arbor and a circular saw, B, the upper portion of which latter extends above the top C of the saw-table, in the usual well-known manner, as shown in Figs. 1 and 2.

D designates an angular horizontally-adjustable supporting arm or bracket, which is preferably made of tubular metal, and which has its vertical limb fitted into a clamp-box, E, secured rigidly to one side of the saw-frame. To this box E, I apply an eccentric, a, having a hand-lever, b, keyed on it for the purpose of gripping or clamping the arm D and holding it rigidly in either of the positions designated in Figs. 1 and 2.

Directly above the clamp-box E, and fixed to the upright limb of the arm D, is a lug, c, which serves as a stop when this arm D is

swung into the position shown in Fig. 2 by impinging against a plate, d, on the main frame.

To the overhanging end of the arm D, I secure a pendant, F, which is vertically slotted, as shown in the drawings, and provided with a hollow segmental guard, G, adapted to cover the upper part of the saw B and protect the sawyer from flying dust, and also protect him against accident, should the saw become fractured and the pieces be thrown from it by centrifugal force. The orifices g in the sides of the guard G will allow the discharge of the sawdust that may get inside.

This guard is guided in its up-and-down movement in the vertical slot formed in the said pendant, and it is vertically adjusted by means of a worm on a hand-wheel shaft, s, which worm engages with the teeth i on a vertically-guided rack, J, to which the said guard G is secured; or I may use, if desired, a worm-gear for this purpose.

It will be seen from the above description that the guard G is moved from the position indicated in Fig. 1 to that shown in Fig. 2 by first adjusting it vertical until it is freed from the saw, then releasing the arm D from its clamping-eccentric a and swinging the arm around about one-half of a revolution on its vertical axis until the stop-lug c strikes the plate d. The arm D may be fixed in this position by means of the eccentric a, above described.

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

1. The combination of the arm adapted to swing over the saw-table, and having on its outer horizontal end a guard for a circular saw, with a clamp-box fixed to the side of said table for clamping the vertical end of said arm, whereby said guard can be moved on its vertical end or fixed in position, substantially as described.

2. The combination, with a saw-table, of a swinging arm having a saw-guard applied to its overhanging end, and provided with a clamping device for the vertical end of the arm, and a stop-lug, c, substantially in the manner and for the purposes described.

3. The combination, with a frame having a

circular saw applied to it, of a horizontally-
swinging arm, a clamping device, and a stop
therefor, a vertically-adjustable saw-guard
applied to a pendant for this guard, secured to
5 said arm, a rack, and a worm for adjusting the
guard, all constructed and adapted to oper-
ate substantially in the manner and for the
purposes described.

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

JOSEPH SILL.

Witnesses:

JAMES B. CORYELL,
THOMAS W. LLOYD.