Simil Sauin Mach. Patented Mar. 30.1869. 10.88417. Fig.1. Inventor.

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## AUGUST M. SCHILLING, OF CHICAGO, ILLINOIS.

Letters Patent No. 88,417, dated March 30, 1869.

## IMPROVEMENT IN SCROLL-SAWING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, August M. Schilling, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Scroll-Sawing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of my machine, partly in

section, through the line x x, fig. 1.

Figure 2 is a detail top view of the central part of the table, showing the adjustable slides.

Similar letters of reference indicate corresponding

parts.

My invention has for its object to furnish an improved scroll-sawing machine, which shall be so constructed and arranged that holes may be sawn with facility and accuracy, without its being necessary to stop the saw to introduce the material to be sawn; and

It consists in the construction and combination of various parts of the machine as hereinafter more fully

described.

A represents the frame of the machine;

B, the table; and

C, a joist, or beam of the building in which the machine is used.

D is the driving-shaft, which revolves in bearings in the frame A, and which is provided with a fast pulley,

 $d^{1}$ , and a loose pulley,  $d^{2}$ .

To the end of the shaft D is attached a crank, or crank-wheel E, to which the lower end of the pitman F is pivoted, the upper end of which is pivoted to the sliding block G, to which the lower end of the saw H is attached.

The sliding block G slides up and down in adjustable ways I, attached, by set-screws passing through slots in said ways, to the support J, attached to the frame A, so that the said ways may be conveniently adjusted to compensate for the wear.

Upon the upper part of the sliding block G are formed shoulders g', against which the pin, or shoulder of the saw H rests, and between which the saw H

passes.

The saw-plate is extended below the said pm, or shoulders, and rests against the side of the block K, formed solidly upon, or securely attached to the sliding block G.

The lower end of the saw-plate H is clamped against the block, or flange K, by the sliding block L, which is moved forward, to secure, and back, to release the saw H, by the set-screw M, as shown in fig. 1.

This construction holds the saw H securely, and en-

ables it to be used with its upper end free.

N is a support, attached to a joist, or beam of the building, or to some other suitable support.

The support N is jointed, so that its lower part may be conveniently turned away from the upper part of

the saw H, for convenience in passing the material through which the hole is to be sawn over the upper end of the said saw.

When the jointed part of the support N is turned down into a vertical position, to receive the upper part of the saw H, it is secured in place by the lever O, which is pivoted to the movable part of said support, in such a position that its forward end may be turned up over the stationary part of said support, as shown in fig. 1, where it is held securely in position by the spring P, one end of which is attached to the movable part of the support N, and the free end of which presses against the forward part of the lever O, as shown in fig. 1.

Q is a plate, or block sliding up and down upon the lower, or movable part of the support N, to which it is secured by a set-screw, passing through a slot in said block, or plate Q, so that the length of the support N may be adjusted according to the thickness of

the material to be sawn.

The groove in which the saw H works is formed by the blocks R, adjustably secured to the block, or plate Q by set-screws, passing through slots in the blocks R, so that the said blocks may be moved to adjust them to the thickness of the saw.

S are plates let into and secured to the table B. T is a slide placed in a groove, or slot in the plate S, directly in the rear of the saw H, and which is secured in place when adjusted, according to the size of the saw by a set seron as shown in for S.

the saw, by a set-screw, as shown in fig. 2.

U<sup>1</sup> are narrow slides, placed between the plates S, at the sides of the saw H, so that they may be adjusted according to the thickness and breadth of the saw, to support and hold the said saw in proper position, enabling thin stuff to be sawn without using the support N.

U<sup>2</sup> are wider slides, placed upon both sides of the slot, through which the saw H works, and which may be adjusted to support the stuff, and prevent it from

being torn by said saw.

The slides U<sup>1</sup> U<sup>2</sup> are secured in place, when adjusted, by set-screws, passing horizontally through the forward plate S, and the heads of which may be covered and protected by a cap, V, as shown in fig. 1.

I claim as new, and desire to secure by Letters

Patent—

1. The plates S S, recessed as described, to receive the adjustable plate T and the plates U¹ U², clamped by the front set-screws, as herein described, for the purpose specified.

2. The support N, carrying the extension-plate Q and adjustable guide-blocks R, when jointed as de-

scribed, for the purpose specified.

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Witnesses:

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