

M. FOLEY.
Scroll-Sawing Machines.

No. 143,895.

Patented Oct. 21, 1873.

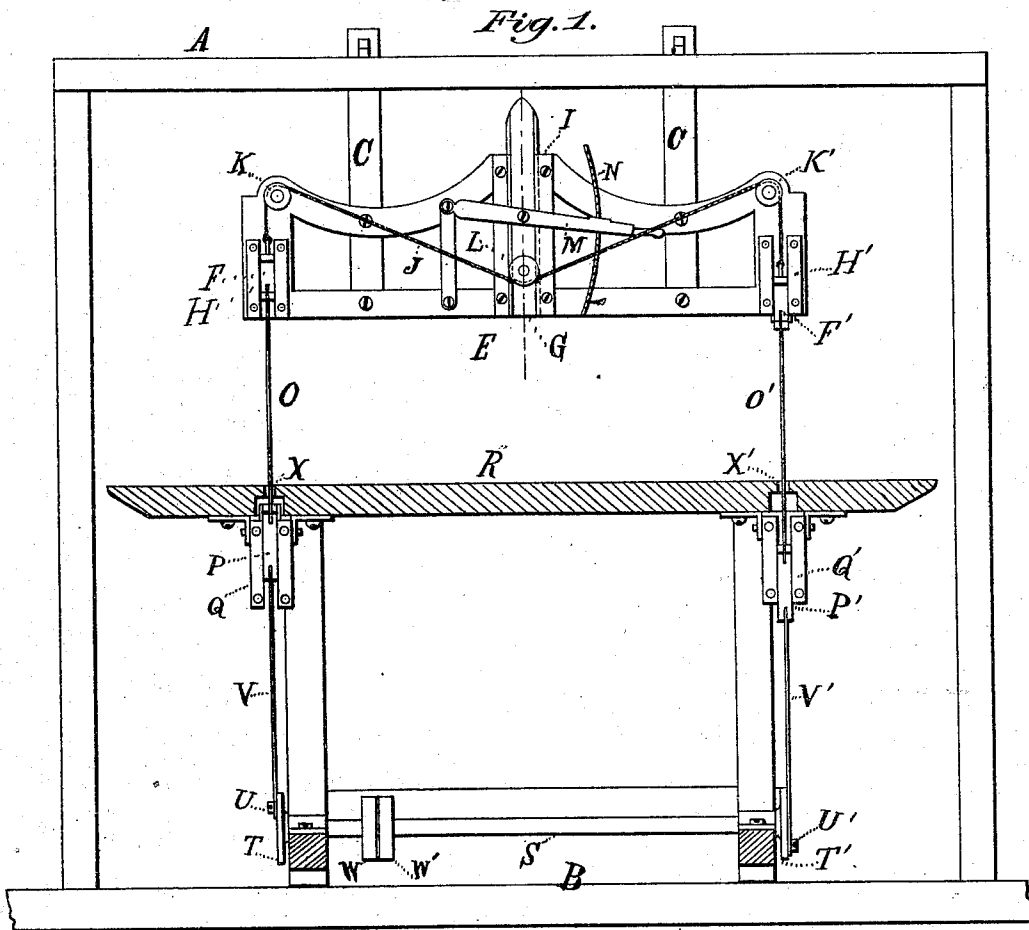
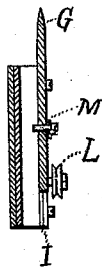


Fig. 2.



Witnesses.
Alexander Lynch.
John H. Sherman,

Inventor.
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By J. F. Ferriss
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UNITED STATES PATENT OFFICE.

MICHAEL FOLEY, OF APPLETON, WISCONSIN.

IMPROVEMENT IN SCROLL-SAWING MACHINES.

Specification forming part of Letters Patent No. 143,895, dated October 21, 1873; application filed June 13, 1873.

To all whom it may concern:

Be it known that I, MICHAEL FOLEY, of Appleton, in the county of Outagamie and State of Wisconsin, have invented a new and useful Improvement in Scroll-Saws, &c.; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation, partially in section, of a machine embodying my improvements; and Fig. 2 is a vertical section of the slide therein used for regulating the tension of the saws.

The invention consists in the construction and arrangement of a hanging frame provided with three slides working in ways, two of the slides being connected by a belt which runs over two pulleys, one above each of said two slides, and under a third pulley fixed to the third slide, which is located intermediately between the two other slides, and provided with a lever and ratchet to move the pulley to and retain it at any required elevation; and two saws, secured at their upper ends to the two connected slides, and at their lower ends to two slides working in ways on the under side of a table, which is secured to the floor and provided with a shaft having a crank-wheel fixed to each end thereof in such a manner that the crank-pins are at opposite points on the crank-wheels, which latter are connected to the lower slides by pitmen.

In the accompanying drawing, the ceiling is represented by A, and the floor by B. Two hangers or posts, C, strengthened by brace-rods, support the hanging frame E, which is provided with slides F, F', and G, working in ways H, H', and I. A belt, J, which runs over pulleys K and K' and under a pulley, L, connects the slides F and F'. The slide G is located intermediately between the slides F and F', and provided with a lever, M, and a ratchet, N, used to move the pulley L to and retain it at any required elevation in the ways I. Two saws, O and O', are secured at their upper ends to the slides F and F', and at

their lower ends to slides P and P', working in ways Q Q' secured to the under side of the table R, which is secured to the floor B, and provided with a shaft, S, having the crank-wheels T T', the pins U U' of which are placed at opposite points on the crank-wheels. Pitmen V V' connect the crank-wheels T T' with the slides P P'. The shaft S is provided with a fixed pulley, W, and a loose pulley, W'. The saws O O' pass through openings X X' in the table R.

When it is desired to use but one saw, a rod may be substituted for either O or O'. By this substitution the tension of the remaining saw can be regulated as readily as if both saws were used.

The tension is regulated as follows: The tension is increased by depressing the lever M, which presses the pulley L upon the belt J and causes the strain upon the belt and the saws to be equal. Elevating the lever M consequently diminishes the tension.

The crank-pins U U' being at opposite points on the crank-wheels T T'—that is to say, one being up and the other down—a revolution of the shaft S causes one saw to ascend while the other descends.

This improvement is equally applicable to scroll-saws or to muleys.

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

In combination, the hanging frame E, provided with the pulleys K K', slides F, F', and G, the latter having pulley L, lever M, and ratchet N, the belt J, saws O O', slides P P', pitmen V V', and shaft S provided with crank-wheels T T', constructed and operating substantially as and for the purposes hereinbefore set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of May, 1873.

MICHAEL FOLEY.

Witnesses:

EDGAR M. PRATT,
ZELOTES C. FAIRBANKS.