

W. NEIDEFFER.
Sawing-Machines.

No. 135,575.

Patented Feb. 4, 1873.

Fig. 1.

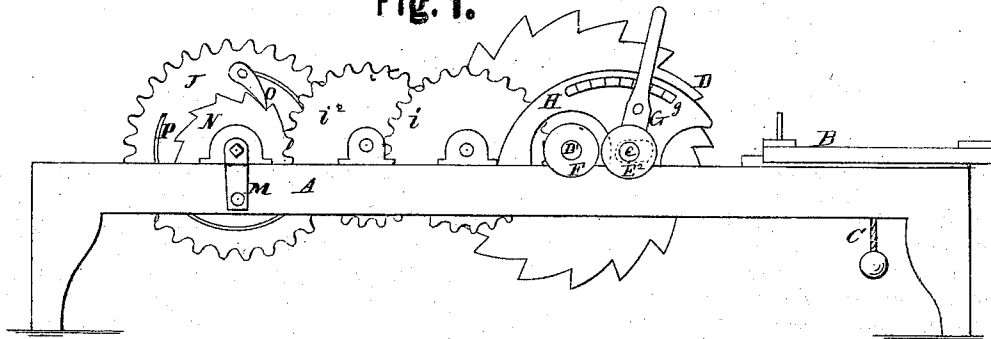
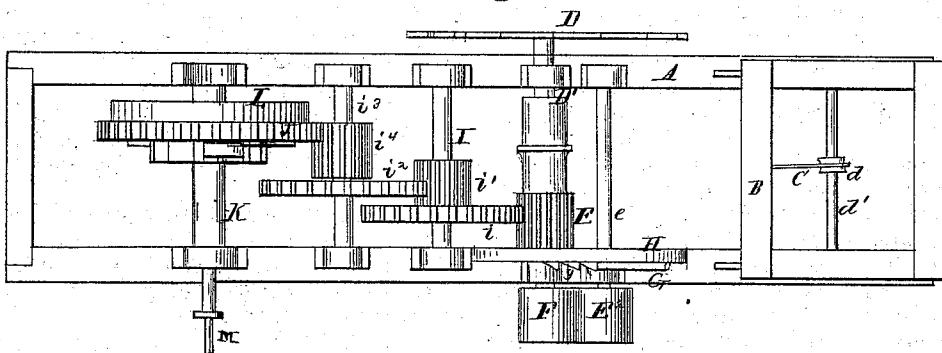


Fig. 2.



WITNESSES.

T. Alonzo
Geo. Elpham.

INVENTOR.

William Neidoffer
Chipman Hosmer & Co
Attys

UNITED STATES PATENT OFFICE.

WILLIAM NEIDOFFER, OF MITCHELL, INDIANA.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 135,575, dated February 4, 1873.

To all whom it may concern:

Be it known that I, WILLIAM NEIDOFFER, of Mitchell, in the county of Lawrence and State of Indiana, have invented a new and valuable Improvement in Sawing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of my invention. Fig. 2 is a top view of my invention.

This invention has relation to sawing-machines; and consists in the construction and novel arrangement of a spring-motor with devices for communicating motion therefrom to the saw, and a friction-brake to prevent the recoil of the spring while it is being wound up, all as hereinafter more fully described.

In the accompanying drawing illustrating this invention, A designates the frame of my improved sawing-machine, upon one end of which moves the saw-carriage B, provided with a weighted cord, C, which passes over a roller, d, on a transverse shaft, d', of the frame, and operates to draw the table back automatically when the board is cut. D indicates the saw, and D' the saw-shaft, the latter journaled transversely upon the frame A, and provided with the pinion E and friction-roller F. The friction-roller is arranged outside the frame. A similar roller, E², is placed on the end of a transverse shaft, e, which has its bearings in slots or large boxes, and is capable of being shifted at its end toward and away from the roller F. The shaft e is armed with a dog, G, which engages with a rack, g, on the side of an upright plate, H, and is designed to hold the roller E² either in close contact with or apart from the roller F, according

as it is required to have the saw stationary or running. I denotes a transverse shaft, holding a spur-wheel, i, which engages with the pinion E, and a pinion, i¹, which engages with a spur-wheel, i², on a transverse shaft, i³, which is also furnished with a pinion, i⁴, engaging with the main spur-wheel J attached to the transverse motor-shaft K. L designates a spring, having one end attached to the frame A, and the other to the shaft K. This spring is wound by turning the crank M on the end of the shaft K. A ratchet-wheel, N, is secured to said shaft, and communicates motion and power to the wheel J through the medium of a pawl, o, pivoted to said spur-wheel, and held in position by means of a spring, P. While the spring is being wound the pawl allows the ratchet to turn independently of the wheel J. For the pinion E and spur-wheel i, a pair of belt-wheels and a belt may be sometimes advantageously substituted. When the rollers F E² are brought closely together, the movement of the devices for communicating motion to the saw is prevented.

What I claim as new is—

1. The combination of the spring L, spur-wheel J, pawl and ratchet o N, gearing E i i¹ i² i⁴, shaft L', and saw D, substantially as specified.

2. The adjustable shaft e provided with the friction-roller E² and the lever or dog G, in combination with the saw-shaft D' having the friction-roller F, the rack g, and the spring L, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM NEIDOFFER.

Witnesses:

O. METCALF,
WILLIAM A. BURTON.