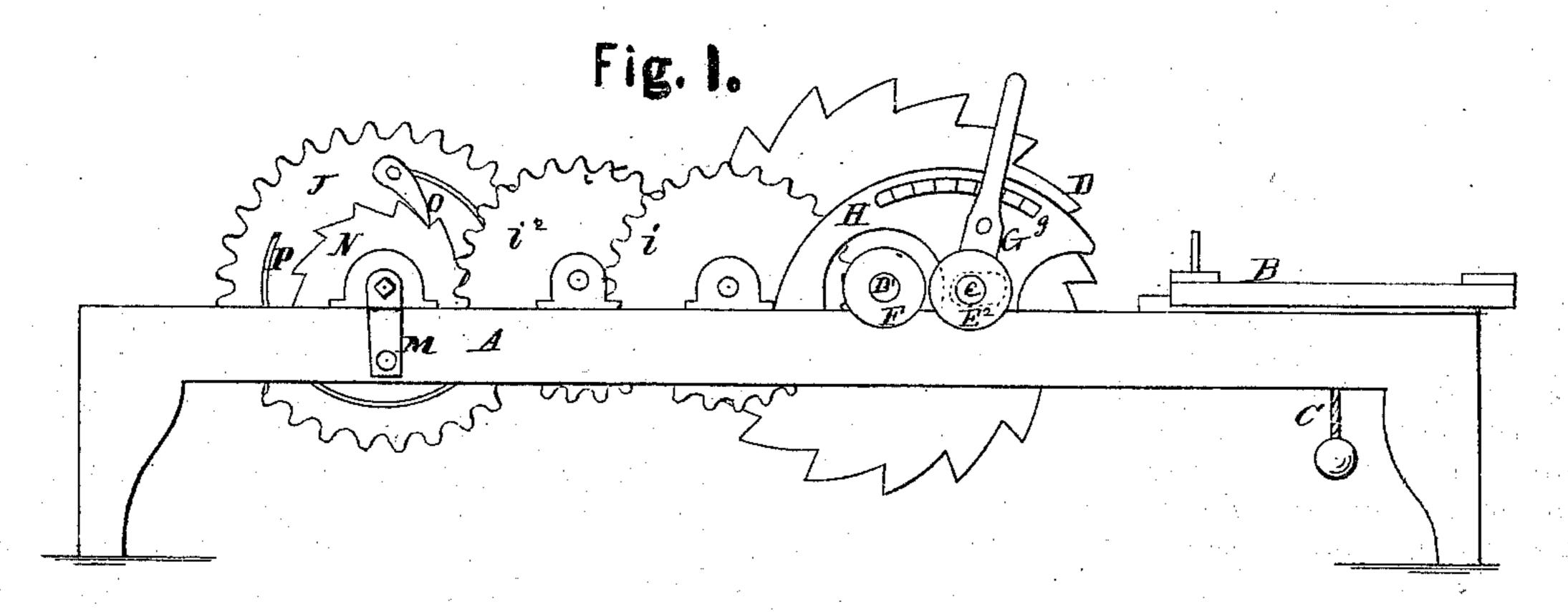
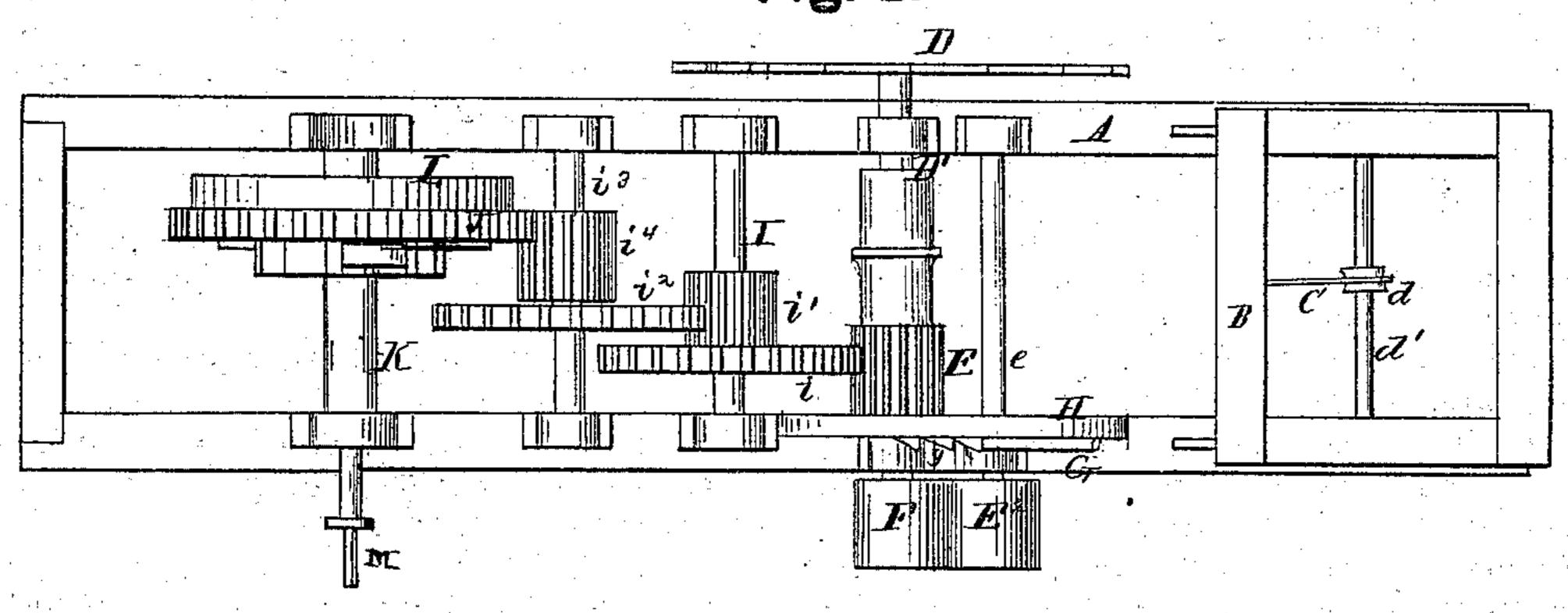
W. NEIDEFFER.

Sawing-Machines.

No. 135,575.

Patented Feb. 4, 1873.





WITNESSES.

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William Neideffer Chipman Hosmort Co Attys

UNITED STATES PATENT OFFICE.

WILLIAM NEIDEFFER, 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 NEIDEFFER, 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 frictionroller 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, i^1 , which engages with a spur-wheel, i^2 , on a transverse shaft, i^3 , 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, spurwheel J, pawl and ratchet o N, gearing E i i^1 i^2 i^4 , 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 NEIDEFFER.

Witnesses:

O. METCALF, WILLIAM A. BURTON.