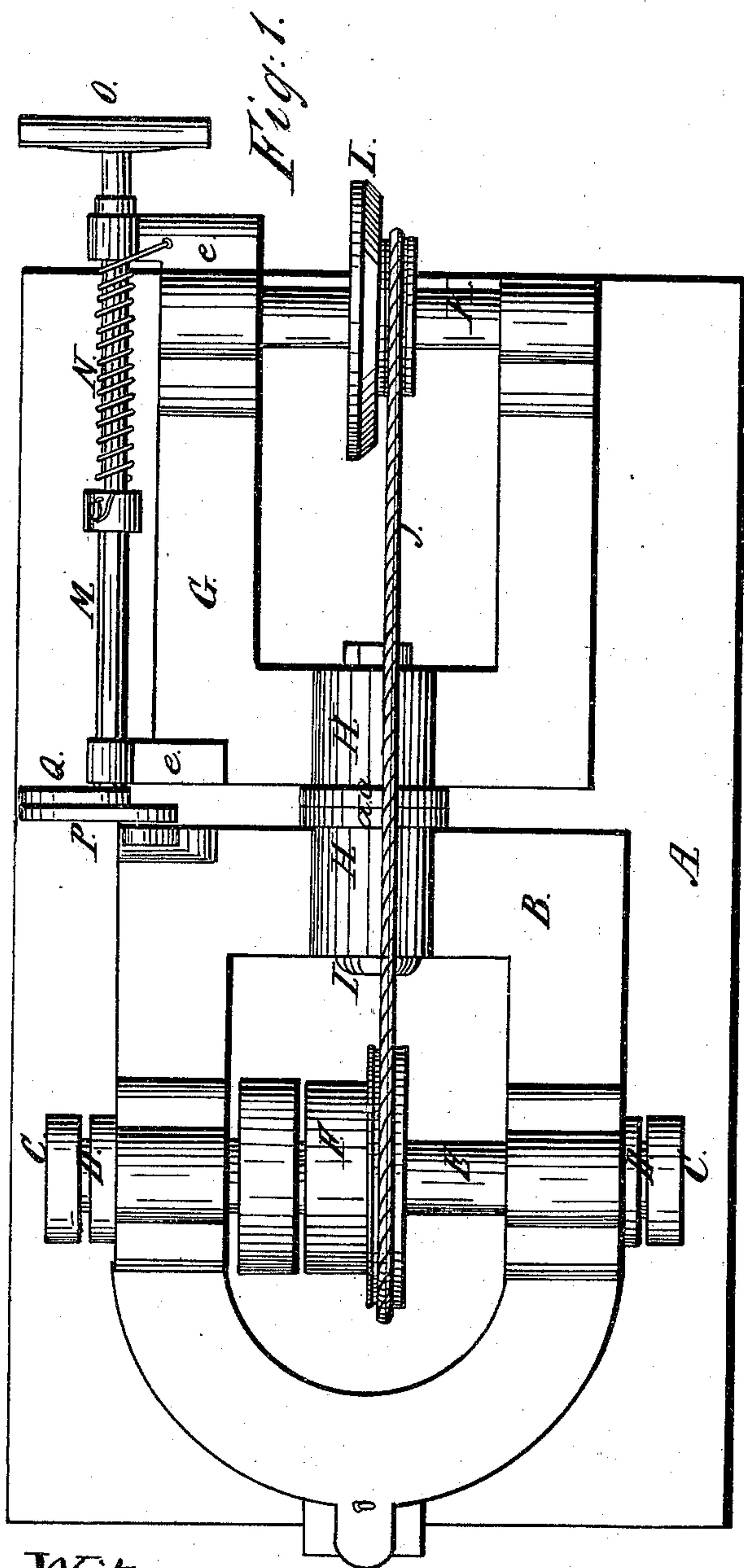
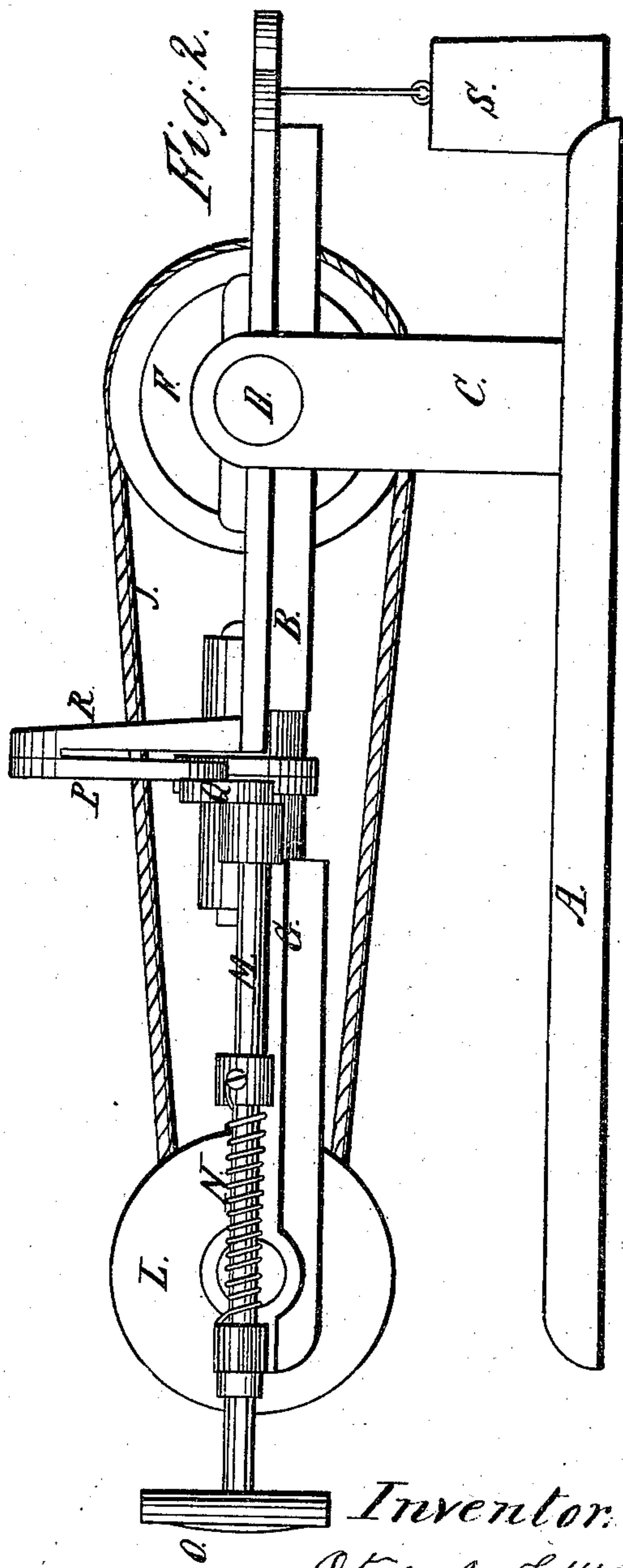


*O. A. Tefft*  
*Saw Sharpening Mach.*  
*Nº 79,787 Patented Jul. 7, 1868.*



*Witnesses.*  
*Wm. Wausleben*  
*V. D. Stockbridge*



*Inventor.*  
*Otis A. Tefft*  
*per Alexander Mason*  
*attys*

# United States Patent Office.

OTIS A. TEFFT, OF PLATTSBURG, ASSIGNOR TO JOSEPH FRAZIER, OF CLINTON COUNTY, NEW YORK.

*Letters Patent No. 79,787, dated July 7, 1868.*

## IMPROVEMENT IN SHARPENING SAWS.

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, OTIS A. TEFFT, of Plattsburg, in the county of Clinton, and in the State of New York, have invented certain new and useful Improvements in Machines for Grinding and Sharpening Saws; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the combination of two frames, one oscillating upon trunnions, and the other adjustably connected to it, so that it may be partially rotated backwards and forwards, this latter frame being provided with a grindstone or polishing-wheel, for sharpening the teeth of and gumming saws, as will be hereinafter described.

In the annexed drawings, making part of this specification, A represents a base or platform, upon which the machine is erected. To this platform are secured the uprights C C. B represents a frame, which is provided with trunnions at D D, and these trunnions have their bearings in the uprights C C. The frame oscillates upon these trunnions. To one end of this frame is connected a weight, S, and to the other end is secured a frame, G. Upon the frames B and G are formed the enlargements H, and upon these enlargements, at their outer ends, are formed the flanges or wheels *a a*. A bolt, I, passes through the enlargements H, for the purpose of securing the two frames together. The flanges *a a* fit and bear against each other. The frame G, it will now be seen, has two movements, one with frame B, when it oscillates upon its trunnions, and the other upon bolt I, upon which it oscillates or partially rotates backward and forward, when desirable.

E represents a shaft, which has its bearings in frame B, and K is a shaft, which has its bearings in frame G. Upon shaft E is secured a pulley-wheel, F, and upon shaft K is secured an emery or grindstone, L, which has a pulley-wheel connected and secured to it.

A belt or band, J, passes around the pulleys of these two shafts, and communicates motion from the one to the other.

*e e* represent two arms, which project from the frame C, and in which a rod or shaft, M, has its bearings. This rod is provided with a handle, O, at one end, a crank, Q, at the other, and is surrounded, a portion of its length, with a coiled wire-spring, N.

The spring N has one of its ends connected to a collar upon the rod or shaft, and its other made fast to one of the arms, *e*.

A bar, P, is pivoted near one end to the upper end of a standard, R, on frame B, and is provided with a hole near its other end, into which passes the wrist of the crank Q.

By means of the crank or shaft on rod M, the frame G is made to oscillate upon the rod I, and change its position with reference to the frame B.

In using this machine, the saw is placed at right angles to the stone, L, and said stone is raised or lowered or adjusted to suit the bevel of the saw-tooth upon which it is operating. The edge of the stone is used for gumming the saw, while the bevelled side of said stone is used for sharpening the bevelled edges of the teeth. The machine is made stationary. The stone is driven by any suitable power, and the frames are operated by means of the handle O upon shaft M. The weight S serves to hold the frames up and away from the saw, when the stone is not being used.

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

The rod or shaft M, provided with crank Q and spiral spring N, in combination with bar P and frames B and G, all constructed and arranged to operate as described, and for the purposes specified.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 24th day of February, 1868.

OTIS A. TEFFT.

Witnesses:

D. S. McMASTERS,

C. RICHARDSON.