S. L. King,

Drag Saw.

No. 76,469. Patented Apr. 7, 1868.

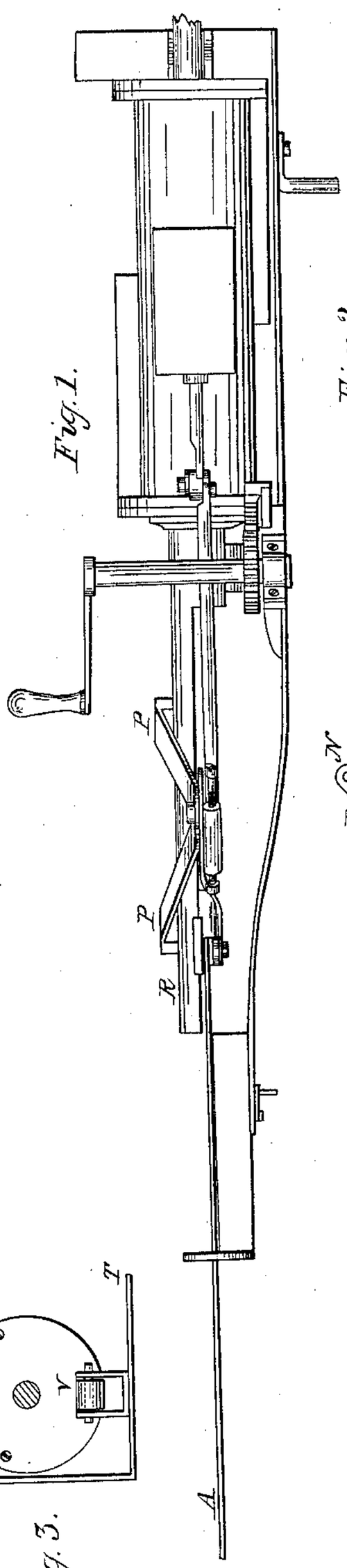

Fig. 1.

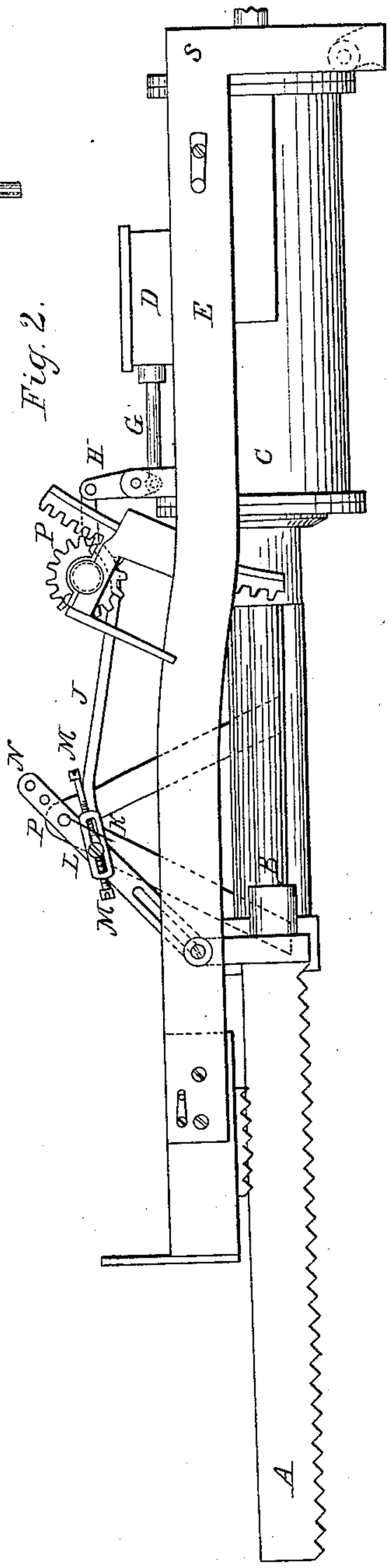

Fig. 2.

Fig. 3.

Witnesses.
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SAMUEL M. KING, OF LANCASTER, PENNSYLVANIA.

Letters Patent No. 76,469, *dated April* 7, 1868.

IMPROVEMENT IN 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, SAMUEL M. KING, of Lancaster city, county of Lancaster, and State of Pennsylvania, have invented an Improved Steam Portable Cross-Cut Saw; and I hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a top view of the machine.

Figure 2, a side elevation, and

Figure 3 showing the rear end of the engine-boiler, with the upright arm and bed-plate of the movable frame hinged to the rear lower end of the cylinder-head.

The nature of my invention consists in the construction of the cross-piece or bed-plate with its hinge attached to the rear lower end of the cylinder-head, the bed-plate being also a part of the upright arm of the movable frame; also the construction and arrangement of the adjustable rock-shaft, with its regulating upright lever attached to the piston-rod.

A represents the saw; B, the piston-rod to which the saw is attached; C, the steam-cylinder; D, the steam chest; E, the movable frame that braces the saw; F, the rack and pinion, by which the movable frame is raised and lowered; G, the valve-rod; H, the connecting-arm that connects the valve-rod with the rock-shaft, that moves the valve-rod back at the same time that the saw is moved forward. J is the rock-shaft slightly curved from the top of the connecting-arm H, about one-third its length, then on a straight line about one-half its length, the outer end then bending slightly downward in an angle, the end formed into a slot, K, in which the pin L operates. At each end of the slot is a set-screw, M, by which the motion of the rock-shaft is nicely adjusted, so that the stroke of the rock-shaft is shortened or lengthened, and by reason of the slot K the rock-shaft is made to move regularly and smoothly on the pin L, as the regulating-lever N moves and vibrates back and forth with the piston-rod B. The lever N works vertically on an upright frame, P, that is attached to the guide and support R of the piston-rod B. The movable frame E works on an upright arm, S, in the rear, and rests upon a horizontal bed-plate, T, located at the rear end of the cylinder, and operating on a hinge, V, attached to the lower end of the cylinder-head W.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of the rock-shaft J, with its adjustable screws M, and regulating-lever N, as herein described, and for the purposes set forth.

SAML. M. KING.

Witnesses:

J. FRANKLIN REIGART,

EDM. F. BROWN.