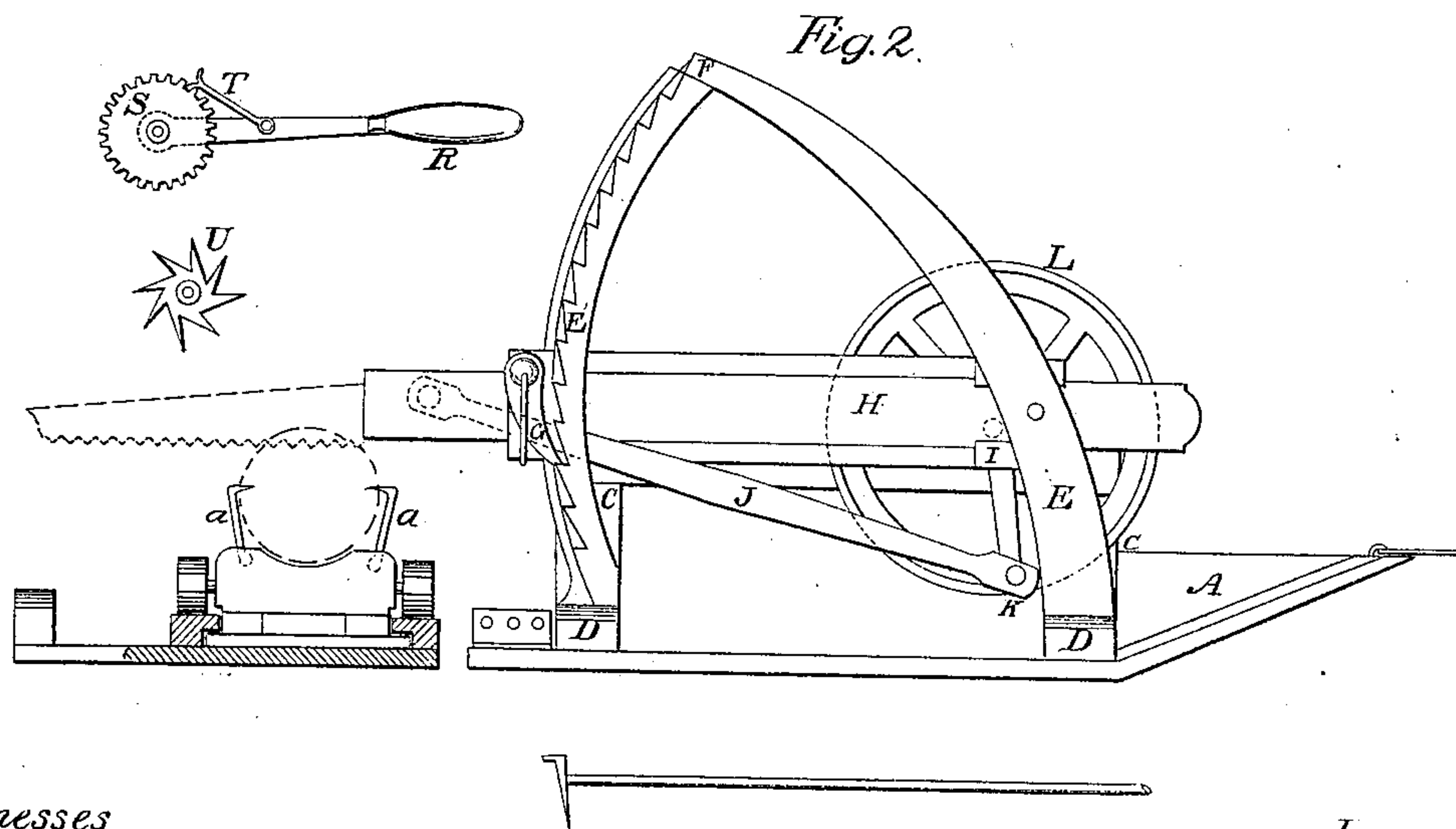
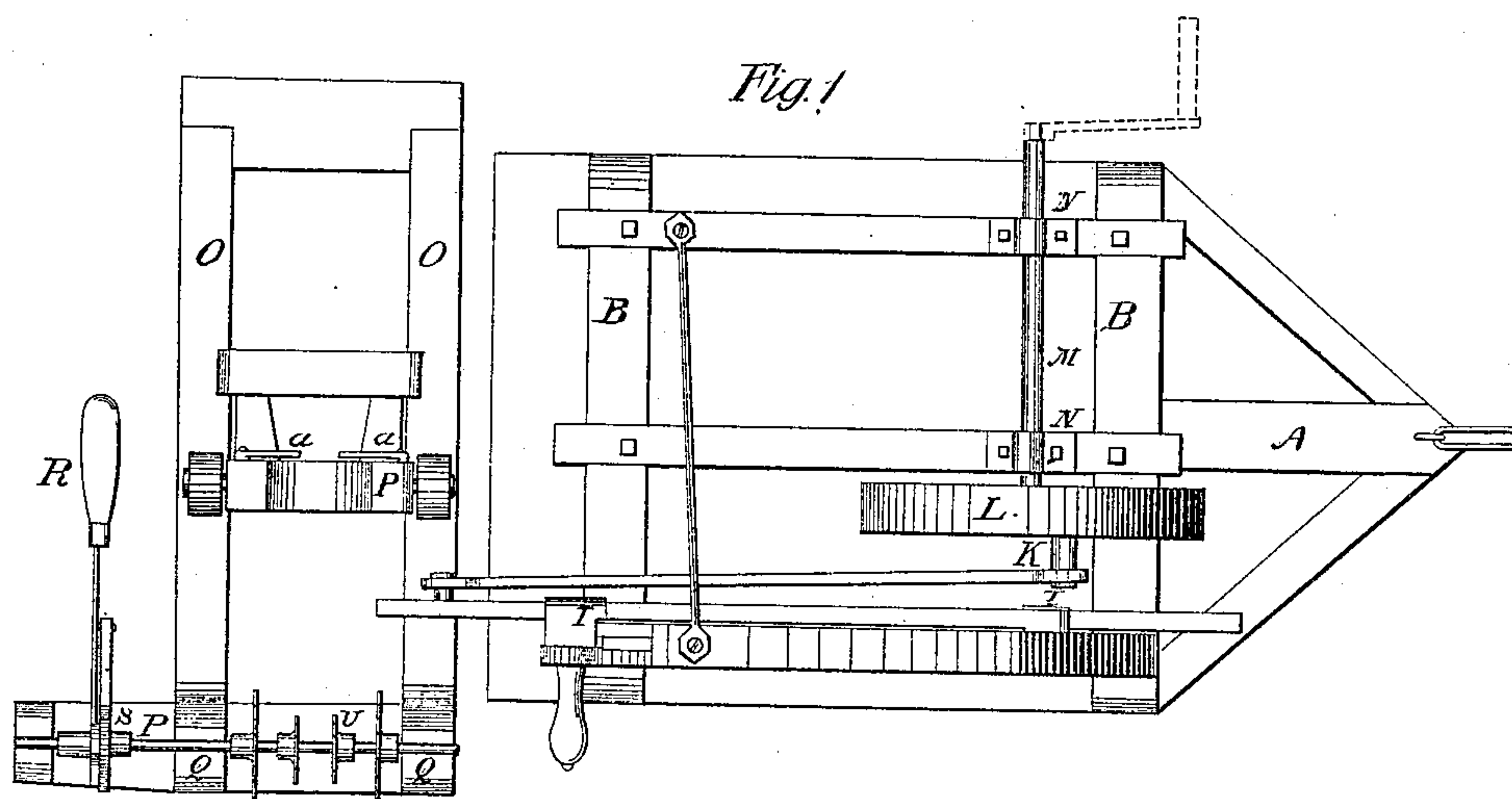


W. H. Stewart,

Drag Saw.

N^o 60,649.

Patented Dec. 18, 1866.



Witnesses

J. C. Jackson
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IMPROVEMENT IN SAWING MACHINES.

WASHINGTON H. STEWART, OF LOGANSPORT, INDIANA.

Letters Patent No. 60,649, dated December 18, 1866.

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, WASHINGTON H. STEWART, of Logansport, in the county of Cass, and State of Indiana, have invented a new and improved Sawing Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

The nature of my invention consists in the peculiar and novel arrangement of a saw frame, in combination with the saw shaft, and by which the saw is made to run level and in line with the axis of the driving shaft and pitman, so as to adjust and accommodate itself to different-sized logs. It further consists in so combining the saw frame and its machinery with a boat sled, so that it may readily be moved from place to place, and easily secured in any position to run. It also consists in combining a two-wheel car with the car frame in such a manner that the log may be sawed much closer than by the ordinary four-wheeled car.

The advantages of my invention are, that it is simple and cheap in its construction, and perfect in its operation, and can be moved from place to place without any inconvenience of loading upon a wagon or other vehicle, and may readily be secured in proper position for work.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a top plan view of my improved sawing machine.

Figure 2, an end elevation of the same.

Figure 3 is a sectional view, showing the toothed wheel and lever.

Figure 4 is a view of one of the ratchets.

Letters of like name and kind refer to like parts in each of the figures.

A represents a sled boat, on which is secured the saw frame and machinery of my sawing machine, the said sled being turned up so as to enable it to pass over obstacles while being drawn from place to place. B is a rectangular frame, made of wood or other material, which is firmly secured upon the tops of posts, C. The said posts, C, are also rigidly secured to the boat or sled, A. From the cross-timbers, D D, which are secured to the boat, extend in an upward direction two curved braces, E E', which connect at F. The brace E' is provided with ratchet notches in which the pawl G works. The said pawl, G, is attached to and works upon the gibs or slides I I of the saw bar H, and into the ratchet upon the brace E', for the purpose of keeping the saw level and in line with its work. J is a pitman, one end of which is attached to the crank-pin K, which is fastened to the crank-wheel L, which runs upon the shaft M, the said shaft being provided with journals that run in suitable bearings, N N, which are secured to the top of the frame B. O is also a rectangular frame, the longitudinal timbers of which are rabbeted, and upon which the two-wheeled truck runs. The axle of the said truck is provided with a saddle, on which the logs are placed while being sawed. P is a strong iron shaft running in the bearings Q Q, which are secured upon the top of the frame O. Upon the said shaft, P, is a series of ratchet-wheels, U, upon which is supported one end of the log. At the outer end of the shaft P is secured a toothed wheel, S; also a lever, R, attached, which works loosely thereon. To this lever, R, is attached a pawl, T, which works by means of the lever R in the said toothed wheel S, for the purpose of moving the log along for another cut.

The operation simply consists in placing the machine in the desired position and staking or anchoring it firmly to the ground, when any of the well-known powers may be applied to a band-wheel or crank upon the outer end of the shaft M, and arranging the truck in a proper position; a log is then placed upon the saddle or axle P, and ratchets U; the log is then secured in position by means of the dogs, a a; the saw is then brought to a proper position by means of the pawl and ratchet, E and G. The machine is then put in motion, and when one cut is off, by means of the lever and pawl, R and T, the log is drawn along to the desired position and again cut, and so on until the log is worked up. It is understood that the saw bar H slides within the slides I. The slide I, on the rear end of the frame, and which is pivoted to the brace E, surrounds the bar H; when the front end of the latter is raised, it turns on the pivoting point a; the pawl G does then fall into one of the teeth of the ratchet-brace E', and thus retains the bar H in place; but that does not prevent the bar H from working between the slides I I, which follow its movements when being adjusted as to height, but which remain stationary when the bar H is operated upon by the pitman J.

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

The brace E', provided with a ratchet, in combination with the pawl G, saw bar H, pitman J, and crank-wheel L, for the purposes and substantially as described.

WASHINGTON H. STEWART.

Witnesses:

JOHN C. HODGE,
S. SCOTT.