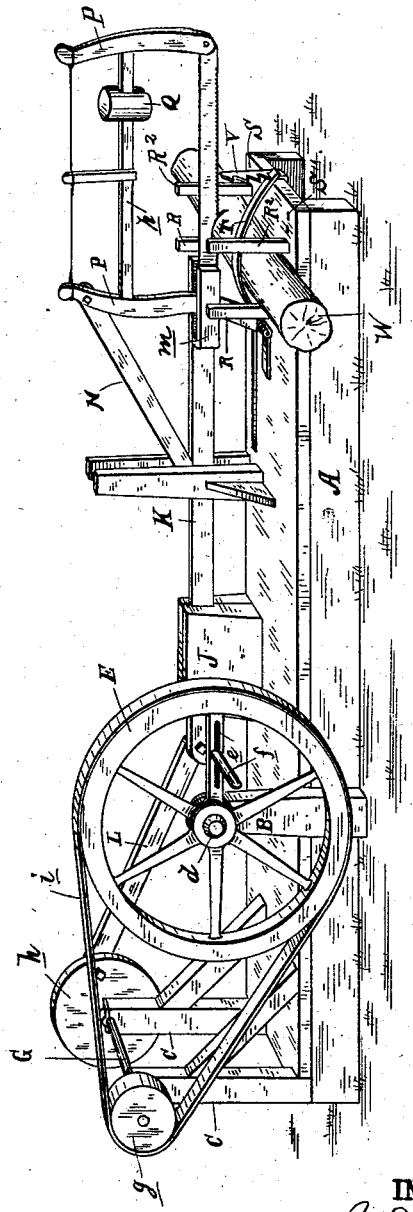
(No Model.)

J. F. SCHERER.

DRAG SAW.

No. 259,928. Patented June 20, 1882.



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JACOB F. SCHERER, OF NEW BREMEN, ILLINOIS.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 259,928, dated June 20, 1882.

Application filed March 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, JACOB FRED. SCHERER, of New Bremen, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sawing-Machines, of which the following is a full, clear, and exact description.

My invention relates to a portable machine which is more particularly intended for sawing logs and cord-wood, but is applicable to various other uses.

The invention consists in a novel construction, arrangement, and combination of a base or frame for supporting the working parts of the machine and the wood to be sawed, a clamping device for holding the wood or log, and certain details hereinafter more particularly referred to.

Reference is to be had to the accompanying drawing, which represents a perspective view of a machine embodying my improvements.

The working parts of the machine are supported by a horizontal frame, A, provided with vertical standards B and C.

In the standard B is journaled a shaft, *d*, which carries a driving-wheel, E. This wheel is provided with a crank-handle, *f*, which may be adjusted, to provide for different degrees of leverage, in a slot, *e*, in one of the spokes of the wheel by means of a nut on the screw-threaded shank of the crank-handle.

In the standard C a shaft, G, has its bearings. This shaft carries at one end a band-pulley, *g*, and at the other end a crank-wheel, *h*. The pulley *g* receives motion from the driving-wheel E through a band, *i*, and conveys it to the crank-wheel *h*.

On one of the sills of the frame A is a block, J, in which works a rectilinearly-sliding bar, K. The rear end of this bar is connected by a pitman, L, with the crank-wheel *h*. The front end of the bar is formed into a fork, *m*.

About midway between the fork *m* and the block J is pivoted the lower end of a bar, N, the upper end of which is pivoted to the upper rear corner of the saw-frame P. The lower rear corner of said saw-frame works in the fork *m*.

On the connecting-bar *p* of the saw-frame P is an adjustable weight, Q, which has a tendency to keep the saw to its work by pressing downward upon it beyond its fulcrum.

Near the front end of the frame A are two pairs of posts, R R^2. The posts R are stationary, and the posts R^2 are adjustable in mortises S in the sills of the frame. Between the posts R is hinged or pivoted one end of a curved elastic iron bar, T, the free end of which is arranged to engage with the teeth of a ratchet-bar or standard, V, extending upward from the frame A.

The operation is as follows: The log W is placed transversely on the frame A, resting against the posts R, and the posts R^2 are adjusted as near as possible to the log. The curved bar T is then swung over on top of the log and engaged with the ratchet-bar V, so as to clamp the log firmly and rigidly in place on the frame. Rotary motion being imparted to the wheel E, pulley *g*, and crank-wheel *h*, a reciprocating motion is conveyed to the bar K, and through it and the bar N to the saw-frame P. As the work of the saw progresses the weight Q bearing down upon the saw in front of its fulcrum keeps it pressed down to the work until completed.

The advantages of my invention are: It is simple and cheap in construction; it is light and portable, and can be readily moved from place to place; it is easily worked; it is adapted to saw logs of various sizes, and it is adapted to carry saws of various descriptions.

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

1. In a sawing-machine, the combination, with the frame A, the drive-wheel E, the pulley *g*, the crank-wheel *h* on the same shaft with the said pulley, and the saw-frame P, of the pitman L, the reciprocating bar K, provided with the forked end *m*, and the brace-bar N, substantially as and for the purpose set forth.

2. In a sawing-machine, the combination, with the frame A and the driving mechanism, of the pitman L, the reciprocating bar K, the block J, the brace N, and the saw-frame P, provided with the adjustable weight Q, substantially as and for the purpose set forth.

JACOB FREDERICK SCHERER.

Witnesses:
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