

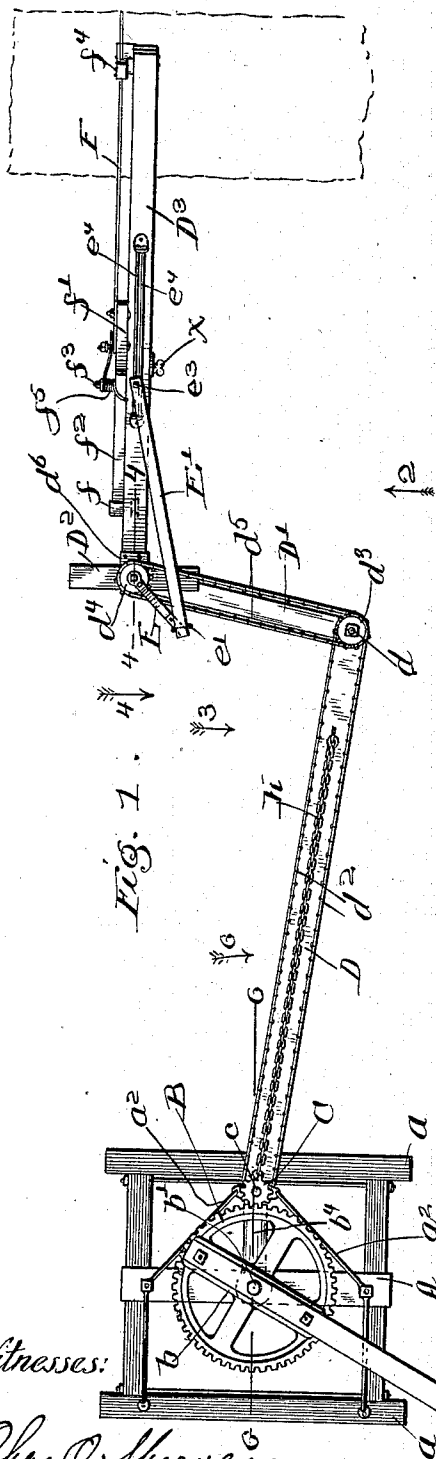
(No Model.)

2 Sheets—Sheet 1.

C. V. BARKER.
WOOD SAWING MACHINE.

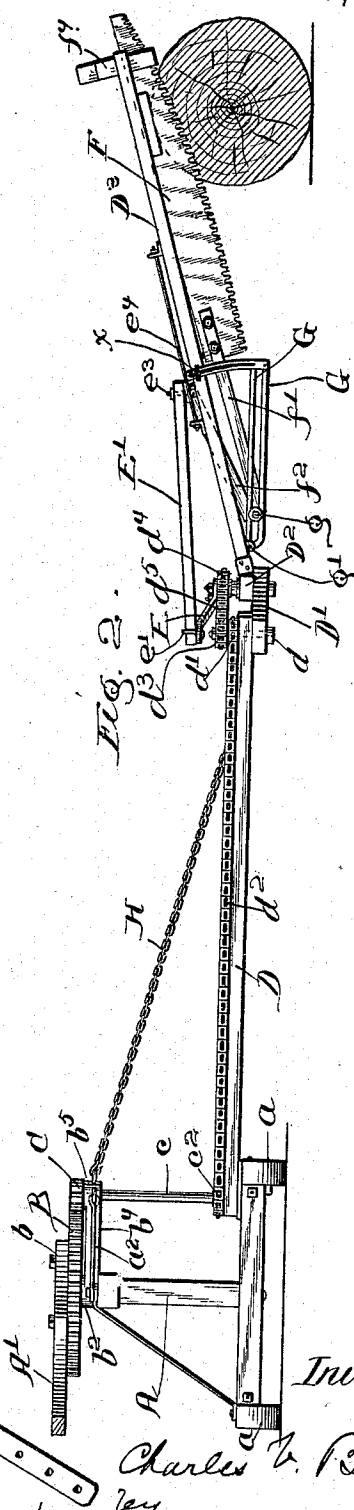
No. 552,505.

Patented Jan. 7, 1896.



Witnesses:

Chas. A. Shervey
H. H. Ebbesen



Inventor:

Charles V. Barker
By
Niles M. M. & S. S. S.
His atty's

(No Model.)

2 Sheets—Sheet 2.

C. V. BARKER.
WOOD SAWING MACHINE.

No. 552,505.

Patented Jan. 7, 1896.

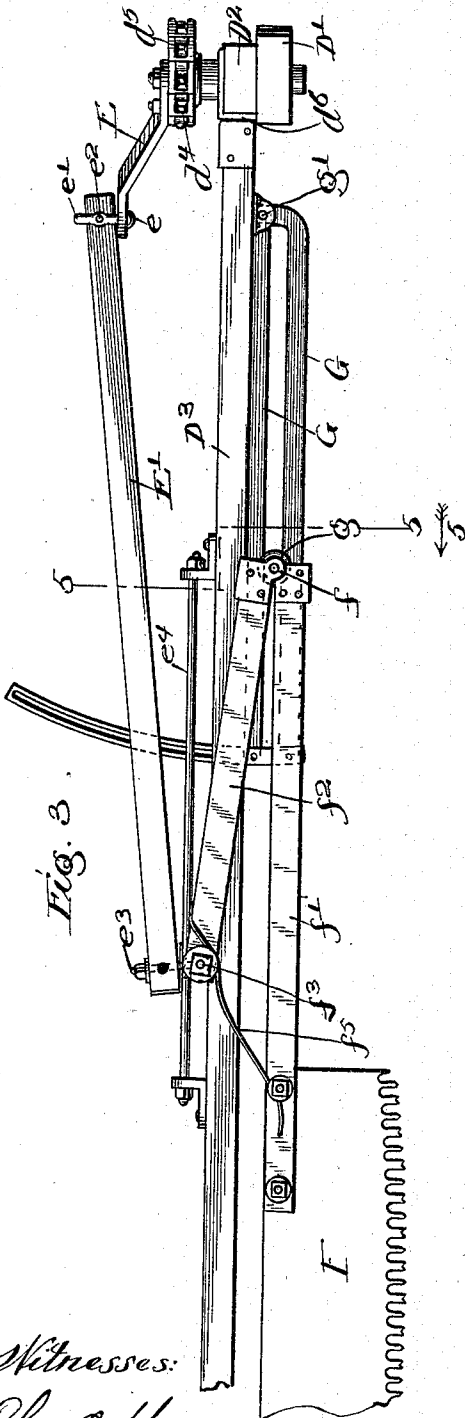


Fig. 3.

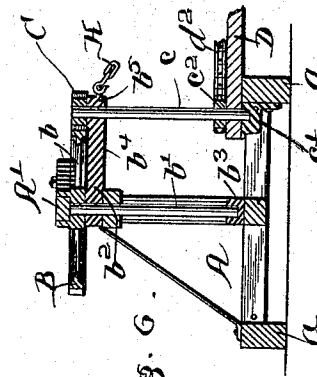


Fig. 6.

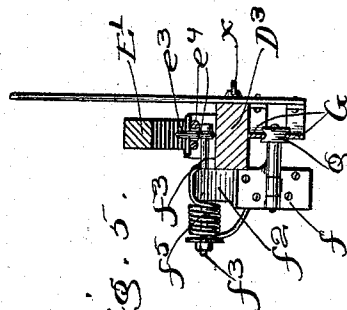


Fig. 5.

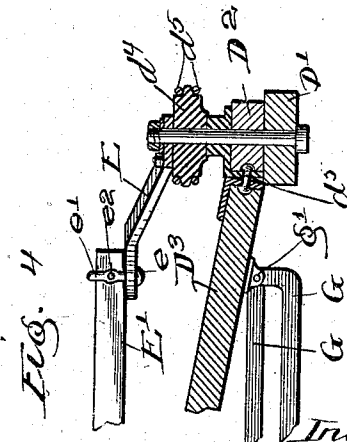


Fig. 4.

Witnesses:
Chas. Sherway,
A. H. Ebbesen

Inventor:
Charles V. Barker
by Milburner Pitner
His Atty

UNITED STATES PATENT OFFICE.

CHARLES V. BARKER, OF CHICAGO, ILLINOIS.

WOOD-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 552,505, dated January 7, 1896.

Application filed January 21, 1895. Serial No. 535,696. (No model.)

To all whom it may concern:

Be it known that I, CHARLES V. BARKER, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wood-Sawing Machines, of which the following is a specification.

My invention relates to certain improvements in wood-sawing machines, its object being to simplify and cheapen the construction and adapt them to use with an ordinary horse-power; also to adapt them to a great range of movement without changing the position of the horse-power and to either saw in a vertical or horizontal direction.

My invention is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a top plan of my preferred construction. Fig. 2 is a side elevation looking in the direction of the arrow 2, Fig. 1. Fig. 3 is a broken detail side elevation showing certain parts of the mechanism on a larger scale and looking in the direction indicated by the arrow 3, Fig. 1. Fig. 4 is a section in line 4 4, Fig. 1, and looking in the direction of the arrow 4. Fig. 5 is a section in line 5 5, Fig. 3, looking in the direction of the arrow 5; and Fig. 6 is a vertical section in line 6 6, Fig. 1, looking in the direction of the arrow 6.

Referring to the drawings, A is a horse-power made up of a frame of ordinary construction and provided with a pair of runners *a*, so that it may be drawn along in moving it from place to place. A sweep *A'* is rigidly fastened to one of the arms *b* of the master-wheel B, which turns upon a shaft *b'*, journaled in suitable bearings *b² b³*. An arm *b⁴* extends from the bearing *b²* and forms a second bearing *b⁵*, in which is journaled a shaft *c*, upon which is fastened a bull-pinion C. Suitable braces *a²* extend from the frame and hold the arm *b⁴* securely in place. The lower end of the shaft *c* is supported in a step *c'*, and carries near its lower end a beam D, provided at one end with a pin *d*, upon which swings a shorter beam *D'*, and upon the end of this turns an arm *D²*. Upon the shaft *c* is fastened a sprocket-wheel *c²*, and on the pin *d* is a sprocket-wheel *d'*. These two sprocket-wheels are connected by means of a chain *d²*,

and on the pin *d* is a second sprocket-wheel *d³*, which is connected to a sprocket-wheel *d⁴* by means of a chain *d⁵*. A crank E is fastened upon the sprocket-wheel *d⁴*, and carries a pitman E', which gives the reciprocating motion to the saw.

The pitman is pivoted to the crank E by means of a bolt *e*, having a yoke *e'* at one end and provided with a pin *e²* passing through the end of the pitman, which gives it the necessary tilting motion in raising or lowering the saw-frame. The pitman is guided by means of a bolt *e³*, running between two parallel rods *e⁴ e⁴*, suitably supported upon the beam D³.

The saw-blade F is carried by means of an arm *f'* bolted to it, which is hinged at *f* to a second arm *f²*, and this arm is carried by means of a bolt *f³*, which passes through an eye in the lower end of the bolt *e³*. The saw-blade is guided at one end by a suitable guide *f⁴* and at the other end by means of a roller *g*, which is journaled on the hinge which connects the two levers *f' f²*, and this roller runs between two parallel bars G G, pivoted at one end to the beam D³ at *g'*, and having at their other end a slotted segment which can be held in any desired position by means of a thumb-screw *x*. A spring *f⁵* tends to hold the saw-blade against the log which it is sawing. The beam D³ is loosely pivoted to the arm D², as will be seen at *d⁶*, so that it may be easily raised or lowered, or, if necessary, it may be turned so as to saw in a horizontal direction. When this is done the pitman is unbolted at one end and the bolt passed through a second hole at right angles to the one formerly occupied.

The machine may be drawn to any place where it is desirable to cut down a number of trees and saw them up into logs. When put in a certain position the saw has a great range of movement, as will be readily understood from the foregoing description. The swinging portion of the machine may be supported above the ground by means of a chain H.

I claim as new and desire to secure by Letters Patent—

1. The combination with the saw, F, arm, *f'*, carrying said saw, a second arm, *f²*, hinged at one end to the arm, *f'*, and provided with the roller, *g*, of the adjustable guide, G, adapted

to guide said roller, pitman, E', rods, e⁴, adapted to guide the pitman, suitable connections between the pitman and the arm, f², the beam, D³, supporting the saw and its connections, the beam, D², and the swivel joint, d⁶, connecting the beam, D³, with the beam, D², whereby the saw may be tilted at any angle and suitable means for giving a reciprocating motion to the saw; substantially as described.

2. The combination with the oscillating frame, D³, of an adjustable guide, G, roller, g, the hinged arm, f², spring, f⁵, pitman, E', connecting devices between the arm, f², and pitman and the crank, E, provided with suitable means for its rotation; substantially as described.

3. In a wood-sawing machine the combina-

tion with a horse-power, of a suitably guided saw, an arm carrying said saw, a second arm hinged to the first named arm and provided with a roller, of a guide, G, pivoted at g' and adapted to guide said roller and provided with a segment and a thumbscrew whereby it may be held in any desired position and a swinging frame consisting of the members, D, D', D², D³, the member, D, being journaled upon the shaft, c, of the horsepower and suitable means for giving a reciprocating motion to the saw.

CHARLES V. BARKER.

Witnesses:

CHAS. O. SHERVEY,
A. I. H. EBBESEN.