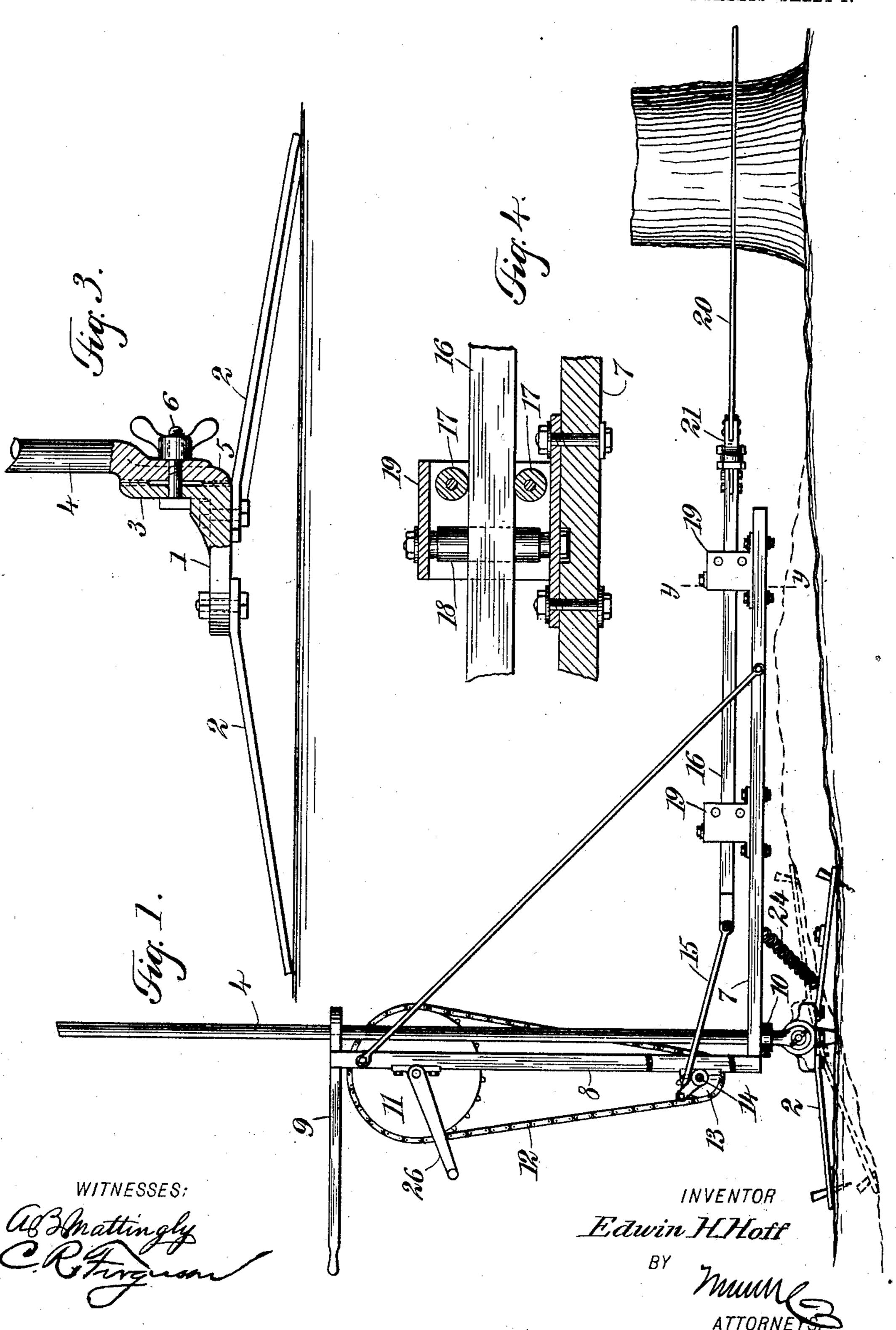
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E. H. HOFF. SAWING MACHINE.

APPLICATION FILED JUNE 13, 1903.

NO MODEL.

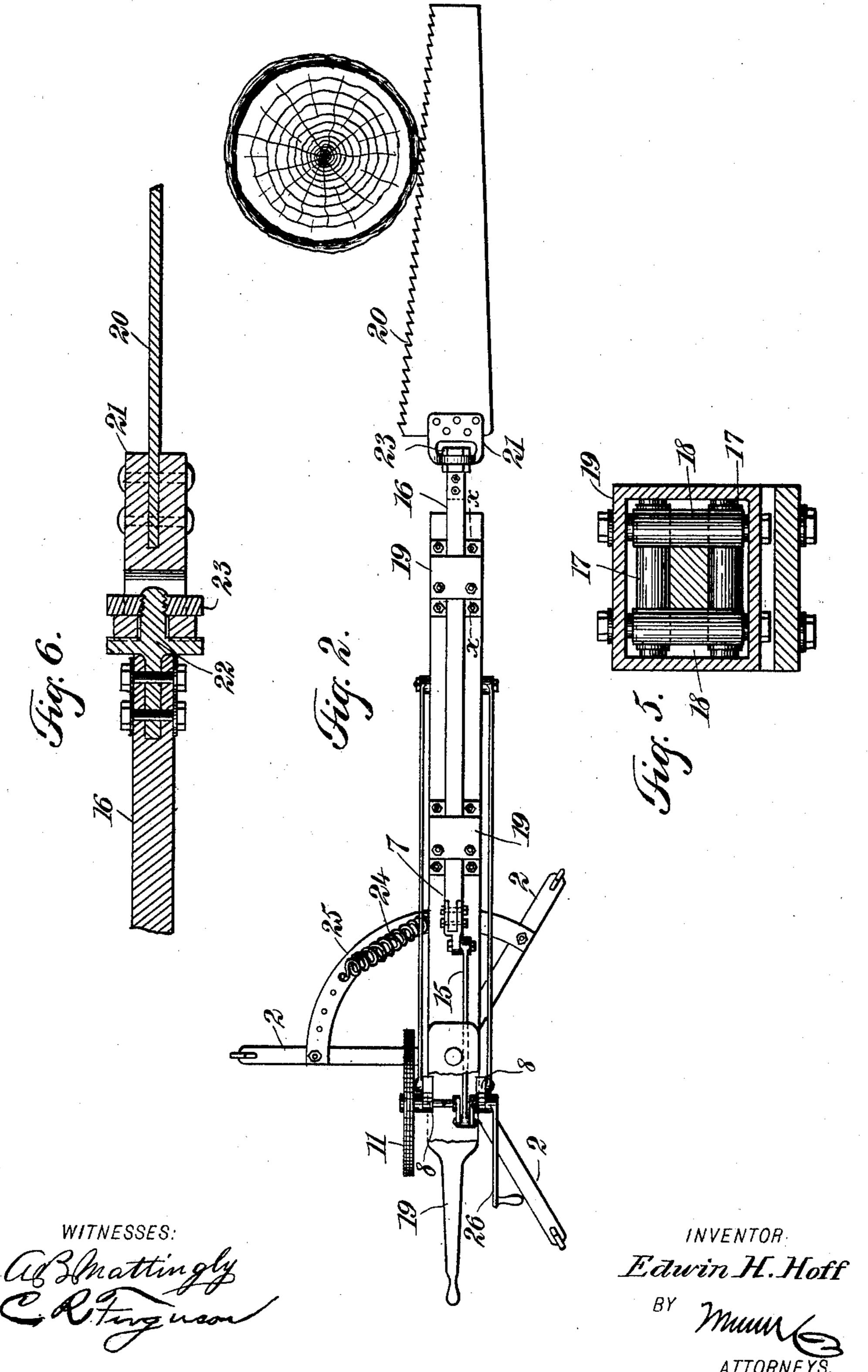
2 SHEETS-SHEET 1.



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NO MODEL.

2 SHEETS-SHEET 2.



United States Patent Office.

EDWIN H. HOFF, OF MOSINEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO LOUIS L. LA MERE, OF MOSINEE, WISCONSIN.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 756,789, dated April 5, 1904.

Application filed June 13, 1903. Serial No. 161,319. (No model.)

To all whom it may concern:

Beit known that I, EDWIN H. HOFF, a citizen of the United States, and a resident of Mosinee, in the county of Marathon and State of Wiscon-5 sin, have invented a new and Improved Sawing-Machine, of which the following is a full, clear, and exact description.

This invention relates to improvements in sawing-machines for felling trees, sawing 10 stumps, or the like, an object being to provide a sawing-machine of simple construction that may be easily carried from place to place, that may be operated with comparatively little manual exertion, and in which the saw may be 15 arranged for operation at any desired angle.

I will describe a sawing-machine embodying my invention and then point out the novel

features in the appended claims.

Reference is to be had to the accompanying 20 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a sawing-machine embodying my invention. Fig. 2 is a 25 plan view thereof. Fig. 3 is a sectional detail showing a means for adjusting the angle of the machine. Fig. 4 is a section on the line x x of Fig. 2: Fig. 5 is a section on the line y y of Fig. 1, and Fig. 6 is a sectional detail 3° showing a means for adjusting the angle of the saw.

Referring to the drawings, 1 designates a bed-plate attached to legs 2 by means of bolts, and secured to an upwardly-extended plate or 35 clutch member 3 on the plate 1 is a standard 4. This standard 4 has a clutch member 5 for engaging with the clutch member 3, and the parts are held as adjusted by means of a clamping-bolt 6. By this construction the standard 40 may be moved into vertical position while the legs engage with uneven ground.

Movable vertically on the standard 4 is a base-board 7, and extended upward from this base-board is a frame consisting of uprights 8, 45 connected to the upper portion of which is a hand bar or lever 9, which is arranged to swing on the standard 4. The frame and base-board may be adjusted vertically on the standard and held as adjusted by means of a collar 10 on l

said standard. Arranged at the upper portion 50 of the frame is a sprocket-wheel 11, from which a chain 12 extends to a sprocket-pinion 13 on a crank-shaft 14 at the lower end of the frame. From the crank on the crank-shaft a pitman 15 extends to a reciprocating bar 16, 55 which carries the saw. This reciprocating bar 16 passes between horizontal rollers 17 and vertical rollers 18 in boxings 19, attached to the base-board 7. The saw 20 is secured to a yoke 21, mounted to turn with relation 60 to the reciprocating bar 16. As here shown, this yoke is attached to a bolt 22, secured to the reciprocating bar and held as adjusted by means of a nut 23. By means of this yoke the saw may be adjusted to make a straight or 65 horizontal cut through a tree or stump should the tree or stump be leaning or on an incline.

A spring 24, attached at one end to the baseboard 7 and at the other end to a plate 25, holds the saw to its work. This plate 25 is 70 secured to two of the legs 2 and is provided with a series of holes in any one of which a pin at the end of the spring may be inserted, . thus regulating the tension of the spring.

In operation it is obvious that by turning 75 the wheel 11 by means of the crank-handle 26 the saw will be reciprocated to work through a tree or stump. Its elevation may be regulated by moving the frame and base-board lengthwise of the standard 4, and, as before 80 stated, the saw may be turned to any desired angle with relation to the frame by loosening the nut 23.

Having thus described my invention, I claim as new and desire to secure by Letters Patent - 85

1. A sawing-machine, comprising a standard, a base-board movable vertically on said standard, a frame extended upward from the base-board, a sprocket-wheel at the upper portion of the frame, a pinion at the lower por- 90 tion of the frame and operated from the sprocket-wheel, a crank-shaft on which the pinion is mounted, a reciprocating bar carried by the base-board, a saw attached to the bar and a pitman connection between said bar and 95 the crank of the crank-shaft.

2. A sawing-machine, comprising a standard, a base-plate on which the standard is adjustably mounted, a base-board mounted to swing on said standard, boxings on said baseboard, horizontally-disposed rollers in said boxings, vertically-disposed rollers in said 5 boxings, a reciprocating bar movable between the rollers, a saw attached to the bar and means for causing the movements of said bar.

3. In a sawing-machine, a standard, a base-board movable vertically and to swing on said standard, a frame extended upward from the base-board, a handle-lever connected to the upper end of said frame and having swinging connection with the standard, a sprocket-wheel at the upper portion of the frame, a sprocket-pinion at the lower portion of the frame, a chain connection between the wheel and pinion, a reciprocating bar mounted on the base-board, a driving connection between

said bar and the sprocket-pinion, and a spring for drawing the base-board in one direction. 20

4. In a sawing-machine, a base-plate, legs on which the base-plate is mounted, a clutch member on said base-plate, a standard, a clutch member on said standard for engaging with the first-named clutch member, a base-board 25 mounted to swing on the standard, a reciprocating bar supported by said base-board, means for causing the movements of said bar, and a saw attached to the bar.

In testimony whereof I have signed my name 30 to this specification in the presence of two sub-

scribing witnesses.

EDWIN H. HOFF.

Witnesses:

John G. Prain,

James O'Connor.