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L. PHILLIPPS.

DRAG SAW.

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(No Model.)

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LOUIS PHILLIPPS, OF COLUMBUS, NEBRASKA.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 622,709, dated April 11, 1899.

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To all whom it may concern:

Be it known that I, LOUIS PHILLIPPS, a citizen of the United States, residing at Columbus, in the county of Platte and State of Nebraska, have invented a new and useful Drag-Saw, of which the following is a specification.

This invention relates generally to saws, and more particularly to a drag-saw and means for operating the same, the objects of the invention being to provide a cheap and simple means for operating the saw, holding the same down when in operation, together with means for holding the log and adjusting the saw-operating mechanism.

With these objects in view the invention consists in the peculiar construction of the various parts and their novel arrangement and combination, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a view showing the practical application of my invention, and Fig. 2 is a section taken through one of the standards.

In carrying out my invention I employ a base A, upon which are mounted two upright standards B, connected at the top by a cross-beam C. The standards are braced in any suitable manner and are slotted vertically, as shown at B', to receive the guide-bolts D' of the bearing-blocks D, said guide-bolts passing through the slots in the standards and carrying the washer and nuts upon the rear ends. The bearing-blocks are connected by a cross rod or bar E, which in turn is connected with a threaded rod F, passing up through the top cross-beam and working in a nut F', said nut having a hand-wheel F² and ratchet-wheel F³ connected therewith, and a pawl F⁴ is pivoted on top of the beam and engages the ratchet-wheel to hold the nut in a locked position, and by turning the hand-wheel the nut is turned and the rod is raised or lowered, and consequently the bearing-blocks. These bearing-blocks are preferably made of channel-iron, and a crank-shaft G is journaled in said blocks near their lower ends, said crank-shaft being connected with the saw-pitman H by means of a stirrup H', said pitman being connected with the saw H² in any suitable

manner. The crank-shaft G has a gear G' upon one end and a fly-wheel G² upon the opposite end, the gear G' meshing with a larger gear I', mounted upon the end of a shaft I, and the gear I' is also provided with a crank-handle I².

The bearing-block adjacent to the gears is slotted obliquely, so that the shafts can be readily removed whenever desired. A beam K is pivoted to one of the bearing-blocks and extends parallel with the pitman and saw, said beam having a clamp-lever K' pivoted adjacent to the forward end, said clamp-lever being intended to bear upon the log and hold it steady while the machine is in operation. A toothed segment K² is carried upon the beam K, and the clamp-lever is provided with a thumb-latch lever K³ for engagement with the said segment and by means of which the clamp is held securely fixed. A presser-rod L is attached to the beam K and projects forwardly and laterally, so that its end rests above the saw, and an antifriction-roller L' is mounted in said end and bears upon the top of the saw, thereby holding said saw down, pressure being supplied by a spring L², fastened to the beam and bearing upon the rod L. By means of the hand-wheel and nut the saw-operating mechanism can be raised or lowered, as needed, and whenever it is desired to saw a standing tree the mechanism is laid upon its side, the small gear removed from the crank-shaft and the crank-gear substituted, and the fly-wheel is placed upon the shaft I.

A sawing mechanism constructed as described is both cheap and simple in construction, easy to operate, and can be shifted or changed to meet all circumstances.

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

1. In a drag-saw mechanism, the combination with the base, standards and cross-beam, said standards being slotted, of the bearing-blocks, one of which is slotted obliquely, the crank-shaft, drive-shaft and gears and fly-wheel, the saw and pitman, the beam and clamp-lever attached thereto, the presser-rod and spring, the bar connecting the bearing-blocks, the screw swiveled thereto, the hand-

wheel nut and ratchet and pawl, all arranged and adapted to operate substantially as shown and described.

- 5 2. In a drag-saw mechanism, the combination with the base, standards and cross-beam, said standards being slotted, of the bearing-blocks one of which is slotted obliquely, the crank-shaft, drive-shaft and gears, and fly-

wheel, the bar connecting the bearing-blocks, the screw swiveled thereto, and the hand-wheel, nut and pawl and ratchet, all substantially as described.

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Witnesses:

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