S. TADLOCK.

ROTARY-CULTIVATOR.

No. 183,229. Patented Oct. 10, 1876.

Fig. 2.

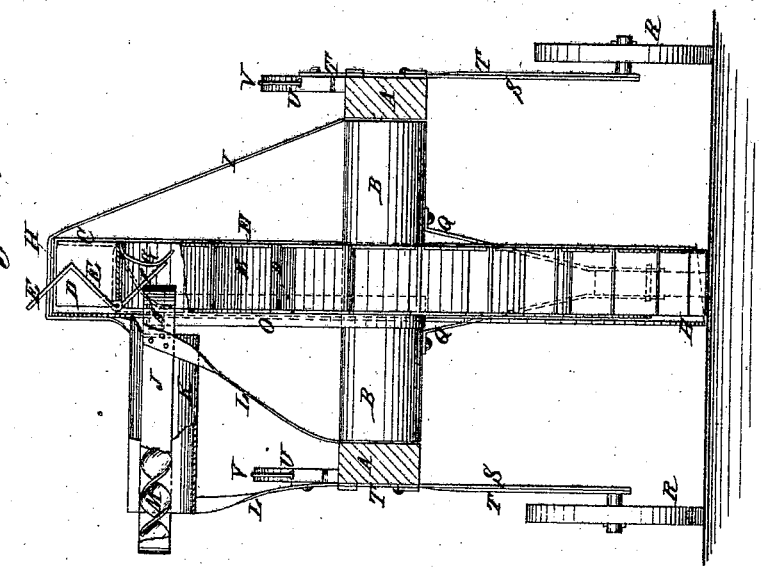
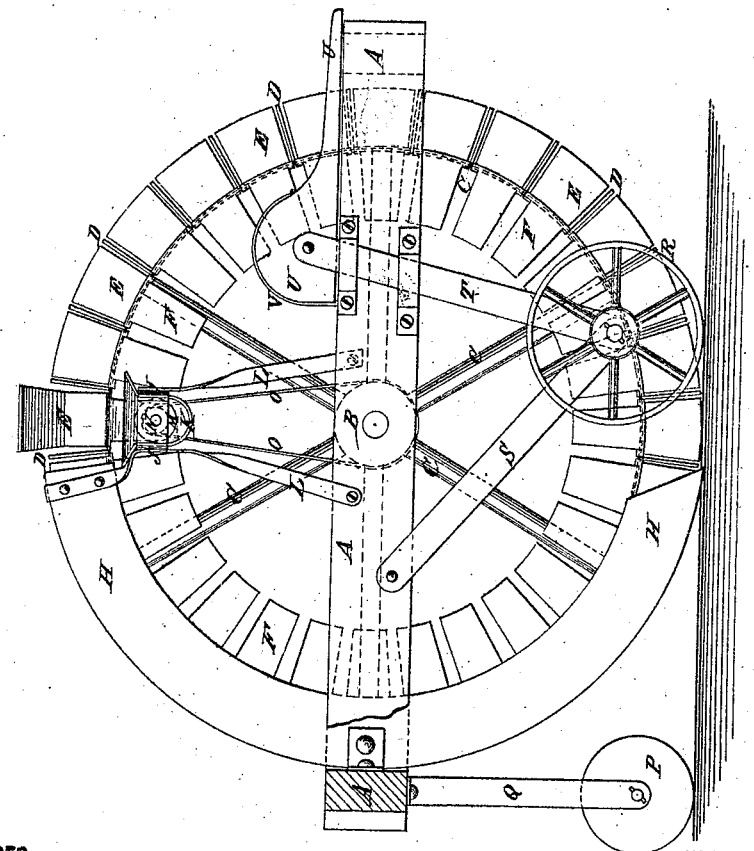


Fig. 1.



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SEVIER TADLOCK, OF HOPE, TEXAS.

IMPROVEMENT IN ROTARY CULTIVATORS.

Specification forming part of Letters Patent No. **183,229**, dated October 10, 1876; application filed July 11, 1876.

To all whom it may concern:

Be it known that I, SEVIER TADLOCK, of Hope, in the county of Lavaca and State of Texas, have invented a new and useful Improvement in Spading-Machine, of which the following is a specification:

Figure 1 is a side view of my machine, part of the frame being broken away. Fig. 2 is a front view of the same, the frame being shown in section, and part of the carrier-trough being broken away.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for opening ditches to drain land and form fences, and to grade railroads, &c., and which shall be convenient in use, effective in operation, and of light draft.

The invention consists in the combination of the stationary spades, the hinged angular spades, provided with the arms and springs, and the chute, with the wheel, the shaft, and the frame; in the combination of the frame, the trough, the swiveled screw, the pulley, and the band with the ditching-wheel, the shaft, and the frame.

A is the frame of the machine, consisting of two side bars and two end bars. In bearings in the middle parts of the side bars of the frame A revolve the journals of the shaft B, to the center of which is attached the wheel C. To the rim of the wheel C, at suitable distances apart, are attached cross-spades or cutters D. To one edge of the rim of the wheel C are hinged right-angled spades E, which rest upon the rim of the wheel C, and upon the hinged ends of which are formed arms F, projecting inward and against springs G, attached to the rim of the wheel C, to hold the spades E upon their seats upon said rim. The spades D and E thus form three sides of a series of rectangular boxes. H is an angular chute, the middle part of which is securely attached to the rear cross-bar of the frame A. The chute H covers the open tops and sides of the boxes formed by the spades D and E, and its upper end extends to the top of the wheel, and is supported by braces I, extending to the side bars of the frame A. The lower end of the chute H extends to the bottom of the wheel, and cuts the bottom and one side of the slice of soil, the spades D E cutting its other side, and cutting it into cubical blocks. As the machine is carried forward the spades D E carry up the blocks of soil through the chute H. As the loaded spades pass from the upper end of the chute H, the arms F strike the rounded inner end of the frame J of the carrier-trough K, which tilts the spades E, as shown in Figs. 1 and 2, and discharges the soil into the trough K. As the wheel moves on, the springs G force the angular spades E back to their seats. The carrier-frame and trough J K are supported from the frame A by braces L. In the trough K is placed a screw, M, which is swiveled to the inner end of the trough K, and to the end of which, within the rounded inner end of the frame J, is attached pulley N, around which passes a band, O. The band O also passes around the shaft B of the ditching-wheel C, so that the carrier-screw M may be operated by the advance of the machine, to move the soil deposited in the trough K outward, and drop it to the ground at such a distance from the wheel C as to be entirely out of the way. The rear end of the machine is supported by the wheel P, the standard Q of which is attached to the rear cross-bar of the frame A. When the machine is at work it rests upon the spades D E, and by its weight forces said spades into the ground. When the machine is not at work, its forward part rests upon the wheels R, which are pivoted to the lower ends of the bars S T. The bars S incline to the rearward, and their upper ends are pivoted to the side bars of the frame A. The bars T incline forward, pass through keepers attached to the side bars of the frame A, and their upper ends are pivoted to the eccentrics U, which are pivoted to the side bars of the frame A, are provided with springs V to hold them to their places, and should be provided with pawls and ratchets. The wheels R also serve as gage-wheels, to regulate the depth to which the spades D E enter the ground.

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

1. The combination of the stationary spades

D, the hinged angular spades E, provided with the arms F and springs G, and the chute H, with the wheel C, shaft B, and frame A, substantially as herein shown and described.

2. The combination of the frame J, trough K, swiveled screw M, pulley N, and band O with the ditching-wheel C D E, the shaft B, and the frame A, substantially as herein shown and described.

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Witnesses:

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