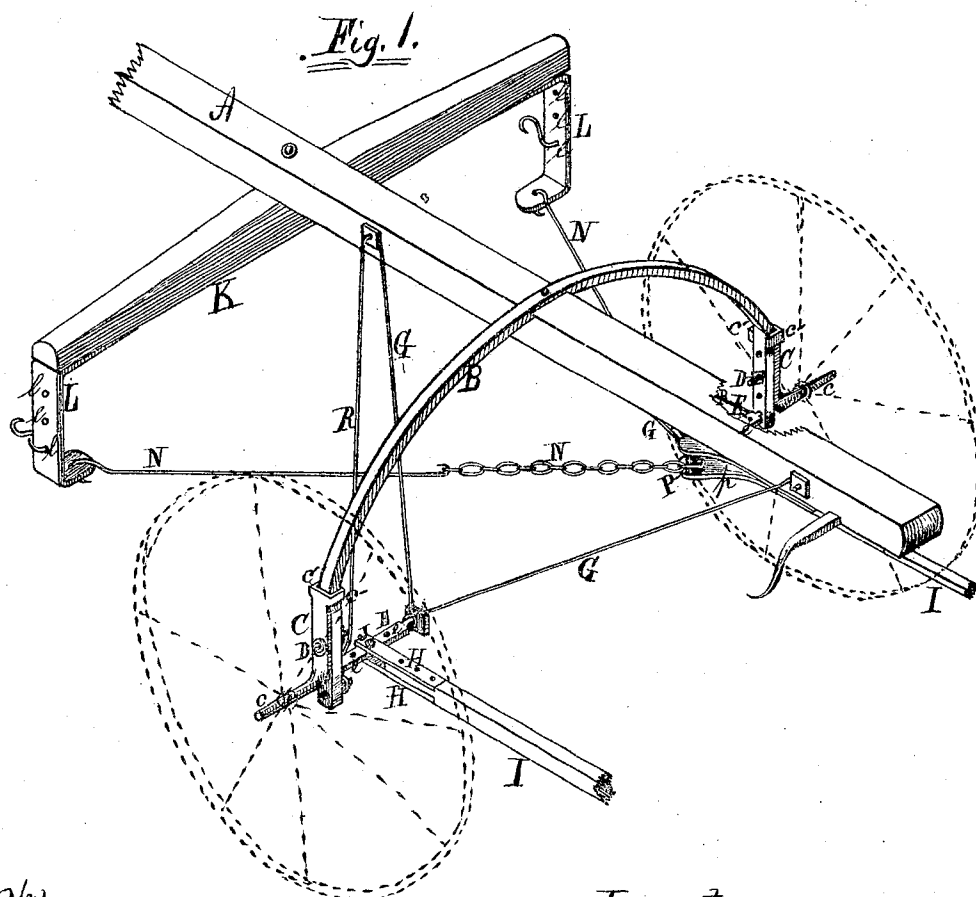


Anthony H. Myers. Cultivator.

117803

PATENTED AUG 8 1871



Witnesses:

H. B. Berger,
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Inventor,

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by W. B. Richards.

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UNITED STATES PATENT OFFICE.

ANTHONY H. MYERS, OF HERMON, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 117,803, dated August 8, 1871.

To all whom it may concern:

Be it known that I, ANTHONY H. MYERS, of Hermon, in the county of Knox and State of Illinois, have invented certain Improvements in Cultivators, of which the following is a specification:

My invention relates to improvements in that class of cultivators known as "walking straddle-row cultivators."

Heretofore the great practical difficulty in the successful operation of this description of machines has been that driving the team has occupied too much of the driver's attention, and diverted it from the proper guiding of the plows, and any part of the machine tending to aggravate this difficulty by interfering with the free passage of the driving-lines from the horses' heads to the hands of the driver, who at the same time is required to hold the plow-handles, or which in any way tends to catch the lines, is hardly to be tolerated.

My invention is designed to obviate this difficulty consequent on the use of rear cross-bar eveners and similar devices, which displace or catch up the driving-lines, and still retain all the advantages of rear draft, equal strain, &c., which pertain to rear cross-bar eveners. The invention consists in securing to the rear under side of the draft-pole a plate carrying a pulley, around which a rope or chain is passed, and connected with the pendent ends of the double-tree, so that an evener device is provided which will not be in the way of the driving-lines, and which has the further advantages over the rear cross-bar eveners heretofore in use that the strain is brought directly on the revolving pulley instead of a fixed pivotal pin, so that any sudden jerk or heavy uneven drag of the machine will not meet with such resistance as in the case of the stationary pin, which, in like circumstances, is liable to bend or break; and, moreover, my pulley-evener can be constructed much cheaper than the rear cross-bar evener, so that as a matter of economy in the construction of these machines my invention is a great improvement.

Figure 1 is a perspective view of my invention, the wheels removed and indicated by dotted lines.

A is the draft-pole. B is the axle, arched or curved, as shown. C C are plates, curved outwardly at right angles, to form the wheel spindles *c c*, and provided with lugs *c' c'*, at their upper ends. D D are bolts and nuts, by which the plates C C are secured to the ends of axle B, which are pierced with series of holes, *b b b*. E E are plates pierced with holes *e e e*, and one of their ends pivoted in the lower end of the axle B, while the other ends are pivoted in the braces G G. H H are plates secured to the tops and bottoms of the plow-beams I I, and pivoted to the plates E E by the bolts J J. K is the double-tree. L L are plates extending downward from the ends of the double-tree K, and pierced with holes *l l l*, in which the single-trees may be hooked. N N is a rod or chain, its ends attached to the lower ends of the plates L L, and its central part passing around a grooved pulley, P, the axial bolt of which has bearings in the block *p*, which is attached to the under side and rear end of the draft-pole A.

The operation is deemed simple from the drawing. The pendent plates L L and rod or chain N transmit the force of the draft to the pulley P, and entirely relieve neck-draft. It will be seen also that one draft animal drawing in advance of the other, the chain N playing on the pulley P will not allow either side of the main frame to be pulled ahead, as is the case with the ordinary draft-equalizers, in which the ends of the double-tree are connected, directly or indirectly, with the sides of the main frame.

To adjust the depth of running of the plows the plates C C may be raised or lowered, and held by bolts D D in the holes *b b b*. The distance of the plows apart is adjusted by bolts J J in holes *e e e*. Vertical movement or vibration of the plow-beams is obtained by the pivoted plates E E, and lateral movement by the pivots J J.

I claim as my invention—

The plates L, chain N, and pulley P, when arranged to operate with the double-tree K and draft-pole A, as and for the purpose specified.

Witnesses: ANTHONY H. MYERS.

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