

W. M. COSTON.
Sulky-Cultivators.

No. 153,751.

Patented Aug. 4, 1874.

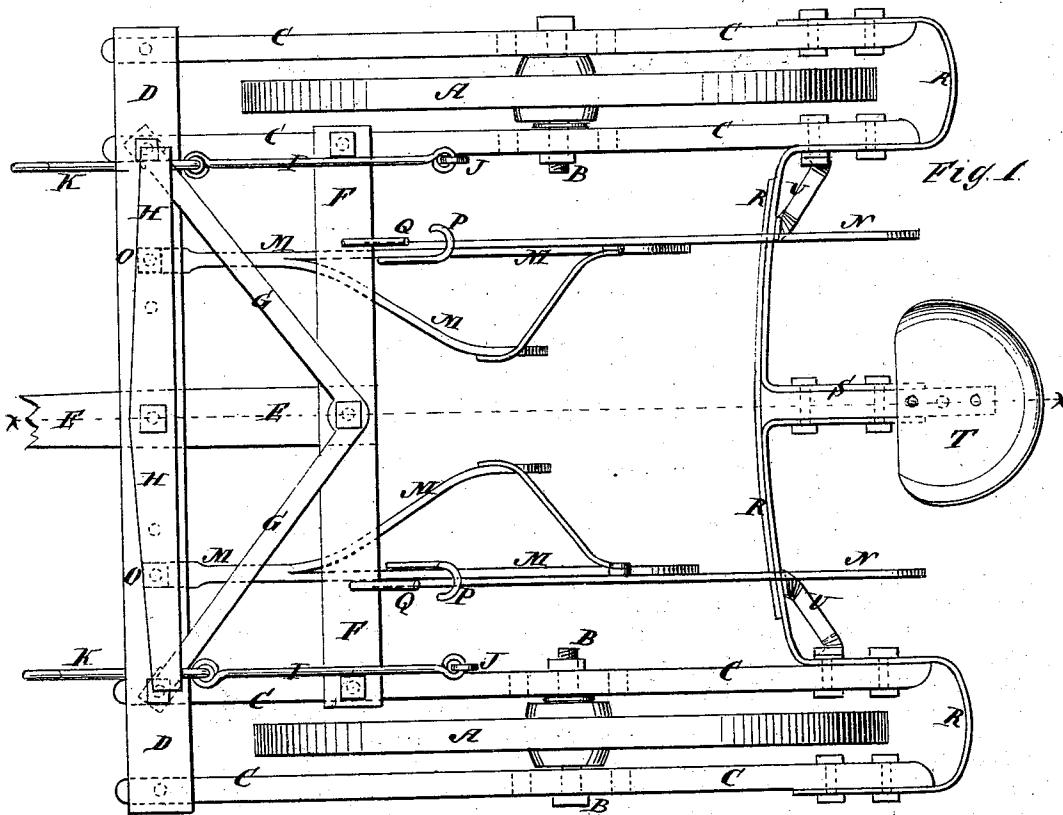
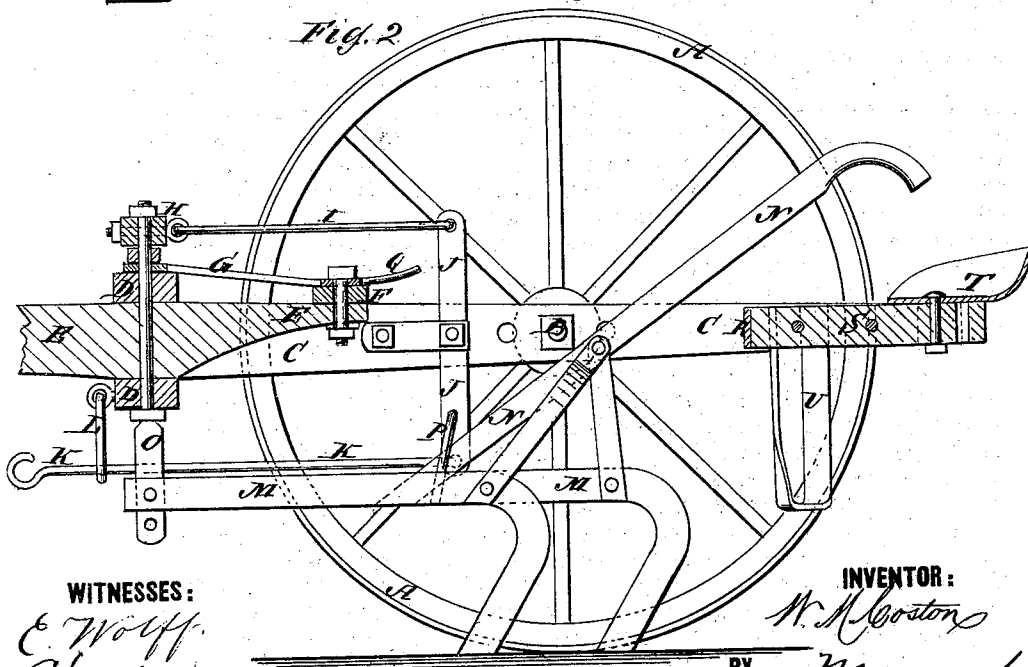


Fig. 2



WITNESSES:
E. Wolff.
Chapman

INVENTOR:
W. M. Coston
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM M. COSTON, OF QUITMAN, MISSOURI.

IMPROVEMENT IN SULKY-CULTIVATORS.

Specification forming part of Letters Patent No. **153,751**, dated August 4, 1874; application filed March 28, 1874.

To all whom it may concern:

Be it known that I, WILLIAM M. COSTON, of Quitman, in the county of Nodaway and State of Missouri, have invented a new and useful Improvement in Sulky-Cultivator, of which the following is a specification:

Figure 1 is a top view of my improved cultivator. Fig. 2 is a vertical longitudinal section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and subsequently pointed out in the claim.

A are the wheels, which revolve upon the bolts or axle-arms B, and each of which is placed between two parallel bars, C, which form the side parts of the frame. The bolts or axles B pass through the hubs of the wheel A, and through holes in the bars C, and are secured in place by having a head formed upon one end, and nuts screwed upon their other ends. Several holes are formed through the bars C to receive the bolts or axles B, so that the said bolts may be adjusted to enable the driver's weight, whether he be light or heavy, to exactly balance the machine. The forward ends of the two pairs of side bars, C, are connected and held in their proper relative position by the cross-bars D, the ends of which are attached to the upper and lower sides of the forward ends of the said side bars C. E is the tongue which is bolted to and between the centers of the cross-bar D. The rear end of the tongue E is bolted to a cross-bar, F, placed a little in the rear of the cross-bars D, and the ends of which are bolted to the inner bars C. The tongue E is strengthened against side strain by the inclined braces G, the rear ends of which are secured by the bolt that secures the tongue to the cross-bar F, and their forward ends are secured by the bolts that secure the cross-bars D to the inner bars C. H is the double-tree, which is pivoted to the upper end of the bolt that secures the tongue to the cross-bars D. To the rear side of the ends of the double-tree H are pivoted the forward ends of the rods I, the rear ends of which are pivoted to the upper ends of the short levers J, which are pivoted to the inner side bars C, and to the lower ends of which are pivoted the rear ends of the rods K, which pass through the guide-loops L, and to their forward ends is attached

the draft. The guide-loops L are attached to the lower cross-bar D. M are the beams, and N are the handles, of the cultivator, about the construction of which there is nothing new. The forward ends of the beams M are pivoted to the lower ends of the swiveled bolts O, in which are formed several holes to receive the pivoting-bolts, so that the forward ends of the cultivator-beams M may be conveniently raised and lowered to regulate the depth at which the plows work in the ground. The bolts O pass up through holes in the cross-bars D, and are secured in place by washers and nuts placed upon their upper ends. Several holes are formed in the cross-bars D to receive the bolts O, so that they may be conveniently adjusted to bring the plows closer together or farther apart, as may be desired. To the plow-beams M are attached hooks P, to hook upon pins Q, attached to the cross-bar F to support the plows away from the ground when turning and when passing from place to place. To the rear ends of the two pairs of side bars C is attached a cross-bar, R, to the middle part of which is attached a rearwardly-projecting arm, S, the rear part of which is slotted longitudinally or has a number of holes formed in it to receive the bolt by which the driver's seat T is secured to it, so that the said seat may be moved forward or back to adjust it so that the weight of the driver may balance the frame-work of the machine. To the bar R, at or near the inner side of the inner bar C, are attached long loops U, to receive the driver's feet, so that they may be comfortably supported in a convenient position.

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

The carriage or frame of a sulky-cultivator, composed of the perforated side beams C C, adjustable wheels A A, front connecting-bars D D, and rear metallic plates or bars R, bent at their ends around the side beams of the frame, and having rearwardly-projecting central arm S for the adjustable attachment of the driver's seat, all the parts being constructed and relatively arranged as herein shown and described.

WILLIAM M. COSTON.

Witnesses:

JNO. G. GREMS,
S. L. CRAIG, Sen.