

G. PERRY.
Wheel-Cultivator.

No. 53,867

Patented Apr. 10, 1866.

Fig. 1.

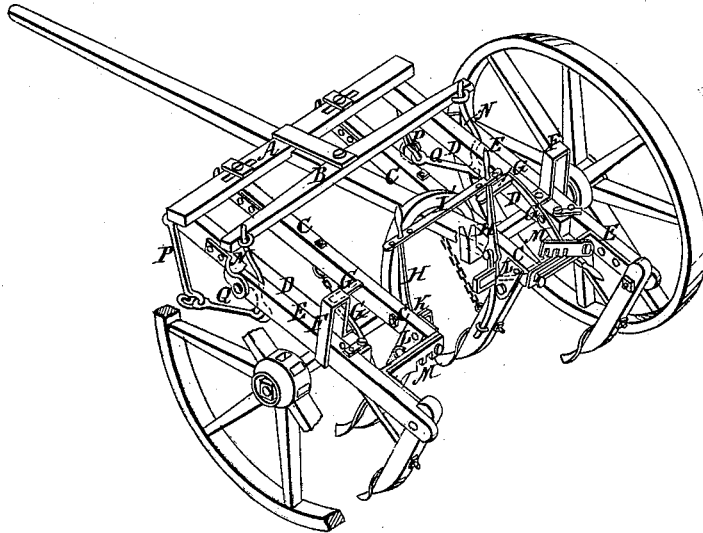
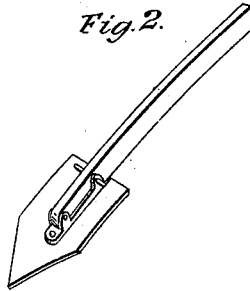


Fig. 2.



Witnesses.

G. C. Humphries.
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Inventor.

Geo. Perry
by
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his Atty.

UNITED STATES PATENT OFFICE.

GEORGE PERRY, OF MUSCATINE, IOWA.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 53,867, dated April 10, 1866.

To all whom it may concern:

Be it known that I, GEORGE PERRY, of Muscatine, in the county of Muscatine and State of Iowa, have invented new and useful Improvements in Cultivators; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed isometrical projection, making part of this specification.

My improvements are applied to a two-horse cultivator carried upon two wheels united by an axle having an arched yoke in the center for the purpose of permitting the passage of the cultivator over the row of corn. To this axle are rigidly attached the bars of the frame D D, connected at their forward ends by the cross-bar A, forming the main frame of the machine.

Beams E E and C C, constituting the supplementary frame, are hinged to the main frame. The beams E E are attached to the sides of the frame D D by pivots, upon which they have free vertical motion, and the beams C C are hinged at their front ends to the cross-bar A, so as to afford them like vertical play. The rear ends of the beams C C are attached to the beams E E by a stud working in a slot in a brace firmly attached to said beams E.

M M are notched latches hinged upon pivots to such braces and closing upon and receiving in their notches the studs at the rear ends of the beams C C. The hinges upon the front ends of the beams C C pass through longitudinal slots in the cross-bar A, and are held in place by set-screws, by means of which slots, together with the slotted braces and notched latches M M, the spaces between the beams C C and the beams E E may be adjusted as desired. By moving one end only of the beams C C the shovel-face may be made to stand obliquely, so as to throw the dirt to or from the rows of corn, as may be desired.

The levers G G, pivoted in the middle to the frame D D, have foot-pieces G' G' at their forward ends, and their rear ends pass under the braces aforesaid. By pressing down with the foot upon G' G', or by raising the rear end of the levers G G with the hand, the shovels, which are attached to the rear end of the supplementary frame, may be raised clear of the earth as required.

The beams C C are hinged by eyebolts or

equivalent devices in front and by studs behind, so as to allow them to turn upon their axes to permit lateral play of the shovels there-to attached, which lateral motion is controlled by the levers H H, united by an adjustable parallel bar, I, which is made detachable, so that one shovel can be moved independently of the other, and may be operated either by hand above or by the foot-pieces K K below. The driver's seat is shown by dotted lines on the rear extremity of the tongue.

The two interior plows are hinged by their standards to the jaws L L. They are restrained by chains, as shown, and may be raised to the front, when required, by drawing back the upper ends of the levers H H, or either of them.

B is the double-tree, hinged in the middle by the king-bolt, and working above the frame. The ends of the double-tree are attached by eyes to the levers N N, which are hinged at the middle to bolts in the frame D D.

Links P Q P Q, hinged respectively to the front ends of the frame-timbers D D, and to the lower extremity of the levers N N, support, by hooks at their points of junction, the whiffletrees. The links P P, to the lower extremity of which the whiffletrees are hooked, descend lower than the lower extremities of the levers N N, so that the draft is up against the front of the frame and back on the tongue, thus taking the draft of the shovels off from the horses' necks.

O O are buttons upon the frame D D, turning upon pivots, so that they can, when desired, be turned over the beams E E, thus rigidly uniting the main and supplementary frames and preventing the shovels on the supplementary frames from being lifted out of the earth; or, by turning the buttons under the beams E E when elevated, the shovels may all be carried free of the ground.

F F are guides attached to the main frame for the purpose of preventing any lateral motion in the beams E E.

Where the character of the ground is such as to require it, I make the standard carrying the shovel of wrought-iron thin on the edge, so as not to catch the trash, and I fasten the shovel by a hinge at the extremity of the standard, placed about midway of the length of the shovel, as shown in Fig. 2. At the upper end of the shovel I place projections fitting each

side of the standard, and through these projections and the standard I drill a hole, in which a wooden pin holds the shovel in place. This pin is so proportioned that, a fixed object striking the point of the shovel, this pin will be cut away before any portion of the machine will break. When this pin is thus broken the shovel turns upon its hinge and passes over the obstacle without injury to the machine.

Having thus fully described my improvements, what I claim as new therein, and seek to secure by Letters Patent, is—

1. The adjustable beams C C, in combination with the slotted cross-bar A and the slotted braces and notched latches M M, substantially as and for the purposes set forth.

2. The foot-levers G G, in combination with the supplementary frame, substantially as and for the purposes set forth.

3. The buttons O O, attached to the frame D D, and rigidly securing the supplementary frame either up or down, when desired, substantially as and for the purposes set forth.

4. The levers H H and the parallel bar I, in combination with the hinged standards of the interior shovels and oscillating beams C C, the latter being also adjustably attached, substantially in the manner and for the purpose set forth.

5. The mode of attaching the standards of the interior plows by the jaws L L to the beams C C, substantially as and for the purposes set forth.

6. A hinged shovel attached to the standard by a wooden pin, substantially in the manner and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE PERRY.

Witnesses:

A. F. DEMOREST,
J. H. CANON.