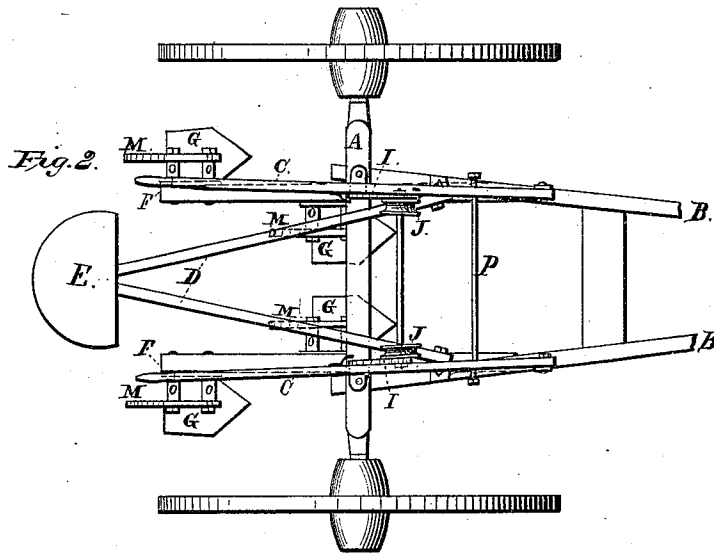
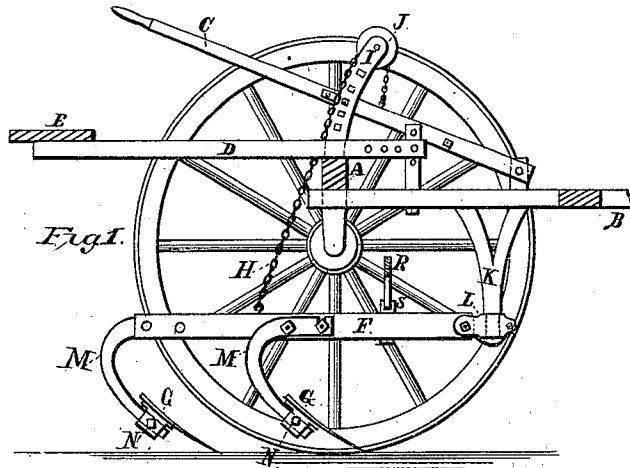


H. PACKER.
CULTIVATOR.

No. 174,563.

Patented March 7, 1876



Witnesses:
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A. L. Perrygo

Inventor:
H. Packer

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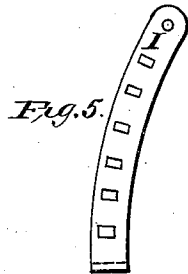
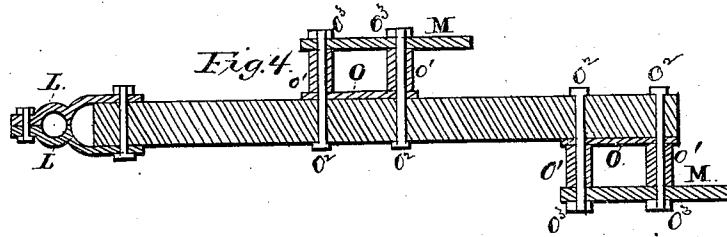
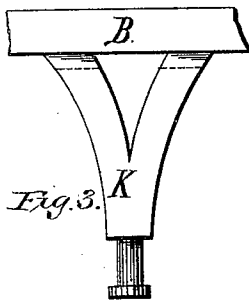
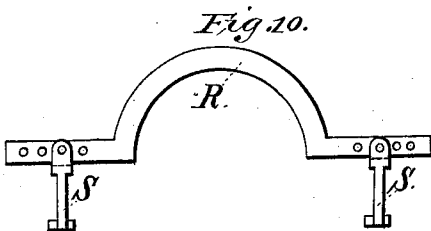
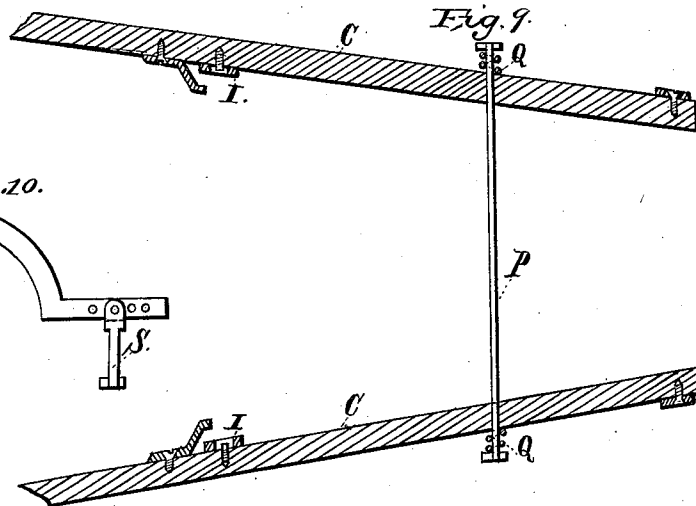
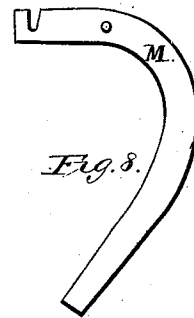


Fig. 6.



Fig. 7.



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Inventor:
H. Packer

UNITED STATES PATENT OFFICE.

HARVEY PACKER, OF SANDWICH, ILLINOIS, ASSIGNOR TO THE SANDWICH ENTERPRISE COMPANY, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **174,563**, dated March 7, 1876; application filed August 2, 1875.

To all whom it may concern:

Be it known that I, HARVEY PACKER, of Sandwich, State of Illinois, have invented an Improvement in Cultivators, of which the following is a specification:

The object of my invention is to provide a cultivator which shall be simple, durable, efficient, and easily operated; all of which is accomplished by the cultivator illustrated in the accompanying drawings, of which—

Figure 1 is a vertical longitudinal section; Fig. 2, a top or plan view; Fig. 3, a side elevation of the Y-shaped hangers. Fig. 4 is a horizontal section through the center of a beam, and its attachments. Fig. 5 is a side elevation of ratchet; Fig. 6, a side elevation, and Fig. 7 a horizontal section, through the center of a shovel-block; Fig. 8 is a side view of the curved shovel standard; Fig. 9, a horizontal section through the center of the handles, ratchets, and springs, and Fig. 10 a rear elevation of beam-connection.

In the drawings, A represents an axle, provided with cast arms at either end for mounting suitable wheels. On the lower side of the said axle the triangular frame B, forming the tongue is attached, the attaching-bolts passing upward through the axle and securing also the ratchets I. On the lower side of the frame B, in the proper place, the hangers K are bolted, one of the bolts securing also the pivoting attachment of the handles C on the lower end of the hangers. The forward ends of the jaws L L are clamped sufficiently loose to allow them to rotate horizontally as far as necessary. At the rear end of the jaws the beams F are pivoted vertically, thus allowing the beams, with their attachments, to be moved in any direction desired. The beams are provided with brackets O O O O, for attaching the standards M M M M, which have at their lower ends sliding blocks N, to which the shovels G are attached. The shovel-blocks N are secured to the standards by set-screws in their sides, the holes therefor being tapped out in either side, so that, in case of being damaged by accident or wear, the set-screws can be transferred to the other side, saving the necessity of replacing the block with a

new one. The rear ends of the beams are suspended by means of the chains H, which pass over the sheaves J, their other ends being secured to the handles C. The handles are formed of wood, of proper size, their front ends pivoted loosely to brackets set in the proper place on the frame B, passing thence rearward far enough to enable the operator to grasp their rear ends. At the point where the handles pass over the axle they are provided with a fixed pawl, which engages with the ratchets I by entering holes in the sides thereof, being held in connection by means of the rod P and spiral springs Q. When the operator, seated on the seat E, (which is supported by the levers D, and brackets, as shown in Fig. 1,) wishes to raise or lower the shovels, he grasps the rear ends of the handles, forces them horizontally so as to disengage the pawls from the ratchets, when, by raising or depressing them, the rear ends of the beams and their attachments are correspondingly depressed or elevated, and upon releasing the handles the springs immediately re-engage the pawls with their respective ratchets, and hold the handles in whatever position placed. The rear ends of the beams are moved horizontally by the feet of the operator, placed on the standard-brackets, which, (by the use of the curved standards, as shown,) are in the proper place on the beams for that purpose. The standards M, Fig. 7, are formed of a flat bar of iron, curved as shown. The standard-brackets are cast in one piece, and consist of a plate of proper dimensions, with two tubes, O O¹, projecting from one of their faces, and are secured to the beams by placing their other face on the side of the beams, passing bolts through the beams and the tubes of the brackets. The standards are then clamped across the faces of the tubes by the nuts and the bolts O² O³, securing the whole attachment to the beams cheaply and substantially. For the purpose of holding the beams a regular distance assunder, the arched bar R, in form as shown in Fig. 10, is provided with holes in either end, where the bar is pivoted vertically in standards S S, which are in turn pivoted horizontally in the beams at any

convenient point, thus allowing any motion of the beams desired, and imparting the motion of one beam to the other.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with the plow-beams F, of the brackets O, having outward-projecting tubes O¹ O¹, cast therewith, the plow-stand-

ards M, and the bolts and nuts O² O³, all constructed substantially as and for the purposes herein set forth.

H. PACKER.

Witnesses:

D. B. CHAPMAN,
A. S. PERIGO.