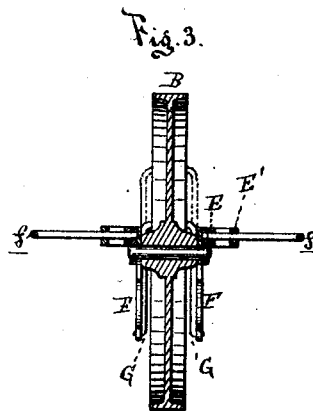
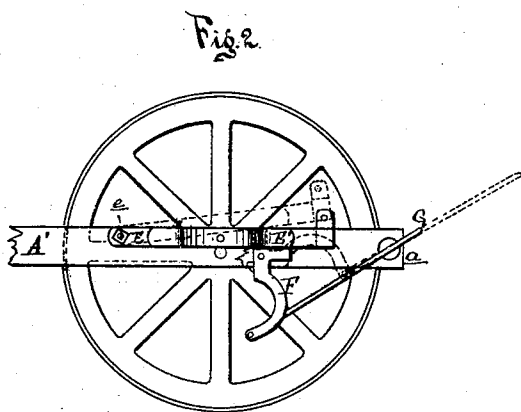
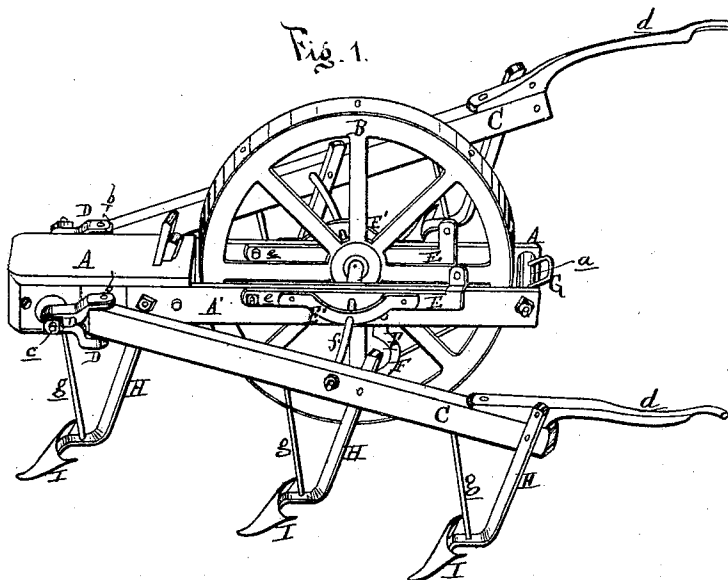


H. CARGO.
Cultivators.

No. 151,839.

Patented June 9, 1874.



Attest.
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UNITED STATES PATENT OFFICE.

HUGH CARGO, OF BOWLING GREEN, OHIO.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **151,839**, dated June 9, 1874; application filed February 24, 1874.

To all whom it may concern:

Be it known that I, HUGH CARGO, of Bowling Green, in the county of Wood and State of Ohio, have invented an Improvement in Adjustable Cultivators, of which the following is a specification:

The nature of this invention relates to an improved form of single-wheel cultivators, having a shovel-beam so pivoted to each side of the main frame or center-beam that each shovel-beam may have an independent lateral adjustment and a free movement radially in a vertical plane, the peculiar features of the invention in its several parts being more fully hereinafter set forth.

Figure 1 is a perspective view. Fig. 2 is a partial side elevation of the main frame, showing the bail and bell-crank for raising the frame. Fig. 3 is an axial cross-section of the wheel.

In the drawing, A represents a short, square wooden beam, to each side of which is bolted a metal plate, A', with a strut, *a*, between their rear ends, the whole forming the central frame of the implement. B is a broad-rimmed wheel, having its axle journaled in the plates A'. C C are shovel-beams, each pivoted between the vertical jaws of a clevis, D, by a vertical pin, *b*, allowing the beams a radial movement laterally. The shanks of the clevises are pivoted to the sides of the beam A by a bolt, *c*, which permits of a radial movement in a vertical plane. Each beam C is provided with a handle, *d*, which the operator grasps to guide the implement, bringing either handle inward whenever he comes to a narrow or a crooked row, or he may raise either beam at will to pass over an obstruction. A pair of metal plates, E, secured together by a forged yoke, at their ends are slipped over the top edge of each frame-plate A', and pivoted at their front ends thereto by a pin, *e*. On the outer plate of each is a curved plate or stop, E, projecting horizontally from which is an arc, *f*, passing through a hole in the adjacent beam C with a stop-nut on the outer end, which limits the radial movement

laterally outward, or spread of the beam C, while the stop E' arrests its inward movement or contraction. F is a bell-crank, pivoted at its angle to the inner face of each frame-plate A', the lower and longer arms of both bell-cranks being pivoted to the lower ends of a bail, G, which pass through holes in the strut *a*. By pulling up the bail the short arms of said bell-cranks acting upon the lower edges of the inner plates E lift them up, and through the arcs, lifting up the shovel-beams, causing their shovels to clear the ground, when the implement may be moved about like a wheelbarrow in going to and from the work, and in turning head-rows. The beam A has secured to it a shovel-standard, H, and to each beam C two others are secured, each carrying a cultivator-shovel, I. The standards instead of being straight, as heretofore, are straight to the plane of the shovel top, being then bent and carried horizontally forward, and then bent diagonally downward to receive the back of the shovel. A brace, *g*, extends from the beam through the middle of the horizontal portion of the standard.

The advantage of this peculiar form of standard is, that it will not become clogged, as everything rising over the top edge of the shovel will fall over behind it before it has a chance to lodge on the brace or the standard.

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

1. The combination, with the frame A A' and shovel-beams C C, of the frames E E, pivoted to the plates A', the arcs *f*, bell-cranks F, and bail G, for raising the said shovel-beams, substantially as described and shown.

2. The herein-described adjustable cultivator, wherein the frame A A', wheel B, beams C C, clevises D D, frame plates E E, bell-cranks F F, and bail G are constructed and combined substantially as shown and set forth.

HUGH CARGO.

Witnesses:

H. S. SPRAGUE,
C. E. HUESTIS.