

R. C. BUCKLEY.

Cultivators.

No. 134,248.

Patented Dec. 24, 1872.

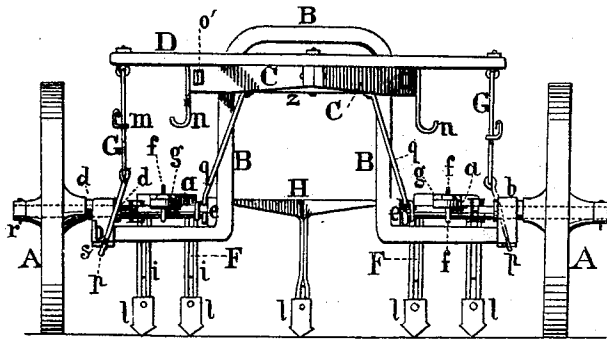


Fig. 1.

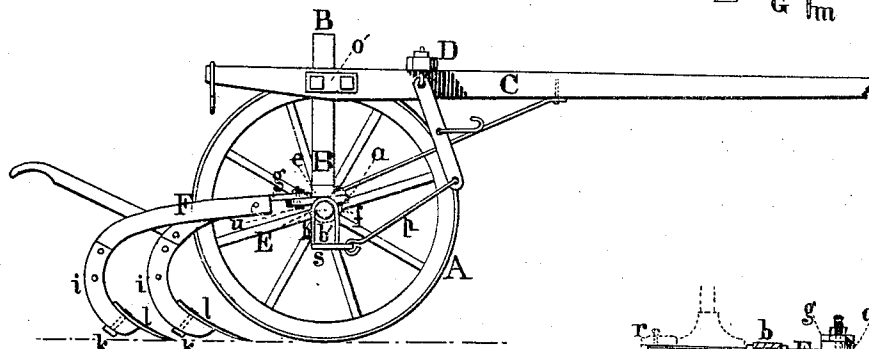


Fig. 3.

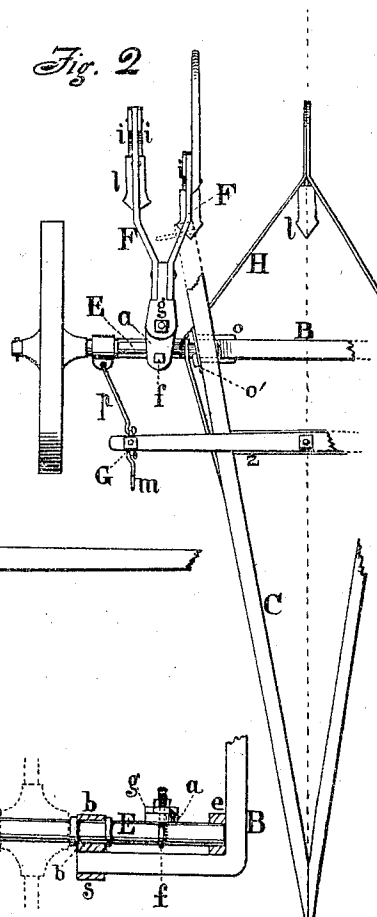


Fig. 2.

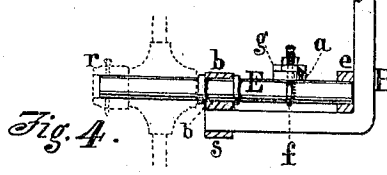


Fig. 4.

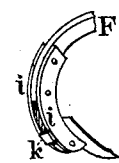


Fig. 6.

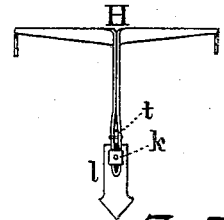


Fig. 7.

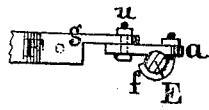


Fig. 5.

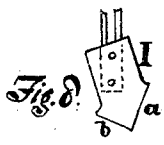


Fig. 8.



Fig. 9.

Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT C. BUCKLEY, OF PEORIA, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 134,218, dated December 24, 1872.

To all whom it may concern:

Be it known that I, ROBERT C. BUCKLEY, of Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Cultivators; and do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of the frame with journals for free axles and the couplings for the plow-beams; also, in the construction of a seeding shovel or plow attached to the axles; all of which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing which forms a part of this specification, and in which—

Figure 1 is a front elevation of my entire cultivator; Fig. 2 is a plan view of one-half of the machine; Fig. 3 is a longitudinal vertical section of the same; and Figs. 4, 5, 6, 7, 8, and 9 are detached views of certain parts thereof.

B represents a frame in the form of an inverted U with a horizontal arm extending outward on each side from its lower end. To the curved part of the frame B are attached the rear parts of the tongue C C by means of staples o, said tongue being formed of two diverging bars, each having at its rear end a hook, n, upon which the plow-beams are hung in going to or from the field. The two bars of the tongue are, in front of the frame, connected by a cross-bar, z, upon which the double-tree D is pivoted, each end of said double-tree being, by a draft-bar, G, and rod p, connected with the frame, and each draft-bar is provided with a hook, m, for the attachment of the single-tree. The tongue is also braced to the frame by rods q q. E E represent short wheel-axes turning in bearings, one upon each of the horizontal arms of the frame B. One bearing, e, is located close to the inner angle of each horizontal arm, and the other, b, at the extremity of said arm. The latter is clasped by a strap or staple, b, to the upper surface of the arm,

which strap incloses the bearing and frame vertically, and terminates below in a plate, s, which may receive bolts projecting from the ends of the strap b' and be secured by nuts below. The plate s terminates in an eye, to which the draft-rod p is attached. The inner bearing or journal e is shown as fastened in the angle of the frame B with its arm; but it may be constructed and attached like that at b b' and be strapped and bolted to either the vertical or the horizontal part of the frame. A flange projects on either side of the outer bearing b; but a pin on the inside of the bearing passing through the axle will answer the same purpose to secure the axle. Outside of the bearing b' each axle receives a wheel, A, secured by a cylindrical cap, r, or other suitable means. The plow-beams F F are of the usual curved construction, and are riveted to either side of a block and plate, g, which receives a bolt and nut, by which it swings upon the surface of the plate a, and this latter plate is secured upon the upper side of the axle E by means of a hook-bolt, f, which encircles the same, as shown in Fig. 5. The shoe of each beam F is formed by two parallel curved wooden bars, i i, riveted to the beam, leaving a slot between them the width of the beam, and between their lower ends is fastened a block of the same thickness, the slot mentioned receiving the adjusting-bolt k of the shovel. l represents the shovel, which is constructed as shown more particularly in Figs. 7, 8, and 9. H represents another plow-beam with shovel, which is attachable by either arm to an axle, E, at the angles of the frame B, to "plow in" seed. For this purpose it has branching arms, which converge from the hooks by which they are hitched to the axles to form the shank, the double bars of which have a similar slot as described for the beam F for the reception of the shovel bolt and nut k. The beams F F can be moved in any direction required, being mounted on a universal joint formed by the free axle E and plates a g. The seed-plow beam H is attached between the other beams to each axle next to the frame by a hook on each branch of the beam, and is used, together with the others, in plowing seed into the soil. The beams F F may be moved along their respective axles

to any desired point between the bearings, and be fastened at such point by the hook-bolt *f*.

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

1. The frame *B* and journals *b* and *c*, in combination with the free axle *E*, hook-bolt *f*, plates *a* and *g*, and beam *f*, substantially as and for the purposes herein set forth.

2. The beam *H*, constructed in one piece and provided with a shovel, *l*, and branching arms, each of which being provided with a hook for the purpose of being connected with the axles *E E*, substantially as and for the purposes herein set forth.

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Witnesses:

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