P. O. Baldwin.

Cultivator

117034

Patented Jul 18 1871

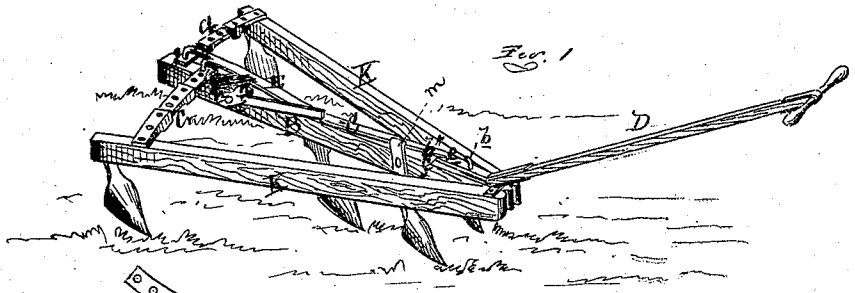

Fig. 1

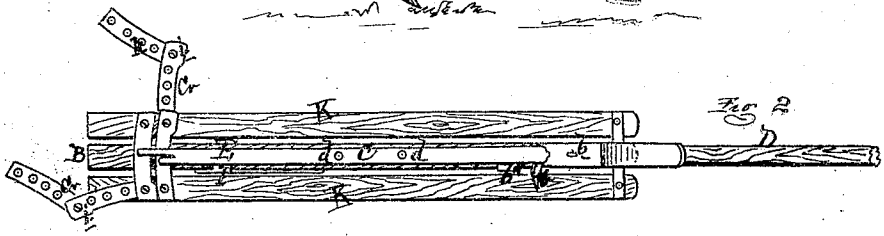

Fig. 2

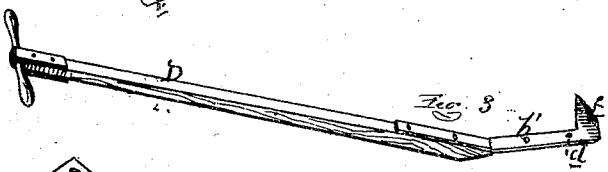

Fig. 3

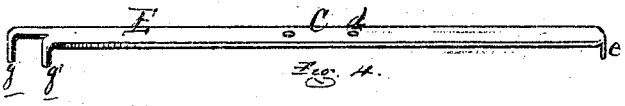

Fig. 4.

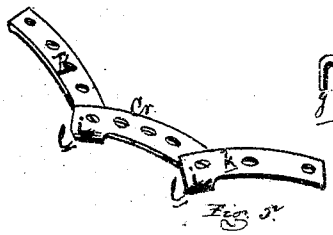

Fig. 5.

Attest

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per Atty

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UNITED STATES PATENT OFFICE.

PHINEAS ORLANDO BALDWIN, OF SPRING LAKE, MICHIGAN.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 117,034, dated July 18, 1871.

To all whom it may concern:

Be it known that I, PHINEAS ORLANDO BALDWIN, of Spring Lake, in the county of Ottawa and State of Michigan, have invented a new and useful Improvement in Cultivators; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of my cultivator extended. Fig. 2 is a plan view of the same with the sides closed on the central beam. Fig. 3 is a detached view of the handle. Fig. 4 is a perspective view of the spring. Fig. 5 is a perspective view of the sectional extension guides.

The nature of this invention relates to an improvement in the construction and operation of a hand-cultivator so arranged as to be adjustable to any desired width. This invention consists in the peculiar arrangement of the devices by means of which the tongue or handle is attached to the cultivator. Also in the novel devices for gauging the width at which it is desired to operate the cultivator, and in the peculiar arrangement of the various parts, as more fully hereinafter set forth.

In the accompanying drawing like letters designate like parts.

Representing the cultivator with the central beam B, upon which is the hook *b*, on which the tongue D is hitched through the hole *b'*, the spring C is fastened to the central frame B at *d*, and has on its forward end a latch-bolt, *e*, which passes through the hole *d* in the tongue and engages with a suitable hole in the central beam B, and when thus placed holds the tongue D in position. The shoe *f*, on the tongue D, raises the spring C, when the tongue D is hooked onto the hook *b*, and passes under the spring and fastens the tongue in its proper position. When the hole *d* is under the bolt *e* the spring returns to its position, and the bolt passes through the hole *d* and into its proper hole in the beam. E is an extension of the spring to the back end of the cultivator, with two latch-bolts, *g* and *g'*. F is a lever attached to the central beam B, at *n*, with a lug, *h*, by which the spring E is raised when necessary. G are the sectional extension guides, jointed at *i i'*, with holes through them as at *k*, through which the latch-bolts *g* and *g'* pass, and by means of which the cultivator is widened or narrowed, as is necessary, the two outer beams K being hinged onto the central beam at B its forward end, as shown. Each of the sectional joints of the extension guides forms the segment of a circle, and they are jointed at *i* and *i'* with a stop, *l*, which allows the sectional joint to be folded backward but not forward, thereby enabling the operator, when desired, to fold the side beams K close to and parallel with the central beam, and making a perfect cultivator, when in that position, to cultivate between very near rows of plants. When the tongue is to be attached to the cultivator it is hooked onto the hook *b* through the hole *b'*, and moved to the left, when the operator faces the cultivator, until the point of the shoe *f* catches under the spring C; then move the tongue to the right, which throws it to its place. In order to detach the tongue, bear down the outer end, which will raise the spring C onto the post *m*, and by carrying the tongue to the right and raising it the bolt *e* is detached from the hole *d* and the tongue is free to move in any direction on the hook *b*.

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

1. The arrangement of the spring C provided with bolt *e*, with the beam B provided with the post *m*, and the tongue D, when each of said parts is constructed to operate substantially as and for the purposes set forth.

2. In combination with the beams B K, the sectional extension guides G, lever F, and the extension of the spring E provided with latch-bolts *g* and *g'*, substantially as and for the purposes set forth.

PHINEAS ORLANDO BALDWIN.

Witnesses:

PHINEAS BALDWIN,

LEMUEL D. BARTHOLOMEW.