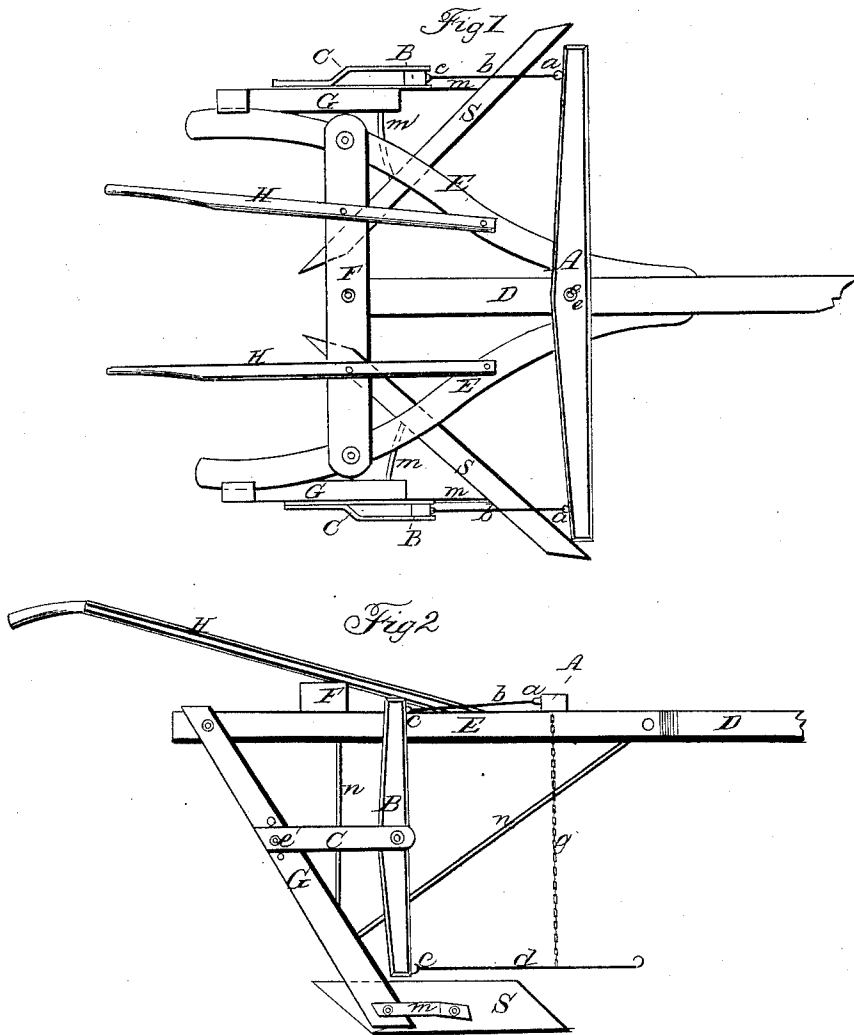


C. B. INGERSOLL.

Cultivator.

No. 36,998.

Patented Nov 25, 1862.



Witnesses.  
D. O. Goodrich  
Joshua Shields

Inventor.  
Charles B. Ingersoll

# UNITED STATES PATENT OFFICE.

C. B. INGERSOLL, OF MORRIS, ILLINOIS.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 36,998, dated November 25, 1862.

*To all whom it may concern:*

Be it known that I, C. B. INGERSOLL, of Morris, in the county of Grundy and State of Illinois, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures marked thereon, which form a part of this specification.

In the aforesaid drawings, Figure 1 represents a plan or top view of my improved cultivator, and Fig. 2 a side view of the same.

Similar letters in the different figures in the drawings denote corresponding parts of my invention.

My invention consists in the improved method of applying the draft to that class of cultivators which are made very high, so as to cultivate both sides of the same row at once without breaking down the corn, cotton, &c. In this class of cultivators the draft as commonly applied comes entirely upon the front of the upper part, and has a tendency to tip the cultivator down toward the front, thus making it very hard work for the horses to draw it and for the operator to manage it, besides doing the work in an imperfect manner; but by my invention this difficulty is entirely obviated, the draft being transferred from the top of the cultivator to the center or below it, and thus the cultivator is drawn along steadily and evenly with great ease, both to the horses and operator, and doing the work in a perfect and desirable manner.

To enable others skilled in the art to construct and use my improved cultivator, I will now proceed to describe the same with particularity.

In the accompanying drawings, D, E, F, G, and H represent the frame and handles of the cultivator, D being the tongue, and G being the standards, to which the shares marked S are attached by the braces *m*. These standards G

are strengthened and made firm by means of the braces *n*.

A represents the horizontal whiffletree, to which the harness-traces are ordinarily attached, and B represents two other vertical whiffletrees, arranged as shown in the drawings, the upper ends of which are connected with the extremities of A by means of the hooks *a c* and the chains *b*. B is kept in position by means of the iron straps or supports C, which are firmly fixed to G by bolts.

*d* is the rod or chain to which the traces are fastened.

It is readily seen that by this arrangement the draft is transferred from the point *e* in the tongue and carried down to the point *e'* in G, and at the same time all the advantages of the double whiffletree or evener A are retained. This point *e'*, at which the draft is applied, is adjustable, and is to be varied to suit the character of the soil, being so chosen in each case that the center of draft and the center of motion shall lie in the same plane and substantially coincide, thus obviating the tendency of the cultivator to tip down toward the front, as it manifestly would do if the draft were applied at the point *e*, and greatly diminishing the power necessary to draw it, as well as the labor to control it.

My invention has no reference to that class of cultivators which are suspended upon wheels; but

What I do claim as my invention is—

The combination and arrangement of the draft-pole D, the double-tree A, the beams E, the cross-beam F, the standards G, the supports C, and the whiffletrees B, when all are constructed, arranged, and operating substantially as and for the purposes herein delineated and set forth.

CHARLES B. INGERSOLL.

Witnesses:

D. O. GOODRICH,  
I. SHIELDS.