

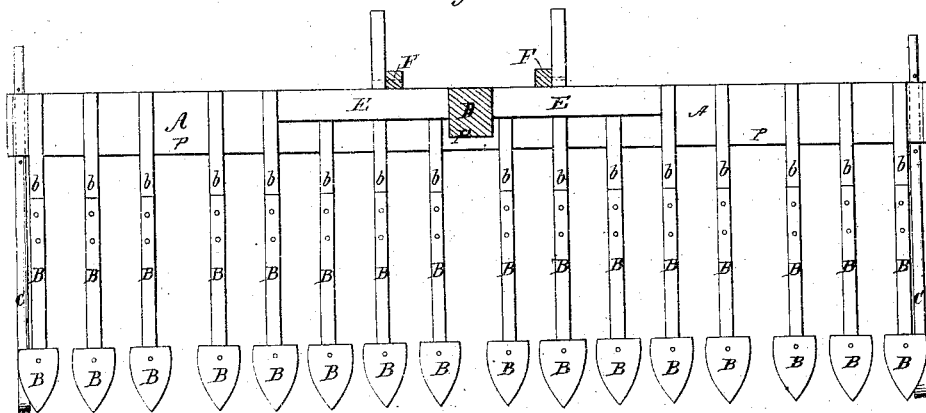
*W. J. Burton.*

*Cultivator.*

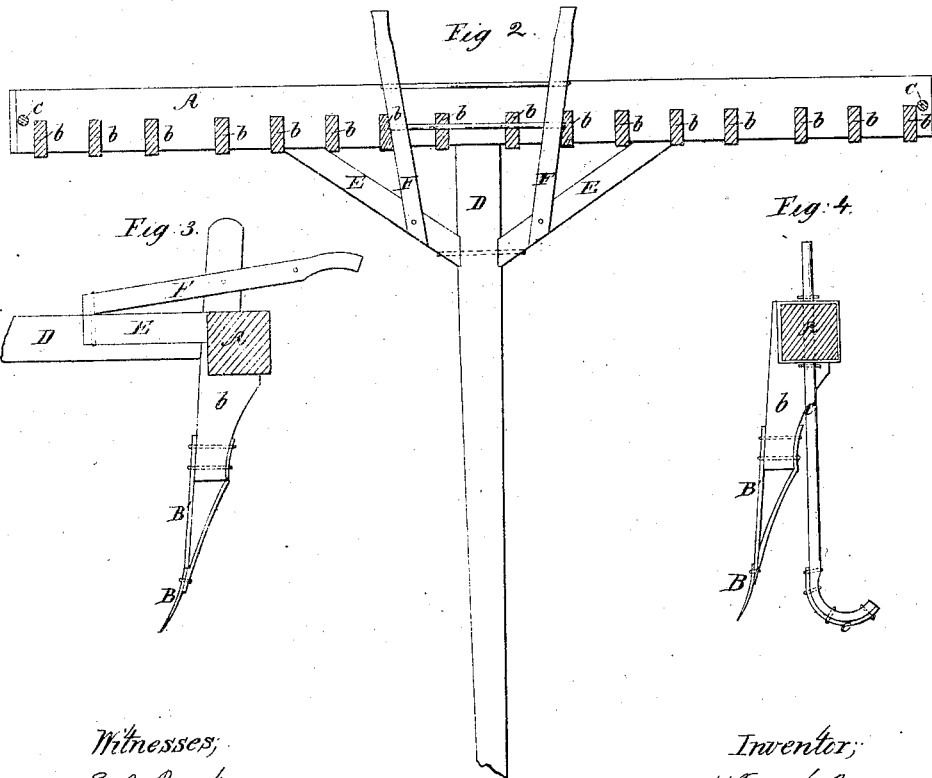
*N<sup>o</sup> 50,093.*

*Patented Sep. 26, 1865.*

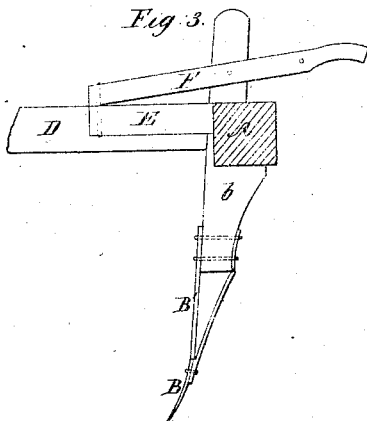
*Fig. 1.*



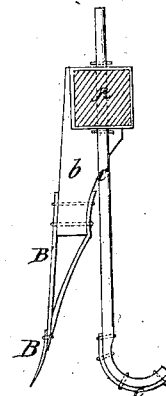
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses;*  
*E. A. Beck*  
*D. W. & Co.*

*Inventor;*  
*William J. Burton*

# UNITED STATES PATENT OFFICE.

WILLIAM J. BURTON, OF TURTLE, WISCONSIN.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 50,093, dated September 26, 1865.

*To all whom it may concern:*

Be it known that I, WILLIAM J. BURTON, of Turtle, in the county of Rock, in the State of Wisconsin, have invented a new and useful Improvement in Cultivators, which invention relates to a new and improved machine for cultivating corn; and it consists in a peculiar construction and arrangement of parts, whereby it is believed that several advantages are obtained over the generality of machines now employed for that purpose; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an isometrical view. *a a*, *E*, *D*, *b b*, *B B*, *B B*, *C C*, and *F F* exhibit a standard projection or working model. *a a* is the head or beam, to which the standards *b b* are attached as shown, to the lower ends of which the iron braces or shanks *B B* are fastened by two three-eighths bolts to each, to the lower extremity of which the cultivator teeth or hoes *B B* are fixed by bolts, as represented at *B*, Figs. 3 and 4. *D* represents the tongue, as shown in Fig. 2. *E E* are the hounds or braces supporting the tongue, as clearly seen in Fig. 2. *F F* are the handles; and *C C*, bows having steel shoes *c*, the upper ends passing through the beam *a a* at *a*, Fig. 4, through a metal box or thimble, permitting the bows to work loosely on the polished surfaces of the interior of said boxes or thimbles, the polished steel shoes aforesaid also working easily on the surface of the ground when in use as a cultivator. The pins or keys through said bows above and below the beam *a a* at *a*, Fig. 4, can be inserted through the holes in said bows higher up or lower down, thereby raising or lowering the beam *a a*, rendering the cultivator adjustable to any desired depth.

Fig. 2 represents a top-section view, which has been adverted to.

Fig. 3 is a cross-section view taken in the line of *F F* and *D* as near as may be.

Fig. 4 is a similar view taken near the ends of the beam *a a*.

Similar letters of reference indicate like parts in all the figures.

Having thus far described the construction and arrangement together of the several parts of the machine in connection with the accompanying drawings, the operation of the machine will be clearly comprehended from the follow-

ing explanations: The beam *a a* is constructed, of pine or other suitable wood, four inches square and twelve feet long, having a half-inch band on each end; the tongue, ten feet ten inches long and three and one-half inches square at the heel; the handles, three feet four inches long, spread two feet three inches, one foot ten inches from after part of beam; the after round, six inches from after part of beam; the bows each two feet ten inches long, one and one-half inch thick, with the said pins or keys for raising or lowering the beam for adjusting the cultivator to any desired depth; sixteen teeth or hoes, so spread and arranged that three rows of corn may be cultivated at once, to wit: The letters *P P P* on the beam *a a*, Fig. 1, indicate three separate rows of corn. The standards *b b* are two feet four inches long from beam *a a* to end of teeth or hoes *B B*, including the said shanks or braces, each ten inches long. Said teeth or hoes are three and one-half by four inches, of steel, and bolted to the shanks or braces, as aforesaid. Said standards *b b* are each bolted to the beam *a a* by two three-eighths bolts; all the parts being suitably secured by appropriate bolts or screws.

This cultivator can be very cheaply constructed, is simple, and easy to operate, accomplishing a large amount of work at small expense of time and power. A stout boy of ten years can operate it with ease. The bows, which are used instead of wheels, possess a remarkable facility for turning the machine and adjusting it to the inequalities and irregularities of crooked rows, the necessary lateral motion being conveniently communicated at the handles by the operator, thus being enabled to cultivate, even, crooked rows by this machine without injuring the growing plants.

Having thus described the construction and operation of my said improved machine, so that one skilled in the art could make and use the same, what I claim, and desire to secure by Letters Patent, is—

The bows *C C*, (this I claim broadly,) the whole arranged as and for the purpose described and set forth.

In testimony whereof I have hereunto set my hand and affixed my seal this 13th day of June, A. D. 1865.

WILLIAM J. BURTON. [L. S.]

In presence of—

E. A. BEACH,

D. W. C. CASTLE.