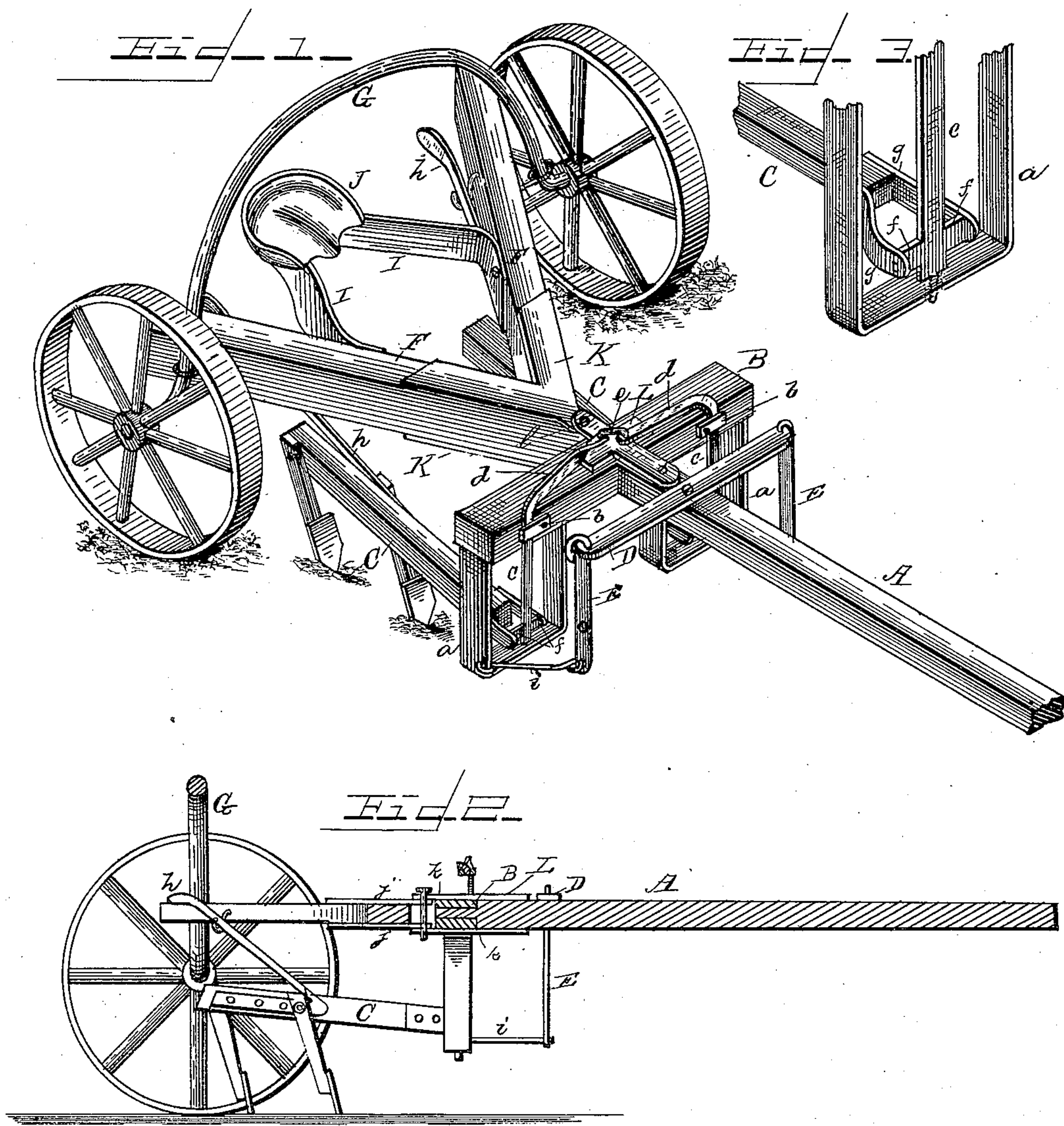


(No Model.)

H. INGERSOLL.  
CULTIVATOR.

No. 306,925.

Patented Oct. 21, 1884.



WITNESSES  
F. L. Orrand  
E. Johnson

Hubert Ingersoll  
INVENTOR  
*[Signature]*  
Attorney



# UNITED STATES PATENT OFFICE.

HUBERT INGERSOLL, OF DELAVAN, ILLINOIS.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 306,925, dated October 21, 1884.

Application filed June 14, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HUBERT INGERSOLL, a citizen of the United States of America, residing at Delavan, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Cultivators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention is an improved cultivator; and it consists in the improvements hereinafter described and set forth.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a cultivator constructed in accordance with my improvements. Fig. 2 is a central section, and Fig. 3 is a detail perspective view.

The tongue A is connected to a suitable cross-bar, B, which has depending from the under side of each end a rectangular frame, *a*. A button, *b*, is pivoted on the front face of the bar B above each frame *a*, as indicated in Fig. 1. A vertical bar, *c*, has its lower end reduced, so as to bear centrally in a perforation formed in the lower horizontal portion of each frame *a*. The upper portion of each vertical bar *c* rests behind the button *b* thereabove, and is horizontally prolonged, as indicated at *d*, so as to extend near the center of the bar B. The inner adjacent ends of the horizontal portions *d* are connected together by a link, *e*. A horizontal ear, *f*, extends from each side of the lower portion of each bar *c*, and the said ears are engaged by perforated straps or tongues *g*, secured to and projecting from the forward portion of a beam, C, which is provided with a series of cultivator shovels or blades and with a suitable operating-handle, *h*. A bar, D, is centrally pivoted on the upper face of the tongue A in advance of the bar B, and from each end of said bar D depends an arm, E, which is connected by a link, *i*, with the outer front corner of the adjacent frame *a*. Two beams, F F, converge together and meet at their front ends, so as to present an angle-frame, and the said converging portion has secured to its upper and lower faces

projecting tongues *j*, which are pivotally secured to similar tongues, *k*, projecting centrally from the rear of the beam B and retained in connection with the converging frame by means of a vertical pivot-bolt, *l*. The rear portion of the frame formed by the converging beams F F is supported by means of a shaft, G, which is curved so as to span the said beams, and is secured to the said beams at each side, and is bent vertically and horizontally to form spindles for the reception of the carrying-wheels H. Two metal plates, I, are secured at their ends to the inner sides of the beams F, and are bent rearwardly toward each other to support the operator's seat J. I provide for the tongues *j* by forming angle-plates K, which are secured on the upper and lower converging faces of the beams F, and which are centrally extended to form the said tongues *j*. Provision is made for the tongues *k* by means of plates L, which are of a cruciform in order to span the rear end of the tongue A, and extend longitudinally along the bar B, the rear portions forming the tongues *k*.

From the foregoing it will be apparent that the cultivator-beams C may move vertically on their front connections, and that each bar *c* may be partially rotated in its frame *a*, to permit the lateral movement of the beams C, connected therewith. Moreover, any movement of one of the beams C will so affect its particular bar *c* as to cause the other bar *c* to be correspondingly moved and effect a corresponding movement of the other beam C.

By forming the converging frame so that the same may be capable of an independent pivotal movement it can move laterally without affecting either of the beams C.

I claim—

1. The combination, in a cultivator, of a draft-frame, a carrying-frame pivoted thereto so as to move laterally with respect therewith, frames *a*, depending from said draft-frame, vertical bars adapted to revolve in said frame and connected with each other, and cultivator-beams C, pivoted to said bar so as to move vertically with respect thereto, and capable of moving laterally when the same revolves, substantially as set forth.

2. The combination, in a cultivator, of a draft-frame, a carrying-frame pivoted thereto so as to play laterally, frames *a*, depending



from each side of the draft-frame, and vertical bars adapted to revolve in said frames, connected to each other and provided with horizontal ears *f*, embraced by straps secured on the front end of the cultivator-beam *C*, substantially as set forth.

3. The combination, in a cultivator, of a draft-frame, tongues *k*, projecting from the rear thereof, carrying-frame composed in part of the converging bars *F*, angle-plates *K*, secured at the converging portion of said bars and provided with tongues *j*, pivotally attached to said tongues *k*, to permit the carrying-frame to move laterally with respect therewith, frames *a*, depending from said draft-frame, vertical bars adapted to revolve in said frame and connected with each other, and cultivator-beams *C*, pivoted to said bar so as to move vertically with respect thereto, and capable of moving laterally when the same revolves, substantially as set forth.

4. The combination, in a cultivator, of a

draft-frame, plates *L*, of cruciform, secured thereto and presenting tongues *k*, projecting from the rear thereof, carrying-frame composed in part of the converging bars *F*, angle-plates *K*, secured at the converging portion of said bar and provided with tongues *j*, pivotally attached to said tongues *k*, to permit the carrying-frame to move laterally with respect therewith, frames *a*, depending from said draft-frame, vertical bars adapted to revolve in said frame and connected with each other, and cultivator-beams *C*, pivoted to said bar so as to move vertically with respect thereto, and capable of moving laterally when the same revolves, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HUBERT INGERSOLL.

Witnesses:

JOSEPH V. GRAFF,  
L. D. LAWTON.