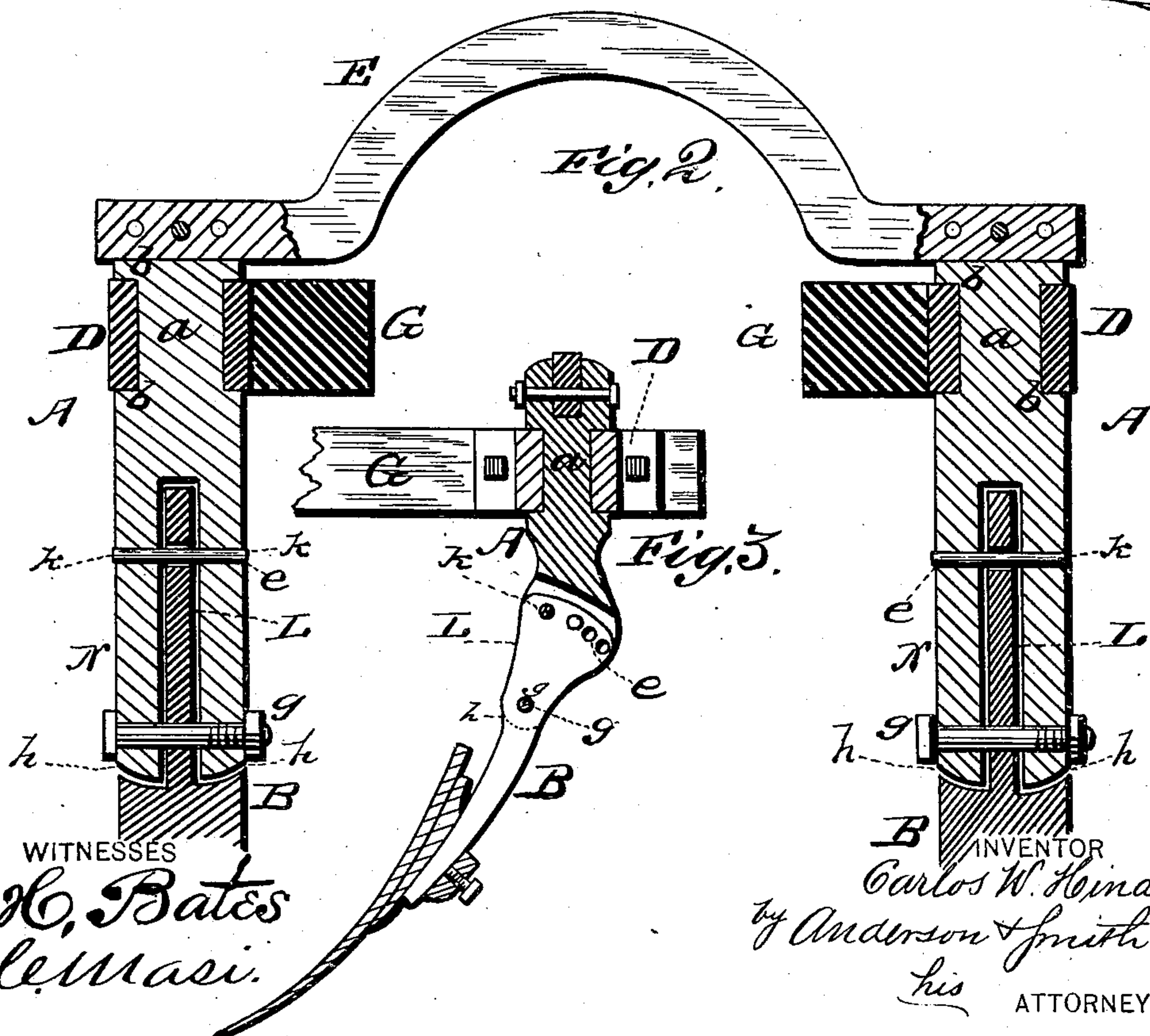
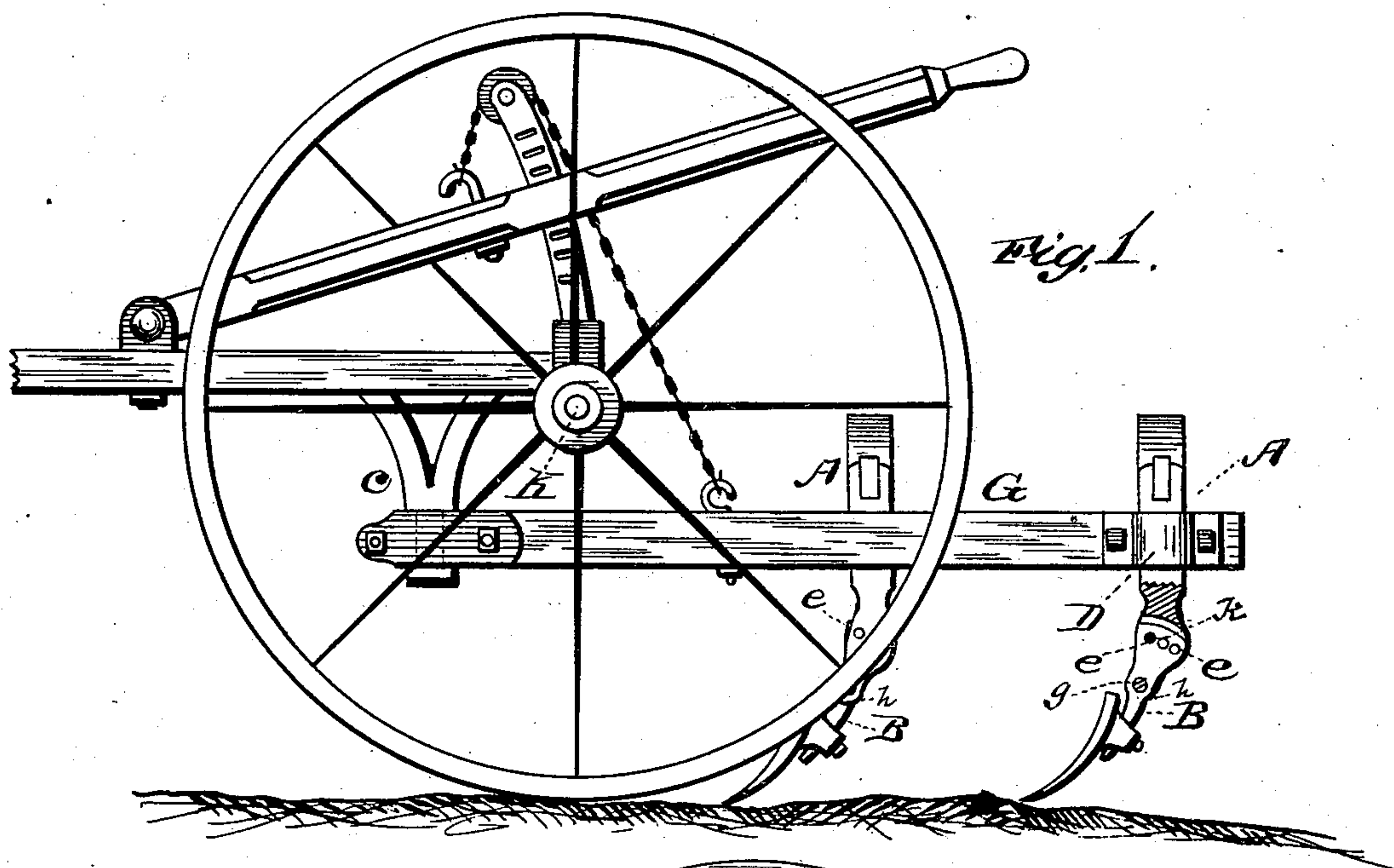


(No Model.)

C. W. HINDS.
CULTIVATOR.

No. 261,093.

Patented July 11, 1882.



WITNESSES
E. H. Bates
R. E. Masi.

INVENTOR
Carlos W. Hinds
by Anderson & Smith
his ATTORNEYS

UNITED STATES PATENT OFFICE.

CARLOS W. HINDS, OF WATERMAN, ILLINOIS, ASSIGNOR OF ONE-THIRD TO
J. J. A. ZELLER, L. E. PHELPS, AND R. K. SWIFT, ALL OF SAME PLACE.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 261,093, dated July 11, 1882.

Application filed March 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, CARLOS W. HINDS, a citizen of the United States, resident of Waterman, in the county of DeKalb and State of Illinois, have invented a new and valuable Improvement in Cultivators; 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my improved cultivator. Fig. 2 is a cross-sectional view of the standards; and Fig. 3 is a vertical sectional view of one of the standards, showing my improvement.

This invention has relation to cultivators; and it consists in the construction and novel arrangement of the transverse connection between the standards and the draft-beams, all as hereinafter set forth, and particularly pointed out in the claims appended.

In the accompanying drawings, the letter A designates the upper portion of the shovel-standard, which is formed with the cylindrical pivotal or bearing portion *a* between shoulders *b*.

G represents the draft-beams, which are connected in front to hangers or pivotal connections *c*, which are parallel to the axle K. The draft-beams are provided, at or near their rear ends, with lateral boxes D, which embrace the bearings *a* of the standards, so that the latter are free to turn therein as the team moves from side to side.

E represents the transverse coupling-bar, which connects the upper ends of the standards, being bolted securely to said upper ends, so that the standards are held in firm relation thereto. The coupling-bar E is at all times parallel to the axle, and by it the standards are held in the same position, so that the shovels C, which are attached to their lower ends, are always square to the front, however great be the angular deviation of the draft-beams.

B indicates the lower portion of the standard, which is extended backward at its upper end in sector shape, as indicated at L, and is provided with a series of perforations, *e*, through this broad and thin portion, as shown

in the drawings. At the lower end of the upper portion, A, of the standard a forked bearing, N, is formed to receive the thin sector-extension L of the lower portion, B, the two parts being pivoted together by the bolt *g*. Shoulders *h* are provided on the lower portion of the standard to engage the convex lower ends, *h*, of the branches of the fork-bearing N, and in some measure relieve the bolt and break-pin from strain. The wooden break-pin *k* passes through one of the perforations *e*, according to the adjustment of the lower portion, B, and through the upper perforations *e* of the fork-bearing N. By means of the wooden pin and the series of perforations *e*, the angular position of the part B of the standard can be readily adjusted to suit the character of the soil, so that the shovel will properly scour itself in its work. The break-pin also prevents injury to the standard on account of obstructions in the ground, as it will give way, allowing the lower part, B, of the standard to turn backward. The direct bearing on the break-pin is insured by keeping the shovels always square to the front. In this position there is no liability of an oblique engagement between the upper end of the lower portion of the standard and the fork N. As the shovels are constantly carried with their faces square to the front or parallel to the axle, they will at all times throw the same amount of soil to the crop. The action of the shovels, therefore, in a cultivator of this character is steady and uniform.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a cultivator, the standards having the pivotal bearings *a*, the swinging beams provided with boxes D, engaging said pivotal bearings, and the transverse bar E, connecting said standards, substantially as specified.

2. In a cultivator, the combination, with the swinging beams G, of the standards A, swiveled thereto, and the connecting transverse bar or arch E, rigidly secured to said standards, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses: CARLOS W. HINDS.

R. HUMPHREY,

FRED. CLEVELAND.