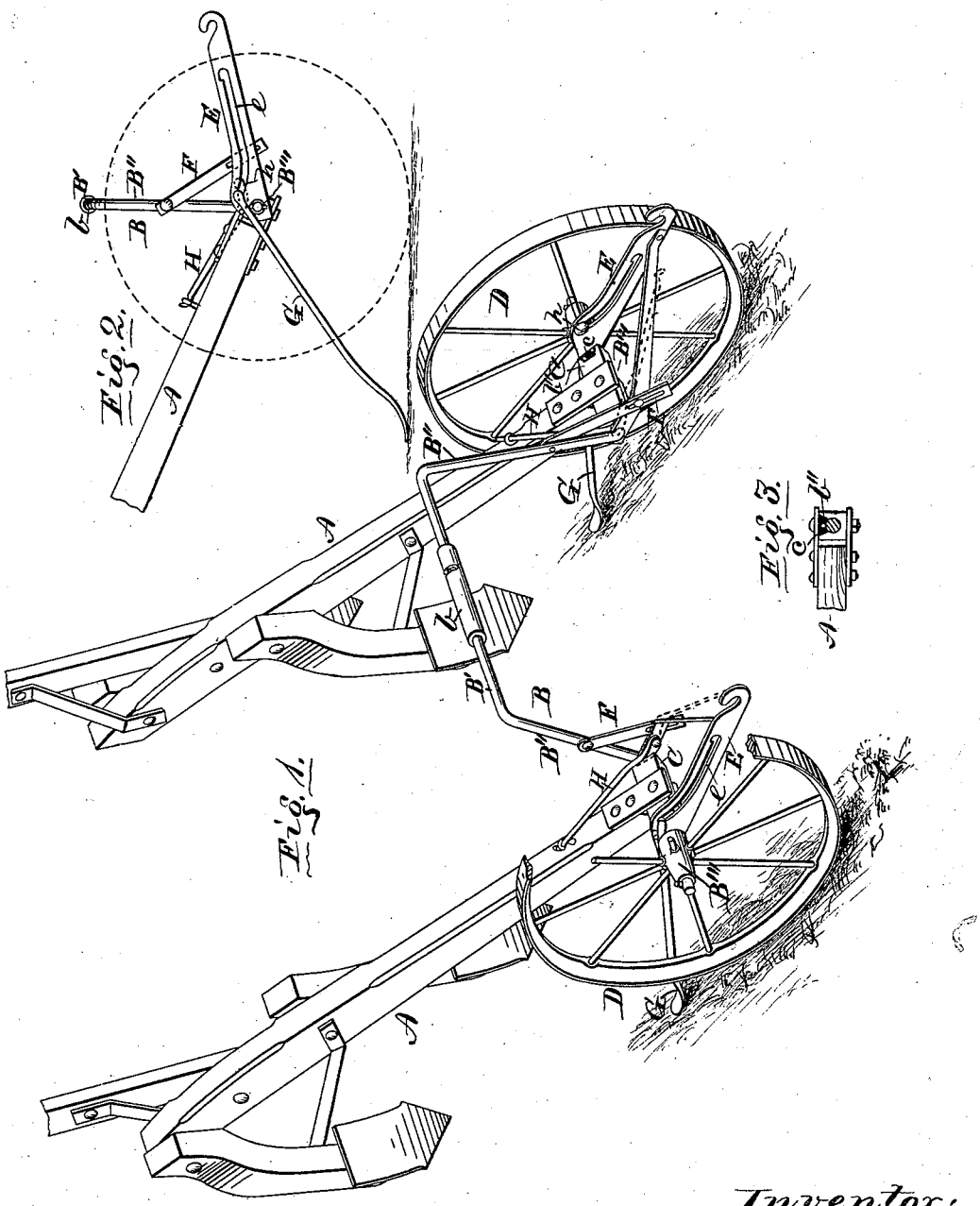
J. H. PATTEE.

CULTIVATORS.

No. 195,042. Patented Sept. 11, 1877.



Witnesses:
W. C. Barringer
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UNITED STATES PATENT OFFICE.

JAMES H. PATTEE, OF MONMOUTH, ILLINOIS, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO HENRY H. PATTEE AND ITHAMER P. PILLSBURY, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **195,042**, dated September 11, 1877; application filed June 30, 1877.

To all whom it may concern:

Be it known that I, JAMES H. PATTEE, of Monmouth, in the county of Warren and State of Illinois, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates generally to improvements in that class of tongueless cultivators having axles hinged so that the vertical side portions of the elevated portion of the axle may be oscillated independently in vertical planes; and the invention consists in improvements relating specially to the feature of suspending the rear ends of the plows in an elevated position for local transportation, all as hereinafter fully described and set forth in the claims hereto annexed.

In the accompanying drawing, Figure 1 is a perspective view of a cultivator embodying my invention. Fig. 2 is a side elevation of a portion of the device, and Fig. 3 is a detail view.

Referring to the parts by letters, A represents the plows and beams of an ordinary cultivator. B is the axle, consisting of an elevated central portion, B′, vertical side portions B″, and horizontal end portions B‴. This axle is of that class in which the two sides are hinged to each other by a sleeve-coupling, *b*, as shown at Fig. 1, or otherwise hinged, so that the lower ends of the side portions B″ can be, and are, advanced and receded relatively to each other, as shown at same figure, for the purpose of allowing either draft-animal to advance or recede, or for other purposes.

The plow-beams A are hinged to sleeves C, which are journaled on the ends B‴, and allow the plows to be elevated at their rear ends, as shown at same figure. A pin, *b″*, projects from the journal B‴, and rests in a recess, *c*, in the sleeve C, and prevents the axle falling forward or rearward.

D D are the ordinary supporting-wheels, carried on the ends B‴ of the axles. E E are the draft-plates, their forward ends formed into hooks for the single-trees, and their rear ends bifurcated and hinged, one branch to each end of a part, B‴, of the axle. F F are braces from the axle to the draft-plates E, and are slotted, to permit the plates E to oscillate. G is a runner or shoe, its upper end either adjustably attached to a draft-plate, E, by means of a slot, *e*, in said draft-plate, so it may be adjusted rearward, as shown at Figs. 1 and 2, or it may be rigidly attached to the draft-plate in the position shown at same figures. In either case it is attached to the draft-plate E, so that, when in the position shown at Figs. 1 and 2, with the rear end of the shoe G on the ground, the forward end of the draft-plate E will be held against movement of its forward end upward. H is a suspending hook rod or bar, its forward end attached to one branch of the draft-plate E, either rigidly, or by a hinge, *h*, which permits turning it forward out of the way when out of use.

When the rod H is hinged to the draft-plate it must, by striking a projection therefrom, or by resting on a sleeve, C, be made to oscillate with the draft-plate.

The rod H may be attached to any part of the draft-plate E, or to the shoe G.

The plows A may be suspended on the hook-rods H, as shown at Figs. 1 and 2.

In this class of hinged axles it will be evident that if the hook-rods H were attached to the sides B″ of the axle, and one end of the axle advanced, as shown by the left-hand side of the axle at Fig. 1, the rearward inclination of the part B″ would not hold the plow above the surface of the ground, while the right-hand plow A′ would be excessively elevated by the forwardly-inclined right-hand bar B″.

It will be seen that in my invention the plows are suspended from the draft-plates E, which are journaled to the axle, so that the axle may be advanced or receded at either end without raising or lowering either plow

above or below its fellow plow, as shown at Fig. 1.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The suspending-rods H and draft-plates E, journaled to the axle B, so as to support the plows A at uniform, or nearly uniform, heights, while either side of the axle is advanced or receded independently, substantially as described, and for the purpose specified.

2. The suspending-rods H, draft-plates E, and shoes G, journaled or hinged to the axles B, so that the plows A may be suspended on the rods H, and either end of the axle B be advanced or receded and the plows remain at uniform, or nearly uniform, heights, substantially as described, and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES H. PATTEE.

Witnesses:
THOMAS MCKEE,
W. B. RICHARDS.