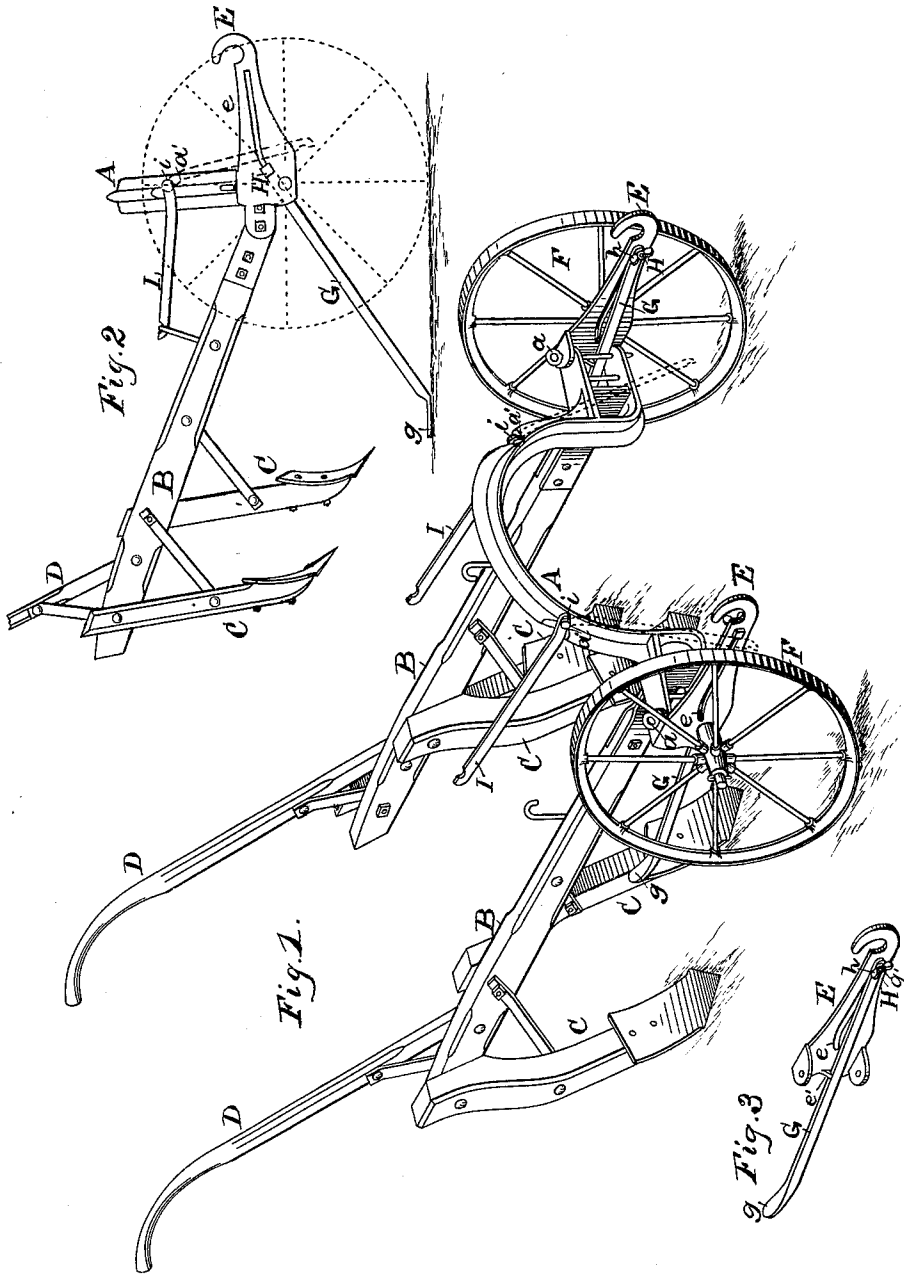


CULTIVATOR.

No. 185,775.

Patented Dec. 26, 1876.



Witnesses

M. H. Barringer
O. G. Stuart.

Inventor

Merry H. Battie
 Ex 133 Richard & Arnold
 attys.

UNITED STATES PATENT OFFICE

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

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 185,775, dated December 26, 1876; application filed September 19, 1876.

To all whom it may concern:

Be it known that I, HENRY 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in tongueless cultivators; the objects of which improvements are to furnish means of sustaining the axle in an elevated position, when the rear ends of the plows are elevated and suspended thereon, and to this end the invention provides runner-braces, so attached to the axle and annexed parts that they may be adjusted rearward to act as runners for sustaining the axle, and forward to place them out of the way when the implement is in use.

A further object of the invention is to furnish devices for suspending the rear ends of the plows from the axle, which may not be in the way in operating the implement, and to this end the invention provides hinged hooks or rods, which may be turned rearward to suspend the plows and forward out of the way when the plows are in use.

In the accompanying drawing, Figure 1 is a perspective view of a cultivator embodying my invention. Fig. 2 is a side elevation. Fig. 3 is a detail view, a perspective of a draft-plate and a runner attached thereto.

Referring to the parts by letters, letter A represents the elevated axle, B the plow-beams, C the standards and shovels, and D the handles of an ordinary tongueless cultivator. Letters E represent the draft-hooks pivoted to the horizontal ends of the axle A by a bolt, *a*, and having spindles on which the axle-supporting wheels F are journaled, as in a well-known class of tongueless cultivators. G G are runners, constructed of straight bars, with their lower ends *g* flat-

tened and curved to form shoes, which will slide over the loose soil readily and easily, and their other ends pierced each with a hole, *g'*. The draft-hooks E have slots *e*, which, preferably, are curved downward at their rear ends. H is a bolt, with a head on one end and a thumb-nut, *h*, on its other end, and passes through the slot *e* and hole *g'*. Each runner G is placed between a bolt, *a*, and draft-plate E, and beneath a lug, *e'*, which projects from the adjacent side and rear end of said draft-hook. I I are suspending hook-bars, their forward ends pivoted at *i* near the forward side of the axle-bar A, and in front of a projection or shoulder, *a'*, on the axle, which projection acts as a support for the bar I when it is turned backward, for supporting the plows, as shown by full lines in the drawings, and which permits it being turned forward and out of the way when the plows are in use, as shown by dotted lines at Fig. 2. The runners G being pushed back until their shoes *g* strike the surface of the ground, their forward ends may be secured by the bolt H and nut *h*, in the rear end of the slot *e*, as shown in full lines at Fig. 2, and in which position they will sustain the axle when the plows are suspended thereon, as shown at same figure.

When the plows are in use the runners G may be pushed forward by loosening the nut *h*, and again secured by tightening it, in the position shown by full lines at Figs. 1 and 3, in which position they will be out of the way when the plows are in use in the field.

It will be seen that the runner G may be slotted, and the bolt fixed in the draft-plate, and that the runner may be attached adjustably to the axle alone, for which reason I do not limit my claim to the peculiar manner of attaching the runner to the draft-plate; but

I claim—

1. The combination, in a tongueless cultivator, of the following instrumentalities, viz., axle A, plows B, slotted draft-plates E, runners G, and bolts H, substantially as and for the purpose specified.

2. Hinged suspending-bars I, combined with

axle A, plows B, and wheels F, substantially as described, and for the purpose specified.

3. The combination, in a tongueless cultivator, of the following instrumentalities, viz., axle A, plows B, slotted draft-plates E, runners G, and hinged suspending-bars I, substantially as and for the purpose specified.

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

HENRY H. PATTEE.

Witnesses:

C. HARDIN,
JAMES WILSON.