

W. H. ROBERTSON.
Cultivator.

No. 162,577.

Patented April 27, 1875.

Fig. 1.

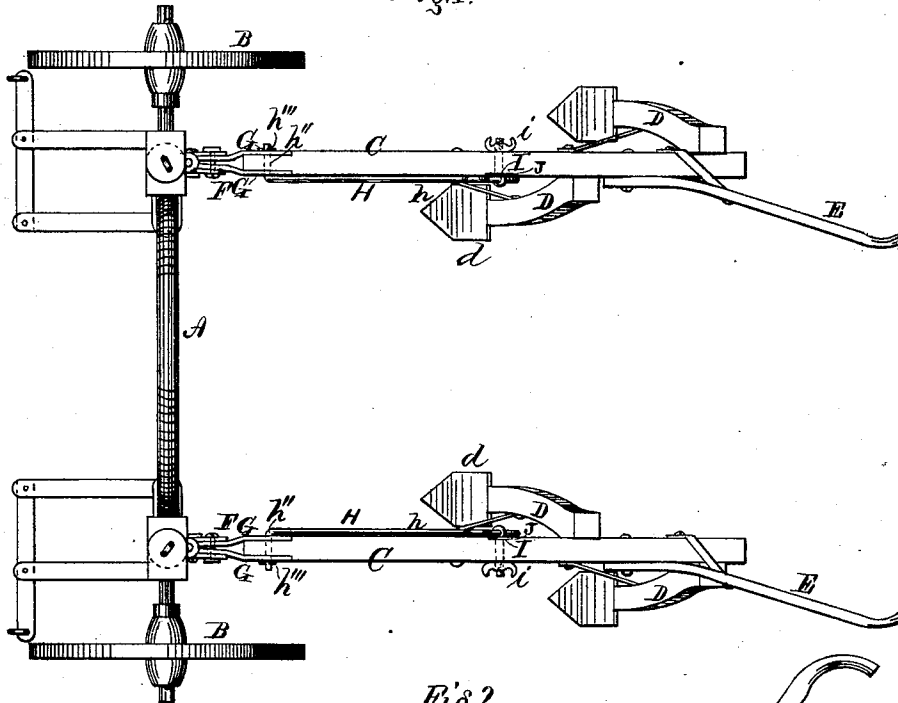
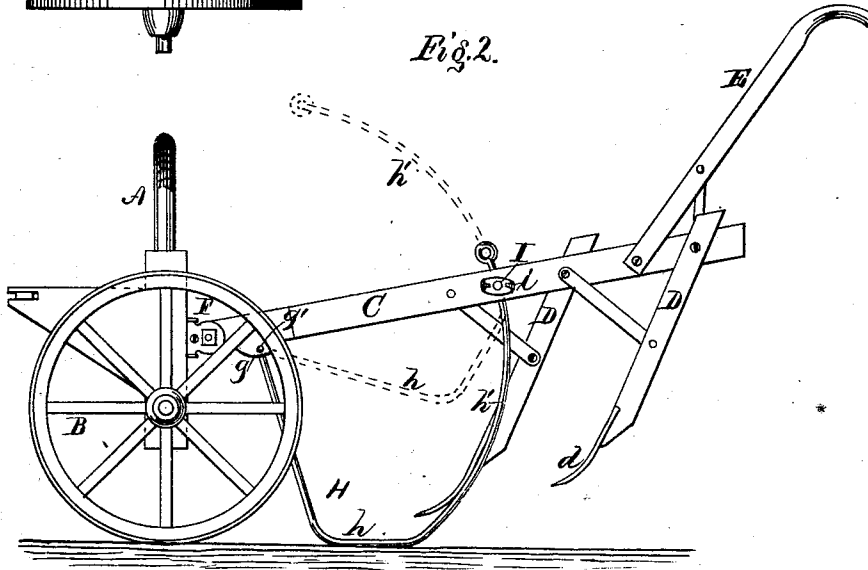


Fig. 2.



Witnesses.

A. M. Callum
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Inventor.

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UNITED STATES PATENT OFFICE.

WILLIAM H. ROBERTSON, OF BUDA, ILLINOIS, ASSIGNOR OF TWO-THIRDS
HIS RIGHT TO RUFUS FORD AND ABEL H. GUNN, OF SAME PLACE.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **162,577**, dated April 27, 1875; application filed
January 5, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. ROBERTSON, of Buda, county of Bureau and State of Illinois, have invented certain Improvements in Cultivators, of which the following is a specification:

This invention relates generally to improvements in that class of cultivators known as tongueless straddle-row cultivators, and more especially to devices for sustaining the plows above the ground, for facilitating turning the machine at the end of rows, for transportation on the farm, &c.; and the invention consists in hinging or journaling one end of a bar, which is curved to form a runner, to the forward end of the plow-beam, the other end of said bar being curved and passed through an eye or opening of any kind near the central part of the plow-beam, in which it may be secured in various positions, to form a runner for sustaining the plow, or to elevate and sustain the bar itself, all as hereinafter fully described.

To enable others skilled in the art to make and use my invention, I will now proceed to describe the same with reference to the accompanying drawing, in which—

Figure 1 is a top or plan view of a machine embodying my invention, and Fig. 2 is a side elevation.

Referring to the parts by letters, letter A represents any ordinary axle used with this class of cultivators, and B B the supporting-wheels. C C are the ordinary plow-beams, carrying shovel-standards D, with shovels *d* and handles E. F is the coupling or attachment of the beams C to the axle, and is of any ordinary construction which allows of free vertical and lateral movement of the plows. G G are ordinary beam-plates, except that they have lugs or projections *g g* from their lower sides, which are pierced with holes *g'*. H is a bar, curved, as shown plainly at Fig. 2, at its forward part to form a runner, *h*, and its rear-

ward part curved to form an arc of a circle, *h'*, of which the holes *g'* are the radius, and its forward end *h''* turned short and sidewise, so that it may be inserted through the holes *g'*, and retained from withdrawal by a key, *h'''*, or other device. I is an eyebolt passing through the central part of the plow-beam, and carrying on its end a thumb-nut, *i*. The arc-shaped end *h'* of the bar H passes through the eye of the bolt I. J is a metallic plate.

The operation is as follows: When it is desired to use the bars H for sustaining the plows above the ground, the bar H may be pressed downward at its rear end to the position shown by full lines at Fig. 2, and secured in said position by tightening up the eyebolt I by means of the thumb-screw *i*, in which position it will, as shown by said figure, sustain the rear ends of the plows at the desired elevation, and allow of the machine being moved from place to place with perfect safety to the plows. The dotted lines, Fig. 2, show the manner of turning up the rod H when the plows are in use, the thumb-nut securing it in said position, same as in former-cited position. Various devices may be used for locking the bar H in its various positions, instead of the eyebolt I.

The changes of position of the bar H, it will be seen, are readily and quickly and easily effected, and the device so adjustable that the plows may be elevated at different heights to suit the operator.

I claim—

The bar H, curved, as shown, to form a runner, *h*, and an adjusting-handle, *h'*, arranged to operate with the plow-beam C, eyebolt I, axle A, and wheels B, substantially as described, and for the purpose specified.

WILLIAM H. ROBERTSON.

Witnesses:

RUFUS H. FORD,
JOHN BOLING.