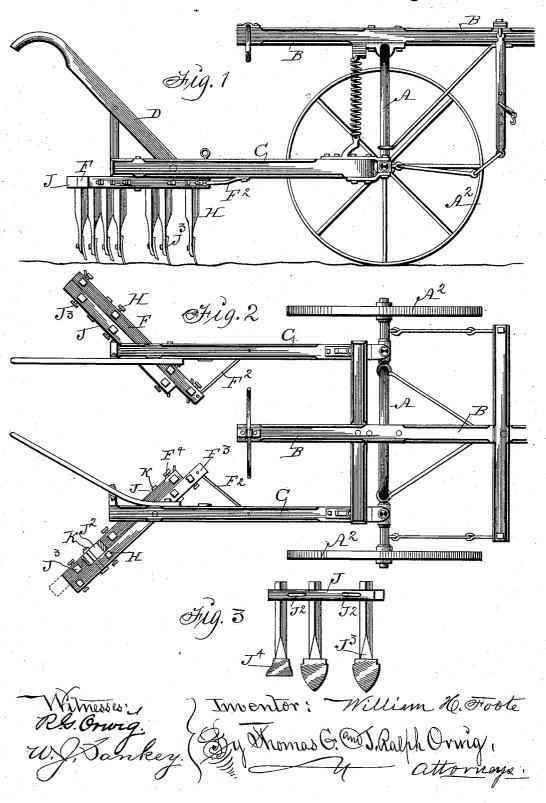
(No Model.)

## W. H. FOOTE. WHEEL CULTIVATOR.

No. 565,886.

Patented Aug. 18, 1896.



## UNITED STATES PATENT OFFICE.

WILLIAM HENRY FOOTE, OF CASEY, IOWA.

## WHEEL-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 565,886, dated August 18, 1896.

Application filed December 12, 1895. Serial No. 571,964. (No model.)

To all whom it may concern:

Beitknown that I, WILLIAM HENRY FOOTE, a citizen of the United States of America, residing at Casey, in the county of Guthrie and 5 State of Iowa, have invented a Wheel-Cultivator, of which the following is a specification.

The object of this invention is to provide a cultivator of simple, cheap, and durable construction in which the two rows of shovels or to teeth may be made to travel in alinement or in separate paths as required to stir the soil deeply or shallower and more thoroughly.

My invention consists in certain details of construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows the complete device in side elevation; Fig. 2, a top view of the same. Fig. 20 3 shows a front elevation of one of the auxil-

iary shovel-supporting bars.

Referring to the accompanying drawings, the running-gear and frame are seen to be of the ordinary construction and comprise an 25 arched axle A, wheels A<sup>2</sup> on its ends, a tongue B, fixed to the axle, two beams C C, connected with the end portions of the axle by a universal joint, and handles D, attached to said beams, whereby the sides of the cultivator may be 30 independently guided.

Each of the shovel-bearing devices is identical in construction, so that but one will be

specifically described.

F indicates a bar pivotally connected with 35 the rear end portion of the beam C. It is braced to stand at an angle approximately forty-five degrees relative to said beam by means of a rod F<sup>2</sup>, attached to the beam and having an eye F<sup>3</sup> at its other end. A wooden 40 peg F<sup>4</sup> is driven into the end of the bar F through the said eye.

H indicates shovels of common construction fitted in said bar at suitable distances of sepa-

ration.

J indicates an auxiliary bar having two horizontal slots J² therein and also a number of shovels J³, one of which (indicated by the symbol J⁴) is preferably flat on its lower edge to serve as a smoother. This beam is consected with the first by means of two bolts K, passed through openings in the beam C and the slots in the auxiliary beam, so that longitudinal adjustment of the latter relative to

the former may be quickly and easily accom-

lished.

In practice when different conditions of the  ${\tt ground\ surface\ are\ encountered\ it\ is\ desirable}$ to work or cultivate it differently. vide for this, when it is desirable to stir the soil deeply the auxiliary shovel-carrying bar 60 is so adjusted that its shovels will travel in the same path as the shovels on the front beam, thus deepening and widening the furrows made by the front shovels. However, if it is not desirable to stir the ground deeply 65 the auxiliary bar is so adjusted that its shovels will travel in paths between the paths of the forward shovels. Hence the ground surface will be stirred more thoroughly. In either case the draft force is much less than when 70 large shovels are used, and, further, the clods of hard earth are not thrown upon the plants being cultivated with such force as when the larger shovels are used.

Having thus described my invention, what 75 I claim as new therein, and desire to secure by Letters Patent of the United States there-

for, is-

1. In a wheel-cultivator, the combination of a beam mounted longitudinally of the cultivator-frame, a bar pivotally mounted on said beam, cultivator shovels or teeth fitted to said bar, a second like bar, shovels or teeth fitted thereto and means for supporting the second bar from the first and for providing means 85 for adjusting it longitudinally relative to the first for the purposes stated.

first, for the purposes stated.

2. In a wheel-cultivator the combination of two parallel beams mounted longitudinally of the machine-frame, a bar pivotally mounted 90 on each beam, shovels or teeth in said bars, auxiliary bars horizontally slotted, shovels or teeth in said bars, bolts passed through the first bars and through the said slots in the auxiliary bars, nuts on said bolts, to provide 95 adjustment whereby the shovels or teeth of the auxiliary bars may be set to follow in the furrow of the shovels or teeth of the first bars or at varying distances of separation therefrom substantially as and for the purposes 100 stated.

WILLIAM HENRY FOOTE.

Witnesses:

JOHN NITTLER, MIKE MAYER.