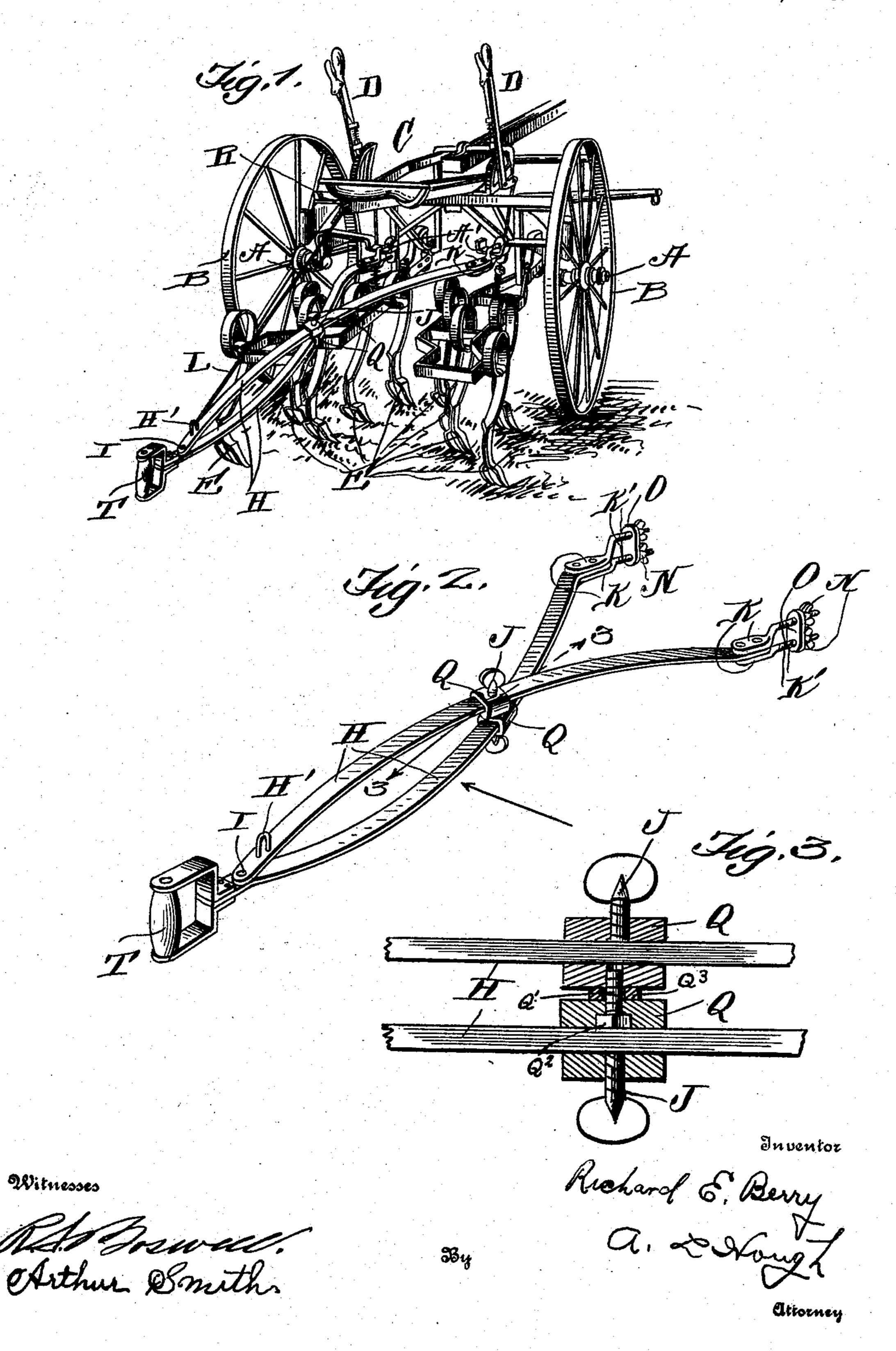
## R. E. BERRY. GUIDING ATTACHMENT FOR CULTIVATORS. APPLICATION FILED JUNE 24, 1908.

900,698.

Patented Oct. 13, 1908.



THE NORRIS PETERS CO., WASHINGTON, D. C

## UNITED STATES PATENT OFFICE.

RICHARD E. BERRY, OF ASHGROVE, VIRGINIA.

## GUIDING ATTACHMENT FOR CULTIVATORS.

No. 900,698.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed June 24, 1908. Serial No. 440,141.

To all whom it may concern:

Be it known that I, RICHARD E. BERRY, a citizen of the United States, residing at Ashgrove, in the county of Fairfax and State of 5 Virginia, have invented certain new and useful Improvements in Guiding Attachments for Cultivators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 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 and figures of reference marked thereon, which form a part of this specification.

15 This invention relates to new and useful improvements in attachments for pivotal axle cultivators, the object in view being to produce a simple and efficient means whereby a wheel cultivator may be guided by a 20 hand lever by a person walking behind the

cultivator.

Heretofore upon cultivators of this type where the person operating the apparatus rides upon the machine, it is necessary for 25 him to bend his head downward constantly in order to watch the hills of corn which may be irregularly planted and, looking down from above, naturally has to act quickly in order to guide the machine to irregular rows 30 to be properly cultivated. This constant strain coming upon the operator by being compelled to bend his neck in looking downward upon the hills over which the apparatus passes renders the manipulation of the culti-35 vators tiresome and it is with a view of overcoming this objection that the present invention is produced.

The invention comprises various details of construction, combinations and arrange-40 ments of parts which will be hereinafter fully described and then specifically defined in the

appended claims.

I illustrate my invention in the accompa-

nying drawings, in which:—

Figure 1 is a perspective view showing the application of my attachment to a pivotal axle cultivator. Fig. 2 is an enlarged detail view of the lever attachments to the stub axle of the cultivator, and Fig. 3 is an en-50 larged sectional view on line 3—3 of Fig. 2.

Reference now being had to the details of the drawings by letter, A-A designate the two stub axles of a pivotal axle cultivator suitably mounted upon the frame, and B 55 designate the cultivator wheels which are journaled on the stub axle.

C is the seat supported upon the frame, and D—D are levers for operating the frames carrying the cultivator teeth E, which are of the usual construction. The inner end of 60 each stub axle is provided with the usual foot rest A' whereby the operator, as he sits upon the seat, may turn one wheel or the other as may be desired to guide the apparatus. Two bars, designated in the drawings by let- 65 ters H and H', are pivotally connected by means of a pin I at their forward ends and their rear ends have two clips K-K riveted or otherwise fastened thereon, each of said clips having a threaded end K'. Said 70 threaded portions of the clips are parallel to each other and are adapted to be engaged by the winged nuts N, a suitable washer O having apertures therein being placed over the threaded portions of the clip and adapted to 75 coöperate with the angled portion of one of the clips to securely engage one of the foot rests, as shown in Fig. 1 of the drawings.

It will be noted that, when the clips are fastened to one of the foot rests, there will 80 be a slight pivotal play whereby the bars may be raised or lowered. This loose connection will also allow the clips to be fastened to foot rests of different sizes. Said bars H are curved, as shown in Fig. 2 of the 85 drawings, and at their points of intersection each passes through a collar Q. A screw Q' is mounted in threaded aperture in said sleeves Q and a nut Q2 is countersunken in one of the latter, as shown in Fig. 3 of the 90 drawings, and each collar carries a set screw J whereby the two bars may be held in different adjusted positions accordingly as the device is applied to different makes of cultivator where the foot rests are at different 95 distances apart. A handle T is fastened to one of the bars H and provides means whereby the bars may be conveniently turned to one side or the other accordingly as it may be desired to guide the cultivator 100 to right or left. In order to support the bars H in any convenient position where the handle T may be conveniently reached by the operator, a chain L is fastened at one end to an eye H' upon one of said bars and its 105 other end fastened to any suitable part of the frame, as to the eye R.

In operation, a person guiding the apparatus by means of the bars has one hand free to engage the animal drawing the cultivator 110 while the other hand is at liberty to turn the bars to one side or the other accordingly as

it may be desired to guide the forward movement of the cultivator. As the operator walking behind the apparatus can look forward and readily discern the irregularly dis-5 posed hills of corn to be cultivated, he can easily, by shifting the bars to one side or the other, guide the cultivator so that the cultivating of the irregularly disposed hills may be properly done, whereas, if it were neces-10 sary to guide the pivotal axle from a location upon the machine by looking downward, it would necessitate the operator continuously holding his head down to watch the irregular positioned hills and would also necessitate 15 the quick manipulation of the machine to avoid damaging any hills which might be irregularly planted.

What I claim to be new is:—

1. An attachment for pivotal axle cultiva-20 tors comprising, in combination with the stub axles, bars pivotally connected to the foot rests of the axles and extending rearward of the machine and affording means for guiding the apparatus, as set forth.

2. An attachment for pivotal axle cultivators comprising, in combination with the stub axles, bars pivotally connected to the foot rests of the axles and pivoted together at their rear ends, and a handle connected to 30 the outer end of one of said bars, as set forth.

3. An attachment for pivotal axle cultivators comprising, in combination with the stub axles, bars pivotally connected to the foot rests of the stub axles and having their 35 rear ends pivoted together, said bars intersecting each other, and means for holding the same in adjusted positions, as set forth.

4. An attachment for pivotal axle cultivators comprising, in combination with the 40 stub axles, bars pivotally connected to the foot rests of the stub axles and having their rear ends pivoted together, said bars intersecting each other, collars swiveled together, one of said bars passing through each collar, 45 a set screw carried by each collar and adapted to hold a bar in an adjusted position, as set forth.

5. An attachment for pivotal axle cultiva-

tors comprising, in combination with the stub axles, bars pivotally connected to the 50 foot rests of the stub axles and having their rear ends pivoted together, said bars intersecting each other, collars swiveled together, one of said bars passing through each collar, a set screw carried by each collar adapted to 55 hold a bar in an adjusted position, and a handle connected to the rear end of one of

said bars, as set forth.

6. An attachment for pivotal axle cultivators comprising, in combination with the 60 stub axles, bars pivotally connected to the foot rests of the stub axles and having their rear ends pivoted together, said bars intersecting each other, collars swiveled together, one of said bars passing through each collar, 65 a set screw carried by each collar adapted to hold a bar in an adjusted position, a handle connected to the rear end of one of said bars, and means for supporting the outer ends of said bars, as set forth.

7. An attachment for pivotal axle cultivators comprising, in combination with the stub axles, bars pivotally connected to the foot rests of the stub axles and having their rear ends pivoted together, said bars inter- 75 secting each other, collars swiveled together, one of said bars passing through each collar, a set screw carried by each collar adapted to hold a bar in an adjusted position, a handle connected to the rear end of one of said bars, 80 a chain fastened to the outer ends of said bars and connected to the frame of the cultivator, as set forth.

8. In combination with a pivotal axle cultivator, guide bars, clips secured at their for- 85 ward ends and engaging the foot rests of said stub axle, said bars intersecting each other, means for holding the bars in adjusted positions, and a handle at the rear end of one of said bars, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

RICHARD E. BERRY.

Witnesses:

A. L. Hough, ROBERT A. BOSWELL.