C. C. VANCE.

CULTIVATOR FOOT.

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1,141,732. **Patented June 1, 1915.**

Fig. 1.

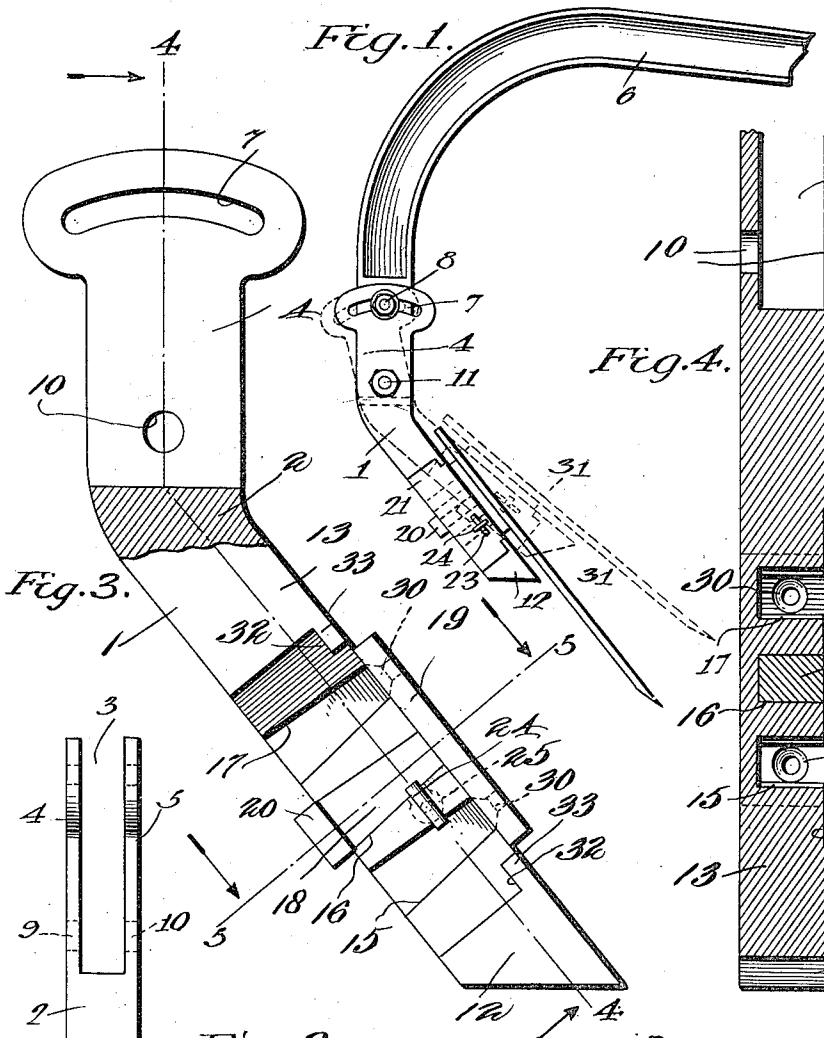


Fig. 4.

Fig. 3.

Fig. 2.

Fig. 5.

Witnesses

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CULTIVATOR-FOOT.

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To all whom it may concern:

Be it known that I, CAUGHEY C. VANCE, a citizen of the United States, residing at Memphis, in the county of Hall and State of Texas, have invented certain new and useful Improvements in Cultivator-Feet; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in cultivators and the primary object of the invention is to provide a cultivator foot by means of which the shovels or blades may be quickly and conveniently attached to or detached from the shoe and the supporting arm of a cultivator.

Another object of this invention is to provide a cultivator foot constructed so that the shovels or sweep blades may be attached thereto in various adjusted positions for regulating the inserting step of the blades or shovels, and also to provide a cultivator foot which may be adjusted at various angles upon the shovel carrying arms of the cultivator for regulating the incline of the shovel blades.

With the foregoing and other objects in view this invention consists in such novel features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings and claimed.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters designate like or corresponding parts throughout the several views and in which:—

Figure 1 is a side elevation of the improved cultivator foot showing the same attached to a cultivator shoe supporting arm showing the shoe in different adjusted positions in dotted lines. Fig. 2 is an edge view of the improved cultivator foot. Fig. 3 is a central section through the improved cultivator foot. Fig. 4 is a sectional view on the line 5—5 of Fig. 4, and Fig. 5 is a cross sectional view on the line 6—6 of Fig. 3.

Referring more particularly to the drawings, 1 designates the improved cultivator foot as an entirety, which is composed of the supporting body 2 which has its upper end bifurcated as is indicated at 3, forming arms 4 and 5 which are provided for receiving therebetween the lower terminal end of a shoe supporting standard 6 of an ordinary cultivator construction. The arms 4 and 5 have projections formed upon and projecting laterally from their edges, which projections and the upper ends of the arms are provided with arcuate slots 7. The arcuate slots 7 receive therethrough a bolt or other suitable fastening element 8 which is inserted through an opening in the arm 6 for holding the shoe structure 1 in different adjusted positions as indicated in solid and dotted lines in Fig. 1 of the drawings. The arms 4 and 5 are provided with openings 9 and 10 respectively, which aline with each other and are provided for receiving a bolt or other suitable fastening member 11 which is inserted therethrough and through an opening (not shown) formed in the end of the standard 6 for pivotally connecting the foot to the standard.

The body 2 of the cultivator foot 1 extends forwardly at an angle to the arms 4 and 5 and it has its lower end cut in substantially a horizontal plane forming a pointed end upon the foot as is indicated at 12. The angled portion 13 of the body 2 of the foot 1 is provided with a side recess 14 formed in one side thereof which communicates with recesses 15, 16 and 17 that are formed in the angled portion 13 of the foot 1. The recesses 15, 16 and 17 extend across the width of the portion 13 of the cultivator foot and have their walls converging toward the forward end thereof as is clearly shown in Fig. 4 of the drawings. The recesses 15, 16 and 17 are provided for receiving at different times, a lug 18 which is formed upon a plate 19. The lug 18 has an enlarged head 20 mounted upon the end opposite to the one which is connected to the plate 19, which head rests against the rear edge of the foot 1 and, in connection with the plate 19, together with the converging walls of the recesses, longitudinal sliding movement of the lug 18 within any one of the recesses is permitted. The side recess 14 has a plate 21 removably seated therein and held in place by a locking bolt 22. The locking bolt 22 extends through the section 13 of the cultivator foot and through a slot 23 which is formed in the plate 21, having a T head 24 formed upon its terminal end, so that after it has been forced through the slot 23 and a half turn is imparted to the bolt the T head will extend transversely of the slot 23 and engage the outer surface of

the plate for securely holding it positioned within the recess 14. The bolt 22 has an enlarged head 25 formed thereupon and a spiral spring 26 coiled thereabout intermediate of the head 25 and one side of the section 13, for holding the T head 24 in firm engagement with the outer surface of the plate 21 when it is positioned transversely in the slot 23. A handle 27 is secured to the plate 21 to provide for the convenient removal of the plate from the recess when the locking bolt 22 is in an inoperative or unlocking position.

The plate 21 serves to hold the lug 18 within any one of the recesses 15, 16 or 17. The plate 19 to which the lug 18 is attached is provided with openings 30 extending therethrough, by means of which openings a cultivator shovel or sweep blade 31 may be attached to the cultivator foot structure 1 and the angle of the shovel or blade 31 may be regulated by the positioning of the bolt 8 in the arcuate slot 7, while the inserting depth of the point of the shovel or blade may be regulated by the placing of the lug 18 in various ones of the openings 15, 16 or 17 as desired and as condition necessitates. The plate 21 is provided with shoulders 32 formed thereon which engage lugs 33 which extends into the recess 14 in the end thereof for preventing forward movement of the plate 21 within the recess and to insure the proper positioning of the same.

In reducing the invention to practice certain minor features of construction, combination and arrangement of parts may necessitate alterations to which the patentee is entitled provided such alterations are comprehended within the scope of what is claimed.

What is claimed is:—

1. In a cultivator foot structure, a body portion having its upper end bifurcated for forming arms, said arms adapted for receiving the lower end of a cultivator shovel supporting arm therebetween, the lower portion of said body portion being angled forwardly from said bifurcated portion, said lower angled portion being provided with a side recess formed in one side thereof, a plurality of recesses formed in said forwardly angled portion and in spaced relation with each other along the length of the same, means for seating in said spaced recesses for detachably connecting a cultivating shovel to said foot, and means for seating in said facial recess for preventing the accidental removal of said first named means.

2. In a cultivator foot structure, a body portion having its upper end bifurcated for forming arms, said arms being adapted for receiving therebetween the lower end of a cultivator shovel supporting arm, said arms being provided with arcuate slots for adjusting the position of said shoe upon said arm, the lower portion of said body portion being angled forwardly from said upper bifurcated portion, said lower portion being provided with a plurality of spaced recesses formed therein, a lug for seating in any one of said recesses, a plate formed upon said lug, said plate being provided for connection with a cultivator shovel, and means for holding said lug in any one of said spaced recesses for preventing accidental removal therefrom.

3. In a cultivator foot structure, a cultivator foot being provided with a plurality of recesses formed therein, a lug for seating in said recesses, said lug having an enlarged head formed upon one end and a plate formed upon the other end, said plate being provided for connection with an ordinary cultivating shovel, said cultivator foot being provided with a side recess communicating with said spaced recesses, a plate seated in said facial recess for preventing accidental removal of said lugs from any one of said recesses, and means for locking said plate in said facial recess against accidental removal.

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

CAUGHEY C. VANCE.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."