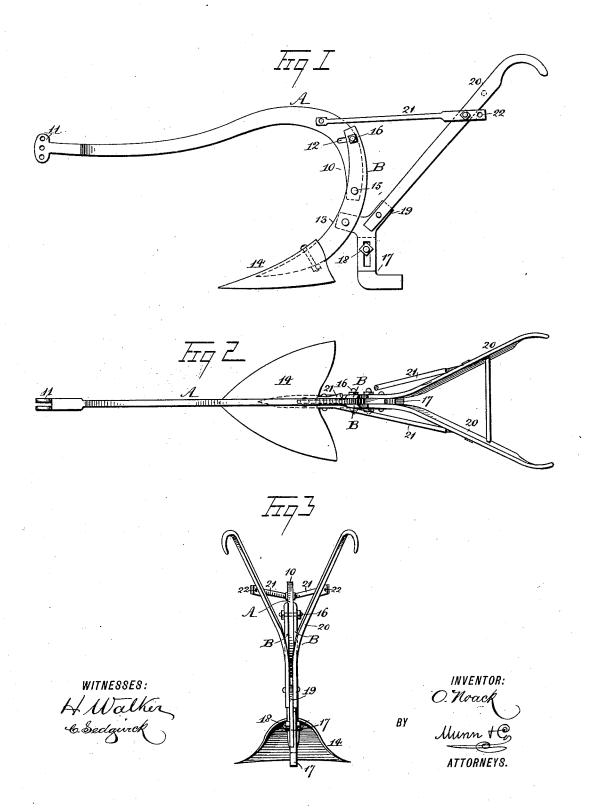
O. NOACK. CULTIVATOR.

No. 420,694.

Patented Feb. 4, 1890.



## UNITED STATES PATENT OFFICE.

OTTO NOACK, OF LATIUM, TEXAS.

## CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 420,694, dated February 4, 1890.

Application filed August 20, 1889. Serial No. 321,417. (No model.)

To all whom it may concern:

Be it known that I, Otto Noack, of Latium, in the county of Washington and State of Texas, have invented a new and useful Improvement in Cultivators, of which the following is a full, clear, and exact description.

My invention is an improvement in that class of cultivators whose beams and stocks are pivoted together and the latter adapted to for adjustment at different inclinations for the purpose of regulating the depth to which the shovel or "sweep" enters the soil.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in all the

views.

Figure 1 is a side elevation of the cultivator. Fig. 2 is a plan view, and Fig. 3 is a rear elevation.

In carrying out the invention the stock 10 is made in two sections A and B, the section A constituting the beam, and to the outer end of said section the clevis 11 is secured. The inner end of the beam-section A is

30 curved downward, as best shown in Fig. 1, and at or near the upper portion of the said curved rear end a transverse slot or opening 12 is produced. The lower stock-section B is constructed of two curved concentric plates

35 13, united at the lower extremities to receive the sweep 14. The lower end of the upper beam-section A of the stock, which is solid, is passed downward between the plates 13 of the lower section B, and the lower extremity

40 of the solid or beam section is pivoted to the plates of the lower section in any approved manner, as illustrated at 15 in Fig. 1.

Through the upper end of the lower plate-

section B of the stock a bolt 16 is passed, 45 which also extends through the slot 12 of the upper section, the said bolt being provided with suitable nuts. From this construction it is evident that the lower section B of the stock may be adjusted upon the upper sec-

50 tion by loosening the nuts and allowing the bolt to slide in the slot 12, and the sweep is thereby made to travel in the ground as deep or as shallow as desired.

An essentially **Z**-shaped guide-bar 17 is 55 provided for the stock, the upper horizontal

member of which guide-bar is introduced between the plates of the lower stock-section B at a point between the pivotal connection of the two stock-sections and the sweep. The lower horizontal member of the guide-bar 17 60 extends rearward in a line parallel with the center of the sweep or the lower end of the lower stock-section B. This guide-bar is made in two sections—an upper and a lower section—vertically adjustable one upon the 65 other by means of a bolt and nut 18, the bolt being made to pass through an aperture in one of the sections and through a slot in the other section. From the upper rear corner of the guide-bar an upwardly and rearwardly 70 inclined lug 19 is projected, and to the said lug the lower extremities of the handles 20 are pivoted. Each handle is connected with the beam-section A of the stock by an arm 21, the arms being pivoted to the stock-sec- 75 tion at one end, and connected with the handles 20 at their other end by means of bolts or equivalent devices. The outer end of each arm, which is secured to the handles, is provided with a series of apertures 22, whereby 80 when the stock-sections are adjusted the handles may be adjusted likewise to suit the op-

Having thus described my invention, I claim as new and desire to secure by Letters 85 Patent—

1. The combination, with the beam and double stock pivoted together and adjustably connected at the upper end of the latter, of the guide-bar 17, pivoted to the said stock 90 and composed of sections which are vertically adjustable on each other, the handles 20, pivoted to the guide-bar, and the horizontal arm 21, which adjustably connects the beam and handles, as shown and described, to op- 95 erate as specified.

2. The combination, with the beam and stock, pivoted together and adjustably connected at the upper end of the latter, and the handles 20, pivotally connected with the ros said stock at a point below the connection of the beam and stock, of the arm 21, which is pivoted to the beam above and forward of the stock and adjustably connected with the handles, all as shown and described.

OTTO NOACK.

Witnesses:

AUGUST NOACK, FREDERIC PHILIPP TREUCK.