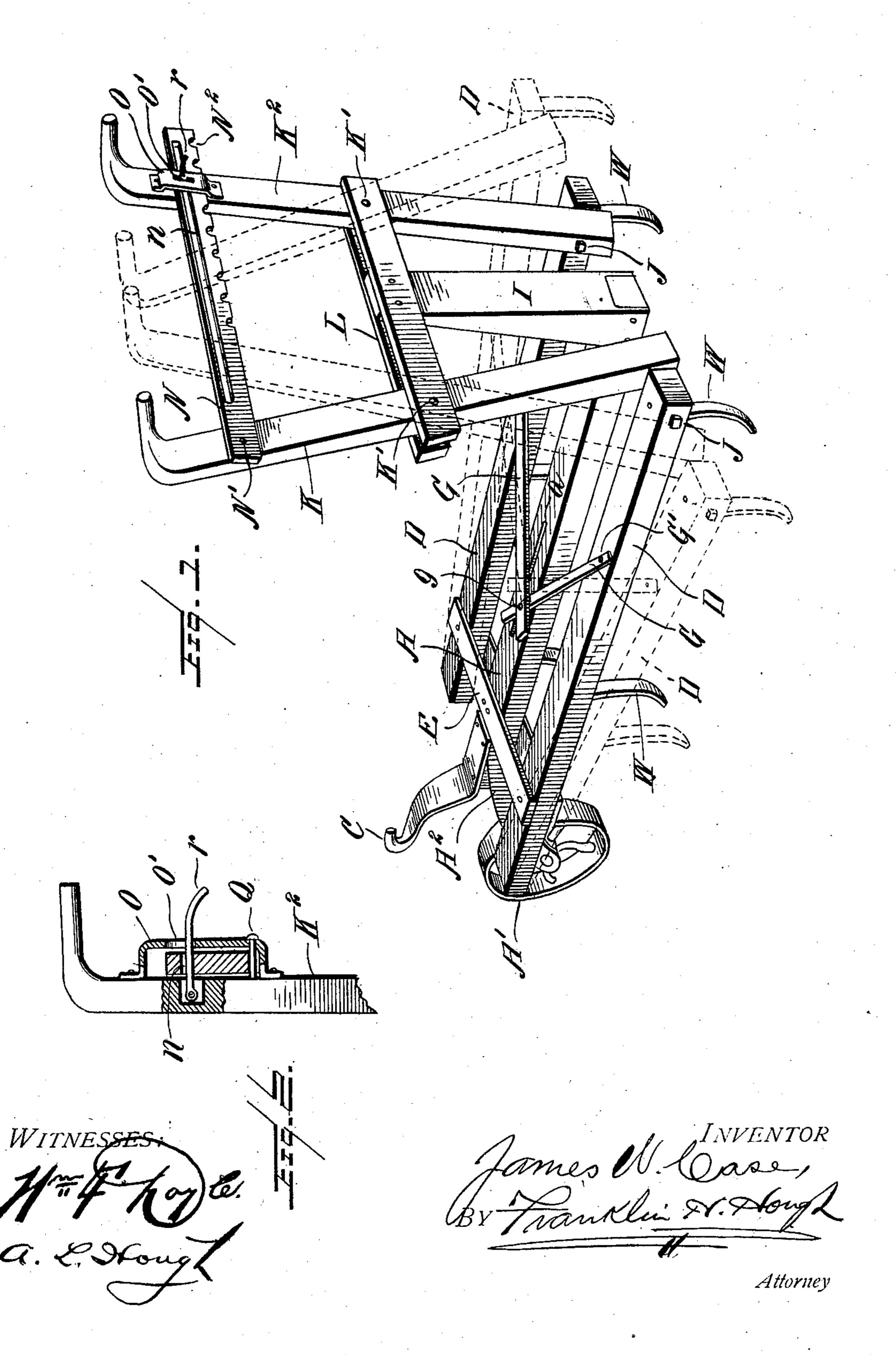
J. W. CASE.
CULTIVATOR.
APPLICATION FILED MAY 8, 1907.



UNITED STATES PATENT OFFICE.

JAMES W. CASE, OF BENZONIA, MICHIGAN.

CULTIVATOR.

No. 861,433.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed May 8, 1907. Serial No. 372,554.

To all whom it may concern:

Be it known that I, James W. Case, a citizen of the United States, residing at Benzonia, in the county of Benzie and State of Michigan, have invented certain 5 new and useful Improvements in Cultivators; 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, reference being had to the accompa-10 nying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in cultivators, the object in view being to pro-15 duce apparatus of this nature which may be conveniently and quickly adjusted for use between rows of varying widths and without stopping the cultivator or letting go the handles thereof, thereby having perfect control over the cultivator at all times without hin-20 drance.

My invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying draw-25ings, in which:—

Figure 1 is a perspective view of my improved cultivator shown in solid lines in its narrowest adjustment and in dotted lines in its widest adjustment, and Fig. 2 30 is a detail sectional view showing a latch for holding the cultivator in an adjusted position.

Reference now being had to the details of the drawings by letter, A designates a central beam and D, D the outer beams, which latter are pivotally connected 35 to a bar E which is fastened to the central beam A at right angles thereto.

C designates a hook to which a clevis is adapted to be attached, and A' designates a wheel mounted in the arms A² which are fastened to the central beam. Said 40 beams are provided with the usual cultivator teeth W, and G, G designate two bars which are pivotally connected at G' to the bars D and their inner ends are pivotally connected to a pin g which has a play in a slot a formed in the central beam A.

Fixed to the rear end of each beam D is an eye-bolt J, and K and K² designate upright handles having pivotal connection with the eyes of said bolt J whereby the handles may have tilting movements, as indicated by Fig. 1 of the drawings. Rising from the rear end 50 of the beam A is a post I, the lower end of which is preferably recessed and adapted to straddle said beam to which it is fixed. Fastened to the upper end of said post are the horizontally disposed cross-pieces L, between the ends of which are mounted the pins K' upon

which said handles K and K² are pivotally mounted 55 and between which cross-pieces L, said handles are guided as they tilt upon the pivot pins K and K2.

N designates a bar which is pivotally connected to a pin N' carried by said handle K and provided with a series of notches N² in its lower edge.

O designates a strap which is fastened to the handle K² and is provided with an elongated slot O' through which a latch r projects and which latch also passes through an elongated slot n formed in the bar N.

Q designates a pin which is passed through the strap 65 O and is adapted to engage one or another of the recesses N² in order to hold the cultivator in an adjusted position, it being understood that said bar N has a play between the cleat or strap O and the handle K².

In operation, it will be readily seen that when it is 70 desired to adjust the cultivator to different widths, all that it is necessary to do is for the operator, who grasps one of the handles, to reach a finger down and actuate the latch which will cause the bar N to be raised from engagement with the pin Q, and then, by moving 75 the handles together or apart, may cause the beams to be widened or narrowed, accordingly as it may be desired to have the cultivator operate between rows of varying widths.

By the construction of a cultivator made as shown 80 and described, it will be noted that means is afforded for adjusting the apparatus without stopping the cultivator and the latter may be adjusted to thoroughly cultivate the ground between rows which may be at uneven distances apart.

What I claim is:—

1. An adjustable cultivator comprising a stationary and pivotal beams, a standard rising from the rear portion of the stationary beam, cross pieces fixed to said standard, handles pivotally connected to the rear ends of said pivotal 90 beams and adapted to swing in planes at right angles thereto, said handles also pivotally mounted between their ends to said cross pieces, a notched bar fixed to one handle. a strap upon the other handle, a pin carried by said strap and adapted to be engaged by the notches of said bar, and 95 means carried by the handle to which said strap is fastened for raising said bar out of engagement with said pin, as set forth.

2. An adjustable cultivator comprising a stationary and pivotal beams, a standard rising from the rear portion of 100 the stationary beam, cross pieces fixed to said standard, handles pivotally connected to the rear ends of said pivotal beams and adapted to swing in planes at right angles thereto, said handles also pivotally mounted between their ends to said cross pieces, a notched bar fixed to one handle; 105 a strap upon the other handle, a pin carried by said strap and adapted to be engaged by the notches of said bar, said notched bar having a longitudinal slot therein, a latch pivotally connected to the handle carrying said strap and extending through said slot, affording means whereby the 110 bar may be raised from engagement with said pin, as set forth.

3. An adjustable cultivator comprising stationary and

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pivotal beams, a standard rising from the rear portion of the stationary beam, cross pieces fixed to said standard, handles pivotally connected to the rear ends of said pivotal beams and adapted to swing in planes at right angles thereto, said handles also pivotally mounted between their ends to said cross pieces, a slotted notched bar fixed to one handle, a slotted strap upon the other handle, a pin carried by said slotted strap and adapted to be engaged by the notches of said bar, said slotted notched bar having a

longitudinal slot therein, a latch pivotally mounted upon a 10 strap upon the strap carrying handle and extending through slots in said bar and strap, as set forth.

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

JAMES W. CASE.

Witnesses:
MAY H. CASE,
JOHN J. HUBBELL.