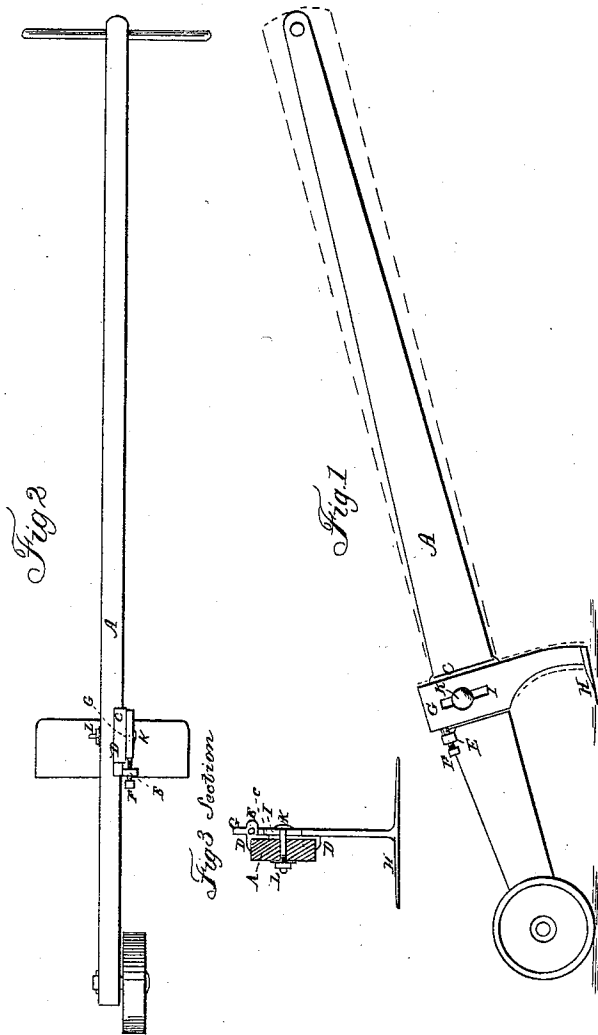


A. C. ARNOLD.

Weeding-Hoe.

No. 50,436.

Patented Oct. 17, 1865



Witnesses:  
*Wm. V. ...*  
*D. S. ...*

Inventor:  
*Alvigo C. Arnold*

# UNITED STATES PATENT OFFICE.

ALONZO C. ARNOLD, OF NORWALK, CONNECTICUT.

## IMPROVEMENT IN ADJUSTABLE WEEDING-HOES.

Specification forming part of Letters Patent No. 50,436, dated October 17, 1865.

*To all whom it may concern:*

Be it known that I, ALONZO C. ARNOLD, of the town of Norwalk, county of Fairfield, and State of Connecticut, have invented new and useful Improvements in the Mode of Constructing Adjustable Weeding-Hoes; and I do hereby declare that the following is a correct description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of invention consists in the mechanical arrangement for adjusting the position of the blade and handle.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same.

In the drawings, Figure 1 is a side view of the hoe and adjusting arrangements. Fig. 2 is a plan view of the same; Fig. 3, a transverse section.

The general construction of my adjustable hoe is substantially the same as other hoes for the same purpose.

My improvements as described in the drawings are in the mechanical arrangements for adjusting and regulating the position of the cutting-blade and the height of the handle to suit a tall or short operator.

The beam A is composed of wood of the proper length and form, with a wheel in front, and arms at the back end. In the forward part, behind the wheel, I attach the adjusting device.

The plate C is made of a suitable thickness and width, and is placed on the side of the beam A, as shown in the drawings, and has a projecting lip, D D, on the top and bottom to clasp the two edges of the beam A to hold the same firmly. On the upper corner of the said plate C, I make a projection, E, of a sufficient size and form to receive the adjusting

set-screw F, which passes through the same, and the end presses against the upper portion of the forward edge of the stem-head G of the blade H.

In the stem-head G, I form an oblong vertical slot, I, to receive the fastening and fulcrum-bolt K, which passes through the same and the plate C and beam A, and the whole is made fast and firm by the back nut, L. The vertical slot I allows the raising or lowering of the blade H to any required position, and at the same time the set-screw F will force the upper part of the stem backward, which will cause the blade H to take a more forward and level position for cutting, and by the same rule if the set-screw is withdrawn it will allow the blade to incline more, as circumstances may require, the pressure being always against the set-screw and the fulcrum-bolt K.

The wheel and the adjusting arrangements, being attached to the side of the beam, will allow the same to be made lighter than usual, as no portion of the beam will be cut away to weaken the same.

I could apply a slotted brace or a quadrant circle in the rear of the stem for the same effect, but prefer the set-screw as more simple and economical.

I do not claim as new the adjusting the stem and beam and blade on the wheel.

What I claim as my invention, and desire to secure by Letters Patent, is—

The set-screw F and plate C, in combination with the slotted stem G, in the manner and for the purpose substantially as herein described.

Norwalk, Conn., August 23, 1865.

ALONZO C. ARNOLD.

Witnesses:

WM. VINE,  
GEO. MARVIN.