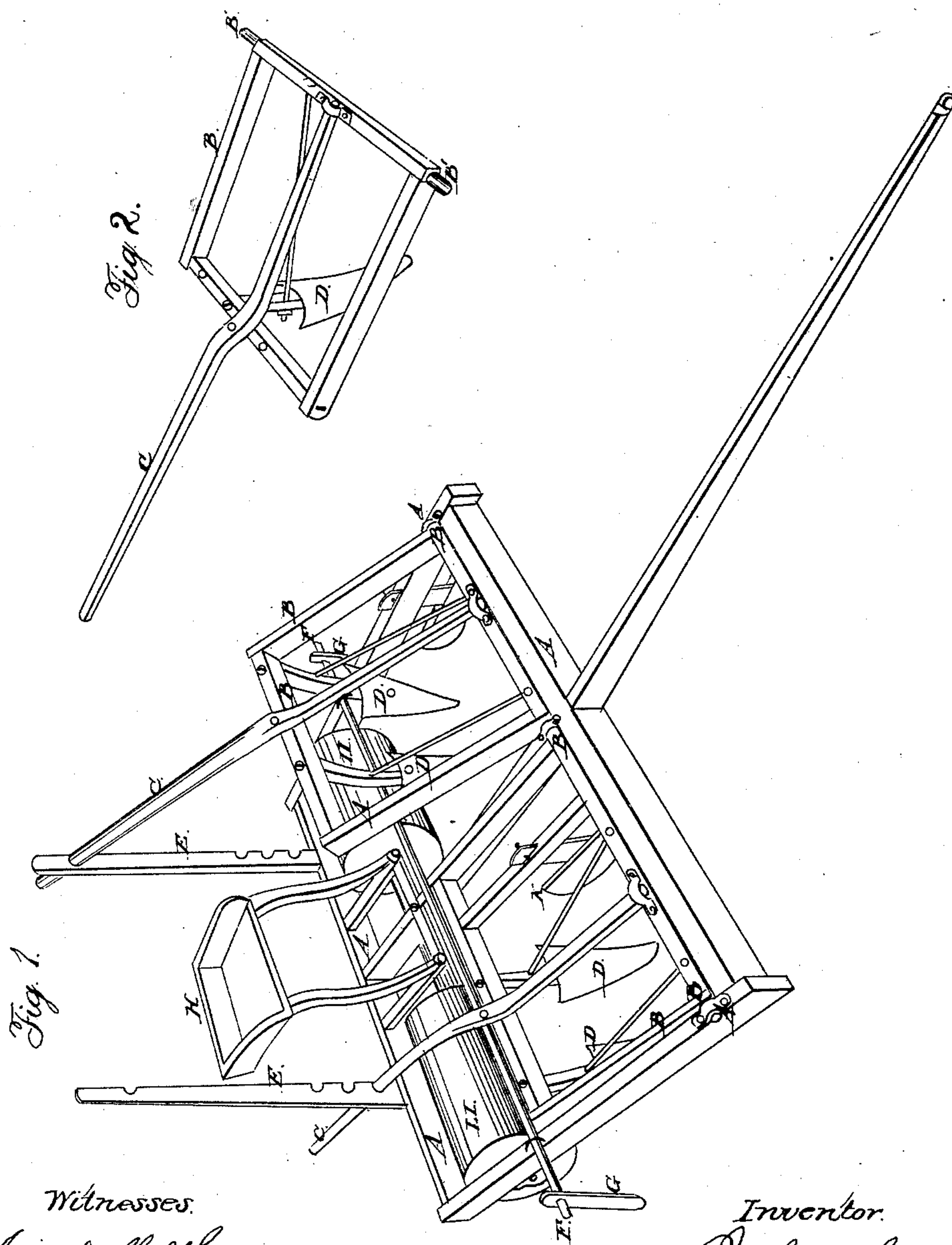


J. GROSS.  
Wheel-Cultivator.

No. 34,828.

Patented Apr. 1, 1862.



Witnesses:  
Jacob H. Thomas  
James W. Tree

Inventor:  
John Gross

# UNITED STATES PATENT OFFICE.

JOHN GROSS, OF MANILLA, INDIANA.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 34,828, dated April 1, 1862.

*To all whom it may concern:*

Be it known that I, JOHN GROSS, of Manilla, in the county of Rush and State of Indiana, have invented certain new and useful Improvements in the Construction and Arrangement of Cultivators; and I do hereby declare that the following is an exact description thereof, reference being had to the accompanying drawings and the letters marked thereon.

Figure 1 is a perspective, and Fig. 2 a sectional, view, showing the construction and general arrangement of the cultivator.

A is the main frame, and supports the two frames B, which are hinged at B<sup>0</sup>. The levers C are attached to the frames B, and gage the angle and depth of the points D by means of the notched standards E. The bar or rod F is designed to hold the guides G, and is used in laying off ground for corn-planting, as will be shown. H is the driver's seat. I I are the rollers which bear the weight of the machine when moving about and break the clods after the points D. The tongue is firmly attached to the frame A.

The following is the operation of the cultivator: In laying off ground for corn-planting the points D are taken out and one of them placed in each of the bars in the rear part of the hinged frames B, so as to set the proper distance apart for the rows of corn. They are then set to the depth required for the furrow by means of the levers C and standards E. The bar F is then attached so as to allow the

tance from the points D that the furrows are apart, and when the machine has gone once across the field the driver guides the machine so that the pendant runs in the furrow, thus making the spaces equal.

When corn is to be plowed the points D are placed as shown in Fig. 1, the points being kept near the row next to the guards K, which keep the lumps of dirt from covering the corn.

The advantages of this machine may be seen in the simple manner in which the parts are combined, its completeness and adjustability.

It will be seen that when the levers C are placed in the upper notches of the standards E the points D are raised free from the ground and the machine rests entirely upon the rollers I I. It will be borne in mind that this is effected by simply adjusting the parts without detaching the same, making a complete roller and cultivator, to be used for either—separately as a roller by simply raising the levers to the notches in the standards E at the top of the same.

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

The lever-frame B, with levers C and adjustable points D, when operated in connection with the frame A, with guide-bar F, and rollers I I, by means of the standards E, the whole being arranged and operated as set forth.

JOHN GROSS.

Witnesses:

JACOB H. THOMAS,  
JAMES W. TREES.