

J. T. D. ALEXANDER.

Wheel Cultivator.

No { 97, }
31,101. }

Patented Jan. 15, 1861

Fig. 3.

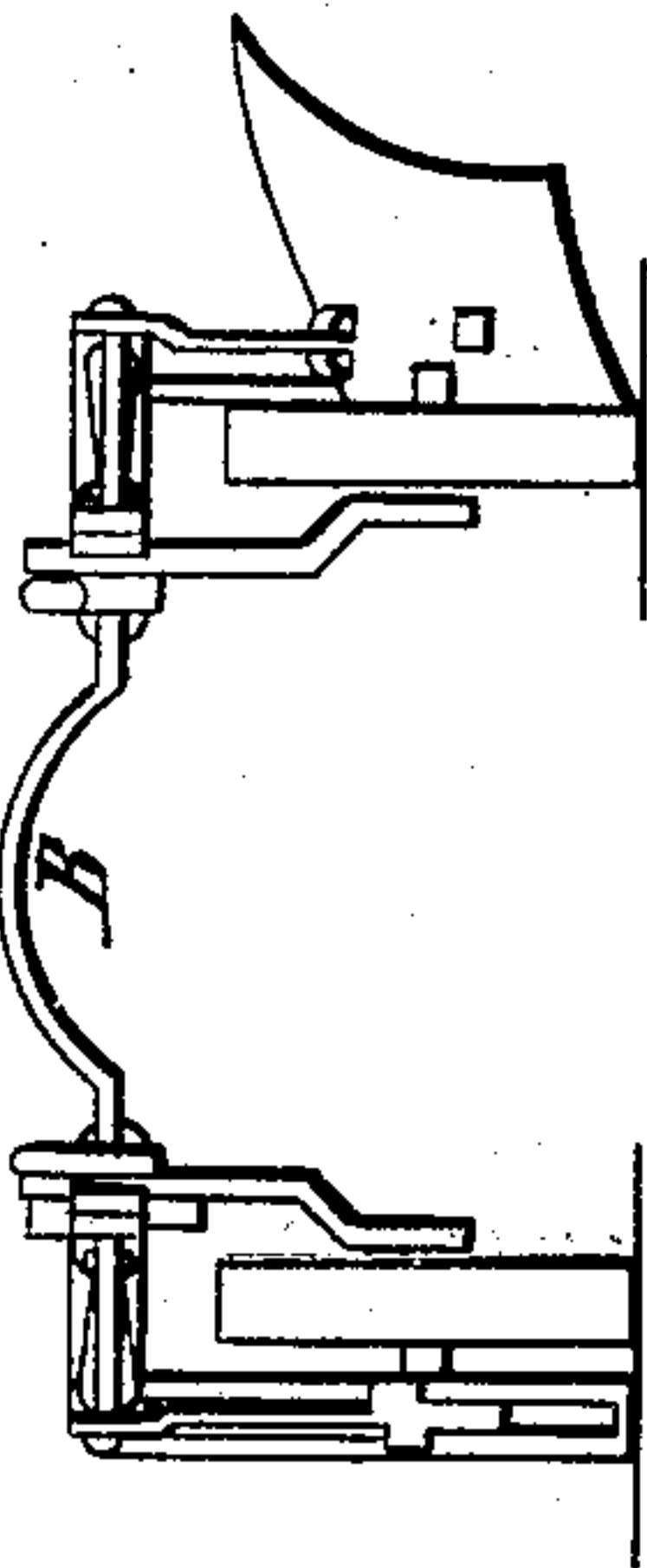


Fig. 1.

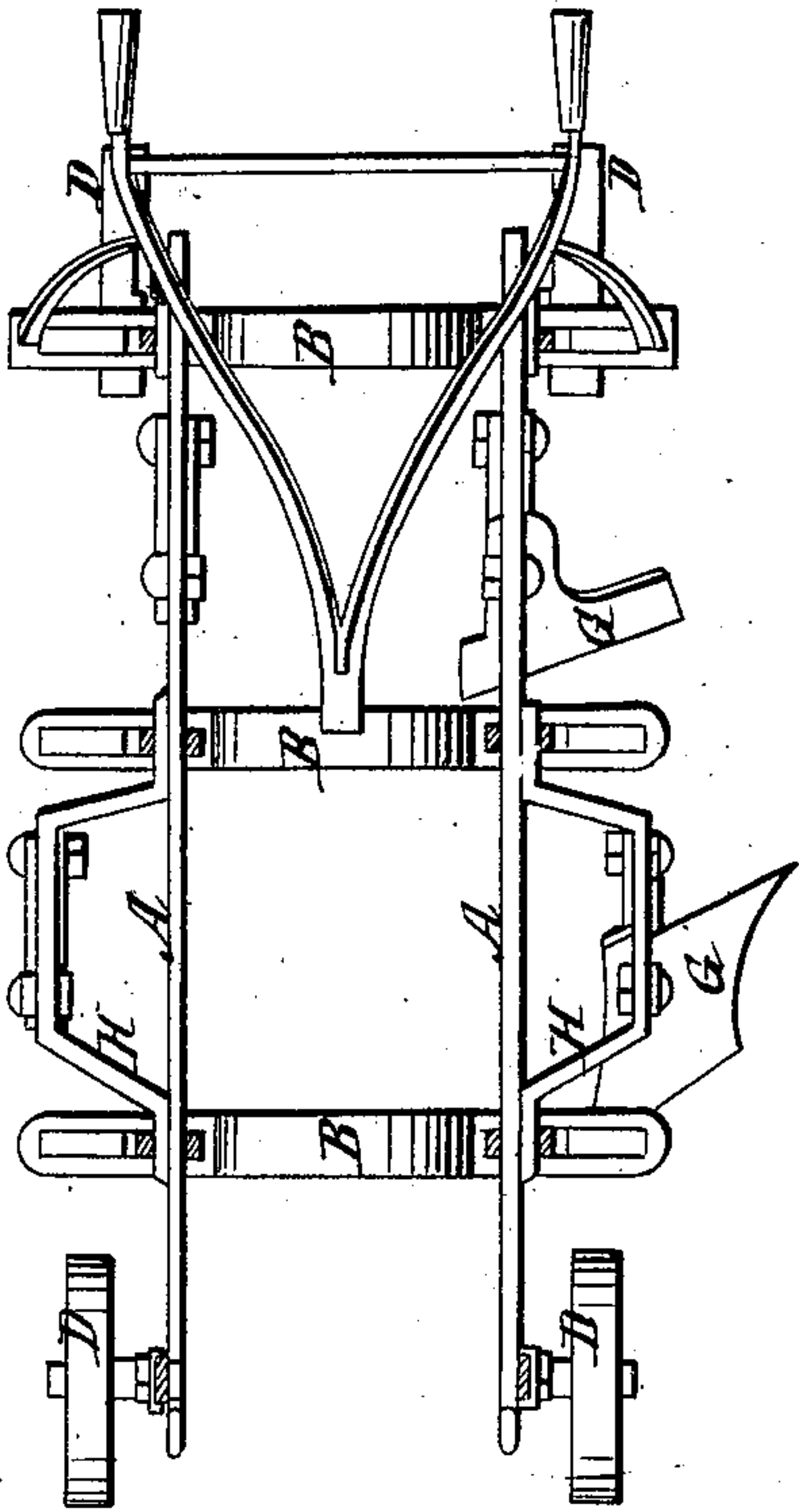
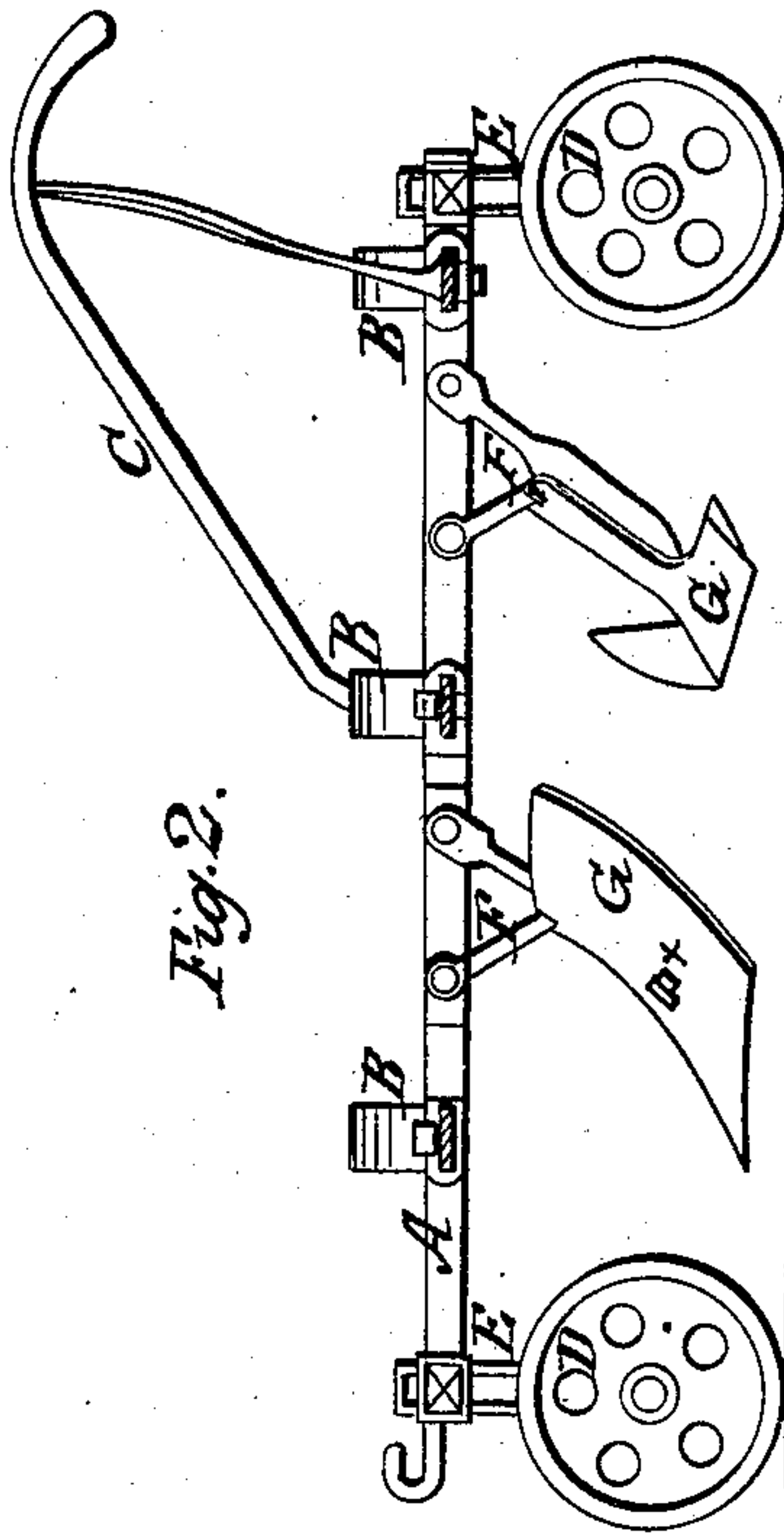


Fig. 2.



Witnesses.
C. M. Alexander
Mrs. S. Yeatman.

Inventor.
J. T. D. Alexander.

UNITED STATES PATENT OFFICE.

J. T. D. ALEXANDER, OF MARIANNA, TEXAS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 31,101, dated January 15, 1861.

To all whom it may concern:

Be it known that I, J. T. D. ALEXANDER, of Marianna, in the county of Polk and State of Texas, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing and arranging the several parts of this machine in the manner hereinafter set forth.

In the annexed drawings, Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is an end view.

In the figures, A A represent two beams or straight bars, which are connected together by means of the curved bars B B B. The bars B are made in the form shown in the drawings, being curved at their centers, so as to pass over cotton-plants or other growth, and being straight at their ends, so as to pass through mortises in the beams A A.

The straight portions of the bars B B are provided with mortises or long openings, in which wedges are inserted on one or both sides of the beams A for the purpose of regulating and adjusting the width between said beams.

H H represent angular side bars, which are provided with straight ends, in which are openings through which the ends of the bars B B pass in order to firmly secure said bars to the sides of the beams A. The shanks to which the plow-blades are attached are secured to the bars H H at the front of the plow-frame; but the shanks to which the rear blades are attached are secured directly to the beams A, as is seen in the figures.

The beams are supported upon wheels D D, and connected to said wheels by means of crank-axles E E. The arm of the crank which is secured to the beam is provided with a long slot through which a bolt passes. The object of this slot is to allow the beams to be raised

or lowered with respect to the ground. The bolt which secures the arm to the axle may be loosened and the frame then lowered or raised, after which the beam will be stationed at the desired point by tightening up a nut upon the bolt.

O represents the handles of the cultivator. These handles have their front support in the center bar B, and their rear support by means of standards in the rear bar B.

The plow-blades are secured to the shanks by being caught under a shoulder at their upper ends, said shoulder being upon the shanks, and then further secured by means of a bolt which passes through the blade and through the shank. By this arrangement of parts it will be seen that the frame may be readily adjusted to or from the ground, and that the plow-blades may be brought close together or separated at pleasure.

The bars H H may be brought on the inside of the beams when said beams are separated farther apart, or they may be allowed to remain on the outside.

A great variety of blades may be used and substituted, the one for the other, upon this frame, so as to adapt the cultivator to a variety of uses.

It will be readily seen that a number of different combinations may be made with the several blades for adapting the machine to any required cultivation.

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

The arrangement of the beams A A, the bars B B and H H, as constructed, the shanks F F, the wheels D D, and the slotted crank-axles E E, the whole being arranged and connected in the manner and for the purpose herein specified.

J. T. D. ALEXANDER.

Witnesses:

H. WASHINGTON,
F. W. WARREN.