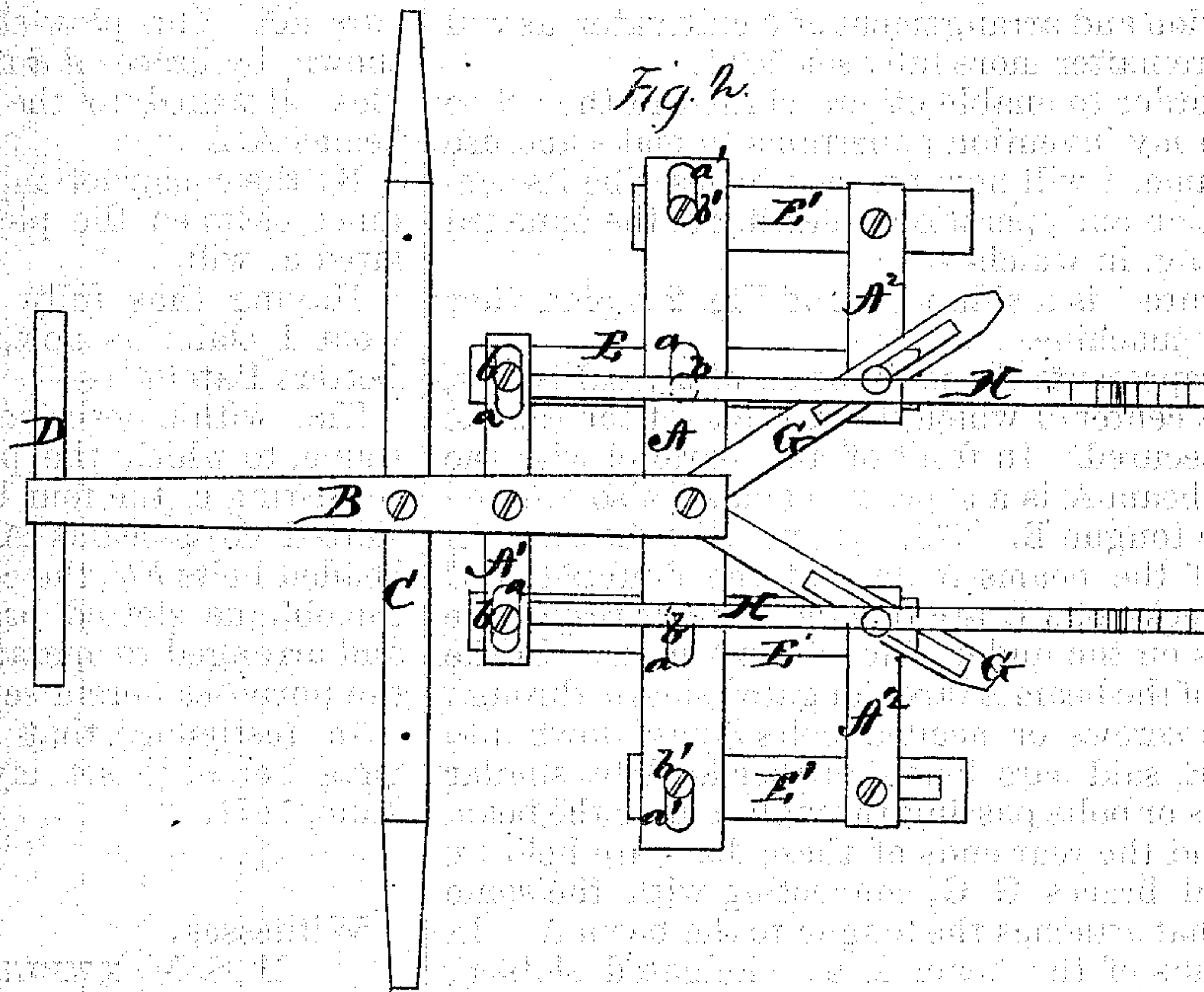
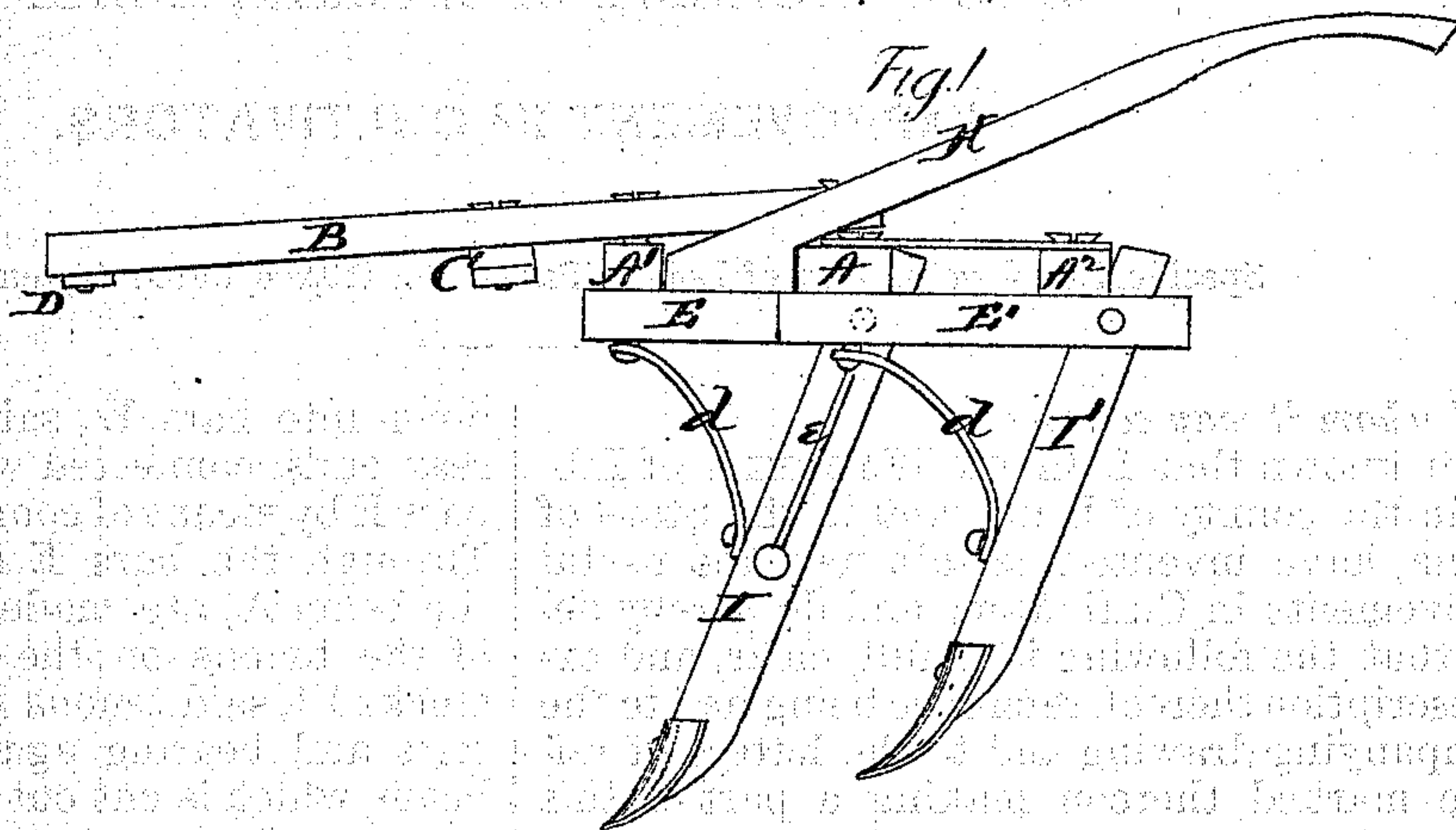


Improvement in Cultivators.

No. 119,206.

Patented Sep. 19, 1871.



Witnesses

James C. Hutchinson
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 per

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UNITED STATES PATENT OFFICE.

JAMES WADDELL, OF LIBERTY, INDIANA.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 119,206, dated September 19, 1871.

To all whom it may concern:

Be it known that I, JAMES WADDELL, of Liberty, in the county of Union and in the State of Indiana, have invented certain new and useful Improvements in Cultivator; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a cultivator, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view and Fig. 2 a plan view of my machine.

A represents the main beam of my cultivator, to the center of which the rear end of the tongue B is secured. In front of and parallel with the main beam A is a shorter beam, A¹, also secured to the tongue B. The tongue B is fastened on top of the beams A A¹, and the double-tree C and neck-yoke D are pivoted in their respective places on the under side of the tongue. In the ends of the beam A¹ are elongated slots *a*, through which screws or headed bolts *b* pass down into bars E, said bars being further held by similar screws or bolts passing through slots in the beam A; and the rear ends of these bars are held by slotted braces G G, connecting with the same bolt that attaches the tongue to the beam A. In the ends of the beam A are elongated slots *a'*, through which screws or headed bolts *b'* pass

down into bars E', said bars being, near their rear ends, connected with the rear ends of the bars E by means of connecting-bars A², as shown. Through the bars E E', immediately in rear of the beam A, are made mortises for the passage of the tenons on the upper ends of the plow-stocks I I, said tenons being pivoted in said mortises and bearing against the rear edge of the beam, which is cut out for that purpose. In like manner the tenons of plow-stocks I' I' pass through mortises in the bars E' E' in rear of the bars A². The plow-stocks I I' are braced, as shown, by braces *d d* and *e*. H H are the handles, attached to the bars E E between the beams A A¹.

By the construction of this cultivator the distance between the plows may be readily regulated at will.

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

The within-described adjustable cultivator-frame, to which the plow-shanks are attached, consisting of the four beams E E E' E', the two slotted cross-beams A¹ and A secured by the headed bolts *b b'*, the connecting-bars A² A², and the oblique slotted braces G G, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of June, 1871.

JAMES WADDELL.

Witnesses:

H. S. MAXWELL,
W. W. SULLIVAN.

(84.)