

(No Model.)

J. B. HIMES.
CULTIVATOR.

No. 397,185.

Patented Feb. 5, 1889.

Fig. 1.

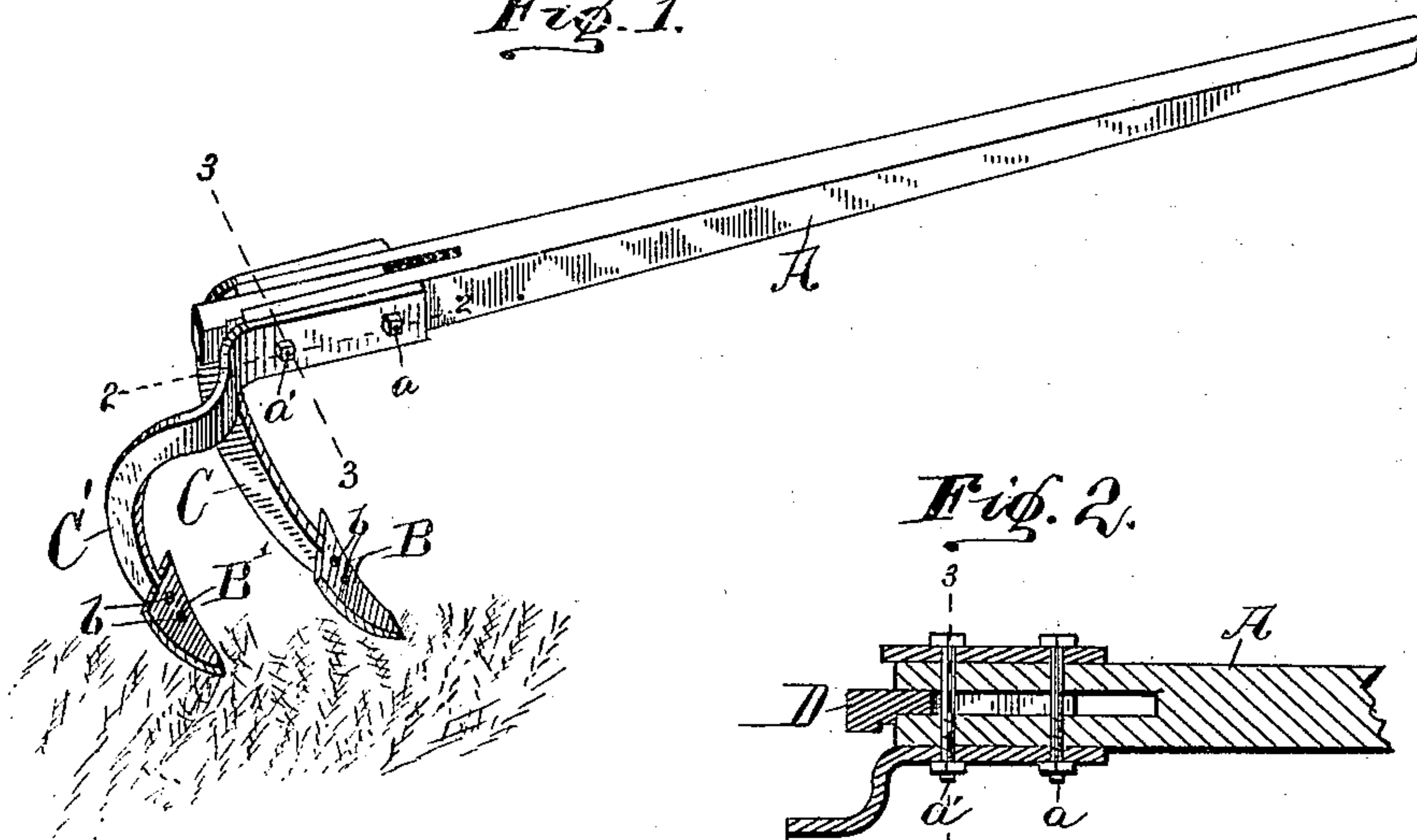


Fig. 2.

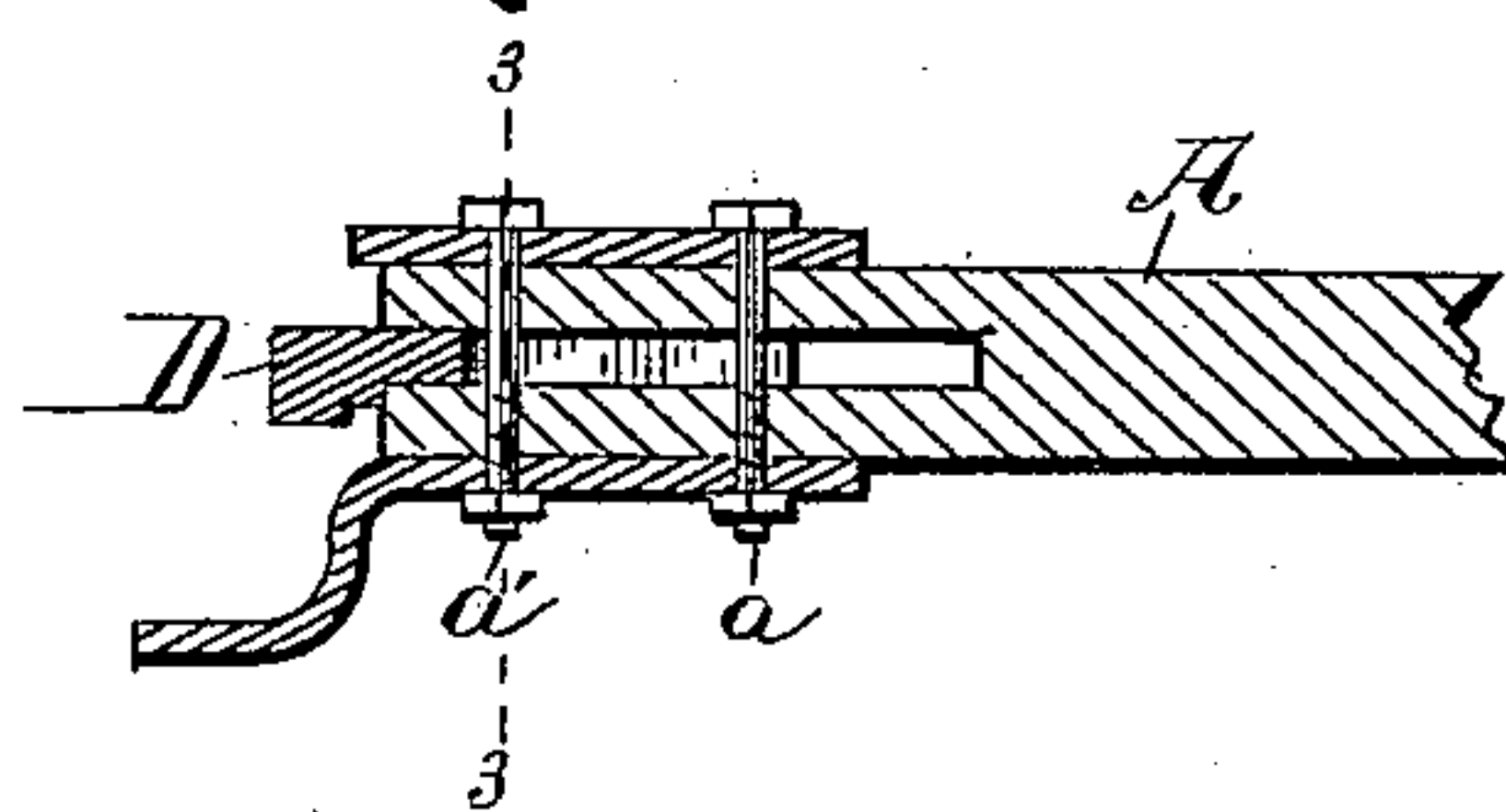


Fig. 3.

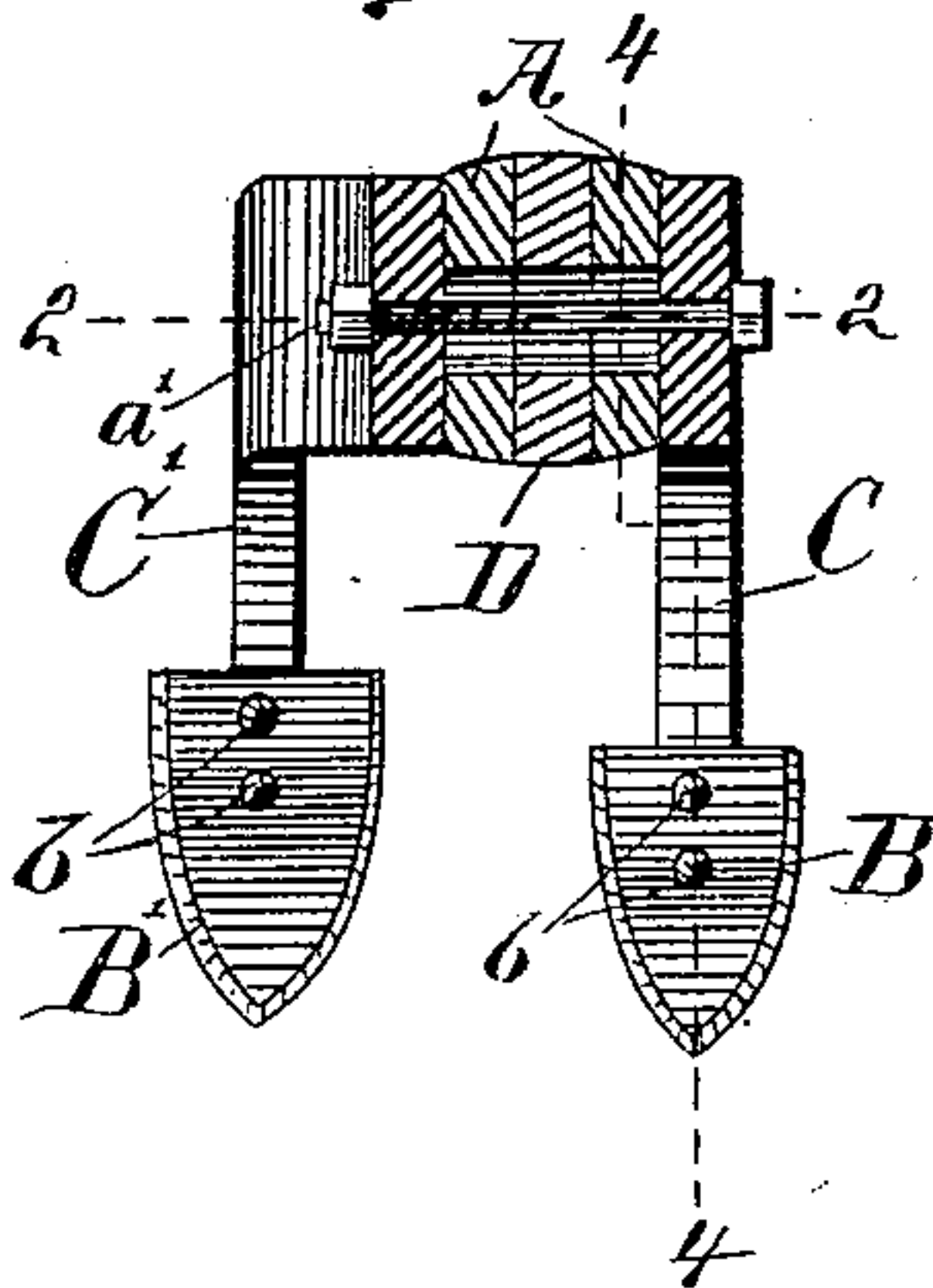


Fig. 4.

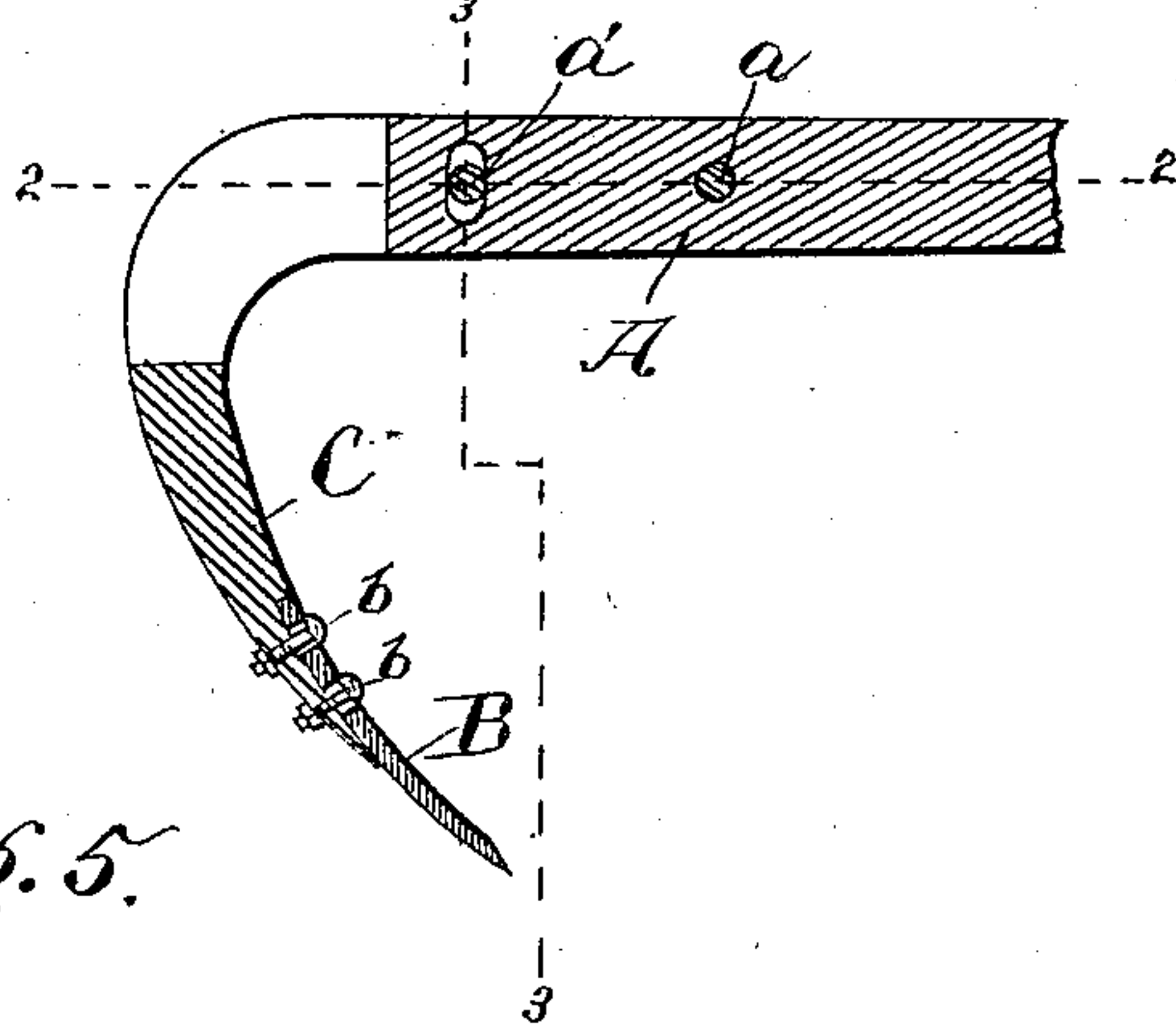
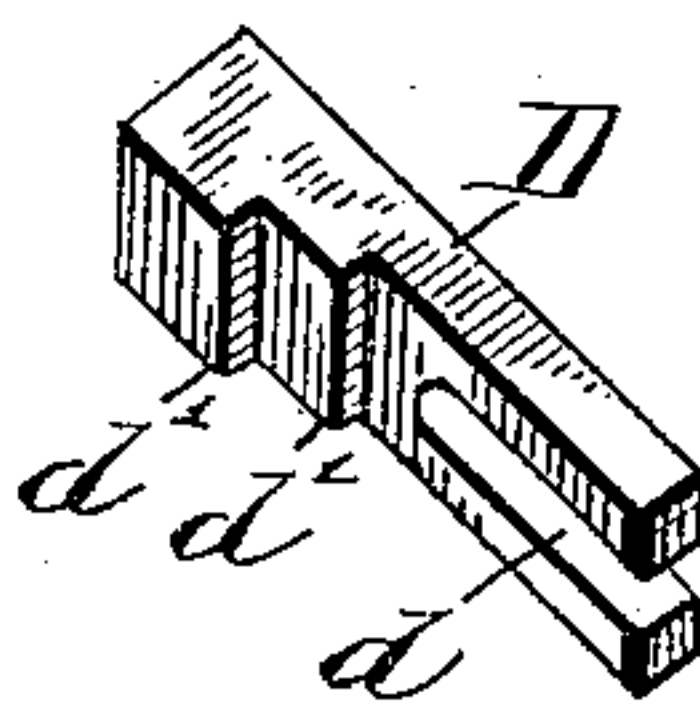


Fig. 5.



WITNESSES.

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JOSEPH B. HIMES, OF LADOGA, INDIANA, ASSIGNOR OF ONE-HALF TO JOHN C. HIMES, OF SAME PLACE.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 397,185, dated February 5, 1889.

Application filed August 21, 1888. Serial No. 283,312. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. HIMES, a citizen of the United States, residing at Ladoga, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Cultivators, of which the following is a specification.

The object of my said invention is to provide a double cultivator or hoe simple and inexpensive in construction and effective in operation, as will be hereinafter fully described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of my improved cultivator with the different parts shown in position for use; Fig. 2, a horizontal section of the same on the dotted line 2 2 in Fig. 1; Fig. 3, a vertical section looking toward the left from the dotted line 3 3 in Fig. 1; Fig. 4, a vertical section looking toward the right from the dotted line 4 4 in Fig. 3, and Fig. 5 a perspective view of the wedge which is used in regulating the distance between the two blades.

In said drawings, the portion marked A represents the handle of the cultivator; B B', the hoes or blades; C C', the shanks, which connect the blades with the handle, and D the wedge.

The pole or handle A is of any ordinary construction for the purpose, and preferably made of wood. At the end where the blades are fastened it is bifurcated or formed with a slot to receive the wedge, as will be presently more fully described.

The blades B B' are of the ordinary construction for the purpose, being fastened to the shanks C C' by means of bolts *b*. The holes in the blades through which the bolts *b* pass are elongated, thus providing for an adjustment in relation to the shanks, as will be readily understood.

The shanks C C' are formed of suitable material and bolted to the handle A by means of the bolts *a* and *a'*, the hole in the handle through which the bolt *a'* passes being elongated, thus providing for a vertical adjustment of the shanks in relation to the handle A, as will be readily understood. The shank C is formed curved and bolted to the handle so that the blade will occupy a position di-

rectly in line with the handle, while the shank C' is formed curved laterally, as shown most plainly in Fig. 1, so that when it is bolted to the handle the blade will occupy a position a certain distance to one side of the one just described, as will be easily seen.

The wedge D is formed with a horizontal slot, *d*, through which the bolts *a* and *a'* pass when the wedge is in position. It is also provided with a series of shoulders, *d'*, on one side, as shown most plainly in Figs. 2 and 5. A means whereby the two portions of the handle can be quickly and accurately set to either of several positions is thus provided, and the blades or hoes thus secured at the desired distance apart. It is only necessary in effecting this adjustment to loosen the bolts *a* and *a'*, move the wedge to the proper point, and tighten up the bolts again. By bringing the shoulders against the end of the handle the same position is secured at all times without the delay and trouble of measuring the distance.

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

1. In a hand hoe or cultivator, the combination of the handle A, formed bifurcated at the end to which the hoes are fastened, the shanks C C', with the blades thereon, secured to said handle by the bolts *a* and *a'*, and the wedge D, slotted and mounted astride said bolts *a* and *a'* in the bifurcated end of the handle, said wedge being formed with a series of shoulders, *d'*, substantially as described, and for the purpose specified.

2. The combination, in a hand hoe or cultivator, of the bifurcated handle, the shanks bolted thereto by the bolts *a* and *a'*, the hole through which one of said bolts passes being formed elongated, as described, the blades adjustably secured on said shanks, and the wedge D, adjustably secured between the parts of the bifurcated end of said handle, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Ladoga, Indiana, this 15th day of August, A. D. 1888.

JOSEPH B. HIMES. [L. s.]

Witnesses:

JOHN E. TALBOTT,
ALBERT G. MCDANIEL.